



2018 Disparity Study

**Pennsylvania Department of
Transportation**

FINAL REPORT

Final Report

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2018 Disparity Study

Prepared for

Pennsylvania Department of Transportation

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CHAPTER ES.

Executive Summary

CHAPTER 1.

Introduction

The Pennsylvania Department of Transportation (PennDOT) oversees programs and policies that affect highways, public transportation, airports, railroads, ports, and waterways throughout Pennsylvania. As a United States Department of Transportation (USDOT) funding recipient, PennDOT implements the Federal Disadvantaged Business Enterprise (DBE) Program. The Federal DBE Program is designed to ensure nondiscrimination in the award and administration of DOT-funded contracts, remove barriers, level the playing field, and assist with firm development for socially and economically disadvantaged businesses.¹ In addition, PennDOT implements the state's transportation-focused Diverse Business (DB) Program. The DB program encourages prime contractors to make a good faith effort to include disadvantaged businesses; minority-owned businesses; woman-owned businesses; and service-disabled veteran- and veteran-owned businesses in state-funded transportation contracts.

PennDOT retained BBC Research & Consulting (BBC) to conduct a *disparity study* to help evaluate the effectiveness of its implementation of both the Federal DBE Program and state DB Program in an effort to determine whether discrimination or its effects exist in PennDOT contracting. This disparity study focuses on horizontal construction and construction-related engineering and professional services contracts. As a result, the study primarily analyzes PennDOT's implementation of the Federal DBE program on FHWA-funded contracts.

As part of the disparity study, BBC examined whether there are any disparities between:

- The percentage of contract dollars—including subcontract dollars—that PennDOT spent with minority- and woman-owned businesses during the study period (i.e., *utilization*); and
- The percentage of contract dollars that those businesses might be expected to receive based on their availability to perform specific types and sizes of PennDOT's prime contracts and subcontracts (i.e., *availability*).²

BBC also assessed other quantitative and qualitative information related to:

- The legal framework surrounding PennDOT's implementation of the Federal DBE Program and the state's transportation-focused DB Program;
- Local marketplace conditions for disadvantaged and diverse businesses; and
- Contracting practices and business assistance programs that PennDOT currently has in place.

¹ 49 C.F.R. 26

² For disparity study analyses, BBC measured the availability and utilization of all minority- and woman-owned businesses regardless of size and revenue.

There are several reasons the disparity study will be useful to PennDOT:

- The disparity study provides an independent review of the participation minority- and woman-owned businesses in PennDOT contracting, which will be valuable to PennDOT and external stakeholders;
- Information from the disparity study will be useful to PennDOT as it makes decisions about its implementation of the Federal DBE Program and the state's transportation-focused DB Program;
- The disparity study provides insights into how to increase contracting opportunities for minority- and woman-owned businesses; and other disadvantaged and diverse businesses; and
- Organizations that have successfully defended their implementations of programs like the Federal DBE Program and the state's transportation-focused DB Program in court have typically relied on information from disparity studies.

BBC introduces the PennDOT disparity study in three parts:

- A. Background;
- B. Study scope; and
- C. Study team members.

A. Background

PennDOT implements the Federal DBE Program and the state's transportation-focused DB Program to encourage the participation of disadvantaged businesses in its USDOT-funded contracts and diverse businesses in its state-funded contracts, respectively. The disparity study includes information that is relevant to refining PennDOT's implementation of both programs.

Federal DBE Program. The Federal DBE Program is a program designed to ensure nondiscrimination in the award and administration of DOT-funded contracts, remove barriers, level the playing field, and assist with firm development for socially and economically disadvantaged businesses. As a recipient of USDOT funds, PennDOT must implement the Federal DBE Program and comply with corresponding federal regulations.

Setting an overall goal for DBE participation. As part of the Federal DBE Program, PennDOT is required to develop and submit a triennial goal and methodology to the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Federal Aviation Administration (FAA). Those goal and methodology documents must be tailored to the contracts funded by each modal agency. Although an agency is required to set a goal every three years, the overall DBE goal is an annual goal in that the agency must monitor DBE participation in its USDOT-funded contracts every year. If DBE participation for a particular year is less than the overall DBE goal, then the agency must analyze the reasons for the difference and establish specific measures that enable the agency to meet the goal in the next year.

The Federal DBE Program describes the steps an agency must follow in establishing its overall DBE goal. To begin the goal-setting process, an agency must develop a base figure, grounded in

demonstrable evidence, of the availability of DBEs to participate in the agency's USDOT-funded contracts. Then, the agency must consider conditions in the local marketplace for minority- and woman-owned businesses and make an upward, downward, or no adjustment to its base figure as it determines its overall DBE goal (referred to as a *step-2* adjustment).

Projecting the portion of the overall DBE goal to be met through race- and gender-neutral means. According to 49 Code of Federal Regulations (CFR) Part 26, an agency must meet the maximum feasible portion of its overall DBE goal through the use of *race- and gender-neutral program measures*.³ Race- and gender-neutral measures are measures that are designed to encourage the participation of all businesses—or all small businesses—in an agency's contracting (for examples of race- and gender-neutral measures, see 49 CFR Section 26.51(b)). Participation in such measures is not limited to socially and economically disadvantaged businesses or to certified DBEs. If an agency cannot meet its goal solely through the use of race- and gender-neutral measures, then it must consider also using *race- and gender-conscious program measures*. Race- and gender-conscious measures are designed to specifically encourage the participation of socially and economically disadvantaged businesses in an agency's contracting (e.g., using DBE goals on individual contracts). The Federal DBE Program requires an agency to project the portion of its overall DBE goal that it will meet through race- and gender-neutral measures and the portion that it will meet through race- or gender-conscious measures. USDOT has outlined a number of factors for an agency to consider when making such determinations.⁴

Determining whether all groups will be eligible for race- and gender-conscious measures. If an agency determines that race- or gender-conscious measures—such as DBE contract goals—are appropriate for its implementation of the Federal DBE Program, then it must also determine which racial/ethnic or gender groups are eligible for participation in those measures. Eligibility for such measures is limited to only those racial/ethnic or gender groups for which compelling evidence of discrimination exists in the local marketplace. USDOT provides a waiver provision if an agency determines that its implementation of the Federal DBE Program should only include certain racial/ethnic or gender groups in the race- or gender-conscious measures that it uses.

Implementation. PennDOT uses a combination of race- and gender-neutral and race- and gender-conscious measures to meet the objectives of the DBE program. It applies DBE contract goals to its USDOT-funded contracts. Prime contractors can meet those goals by either making subcontracting commitments with certified DBE subcontractors within seven days of bid submission, or by documenting sufficient good faith efforts toward achieving the established subcontracting goals. PennDOT also uses various race- and gender-neutral measures to meet the objectives of the DBE program, including technical assistance; outreach to small businesses; a small-business set-aside program; prompt payment policies; designating a PennDOT official to supervise the agency's diversity effort; and reporting the percentage of dollars that disadvantaged businesses receive on agency contracting (for more detail see Chapter 8). In addition, PennDOT has established the Disadvantaged Business Enterprise Supportive Services

³ 49 CFR Section 26.51.

⁴ <http://www.dotcr.ost.dot.gov/Documents/Dbe/49CFRPART26.doc>

(DBE SS) Program, which provides training, assistance, and services to DBE businesses. Cheyney University administers PennDOT's DBE Supportive Services Program.

DB Program. PennDOT's Diverse Business Program was implemented in October 2014 for state-funded transportation and professional services contracts.⁵ The Diverse Business Program for Pennsylvania Transportation entities includes the following agencies: PennDOT, the PA Turnpike Commission, SEPTA, and all other transit organizations. Title 74 and 75 in Section 303 of the Pennsylvania Consolidated Statutes require prime contractors to make a good faith effort to solicit diverse business subcontractors for state-funded transportation and professional services contracts. Section 303 defines diverse businesses as disadvantaged businesses (DBE); minority-owned businesses; woman-owned businesses; and service-disabled veteran- and veteran-owned businesses. PennDOT uses various race- and gender-neutral measures to meet the objectives of the DB program, including contracting language that encourages the use of diverse businesses; requiring prime contractors to report the diverse businesses that they are using as part of contracts; designating a PennDOT official to supervise the agency's diversity effort; and reporting the percentage of dollars that diverse businesses receive on agency contracting. In addition, PennDOT has established the Diverse Business Supportive Services (DB SS) Program, which provides training, assistance, and services to DB businesses. Cheyney University administers the DB Supportive Services Program in addition to the DBE Supportive Services Program.

B. Study Scope

Information from the disparity study will help PennDOT continue to encourage the participation of minority- and woman-owned businesses, and other disadvantaged and diverse businesses, in state-funded and FHWA-funded contracts. In addition, information from the study will help the agency implement the Federal DBE Program and state's transportation-focused DB Program in a legally-defensible manner.

Relevant business groups. In general, BBC focused its analyses on whether barriers or discrimination based on various factors, including race/ethnicity and gender, affected the participation of businesses in PennDOT contracts or procurements, regardless of whether those businesses were, or could be, certified as DBEs or DBs. Analyzing the participation and availability of businesses regardless of certification status allowed BBC to assess whether barriers affect business success based specifically on the race/ethnicity and gender of the owners and independent of certification status. To interpret the core analyses presented in the disparity study, it is useful to understand how the study team defines the various groups of businesses that are the focus of the Federal DBE Program, the state's transportation-focused DB Program, and the disparity study.

⁵ It was created in accordance with Act 89 of 2013.

Figure 1-1.
Definition of potential DBEs

To help PennDOT calculate its overall DBE goal, BBC did not include the following types of minority- and woman-owned businesses in its definition of potential DBEs:

- Minority- and woman-owned businesses that have graduated from the DBE Program and have not been recertified;
- Minority- and woman-owned businesses that are not currently DBE-certified but that have applied for DBE certification through the Pennsylvania UCP and have been denied; and
- Minority- and woman-owned businesses that are not currently DBE-certified that appear to have average annual revenues over the most recent three years so high as to deem them ineligible for DBE certification.

At the time of this study, the overall revenue limit for DBE certification was \$23,980,000 based on a three-year average of gross receipts. There were lower revenue limits for specific subindustries according to the United States Small Business Administration (SBA) small business size standards. Only a few minority- and woman-owned businesses appeared to have exceeded those revenue limits based on information that they provided as part of availability surveys. The revenue categories that the study team used to classify firms reflect recent changes to the Table of Small Business Size Standards published by the SBA.

Business owners must also meet USDOT personal net worth limits for their businesses to qualify for DBE certification. The personal net worth of business owners was not available as part of this study and thus was not considered when determining potential DBE status.

Minority- and woman-owned businesses. BBC analyzed business outcomes for socially and economically disadvantaged businesses, which were defined as businesses owned by Asian Pacific Americans, Black Americans, Hispanic Americans, Native Americans, Subcontinent Asian Americans, or women of any race/ethnicity. To avoid any double-counting, BBC classified minority woman-owned businesses with their corresponding minority groups. (For example, Black American woman-owned businesses were classified, along with businesses owned by Black American men, as Black American-owned businesses.) Thus, *woman-owned businesses* in this report refers to non-Hispanic white woman-owned businesses.

Certified DBEs. Certified DBEs are businesses owned by socially and economically disadvantaged individuals specifically certified as DBEs through the Pennsylvania Unified Certification Program (UCP). A determination of DBE eligibility includes assessing businesses' gross revenues and business owners' personal net worth (maximum of \$1.32 million excluding equity in a home and in the business). Some socially and economically disadvantaged businesses do not qualify as DBEs because of gross revenue or net worth requirements.⁶

Potential DBEs. *Potential DBEs* are socially and economically disadvantaged businesses that are DBE-certified or appear that they could be DBE-certified based on revenue requirements described in 49 CFR Part 26 (regardless of actual certification). The study team did not count businesses that have been decertified or have graduated from the DBE Program as potential DBEs in this study. BBC examined the availability of potential DBEs as part of helping PennDOT calculate the base figure of its overall DBE goal. Figure 1-1 provides further explanation of BBC's definition of potential DBEs.

⁶ Businesses owned by non-Hispanic white men can be certified as DBEs if those businesses meet the requirements in 49 CFR Part 26.

Majority-owned businesses. Majority-owned businesses are businesses that are not owned by minorities or women.

Analyses in the disparity study. The disparity study examined whether there are any disparities between the participation and availability of minority- and woman-owned businesses on PennDOT contracts. The study focused on horizontal construction and construction-related engineering and professional services contracts that PennDOT awarded between July 1, 2011 and June 30, 2016 (i.e., the study period). In addition to the core utilization, availability, and disparity analyses, the disparity study also includes:

- A review of legal issues surrounding PennDOT’s implementation of the Federal DBE Program and the state’s transportation-focused DB Program;
- An analysis of local marketplace conditions for disadvantaged and diverse businesses;
- An assessment of PennDOT’s contracting practices and business assistance programs; and
- Other information for PennDOT to consider as it refines its implementation of the Federal DBE Program and state’s transportation-focused DB Program.

That information is organized in the disparity study report in the following manner:

Legal framework and analysis. The study team conducted a detailed analysis of relevant federal regulations, case law, state law, and other information to guide the methodology for the disparity study. The analysis included a review of federal and state requirements concerning PennDOT’s implementation of the Federal DBE Program and the state’s transportation-focused DB Program. The legal framework and analysis for the study is summarized in **Chapter 2** and presented in detail in **Appendix B**.

Marketplace conditions. BBC conducted quantitative analyses examining the success of disadvantaged individuals and disadvantaged and diverse businesses in local contracting industries. BBC compared business outcomes for disadvantaged individuals and disadvantaged and diverse businesses to outcomes for majority individuals and majority-owned businesses. In addition, the study team collected qualitative information about potential barriers that disadvantaged and diverse businesses face in Pennsylvania through public meetings and in-depth interviews. Information about marketplace conditions is presented in **Chapter 3**, **Appendix C**, and **Appendix D**.

Data collection and analysis. BBC examined data from multiple sources to complete the utilization and availability analyses. In addition, the study team conducted telephone surveys with thousands of businesses throughout Pennsylvania. The scope of the study team’s data collection and analysis as it pertains to the utilization and availability analyses is presented in **Chapter 4**.

Availability analysis. BBC analyzed the percentage of woman- and minority-owned businesses that are *ready, willing, and able* to perform on PennDOT prime contracts and subcontracts. That analysis was based on PennDOT data and telephone surveys that the study team conducted with thousands of Pennsylvania businesses that work in industries related to the types of contracting dollars that PennDOT awards. BBC analyzed availability separately for businesses owned by

specific minority groups and women, and for different types of contracts. Results from the availability analysis are presented in **Chapter 5** and **Appendix E**.

Utilization analysis. BBC analyzed contract dollars that PennDOT spent with woman- and minority-owned businesses on contracts that the agency awarded between July 1, 2011 and June 30, 2016. Those data included information about associated subcontracts. Note that PennDOT applied DBE contract goals to many of those contracts. BBC analyzed utilization separately for businesses owned by specific minority groups and women, and for different types of contracts. Results from the utilization analysis are presented in **Chapter 6**.

Disparity analysis. BBC examined whether there were any disparities between the utilization of woman- and minority-owned businesses on contracts that PennDOT awarded during the study period and the availability of those businesses for that work. BBC analyzed disparity analysis results separately for businesses owned by specific minority groups and women, and for different types of contracts. The study team also assessed whether any observed disparities were statistically significant. Results from the disparity analysis are presented in **Chapter 7** and **Appendix F**.

Program measures. BBC reviewed the measures that PennDOT uses to encourage the participation of disadvantaged and diverse businesses in its contracting as well as measures that other organizations in Pennsylvania use. That information is presented in **Chapter 8**.

Overall DBE goal. Based on information from the availability analysis and other research, BBC provided PennDOT with information that will help the agency set its overall DBE goal, including the base figure and consideration of a *step-2* adjustment. Information about PennDOT's overall DBE goal is presented in **Chapter 9**.

Program implementation. BBC reviewed PennDOT's contracting practices and its Federal DBE and state transportation-focused DB program measures. BBC provided guidance and recommendations related to decisions that PennDOT could make to refine its implementation of the Federal DBE Program and state transportation-focused DB Program. Those considerations are presented in **Chapter 10**.

C. Study Team Members

The BBC study team was made up of ten firms which, collectively, possess decades of experience related to conducting disparity studies in connection with state and local business programs.

BBC (prime consultant). BBC is a Denver-based disparity study and economic research firm. BBC had overall responsibility for the study and performed all of the quantitative analyses.

Always Busy Consulting (ABC). ABC is a Black American woman-owned professional services firm based in Pittsburgh, Pennsylvania. ABC conducted in-depth interviews with Pennsylvania businesses as part of the study team's qualitative analyses of marketplace conditions.

Kairos Development Group (Kairos). Kairos is a woman-owned consulting firm based in Philadelphia, Pennsylvania. Kairos conducted in-depth interviews with Pennsylvania businesses as part of the study team's qualitative analyses of marketplace conditions.

Milligan & Company (Milligan). Milligan is a minority veteran-owned small business based in Philadelphia, Pennsylvania. Milligan helped collect and compile electronic and hardcopy data related to PennDOT contracts and procurements. The firm also helped review PennDOT's contracting practices, policies, and business programs.

Powell Law. Powell Law is a Black American woman-owned law firm based in Harrisburg, Pennsylvania. Powell Law conducted in-depth interviews with Pennsylvania businesses as part of the study team's qualitative analyses of marketplace conditions.

Ritzman Law. Ritzman Law is a Black American, veteran, woman-owned general practice law firm based in Harrisburg, Pennsylvania. Ritzman Law reviewed contracting practices and procedures that PennDOT uses to award contracts; legal issues related to business programs in the state; and various sections of the draft and final disparity study reports.

National Gay and Lesbian Chamber of Commerce (NGLCC). NGLCC is the largest global nonprofit advocacy organization dedicated to expanding economic opportunities and advancements for LGBT people. NGLCC advised on the study team's research efforts with the LGBT community and helped facilitate community engagement efforts.

Customer Research International (CRI). CRI is a Subcontinent Asian American-owned survey fieldwork firm based in San Marcos, Texas. CRI conducted telephone surveys with thousands of businesses located in Pennsylvania to gather information for the utilization and availability analyses.

Holland & Knight. Holland & Knight is a law firm with offices throughout the country. Holland & Knight conducted the legal analysis that provided the basis for this study.

Keen Independent Research (Keen Independent). Keen Independent is an Arizona-based research firm. Keen Independent helped manage the in-depth interview process as part of the study team's qualitative analyses of marketplace conditions.

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The Pennsylvania Department of Transportation (PennDOT) oversees programs and policies that affect highways, public transportation, airports, railroads, ports, and waterways throughout Pennsylvania. As a United States Department of Transportation (USDOT) funding recipient, PennDOT implements the Federal Disadvantaged Business Enterprise (DBE) Program. The Federal DBE Program is designed to ensure nondiscrimination in the award and administration of DOT-funded contracts, remove barriers, level the playing field, and assist with firm development for socially and economically disadvantaged businesses.¹ In addition, PennDOT implements the state's transportation-focused Diverse Business (DB) Program. The DB program encourages prime contractors to make a good faith effort to include disadvantaged businesses; minority-owned businesses; woman-owned businesses; and service-disabled veteran- and veteran-owned businesses in state-funded transportation contracts.

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Implementation. PennDOT uses a combination of race- and gender-neutral and race- and gender-conscious measures to meet the objectives of the DBE program. It applies DBE contract goals to its USDOT-funded contracts. Prime contractors can meet those goals by either making subcontracting commitments with certified DBE subcontractors within seven days of bid submission, or by documenting sufficient good faith efforts toward achieving the established subcontracting goals. PennDOT also uses various race- and gender-neutral measures to meet the objectives of the DBE program, including technical assistance; outreach to small businesses; a small-business set-aside program; prompt payment policies; designating a PennDOT official to supervise the agency's diversity effort; and reporting the percentage of dollars that disadvantaged businesses receive on agency contracting (for more detail see Chapter 8). In addition, PennDOT has established the Disadvantaged Business Enterprise Supportive Services

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B. Study Scope

Information from the disparity study will help PennDOT continue to encourage the participation of minority- and woman-owned businesses, and other disadvantaged and diverse businesses, in state-funded and FHWA-funded contracts. In addition, information from the study will help the agency implement the Federal DBE Program and state's transportation-focused DB Program in a legally-defensible manner.

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Figure 1-1.
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- Minority- and woman-owned businesses that are not currently DBE-certified that appear to have average annual revenues over the most recent three years so high as to deem them ineligible for DBE certification.

At the time of this study, the overall revenue limit for DBE certification was \$23,980,000 based on a three-year average of gross receipts. There were lower revenue limits for specific subindustries according to the United States Small Business Administration (SBA) small business size standards. Only a few minority- and woman-owned businesses appeared to have exceeded those revenue limits based on information that they provided as part of availability surveys. The revenue categories that the study team used to classify firms reflect recent changes to the Table of Small Business Size Standards published by the SBA.

Business owners must also meet USDOT personal net worth limits for their businesses to qualify for DBE certification. The personal net worth of business owners was not available as part of this study and thus was not considered when determining potential DBE status.

Minority- and woman-owned businesses. BBC analyzed business outcomes for socially and economically disadvantaged businesses, which were defined as businesses owned by Asian Pacific Americans, Black Americans, Hispanic Americans, Native Americans, Subcontinent Asian Americans, or women of any race/ethnicity. To avoid any double-counting, BBC classified minority woman-owned businesses with their corresponding minority groups. (For example, Black American woman-owned businesses were classified, along with businesses owned by Black American men, as Black American-owned businesses.) Thus, *woman-owned businesses* in this report refers to non-Hispanic white woman-owned businesses.

Certified DBEs. Certified DBEs are businesses owned by socially and economically disadvantaged individuals specifically certified as DBEs through the Pennsylvania Unified Certification Program (UCP). A determination of DBE eligibility includes assessing businesses' gross revenues and business owners' personal net worth (maximum of \$1.32 million excluding equity in a home and in the business). Some socially and economically disadvantaged businesses do not qualify as DBEs because of gross revenue or net worth requirements.⁶

Potential DBEs. *Potential DBEs* are socially and economically disadvantaged businesses that are DBE-certified or appear that they could be DBE-certified based on revenue requirements described in 49 CFR Part 26 (regardless of actual certification). The study team did not count businesses that have been decertified or have graduated from the DBE Program as potential DBEs in this study. BBC examined the availability of potential DBEs as part of helping PennDOT calculate the base figure of its overall DBE goal. Figure 1-1 provides further explanation of BBC's definition of potential DBEs.

⁶ Businesses owned by non-Hispanic white men can be certified as DBEs if those businesses meet the requirements in 49 CFR Part 26.

Majority-owned businesses. Majority-owned businesses are businesses that are not owned by minorities or women.

Analyses in the disparity study. The disparity study examined whether there are any disparities between the participation and availability of minority- and woman-owned businesses on PennDOT contracts. The study focused on horizontal construction and construction-related engineering and professional services contracts that PennDOT awarded between July 1, 2011 and June 30, 2016 (i.e., the study period). In addition to the core utilization, availability, and disparity analyses, the disparity study also includes:

- A review of legal issues surrounding PennDOT’s implementation of the Federal DBE Program and the state’s transportation-focused DB Program;
- An analysis of local marketplace conditions for disadvantaged and diverse businesses;
- An assessment of PennDOT’s contracting practices and business assistance programs; and
- Other information for PennDOT to consider as it refines its implementation of the Federal DBE Program and state’s transportation-focused DB Program.

That information is organized in the disparity study report in the following manner:

Legal framework and analysis. The study team conducted a detailed analysis of relevant federal regulations, case law, state law, and other information to guide the methodology for the disparity study. The analysis included a review of federal and state requirements concerning PennDOT’s implementation of the Federal DBE Program and the state’s transportation-focused DB Program. The legal framework and analysis for the study is summarized in **Chapter 2** and presented in detail in **Appendix B**.

Marketplace conditions. BBC conducted quantitative analyses examining the success of disadvantaged individuals and disadvantaged and diverse businesses in local contracting industries. BBC compared business outcomes for disadvantaged individuals and disadvantaged and diverse businesses to outcomes for majority individuals and majority-owned businesses. In addition, the study team collected qualitative information about potential barriers that disadvantaged and diverse businesses face in Pennsylvania through public meetings and in-depth interviews. Information about marketplace conditions is presented in **Chapter 3**, **Appendix C**, and **Appendix D**.

Data collection and analysis. BBC examined data from multiple sources to complete the utilization and availability analyses. In addition, the study team conducted telephone surveys with thousands of businesses throughout Pennsylvania. The scope of the study team’s data collection and analysis as it pertains to the utilization and availability analyses is presented in **Chapter 4**.

Availability analysis. BBC analyzed the percentage of woman- and minority-owned businesses that are *ready, willing, and able* to perform on PennDOT prime contracts and subcontracts. That analysis was based on PennDOT data and telephone surveys that the study team conducted with thousands of Pennsylvania businesses that work in industries related to the types of contracting dollars that PennDOT awards. BBC analyzed availability separately for businesses owned by

specific minority groups and women, and for different types of contracts. Results from the availability analysis are presented in **Chapter 5** and **Appendix E**.

Utilization analysis. BBC analyzed contract dollars that PennDOT spent with woman- and minority-owned businesses on contracts that the agency awarded between July 1, 2011 and June 30, 2016. Those data included information about associated subcontracts. Note that PennDOT applied DBE contract goals to many of those contracts. BBC analyzed utilization separately for businesses owned by specific minority groups and women, and for different types of contracts. Results from the utilization analysis are presented in **Chapter 6**.

Disparity analysis. BBC examined whether there were any disparities between the utilization of woman- and minority-owned businesses on contracts that PennDOT awarded during the study period and the availability of those businesses for that work. BBC analyzed disparity analysis results separately for businesses owned by specific minority groups and women, and for different types of contracts. The study team also assessed whether any observed disparities were statistically significant. Results from the disparity analysis are presented in **Chapter 7** and **Appendix F**.

Program measures. BBC reviewed the measures that PennDOT uses to encourage the participation of disadvantaged and diverse businesses in its contracting as well as measures that other organizations in Pennsylvania use. That information is presented in **Chapter 8**.

Overall DBE goal. Based on information from the availability analysis and other research, BBC provided PennDOT with information that will help the agency set its overall DBE goal, including the base figure and consideration of a *step-2* adjustment. Information about PennDOT's overall DBE goal is presented in **Chapter 9**.

Program implementation. BBC reviewed PennDOT's contracting practices and its Federal DBE and state transportation-focused DB program measures. BBC provided guidance and recommendations related to decisions that PennDOT could make to refine its implementation of the Federal DBE Program and state transportation-focused DB Program. Those considerations are presented in **Chapter 10**.

C. Study Team Members

The BBC study team was made up of ten firms which, collectively, possess decades of experience related to conducting disparity studies in connection with state and local business programs.

BBC (prime consultant). BBC is a Denver-based disparity study and economic research firm. BBC had overall responsibility for the study and performed all of the quantitative analyses.

Always Busy Consulting (ABC). ABC is a Black American woman-owned professional services firm based in Pittsburgh, Pennsylvania. ABC conducted in-depth interviews with Pennsylvania businesses as part of the study team's qualitative analyses of marketplace conditions.

Kairos Development Group (Kairos). Kairos is a woman-owned consulting firm based in Philadelphia, Pennsylvania. Kairos conducted in-depth interviews with Pennsylvania businesses as part of the study team's qualitative analyses of marketplace conditions.

Milligan & Company (Milligan). Milligan is a minority veteran-owned small business based in Philadelphia, Pennsylvania. Milligan helped collect and compile electronic and hardcopy data related to PennDOT contracts and procurements. The firm also helped review PennDOT's contracting practices, policies, and business programs.

Powell Law. Powell Law is a Black American woman-owned law firm based in Harrisburg, Pennsylvania. Powell Law conducted in-depth interviews with Pennsylvania businesses as part of the study team's qualitative analyses of marketplace conditions.

Ritzman Law. Ritzman Law is a Black American, veteran, woman-owned general practice law firm based in Harrisburg, Pennsylvania. Ritzman Law reviewed contracting practices and procedures that PennDOT uses to award contracts; legal issues related to business programs in the state; and various sections of the draft and final disparity study reports.

National Gay and Lesbian Chamber of Commerce (NGLCC). NGLCC is the largest global nonprofit advocacy organization dedicated to expanding economic opportunities and advancements for LGBT people. NGLCC advised on the study team's research efforts with the LGBT community and helped facilitate community engagement efforts.

Customer Research International (CRI). CRI is a Subcontinent Asian American-owned survey fieldwork firm based in San Marcos, Texas. CRI conducted telephone surveys with thousands of businesses located in Pennsylvania to gather information for the utilization and availability analyses.

Holland & Knight. Holland & Knight is a law firm with offices throughout the country. Holland & Knight conducted the legal analysis that provided the basis for this study.

Keen Independent Research (Keen Independent). Keen Independent is an Arizona-based research firm. Keen Independent helped manage the in-depth interview process as part of the study team's qualitative analyses of marketplace conditions.

CHAPTER 2.

Legal Analysis

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Legal Analysis

The Pennsylvania Department of Transportation (PennDOT) implements the Federal Disadvantaged Business Enterprise (DBE) Program. The Federal DBE Program is designed to ensure nondiscrimination in the award and administration of DOT-funded contracts, remove barriers, level the playing field, and assist with firm development for socially and economically disadvantaged businesses.¹ In addition, PennDOT implements the state's transportation-focused Diverse Business (DB) Program. The DB program encourages the participation of disadvantaged businesses; minority-owned businesses; woman-owned businesses; and service-disabled veteran- and veteran-owned businesses in state-funded transportation contracts.

In carrying out these programs, PennDOT relies solely on various *race- and gender-neutral measures* as part of the state's transportation-focused DB Program, and a combination of *race- and gender-neutral* and *race- and gender-conscious measures* as part of the Federal DBE Program. Race- and gender-neutral measures are measures that are designed to encourage the participation of all small businesses in an organization's contracting, regardless of the race/ethnicity or gender of businesses' owners. In contrast, race- and gender-conscious measures are designed to specifically encourage the participation of socially and economically disadvantaged businesses in the organization's contracting (e.g., DBE participation goals on individual contracts).

PennDOT's use of DBE goals on individual USDOT-funded contracts is considered a race- and gender-conscious measure. Prime contractors can meet DBE contract goals by either making subcontracting commitments with certified DBE subcontractors at the time of bid or by showing that they made all reasonably possible good faith efforts to meet the goals but could not do so. It is instructive to review legal standards surrounding their use in case the agency decides that continuing to use such measures is appropriate in the future.

Programs that Rely Only on Race- and Gender-Neutral Measures

Government organizations that implement contracting programs that rely only on race- and gender-neutral measures to encourage the participation of small businesses, regardless of the race/ethnicity or gender of business owners, must show a *rational basis* for their programs. Showing a rational basis requires organizations to demonstrate that their contracting programs are rationally related to a legitimate government interest. It is the lowest threshold for evaluating the legality of government contracting programs. When courts review programs based on a rational basis, only the most egregious violations lead to programs being deemed unconstitutional. PennDOT implements the state's transportation-focused DB Program in a wholly race- and gender-neutral manner.

¹ 49 C.F.R. 26

Programs that Rely on Race- and Gender-Neutral and Race- and Gender-Conscious Measures

The United States Supreme Court has established that contracting programs that include both race- and gender-neutral and race- and gender-conscious measures must meet the *strict scrutiny* standard of constitutional review.² PennDOT uses both race- and gender-neutral and race- and gender-conscious measures as part of its implementation of the Federal DBE Program. In contrast to a rational basis, the strict scrutiny standard presents the highest threshold for evaluating the legality of government contracting programs short of prohibiting them altogether. The two key United States Supreme Court cases that established the strict scrutiny standard for such programs are:

- The 1989 decision in *City of Richmond v. J.A. Croson Company*, which established the strict scrutiny standard of review for race-conscious programs adopted by state and local governments;³ and
- The 1995 decision in *Adarand Constructors, Inc. v. Peña*, which established the strict scrutiny standard of review for federal race-conscious programs.⁴

Under the strict scrutiny standard, a government organization must show a *compelling governmental interest* to use race- and gender-conscious measures and ensure that its use of race- and gender-conscious measures is *narrowly tailored*. A program that fails to meet either component is unconstitutional.

Compelling governmental interest. A government organization must demonstrate a *compelling governmental interest* in remedying past identified discrimination in order to implement race- and gender-conscious measures. An organization that uses race- and gender-conscious measures as part of a socially and economically disadvantaged business program has the initial burden of showing evidence of discrimination, including statistical and anecdotal evidence, that supports the use of such measures. Organizations cannot rely on national statistics of discrimination in an industry to draw conclusions about the prevailing market conditions in their own regions. Rather, they must assess discrimination within their own relevant market areas.⁵ It is not necessary for a government organization itself to have discriminated against minority- or woman-owned businesses for it to act. In *City of Richmond v. J.A. Croson Company*, the Supreme Court found, “if [the organization] could show that it had essentially become a ‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry ... [i]t could take affirmative steps to dismantle such a system.”

Narrow tailoring. In addition to demonstrating a compelling governmental interest, a government organization must also demonstrate that its use of race- and gender-conscious

² Certain Federal Courts of Appeals apply the *intermediate scrutiny* standard to gender-conscious programs. Appendix B describes the intermediate scrutiny standard in detail.

³ *City of Richmond v. J.A. Croson Company*, 488 U.S. 469 (1989).

⁴ *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995).

⁵ See e.g., *Concrete Works, Inc. v. City and County of Denver* (“Concrete Works I”), 36 F.3d 1513, 1520 (10th Cir. 1994).

measures is *narrowly tailored*. There are a number of factors that a court considers when determining whether the use of such measures is narrowly tailored, including:

- The necessity of such measures and the efficacy of alternative, race- and gender-neutral measures;
- The degree to which the use of such measures is limited to those groups that actually suffer discrimination in the local marketplace;
- The degree to which the use of such measures is flexible and limited in duration, including the availability of waivers and sunset provisions;
- The relationship of any numerical goals to the relevant business marketplace; and
- The impact of such measures on the rights of third parties.⁶

Meeting the strict scrutiny standard. Many government organizations have used information from disparity studies as part of determining whether their contracting practices are affected by race- or gender-based discrimination and ensuring that their use of race- and gender-conscious measures is narrowly tailored. Specifically, organizations have assessed evidence of any disparities between the participation and availability of minority- and woman-owned businesses for their contracts and procurements. In *City of Richmond v. J.A. Croson Company*, the United States Supreme Court held that, “[w]here there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.” Lower court decisions since *City of Richmond v. J.A. Croson Company* have held that a compelling governmental interest must be established for each racial/ethnic and gender group to which race- and gender-conscious measures apply.

Many programs have failed to meet the strict scrutiny standard because they have failed to meet the compelling governmental interest requirement, the narrow tailoring requirement, or both. However, many other programs have met the strict scrutiny standard and courts have deemed them to be constitutional. Appendix B provides detailed discussions of the case law related to those programs.

⁶ See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1198-1199; *Rothe*, 545 F.3d at 1036; *Western States Paving*, 407 F.3d at 993-995; *Sherbrooke Turf*, 345 F.3d at 971; *Adarand VII*, 228 F.3d at 1181; *Eng’g Contractors Ass’n*, 122 F.3d at 927 (internal quotations and citations omitted).

CHAPTER 3.

Marketplace Conditions

CHAPTER 3.

Marketplace Conditions

Historically, there have been myriad legal, economic, and social obstacles that have impeded minorities and women from acquiring the human and financial capital necessary to start and operate successful businesses. Barriers such as slavery, racial oppression, segregation, race-based displacement, and labor market discrimination have produced substantial disparities for minorities and women, the effects of which are still apparent today. Those barriers have limited opportunities for minorities in terms of both education and workplace experience.^{1,2,3,4} Similarly, many women have been restricted to either being homemakers or taking gender-specific jobs with low pay and little chance for advancement.⁵

In the 19th and early 20th centuries, minorities in Pennsylvania faced barriers that were similar to those that minorities faced nationwide. Pennsylvania's Black American population grew considerably, but discriminatory treatment was nonetheless common for minorities in Pennsylvania. Black Americans were forced to live in racially-segregated neighborhoods, send their children to segregated schools, and use separate facilities at area restaurants and cultural institutions. Disparate treatment also extended into the labor market. Although opportunities in the workplace attracted people to Pennsylvania, unemployment rates for Black Americans exceeded those for non-Hispanic whites. Black Americans were concentrated in low-wage work in domestic services and general labor with few opportunities for advancement.^{6,7}

In the middle of the 20th century, many legal and workplace reforms opened up new opportunities for minorities and women nationwide. *Brown v. Board of Education*, *The Equal Pay Act*, *The Civil Rights Act*, and *The Women's Educational Equity Act* outlawed many forms of race- and gender-based discrimination. Workplaces adopted formalized personnel policies and implemented programs to diversify their staffs.⁸ Those reforms increased diversity in workplaces and reduced educational and employment disparities for minorities and women.^{9, 10, 11, 12} However, despite those improvements, minorities and women continue to face barriers—such as incarceration, residential segregation, and disproportionate family responsibilities—that have made it more difficult to acquire the human and financial capital necessary to start and operate businesses successfully.^{13, 14, 15}

Federal courts and the United States Congress have considered barriers that minorities, women, and minority- and woman-owned businesses face in a local marketplace as evidence for the existence of race- and gender-based discrimination in that marketplace.^{16, 17, 18} The United States Supreme Court and other federal courts have held that analyses of conditions in a local marketplace for minorities, women, and minority- and woman-owned businesses are instructive in determining whether agencies' implementations of minority- and woman-owned business programs are appropriate and justified. Those analyses help agencies determine whether they are *passively participating* in any race- or gender-based discrimination that makes it more difficult for minority- and woman-owned businesses to successfully compete for their contracts. Passive participation in discrimination means that agencies unintentionally perpetuate race- or

gender-based discrimination simply by operating within discriminatory marketplaces. Many courts have held that passive participation in any race- or gender-based discrimination establishes a *compelling governmental interest* for agencies to take remedial action to address that discrimination.^{19, 20, 21}

The study team conducted quantitative and qualitative analyses to assess whether minorities, women, and minority- and woman-owned businesses face any barriers in the Pennsylvania construction, architecture and engineering, professional services, and goods and services industries. The study team also examined the potential effects that any such barriers have on the formation and success of minority- and woman-owned businesses and on their participation in and availability for contracts that the Pennsylvania Department of Transportation (PennDOT) awards. The study team examined local marketplace conditions primarily in four areas:

- **Human capital**, to assess whether minorities and women face barriers in education, employment, or gaining managerial experience;
- **Financial capital**, to assess whether minorities and women face barriers in wages, homeownership, personal wealth, or access to financing;
- **Business ownership** to assess whether minorities and women own businesses at rates that are comparable to that of non-Hispanic white men; and
- **Success of businesses** to assess whether minority- and woman-owned businesses have outcomes that are similar to those of businesses owned by non-Hispanic white men.

The information in Chapter 3 comes from existing research in the area of race- and gender-based discrimination as well as from primary research that the study team conducted on current marketplace conditions. Data sources include the U.S. Census Bureau, U.S. Consumer Financial Protection Bureau, the U.S. Small Business Administration, and the study team’s in-depth interviews with business owners in the Pennsylvania marketplace.²² Additional quantitative and qualitative analyses of marketplace conditions are presented in Appendix C and Appendix D, respectively.

A. Human Capital

Human capital is the collection of personal knowledge, behavior, experience, and characteristics that make up an individual’s ability to perform and succeed in particular labor markets. Human capital factors such as education, business experience, and managerial experience have been shown to be related to business success.^{23, 24, 25, 26} Any race- or gender-based barriers in those areas may make it more difficult for minorities and women to work in relevant industries and prevent some of them from starting and operating businesses successfully.

Education. Barriers associated with educational attainment may preclude entry or advancement in certain industries because many occupations require at least a high school diploma, and some occupations, such as those in professional services, require at least a four-year college degree. In addition, educational attainment is a strong predictor of both income and personal wealth, which are both shown to be related to business formation and success.^{27, 28} Nationally, minorities lag behind non-Hispanic whites in terms of both educational attainment and the quality of education that they receive.^{29, 30} Minorities are far more likely than non-

Hispanic whites to attend schools that do not provide access to core classes in science and math.³¹ In addition, Black Americans are more than three times more likely than non-Hispanic whites to be expelled or suspended from high school.³² For those and other reasons, minorities are far less likely than non-Hispanic whites to attend college, enroll at highly- or moderately selective four-year institutions, and earn college degrees.³³

Educational outcomes for minorities in Pennsylvania are similar to those for minorities nationwide. The study team’s analyses of the Pennsylvania labor force indicate that certain minority groups are far less likely than non-Hispanic whites to earn a college degree. Figure 3-1 presents the percentage of Pennsylvania workers that have earned a four-year college degree by racial/ethnic and gender group. As shown in Figure 3-1, Black American, Hispanic American, and Native American workers in Pennsylvania are substantially less likely than non-Hispanic white workers to have four-year college degrees.

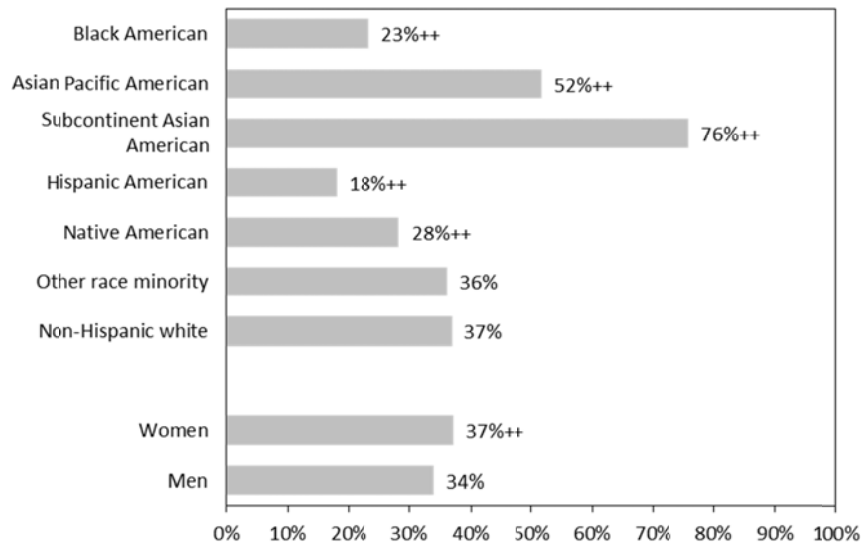
Figure 3-1.
Percentage of all workers 25 and older with at least a four-year degree, Pennsylvania, 2012-2016

Note:

++ Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between women and men) is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

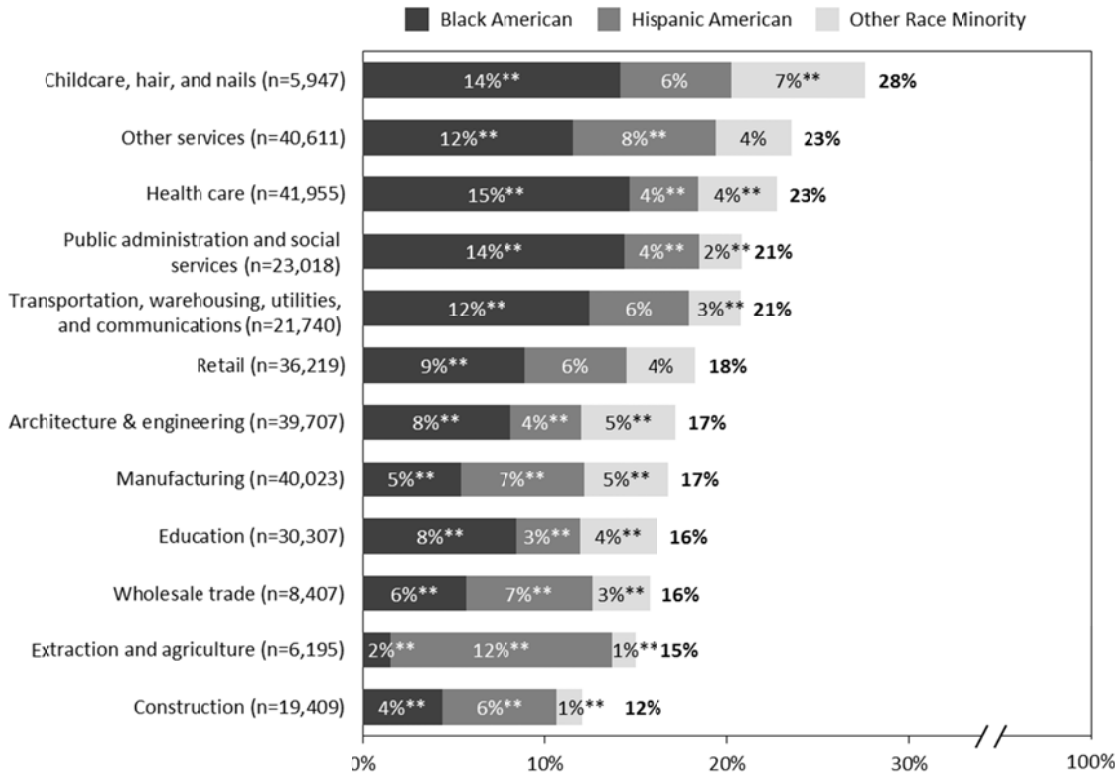


Employment and management experience. An important precursor to business ownership and success is acquiring relevant work and management experience. Any barriers that limit minorities, women, and other disadvantaged groups from acquiring that experience could prevent them from starting and operating related businesses in the future.

Employment. On a national level, prior industry experience has been shown to be an important indicator for business ownership and success. However, minorities and women are often unable to acquire relevant work experience. Minorities and women are sometimes discriminated against in hiring decisions, which impedes their entry into the labor market.^{34, 35, 36} When employed, minorities and women are often relegated to peripheral positions in the labor market and to industries that exhibit already high concentrations of minorities or women.^{37, 38, 39, 40, 41} In addition, minorities are incarcerated at a higher rate than non-Hispanic whites in Pennsylvania and nationwide, which contributes to a number of labor difficulties, including difficulties finding jobs and relatively slow wage growth.^{42, 43, 44, 45} Figure 3-2 presents the representation of

minority workers in various Pennsylvania industries. As shown in Figure 3-2, the industries with the highest representations of minority workers are childcare, hair, and nails; other services; and healthcare. The industries with the lowest representations of minority workers are wholesale trade, extraction and agriculture, and construction.

Figure 3-2.
Percent representation of minorities in various industries, Pennsylvania, 2012-2016



Note: *, ** Denotes that the difference in proportions between minority workers in the specified industry and all industries is statistically significant at the 90% and 95% confidence levels, respectively.

The representation of minorities among all Pennsylvania workers is 10% for Black Americans, 6% for Hispanic Americans, 4% for other race minorities, and 20% for all minorities considered together.

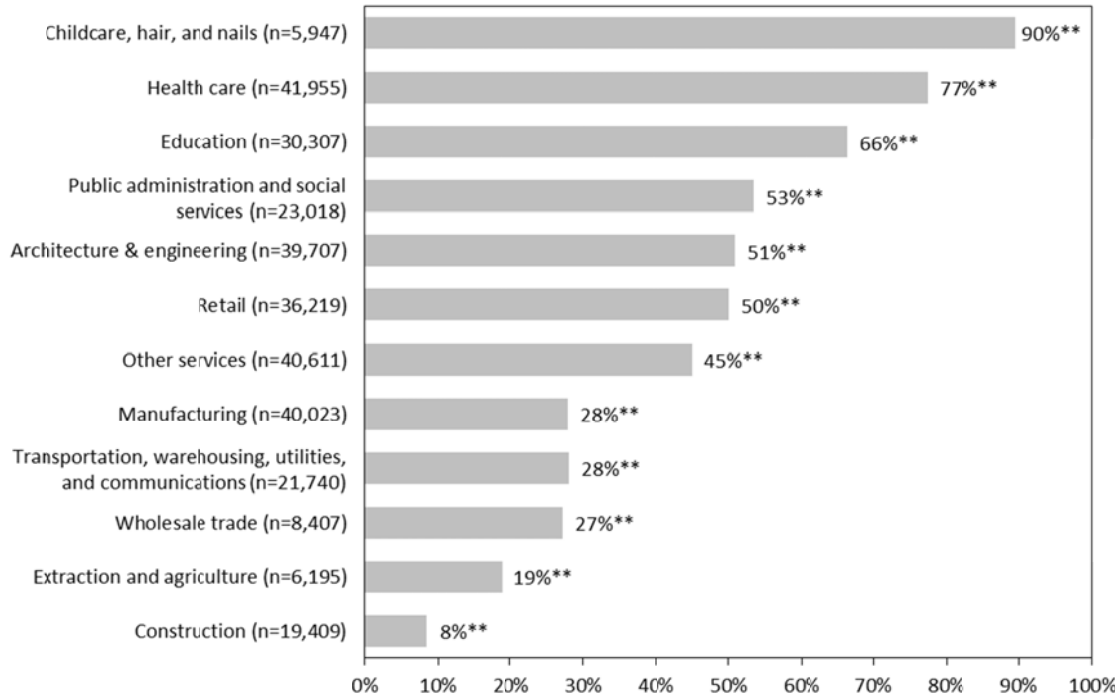
'Other race minority' includes Subcontinent Asian Americans, Asian Pacific Americans, Native Americans, and other races.

Workers in the finance, insurance, real estate, legal services, accounting, advertising, architecture, management, scientific research, and veterinary services industries were combined to one category of 'architecture and engineering;' Workers in the rental and leasing, travel, investigation, waste remediation, arts, entertainment, recreation, accommodations, food services, and select other services were combined into one category of 'other services;' Workers in child day care services, barber shops, beauty salons, nail salons, and other personal services were combined into one category of 'childcare, hair, and nails.'

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure 3-3 presents the representation of woman workers in various Pennsylvania industries. The industries with the highest representations of women workers are childcare, hair, and nails; healthcare; and education. The Pennsylvania industries with the lowest representations of women workers are wholesale trade, extraction and agriculture, and construction.

Figure 3-3.
Percent representation of women in various industries, Pennsylvania, 2012-2016



Note: *, ** Denotes that the difference in proportions between women workers in the specified industry and all industries is statistically significant at the 90% and 95% confidence levels, respectively.

The representation of women among all Pennsylvania workers is 48%.

Workers in the finance, insurance, real estate, legal services, accounting, advertising, architecture, management, scientific research, and veterinary services industries were combined to one category of 'architecture and engineering;' Workers in the rental and leasing, travel, investigation, waste remediation, arts, entertainment, recreation, accommodations, food services, and select other services were combined into one category of 'other services;' Workers in child day care services, barber shops, beauty salons, nail salons, and other personal services were combined into one category of 'childcare, hair, and nails.'

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Management experience. Managerial experience is an essential predictor of business success. However, race-and gender-based discrimination remains a persistent obstacle to greater diversity in management positions.^{46, 47, 48} Nationally, minorities and women are far less likely than non-Hispanic white men to work in management positions.^{49, 50} Similar outcomes appear to exist for minorities and women in Pennsylvania. The study team examined the concentration of minorities, women, and other disadvantaged individuals in management positions in the Pennsylvania construction, professional services, architecture and engineering, and goods and general services industries.

Figure 3-4.
Percentage of workers who worked as managers in each study-related industry, Pennsylvania, 2012-2016

Pennsylvania	Construction	Architecture & Engineering	Professional Services	Goods & Services
Race/ethnicity				
Black American	5.0 % **	1.4 % *	1.5 % **	1.9 % **
Asian Pacific American	13.5 %	2.9 %	2.5 % **	3.9 %
Subcontinent Asian American	4.0 % †	3.6 %	9.1 % **	5.3 %
Hispanic American	3.5 % **	2.8 %	2.1 % **	1.9 % **
Native American	4.7 %	2.3 %	1.6 %	3.5 %
Non-Hispanic white	7.4 %	4.5 %	6.0 %	3.8 %
Gender				
Women	5.5 % **	2.8 % **	4.1 % **	2.8 % **
Men	7.2 %	5.0 %	6.6 %	4.0 %

Note: *, ** Denotes that the difference in proportions between the minority group and non-Hispanic whites, or between women and men, is statistically significant at the 90% and 95% confidence levels, respectively.

† Denotes that statistically significant differences in proportions were not reported due to small sample sizes.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

As shown in Figure 3-4:

- Compared to non-Hispanic whites, smaller percentages of Black Americans and Hispanic Americans work as managers in the Pennsylvania construction industry.
- Compared to non-Hispanic whites, a smaller percentage of Black Americans work as managers in the Pennsylvania architecture and engineering industry.
- Compared to non-Hispanic whites, smaller percentages of Black Americans, Asian Pacific Americans, and Hispanic Americans work as managers in the Pennsylvania professional services industry.
- Compared to non-Hispanic whites, smaller percentages of Black Americans and Hispanic Americans work as managers in the Pennsylvania goods and services industry.
- Compared to men, a smaller percentage of women work as managers in the Pennsylvania construction, architecture and engineering, professional services, and goods and services industries.

Intergenerational business experience. Having a family member who owns a business and works in that business is an important predictor of business ownership and business success. Such experiences help entrepreneurs gain access to important opportunity networks; obtain knowledge of best practices and business etiquette; and receive hands-on experience in helping to run businesses. However, at least nationally, minorities have substantially fewer family members who own businesses, and both minorities and women have fewer opportunities to be involved with those businesses.^{51, 52} That lack of experience makes it more difficult for minorities and women to subsequently start their own businesses and operate them successfully.

B. Financial Capital

In addition to human capital, financial capital has been shown to be an important indicator of business formation and success.^{53, 54, 55} Individuals can acquire financial capital through many sources, including employment wages, personal wealth, homeownership, and financing. If race- or gender-based discrimination exists in those capital markets, minorities and women may have difficulty acquiring the capital necessary to start, operate, or expand businesses.

Wages and income. Wage and income gaps between minorities and non-Hispanic whites and between women and men are well-documented throughout the country, even when researchers have statistically controlled for various factors that are ostensibly unrelated to race and gender.^{56, 57, 58} For example, national income data indicate that, on average, Black Americans and Hispanic Americans have household incomes that are less than two-thirds those of non-Hispanic whites.^{59, 60} Women have also faced consistent wage and income gaps relative to men. Nationally, the median hourly wage of women is still only 84 percent the median hourly wage of men.⁶¹ Such disparities make it difficult for minorities and women to use employment wages as a source of business capital.

BBC observed wage gaps in Pennsylvania consistent with gaps that researchers have observed nationally. Figure 3-5 presents mean annual wages for Pennsylvania workers by race/ethnicity and gender. As shown in Figure 3-5:

- Black Americans, Hispanic Americans, Native Americans, and other race minorities earn substantially less than non-Hispanic whites; and
- Women earn substantially less than men.

BBC also conducted regression analyses to assess whether wage disparities for minorities and women exist even after accounting for various race- and gender-neutral factors such as age, education, and family status. Those analyses indicated that being Black American, Asian Pacific American, Subcontinent Asian American, Hispanic American, or Native American was associated with substantially lower earnings than being non-Hispanic white, even after accounting for various race- and gender-neutral factors. Similarly, being a woman was associated with lower earnings than being a man (for details, see Figure C-10 in Appendix C).

Figure 3-5.
Mean annual wages,
Pennsylvania, 2012-2016

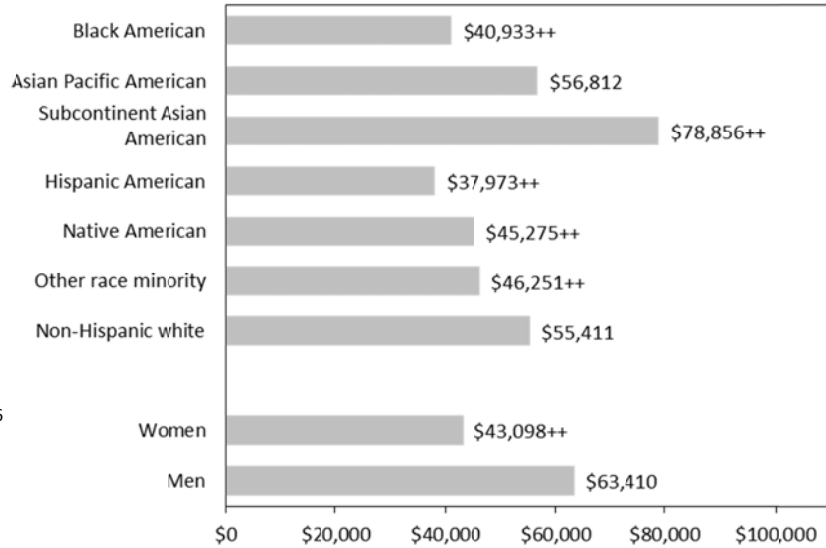
Note:

The sample universe is all non-institutionalized, employed individuals aged 25-64 that are not in school or self-employed.

++ Denotes statistically significant differences from non-Hispanic whites (for minority groups), and from men (for women) at the 95% confidence level.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



Personal wealth. Another important potential source of business capital is personal wealth. As with wages and income, there are substantial disparities between minorities and non-Hispanic whites and between women and men in terms of personal wealth.^{62, 63} For example, in 2010, Black Americans and Hispanic Americans across the country exhibited average household net worth that was 5 percent and 1 percent that of non-Hispanic whites, respectively. In Pennsylvania and nationwide, approximately one-quarter of Black Americans and Hispanic Americans are living in poverty, approximately double the rate for non-Hispanic whites.⁶⁴ Wealth inequalities also exist for women relative to men. For example, nationally, the median wealth of non-married women is approximately one-third that of non-married men.⁶⁵

Homeownership. Homeownership and home equity have been shown to be key sources of business capital.^{66, 67} However, minorities appear to face substantial barriers nationwide in owning homes. For example, Black Americans and Hispanic Americans own homes at less than two-thirds the rate of non-Hispanic whites.⁶⁸ Discrimination is at least partly to blame for those disparities. Research indicates that minorities continue to be given less information on prospective homes and have their purchase offers rejected because of their race.^{69, 70} Minorities who own homes tend to own homes that are worth substantially less than those of non-Hispanic whites and also tend to accrue substantially less equity.^{71, 72} Differences in home values and equity between minorities and non-Hispanic whites can be attributed, at least in part, to the depressed property values that tend to exist in neighborhoods with a higher percentage of minority homeowners.^{73, 74}

Minorities appear to face homeownership barriers in Pennsylvania that are similar to those observed nationally. BBC examined homeownership rates in Pennsylvania for relevant racial/ethnic groups. As shown in Figure 3-6, racial minority groups in Pennsylvania exhibit homeownership rates that are significantly lower than that of non-Hispanic whites.

Figure 3-6.
Home ownership rates,
Pennsylvania, 2012-2016

Note:
 The sample universe is all households.
 ++ Denotes statistically significant differences from non-Hispanic whites at the 95% confidence level.

Source:
 BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

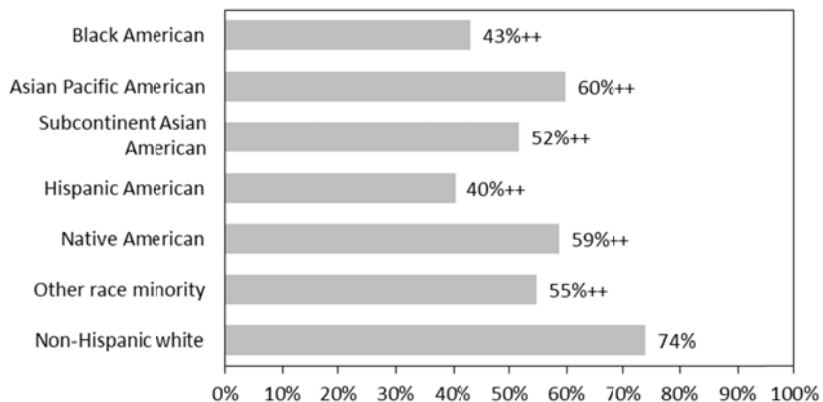
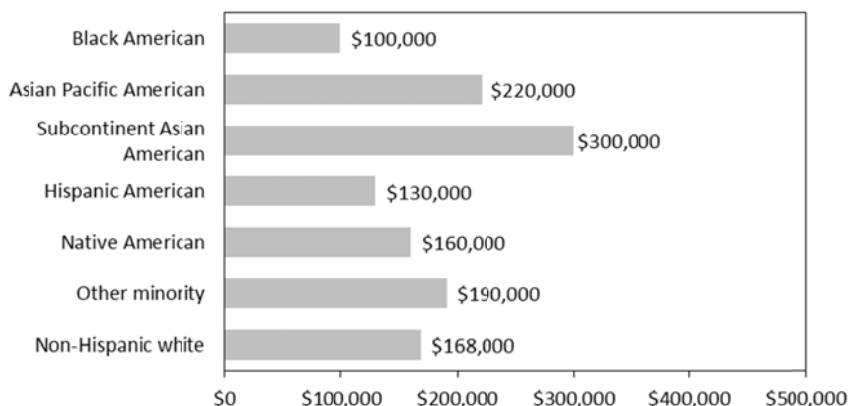


Figure 3-7 presents median home values among homeowners of different racial/ethnic groups in Pennsylvania. Consistent with national trends, Black Americans and Hispanic Americans own homes that, on average, are worth substantially less than those of non-Hispanic whites.

Figure 3-7.
Median home values,
Pennsylvania, 2012-2016

Note:
 The sample universe is all owner-occupied housing units.

Source:
 BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



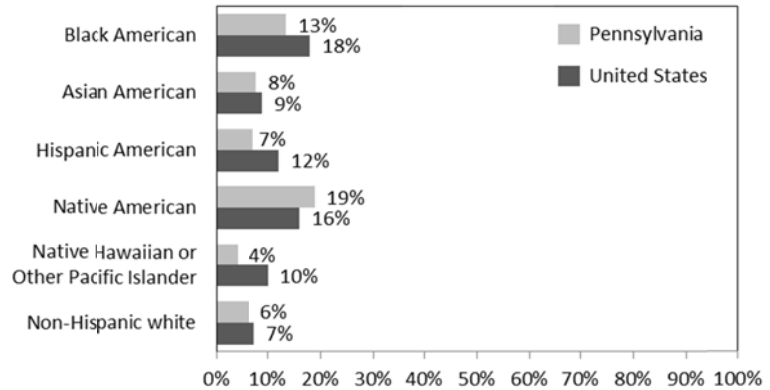
Access to financing. Minorities and women face many barriers in trying to access credit and financing, both for home purchases and for business capital. Researchers have often attributed those barriers to various forms of race- and gender-based discrimination that exist in credit markets.^{75, 76, 77, 78, 79, 80} The study team summarizes results related to difficulties that minorities, women, minority-owned businesses, and woman-owned businesses face in the home credit and business credit markets.

Home credit. Minorities and women continue to face barriers when trying to access credit to purchase homes. Examples of such barriers include discriminatory treatment of minorities and women during the pre-application phase and disproportionate targeting of minority and women borrowers for subprime home loans.^{81, 82, 83, 84, 85} Race- and gender-based barriers in home credit markets, as well as the recent foreclosure crisis, have led to decreases in homeownership among minorities and women and have eroded their levels of personal wealth.^{86, 87, 88, 89}

To examine how minorities fare in the home credit market relative to non-Hispanic whites, the study team analyzed home loan denial rates for high-income households by race/ethnicity. The study team analyzed those data for Pennsylvania and the United States as a whole. As shown in Figure 3-8, Black Americans, Asian Americans, Hispanic Americans, and Native Americans

exhibit higher home loan denial rates than non-Hispanic whites in the United States and in Pennsylvania in particular. In addition, the study team’s analyses indicate that certain minority groups in Pennsylvania are more likely than non-Hispanic whites to receive subprime mortgages (for details, see Figure C-15 in Appendix C).

Figure 3-8.
Denial rates of conventional purchase loans for high-income households, Pennsylvania, 2016



Note:

High-income borrowers are those households with 120% or more of the HUD area median family income (MFI).

Source:

FFIEC HMDA data 2007 and 2016. The raw data extract was obtained from the Consumer Financial Protection Bureau HMDA data tool: <http://www.consumerfinance.gov/hmda/explore>.

Business credit. Minority- and woman-owned businesses face substantial difficulties accessing business credit. For example, during loan pre-application meetings, minority-owned businesses are given less information about loan products, are subjected to more credit information requests, and are offered less support than their non-Hispanic white counterparts.⁹⁰ Researchers have shown that Black American-owned businesses and Hispanic American-owned businesses are more likely to forego submitting business loan applications and are more likely to be denied business credit when they seek loans, even after accounting for various race- and gender-neutral factors.^{91, 92, 93} In addition, women are less likely to apply for credit and receive loans of less value when they do.^{94, 95} Without equal access to business capital, minority- and woman-owned businesses must operate with less capital than businesses owned by non-Hispanic white men and must rely more on personal capital.^{96, 97, 98, 99}

C. Business Ownership

Nationally, there has been substantial growth in the number of minority- and woman-owned businesses in recent years. For example, from 2007 to 2012, the number of woman-owned businesses increased by 27 percent, the number of Black American-owned businesses increased by 35 percent, and the number of Hispanic American-owned businesses increased by 46 percent.¹⁰⁰ Despite the progress that minorities and women have made with regard to business ownership, important barriers in starting and operating businesses remain. Black Americans, Hispanic Americans, and women are still less likely to start businesses than non-Hispanic white men.^{101, 102, 103, 104} In addition, although rates of business ownership have increased among minorities and women, they have been unable to penetrate all industries evenly. Minorities and women disproportionately own businesses in industries that require less human and financial capital to be successful and that already include large concentrations of individuals from disadvantaged groups.^{105, 106, 107} The study team examined rates of business ownership in the Pennsylvania construction, architecture and engineering, professional services, and goods and services industries by race/ethnicity and gender.

Figure 3-9.
Business ownership rates in study-related industries, Pennsylvania, 2012-2016

Pennsylvania	Construction	Architecture & Engineering	Professional Services	Goods & Services
Race/ethnicity				
Black American	21.5 %	10.4 % **	7.0 % **	1.5 % **
Asian Pacific American	26.8 %	18.0 %	14.3 %	13.8 % **
Subcontinent Asian American	24.8 % †	5.9 % **	5.0 % **	16.7 % **
Hispanic American	16.2 % **	5.8 % **	9.9 % **	2.7 % **
Native American	20.6 %	31.1 %	23.4 %	2.2 % **
Other Race Minority	15.0 % †	0.0 % †	27.3 %	6.3 %
Non-Hispanic white	24.2 %	15.9 %	17.6 %	4.5 %
Gender				
Women	12.6 % **	12.7 % **	12.3 % **	2.8 % **
Men	24.5 %	16.6 %	19.2 %	5.3 %
All individuals	23.5 %	15.3 %	15.5 %	4.4 %

Note: *, ** Denotes that the difference in proportions between the minority group and non-Hispanic whites, or between women and men, is statistically significant at the 95% confidence level.

† Denotes that statistically significant differences in proportions were not reported due to small sample sizes.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

As shown in Figure 3-9:

- Hispanic Americans exhibit lower rates of business ownership than non-Hispanic whites in the Pennsylvania construction industry.
- Black Americans, Subcontinent Asians Americans, and Hispanic Americans exhibit lower rates of business ownership than non-Hispanic whites in the Pennsylvania architecture and engineering industry.
- Black Americans, Subcontinent Asian Americans, and Hispanic Americans exhibit lower rates of business ownership than non-Hispanic whites in the Pennsylvania professional services industry.
- Black Americans, Hispanic Americans, and Native Americans exhibit lower rates of business ownership than non-Hispanic whites in the Pennsylvania goods and services industry.
- Women exhibit lower rates of business ownership than men in the Pennsylvania construction, architecture and engineering, professional services, and goods and services industries.

BBC also conducted regression analyses to determine whether differences in business ownership rates exist between minorities and non-Hispanic whites and between women and men even after statistically controlling for various factors such as income, education, and family status. The study team conducted those analyses separately for each relevant industry. Figure 3-10 presents the factors that were significantly and independently related to business ownership for each relevant industry.

Figure 3-10.
Statistically significant relationships between race/ethnicity, gender, and business ownership in study-related industries, Pennsylvania, 2012-2016

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Industry and Group	Coefficient
Construction	
Hispanic American	-0.1616
Women	-0.5592
Architecture and Engineering	
Hispanic American	-0.4077
Subcontinent Asian American	-0.5469
Women	-0.1134
Professional Services	
Black American	-0.2535
Other minority group	-0.6392
Subcontinent Asian American	-0.6645
Women	-0.2406
Goods and Services	
Black American	-0.2609
Asian Pacific American	-0.6537
Subcontinent Asian American	-0.8044
Women	-0.2843

As shown in Figure 3-10, even after accounting for various relevant factors:

- Being Hispanic American was associated with lower rates of business ownership in the Pennsylvania construction and architecture and engineering industries.
- Being Subcontinent Asian American was associated with lower rates of business ownership in the Pennsylvania architecture and engineering, professional services, and goods and services industries.
- Being Asian Pacific American was associated with lower rates of business ownership in the Pennsylvania goods and services industry.
- Being Black American was associated with lower rates of business ownership in the Pennsylvania professional services industry.
- Being a woman was associated with lower rates of business ownership in Pennsylvania in all study-related industries.

Thus, disparities in business ownership rates between minorities and non-Hispanic whites and between women and men are not completely explained by differences in relevant factors such as income, education, and family status. Disparities in business ownership rates exist for several groups in all relevant industries even after accounting for such factors.

D. Business Success

There is a great deal of research indicating that, nationally, minority- and woman-owned businesses fare worse than businesses owned by non-Hispanic white men. For example, Black Americans, Native Americans, Hispanic Americans, and women exhibit higher rates of moving from business ownership to unemployment than non-Hispanic whites and men. In addition, minority- and woman-owned businesses have been shown to be less successful than businesses

owned by non-Hispanic whites and men, using a number of different indicators such as profits, closure rates, and business size.^{108, 109, 110} The study team examined data on business closure, business receipts, and business owner earnings to further explore the success of minority- and woman-owned businesses in Pennsylvania.

Business closure. The study team examined the rates of closure among Pennsylvania businesses by the race/ethnicity and gender of the owners. Figure 3-11 presents those results. As shown in Figure 3-11, Black American-owned businesses, Asian American-owned businesses, and Hispanic American-owned businesses in Pennsylvania appear to close at higher rates than non-Hispanic white-owned businesses. In addition, woman-owned businesses in Pennsylvania appear to close at higher rates than businesses owned by men. Increased rates of business closure among minority- and woman-owned businesses may have important effects on their availability for government contracts in Pennsylvania.

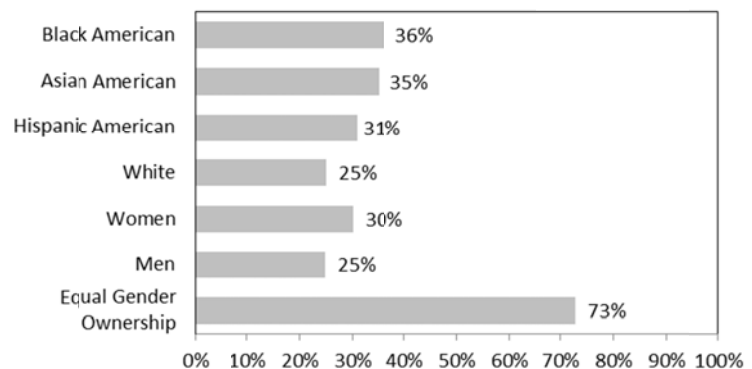
Figure 3-11.
Rates of business closure,
Pennsylvania, 2002-2006

Note:

Data include only non-publicly held businesses.

Equal Gender Ownership refers to those businesses for which ownership is split evenly between women and men.

Statistical significance of these results cannot be determined because sample sizes were not reported.



Source:

Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C..

Lowrey, Ying. 2014. "Gender and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Business receipts. BBC also examined data on business receipts to assess whether minority- and woman-owned businesses in Pennsylvania earn as much as businesses owned by non-Hispanic whites or business owned by men, respectively. Figure 3-12 shows mean annual receipts for Pennsylvania businesses by the race/ethnicity and gender of owners. Those results indicate that, in 2012, all relevant minority groups in Pennsylvania showed lower mean annual business receipts than businesses owned by non-Hispanic whites. In addition, woman-owned businesses in Pennsylvania showed lower mean annual business receipts than businesses owned by men.

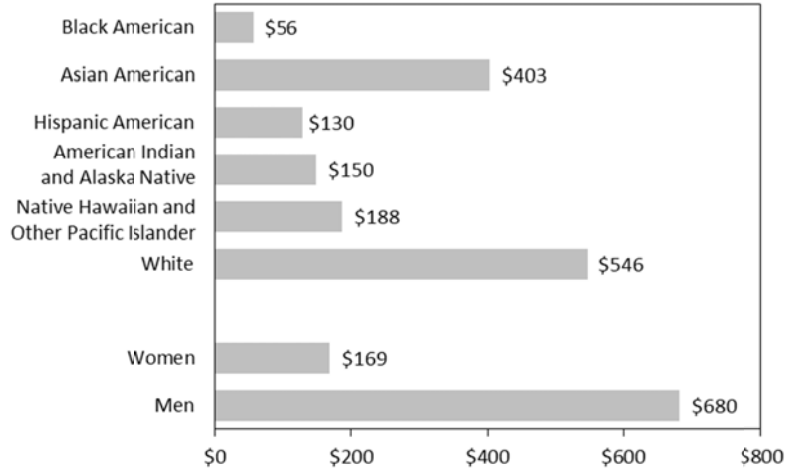
Figure 3-12.
Mean annual business receipts (in thousands), Pennsylvania, 2012

Note:

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source:

2012 Survey of Business Owners, part of the U.S. Census Bureau's 2012 Economic Census.



Business owner earnings. The study team analyzed business owner earnings to assess whether minorities and women in Pennsylvania earn as much from the businesses that they own as non-Hispanic whites and men do. As shown in Figure 3-13, Black Americans, Hispanic Americans, and Native Americans earned less on average from their businesses than non-Hispanic whites earned from their businesses. In addition, women in Pennsylvania earned less from their businesses than men earned from their businesses. BBC also conducted regression analyses to determine whether earnings disparities in Pennsylvania exist even after statistically controlling for various relevant factors such as age, education, and family status. The results of those analyses indicated that being a Black American woman was associated with substantially lower business owner earnings in Pennsylvania (for details, see Figure C-32 in Appendix C).

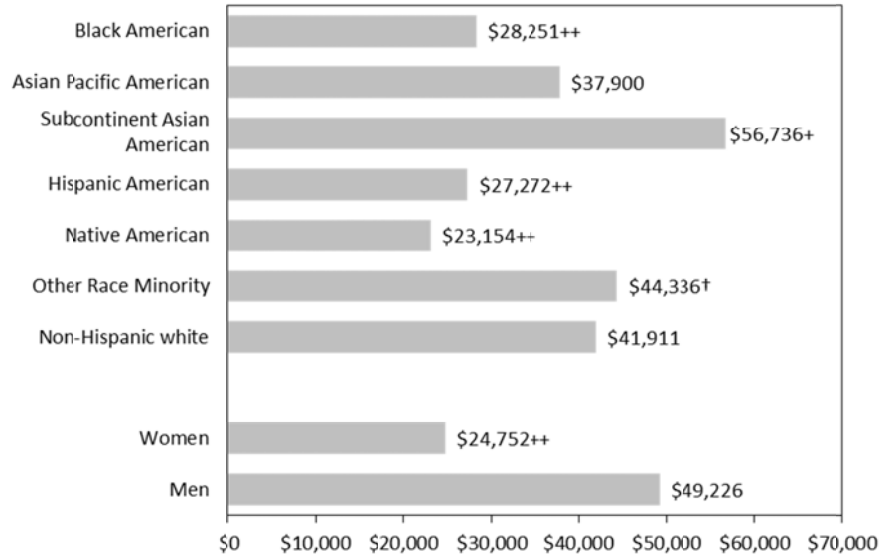
Figure 3-13.
Mean annual
business owner
earnings,
Pennsylvania, 2012-
2016

Note:

The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2016 dollars.

++ Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 95% confidence level.

† Denotes that statistically significant differences were not reported due to small sample sizes.



Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

E. Summary

BBC's analyses of marketplace conditions indicate that minorities, women, minority-owned businesses, and woman-owned businesses face substantial barriers nationwide and in Pennsylvania. Existing research, as well as primary research that the study team conducted, indicate that disparities exist in terms of acquiring human capital, accruing financial capital, owning businesses, and operating successful businesses. In many cases, there is evidence that those disparities exist even after accounting for various relevant factors such as age, income, education, and family status. There is also evidence that many disparities are due, at least in part, to discrimination.

Barriers in the marketplace likely have important effects on the ability of minorities and women to start businesses in the relevant Pennsylvania industries of construction, architecture and engineering, professional services, and goods and services, as well as affecting their ability to operate those businesses successfully. Any difficulties that those groups face in starting and operating businesses may reduce their availability for government agency work and may also reduce the degree to which they are able to successfully compete for government contracts. In addition, the existence of barriers in the Pennsylvania marketplace indicates that government agencies in the state are passively participating in discrimination that makes it more difficult for certain businesses to successfully compete for their contracts. Many courts have held that passive participation in any discrimination establishes a compelling governmental interest for agencies to take remedial action to address such discrimination.

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- ¹⁷*Adarand VII*, 228 F.3d. at 1168-70; *Western States Paving*, 407 F.3d at 992; see *DynaLantic*, 885 F.Supp.2d 237; *Midwest Fence Corp. v. U.S. DOT, Illinois DOT, et al.*, 2015 WL 1396376, *appeal pending*; *Geyer Signal*, 2014 WL 130909297 at *14.
- ¹⁸*Adarand VII* at 1170-72; see *DynaLantic*, 885 F.Supp.2d 237; *Geyer Signal*, 2014 WL 1309092 at *14.
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CHAPTER 4.

Collection and Analysis of Contract Data

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Collection and Analysis of Contract Data

Chapter 4 provides an overview of the policies that the Pennsylvania Department of Transportation (PennDOT) uses to award contracts; the contracts that the study team analyzed as part of the disparity study; and the process that the study team used to collect relevant prime contract and subcontract data.¹ Chapter 4 is organized into six parts:

- A. Overview of contracting policies;
- B. Collection and analysis of contract data;
- C. Collection of vendor data;
- D. Relevant geographic market area;
- E. Relevant types of work; and
- F. Agency review process.

A. Overview of Contracting Policies

PennDOT oversees programs and policies affecting highways, urban and rural public transportation, airports, railroads, ports, and waterways in Pennsylvania. Nearly three-quarters of PennDOT's annual budget is invested in the maintenance, restoration, and expansion of Pennsylvania's state and local highways system and bridge infrastructure.

PennDOT's procurement is generally governed by the *Commonwealth Procurement Code (62 Pa C.S.)* and Title 23 of the United States Code. PennDOT's procurement can be divided into two main areas, which are informed by different procurement authorities and policies: horizontal construction and all other goods, facilities projects, and non-construction related services.² This disparity study and its analyses focused on PennDOT's horizontal construction and construction-related engineering and professional services contract dollars during the study period. These data were obtained from PennDOT's Engineering and Construction Management System (ECMS), and from Walsh Construction for PennDOT's largest public-private partnership project to-date, The Rapid Bridge Replacement Project (RBR P3).

Horizontal Construction. PennDOT has the authority to act as the purchasing agency for its bridge, highway, dam, airport, railroad or other transportation-related heavy construction projects.³ Thus, PennDOT is responsible for awarding horizontal construction and construction-

¹ The terms "contract" and "procurement" are used interchangeably in this report unless otherwise noted.

² BBC recognizes that the procurement policies and authorities governing PennDOT contracting are complex. Thus, this chapter is designed to provide an overview of the PennDOT contracting policies that are most relevant to the procurement data BBC collected for this disparity study and its analyses.

³ 62 Pa.C.S. § 301(c)(1).

related engineering and professional services contracts for state and USDOT-funded projects. PennDOT maintains the majority of data on these contracts in its ECMS.

Horizontal Construction Contracts. PennDOT follows a specific bid solicitation process for its highway and other horizontal construction projects. Each quarter, PennDOT publishes a six-month schedule of highway construction contracting opportunities on ECMS. Prospective bidders can access all highway bid documents and review specific project plans and specifications through the ECMS website. For complex projects, potential bidders are notified of the time and place of a pre-bid conference so that they may attend and seek additional information about the contract being awarded. Potential bidders can also submit questions about bid packages through ECMS. PennDOT accepts bids from prime contractors that are pre-qualified and are Registered Business Partners through the agency. In order to perform work on a PennDOT construction project, a business must be prequalified under PennDOT regulations.⁴ The prequalification process requires contractors to provide information related to their financial ability, adequacy of plant and equipment, experience and organization.

Bidders must download the Expedite software and a project-specific Electronic Bid System file from ECMS. Then, bidders must complete bid packets using Expedite and submit their completed bids through ECMS. Bids must be received before the date and time of the deadline stated in the bid package. PennDOT opens all bids on the solicitation due date and reviews all bids for responsiveness. The agency then reviews all eligible bids and awards the contract to the lowest responsive and responsible bidder.

Construction-related engineering and professional services contracts. PennDOT is also responsible for awarding construction-related engineering and professional services contracts for its horizontal construction projects. PennDOT advertises for professional services contracts. All advertisements for current and future planned projects are posted on ECMS, and outline the scope of the project and desired qualifications. Consultants then submit a Statement of Interest for each project for which they want to be considered. In order to be considered for professional services contracts, consultants must have registered and described their qualifications in ECMS prior to submitting a Statement of Interest.

Consultants for construction-related engineering and professional services contracts are selected based upon their qualifications. Specifically, through its standard selection procedure, PennDOT scores all Statements of Interest for projects, and then selects a minimum of three best-qualified firms to submit technical proposals that outline how they plan to perform the proposed work. The finalists are then ranked based an evaluation of their technical proposals, including the firm's technical merit; use of subconsultants; proposed project management and delivery structure; and past performance. The highest ranked firm is then asked to provide a price proposal. As long as the selected consultant's proposal is acceptable, a contract is executed. For all design-related professional services projects, PennDOT is required to establish a selection committee of five architects, engineers, or other professionals with engineering and construction expertise.

⁴ 67 Pa. Code § 457

Once PennDOT selects a consultant for a professional services contract, the agency enters into either a project-specific or open-ended agreement with the business. A project-specific agreement is enacted when a project's scope of services and timeline are clearly defined (e.g. engineering work for a bridge). In contrast, open-ended project agreements are used when consultants are needed to provide certain services on an "as-needed" basis without a specific determination of how or when PennDOT might require those services. Once PennDOT determines those details, the agency creates specific work orders associated with an open-ended agreement. A subset of professional services agreements are project-specific, open-ended agreements. In those cases, PennDOT clearly defines the project for which services are needed but has not defined the exact scope of services required.

Emergency horizontal construction contracts. PennDOT is authorized to determine when USDOT-funded and state projects merit emergency purchases. When the need arises for a consultant to perform work and the emergency request is approved by the appropriate official, PennDOT is required to select a consultant who is the best qualified and available.⁵ PennDOT maintains a written record of the process.

Sole source contracts. PennDOT allows for the procurement of horizontal construction-related professional services on a sole source basis, if the procurement meets at least one of the following conditions:

- Only a single source is capable of providing the services;
- Competition determined inadequate after solicitation of a number of sources;
- Federal or state regulations specifically exempt use of a competitive procedure; or
- Not enough time to award the contract on a competitive basis.

PennDOT provides additional guidance on its horizontal construction contracting processes to vendors interested in doing business with the agency in *PUB 408 and PUB 93*.^{6,7}

Other procurements. The Department of General Services (DGS) retains purchasing authority for the majority of PennDOT's goods, facilities projects, and non-construction related services, unless DGS delegates that authority.⁸ PennDOT is currently delegated purchasing authority for a number of vertical construction facilities projects. Those contract dollars were not analyzed as part of this disparity study.

⁵ PennDOT may elect to call a prequalified contractor or if time permits competitively bid a contract.

⁶ Policy and Procedures for the Administration of Consultant Agreements. Pennsylvania Department of Transportation PUB 93 (3-18). Available online at <http://www.dot.state.pa.us/public/PubsForms/Publications/PUB%2093.pdf>.

⁷ Specifications. Pennsylvania Department of Transportation. PUB 408/2016. Available online at http://www.dot.state.pa.us/public/PubsForms/Publications/Pub_408/408_2016/408_2016_5/408_2016_5.pdf

⁸ *The Commonwealth Procurement Code* authorizes the Department of General Services (DGS) to carry out and act as purchasing agency on all goods, services, design, and construction activities for the Commonwealth of Pennsylvania unless DGS delegates that authority. Memorandum of Understanding (MOU) #BB05192015 outlines some of the specific procurement responsibilities that DGS has delegated to PennDOT.

B. Collection and Analysis of Contract Data

BBC Research & Consulting (BBC) collected contracting and vendor data from PennDOT's Bureau of Project Delivery and Bureau of Equal Opportunity divisions to serve as the basis of key disparity study analyses, including the utilization, availability, and disparity analyses. All contracting and vendor data came from PennDOT's ECMS software except for contract data about RBR P3. The study team collected the most comprehensive set of data that was available on prime contracts and subcontracts that PennDOT awarded during the study period (i.e., July 1, 2011 through June 30, 2016).⁹ BBC sought data that included information about prime contractors, subcontractors, and suppliers, regardless of the race/ethnicity and gender of their owners or their statuses as small disadvantaged businesses. The study team collected data on transportation-related construction and engineering and professional services prime contracts and subcontracts that PennDOT awarded during the study period. The study team's analyses included contracts worth \$10,000 or more.¹⁰

Prime contract data. PennDOT provided the study team with electronic data on horizontal construction and related engineering and professional services prime contracts from their ECMS software, including state construction project records, state consulting agreement records, local construction project records, and local consulting agreement records. In addition, PennDOT provided contract data for its largest public-private partnership project to date, the RBR P3. Contract data for RBR P3 is managed by the project's prime contractor, Walsh Construction.

BBC collected the following information about each relevant horizontal construction and construction-related engineering and professional services prime contract:

- Contract number;
- Description of work;
- Award date;
- Award amount (including change orders and amendments);
- Amount paid-to-date;
- Location of work (PennDOT District);
- Prime contractor name; and
- Prime contractor identification number.

PennDOT staff advised the study team on how to interpret the ECMS and RBR P3 data that the agency provided, including how to identify unique contracts.

⁹ BBC collected and analyzed subcontractor and supplier contract dollars. In the report, all references to "subcontracts" include supplier contracts.

¹⁰ Procurements of \$10,000 or more accounted for more than 99 percent of all in-scope PennDOT contract and procurement dollars during the study period.

Subcontract data collection. PennDOT also provided the study team with electronic data from ECMS on subcontracts that the agency awarded during the study period. All subcontract data was related to the horizontal construction and engineering and professional services prime contracts BBC collected from PennDOT. BBC collected the following information about each relevant subcontract:

- Associated prime contract number;
- Amount paid on the subcontract as of June 30, 2016;
- Amount awarded on the subcontract;
- Description of work; and
- Subcontractor name.

Contracts included in study analyses. BBC collected information on 5,023 prime contracts and 33,938 associated subcontracts that PennDOT awarded during the study period in the areas of horizontal construction and construction-related engineering and professional services. Those contracts accounted for \$12.54 billion of PennDOT contracting dollars during the five-year study period. Figure 4-1 presents dollars by relevant contracting area for the prime contracts and subcontracts that the study team included in its analyses.

Figure 4-1.
Number of PennDOT contracts included in the study

Note:

Numbers rounded to nearest dollar and thus may not sum exactly to totals.

Source:

BBC Research from PennDOT ECMS and RBR P3 contract data.

Contract Type	Number of Contract Elements	Dollars (Thousands)
Horizontal construction	32,149	\$10,341,898
Construction-related engineering and professional services	<u>6,812</u>	<u>\$2,202,619</u>
Total	38,961	\$12,544,517

Prime contract and subcontract amounts. Because of the nature of the ECMS and RBR P3 data, BBC based its analyses on contract award amounts and contract paid-to-date amounts, depending on contract type. For PennDOT’s state-level consulting agreements (from ECMS) and the Rapid Bridge Replacement (RBR) project, BBC used the amounts paid-to-date to the prime contractor as of June 30, 2016. If the contract included subcontracts, the study team calculated subcontract amounts as the total amount paid to each subcontractor. BBC then calculated the prime contract amount as the total amount paid to the prime contractor less the sum of dollars paid to all subcontractors. If a contract did not include any subcontracts, the study team attributed the entire paid amount to the prime contractor.

Where amount paid-to-date was not available, BBC examined the dollars that PennDOT awarded to each prime contractor and subcontractor. BBC used award amount in the analysis of all state-level construction contracts, local construction contracts, and local consulting agreements in the ECMS data. If a contract included subcontracts, the study team calculated subcontract amounts as the total amount awarded to each subcontractor. BBC then calculated the prime contract amount as the total award amount less the sum of dollars awarded to all subcontractors. If a

contract did not include any subcontracts, the study team attributed the entire award amount to the prime contractor.

C. Collection of Vendor Data

PennDOT maintains data on all vendors who have performed work on PennDOT contracts. The study team compiled the following information on businesses that participated in PennDOT horizontal construction and construction-related engineering and professional services contracts and procurements during the study period:

- Business name;
- Addresses and phone numbers;
- Ownership status (i.e., whether each business was minority- or woman-owned);
- Ethnicity of ownership (if minority-owned);
- Disadvantaged business enterprise (DBE) or disadvantaged business (DB) certification status;
- Primary line of work;
- Business size; and
- Year of establishment.

BBC relied on a variety of sources for vendor information, including:

- PennDOT contract and vendor data from ECMS;
- PennDOT United Certification Program DBE list;
- City of Philadelphia Office of Economic Opportunity certification list;
- Small Business Administration certification and ownership lists, including 8(a) HUBZone and self-certification lists;
- Dun & Bradstreet (D&B) business listings and other business information sources;
- Telephone surveys that the study team conducted with business owners and managers as part of the utilization and availability analyses;
- Business websites; and
- Reviews that PennDOT conducted of study information.

D. Relevant Geographic Market Area

The study team used PennDOT's contracting and vendor data to help determine the relevant geographic market area—the geographical area in which the agency spends the substantial majority of its contracting dollars—for the study. The study team's analysis showed that 94 percent of PennDOT's horizontal construction and construction-related engineering and professional services contracting dollars during the study period went to businesses with locations in Pennsylvania, indicating that Pennsylvania should be considered the relevant

geographic market area for the study. BBC's analyses—including the availability analysis and quantitative analyses of marketplace conditions—focused on Pennsylvania.

E. Relevant Types of Work

For each prime contract and subcontract, the study team determined the *subindustry* that best characterized the business's primary line of work (e.g., heavy construction). BBC identified 51 subindustries based on PennDOT contract data; telephone surveys that BBC conducted with prime contractors and subcontractors; business certification lists; D&B business listings; and other sources. BBC developed subindustries based in part on 8-digit D&B industry classification codes. Figure 4-2 presents the dollars that the study team examined in the various horizontal construction and construction-related engineering and professional services subindustries that BBC included in its analyses.

**Figure 4-2.
PennDOT contract
dollars by subindustry**

Note:
Numbers rounded to nearest dollar
and thus may not sum exactly to
totals.

Source:
BBC Research & Consulting from
PennDOT ECMS and RBR P3 contract
data.

Industry	Total (in Thousands)
Horizontal Construction	
Heavy construction	\$5,504,614
Concrete and related products	\$1,529,816
Structural steel and building construction	\$545,609
Excavation	\$393,819
Fencing, guardrails and signs	\$353,348
Concrete work	\$331,799
Electrical work	\$269,074
Painting	\$246,658
Trucking, hauling and storage	\$229,911
Other construction services	\$161,858
Water, sewer, and utility lines	\$113,451
Structural metals	\$108,666
Electrical equipment and supplies	\$103,614
Other construction materials	\$101,212
Residential construction	\$93,270
Landscape services	\$69,642
Flagging services	\$48,191
Heavy construction equipment	\$46,203
Petroleum and petroleum products	\$27,765
Dam and marine construction	\$16,952
Plumbing and HVAC	\$12,792
Wrecking and demolition work	\$12,485
Railroad construction	\$6,942
Masonry, drywall and stonework	\$6,087
Roofing	\$3,645
Other goods	\$1,554
Security guard services	\$490
Industrial chemicals	\$452
Industrial equipment and machinery	\$373
Safety equipment	\$370
Cleaning and janitorial services	\$337
Office equipment	\$270
Vehicle parts and supplies	\$256
Automobiles	\$234
Other services	\$127
Communications equipment	\$10
Total construction	\$10,341,898

**Figure 4-2. (Continued)
PennDOT contract
dollars by subindustry**

Note:
Numbers rounded to nearest dollar
and thus may not sum exactly to
totals.

Source:
BBC Research & Consulting from
PennDOT contract data.

Industry	Total (in Thousands)
Construction-Related Engineering and Professional Services	
Engineering	\$1,311,139
Construction management	\$652,416
Environmental services and transportation planning	\$124,462
Architectural and design services	\$48,004
Real estate management	\$14,595
Testing services	\$13,301
Human resources and job training services	\$10,719
Surveying and mapmaking	\$9,357
Business services and consulting	\$7,243
IT and data services	\$3,308
Finance and accounting	\$3,222
Advertising, marketing and public relations	\$3,001
Scientific and market research	\$1,051
Other professional services	\$635
Legal services	\$163
Total professional services	\$2,202,619
Total	\$12,544,517

The study team combined related subindustries that accounted for relatively small percentages of total contracting dollars into four “other” construction-related subindustries: “other construction services,” “other professional services,” “other goods,” and “other services.” For example, the contracting dollars that PennDOT awarded to contractors for “miscellaneous rehabilitation work” represented less than 1 percent of the total PennDOT contract dollars that BBC examined in the study. BBC combined “miscellaneous rehabilitation work” with other construction subindustries that also accounted for relatively small percentages of total contracting dollars and that were relatively dissimilar to other subindustries into the “other construction services” subindustry.

There were also contracts that were categorized in various subindustries that BBC did not include as part of its analyses, because they are not typically analyzed as part of disparity studies. BBC did not include contracts in its analyses that:

- PennDOT awarded to other government agencies, nonprofit organizations, banks, or individuals (\$113 million of associated contract dollars);
- Accounted for small proportions of PennDOT’s contracting dollars (\$6.57 million of associated contract dollars); or
- Could not be classified into a particular subindustry (\$1.7 million of associated contract dollars).

F. Agency Review Process

PennDOT reviewed BBC’s prime contract and subcontract data several times during the study process. The BBC study team met with PennDOT staff to review the data collection process, contract and vendor information that the study team gathered from ECMS and Walsh Construction, and summary results. BBC incorporated PennDOT’s feedback in the final contract and vendor data that the study team used as part of the disparity study.

CHAPTER 5.

Availability Analysis

CHAPTER 5.

Availability Analysis

BBC Research & Consulting (BBC) analyzed the availability of minority- and woman-owned businesses that are ready, willing, and able to perform on Pennsylvania Department of Transportation's (PennDOT's) horizontal construction and construction-related engineering and professional services contracts.¹ Chapter 5 describes the availability analysis in seven parts:

- A. Purpose of the availability analysis;
- B. Potentially available businesses;
- C. Businesses in the availability database;
- D. Availability calculations;
- E. Availability results;
- F. Base figure for overall DBE goal; and
- G. Implications for DBE contract goals.

Appendix E provides supporting information related to the availability analysis.

A. Purpose of the Availability Analysis

BBC examined the availability of minority- and woman-owned businesses for PennDOT prime contracts and subcontracts to inform the agency's implementation of the Federal Disadvantaged Business Enterprise (DBE) Program and the state's transportation-focused Diverse Business (DB) Program.² In addition, BBC used availability analysis results as inputs in the disparity analysis. In the disparity analysis, BBC compared the percentage of PennDOT contract dollars that went to minority- and woman-owned businesses during the study period (i.e., *participation* or *utilization*) to the percentage of dollars that one might expect those businesses to receive based on their availability for specific types and sizes of PennDOT prime contracts and subcontracts (i.e., *availability*).³ Comparisons between participation and availability allowed the study team to determine whether any relevant business groups were *underutilized* during the study period relative to their availability for PennDOT work (for details, see Chapter 7).

B. Potentially Available Businesses

BBC's availability analysis focused on specific areas of work (i.e., subindustries) related to the types of prime contracts and subcontracts that PennDOT awarded during the study period. BBC began the availability analysis by identifying the specific subindustries in which PennDOT

¹ "Woman-owned businesses" refers to non-Hispanic white woman owned businesses. Information and results for minority woman-owned businesses are included along with their corresponding racial/ethnic groups.

² For disparity study analyses, BBC measured the availability and utilization of all minority- and woman-owned businesses regardless of size and revenue.

³ The study period for the disparity study was July 1, 2011 through June 30, 2016.

spends most of its contracting dollars (i.e., *relevant work types*) as well as the geographic areas in which the majority of the businesses with which PennDOT spends those contracting dollars are located (i.e., *relevant geographic market area*).⁴

Once BBC identified PennDOT’s relevant subindustries and its relevant geographic market area, the study team conducted extensive surveys to develop a representative, unbiased, and statistically-valid database of potentially available businesses located in the relevant geographic market area that perform work within relevant subindustries. The objective of the availability survey was not to collect information from each and every relevant business that is operating in the local marketplace. It was to collect information from an unbiased subset of the business population that appropriately represents the entire relevant business population operating in Pennsylvania. That method of examining availability is referred to as a *custom census* and has been accepted in federal court as the preferred methodology for conducting availability analyses. BBC’s approach allowed the study team to estimate the availability of minority- and woman-owned businesses in an accurate, statistically-valid manner.

Overview of availability surveys. The study team conducted telephone surveys with business owners and managers to identify Pennsylvania businesses that are potentially available for PennDOT prime contracts and subcontracts.⁵ BBC began the survey process by compiling a comprehensive and unbiased *phone book* of all types of Pennsylvania businesses—that is, not only those businesses that are minority or woman-owned but *all* businesses—that perform work in relevant subindustries. BBC developed that phone book primarily based on information from Dun & Bradstreet (D&B) Marketplace.⁶ BBC collected information about all business establishments listed under 8-digit work specialization codes (as developed by D&B) that were most related to the contracts that PennDOT awarded during the study period. BBC obtained listings on 28,507 Pennsylvania businesses that do work in relevant subindustries. However, BBC did not have working phone numbers for 3,506 of those businesses. BBC attempted availability surveys with the remaining 25,001 business establishments.

Availability survey information. The BBC project team conducted telephone surveys with the owners or managers of the identified business establishments. Survey questions covered many topics about each business including:

- Status as a private business (as opposed to a public agency or nonprofit organization);
- Status as a subsidiary or branch of another company;
- Primary lines of work;
- Role as a contractor (i.e., prime contractor, subcontractor, or both);
- Interest in performing work for PennDOT;
- Largest prime contract or subcontract bid on or performed in the previous five years;

⁴ BBC identified the relevant geographic market area for the disparity study as the entire state of Pennsylvania.

⁵ The study team offered business representatives the option of completing surveys via fax or e-mail if they preferred not to complete surveys via telephone.

⁶ D&B Marketplace is accepted as the most comprehensive and unbiased source of business listings in the nation.

- Year of establishment; and
- Race/ethnicity and gender of ownership.

Potentially available businesses. BBC considered businesses to be potentially available for PennDOT prime contracts or subcontracts if they reported having a location in Pennsylvania and reported possessing *all* of the following characteristics:

- Being a private business (as opposed to a nonprofit organization);
- Having performed work relevant to PennDOT contracts or procurements;
- Having bid on or performed relevant work in either the public sector or private sector in Pennsylvania in the past five years;
- Being able to perform work or serve customers in the geographical area in which the work took place; and
- Being interested in performing PennDOT work.

BBC also considered the following information about businesses to determine if they were potentially available for specific prime contracts and subcontracts that PennDOT awards:

- The role in which they work (i.e., as a prime contractor, subcontractor, or both);
- The largest contract they bid on or performed in the past five years; and
- The year in which they were established.

C. Businesses in the Availability Database

After conducting availability surveys with thousands of local businesses, BBC developed a database of information about businesses that are potentially available for PennDOT contracts and procurements. Information from the database allowed BBC to develop an accurate assessment of businesses that are ready, willing, and able to perform work for PennDOT. Figure 5-1 presents the percentage of businesses in the *availability database* that were minority-, woman-, and veteran-owned. The study team’s analysis included 1,872 businesses that are potentially available for specific prime contracts and subcontracts that PennDOT awards. As shown in Figure 5-1, 26.4 percent of those businesses were minority- or woman-owned. The information in Figure 5-1 reflects a simple *head count* of businesses with no analysis of their availability for specific PennDOT contracts and procurements. Thus, it represents only a first step toward analyzing the availability of minority- and woman-owned businesses for PennDOT work.

Figure 5-1.
Percentage of businesses in the availability database that were minority- and woman-owned

Note:
 Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.

Source:
 BBC Research & Consulting availability analysis.

Business group	Availability %
Asian Pacific American-owned	1.1 %
Black American-owned	3.9 %
Hispanic American-owned	1.5 %
Native American-owned	0.5 %
Subcontinent Asian American-owned	1.0 %
Non-Hispanic white woman-owned	<u>18.3 %</u>
Total Minority- and Woman-owned	26.4 %

D. Availability Calculations

BBC analyzed information from the availability database to develop dollar-weighted estimates of the availability of minority- and woman-owned businesses for PennDOT contracts and procurements. Those estimates represent the percentage of contracting dollars that minority- and woman-owned businesses would be expected to receive based on their availability for specific types and sizes of PennDOT prime contracts and subcontracts.

Steps to calculating availability. BBC used a bottom up, contract-by-contract matching approach to calculate availability. Only a portion of the businesses in the availability database was considered potentially available for any given PennDOT prime contract or subcontract. BBC first examined the characteristics of each specific prime contract or subcontract (referred to generally as a *contract element*), including type of work, location of work, contract size, and contract date. BBC then identified businesses in the availability database that perform work of that type, in that role (i.e., as a prime contractor or subcontractor), in that location, of that size, and that were in business in the year that PennDOT awarded the contract element.

BBC identified the specific characteristics of each prime contract and subcontract that the study team examined as part of the disparity study and then took the following steps to calculate availability for each contract element:

1. For each contract element, the study team identified businesses in the availability database that reported that they:
 - Are interested in performing horizontal construction or construction-related engineering and professional services work in that particular role for that specific type of work for PennDOT;
 - Are able to serve customers in the geographical area in which the work took place;
 - Have bid on or performed work of that size in the past five years; and
 - Were in business in the year that PennDOT awarded the contract element.
2. The study team then counted the number of minority-owned businesses, woman-owned businesses, and businesses owned by non-Hispanic white men (i.e., *majority-owned businesses*) in the availability database that met the criteria specified in Step 1.
3. The study team translated the numeric availability of businesses for the contract element into percentage availability.

BBC repeated those steps for each contract element that the study team examined as part of the disparity study. BBC multiplied the percentage availability for each contract element by the dollars associated with the contract element, added results across all contract elements, and divided by the total dollars for all contract elements. The result was dollar-weighted estimates of the availability of minority- and woman-owned businesses, both overall and separately for each relevant business group. Figure 5-2 provides an example of how BBC calculated availability for a specific subcontract associated with a construction prime contract that PennDOT awarded during the study period.

Improvements on a simple head count of businesses. BBC used a custom census approach to calculating the availability of minority- and woman-owned businesses for PennDOT work rather than using a simple head count of those businesses (e.g., simply calculating the percentage of all Pennsylvania businesses that are minority- or woman-owned). There are several important ways in which BBC's custom census approach to measuring availability is more precise than completing a simple head count.

BBC's approach accounts for type of work. Federal regulations suggest calculating availability based on businesses' abilities to perform specific types of work. For example, the United States Department of Transportation (USDOT) gives the following example in "Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program:"

If 90 percent of an agency's contracting dollars is spent on heavy construction and 10 percent on trucking, the agency would calculate the percentage of heavy construction businesses that are [minority- or woman-owned] and the percentage of trucking businesses that are [minority- or woman-owned], and weight the first figure by 90 percent and the second figure by 10 percent when calculating overall [minority- and woman-owned business] availability.⁷

The BBC study team took type of work into account by examining 60 different subindustries related to horizontal construction and construction-related engineering and professional services as part of estimating availability for PennDOT prime contracts and subcontracts.

BBC's approach accounts for interest in relevant prime contract and subcontract work. The study team collected information on whether businesses are interested in working as prime contractors, subcontractors, or both on PennDOT work (in addition to considering several other factors related to PennDOT prime contracts and subcontracts such as contract types, sizes, and locations). Businesses had to indicate that they are interested in performing such work for

**Figure 5-2.
Example of the availability calculation
for a PennDOT subcontract**

On a contract that PennDOT awarded in 2015, the prime contractor awarded a subcontract worth \$64,377 for heavy construction. To determine the overall availability of minority- and woman-owned businesses for that subcontract, the study team identified businesses in the availability database that:

- a. Were in business in 2015;
- b. Indicated that they performed heavy construction;
- c. Reported bidding on work of similar or greater size in the past;
- d. Reported being able to work or serve customers statewide (where the work was performed); and
- e. Reported qualifications and interest in working as a subcontractor on PennDOT projects.

The study team found 49 businesses in the availability database that met those criteria. Of those businesses, eight were minority- or woman-owned businesses. Thus, the availability of minority- and woman-owned businesses for the subcontract was 16 percent (i.e., $8/49 \times 100 = 16$).

⁷ Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program, <http://www.osdbu.dot.gov/dbeprogram/tips.cfm>.

PennDOT in order to be considered potentially available for PennDOT contracts and procurements.

BBC’s approach accounts for the relative capacity of businesses. BBC considered the size—in terms of dollar value—of the prime contracts and subcontracts that a business bid on or received in the previous five years (i.e., *relative capacity*) when determining whether to count that business as available for a particular contract element. BBC considered whether businesses had previously bid on or received at least one contract of an equivalent or greater dollar value. BBC’s approach is consistent with many recent, key court decisions that have found relative capacity measures to be important to measuring availability (e.g., *Associated General Contractors of America, San Diego Chapter vs. California Department of Transportation, et al.*,⁸ *Western States Paving Company v. Washington State DOT*,⁹ *Rothe Development Corp. v. U.S. Department of Defense*,¹⁰ and *Engineering Contractors Association of S. Fla. Inc. vs. Metro Dade County*¹¹).

BBC’s approach generates dollar-weighted results. BBC examined availability on a contract-by-contract basis and then dollar-weighted the results for different sets of contract elements. Thus, the results of relatively large contract elements contributed more to overall availability estimates than those of relatively small contract elements. BBC’s approach is consistent with relevant case law and federal regulations including USDOT’s “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program,” which suggests a dollar-weighted approach to calculating availability.

E. Availability Results

BBC estimated the availability of minority- and woman-owned businesses for the 38,961 relevant prime contracts and subcontracts that PennDOT awarded between July 1, 2011 through June 30, 2016.

Overall. Figure 5-3 presents overall dollar-weighted availability estimates by relevant business group for PennDOT contracts. Overall, the availability of minority- and woman-owned businesses for PennDOT’s horizontal construction and construction-related engineering and professional services contracts and procurements is 10.4 percent. Non-Hispanic white woman-owned businesses (8.2%), Black American-owned businesses (0.8%), and Hispanic American-owned businesses (0.7%) exhibited the highest availability percentages among all groups.

⁸ *AGC, San Diego Chapter v. California DOT*, 2013 WL 1607239 (9th Cir. April 16, 2013).

⁹ *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006).

¹⁰ *Rothe Development Corp. v. U.S. Department of Defense*, 545 F.3d 1023 (Fed. Cir. 2008).

¹¹ *Engineering Contractors Association of S. Fla. Inc. vs. Metro Dade County*, 943 F. Supp. 1546 (S.D. Fla. 1996).

Figure 5-3.
Overall availability estimates

Note:

Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.

For more detail and results by group, see Figure F-2 in Appendix F.

Source:

BBC Research & Consulting availability analysis.

Business group	Availability %
Asian Pacific American-owned	0.3 %
Black American-owned	0.8 %
Hispanic American-owned	0.7 %
Native American-owned	0.1 %
Subcontinent Asian American-owned	0.2 %
Non-Hispanic white woman-owned	8.2 %
Total Minority- and Woman-owned	10.4 %

Contract role. Many minority- and woman-owned businesses are small businesses, and thus, often work as subcontractors. Because of that tendency, it is useful to examine availability estimates separately for prime contracts and subcontracts. Figure 5-4 presents results for minority- and woman-owned businesses. As shown in Figure 5-4, the availability of minority- and woman-owned businesses considered together is lower for PennDOT prime contracts (6.0%) than for PennDOT subcontracts (21.3%). Among other factors, those results could be due to the fact that subcontracts tend to be much smaller in size than prime contracts. As a result, subcontracts are often more accessible than prime contracts to minority- and woman-owned businesses.

Figure 5-4.
Availability estimates by contract role

Note:

Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.

For more detail, see Figures F-7 and F-8 in Appendix F.

Source:

BBC Research & Consulting availability analysis.

Business group	Contract role	
	Prime contracts	Subcontracts
Asian Pacific American-owned	0.3 %	0.3 %
Black American-owned	0.1 %	2.4 %
Hispanic American-owned	0.4 %	1.5 %
Native American-owned	0.1 %	0.1 %
Subcontinent Asian American-owned	0.2 %	0.3 %
Non-Hispanic white woman-owned	4.8 %	16.6 %
Total Minority- and Woman-owned	6.0 %	21.3 %

Results by funding source. PennDOT implements the Federal DBE Program to encourage the participation of minority- and woman-owned businesses in Federal Highway Administration (FHWA)-funded contracts and the DB Program to encourage the participation of disadvantaged and diverse businesses in state-funded contracts. As a result, it is instructive to examine availability analysis results separately for PennDOT’s FHWA-funded contracts and state-funded contracts.¹² Figure 5-5 presents those results. As shown in Figure 5-5, the availability of minority- and woman-owned businesses considered together is somewhat higher for PennDOT’s FHWA-funded contracts (10.6%) than for its state-funded contracts (9.6%).

¹² The study team considered a contract to be FHWA-funded if it included at least one dollar of FHWA funding.

Figure 5-5.
Availability estimates by funding source

Note:
Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.
For more detail, see Figures F-22 and F-23 in Appendix F.

Source:
BBC Research & Consulting availability analysis.

Business group	Funding	
	FHWA	State
Asian Pacific American-owned	0.3 %	0.3 %
Black American-owned	0.8 %	0.6 %
Hispanic American-owned	0.7 %	0.7 %
Native American-owned	0.1 %	0.1 %
Subcontinent Asian American-owned	0.2 %	0.2 %
Non-Hispanic white woman-owned	8.4 %	7.7 %
Total Minority- and Woman-owned	10.6 %	9.6 %

Results by industry. BBC examined availability analysis results separately for PennDOT’s horizontal construction and construction-related engineering and professional services contracts and procurements. As shown in Figure 5-6, the availability of minority- and woman-owned businesses considered together is highest for PennDOT’s professional services contracts (15.1%) and lowest for its construction contracts (9.3%).

Figure 5-6.
Availability estimates by industry

Note:
Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.
For more detail, see Figures F-5, and F-6 in Appendix F.

Source:
BBC Research & Consulting availability analysis.

Business group	Industry	
	Horizontal construction	Construction-related engineering and professional services
Asian American-owned	0.1 %	1.6 %
Black American-owned	0.5 %	2.0 %
Hispanic American-owned	0.7 %	1.0 %
Native American-owned	0.0 %	0.6 %
Subcontinent Asian American-owned	0.0 %	1.4 %
Non-Hispanic white woman-owned	8.1 %	8.6 %
Total Minority- and Woman-owned	9.3 %	15.1 %

Results by time period. BBC examined the availability of minority- and woman-owned businesses separately for contracts and procurements that PennDOT awarded in the *early study period* (i.e., July 1, 2011 – December 31, 2013) and the *late study period* (i.e., January 1, 2014 – June 30, 2016) to determine whether the types and sizes of contracts that PennDOT awarded across the study period changed over time, which in turn would affect availability. As shown in Figure 5-7, the availability of minority- and woman-owned businesses considered together is similar between the early (10.6%) and late (10.1%) study periods.

Figure 5-7.
Availability estimates by time period

Note:
Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.
For more detail and results by group, see Figure F-3 and F-4 in Appendix F.

Source:
BBC Research & Consulting availability analysis.

Business group	Time period	
	Early	Late
Asian Pacific American-owned	0.4 %	0.3 %
Black American-owned	0.9 %	0.7 %
Hispanic American-owned	0.8 %	0.7 %
Native American-owned	0.1 %	0.1 %
Subcontinent Asian American-owned	0.3 %	0.2 %
Non-Hispanic white woman-owned	8.2 %	8.2 %
Total Minority- and Woman-owned	10.6 %	10.1 %

F. Base Figure for Overall DBE Goal

As part of the Federal DBE Program, every three years, an agency is required to set an overall goal for DBE participation in its FHWA-funded contracts. Establishing a base figure is the first step in calculating an overall goal for DBE participation in PennDOT’s FHWA-funded contracts. BBC calculated the base figure using the same availability database and approach described above except that calculations only included *potential* DBEs—that is, minority- and woman-owned businesses that are DBE-certified or appear that they could be DBE-certified based on revenue requirements described in 49 Code of Federal Regulations Part 26—and only included FHWA-funded prime contracts and subcontracts. BBC’s approach to calculating PennDOT’s base figure is consistent with:

- Court-reviewed methodologies in several states including Washington, California, Illinois, and Minnesota;
- Instructions in the Final Rule effective February 20, 2011 that outline revisions to the Federal DBE Program; and
- USDOT’s “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program.”

Figure 5-8 presents BBC’s base figure calculations by relevant racial/ethnic and gender group. Those results indicate that the availability of potential DBEs for PennDOT’s FHWA-funded transportation contracts is 9.7 percent. PennDOT might consider 9.7 percent as the base figure for its overall goal for DBE participation, assuming that the types, sizes, and locations of FHWA-funded contracts that the agency awards in the time period that the goal will cover are similar to the types of FHWA-funded contracts that the agency awarded during the study period.

Figure 5-8.
Base figure calculations

Note:
Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.
For more detail and results by group, see Figure F-31 in Appendix F.

Source:
BBC Research & Consulting availability analysis.

Business group	Availability %
Asian Pacific American-owned	0.3 %
Black American-owned	0.7 %
Hispanic American-owned	0.7 %
Native American-owned	0.1 %
Subcontinent Asian American-owned	0.2 %
Non-Hispanic white woman-owned	7.6 %
Total Minority- and Woman-owned	9.7 %

Differences from overall availability. The availability of potential DBEs for FHWA-funded contracts is lower than the overall availability of minority- and woman-owned businesses that is presented in Figure 5-3. BBC’s calculation of the overall availability of minority- and woman-owned businesses includes three groups of minority- and woman-owned businesses that the study team did not count as potential DBEs when calculating the base figure:

- Minority- and woman-owned businesses that graduated from the DBE Program (that were not recertified);
- Minority- and woman-owned businesses that are not currently DBE-certified but that applied for DBE certification and have been denied; and
- Minority- and woman-owned businesses that are not currently DBE-certified that reported annual revenues over the most recent three years that were so high as to deem them ineligible for DBE certification.

In addition, the study team’s analyses for calculating the base figure for PennDOT’s overall DBE goal only included FHWA-funded prime contracts and subcontracts. The calculations for the overall availability of minority- and woman-owned businesses presented in Figure 5-3 included both FHWA- and state-funded prime contracts and subcontracts.

Additional steps before PennDOT determines its overall DBE goal. PennDOT must consider whether to make a step-2 adjustment to the base figure as part of determining its overall DBE goal. Step-2 adjustments can be upward or downward, but there is no requirement for PennDOT to make a step-2 adjustment as long as the agency can explain what factors it considered and why no adjustment was warranted. Chapter 9 discusses factors that PennDOT might consider in deciding whether to make a step-2 adjustment to the base figure.

G. Implications for Any DBE Contract Goals

If PennDOT determines that the use of DBE contract goals is appropriate in the future, it might use information from the availability analysis when setting any DBE contract goals. It might also use information from a current DBE directory, a current bidders list, or other sources that could provide information about the availability of minority- and woman-owned businesses to participate in particular contracts. The Federal DBE Program provides agencies that use DBE contract goals with flexibility in how they set those goals. DBE goals on some contracts might be higher than the overall DBE goal. In contrast, DBE goals on other contracts might be lower than the overall DBE goal. In addition, there may be some FHWA-funded contracts for which setting DBE contract goals would not be appropriate.

CHAPTER 6.

Utilization Analysis

CHAPTER 6.

Utilization Analysis

Chapter 6 presents information about the participation of minority- and woman-owned businesses in horizontal construction and construction-related engineering and professional services contracts and procurements that the Pennsylvania Department of Transportation (PennDOT) awarded between July 1, 2011 and June 30, 2016.¹ Chapter 6 is organized in two parts:

- A. Overview of utilization analysis; and
- B. Utilization analysis results.

A. Overview of Utilization Analysis

BBC Research & Consulting (BBC) measured the participation of minority- and woman-owned businesses in PennDOT contracting in terms of *utilization*—the percentage of prime contract and subcontract dollars that those businesses received on PennDOT prime contracts and subcontracts during the study period. For example, if 5 percent of PennDOT prime contract and subcontract dollars went to woman-owned businesses on a particular set of contracts, utilization of woman-owned businesses for that set of contracts would be 5 percent.

As a United States Department of Transportation (USDOT) fund recipient, PennDOT implements the Federal Disadvantaged Business Enterprise (DBE) Program. USDOT requires PennDOT to submit reports about the participation of DBE-certified minority- and woman-owned businesses in its Federal Highway Administration (FHWA)-funded contracts twice each year (typically in June and December). BBC's analysis of the participation of minority- and woman-owned businesses in PennDOT contracting went beyond what the agency currently reports to USDOT in two key ways:

- BBC counted the participation of all minority- and woman-owned businesses in its analysis, regardless of whether they were certified as DBEs; and
- BBC examined the participation of minority- and woman-owned businesses in both FHWA- and state-funded contracts, not only in FHWA-funded contracts.²

B. Utilization Analysis Results

BBC measured the participation of minority- and woman-owned businesses in relevant contracts that PennDOT awarded during the study period. BBC included all minority and woman-owned businesses in the analysis, regardless of their certification status. The study team

¹ "Woman-owned businesses" refers to *non-Hispanic white woman owned* businesses. Information and results for minority woman-owned businesses are included along with their corresponding racial/ethnic groups.

² For disparity study analyses, BBC measured the availability and utilization of all minority- and woman-owned businesses regardless of size and revenue.

also measured participation separately for minority- and woman-owned businesses that were DBE-certified.

Overall. Figure 6-1 presents the percentage of contract dollars that minority- and woman-owned businesses received on contracts that PennDOT awarded during the study period (including both prime contracts and subcontracts). As shown in Figure 6-1, overall, minority- and woman-owned businesses considered together received 11.5 percent of the relevant contract dollars that PennDOT awarded during the study period. Most of those dollars—7.1 percent—went to certified DBEs (as shown in the bottom panel of Figure 6-1). Non-Hispanic white woman-owned businesses (8.5%) and Hispanic American-owned businesses (0.9%) exhibited higher levels of participation on PennDOT contracts than all other relevant groups.

Figure 6-1.
Overall utilization results

Note:
Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals.
For more detail, see Figure F-2 in Appendix F.

Source:
BBC Research & Consulting utilization analysis.

Utilization	
Minority- and Woman-owned	
Asian Pacific American-owned	0.6 %
Black American-owned	0.7 %
Hispanic American-owned	0.9 %
Native American-owned	0.2 %
Subcontinent Asian American-owned	0.5 %
Non-Hispanic white woman-owned	<u>8.5 %</u>
Total Minority- and Woman-owned	11.5 %
DBEs	
Asian Pacific American-owned	0.4 %
Black American-owned	0.6 %
Hispanic American-owned	0.9 %
Native American-owned	0.2 %
Subcontinent Asian American-owned	0.3 %
Non-Hispanic white woman-owned	<u>4.6 %</u>
Total DBEs	7.1 %

Contract role. Many minority- and woman-owned businesses are small businesses, and thus, often work as subcontractors. Because of that tendency, it is useful to examine utilization results separately for prime contracts and subcontracts. Figure 6-2 presents results for minority- and woman-owned businesses. As shown in Figure 6-2, the participation of minority- and woman-owned businesses considered together was in fact much higher in PennDOT subcontracts (29.1%) than prime contracts (4.5%).

Figure 6-2.
Utilization results by contract role

Note:
Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals.
For more detail, see Figures F-7 and F-8 in Appendix F.

Source:
BBC Research & Consulting utilization analysis.

Business group	Contract role	
	Prime contracts	Subcontracts
Asian Pacific American-owned	0.1 %	2.1 %
Black American-owned	0.1 %	2.1 %
Hispanic American-owned	0.1 %	3.0 %
Native American-owned	0.0 %	0.8 %
Subcontinent Asian American-owned	0.1 %	1.5 %
Non-Hispanic white woman-owned	4.1 %	19.7 %
Total Minority- and Woman-owned	4.5 %	29.1 %

Funding source. PennDOT implements the Federal DBE Program to encourage the participation of socially and economical disadvantaged minority- and woman-owned businesses in FHWA-funded contracts and the state’s DB Program to encourage the participation of diverse businesses, including minority- and woman-owned businesses, in state-funded contracts. Thus, it is instructive to examine utilization analysis results separately for PennDOT’s FHWA-funded contracts and state-funded contracts.³ Figure 6-3 presents those results. As shown in Figure 6-3, the participation of minority- and woman-owned businesses considered together was higher in PennDOT’s FHWA-funded contracts (12.4%) than state-funded contracts (9.2%).

Figure 6-3.
Utilization results by funding source

Note:
Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals.
For more detail, see Figures F-22 and F-23 in Appendix F.

Source:
BBC Research & Consulting utilization analysis.

Business group	Funding	
	FHWA	State
Asian Pacific American-owned	0.7 %	0.5 %
Black American-owned	0.7 %	0.6 %
Hispanic American-owned	0.9 %	0.9 %
Native American-owned	0.3 %	0.2 %
Subcontinent Asian American-owned	0.4 %	0.5 %
Non-Hispanic white woman-owned	9.4 %	6.4 %
Total Minority- and Woman-owned	12.4 %	9.2 %

Industry. BBC examined utilization results separately for PennDOT’s horizontal construction and construction-related engineering and professional services contracts and procurements. As shown in Figure 6-4, the participation of minority- and woman-owned businesses considered together was highest in PennDOT’s construction-related engineering and professional services contracts (15.2%) and lowest in horizontal construction contracts (10.7%).

³ The study team considered a contract to be FHWA-funded if it included at least one dollar of FHWA funding.

Figure 6-4.
Utilization results by industry

Note:

Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.

For more detail and results by group, see Figures F-5 and F-6 in Appendix F.

Source:

BBC Research & Consulting utilization analysis.

Business group	Industry	
	Horizontal construction	Construction-related engineering and professional services
Asian Pacific American-owned	0.6 %	0.8 %
Black American-owned	0.8 %	0.2 %
Hispanic American-owned	0.8 %	1.3 %
Native American-owned	0.3 %	0.1 %
Subcontinent Asian American-owned	0.1 %	2.3 %
Non-Hispanic white woman-owned	8.1 %	10.4 %
Total Minority- and Woman-owned	10.7 %	15.2 %

Time period. BBC also examined the participation of minority- and woman-owned businesses separately for contracts and procurements that PennDOT awarded in the *early study period* (i.e., July 1, 2011 – June 30, 2014) and the *late study period* (i.e., July 1, 2014 – June 30, 2016) to determine whether their participation in PennDOT contracts changed over time. As shown in Figure 6-5, the participation of minority- and woman-owned businesses when considered together was similar in the early (11.5%) and late (11.5%) study periods.

Figure 6-5.
Utilization results by time period

Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals.

For more detail, see Figures F-3 and F-4 in Appendix F.

Source:

BBC Research & Consulting utilization analysis.

Business group	Time period	
	Early	Late
Asian Pacific American-owned	0.7 %	0.6 %
Black American-owned	0.7 %	0.7 %
Hispanic American-owned	0.9 %	1.0 %
Native American-owned	0.2 %	0.2 %
Subcontinent Asian American-owned	0.6 %	0.4 %
Non-Hispanic white woman-owned	8.4 %	8.6 %
Total Minority- and Woman-owned	11.5 %	11.5 %

Concentration of dollars. BBC analyzed whether the dollars that each relevant group of minority- and woman-owned businesses received on PennDOT contracts during the study period were spread across a relatively large number of different businesses or were concentrated within a relatively small number of businesses. The study team assessed that question by calculating:

- The number of different businesses within each relevant group that received contracting dollars during the study period; and
- The number of different businesses within each relevant group that accounted for 75 percent of the group’s total contracting dollars during the study period.

Figure 6-6 presents those results. Overall, 347 different minority- and woman-owned businesses participated in PennDOT contracts during the study period. 60 of those businesses, or 17.3 percent of all utilized minority- and woman-owned businesses, accounted for 75 percent of the total contracting dollars that minority- and woman-owned businesses received during the study period.

Figure 6-6.
Concentration of dollars that went to minority- and woman-owned businesses

Business group	Utilized businesses	Number of businesses accounting for 75% of dollars	% of businesses accounting for 75% of dollars
Asian Pacific American-owned	15	4	26.7%
Black American-owned	43	8	18.6%
Hispanic American-owned	20	5	25.0%
Native American-owned	6	2	33.3%
Subcontinent Asian American-owned	23	7	30.4%
Non-Hispanic white woman-owned	<u>236</u>	<u>34</u>	<u>14.4%</u>
Total Minority- and Woman-owned	347	60	17.3%

Note: The sum of utilized businesses by group is not equal to total utilized minority- and woman-owned businesses, because four minority-owned businesses that received work during the study period were of unknown race/ethnicity.

Source: BBC Research & Consulting utilization analysis.

CHAPTER 7.

Disparity Analysis

CHAPTER 7.

Disparity Analysis

The disparity analysis compared the participation of minority- and woman-owned businesses in contracts that the Pennsylvania Department of Transportation (PennDOT) awarded between July 1, 2011 and June 30, 2016 (i.e., the study period) to what those businesses might be expected to receive based on their availability for that work. The analysis focused on horizontal construction and construction-related engineering and professional services contracts and procurements. Chapter 7 presents the disparity analysis in four parts:

- A. Overview;
- B. Disparity analysis results; and
- C. Statistical significance.

A. Overview

As part of the disparity analysis, BBC Research & Consulting (BBC) compared the actual participation of minority- and woman-owned businesses in PennDOT prime contracts and subcontracts with the percentage of contract dollars that those businesses might be expected to receive based on their availability for that work.¹ BBC expressed both actual participation and availability as percentages of the total dollars associated with a particular set of contracts (e.g., 5% participation compared with 4% availability). BBC then calculated a *disparity index* to help compare participation and availability results across relevant business groups and contract sets using the following formula:

$$\frac{\% \text{ participation}}{\% \text{ availability}} \times 100$$

A disparity index of 100 indicates *parity* between actual participation, or *utilization*, and availability. That is, participation of a particular business group was largely in line with its availability. A disparity index of less than 100 indicates a *disparity* between participation and availability. That is, a particular business group was *underutilized* relative to its availability. Finally, a disparity index of less than 80 indicates a *substantial* disparity between participation and availability. That is, a particular business group was substantially underutilized relative to its availability.²

¹ “Woman-owned businesses” refers to non-Hispanic white woman owned businesses. Information and results for minority woman-owned businesses are included along with their corresponding racial/ethnic groups.

² Many courts have deemed disparity indices below 80 as being *substantial* and have accepted such outcomes as evidence of adverse conditions for a particular business group (e.g., see *Rothe Development Corp v. U.S. Dept of Defense*, 545 F.3d 1023, 1041; *Eng’g Contractors Ass’n of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d at 914, 923 (11th Circuit 1997); and *Concrete Works of Colo., Inc. v. City and County of Denver*, 36 F.3d 1513, 1524 (10th Cir. 1994). See Appendix B for additional discussion of those and other cases.

The disparity analysis results that BBC presents in Chapter 7 summarize detailed results tables that are presented in Appendix F. Each table in Appendix F presents disparity analysis results for a different set of contracts. For example, Figure 7-1, which is identical to Figure F-2 in Appendix F, presents disparity analysis results for all PennDOT contracts that BBC examined as part of the study. Appendix F includes analogous tables for different subsets of contracts including:

- Horizontal construction and construction-related engineering and professional services contracts;
- Prime contracts and subcontracts; and
- Contracts that PennDOT awarded in different study period years.

The heading of each table in Appendix F provides a description of the subset of contracts that BBC analyzed for that particular table.

A review of Figure 7-1 helps to introduce the calculations and format of all of the disparity analysis tables in Appendix F. As illustrated in Figure 7-1, the disparity analysis tables present information about each relevant business group in separate rows:

- “All businesses” in row (1) pertains to information about all businesses regardless of the race/ethnicity and gender of their owners.
- Row (2) presents results for all minority- and woman-owned businesses considered together, regardless of whether they were certified as Disadvantaged Business Enterprises (DBEs) or Diverse Businesses (DBs).
- Row (3) presents results for all non-Hispanic white woman-owned businesses, regardless of whether they were certified as DBEs or DBs.
- Row (4) presents results for all minority-owned businesses, regardless of whether they were certified as DBEs or DBs.
- Rows (5) through (10) present results for businesses of each individual racial/ethnic group, regardless of whether they were certified as DBEs or DBs.

Utilization results. Each disparity analysis table includes the same columns and rows:

- Column (a) presents the total number of prime contracts and subcontracts (i.e., contract elements) that BBC analyzed as part of the contract set. As shown in row (1) of column (a) of Figure 7-1, BBC analyzed 38,961 contract elements. The value presented in column (a) for each individual business group represents the number of contract elements in which businesses of that particular group participated (e.g., as shown in row (6) of column (a), Black American-owned businesses participated in 679 prime contracts and subcontracts).

Figure 7-1.
Example of a disparity analysis table from Appendix F (same as Figure F-2 in Appendix F)

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	38,961	\$12,544,517	\$12,544,517				
(2) Minority and woman-owned businesses	12,840	\$1,438,081	\$1,438,081	11.5	10.4	1.1	110.7
(3) Non-Hispanic white woman-owned	9,978	\$1,071,806	\$1,071,806	8.5	8.2	0.4	104.6
(4) Minority-owned	2,862	\$366,275	\$366,275	2.9	2.2	0.7	133.6
(5) Asian Pacific American-owned	571	\$77,220	\$78,417	0.6	0.3	0.3	181.8
(6) Black American-owned	679	\$83,343	\$84,635	0.7	0.8	-0.1	87.6
(7) Hispanic American-owned	646	\$114,454	\$116,228	0.9	0.7	0.2	129.2
(8) Native American-owned	302	\$30,012	\$30,478	0.2	0.1	0.1	200+
(9) Subcontinent Asian American-owned	518	\$55,654	\$56,517	0.5	0.2	0.2	187.9
(10) Unknown minority-owned	146	\$5,593					
(11) DBE-certified	10,015	\$890,234	\$890,234	7.1			
(12) Non-Hispanic white woman-owned	7,642	\$569,372	\$573,610	4.6			
(13) Minority-owned DBE	2,301	\$314,286	\$316,625	2.5			
(14) Asian Pacific American-owned DBE	427	\$55,958	\$56,375	0.4			
(15) Black American-owned DBE	539	\$74,369	\$74,922	0.6			
(16) Hispanic American-owned DBE	596	\$111,263	\$112,091	0.9			
(17) Native American-owned DBE	299	\$29,847	\$30,069	0.2			
(18) Subcontinent Asian American-owned DBE	440	\$42,849	\$43,168	0.3			

Note: Numbers are rounded to the nearest thousand dollars or tenth of one percent. "Woman-owned" refers to non-Hispanic white woman-owned.

* Unknown minority-owned businesses were allocated to minority subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6.

Source: BBC Research & Consulting disparity analysis.

- Column (b) presents the dollars (in thousands) that were associated with the set of contract elements. As shown in row (1) of column (b) of Figure 7-1, BBC examined approximately \$12.5 billion for the entire set of contract elements. The dollar totals include both prime contract and subcontract dollars. The value presented in column (b) for each individual business group represents the dollars that the businesses of that particular group received on the set of contract elements (e.g., as shown in row (5) of column (b), Black American-owned businesses received approximately \$83.3 million).
- Column (c) presents the dollars (in thousands) that were associated with the set of contract elements after adjusting those dollars for businesses that BBC identified as minority-owned but for which specific race/ethnicity information was not available. The dollar totals include both prime contract and subcontract dollars.
- Column (d) presents the participation of each business group as a percentage of total dollars associated with the set of contract elements. BBC calculated each percentage in column (d) by dividing the dollars going to a particular group in column (c) by the total dollars associated with the set of contract elements shown in row (1) of column (c), and then expressing the result as a percentage (e.g., for Black American-owned businesses, the study team divided \$84.6 million by \$12.5 billion and multiplied by 100 for a result of 0.7%, as shown in row (5) of column (d)).
- The bottom half of Figure 7-1 presents utilization results for minority- and woman-owned businesses that were DBE-certified.

Availability results. Column (e) of Figure 7-1 presents the availability of each relevant business group for all contract elements that the study team analyzed as part of the contract set. Availability estimates, which are represented as percentages of the total contracting dollars associated with the set of contracts, serve as benchmarks against which to compare the participation of specific groups for specific sets of contracts (e.g., as shown in row (5) of column (e), the availability of Black American-owned businesses is 0.8%).

Differences between participation and availability. The next step in analyzing whether there was a disparity between the participation and availability of minority- and woman-owned businesses is to subtract the availability percentage from the participation percentage. Column (f) of Figure 7-1 presents the percentage point difference between participation and availability for each relevant racial/ethnic and gender group. For example, as presented in row (5) of column (f) of Figure 7-1, the participation of Black American-owned businesses in PennDOT contracts was 0.1 percentage points less than their availability.

Disparity indices. It is sometimes difficult to interpret absolute percentage differences between participation and availability. Therefore, BBC also calculated a disparity index for each relevant racial/ethnic and gender group. Column (g) of Figure 7-1 presents the disparity index for each relevant racial/ethnic and gender group. For example, as reported in row (5) of column (g), the disparity index for Black American-owned businesses was approximately 88, indicating that Black American-owned businesses actually received approximately \$.88 for every dollar that they might be expected to receive based on their availability for prime contracts and subcontracts that PennDOT awarded during the study period.

When BBC’s calculations showed a disparity index exceeding 200, BBC reported an index of “200+.” A disparity index of 200+ means that participation was more than twice as much as availability for a particular group for a particular set of contracts.

B. Disparity Analysis Results

BBC measured disparities between the participation and availability of minority- and woman-owned businesses for various sets of contracts that PennDOT awarded during the study period.

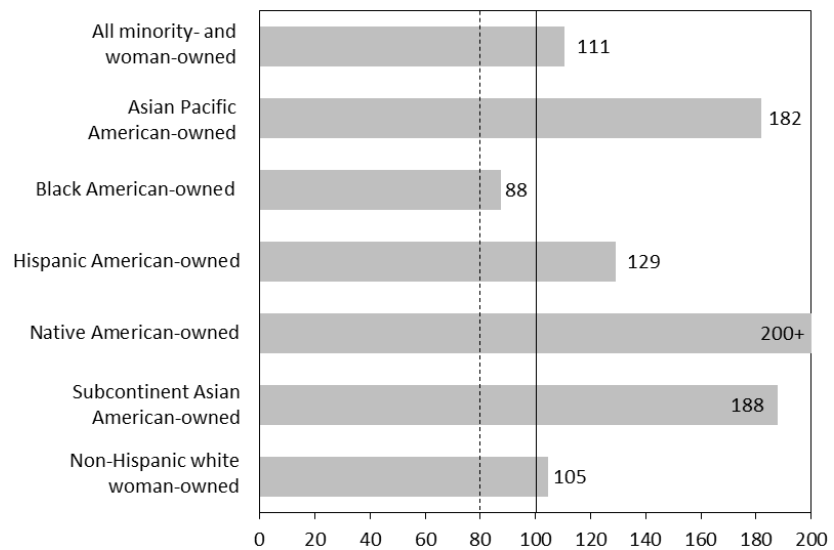
Overall. Figure 7-2 presents disparity indices for all relevant prime contracts and subcontracts that PennDOT awarded during the study period. The line down the center of the graph shows a disparity index level of 100, which indicates parity between participation and availability. Disparity indices of less than 100 indicate disparities between participation and availability (i.e., underutilization). For reference, a line is also drawn at a disparity index level of 80, because some courts use 80 as the threshold for what indicates a substantial disparity.

As shown in Figure 7-2, overall, the participation of minority- and woman-owned businesses in contracts that PennDOT awarded during the study period was largely in line with what one might expect based on the availability of those businesses for that work. The disparity index of 111 indicates that minority- and woman-owned businesses received approximately \$1.11 for every dollar that they might be expected to receive based on their availability for the relevant prime contracts and subcontracts that PennDOT awarded during the study period. Disparity analysis results by individual racial/ethnic and gender group indicated that the only group to show a disparity was Black American-owned business (disparity index of 88), but that disparity was higher than the threshold of being considered substantial. Note that PennDOT used DBE contract goals to award most of its contracts during the study period, so the results presented in Figure 7-2 are reflective of the use of those goals. It is important to examine outcomes for minority- and woman-owned businesses on PennDOT contracts to which such race- and gender-conscious program measures did not apply.

Figure 7-2.
Disparity indices by group

Note:
For more detail, see Figure F-2 in
Appendix F.

Source:
BBC Research & Consulting disparity
analysis.



Contract role. Subcontracts tend to be much smaller in size than prime contracts. As a result, subcontracts are often more accessible than prime contracts to minority- and woman-owned businesses. Thus, it might be reasonable to expect better outcomes for minority- and woman-owned businesses on subcontracts than on prime contracts. In addition, PennDOT’s use of DBE contract goals during the study period applied most directly to minority- and woman-owned businesses in subcontracts rather than prime contracts. Thus, disparity analysis results for prime contracts represent outcomes for minority- and woman-owned businesses on contracts that were awarded in a *race- and gender-neutral environment*. Those results are particularly relevant to decisions that PennDOT must make regarding its use of race- and gender-conscious measures.

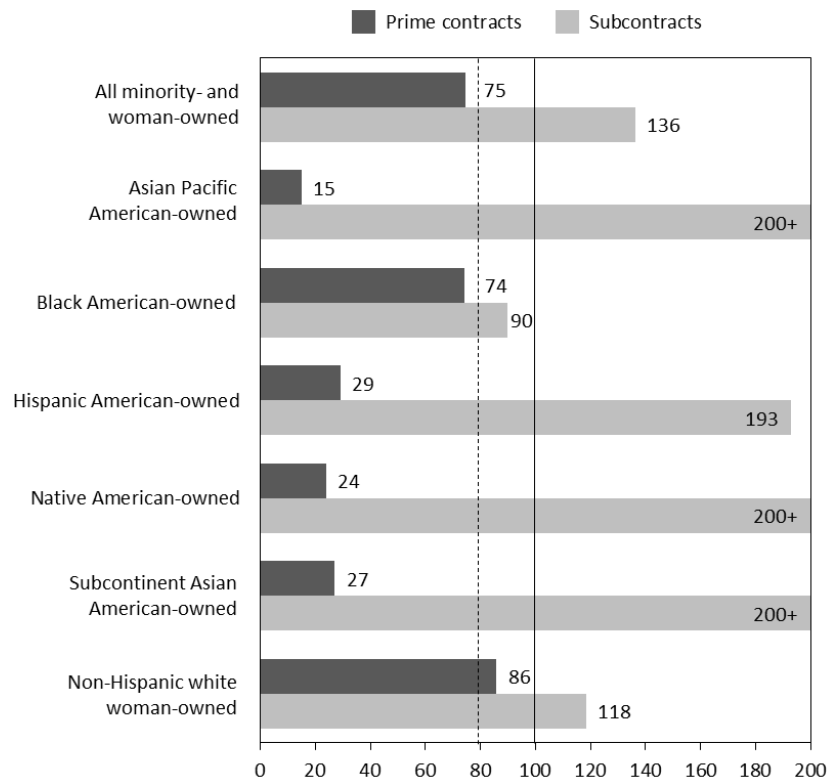
Figure 7-3 presents disparity indices separately for prime contracts and subcontracts. As shown in Figure 7-3, minority- and woman-owned businesses considered together showed a substantial disparity for prime contracts (disparity index of 75) but not for subcontracts (disparity index of 136). Results for individual groups indicated that:

- All groups showed substantial disparities on prime contracts except for non-Hispanic white woman-owned businesses, who showed a disparity that was close to being considered substantial (disparity index of 86).
- Only Black American-owned businesses showed a disparity on subcontracts (disparity index of 90), but that disparity was higher than the threshold of being considered substantial.

Figure 7-3.
Disparity indices for
prime contracts and
subcontracts

Note:
 For more detail, see Figures F-7 and F-8 in Appendix F.

Source:
 BBC Research & Consulting
 disparity analysis.

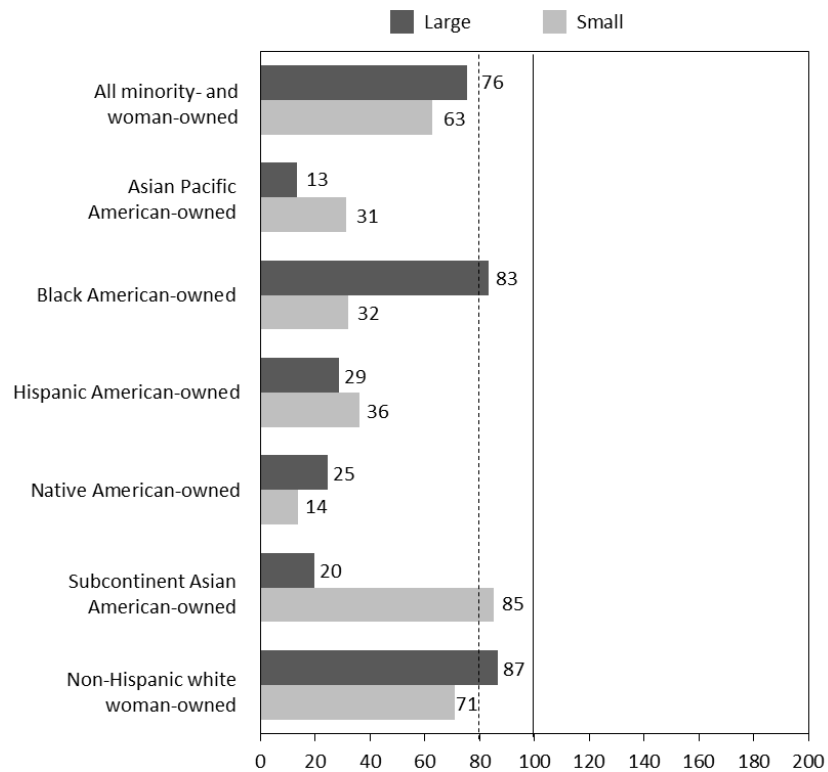


Contract size. BBC further examined outcomes for minority- and woman-owned businesses on prime contracts by comparing disparity analysis results for *large* and *small* prime contracts that PennDOT awarded during the study period to assess whether disparity analysis results for prime contracts varied by contract size. *Large* prime contracts were defined as contracts worth more than \$500,000, and *small* prime contracts were defined as contracts worth \$500,000 or less. Figure 7-4 presents those results.

Figure 7-4.
Disparity indices for large and small prime contracts

Note:
 For more detail, see Figures F-20 and F-21 in Appendix F.

Source:
 BBC Research & Consulting disparity analysis.



Overall, minority- and woman-owned businesses exhibited a substantial disparity for both large prime contracts (disparity index of 76) and small prime contracts (disparity index of 63). There were several key differences in disparities by contract size and group:

- All racial/ethnic and gender groups showed substantial disparities for large prime contracts except Black American-owned businesses (disparity index of 83) and non-Hispanic white woman-owned businesses (disparity index of 87). Both of those disparities were close to the threshold of being considered substantial.
- All racial/ethnic and gender groups showed substantial disparities for small prime contracts except Subcontinent Asian American-owned businesses (disparity index of 85). However, that disparity is close to the threshold of being considered substantial.

Funding source. PennDOT implements the Federal DBE Program to ensure nondiscrimination in the award and administration of USDOT-funded contracts, remove barriers, level the playing field, and assist with capacity-building for socially and economically disadvantaged businesses.³

³ 49 C.F.R. Part 26

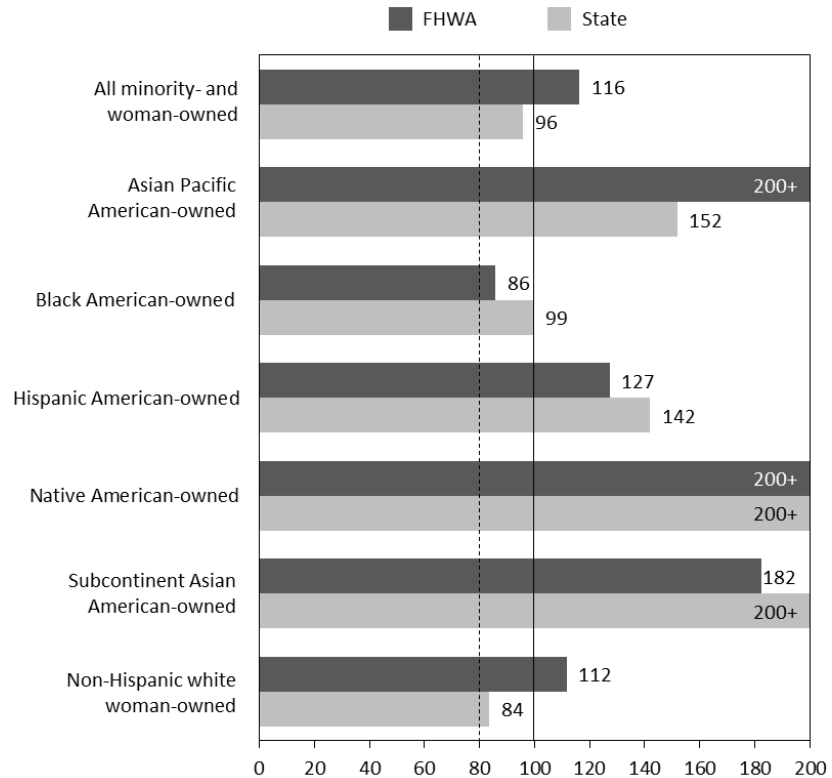
As a result, it is instructive to examine availability analysis results separately for PennDOT’s FHWA-funded contracts and state-funded contracts.⁴ Figure 7-5 presents disparity analysis results separately for FHWA- and state-funded contracts. As shown in Figure 7-5, minority- and woman-owned businesses considered together showed a disparity for state-funded contracts (disparity index of 96) but not for FHWA-funded contracts (disparity index of 116). Results for individual groups indicated that:

- The only individual racial/ethnic or gender group to show a disparity for FHWA-funded contracts was Black American-owned businesses (disparity index of 86). That disparity was close to the threshold of being considered substantial.
- Black American-owned businesses (disparity index of 99) and non-Hispanic white woman-owned businesses (disparity index of 84) showed a disparity for state-funded contracts. The disparity for Black American-owned businesses was higher than the threshold for being considered substantial while the disparity for non-Hispanic white woman-owned businesses was close to the threshold.

Figure 7-5.
Disparity analysis results by funding source

Note:
For more detail, see Figures F-22 and F-23 in Appendix F.

Source:
BBC Research & Consulting disparity analysis.



Industry. BBC examined disparity analysis results separately for PennDOT’s horizontal construction and construction-related engineering and professional services contracts, so that PennDOT can use that information to implement the Federal DBE Program appropriately for each relevant contracting area. Figure 7-6 presents disparity indices for each relevant contracting area. Disparity analyses results differed by contracting area and group:

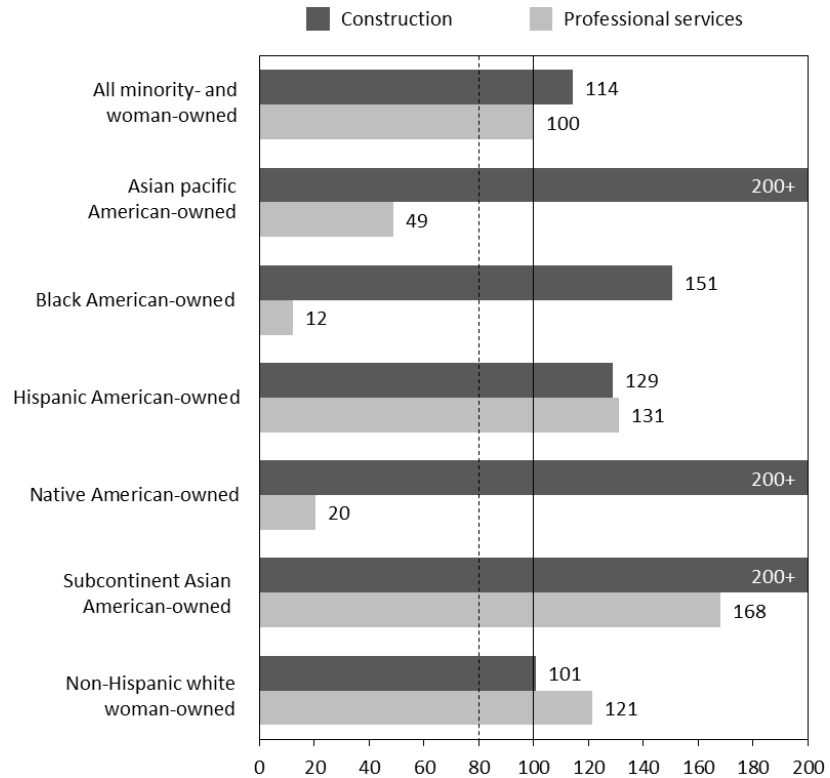
⁴ The study team considered a contract to be FHWA-funded if it included at least one dollar of FHWA funding.

- Minority- and woman-owned businesses considered together did not show a disparity on construction contracts (disparity index of 114) nor did any individual racial/ethnic or gender groups.
- Minority- and woman-owned businesses considered together did not show a disparity on professional services contracts (disparity index of 100). However, Asian Pacific American-owned business (disparity index of 49), Black American-owned businesses (disparity index of 12), and Native American-owned businesses (disparity index of 20) all showed substantial disparities.

Figure 7-6
Disparity analysis results
by relevant industry

Note:
 For more detail, see Figures
 F-5 and F-6 in Appendix F.

Source:
 BBC Research & Consulting
 disparity analysis.

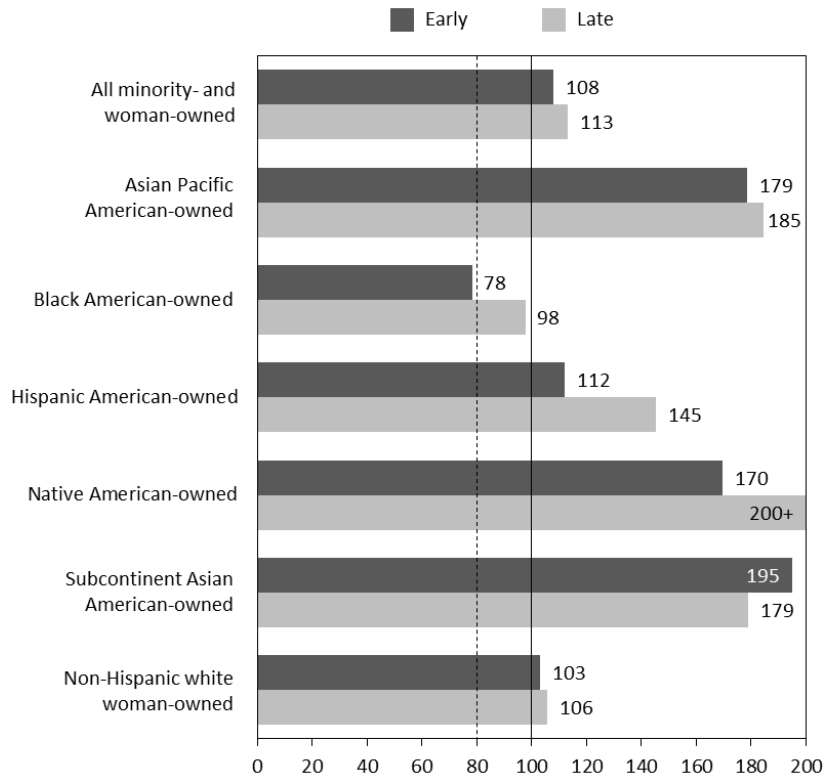


Time period. BBC also examined disparity analysis results separately for two separate time periods: July 1, 2011 through December 31, 2013 (*early* study period) and January 1, 2014 through June 30, 2016 (*late* study period). That information might help PennDOT determine whether there were different outcomes for minority- and woman-owned businesses as the country moved further and further from the economic downturn that began in 2008. Figure 7-7 presents disparity indices separately for the early and late study periods. As shown in Figure 7-7, minority- and woman-owned businesses considered together did not show substantial disparities for contracts that PennDOT awarded in the early study period (disparity index of 108) or in the late study period (disparity index of 113). However, Black American-owned businesses showed a substantial disparity for contracts that PennDOT awarded in the early study period (disparity index of 78) and a disparity for contracts awarded in the late study period (disparity index of 98).

Figure 7-7.
Disparity indices for
early and late study
period

Note:
 For more detail, see Figures F-3 and F-4 in Appendix F.

Source:
 BBC Research & Consulting
 disparity analysis.



C. Statistical Significance

Statistical significance tests allow researchers to test the degree to which they can reject random chance as an explanation for any observed quantitative differences. In other words, a statistically significant difference is one that can be considered to be reliable or *real*.

Monte Carlo analysis. BBC used an algorithm that relies on repeated, random simulations to examine the statistical significance of disparity analysis results. That approach is referred to as a *Monte Carlo* analysis. Figure 7-8 describes how the study team used Monte Carlo to test the statistical significance of disparity analysis results.

Figure 7-8.
Monte Carlo Analysis

BBC used a Monte Carlo approach to randomly select businesses to *win* each individual contract element that the study team included in its analyses. For each contract element, BBC's availability database provided information on individual businesses that are available for that contract element based on type of work, contractor role, and contract size. BBC assumed that each available business had an equal chance of winning the contract element, so the odds of a business from a certain group winning it were equal to the number of businesses from that group available for it divided by the total number of businesses available for it. The Monte Carlo simulation then randomly chose a business from the pool of available businesses to win the contract element.

The Monte Carlo simulation repeated the above process for all contract elements in a particular contract set. The output of a single Monte Carlo simulation for all contract elements in the set represented the simulated participation of minority- and woman-owned businesses for that set of contract elements. The entire Monte Carlo simulation was then repeated 1 million times for each contract set. The combined output from all 1 million simulations represented a probability distribution of the overall participation of minority- and woman-owned businesses if contracts were awarded randomly based only on the availability of relevant businesses working in the local marketplace.

The output of the Monte Carlo simulations represents the number of simulations out of 1 million that produced simulated participation that was equal or below the actual observed participation for each racial/ethnic and gender group and for each set of contracts. If that number was less than or equal to 25,000 (i.e., 2.5% of the total number of simulations), then BBC considered the corresponding disparity index to be statistically significant at the 95 percent confidence level. If that number was less than or equal to 50,000 (i.e., 5.0% of the total number of simulations), then BBC considered that disparity index to be statistically significant at the 90 percent confidence level.

Results. BBC used Monte Carlo analysis to test whether the disparities that the study team observed on all contracts considered together, prime contracts, and no-goals contracts were statistically significant. BBC identified substantial disparities for minority- and woman-owned businesses considered together and for certain racial/ethnic and gender groups considered separately on those contract sets. Examining whether disparities are statistically significant is particularly instructive for no-goal contracts and prime contracts, because they provide information about outcomes for minority- and woman-owned businesses in the absence of PennDOT's use of race- and gender-conscious measures.

Figure 7-9 presents results from the Monte Carlo analysis as they relate to the statistical significance of disparities that the study team observed on prime contracts. We tested statistical significance for all minority- and woman-owned businesses considered together and separately for non-Hispanic white woman-owned businesses and for all minority-owned businesses considered together.

Figure 7-9.
Monte Carlo simulation results for disparity analysis results

Race/Ethnicity and Gender	Disparity Index	Number of simulation runs out of one million that replicated observed utilization	Probability of observed disparity occurring due to "chance"
Total minority-/woman-owned	75	2,638	0.3 %
White woman-owned	86	120,456	12.0 %
Total minority-owned	29	0	<0.1 %
Asian Pacific American-owned	15	3	<0.1 %
Black American-owned	74	140,123	14.0 %
Hispanic American-owned	29	40	<0.1 %
Native American-owned	24	1,558	0.2 %
Subcontinent Asian American-owned	27	68	<0.1 %

Note: Numbers rounded to nearest tenth of 1 percent.
 Numbers may not add to totals due to rounding.

Source: BBC Research & Consulting.

As shown in Figure 7-9, results from the Monte Carlo analysis indicated that the disparities on prime contracts for all minority- and woman-owned businesses, all minority-owned businesses, Asian Pacific American-owned businesses, Hispanic American-owned businesses, Native American-owned businesses, and Subcontinent Asian American-owned businesses were statistically significant at the 95 percent confidence level.

D. Case Study Analysis

BBC completed a case study analysis to assess whether characteristics of PennDOT's bid and proposal evaluation processes help to explain any of the disparities that the study team observed for prime contracts. BBC analyzed bid and proposal information on construction-related engineering and professional services contracts that PennDOT awarded during the study period.

Professional services. BBC examined proposal information for a sample of 50 construction-related engineering and professional services contracts that PennDOT awarded during the study period. In total, PennDOT received 795 proposals for those contracts.

Number of proposals from minority- and woman-owned businesses. Minority- and woman-owned businesses submitted 68 of the 795 proposals (9%) that the study team examined:

- Forty-two proposals (5% of all proposals) came from minority-owned businesses (12 different businesses); and
- Twenty-six proposals (3% of all proposals) came from white woman-owned businesses (12 different businesses).

Of the engineering and professional services-focused business owners and managers that indicated in availability surveys that their companies are interested in competing as prime contractors on public contracts, 10 percent represented minority-owned businesses and 21

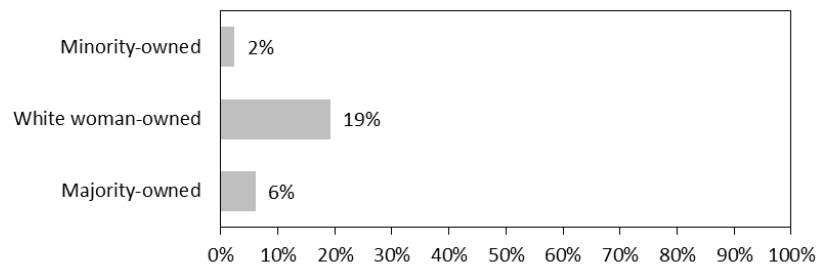
percent represented white woman-owned businesses. Those percentages are higher than the percentage of minority-owned businesses and white woman-owned businesses that submitted proposals on PennDOT's engineering and professional services contracts during the study period.

Success of bids. BBC also examined the percentage of proposals that minority- and woman-owned businesses submitted that resulted in contract awards. As shown in Figure 7-10, 2 percent of the proposals that minority-owned businesses submitted resulted in contract awards, which was lower than the percent of proposals that majority-owned businesses submitted that resulted in contract awards (6%). Of the proposals that white woman-owned businesses submitted, 19 percent resulted in contract awards, higher than the percent of proposals that majority-owned businesses submitted that resulted in contract awards.

Figure 7-10.
Percentage of bids on professional services contracts that resulted in contract awards

Note:
Based on an analysis of 795 bids on 50 professional services contracts.

Source:
BBC Research & Consulting from PennDOT ECMS contracting data.



CHAPTER 8.

Program Measures

CHAPTER 8.

Program Measures

As a United States Department of Transportation (USDOT) recipient, the Pennsylvania Department of Transportation (PennDOT) implements the Disadvantaged Business Enterprise (DBE) Program that applies to federal-aid highway dollars expended on federally-assisted contracts. The DBE Program is made available to small business concerns owned and controlled by socially and economically disadvantaged individuals. According to the Federal Highway Administration the DBE Program was established to “ensure nondiscrimination in the award and administration of DOT-assisted contracts, help remove barriers to the participation of DBEs in DOT-assisted contracts, and assist the development of firms that can compete successfully in the marketplace outside of the DBE program.”¹

As part of meeting the *narrow tailoring* requirement of the strict scrutiny standard of constitutional review, organizations that implement disadvantaged business programs must meet the maximum feasible portion of overall annual minority- and woman-owned business participation goals using race- and gender-neutral measures. If an agency cannot meet its overall goals using race- and gender-neutral measures alone, then it can also consider using race- and gender-conscious measures.

Race- and gender-neutral measures are designed to encourage the participation of all businesses—or, all small businesses—in an organization’s contracting. In contrast, race- and gender-conscious measures are designed to specifically encourage the participation of socially and economically disadvantaged minority- and woman-owned businesses in an organization’s contracting (e.g., using contract goals on individual contracts).

PennDOT’s Diverse Business (DB) Program was created in accordance with Act 89 of 2013, and implemented in October 2014 for state-funded transportation and professional services contracts. The DB Program applies to multiple Pennsylvania Transportation entities including: PennDOT, the PA Turnpike Commission, Southeastern Pennsylvania Transportation Authority (SEPTA), and all other transit organizations. The DB Program requires contractors to make a good faith effort to solicit diverse business subcontractors for state-funded transportation and professional services contracts.² Pennsylvania law defines “diverse businesses” as disadvantaged business (DBE), minority-owned business, woman-owned business, service-disabled veteran-owned and veteran-owned business.³ This program uses race- and gender-neutral measures for participation.

¹ 49 CFR Part 26.

² 74 PA C.S. Section 303.

³ *Ibid.*

BBC Research & Consulting (BBC) reviewed the measures that PennDOT currently uses to encourage the participation of small, disadvantaged, and diverse businesses in its contracting. In addition, BBC reviewed race- and gender-neutral measures that other organizations in Pennsylvania use. That information is instructive because it allows an assessment of the measures that PennDOT is currently using in addition to an assessment of additional measures that the organization could consider using in the future. BBC reviewed PennDOT's program measures in three parts:

- A. Race and gender-neutral measures;
- B. Race and gender-conscious measures; and
- C. Other organizations' program measures.

A. Race- and Gender-Neutral Measures

PennDOT uses various race- and gender-neutral measures to encourage the participation of all small businesses in its contracting. PennDOT uses the following types of race- and gender-neutral measures as part of its implementation of the DBE and DB Programs:

- Small business set-aside pilot program;
- Outreach efforts;
- Prompt payment; and
- Technical assistance.

Small business set-aside pilot program. PennDOT has introduced a small business set-aside pilot program for Small Business Enterprises (SBE) to compete as prime contractors for federally-assisted preliminary engineering and final design agreements. For the pilot program, PennDOT districts will identify projects for the preliminary engineering and final design of non-complex box culvert or single span bridge replacements. Six projects will be chosen from across the state and deemed as small business set-aside projects. The pilot program will begin in federal fiscal year 2018 (October 1) and will run to project completion. Based on the measurable outcomes, PennDOT may expand the set-aside programs to include other contracting opportunities.

Outreach efforts. Each year, PennDOT participates in several outreach efforts designed to support business development and solicit input and feedback from the business community about its contracting processes.

Trade association events. Each year, PennDOT meets with members of key business associations, including: the Associated Pennsylvania Constructors (APC), the American Council of Engineering Companies of Pennsylvania (ACEC/PA), Constructors Association of Western Pennsylvania (CAWP), and Pennsylvania Diversity Coalition (PADC), to seek input and feedback from the contracting community.

Public hearings. PennDOT convenes meetings to solicit feedback about its program implementation plans for the DBE program. For example, PennDOT holds meetings across the state during the development of the methodology and goals triennial plan. These meetings are

for PennDOT stakeholders including trade associations and all members of the contracting and consulting communities.

Diversity forums. PennDOT hosts daylong networking and business development events focused on building small business capacity and participation in PennDOT contracting. For example, in 2017, PennDOT convened contracting forums in Philadelphia, Pittsburgh, and Harrisburg focused on increasing small business participation and diversity in PennDOT's heavy construction contracting. Prime contractors, subcontractors, and PennDOT representatives attended those events, which included networking opportunities and technical assistance sessions on navigating the Engineering and Construction Management System (ECMS); and business development. PennDOT has two consulting services-focused diversity forums planned for 2018.

Stakeholder Advisory Council. In 2017, PennDOT formed an Advisory Council made up of key stakeholders that meet quarterly. The Advisory Council provides a forum to engage DBEs and other business owners in increased communication regarding PennDOT's small business development initiatives. Participants include trade associations, PA Turnpike representatives, university representatives, small business owners, DBE-certified business owners, and PennDOT representatives. Advisory Council members serve two-year terms.

Other business development events. PennDOT participates in business development events organized by minority business associations, universities, and organizational partners across Pennsylvania. Such events have been held at the Enterprise Center in Philadelphia and the Northeastern Pennsylvania Alliance in Scranton. PennDOT presents information about contracting opportunities, particularly about contracting opportunities for small businesses at these events. In addition, through its business support services partner, Cheyney University, PennDOT participates in various annual informational presentations and events with other certifying agencies that are part of the Pennsylvania Unified Certification Program. Cheyney University's DBE Supportive Services provides up to four networking events per federal fiscal year for firms who do business with or are looking to do business with PennDOT.

Prompt payment. PennDOT follows the Commonwealth of Pennsylvania's (Commonwealth's) procurement code regarding the timeliness of payment. The Commonwealth requires all state agencies to pay contractors for projects within 45 days of completing their project work and submitting invoices.⁴ In addition, the procurement code requires that prime contractors pay all subcontractors within 14 days of when the prime contractor receives payment for services from the agency.⁵ PennDOT has developed additional prompt payment requirements. PennDOT will make payments to prime contractors for certified completed work within 30 days. Prime contractors are then required to pay subcontractors within seven days of receipt of a current estimate and final payments from PennDOT, provided the terms and conditions of the applicable

⁴ Pennsylvania Procurement Handbook, Part 1, Chapter 18.

⁵ *Ibid.*

subcontract have been reasonably met. Prime contractors must report such payments using the ECMS.^{6,7}

Technical assistance. PennDOT works with local partners, chambers of commerce, and universities across Pennsylvania to provide technical support and other training resources to small business owners interested in working on transportation-related projects.

Supportive Services Centers at Cheyney University. In partnership with PennDOT, Cheyney University manages DB, DBE, and SBE supportive services programs. The DB, DBE, SBE programs are designed to assist small, disadvantaged, and diverse business development and training to increase capacity and participation in contracting with PennDOT.

Training workshops at business development events. PennDOT, through Cheyney University, conducts workshops across Pennsylvania designed to help small business owners understand how to do business on transportation-related projects. Those workshops cover topics such as becoming a certified DB or DBE and researching PennDOT contracting opportunities. At the workshops PennDOT also provides information about the main types of procurement processes that the agency uses and any upcoming contracting opportunities. PennDOT also highlights any changes to the procurement procedures to encourage the participation of diverse and disadvantaged businesses. PennDOT hosts the workshops with a variety of partners including local chambers of commerce and business development organizations.

Certification assistance. PennDOT provides one-on-one assistance to small business owners that want to certify as DBs or DBEs in Pennsylvania. PennDOT offers that assistance via telephone and through in-person training.

B. Race- and Gender-Conscious Measures

PennDOT currently uses race- and gender-conscious measures to award many of its contracts, including DBE contract goals to award USDOT-funded contracts. Prime contractors can meet those goals by either making subcontracting commitments with certified DBE subcontractors within seven days of bid acceptance or by documenting sufficient good faith efforts toward achieving the established subcontracting goals. If prime contractors fail to meet DBE contract goals through subcontracting commitments or fail to show sufficient good faith efforts, PennDOT may deem their bids unresponsive and reject them.

C. Other Organizations' Program Measures

In addition to the race- and gender-neutral measures that PennDOT currently uses, there are a number of race- and gender-neutral measures that other governmental and non-governmental organizations in Pennsylvania use to encourage the participation of small and small diverse business participation. Figure 8-1 provides examples of those measures.

⁶ Policy and Procedures for the Administration of Consultant Agreements. Pennsylvania Department of Transportation PUB 93 (3-18). Available online at <http://www.dot.state.pa.us/public/PubsForms/Publications/PUB%2093.pdf>.

⁷ Specifications. Pennsylvania Department of Transportation. PUB 408/2016. Available online at http://www.dot.state.pa.us/public/PubsForms/Publications/Pub_408/408_2016/408_2016_5/408_2016_5.pdf

Figure 8-1.
Examples of race- and gender-neutral measures that other Pennsylvania organizations use

Type	Examples of Program Measures
Statewide Neutral Measure Programs	
Advocacy and Outreach	<p>The Pennsylvania Chamber of Business and Industry serves as the frontline advocate for business on Capitol Hill in Harrisburg. Through lobbying, testifying, developing key relationships, grassroots activities, and tracking regulations, the organization promotes pro-business legislation and fights against efforts that may serve as barriers to local businesses.</p> <p>The PA Turnpike Commission conducts community outreach events, and partners with other business organizations - such as the Diversity and Inclusion Professionals of Central Pennsylvania, the Harrisburg Regional Chamber of Commerce, and The Enterprise Center - to share information about the agency's bidding opportunities. The agency's website also advertises bid opportunities.</p> <p>Penn State University (PSU) works with partners such as the National Minority Supplier Development Council, the Southern Alleghenies Planning and Development Commission, and the Philadelphia Minority Business Development Agency to provide information about how to identify and bid on contract opportunities with the University. In addition, PSU partners with business associations including the Pennsylvania Small Business Development Centers (SBDCs) to provide seminars that explain how to successfully complete bids and proposals for PSU contract opportunities. PSU also hosts annual trade fairs each spring with approximately 50 minority- and woman-owned businesses. The purpose of the trade fairs is for suppliers to network with end-users of goods and services at the University.</p> <p>The Pennsylvania Housing Financing Agency conducts outreach to small companies by attending business and procurement fairs to generate greater awareness about the agency's contracting opportunities. In addition, the agency provides self-help tutorials for small businesses to help them learn how to develop successful bids and proposals, and manage contracts.</p>
Capital, Bonding, and Insurance	<p>D&H Distributing is an international company with its corporate headquarters in Harrisburg, Pennsylvania. The company occasionally offers different terms and financial credit to small businesses.</p>
Technical Assistance	<p>Slippery Rock University (SRU) is a state-funded institution of higher education that posts contracting opportunities larger than \$20,000 to the Pennsylvania State System of Higher Education's eProcurement exchange: https://passhe.procureware.com/home. Businesses must register with the ProcureWare portal to participate in contracting. Once registered, business owners and representatives can then access "Help" tutorials about how to develop and submit bids and proposals through the online portal.</p> <p>Congress authorized the Procurement Technical Assistance Program (PTAP) to expand the number of businesses capable of participating in government contracting. Administered by the Defense Logistics Agency, PTAP provides matching funds through cooperative agreements with state and local governments and non-profit organizations for the establishment of Procurement Technical Assistance Centers (PTACs) to provide procurement assistance. There are 13 PTACs located throughout Pennsylvania. They help businesses secure government contracts. PTAC counselors help businesses determine their suitability for government contracts, secure necessary business registrations, pursue small business certifications, market themselves, research procurement histories, network, identify bid opportunities, prepare proposals, and resolve contract performance issues.</p>

Figure 8-1. (Continued)
Examples of race- and gender-neutral measures that other Pennsylvania organizations use

Type	Examples of Program Measures
Statewide Neutral Measure Programs (Continued)	
Technical Assistance (Continued)	Small businesses in all 67 of Pennsylvania's counties are served by Pennsylvania Small Business Development Centers (SBDCs) . Businesses can access the SBDC in the county in which their business is located. SBDCs provide consulting services and educational programs to entrepreneurs looking to start or grow their small businesses. SBDC consultants work with entrepreneurs in confidential, one-on-one sessions to help them with a range of business issues, including testing new business propositions, shaping business plans, and investigating funding opportunities.
Prompt Payment	<p>The PA Turnpike Commission pays prime contractors within 30 days of receiving an invoice for services rendered, and requires the prime to pay its subcontractors within 5 days of receiving payment from the agency.</p> <p>The County of York issues payments to contractors within 30 days of receiving an invoice for services rendered. If the contractor elects to be paid using the County's business credit card, then county officials can pay the contractor in three days via the agency's Net Payment system.</p>
Regional Neutral Measures Programs	
Advocacy and Outreach	<p>The Greater Philadelphia Hispanic Chamber of Commerce Small Business Development & Education (SBDE) Program is an umbrella program that addresses the needs of Hispanic American business owners and corporations working in emerging markets. The SBDE's purpose is to connect members with new business opportunities to help them realize their local, regional, national, and international growth opportunities; provide education, research findings, and information to help individuals adopt best business practices; and provide meaningful opportunities for Hispanic business leaders and employees to influence public policy by engaging with public officials.</p> <p>The African American Chamber of Commerce (AACC) is an advocacy group for minority-owned businesses in the Delaware Valley and Southeastern Pennsylvania. Its purpose is to enhance the growth and effectiveness of Black American-owned businesses in the Delaware Valley and, thereby, improve the economic conditions within the community. Its primary goal is to further the interests of businesses by responding to the needs of the business community and increasing economic opportunities for Black American-owned businesses.</p> <p>The Asian American Chamber of Commerce of Greater Philadelphia (AACCGP) promotes and fosters relationships between the Asian American community and private and public sector businesses. The organization also promotes education programs geared towards increasing awareness about the availability of Asian American-owned businesses.</p> <p>Pennsy Supply Inc. provides advocacy and outreach to the small business community by conducting seminars to discuss their contracting opportunities for smaller businesses.</p>
Capital, Bonding, and Insurance	<p>The Kutztown Small Business Development Center (SBDC) has personal connections with more than 50 different lending institutions and lenders in Central and Eastern Pennsylvania. The organization helps business owners structure their loan requests to expedite the approval process. SBDC also lowers the overall cost of borrowing, and identifies hidden fees in lender disclosure documents. Kutztown SBDC employs former commercial lenders to help prepare financial projections, and provides a list of documents necessary for the business loan application process. The organization also helps business owners prepare for discussions with lenders by aiding them with budget projections, business plans, and pitches.</p> <p>The Greater Philadelphia Hispanic Chamber of Commerce SBDE Program helps Hispanic American-owned businesses access capital and provides a variety of lending products ranging from microloans to real estate and traditional lending.</p>

Figure 8-1. (Continued)
Examples of race- and gender-neutral measures that other Pennsylvania organizations use

Type	Examples of Program Measures
Regional Neutral Measures Programs (Continued)	
Capital, Bonding, and Insurance (Continued)	<p>The Community First Fund provides financing to both start-up and growth stage small businesses. Their key focus is to ensure that capital is invested in the underserved communities that need it the most, especially the cities and towns that face challenges with poverty and unemployment. Their goal is to facilitate economic and employment growth through focused, socially-responsible lending.</p> <p>The Susquehanna Service Corps of Retired Executives (SCORE) serves Adams, Cumberland, Dauphin, Perry, and York Counties. It offers business assistance, and helps facilitate the distribution of grant money received by other entities to businesses in its service area.</p> <p>First National Bank conducts seminars throughout the Pittsburgh area to explain bonding processes to business owners, and explain how contractors can become bonded.</p>
Mentor-Protégé Programs	<p>The Susquehanna SCORE is a nonprofit partner with the United States Small Business Administration that offers free business mentoring and low or no-cost workshops.</p> <p>The Kutztown SBDC business consultants come from a variety of industries and have attained professional degrees and years of practical business experience. They have the expertise and insight to mentor business owners in areas such as evaluating or refining business plans; incorporating new technology; conducting market research; identifying funding sources; understanding regulatory requirements; and weighing sales opportunities or franchise options.</p>
Technical Assistance	<p>The Greater Philadelphia Hispanic Chamber of Commerce SBDE Program offers educational programming to retail, restaurants, and entrepreneurial ventures just starting out, including help learning English and establishing business accounting systems. For more established Hispanic American-owned businesses, the SBDE focuses on increasing minority-owned business participation by providing support to business owners seeking certification and pursuing contract acquisition.</p> <p>The AACC - Supplier Development Program focuses annually on addressing key areas that contribute to African American business failure; helping grow businesses that can hire within their communities, and meeting the needs of businesses looking to improve and grow their supplier diversity spend.</p> <p>The AACCGP provides technical assistance and support for newly founded and growing Asian American-owned businesses. For example, the organization conducts educational sessions on business plans, cash flow analyses, marketing, obtaining start-up capital, and obtaining working capital. In addition, the organization provides technical support related to certification with various Pennsylvania organizations.</p> <p>Pitt Ohio is a supply chain solutions company that provides technical assistance to local businesses in the Pittsburgh area that want to submit bids and proposals.</p> <p>The Kutztown SBDC offers existing businesses and early-stage entrepreneurs access to no-cost confidential consulting services and learning opportunities. Funding support and resources are provided through a cooperative agreement with the United States Small Business Administration, the Commonwealth of Pennsylvania through the Department of Community & Economic Development, and through support from Kutztown University.</p>

Figure 8-1. (Continued)
Examples of race- and gender-neutral measures that other Pennsylvania organizations use

Type	Examples of Program Measures
City or Local Neutral Measures Program	
Advocacy and Outreach	<p>The Housing Authority of the City of Pittsburgh (HACP) promotes its contracting opportunities at local events hosted by other organizations. The purpose of these outreach efforts is to encourage vendors to register on the HACP webpage for future contracting opportunities. For example, HACP will participate in the 2018 business development open house sponsored by the Allegheny County Department of Minority, Women, and Disadvantaged Enterprise and the Southwestern Pennsylvania Commission.</p> <p>The Philadelphia Housing Authority (PHA) partners with the local Asian, Hispanic, and minority business chambers of commerce to conduct outreach events. The agency's Affirmative Action Contract Compliance program promotes the development of certified Minority-owned and Woman-owned Business Enterprises (MBE/WBEs). The program maximizes the participation of certified MBE/WBEs in PHA contracts and subcontracts.</p> <p>The City of Harrisburg provides outreach to potential contractors through its "Doing Business in the City" initiative in order to improve the financial stability of businesses in the region. Its outreach initiatives include providing a forum for small businesses to learn about contracting opportunities with the City. The City has also developed a directory of potential contractors that includes information about the services that they provide and their status as disadvantaged businesses.</p> <p>The City of Pittsburgh provides outreach to small businesses at community events in order to encourage them to register with the City's business supplier list, and receive notices about contracting opportunities. The list is also forwarded to prime contractors so that they can reach out to sub-contractors about potential contracting opportunities.</p>
Capital, Bonding, and Insurance	<p>The Housing Authority of the City of Pittsburgh waives bonding requirements for some smaller projects to encourage small business participation.</p> <p>The City of Harrisburg tries to make its procurement process easier for smaller businesses by allowing certain policies to be more lenient. For example, small sole proprietorships that are contracted to work on small projects may have less stringent bonding and insurance requirements than contractors that work on larger projects.</p> <p>The City of Pittsburgh recently removed its bonding requirements for master (prime) contracts to make it easier for small businesses to engage in City contracting.</p>
Mentor-Protégé Programs	<p>The PHA facilitates opportunities for networking between subcontractors and prime contractors, often leading to mentor-protégé relationships.</p>
Technical Assistance	<p>The Jump Start Incubator of Berks County provides technical services to newly-established businesses through one-on-one counseling sessions and planned workshop seminars. . It helps them create short-term and long-term planning strategies, and market their services.</p> <p>HACP provides technical support to small businesses by hosting a "How to Do Business Workshop." They use "dummy" bid responses to teach vendors how to successfully respond to requests for proposals (RFPs) and invitations for bid (IFBs).</p> <p>The City of Allentown offers technical assistance via telephone to small companies throughout the bidding and contracting processes. The City also just completed a survey in partnership with the local chamber of commerce to better understand the needs of small businesses.</p>

Figure 8-1. (Continued)
Examples of race- and gender-neutral measures that other Pennsylvania organizations use

Type	Examples of Program Measures
City or Local Neutral Measures Program (Continued)	
Prompt Payment	<p>HACP makes payments within 30 days of receiving invoices from prime contractors, or sooner if possible.</p> <p>PHA pays prime contractors within 30 days of receiving invoices, and requires that prime contractors pay subcontractors within 7 days of receiving an agency payment.</p> <p>The City of Allentown uses a prompt payment system that ensures contractor invoices are processed within 30 days.</p> <p>The University of Pennsylvania ensures prompt payment to small businesses. The University pays contractors within approximately three days of them submitting their invoices.</p> <p>The City of Pittsburgh issues payments promptly to contractors through its Electronic Distributing Invoice system. Payments are typically issued within 30 to 45 days upon receipt of contractor invoices.</p>

CHAPTER 9.

Overall DBE Goal

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Overall DBE Goal

As part of its implementation of the Federal Disadvantaged Business Enterprise (DBE) Program, the Pennsylvania Department of Transportation (PennDOT) is required to set an overall goal for DBE participation in its Federal Highway Administration (FHWA)-funded contracts.¹ Agencies that implement the Federal DBE Program must develop overall DBE goals every three years. However, the overall DBE goal is an *annual* goal in that an agency must monitor DBE participation in its FHWA-funded contracts every year. If DBE participation for a particular year is less than the overall DBE goal, then the agency must analyze the reasons for the difference and establish specific measures to enable it to meet the goal in the next year.

PennDOT must prepare and submit a Goal and Methodology document to FHWA that presents its overall DBE goal that is supported by information about the steps that the agency took to develop the goal. In 2017, PennDOT developed an overall DBE goal for FHWA-funded contracts for federal fiscal years (FFYs) 2018 through 2020. The agency established an overall DBE goal of 9.38 percent for that time period. PennDOT indicated to FHWA that it planned to meet the goal through the use of a combination of race- and gender-neutral and race- and gender-conscious program measures.

PennDOT may choose to update its goal for FFYs 2018 through 2020 based on results from this disparity study. Chapter 9 provides information that PennDOT might consider as part of updating its overall DBE goal. Chapter 9 is organized in two parts that are based on the two-step process that 49 Code of Federal Regulations (CFR) Part 26.45 outlines for agencies to set their overall DBE goals:

- A. Establishing a base figure; and
- B. Considering a step-2 adjustment.

A. Establishing a Base Figure

Establishing a base figure is the first step in calculating an overall goal for DBE participation in PennDOT's FHWA-funded transportation contracts. For the purposes of establishing a base figure, the availability analysis was limited to the availability of *potential DBEs*—minority- and woman-owned businesses that are currently DBE-certified or appear that they could be DBE-certified based on revenue requirements described in 49 CFR Part 26.65—for FHWA-funded prime contracts and subcontracts that PennDOT awarded during the study period. Figure 9-1 presents the availability of potential DBEs for the FHWA-funded construction; professional services; and goods and support services prime contracts and subcontracts that PennDOT awarded during the study period. As show in Figure 9-1, potential DBEs might be expected to

¹ BBC considered any contract with at least \$1 of FHWA funding as an "FHWA-funded contract" and includes the total value of the contract in its pool of total FHWA-funded contracting dollars.

receive 9.7 percent of PennDOT’s FHWA-funded prime contract and subcontract dollars based on their availability for that work. PennDOT might consider 9.7 percent as the base figure for its overall DBE goal if the agency anticipates that the types, sizes, and locations of FHWA-funded contracts that it will award in the future will be similar to the FHWA-funded contracts that it awarded during the study period.

Figure 9-1.
Availability components of the base figure
(based on availability of potential DBEs for FHWA-funded transportation contracts)

Business group	Industry		Total
	Horizontal construction	Construction-related engineering and professional services	
Asian Pacific American-owned	0.5	1.5	0.3
Black American-owned	0.1	1.5	0.7
Hispanic American-owned	0.0	0.9	0.7
Native American-owned	0.7	0.6	0.1
Subcontinent Asian American-owned	0.0	1.1	0.2
Non-Hispanic white woman-owned	8.0	5.7	7.6
Total Minority- and Woman-owned	9.3	11.3	9.7

Note: Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.

Source: BBC Research & Consulting availability analysis.

The total base figure calculation reflects a weight of 0.81 for horizontal construction contracts; and 0.19 for construction-related engineering and professional services contracts based on the volume of FHWA-funded contract dollars that PennDOT awarded during the study period. If PennDOT expects that the distributions of FHWA-funded construction; and construction-related engineering and professional services contract dollars will change substantially in the future, the agency might consider applying different weights to the corresponding base figure components.

B. Considering a Step-2 Adjustment

The Federal DBE Program requires PennDOT to consider a potential step-2 adjustment to its base figure as part of determining its overall DBE goal. PennDOT is not required to make a step-2 adjustment as long as it considers appropriate factors and explains its decision in its Goal and Methodology document. The Federal DBE Program outlines several factors that an agency must consider when assessing whether to make a step-2 adjustment to its base figure:

1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years;
2. Information related to employment, self-employment, education, training, and unions;
3. Any disparities in the ability of DBEs to get financing, bonding, and insurance; and
4. Other relevant data.²

² 49 CFR Section 26.45.

BBC Research & Consulting (BBC) completed an analysis of each of the above step-2 factors. Much of the information that BBC examined was not easily quantifiable but is still relevant to PennDOT as it determines whether to make a step-2 adjustment.

1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years. The United States Department of Transportation's (USDOT's) "Tips for Goal-Setting" suggests that agencies should examine data on past DBE participation in their USDOT-funded contracts in recent years. USDOT further suggests that agencies should choose the median level of annual DBE participation for those years as the measure of past participation:

Your goal setting process will be more accurate if you use the median (instead of the average or mean) of your past participation to make your adjustment because the process of determining the median excludes all outlier (abnormally high or abnormally low) past participation percentages.³

BBC's analysis of DBE participation in PennDOT's FHWA-funded contracts during the study period indicates DBE participation of 8.0 percent, which supports a downward adjustment to PennDOT's base figure. If PennDOT were to adjust its base figure based on DBE participation information from the disparity study, it might consider taking the average of the 9.7 percent base figure and the 8.0 percent DBE participation, yielding a potential overall DBE goal of 8.9 percent.

2. Information related to employment, self-employment, education, training, and unions. Chapter 3 summarizes information about conditions in the local contracting industry for minorities; women; and minority- and woman-owned businesses. Additional information about quantitative and qualitative analyses of conditions in the local marketplace are presented in Appendices C and D. BBC's analyses indicate that there are barriers that certain minority groups and women face related to human capital, financial capital, and business ownership in the Pennsylvania contracting industry. Such barriers may decrease the availability of minority- and woman-owned businesses to perform the FHWA-funded contracts that PennDOT awards, which supports an upward adjustment to PennDOT's base figure.

Although it may not be possible to quantify the effects that barriers in human capital, financial capital, and business success may have on the availability of minority- and woman-owned businesses in the local marketplace, the effects of barriers in business ownership can be quantified. BBC used regression analyses to investigate whether race/ethnicity and gender are related to rates of business ownership among workers in the local contracting industry. The regression analyses allowed BBC to examine those relationships while statistically controlling for various race- and gender-neutral personal characteristics including education and age. (Chapter 3 and Appendix C provide details about BBC's regression analyses.) The regression analyses revealed that, even after accounting for various personal characteristics:

³ Section III (A)(5)(c) in USDOT's "Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program." <http://www.osdbu.dot.gov/DBEProgram/tips.cfm>

- Being Hispanic American was associated with a lower likelihood of business ownership in the construction industry. In addition, being a woman was associated with a lower likelihood of business ownership in the Construction industry.
- Being Subcontinent Asian American or Hispanic American was associated with a lower likelihood of business ownership in the construction-related engineering and professional services industry. In addition, being a woman was associated with a lower likelihood of business ownership in this industry.

BBC analyzed the impact that barriers in business ownership would have on the base figure if the groups of minorities and women that exhibited statistically significant disparities in rates of business ownership owned businesses at the same rate as comparable non-Hispanic white men. The results of that analysis—sometimes referred to as a *but for* analysis, because it estimates the availability of minority- and woman-owned businesses *but for* the effects of race- and gender-based discrimination—are presented in Figure 9-3.

The *but for* analysis included the same contracts that the study team analyzed to determine the base figure (i.e., FHWA-funded prime contracts and subcontracts that PennDOT awarded during the study period). The weights for each industry were based on the proportion of FHWA-funded contract dollars that PennDOT awarded in each industry during the study period (i.e., 0.81 weight for construction and a 0.19 weight for professional services). In that way, BBC determined a potential adjustment to PennDOT’s base figure that attempted to account for race- and gender-based barriers in business ownership in the local contracting industry.

The rows and columns of Figure 9-3 present the following information from BBC’s *but for* analysis:

- a. **Current availability.** Column (a) presents the current availability of potential DBEs by racial/ethnic and gender group and by industry, as also presented in Figure 9-1. Each row presents the percentage availability for each racial/ethnic and gender group. Combined, the current availability of potential DBEs for PennDOT’s FHWA-funded contracts is 9.7 percent, as shown in row (19) of column (a).
- b. **Disparity indices for business ownership.** For each group that is significantly less likely than similarly-situated non-Hispanic white men to own construction and engineering businesses, BBC simulated business ownership rates if those groups owned businesses at the same rate as non-Hispanic white men who share similar race- and gender-neutral personal characteristics.

To simulate business ownership rates if minorities and women owned businesses at the same rate as non-Hispanic white men in a particular industry, BBC took the following steps: 1) BBC performed a probit-regression analysis predicting business ownership including only workers who were non-Hispanic white men in the dataset; and 2) the study team then used the coefficients from that model and the mean personal characteristics of individual minority groups (or non-Hispanic white women) working in the industry (i.e., personal characteristics, indicators of educational attainment, and indicators of personal financial resources and constraints) to simulate business ownership for each group.

The study team then calculated a business ownership disparity index for each group by dividing the observed business ownership rate by the simulated business ownership rate and then multiplying the result by 100. Values of less than 100 indicate that, in reality, the group is less likely to own businesses than what would be expected for non-Hispanic white men who share similar personal characteristics. Column (b) presents disparity indices related to business ownership for the different racial/ethnic and gender groups. For example, as shown in row (4) of column (b), Hispanic Americans own construction businesses at 73 percent of the rate that they would be expected to own construction businesses if they were non-Hispanic white men with similar personal characteristics.

- c. Availability after initial adjustment.** Column (c) presents availability estimates by racial/ethnic and gender group and by industry after initially adjusting for statistically significant disparities in business ownership rates. BBC calculated those estimates by dividing the current availability in column (a) by the disparity index for business ownership in column (b) and then multiplying by 100. Note that BBC only made adjustments for those groups that are significantly less likely than similarly-situated non-Hispanic white men to own businesses.
- d. Availability after scaling to 100 percent.** Column (d) shows adjusted availability estimates that the study team re-scaled so that the sum of the availability estimates equaled 100 percent for each industry. BBC re-scaled the adjusted availability estimates by taking each group's adjusted availability estimate in column (c) and dividing it by the sum of availability estimates shown under "Total" in column (c)—in row (9) for construction and row (18) for engineering and professional services. For example, the scaled availability estimate for non-Hispanic white woman-owned construction businesses shown in row (6) of column (d) was calculated in the following way: $(17.4\% \div 109.6\%) \times 100 = 15.8$ percent.
- e. Components of goal.** Column (e) shows the component of the total base figure attributed to the adjusted availability of minority- and woman-owned businesses for each industry. BBC calculated each component by taking the total availability estimate shown under "Potential DBEs" in column (d)—in row (7) for construction and row (16) for engineering and professional services—and multiplying it by the proportion of total FHWA-funded contract dollars for which each industry accounts (i.e., 0.81 for construction, 0.19 for engineering and professional services). For example, BBC used the 17.3 percent shown in row (7) of column (d) for construction and multiplied it by 0.81 for a result of 14 percent (see row (7) of column (e)). The values in column (e) were then summed to equal the overall base figure adjusted for barriers in business ownership—17 percent, as shown in the bottom row (row 19) of column (e).

Figure 9-3.
Potential step-2 adjustment to base figure considering disparities in rates of business ownership

Industry and group	a. Current availability	b. Disparity index for business ownership	c. Availability after initial adjustment*	d. Availability after scaling to 100%	e. Components of base figure**
Construction					
(1) Black American	0.5 %	n/a	0.5 %	0.5 %	
(2) Asian Pacific American	0.1	n/a	0.1	0.1	
(3) Subcontinent Asian American	0.0	n/a	0.0	0.0	
(4) Hispanic American	0.7	73	0.9	0.9	
(5) Native American	0.0	n/a	0.0	0.0	
(6) White woman	8.0	46	17.4	15.8	
(7) Potential DBEs	9.3 %	n/a	18.9 %	17.3 %	14.0 %
(8) All other businesses ***	90.7	n/a	90.7	82.7	
(9) Total	100.0 %	n/a	109.6 %	100.0 %	
Professional services					
(10) Black American	1.5 %	63	2.4 %	2.3 %	
(11) Asian Pacific American	1.5	n/a	1.5	1.4	
(12) Subcontinent Asian American	1.1	35	3.2	3.1	
(13) Hispanic American	0.9	n/a	0.9	0.9	
(14) Native American	0.6	n/a	0.6	0.6	
(15) White woman	5.7	71	8.0	7.6	
(16) Potential DBEs	11.3 %	n/a	16.6 %	15.8 %	3.0 %
(17) All other businesses	88.7	n/a	88.7	84.2	
(18) Total	100.0 %	n/a	105.3 %	100.0 %	
(19) TOTAL	9.7 %	n/a		n/a	17.0 %

Note: * Initial adjustment is calculated as current availability divided by the disparity index.

** Components of base figure calculated as value after adjustment and scaling to 100% multiplied by percentage of total FHWA-funded contract dollars in that category (construction is 81%; and professional services is 19%).

*** All other businesses include majority-owned business and minority- and woman-owned businesses that are not potential DBEs.

Source: BBC Research & Consulting.

Based on information related to business ownership alone, PennDOT might consider adjusting the base figure upward to 17 percent.

3. Any disparities in the ability of DBEs to get financing, bonding, and insurance.

BBC's analysis of access to financing, bonding, and insurance also revealed quantitative and qualitative evidence that minorities; women; and minority- and woman-owned businesses in Pennsylvania do not have the same access to those business inputs as non-Hispanic white men and businesses owned by non-Hispanic white men (for details, see Chapter 3 and Appendices C and D). Any barriers to obtaining financing, bonding, and insurance might limit opportunities for minorities and women to successfully form and operate businesses in the Pennsylvania contracting marketplace. Any barriers that minority- and woman-owned businesses face in obtaining financing, bonding, and insurance would also place those businesses at a disadvantage in competing for PennDOT's FHWA-funded prime contracts and subcontracts. Thus, information from the disparity study about financing, bonding, and insurance also supports an upward step-2 adjustment to PennDOT's base figure.

4. Other factors. The Federal DBE Program suggests that federal fund recipients also examine “other factors” when determining whether to make step-2 adjustments to their base figures.⁴

Success of businesses. There is quantitative evidence that certain groups of minority- and woman-owned businesses are less successful than businesses owned by non-Hispanic white men and face greater barriers in the marketplace, even after accounting for race- and gender-neutral factors. Chapter 3 summarizes that evidence and Appendix C presents corresponding quantitative analyses. There is also qualitative evidence of barriers to the success of minority- and woman-owned businesses, as presented in Appendix D. Some of that information suggests that discrimination on the basis of race/ethnicity and gender adversely affects minority- and woman-owned businesses in the local contracting industry. Thus, information about the success of businesses also supports an upward step-2 adjustment to PennDOT’s base figure.

Evidence from disparity studies conducted within the jurisdiction. USDOT suggests that federal fund recipients also examine evidence from disparity studies conducted within their jurisdictions when determining whether to make adjustments to their base figures. While conducting a disparity study for PennDOT, BBC also conducted a disparity study for the Commonwealth of Pennsylvania’s Department of General Services (DGS). However, DGS’ contracts differ substantially in terms of size and type from the FHWA-funded contracts that PennDOT awarded during the study period. Therefore, PennDOT should exercise caution in using information from DGS’ disparity study in determining whether to make an adjustment to its base figure.

Summary. Taken together, the quantitative and qualitative evidence that the study team collected as part of the disparity study may support a step-2 adjustment to the base figure as PennDOT considers setting its overall DBE goal. As noted in USDOT’s “Tips for Goal-Setting:”

If the evidence suggests that an adjustment is warranted, it is critically important to ensure that there is a rational relationship between the data you are using to make the adjustment and the actual numerical adjustment made.⁵

Based on information from the disparity study, there are reasons why PennDOT might consider an upward adjustment to its base figure:

- PennDOT might adjust its base figure upward to account for barriers that minorities and women face in human capital and owning businesses in the local contracting industry. Such an adjustment would correspond to a “determination of the level of DBE participation you would expect absent the effects of discrimination.”⁶
- PennDOT might also adjust its base figure in light of evidence of barriers that affect minorities; women; and minority- and woman-owned businesses in obtaining financing, bonding, and insurance and evidence that certain groups of minority- and woman-owned

⁴ 49 CFR Section 26.45.

⁵ USDOT. “Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program.” <http://www.osdbu.dot.gov/DBEProgram/tips.cfm>.

⁶ 49 CFR Section 26.45 (b).

businesses are less successful than comparable businesses owned by non-Hispanic white men.

There are also reasons why PennDOT might consider a downward adjustment to its base figure. BBC's analysis of DBE participation in PennDOT's FHWA-funded contracts also indicates DBE participation (8.0%) that is lower than the base figure. If PennDOT were to adjust its base figure based on DBE participation information from the disparity study, it might consider taking the average of the 9.7 percent base figure and the 8.0 percent past DBE participation for an overall DBE goal of 8.9 percent.

USDOT regulations clearly state that an agency such as PennDOT is required to review a broad range of information when considering whether it is necessary to make a step-2 adjustment—either upward or downward—to its base figure. However, *Tips for Goal-Setting* states that an agency such as PennDOT is not required to make an adjustment as long as it can explain what factors it considered and can explain its decision in its Goal and Methodology document.

CHAPTER 10.

Program Implementation

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Program Implementation

Chapter 10 reviews information relevant to the Pennsylvania Department of Transportation's (PennDOT's) implementation of specific components of the Federal Disadvantaged Business Enterprise (DBE) Program for Federal Highway Administration (FHWA)-funded contracts. In addition, Chapter 10 presents considerations that the agency should make as it works to refine its implementation of the DBE Program. Chapter 10 is presented in two parts:

- A. Elements of the Federal DBE Program; and
- B. Additional Considerations.

A. Elements of the Federal DBE Program

Regulations presented in 49 Code of Federal Regulations (CFR) Part 26 and other documents offer agencies guidance related to implementing the Federal DBE Program. Key requirements of the program are described below in the order that they are presented in 49 CFR Part 26.¹

Reporting to DOT – 49 CFR Part 26.11 (b). PennDOT must periodically report DBE participation in its FHWA-funded contracts to the United States Department of Transportation (USDOT). PennDOT tracks DBE and non-DBE participation in its federally-funded contracts at the time of award, based on award amounts to prime contractors and commitment amounts to subcontractors. With regard to payment data, PennDOT maintains information on amounts that it pays to prime contractors, and prime contractors are expected to enter information about payments that they make to subcontractors into PennDOT's Engineering and Construction Management System (ECMS). PennDOT should consider taking steps to ensure that prime contractors enter information about payments to subcontractors into ECMS in a complete and accurate manner on all contracts, potentially as a condition of receiving payment.

Bidders list – 49 CFR Part 26.11 (c). As part of its implementation of the Federal DBE Program, PennDOT has developed and maintains a bidders list of businesses that are interested in bidding on its contracts. PennDOT updates its bidders list triennially by surveying businesses who have registered as business partners through ECMS. The bidders list includes the following information about each potential bidder:

- Business name;
- Address;
- DBE certification status;
- Age of business; and
- Annual gross receipts.

¹ Because only certain portions of the Federal DBE Program are discussed in Chapter 10, PennDOT should refer to the complete federal regulations when considering its implementation of the program.

PennDOT should continue to ensure that its bidders list is current and includes all relevant information for businesses bidding or proposing on the agency's FHWA-funded prime contracts and subcontracts.

Information from availability surveys. As part of the availability analysis, the study team collected information about local businesses that are potentially available for different types of PennDOT prime contracts and subcontracts. As appropriate, PennDOT should consider using that information to augment its current bidders list.

Maintaining comprehensive vendor data. In order to effectively track the participation of minority- and woman-owned businesses in its contracts, PennDOT should consider continuing to improve the information that it collects on the ownership and certification status of businesses that participate in its prime contracts and subcontracts. PennDOT should consider maintaining information about businesses' DBE certification statuses (e.g., active or expired) by calendar year. PennDOT should also consider collecting information on the race/ethnicity and gender of business owners regardless of DBE certification status. As appropriate, PennDOT can use business information that the study team collected as part of the disparity study to augment its vendor data.

Prompt payment – 49 CFR Part 26.29. PennDOT follows the prompt payment requirements that are specified in the Commonwealth of Pennsylvania's procurement code, but has developed its own prompt payment policies.² PennDOT will make payments to prime contractors for certified completed work within 30 days. Prime contractors are then required to pay subcontractors within seven days of receipt of a current estimate and final payments from PennDOT, provided the terms and conditions of the applicable subcontract have been reasonably met. Prime contractors must report such payments using the ECMS.^{3,4}

Qualitative information collected as part of in-depth interviews and public meetings that the study team conducted indicated that many businesses are generally dissatisfied with the timeliness of payment by primes on public sector contracts. Business owners described challenges with slow payment and the degree to which they rely on consistent cash flow to stay in business. PennDOT should consider reviewing its enforcement of prompt payment policies to ensure subcontractors are being paid promptly by prime contractors.

DBE directory – 49 CFR Part 26.31. PennDOT is one of five certifying agencies that is part of the Pennsylvania Unified Certification Program (PAUCP). A searchable directory of all certified DBEs is available through the PAUCP website.⁵ The directory contains the following information about each certified business: business name, address, owner name, phone number, email

² Pennsylvania Procurement Handbook, Part 1, Chapter 18. The Pennsylvania procurement code requires state agencies to pay prime contractors within 45 days of the agency approving an invoice. In addition, the procurement code requires that prime contractors pay all subcontractors within 14 days of when the prime contractor receives payment for services from the agency.

³ Policy and Procedures for the Administration of Consultant Agreements. Pennsylvania Department of Transportation PUB 93 (3-18). Available online at <http://www.dot.state.pa.us/public/PubsForms/Publications/PUB%2093.pdf>.

⁴ Specifications. Pennsylvania Department of Transportation. PUB 408/2016. Available online at http://www.dot.state.pa.us/public/PubsForms/Publications/Pub_408/408_2016/408_2016_5/408_2016_5.pdf

⁵ <https://www.dotsbe.pa.gov/PAUCPWeb/paucp/viewHome.do>.

address, website, industry code, industry type, a description of the work the firm has been certified to perform, and its geographical location.

Qualitative information that the study team collected through in-depth interviews and public meetings indicated that many business owners and managers viewed DBE certification as advantageous for getting work on public sector contracts. However, many of those business owners felt they were still up against a closed network of contractors who typically work together on PennDOT contracts. PennDOT should review the ways it can create networking and contracting opportunities for DBEs and ensure that contractors comply with DBE contract goals. PennDOT might also consider creating more opportunities for prime contractors to identify potential DBE subcontractors. PennDOT could consider linking project solicitations on ECMS to the DBE directory so prospective bidders can easily locate qualified DBEs that might be interested in participating in those contracts as subcontractors.

Overconcentration – 49 CFR Part 26.33. Agencies implementing the Federal DBE Program are required to report and take corrective measures if they find that DBEs are so overconcentrated in certain work areas as to unduly burden non-DBEs working in those areas. Such measures may include:

- Developing ways to assist DBEs to move into nontraditional areas of work;
- Varying the use of DBE contract goals; and
- Working with contractors to find and use DBEs in other industry areas.

BBC investigated potential overconcentration in PennDOT contracts. There were eight specific subindustries in which certified DBEs accounted for 50 percent or more of total subcontract dollars for contracts awarded between July 1, 2011 and June 30, 2016 based on contract data that the study team received from PennDOT:

- Structural metals (98%);
- Real estate management (97%);
- Petroleum and petroleum products (94%);
- Human resources and job training services (83%);
- Surveying and mapmaking (79%);
- Other construction-related goods (74%);
- Testing services (68%); and
- Landscape services (50%).

The above figures are based only on subcontract dollars and so do not include work that prime contractors self-performed in those areas. If the study team had included self-performed work in those analyses, the percentages for which DBEs accounted would likely have decreased. In addition, the above figures are based on both FHWA- and state-funded contracts and would likely differ if limited to only FHWA-funded contracts. PennDOT should consider reviewing similar information and continuing to monitor the above types of work for potential overconcentration in the future.

Business development programs – 49 CFR Part 26.35 and mentor-protégé programs – 49 CFR Appendix D to Part 26. Business Development Programs (BDPs) are programs that are designed to assist DBE-certified businesses in developing the capabilities to compete for work independent of the Federal DBE Program. PennDOT offers a number of BDPs for potential and current DBEs including:

- The DBE Supportive Services Program, through Cheyney University, which offers technical and management assistance to certified DBEs; and
- A Comprehensive Business Development Program (CBPD), through which PennDOT offers assistance to a limited number of DBEs and helps them develop comprehensive business plans. The CBPD helps DBEs understand their market potential, set specific business development goals, and address any barriers to receiving contracts, such as financial limitations.

Qualitative information that the study team collected through in-depth interviews and public meetings indicated that many business owners find industry-focused networking events hosted by agencies like PennDOT very useful, because those events allow them to meet potential prime contractors with which to partner in the future. Several business owners also expressed interest in a mentor-protégé program, which PennDOT does not currently operate. PennDOT should continue to communicate with certified DBEs to ensure that its BDPs provide specialized assistance that is tailored to the needs of developing businesses in the Pennsylvania marketplace and throughout PennDOT's 11 districts. The agency might also consider exploring the development of a mentor-protégé program.

Responsibilities for monitoring the performance of program participants – 49 CFR Part 26.37 and 49 CFR Part 26.55. The Final Rule effective February 28, 2011 revised requirements for monitoring the work that prime contractors commit to DBE subcontractors at contract award (or through contract modifications) and enforcing that those DBEs actually perform that work. The Final Rule states that prime contractors can only terminate DBEs for “good cause” and with written consent from the awarding agency. In addition, 49 CFR Part 26.55 requires agencies to only count the participation of DBEs that are performing commercially useful functions (CUFs) on contracts toward meeting DBE contract goals and overall DBE goals. PennDOT uses several monitoring and enforcement mechanisms to ensure that DBEs actually perform work that is committed to them and that DBEs perform CUFs, including:

- Review of DBE commitments, DBE subcontracts, and DBE payments for highway construction and consultant agreement contracts tracked in ECMS;
- Review of contractor compliance with DBE requirements, including CUF policies, as part of general compliance reviews of construction contractors;
- DBE Monthly Monitoring Reports that monitor DBE goal attainment and are submitted to the Bureau of Equal Opportunity;
- DBE Field Agent reviews of monthly progress reports from each of PennDOT's Engineering Districts, which detail DBE participation; and

- On-site compliance reviews of highway construction projects, during which PennDOT's DBE Field Agent reviews DBE subcontracts, payments, and completed CUF reports and evaluates any DBEs working on-site that day.

PennDOT should consider reviewing the requirements set forth in 49 CFR Part 26.37(b), 49 CFR Part 26.55, and in the Final Rule to ensure that its monitoring and enforcement mechanisms are consistent with federal regulations and best practices.

Fostering small business participation – 49 CFR Part 26.39. When implementing the Federal DBE Program, PennDOT must include measures to structure contracting requirements to facilitate competition by small businesses. 49 CFR Part 26.39 states that agencies should be “taking all reasonable steps to eliminate obstacles to their participation, including unnecessary and unjustified bundling of contract requirements that may preclude small business participation in procurements as prime contractors or subcontractors.”⁶ The Final Rule effective February 28, 2011 added a requirement for agencies to foster small business participation in their contracting. It required agencies to submit a small business participation plan to USDOT. USDOT identifies the following potential strategies for fostering small business participation:

- Establishing a race- and gender-neutral small business set-aside for prime contracts under a stated amount (e.g., \$1 million);
- Identifying alternative acquisition strategies and structuring procurements to facilitate the ability of consortia or joint ventures comprising small businesses, including DBEs, to compete for and perform prime contracts; and
- Unbundling large contracts to allow small businesses more opportunities to bid for smaller contracts.

PennDOT currently implements a comprehensive small business program as part of its implementation of the Federal DBE program. PennDOT certifies firms that meet the definition of a small business as Small Business Enterprises (SBEs). In the fall of 2018, PennDOT will launch a small business set-aside program for some state-funded technical consulting contracts worth less than \$100,000. In addition, PennDOT supports the SBE Supportive Services Center at Cheyney University, which provides technical assistance to help all small businesses grow and thrive. Finally, PennDOT publicizes a list of potential prime contractor bidders for agency projects to allow SBEs to contact the bidders and offer quotes. The Bureau of Equal Opportunity tracks SBE commitments and attainments and reports those numbers using the same methods it uses as part of the Federal DBE program.

Qualitative data that the study team collected through in-depth interviews and public meetings indicated that many businesses supported the use of small business set-asides and unbundling large contracts. PennDOT might consider ways in which it can expand its use of set-asides on FHWA-funded contracts. PennDOT should also continue to make efforts to unbundle large contracts into smaller contracts. Those efforts might increase small business participation in PennDOT contracts. PennDOT might also consider other ways to increase small business participation, such as waiving prequalification requirements for relatively small contracts.

⁶ 49 CFR Part 26.39(a).

Chapter 8 of the report outlines many of PennDOT's current and planned race- and gender-neutral program measures and provides examples of measures that other organizations in Pennsylvania have implemented. PennDOT should review that information and consider implementing any additional measures that the agency deems to be effective. PennDOT should also review legal and budgetary issues in considering different measures.

Prohibition of DBE quotas and set-asides for DBEs unless in limited and extreme circumstances – 49 CFR Part 26.43. DBE quotas are prohibited under the Federal DBE Program, and DBE set-asides can only be used in extreme circumstances. PennDOT does not use DBE quotas or set-asides as part of its implementation of the Federal DBE Program.

Setting overall DBE goals – 49 CFR Part 26.45. In the Final Rule effective February 28, 2011, USDOT changed how often agencies that implement the Federal DBE Program are required to submit their overall DBE goals. As discussed in Chapter 1, agencies such as PennDOT now need to develop and submit their overall DBE goals every three years. Chapter 9 uses data and results from the disparity study to provide PennDOT with information that could be useful in updating its current overall DBE goal or setting its next overall DBE goal.

Analysis of reasons for not meeting overall DBE goal – 49 CFR Part 26.47(c). Another addition to the Federal DBE Program made under the Final Rule effective February 28, 2011 requires agencies to take the following actions if their DBE participation for a particular fiscal year is less than their overall DBE goal for that year:

- Analyze the reasons for the difference in detail; and
- Establish specific steps and milestones to address the difference and enable the agency to meet the goal in the next fiscal year.

Need for separate accounting for the participation of potential DBEs. In accordance with guidance in the Federal DBE Program, BBC's analysis of the overall DBE goal in the disparity study includes DBEs that are currently certified as well as minority- and woman-owned businesses that could *potentially* be DBE-certified based on revenue standards (i.e., *potential DBEs*).⁷ Agencies can explore whether one reason they have not met their overall DBE goals is because they are not counting the participation of potential DBEs. USDOT might then expect an agency to further encourage potential DBEs to become DBE-certified as one way of closing the gap between reported DBE participation and its overall DBE goal. In order to have the information to explore that possibility, PennDOT should consider:

- Developing a system to collect information on the race/ethnicity and gender of the owners of all businesses, not just certified DBEs, participating as prime contractors or subcontractors in FHWA-funded contracts;
- Developing internal reports for the participation of all minority- and woman-owned businesses in FHWA-funded contracts; and

⁷ Note that minority- and woman-owned businesses that could be DBE-certified but that are not currently certified are counted as part of calculating the overall DBE goal. However, the participation of those businesses is not counted as part of PennDOT's DBE participation reports to FHWA.

- Continuing to track participation of certified DBEs on FHWA-funded contracts, per USDOT reporting requirements.

Other steps to evaluate how PennDOT might better meet its overall DBE goal. Analyzing the participation of potential DBEs is one step among many that PennDOT might consider taking when examining any differences between DBE participation and its overall DBE goal. PennDOT must also establish specific steps and milestones to correct any problems it identifies to enable it to better meet its overall DBE goal in the future.⁸

Maximum feasible portion of goal met through race- and gender-neutral program measures – 49 CFR Part 26.51(a). As presented in Chapter 9, PennDOT must meet the maximum feasible portion of its overall DBE goal through the use of race- and gender-neutral program measures. PennDOT must project the portion of its overall DBE goal that could be achieved through such measures.

Use of DBE contract goals – 49 CFR Part 26.51(d). The Federal DBE Program requires agencies to use race- and gender-conscious measures, such as DBE contract goals, to meet any portion of their overall DBE goals that they do not project being able to meet using race- and gender-neutral measures. Based on information from the disparity study and other available information, PennDOT should assess whether the continued use of DBE contract goals is necessary in the future to meet any portion of its overall DBE goal. USDOT guidelines on the use of DBE contract goals, which are presented in 49 CFR Part 26.51(e), include the following guidance:

- DBE contract goals may only be used on contracts that have subcontracting possibilities;
- Agencies are not required to set DBE contract goals on every FHWA-funded contract;
- During the period covered by the overall DBE goal, an agency must set DBE contract goals so that they will cumulatively result in meeting the portion of the overall DBE goal that the agency projects being unable to meet through race- and gender-neutral measures;
- An agency's DBE contract goals must provide for participation by all DBE groups eligible to participate in race- and gender-conscious measures and must not be subdivided into group-specific goals; and
- An agency must maintain and report data on DBE participation separately for contracts that include and do not include DBE contract goals.

If PennDOT determines that the continued use of DBE contract goals on FHWA-funded contracts is appropriate, then it should also evaluate which DBE groups should be considered eligible for those goals. If PennDOT decides to consider only certain DBE groups (e.g., groups that PennDOT determines to be *underutilized* DBEs) as eligible to participate in DBE contract goals, it must submit a waiver request to FHWA.

Some individuals participating in in-depth interviews and public meetings made comments related to the use of race- and gender-conscious measures such as DBE contract goals:

⁸ 49 CFR Part 26.47(c)(2).

- Several minority- and woman-owned businesses commented that race- and gender-conscious measures help their businesses get a “foot in the door” with prime contractors. Some minority- and woman-owned businesses indicated that the Federal DBE program was the biggest factor helping their businesses compete in otherwise “tough” fields with closed networks of contractors.
- Some business owners viewed race- and gender-conscious measures as a disadvantage to other small businesses in the marketplace because the measures result in agencies awarding contracts to businesses that are “not always qualified” to do the work. Many interviewees also indicated that they are aware of fraudulent DBEs that are taking advantage of DBE certification and contract goals to win work.
- Many participants indicated that PennDOT’s current use of race- and gender-conscious measures does not encourage prime contractors to make anything more than perfunctory good faith efforts in order to comply with the program. For example, several business owners detailed how their businesses were included on proposed project teams as DBEs but that they were never given work once a contract was awarded.
- Some interviewees also expressed concerns about PennDOT’s lack of effective monitoring and enforcement of DBE contract goals once contracts are awarded.

PennDOT should consider those comments if it determines that it is appropriate to use DBE contract goals on FHWA-funded contracts in the future.

Flexible use of any race- and gender-conscious measures – 49 CFR Part 26.51(f).

State and local agencies must exercise flexibility in any use of race- and gender-conscious measures such as DBE contract goals. For example, if PennDOT determines that DBE participation exceeds its overall DBE goal for a fiscal year, it must reduce its use of DBE contract goals to the extent necessary. If it determines that it will fall short of the overall DBE goal in a fiscal year, then it must make appropriate modifications in the use of race- and gender-neutral and race- and gender-conscious measures to allow it to meet its overall DBE goal in the following year. If PennDOT observes increased DBE participation (relative to availability) on contracts to which race- and gender-conscious measures do not apply, the agency might consider changing its projection of how much of its overall DBE goal it can achieve through the use of race- and gender-neutral measures in the future.

Good faith efforts procedures – 49 CFR Part 26.53. USDOT has provided guidance for agencies to review good faith efforts, including materials in Appendix A of 49 CFR Part 26. PennDOT’s current implementation of the Federal DBE Program outlines the good faith efforts process that it uses for DBE contract goals. The Final Rule effective February 28, 2011 updated requirements for good faith efforts when agencies use DBE contract goals. PennDOT requires contractors to submit documentation of their good faith efforts and written confirmation in the event that bidders’ efforts to include sufficient DBE participation were unsuccessful. Factors that PennDOT considers in evaluating good faith efforts include:

- Whether a bidder made efforts to solicit DBE participation through all reasonable and available means, including whether solicitations were advertised at least 15 calendar days prior to the bid due date to allow DBEs to respond;

- Whether a bidder has selected portions of work to be performed by DBEs or has broken out portions of work into more feasible units in order to increase the likelihood that the DBE goal will be achieved;
- Whether a bidder provided interested DBEs with adequate information about project plans, specifications, and requirements in a timely manner;
- Whether a bidder has negotiated in good faith with interested DBEs in an effort to facilitate DBE participation;
- Whether a bidder used sound reasoning to determine if a DBE was not adequately qualified to perform the proposed work;
- Whether a bidder made efforts to assist interested DBEs in obtaining required bonding, lines of credit, or insurance;
- Whether a bidder made efforts to assist interested DBEs in obtaining required equipment, supplies, or materials; and
- Effectively using the services of community groups representing minorities and women, contractor groups, PennDOT's DBE and SBE Support Services Centers, and other business assistance resources to identify interested DBEs.

PennDOT does not consider perfunctory efforts to be good faith efforts. Determining the sufficiency of bidders' good faith efforts is at PennDOT's discretion and the use of quantitative formulas is not required. PennDOT should review 49 CFR Part 26.53, the Final Rule, and relevant case law to ensure that its good faith efforts procedures are consistent with federal regulations.

Counting DBE participation – 49 CFR Part 26.55. 49 CFR Part 26.55 describes how agencies should count DBE participation and evaluate whether bidders have met DBE contract goals. Federal regulations also give specific guidance for counting the participation of different types of DBE suppliers and trucking companies. 49 CFR Part 26.11 presents guidance related to submitting Uniform Reports of DBE Awards or Commitments and Payments. PennDOT currently tracks participation for certified DBEs but not for uncertified minority- and woman-owned businesses. As discussed above, in addition to tracking the participation of certified DBEs, PennDOT should consider developing procedures to consistently track participation of all minority- and woman-owned businesses and potential DBEs in the contracts that it awards. Those efforts will help PennDOT better track the effectiveness of its efforts to encourage DBE participation and businesses that could become DBE certified in the future. If applicable, PennDOT should also consider collecting important information regarding any shortfalls in annual DBE participation, including preparing participation reports for all minority- and woman-owned businesses (not only those that are DBE-certified). In addition to the information it already maintains, PennDOT should also consider collecting and using the following information:

- Databases that BBC developed as part of the disparity study;
- Contractor/consultant registration documents from all businesses working with PennDOT as prime contractors or subcontractors, including information about the race/ethnicity and gender of business owners;

- Prime contractor and subcontractor participation on agency contracts;
- Subcontractor participation data for all tiers and suppliers and for all businesses regardless of race/ethnicity, gender, or certification status;
- Payment data for prime contractors and subcontractors; and
- Descriptions of the areas of contracts in which subcontractors worked.

DBE certification – 49 CFR Part 26 Subpart D. PennDOT is one of five agencies responsible for DBE certification in Pennsylvania through the PAUCP. PennDOT’s certification process is designed to comply with 49 CFR Part 26, Subpart D. As PennDOT continues to work with certified DBEs, the agency should consider ensuring that it continues to certify all groups that the Federal DBE Program presumes to be socially and economically disadvantaged in a manner that is consistent with federal regulations.

Many business owners and managers participating in in-depth interviews and public meetings commented on the DBE certification process. Some business owners felt that the certification process was reasonable and relatively easy to complete. However, other business owners were highly critical of the certification process. A number of business owners reported that the process was difficult to understand, very time consuming, and required extensive paperwork. Appendix D provides additional details about business owners’ experiences with and perceptions of DBE certification. PennDOT appears to follow federal regulations concerning DBE certification, which requires collecting and reviewing considerable information from program applicants. However, the agency might consider interviewees’ concerns and research other ways to make the certification process easier for potential DBEs.

Monitoring changes to the Federal DBE Program. Federal regulations related to the Federal DBE Program change periodically, such as with the DBE Program Implementation Modifications Final Rule issued on October 2, 2014 and the Final Rule issued on February 28, 2011. PennDOT should continue to monitor such developments and ensure that the agency’s implementation of the Federal DBE Program is in compliance with federal regulations. Other transportation agencies’ implementations of the Federal DBE Program are under review in federal district courts. PennDOT should also continue to monitor court decisions in those and other relevant cases (for details, see Appendix B).

B. Additional Considerations

Based on disparity study results and the study team’s review of PennDOT’s contracting practices and program measures, BBC provides additional considerations that PennDOT should make as it works to refine its implementation of the Federal DBE Program and the state’s transportation-focused Diverse Business (DB) Program. In making those considerations, PennDOT should also assess whether additional resources or changes in state law or internal policy may be required.

Consolidation of programs. There appears to be substantial confusion among members of the business community regarding the Federal DBE Program, the DB Program, the Commonwealth of Pennsylvania’s Department of General Service’s (DGS’s) Small Diverse Business (SDB) Program, and DGS’s Small Business (SB) Program. The similarity of the objectives and names of the DBE, DB SDB, and SB Programs proves to be challenging for many

businesses attempting to work with PennDOT (and DGS). Although PennDOT must implement the Federal DBE Program separately for its USDOT-funded contracts, the agency might consider ways to work with the Commonwealth to consolidate its DB Program with DGS's SDB and SB Programs. Doing so might help encourage businesses to become certified, adhere to program requirements, and engage with both agencies. It might also reduce the amount of monitoring that PennDOT and DGS must undertake as part of all four programs.

Overall DBE goal. As part of implementing the Federal DBE goal, PennDOT must set an overall aspirational goal for DBE participation in its USDOT-funded contracts every three years. The agency last set an overall DBE goal of 9.38 percent that covers federal fiscal years 2018-2020. Information from the availability analysis indicates that the overall availability of *potential DBEs*—that is, minority- and woman-owned businesses that are DBE-certified or appear that they could be DBE-certified based on revenue requirements described in 49 Code of Federal Regulations Part 26—for PennDOT's USDOT-funded prime contracts and subcontracts is 9.7 percent, which is very similar to PennDOT's current overall DBE goal of 9.38 percent. PennDOT should considering using information from the availability analysis and other analyses in the disparity study, such as information about current marketplace conditions, to either adjust its current overall DBE goal or set its next one. Chapter 9 discusses factors that PennDOT might consider in deciding how to set its next overall DBE goal.

Subcontract opportunities. Overall, minority- and woman-owned businesses did not show disparities on the subcontracts that PennDOT awarded during the study period, in no small part because the agency uses DBE contracting goals in awarding many of its contracts, which appears to be an effective measure to encourage the participation of minority- and woman-owned businesses. However, subcontracting accounted for a relatively small percentage of the total contracting dollars that PennDOT awarded during the study period. To increase the number of subcontract opportunities, PennDOT could consider implementing a program that requires prime contractors to subcontract a certain amount of project work as part of their bids and proposals. For specific types of contracts where subcontracting or partnership opportunities might exist, PennDOT could set a minimum percentage of work to be subcontracted based on the type of work involved, the size of the project, and other factors. Prime contractors would then have to meet or exceed this threshold in order for their bids to be considered responsive.

If PennDOT were to implement such a program, it should include flexibility provisions such as a good faith efforts process.

DBE contract goals. As part of the Federal DBE Program, PennDOT uses DBE contract goals on many individual contracts that it awards to encourage the participation of minority- and woman-owned businesses. Prime contractors bidding on those contracts must either meet the goals by making subcontracting commitments to disadvantaged businesses or by requesting good faith effort waivers. PennDOT reviews waiver requests and will grant waivers if prime contractors demonstrate good faith efforts towards compliance with the goals. If prime contractors do not meet the goals through subcontracting commitments and do not submit acceptable good faith effort waivers, then PennDOT may reject their bids.

Based on disparity analysis results, PennDOT should consider continuing its use of DBE contract goals in the future and potentially extending the use of contract goals to its state-funded

contracts as well. Results indicated that not only are the use of those goals effective in encouraging the participation of minority- and woman-owned businesses, but when such goals are not applicable—for example, on prime contracts that PennDOT awarded during the study period—all relevant racial groups show substantial disparities. (Non-Hispanic white woman-owned businesses exhibited a disparity that was close to the threshold of being considered substantial.) PennDOT should consider disparity analysis results for various contract sets to ensure its future use of contract goals is appropriate and narrowly tailored.

DBE certification. Many businesses participating in in-depth interviews and public meetings commented on the difficulties and time requirements associated with PennDOT’s certification process. In fact, representatives of some minority- and woman-owned businesses reported that they were not certified, because they perceived the process as too difficult and time consuming. Appendix D provides various insights from business owners that have considered DBE certification or that have gone through the certification process. PennDOT might consider researching ways to make the certification process easier for potential DBEs. Improving PennDOT’s certification process will likely require new policies, additional staff, and resources. PennDOT might consider partnering with a consulting firm that specializes in certification processes if it is interested in making substantial improvements.

Unbundling large contracts. In general, minority- and woman-owned exhibited reduced availability for relatively large contracts that PennDOT awarded during the study period. In addition, as part of in-depth interviews, several minority- and woman-owned businesses reported that the size of contracts often serves as a barrier to their success (for details, see Appendix D). PennDOT should consider making efforts to unbundle prime contracts and even subcontracts. For example, the City of Charlotte, North Carolina encourages prime contractors to unbundle subcontracting opportunities into smaller contract pieces that are more feasible for small, minority-, and woman-owned businesses to work on and accepts such attempts as good faith efforts. Such measures would result in PennDOT work being more accessible to small businesses, which in turn might increase opportunities for minority- and woman-owned businesses and result in greater participation in PennDOT contracting.

Bidding procedures. As part of in-depth interviews and public meetings that the study team conducted, several business owners indicated that PennDOT bidding procedures could be confusing, cumbersome, or not well documented. PennDOT should consider ways in which it can streamline bidding procedures to reduce burdens for small businesses, including many minority- and woman-owned businesses, that are potentially interested in pursuing PennDOT work. In addition, many business owners commented that prime contractors regularly engage in bid shopping and eliminate or substitute subcontractors from their project teams after contract award. To help prevent such practices, PennDOT should consider requiring prime contractors to list all major subcontractors and suppliers as part of their bids on its contracts and instituting policies that require prime contractors to obtain PennDOT approval to change any subcontractors or scopes of work after contract award.

Prime contract opportunities. Disparity analysis results indicated substantial disparities for all relevant racial groups on the prime contracts that PennDOT awarded during the study period. (Non-Hispanic white woman-owned businesses exhibited a disparity that was close to the threshold of being considered substantial.) Those disparities existed on both large prime

contracts and small prime contracts. PennDOT is in the process of implementing a potential remedy to address these disparities: a small business set-aside program. PennDOT has introduced a pilot program for Small Business Enterprises (SBE) to compete as prime contractors for federally-assisted preliminary engineering and final design agreements. For the pilot program, PennDOT Districts will identify projects for the preliminary engineering and final design of non-complex box culvert or single span bridge replacements. Six projects will be chosen from across the state and deemed as small business set-aside projects. The pilot program will begin in federal fiscal year 2018 (October 1) and will run to project completion. Based on the measurable outcomes, PennDOT may expand the set-aside programs to include other contracting opportunities. PennDOT should also consider establishing a medium-sized business set-aside program that would involve setting aside certain prime contracts exclusively for medium-sized business bidding. Doing so would increase prime contracting opportunities and encourage business success for small businesses, including many minority- and woman-owned businesses, that have grown in size and capacity. If PennDOT establishes such a program, it would have to ensure that the program meets all applicable legal standards, including establishing a *rational basis* for the program.

Prequalification. Prequalification can serve as a substantial barrier to small businesses, including many minority- and woman-owned businesses, that are trying to compete for government contracts. PennDOT should consider reviewing its prequalification processes and the industries to which those processes apply to ensure that they are appropriate and that the agency's prequalification processes are not serving as an undue burden to minority- and woman-owned businesses. In addition, PennDOT should consider reinforcing its construction prequalification unit to address its current backlog. Some businesses noted that it can take several months for businesses to become prequalified and receive approved work class codes. PennDOT should consider auditing the unit routinely to improve efficiency.

Growth monitoring. Along with working to improve its contracting and vendor data systems, PennDOT might also consider collecting data on the impact that the DBE and DB Programs have on minority- and woman-owned business growth over time. Doing so would require PennDOT to collect baseline information on minority- and woman-owned businesses—such as revenue, number of locations, number of employees, and employee demographics—and then continue to collect that information from each firm on an annual basis. Such metrics would allow PennDOT to assess whether the programs are helping diverse businesses grow and help refine measures that PennDOT uses as part of the DBE and DB Programs.

Networking and outreach. PennDOT hosts and participates in many networking and outreach events that include information about marketing, the DBE certification process, doing business with PennDOT, and available bid opportunities. PennDOT should consider continuing those efforts but might also consider broadening its efforts to include more partnerships with local trade organizations and other public agencies. PennDOT might also consider creating a consortium of local organizations and public agencies that would jointly host quarterly outreach and networking events and training sessions for businesses seeking public sector contracts. In addition, PennDOT should consider ways that it can better leverage technology to network more effectively with businesses throughout Pennsylvania, such as making use of online procurement fairs, webinars, conference calls, and other tools to provide outreach and technical assistance.

Future disparity studies. The 2018 PennDOT disparity study focused on FHWA-funded horizontal construction and construction-related engineering and professional services contracts. PennDOT should consider conducting future disparity studies that examine transportation contracts funded by the Federal Aviation Administration (FAA) and the Federal Transit Administration (FTA).

APPENDIX A.

Definitions of Terms

APPENDIX A.

Definitions of Terms

Appendix A defines terms that are useful to understanding the 2018 Pennsylvania Department of Transportation Disparity Study report. The following definitions are only relevant in the context of this report.

49 Code of Federal Regulations (CFR) Part 26

49 CFR Part 26 are the federal regulations that set forth the Federal Disadvantaged Business Enterprise Program. The objectives of 49 CFR Part 26 are to:

- a) Ensure nondiscrimination in the award and administration of United States Department of Transportation-assisted contracts;
- b) Create a level playing field on which Disadvantaged Business Enterprises can compete fairly for United States Department of Transportation-assisted contracts;
- c) Ensure that the Federal Disadvantaged Business Enterprise Program is narrowly tailored in accordance with applicable law;
- d) Ensure that only businesses that fully meet eligibility standards are permitted to participate as Disadvantaged Business Enterprises;
- e) Help remove barriers to the participation of Disadvantaged Business Enterprises in United States Department of Transportation-assisted contracts;
- f) Promote the use of Disadvantaged Business Enterprises in all types of federally-assisted contracts and procurements;
- g) Assist in the development of businesses so that they can compete outside of the Federal Disadvantaged Business Enterprise Program; and
- h) Provide appropriate flexibility to agencies implementing the Federal Disadvantaged Business Enterprise Program.

Anecdotal Information

Anecdotal information includes personal qualitative accounts and perceptions of specific incidents—including any incidents of discrimination—told from individual interviewees' or participants' perspectives.

Availability Analysis

An availability analysis assesses the percentage of dollars that one might expect a specific group of businesses to receive on contracts that a particular agency awards. The availability analysis in this report is based on various characteristics of potentially available businesses in Pennsylvania and contract elements that the Pennsylvania Department of Transportation awarded during the study period.

Business

A business is a for-profit company, including all of its establishments or locations.

Business Listing

A business listing is a record in a database of business information. A record is considered a *listing* until the study team determines that the listing actually represents a business establishment with a working phone number.

Business Establishment

A business establishment is a place of business with an address and a working phone number. A single business, or firm, can have many business establishments, or locations.

Compelling Governmental Interest

As part of the strict scrutiny legal standard, an agency must demonstrate a compelling governmental interest in remedying past identified discrimination in order to implement race- or gender-conscious measures. An agency that uses race- or gender-conscious measures as part of a minority- or woman-owned business program—such as the Federal Disadvantaged Business Enterprise Program—has the initial burden of showing evidence of discrimination—including statistical and anecdotal evidence—that supports the use of such measures. The agency must assess discrimination within its own relevant geographic market area.

Consultant

A consultant is a business performing a professional services contract.

Contract

A contract is a legally binding relationship between the seller of goods or services and a buyer. The study team often treats the term “contract” synonymously with “procurement.”

Contract Element

A contract element is either a prime contract or a subcontract.

Contractor

A contractor is a business performing a construction contract.

Control

Control means exercising management and executive authority of a business.

Custom Census Availability Analysis

A custom census availability analysis is one in which researchers attempt extensive surveys with potentially available businesses working in the local marketplace to collect information about key business characteristics. Researchers then take survey information about potentially available businesses and match them to the characteristics of prime contracts and subcontracts that an organization actually awarded during the study period to assess the percentage of

dollars that one might expect a specific group of businesses to receive on contracts or procurements that the organization awards. A custom census availability approach is accepted in the industry as the preferred method for conducting availability analyses, because it takes several different factors into account, including businesses' primary lines of work and their capacity to perform on an organization's contracts.

Disadvantaged Business Enterprise (DBE)

A DBE is a business that is owned and controlled by one or more individuals who are socially and economically disadvantaged according to the guidelines in 49 CFR Part 26 which pertains to the Federal DBE Program. DBEs must be certified as such through the Pennsylvania Unified Certification Program. The following groups are presumed to be socially and economically disadvantaged according to the Federal DBE Program:

- a) Asian Pacific Americans;
- b) Black Americans;
- c) Hispanic Americans;
- d) Native Americans;
- e) Subcontinent Asian Americans; and
- f) Women of any race or ethnicity.

A determination of economic disadvantage also includes assessing business' gross revenues (maximum revenue limits ranging from \$7million to \$24.1 million depending on subindustry) and business owners' personal net worth (maximum of \$1.32 million excluding equity in a home and in the business). Some minority- and woman-owned businesses do not qualify as DBEs because of gross revenue or net worth requirements. Businesses owned by non-Hispanic white men can also be certified as DBEs if those businesses meet the economic requirements in 49 CFR Part 26.

Disparity

A disparity is a difference or gap between an actual outcome and some benchmark. In this report, the term "disparity" refers to a difference between the participation, or utilization, of a specific group of businesses in Pennsylvania Department of Transportation contracting and the availability of those businesses for that work.

Disparity Analysis

A disparity analysis examines whether there are any differences between the participation, or utilization, of a specific group of businesses in Pennsylvania Department of Transportation contracting and the availability of those businesses for that work.

Disparity Index

A disparity index is computed by dividing the actual participation, or utilization, of a specific group of businesses in Pennsylvania Department of Transportation contracting by the availability of those businesses for that work and multiplying the result by 100. Smaller disparity indices indicate larger disparities.

Diverse Business (DB) Program

The Pennsylvania Department of Transportation established the DB Program in 2014 to provide opportunities for minority-owned businesses, woman-owned businesses, and veteran-owned businesses to participate in state-funded transportation contracts. The department uses various race- and gender-neutral measures to meet the objectives of the program, including encouraging the use of small disadvantaged businesses in contracting language, requiring prime contractors to report the small disadvantaged businesses that they are using as part of contracts, and reporting the percentage of dollars that small disadvantaged businesses receive on agency contracting. In addition, as required by the program, the Pennsylvania Department of Transportation has established the Diverse Business Supportive Services Program, which provides training, assistance, and services to DB-certified businesses.

Dun & Bradstreet (D&B)

D&B is the leading global provider of lists of business establishments and other business information for specific industries within specific geographical areas (for details, see www.dnb.com).

Enterprise

An enterprise is an economic unit that could be a for-profit business or business establishment; a nonprofit organization; or a public sector organization.

Federal DBE Program

The Federal DBE Program was established by the United States Department of Transportation after enactment of the Transportation Equity Act for the 21st Century (TEA-21) as amended in 1998. Regulations for the Federal DBE Program are set forth in 49 CFR Part 26. It is designed to increase the participation of minority- and woman-owned businesses in United States Department of Transportation-funded contracts.

Federally-funded Contract

A federally-funded contract is any contract or project funded in whole or in part with United States Department of Transportation financial assistance, including loans. In this study, the study team uses the term “federally-funded contract” synonymously with “United States Department of Transportation-funded contract” or “Federal Highway Administration-funded contract.”

Federal Highway Administration (FHWA)

The FHWA is an agency of the United States Department of Transportation that works with state and local governments to construct, preserve, and improve the National Highway System; other roads eligible for federal aid; and certain roads on federal and tribal lands.

Firm

See “business.”

Industry

An industry is a broad classification for businesses providing related goods or services (e.g., *construction* or *professional services*).

Majority-owned Business

A majority-owned business is a for-profit business that is at least 51 percent owned and controlled by non-Hispanic white men who are not veterans.

Minority

A minority is an individual who identifies with one of the racial/ethnic groups specified in the Federal DBE Program: Asian Pacific Americans, Black Americans, Hispanic Americans, Native Americans, or Subcontinent Asian Americans.

Minority-owned Business

A minority-owned business is a business with at least 51 percent ownership and control by individuals who identify themselves with one of the racial/ethnic groups that the Federal DBE Program presumes to be disadvantaged: Asian Pacific Americans, Black Americans, Hispanic Americans, Native Americans, or Subcontinent Asian Americans. A business does not have to be certified as a DBE or DB to be considered a minority-owned business. (The study team considers businesses owned by minority women as minority-owned businesses.)

Narrow Tailoring

As part of the strict scrutiny legal standard, an agency must demonstrate that its use of race- and gender-conscious measures is narrowly tailored. There are a number of factors that a court considers when determining whether the use of such measures is narrowly tailored, including:

- a) The necessity of such measures and the efficacy of alternative, race- and gender-neutral measures;
- b) The degree to which the use of such measures is limited to those groups that actually suffer discrimination in the local marketplace;
- c) The degree to which the use of such measures is flexible and limited in duration, including the availability of waivers and sunset provisions;
- d) The relationship of any numerical goals to the relevant business marketplace; and
- e) The impact of such measures on the rights of third parties.

Participation

See *utilization*.

Pennsylvania Department of Transportation

The Pennsylvania Department of Transportation (PennDOT) oversees programs and policies that affect highways, public transportation, airports, railroads, ports, and waterways throughout Pennsylvania.

Pennsylvania Unified Certification Program

The Pennsylvania Unified Certification Program (PAUCP) is responsible for certifying interested businesses as Disadvantaged Business Enterprises (DBEs), in accordance with 49 CFR Part 26. The PAUCP makes all certification decisions on behalf of all agencies and organizations in Pennsylvania with respect to DBE certification. PAUCP is made up of Allegheny County, PennDOT, the Philadelphia International Airport, the Port Authority of Allegheny County, and the Southeastern Pennsylvania Transportation Authority.

Potential DBE

A potential DBE is a minority- or woman-owned business that is DBE-certified or appears that it could be DBE-certified (regardless of actual DBE certification) based on revenue requirements specified as part of the Federal DBE Program.

Prime Consultant

A prime consultant is a professional services business that performed a professional services prime contract for an end user such as PennDOT.

Prime Contract

A prime contract is a contract between a prime contractor, or prime consultant, and an end user such as PennDOT.

Prime Contractor

A prime contractor is a construction business that performed a prime contract for an end user such as PennDOT.

Project

A project refers to a construction or professional services endeavor that PennDOT bid out during the study period. A project could include one or more prime contracts and corresponding subcontracts.

Race- and Gender-conscious Measures

Race- and gender-conscious measures are contracting measures that are specifically designed to increase the participation of minority- and woman-owned businesses in government contracting. Businesses owned by members of certain racial/ethnic groups might be eligible for such measures but not other businesses. Similarly, businesses owned by women might be eligible but not businesses owned by men.

Race- and Gender-neutral Measures

Race- and gender-neutral measures are measures that are designed to remove potential barriers for all businesses attempting to do work with an organization or measures that are designed to increase the participation of small or emerging businesses in the organization's contracts, regardless of the race/ethnicity or gender of the owners. Race- and gender-neutral measures may include assistance in overcoming bonding and financing obstacles; simplifying bidding

procedures; providing technical assistance; establishing programs to assist start-ups; and other methods open to all businesses, regardless of the race/ethnicity or gender of the owners.

Rational Basis

Government organizations that implement contracting programs that rely only on race- and gender-neutral measures to encourage the participation of small businesses, regardless of the race/ethnicity or gender of business owners, must show a rational basis for their programs. Showing a rational basis requires organizations to demonstrate that their contracting programs are rationally related to a legitimate government interest. It is the lowest threshold for evaluating the legality of government contracting programs. When courts review programs based on a rational basis, only the most egregious violations lead to programs being deemed unconstitutional.

Relevant Geographic Market Area

The relevant geographic market area is the geographic area in which the businesses to which PennDOT awards most of its contracting dollars are located. The relevant geographic market area is also referred to as the *local marketplace*. Case law related to business programs as well as disparity studies requires disparity study analyses to focus on the relevant geographic market area. The relevant geographic market area for PennDOT is the entire state of Pennsylvania.

State-funded Contract

A state-funded contract is any contract or project that is wholly funded with non-federal funds—that is, they do not include United States Department of Transportation or any other federal funds.

Statistically Significant Difference

A statistically significant difference refers to a quantitative difference for which there is a 0.95 or 0.90 probability that chance can be correctly rejected as an explanation for the difference (meaning that there is a 0.05 or 0.10 probability, respectively, that chance in the sampling process could correctly account for the difference).

Strict Scrutiny

Strict scrutiny is the legal standard that a government organization's use of race- and gender-conscious measures must meet in order for it to be considered constitutional. Strict scrutiny represents the highest threshold for evaluating the legality of race- and gender-conscious measures short of prohibiting them altogether. Under the strict scrutiny standard, an organization must:

- a) Have a compelling governmental interest in remedying past identified discrimination or its present effects; and
- b) Establish that the use of any such measures is narrowly tailored to achieve the goal of remedying the identified discrimination.

An organization's use of race- and gender-conscious measures must meet both the compelling governmental interest and the narrow tailoring components of the strict scrutiny standard for it to be considered constitutional.

Study Period

The study period is the time period on which the study team focused for the utilization, availability, and disparity analyses. PennDOT had to have awarded a contract during the study period for the contract to be included in the study team's analyses. The study period for the PennDOT Disparity Study was July 1, 2011 through June 30, 2016.

Subconsultant

A subconsultant is a professional services business that performed services for a prime consultant as part of a larger professional services contract.

Subcontract

A subcontract is a contract between a prime contractor or prime consultant and another business selling goods or services to the prime contractor or prime consultant as part of a larger contract.

Subcontractor

A subcontractor is a business that performed services for a prime contractor as part of a larger contract.

Subindustry

A subindustry is a specific classification for businesses providing related goods or services within a particular industry (e.g., *water, sewer, and utility lines* is a subindustry of *construction*).

United States Departments of Transportation (USDOT)

USDOT is a federal cabinet department of the United States government that oversees federal highway, air, railroad, maritime, and other transportation administration functions. FHWA is a USDOT agency.

Utilization

Utilization refers to the percentage of total contracting dollars that were associated with a particular set of contracts that went to a specific group of businesses.

Vendor

A vendor is a business that sells goods either to a prime contractor or prime consultant or to an end user such as PennDOT.

Veteran-owned Business

A veteran-owned business is a business with at least 51 percent ownership and control by veterans of the United States military. A business does not have to be certified as a DB to be considered a veteran-owned business.

Woman-owned Business

A woman-owned business is a business with at least 51 percent ownership and control by non-Hispanic white women. A business does not have to be certified as a DBE or DB to be considered a woman-owned business. (The study team considered businesses owned by minority women as minority-owned businesses.)

APPENDIX B.

Legal Framework and Analysis

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APPENDIX B.

Legal Framework and Analysis

EXECUTIVE SUMMARY

A. Introduction

In this appendix, Holland & Knight LLP analyzes recent cases involving local and state government minority and women-owned and disadvantaged-owned business enterprise (“MBE/WBE/DBE”) programs. The appendix also reviews recent cases, which are instructive to the study and MBE/WBE/DBE programs, regarding the Federal Disadvantaged Business Enterprise (“Federal DBE”) Program¹ and the implementation of the Federal DBE Program by local and state governments. The Federal DBE Program was continued and reauthorized by the Fixing America’s Surface Transportation Act (FAST Act)². The appendix provides a summary of the legal framework for the disparity study as applicable to the Commonwealth of Pennsylvania Department of General Services and the Pennsylvania Department of Transportation.

Appendix B begins with a review of the landmark United States Supreme Court decision in *City of Richmond v. J.A. Croson*.³ *Croson* sets forth the strict scrutiny constitutional analysis applicable in the legal framework for conducting a disparity study. This section also notes the United States Supreme Court decision in *Adarand Constructors, Inc. v. Peña*,⁴ (“*Adarand I*”), which applied the strict scrutiny analysis set forth in *Croson* to federal programs that provide federal assistance to a recipient of federal funds. The Supreme Court’s decisions in *Adarand I* and *Croson*, and subsequent cases and authorities provide the basis for the legal analysis in connection with the study.

The legal framework analyzes and reviews significant recent court decisions that have followed, interpreted, and applied *Croson* and *Adarand I* to the present and that are applicable to this disparity study, MBE/WBE/DBE Programs, the Federal DBE Program, state and local government implementation of the Federal DBE Program, and the strict scrutiny analysis. This analysis reviews the Third Circuit Court of Appeals decisions in *Contractors Association of Eastern Pennsylvania, Inc., et al. v. City of Philadelphia, et al.*, (CAEP II),⁵ and *Contractors Association of Eastern Pennsylvania, Inc., et al. v. City of Philadelphia, (CAEP I)*,⁶ regarding

¹ 49 CFR Part 26 (Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs (“Federal DBE Program”). See the Transportation Equity Act for the 21st Century (TEA-21) as amended and reauthorized (“MAP-21,” “SAFETEA” and “SAFETEA-LU”), and the United States Department of Transportation (“USDOT” or “DOT”) regulations promulgated to implement TEA-21 the Federal regulations known as Moving Ahead for Progress in the 21st Century Act (“MAP-21”), Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.; preceded by Pub L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1156; preceded by Pub L. 105-178, Title I, § 1101(b), June 9, 1998, 112 Stat. 107.

² Pub. L. 114-94, H.R. 22, § 1101(b), December 4, 2015, 129 Stat. 1312.

³ *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989).

⁴ *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995).

⁵ 91 F.3d 586 (3d Cir. 1996).

⁶ 6 F.3d 990 (3d Cir. 1993).

MBE/WBE/DBE programs. The analysis also reviews recent court decisions that involved challenges to MBE/WBE/DBE programs in other jurisdictions in Section E below, which are informative to the study.

In addition, the analysis reviews in Section F below recent federal cases that have considered the validity of the Federal DBE Program and its implementation by state or local government agencies or recipients of federal funds, and the validity of local and state DBE programs, including: *Midwest Fence Corp. v. U.S. DOT, FHWA, Illinois DOT, Illinois State Toll Highway Authority, et al.*,⁷ *Mountain West Holding Co. v. Montana, Montana DOT, et al.*,⁸ *Dunnet Bay Construction Co. v. Illinois DOT*,⁹ *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation (“Caltrans”), et al.*,¹⁰ *Western States Paving Co. v. Washington State DOT*,¹¹ *M.K. Weeden Construction v. Montana, Montana DOT, et al.*,¹² *Northern Contracting, Inc. v. Illinois DOT*,¹³ *Sherbrooke Turf, Inc. v. Minn DOT and Gross Seed v. Nebraska Department of Roads*,¹⁴ *Adarand Construction, Inc. v. Slater*¹⁵ (“Adarand VII”), *Geyer Signal, Inc. v. Minnesota DOT*,¹⁶ *Geod Corporation v. New Jersey Transit Corporation*,¹⁷ and *South Florida Chapter of the A.G.C. v. Broward County, Florida*.¹⁸

The analyses of these and other recent cases summarized below are instructive to the disparity study because they are the most recent and significant decisions by courts setting forth the legal framework applied to MBE/WBE/DBE Programs, the Federal DBE Program and its implementation by state or local governments, and disparity studies, and construing the validity of government programs involving MBE/WBE/DBEs.

⁷ *Midwest Fence Corp. v. U.S. DOT, FHWA, Illinois DOT, Illinois State Toll Highway Authority, et al.*, 840 F.3d 932, 2016 WL 6543514 (7th Cir. 2016). *Midwest Fence* filed a Petition for a Writ of Certiorari with the U.S. Supreme Court, see 2017 WL 511931 (Feb. 2, 2017), which was *denied*, 2017 WL 497345 (June 26, 2017).

⁸ *Mountain West Holding Co., Inc. v. Montana*, 2017 WL 2179120 (9th Cir. May 16, 2017), Memorandum, U.S. Court of Appeals for the Ninth Circuit, May 16, 2017, Docket Nos. 14-26097 and 15-35003, dismissing in part, reversing in part and remanding the U.S. District Court decision at 2014 WL 6686734 (D. Mont. 2014). This case settled on remand and was voluntarily dismissed by stipulation of the parties and an order issued by the district court on March 14, 2018.

⁹ *Dunnet Bay Construction Co. v. Borggren, Illinois DOT, et al.*, 799 F.3d 676, 2015 WL 4934560 (7th Cir., 2015), *cert. denied*, 137 S. Ct. 31, 2016 WL 193809, (October 3, 2016), Docket No. 15-906; *Dunnet Bay Construction Co. v. Illinois DOT, et al.* 2014 WL 552213 (C. D. Ill. 2014), *affirmed by Dunnet Bay*, 2015 WL 4934560 (7th Cir., 2015).

¹⁰ *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F.3d 1187, (9th Cir. 2013); U.S.D.,C., E.D. Cal, Civil Action No. S-09-1622, Slip Opinion Transcript (E.D. Cal. April 20, 2011), *appeal dismissed based on standing, on other grounds Ninth Circuit held Caltrans’ DBE Program constitutional, Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, F.3d 1187, (9th Cir. 2013).

¹¹ *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006).

¹² *M. K. Weeden Construction v. State of Montana, Montana DOT*, 2013 WL 4774517 (D. Mont. 2013).

¹³ *Northern Contracting, Inc. v. Illinois DOT*, 473 F.3d 715 (7th Cir. 2007).

¹⁴ *Sherbrooke Turf, Inc. v. Minn. DOT and Gross Seed v. Nebraska Department of Roads*, 345 F.3d 964 (8th Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004).

¹⁵ 228 F.3d 1147 (10th Cir. 2000) (“Adarand VII”).

¹⁶ *Geyer Signal, Inc. v. Minnesota DOT*, 2014 W.L. 1309092 (D. Minn. 2014).

¹⁷ 766 F. Supp.2d. 642 (D. N.J. 2010).

¹⁸ 544 F. Supp.2d 1336 (S.D. Fla. 2008).

B. U.S. Supreme Court Cases

1. City of Richmond v. J.A. Croson Co., 488 U.S. 469 (1989)

In *Croson*, the U.S. Supreme Court struck down the City of Richmond’s “set-aside” program as unconstitutional because it did not satisfy the strict scrutiny analysis applied to “race-based” governmental programs.¹⁹ J.A. Croson Co. (“Croson”) challenged the City of Richmond’s minority contracting preference plan, which required prime contractors to subcontract at least 30 percent of the dollar amount of contracts to one or more Minority Business Enterprises (“MBE”). In enacting the plan, the City cited past discrimination and an intent to increase minority business participation in construction projects as motivating factors.

The Supreme Court held the City of Richmond’s “set-aside” action plan violated the Equal Protection Clause of the Fourteenth Amendment. The Court applied the “strict scrutiny” standard, generally applicable to any race-based classification, which requires a governmental entity to have a “compelling governmental interest” in remedying past identified discrimination and that any program adopted by a local or state government must be “narrowly tailored” to achieve the goal of remedying the identified discrimination.

The Court determined that the plan neither served a “compelling governmental interest” nor offered a “narrowly tailored” remedy to past discrimination. The Court found no “compelling governmental interest” because the City had not provided “a strong basis in evidence for its conclusion that [race-based] remedial action was necessary.”²⁰ The Court held the City presented no direct evidence of any race discrimination on its part in awarding construction contracts or any evidence that the City’s prime contractors had discriminated against minority-owned subcontractors.²¹ The Court also found there were only generalized allegations of societal and industry discrimination coupled with positive legislative motives. The Court concluded that this was insufficient evidence to demonstrate a compelling interest in awarding public contracts on the basis of race.

Similarly, the Court held the City failed to demonstrate that the plan was “narrowly tailored” for several reasons, including because there did not appear to have been any consideration of race-neutral means to increase minority business participation in city contracting, and because of the over inclusiveness of certain minorities in the “preference” program (for example, Aleuts) without any evidence they suffered discrimination in Richmond.²²

The Court stated that reliance on the disparity between the number of prime contracts awarded to minority firms and the minority population of the City of Richmond was misplaced. There is no doubt, the Court held, that “[w]here gross statistical disparities can be shown, they alone in a proper case may constitute prima facie proof of a pattern or practice of discrimination” under

¹⁹ 488 U.S. 469 (1989).

²⁰ 488 U.S. at 500, 510.

²¹ 488 U.S. at 480, 505.

²² 488 U.S. at 507-510.

Title VII,²³. But it is equally clear that “[w]hen special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value.”²⁴

The Court concluded that where special qualifications are necessary, the relevant statistical pool for purposes of demonstrating discriminatory exclusion must be the number of minorities qualified to undertake the particular task. The Court noted that “the city does not even know how many MBE’s in the relevant market are qualified to undertake prime or subcontracting work in public construction projects.”²⁵ “Nor does the city know what percentage of total city construction dollars minority firms now receive as subcontractors on prime contracts let by the city.”²⁶

The Supreme Court stated that it did not intend its decision to preclude a state or local government from “taking action to rectify the effects of identified discrimination within its jurisdiction.”²⁷ The Court held that “[w]here there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.”²⁸

The Court said: “If the City of Richmond had evidence before it that nonminority contractors were systematically excluding minority businesses from subcontracting opportunities it could take action to end the discriminatory exclusion.”²⁹ “Under such circumstances, the city could act to dismantle the closed business system by taking appropriate measures against those who discriminate on the basis of race or other illegitimate criteria.” “In the extreme case, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion.”³⁰

The Court further found “if the City could show that it had essentially become a ‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry, we think it clear that the City could take affirmative steps to dismantle such a system. It is beyond dispute that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of private prejudice.”³¹

²³ 488 U.S. at 501, quoting *Hazelwood School Dist. v. United States*, 433 U.S. 299, 307–308, 97 S.Ct. 2736, 2741.

²⁴ 488 U.S. at 501 quoting *Hazelwood*, 433 U.S. at 308, n. 13, 97 S.Ct., at 2742, n. 13.

²⁵ 488 U.S. at 502.

²⁶ *Id.*

²⁷ 488 U.S. at 509.

²⁸ *Id.*

²⁹ 488 U.S. at 509.

³⁰ *Id.*

³¹ 488 U.S. at 492.

2. Adarand Constructors, Inc. v. Peña (“Adarand I”), 515 U.S. 200 (1995)

In *Adarand I*, the U.S. Supreme Court extended the holding in *Croson* and ruled that all federal government programs that use racial or ethnic criteria as factors in procurement decisions must pass a test of strict scrutiny in order to survive constitutional muster.

The cases interpreting *Adarand I* are the most recent and significant decisions by federal courts setting forth the legal framework for disparity studies as well as the predicate to satisfy the constitutional strict scrutiny standard of review, which applies to the implementation of the Federal DBE Program by recipients of federal funds.

C. The Legal Framework Applied to State and Local Government MBE/WBE/DBE Programs

The following provides an analysis for the legal framework focusing on recent key cases regarding state and local MBE/WBE/DBE programs, and their implications for a disparity study. The recent decisions involving these programs, the Federal DBE Program, and its implementation by state and local programs, are instructive because they concern the strict scrutiny analysis, the legal framework in this area, challenges to the validity of MBE/WBE/DBE programs and the Federal DBE Program, state and local DBE programs implementing the Federal DBE program, and an analysis of disparity studies.

1. Strict scrutiny analysis

A race- and ethnicity-based program implemented by a state or local government is subject to the strict scrutiny constitutional analysis.³² The strict scrutiny analysis is comprised of two prongs:

- The program must serve an established compelling governmental interest; and
- The program must be narrowly tailored to achieve that compelling government interest.³³

a. The Compelling Governmental Interest Requirement.

The first prong of the strict scrutiny analysis requires a governmental entity to have a “compelling governmental interest” in remedying past identified discrimination in order to implement a race- and ethnicity-based program.³⁴ State and local governments cannot rely on national statistics of discrimination in an industry to draw conclusions about the prevailing market conditions in their own regions.³⁵ Rather, state and local governments must measure

³² *Croson*, 448 U.S. at 492-493; *Adarand Constructors, Inc. v. Peña (Adarand I)*, 515 U.S. 200, 227 (1995); see, e.g., *Fisher v. University of Texas*, 133 S.Ct. 2411 (2013); *Midwest Fence v. Illinois DOT*, 840 F.3d 932, 935, 948-954 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d 1187, 1195-1200 (9th Cir. 2013); *H.B. Rowe Co., Inc. v. NCDOT*, 615 F.3d 233, 241-242 (4th Cir. 2010); *Northern Contracting*, 473 F.3d at 721; *Western States Paving*, 407 F.3d at 991; *Sherbrooke Turf*, 345 F.3d at 969; *Adarand VII*, 228 F.3d at 1176; *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206 (5th Cir. 1999); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP II”)*, 91 F.3d 586 (3^d Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”)*, 6 F.3d 990 (3^d Cir. 1993).

³³ *Adarand I*, 515 U.S. 200, 227 (1995); *Midwest Fence v. Illinois DOT*, 840 F.3d 932, 935, 948-954 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d 1187, 1195-1200 (9th Cir. 2013); *H. B. Rowe Co., Inc. v. NCDOT*, 615 F.3d 233, 241-242 (4th Cir. 2010); *Northern Contracting*, 473 F.3d at 721; *Western States Paving*, 407 F.3d at 991 (9th Cir. 2005); *Sherbrooke Turf*, 345 F.3d at 969; *Adarand VII*, 228 F.3d at 1176; *Associated Gen. Contractors of Ohio, Inc. v. Drabik (“Drabik II”)*, 214 F.3d 730 (6th Cir. 2000); *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206 (5th Cir. 1999); *Eng’g Contractors Ass’n of South Florida, Inc. v. Metro. Dade County*, 122 F.3d 895 (11th Cir. 1997); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP II”)*, 91 F.3d 586 (3^d Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”)*, 6 F.3d 990 (3^d Cir. 1993).

³⁴ *Id.*

³⁵ *Id.*; see, e.g., *Concrete Works, Inc. v. City and County of Denver (“Concrete Works I”)*, 36 F.3d 1513, 1520 (10th Cir. 1994).

discrimination in their state or local market. However, that is not necessarily confined by the jurisdiction's boundaries.³⁶

It is instructive to review the type of evidence utilized by Congress and considered by the courts to support the Federal DBE Program, and its implementation by local and state governments and agencies, which is similar to evidence considered by cases ruling on the validity of MBE/WBE/DBE programs. The federal courts found Congress "spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry."³⁷ The evidence found to satisfy the compelling interest standard included numerous congressional investigations and hearings, and outside studies of statistical and anecdotal evidence (*e.g.*, disparity studies).³⁸ The evidentiary basis on which Congress relied to support its finding of discrimination includes:

- **Barriers to minority business formation.** Congress found that discrimination by prime contractors, unions, and lenders has woefully impeded the formation of qualified minority business enterprises in the subcontracting market nationwide, noting the existence of "good ol' boy" networks, from which minority firms have traditionally been excluded, and the race-based denial of access to capital, which affects the formation of minority subcontracting enterprise.³⁹
- **Barriers to competition for existing minority enterprises.** Congress found evidence showing systematic exclusion and discrimination by prime contractors, private sector customers, business networks, suppliers, and bonding companies precluding minority enterprises from opportunities to bid. When minority firms are permitted to bid on subcontracts, prime contractors often resist working with them. Congress found evidence of the same prime contractor using a minority business enterprise on a government contract not using that minority business enterprise on a private contract, despite being satisfied with that subcontractor's work. Congress found that informal, racially exclusionary business networks dominate the subcontracting construction industry.⁴⁰
- **Local disparity studies.** Congress found that local studies throughout the country tend to show a disparity between utilization and availability of minority-owned firms, raising an inference of discrimination.⁴¹
- **Results of removing affirmative action programs.** Congress found evidence that when race-conscious public contracting programs are struck down or discontinued, minority

³⁶ See, *e.g.*, *Concrete Works I*, 36 F.3d at 1520.

³⁷ *Sherbrooke Turf*, 345 F.3d at 970, (*citing Adarand VII*, 228 F.3d at 1167 – 76); *Western States Paving*, 407 F.3d at 992-93.

³⁸ See, *e.g.*, *Adarand VII*, 228 F.3d at 1167– 76; see also *Western States Paving*, 407 F.3d at 992 (Congress "explicitly relied upon" the Department of Justice study that "documented the discriminatory hurdles that minorities must overcome to secure federally funded contracts"); *Geyer Signal, Inc.*, 2014 WL 1309092.

³⁹ *Adarand VII*, 228 F.3d. at 1168-70; *Western States Paving*, 407 F.3d at 992; see *Geyer Signal, Inc.*, 2014 WL 1309092; *DynaLantic*, 885 F.Supp.2d 237.

⁴⁰ *Adarand VII*. at 1170-72; see *DynaLantic*, 885 F.Supp.2d 237.

⁴¹ *Id.* at 1172-74; see *DynaLantic*, 885 F.Supp.2d 237; *Geyer Signal, Inc.*, 2014 WL 1309092.

business participation in the relevant market drops sharply or even disappears, which courts have found strongly supports the government’s claim that there are significant barriers to minority competition, raising the specter of discrimination.⁴²

- **FAST Act and MAP-21.** In December 2015 and in July 2012, Congress passed the FAST Act and MAP-21, respectively (see below), which made “Findings” that “discrimination and related barriers continue to pose significant obstacles for minority- and women-owned businesses seeking to do business in federally-assisted surface transportation markets,” and that the continuing barriers “merit the continuation” of the Federal DBE Program.⁴³ Congress also found in both the FAST Act and MAP-21 that it received and reviewed testimony and documentation of race and gender discrimination which “provide a strong basis that there is a compelling need for the continuation of the” Federal DBE Program.⁴⁴

The Federal DBE Program

After the *Adarand* decision, the U.S. Department of Justice in 1996 conducted a study of evidence on the issue of discrimination in government construction procurement contracts, which Congress relied upon as documenting a compelling governmental interest to have a federal program to remedy the effects of current and past discrimination in the transportation contracting industry for federally-funded contracts.⁴⁵ Subsequently, in 1998, Congress passed the Transportation Equity Act for the 21st Century (“TEA-21”), which authorized the United States Department of Transportation to expend funds for federal highway programs for 1998 - 2003. Pub.L. 105-178, Title I, § 1101(b), 112 Stat. 107, 113 (1998). The USDOT promulgated new regulations in 1999 contained at 49 CFR Part 26 to establish the current Federal DBE Program. The TEA-21 was subsequently extended in 2003, 2005 and 2012. The reauthorization of TEA-21 in 2005 was for a five year period from 2005 to 2009. Pub.L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1153-57 (“SAFETEA”). In July 2012, Congress passed the Moving Ahead for Progress in the 21st Century Act (“MAP-21”).⁴⁶ In December 2015, Congress passed the Fixing America’s Surface Transportation Act (“FAST Act”).⁴⁷

The Federal DBE Program as amended changed certain requirements for federal aid recipients and accordingly changed how recipients of federal funds implemented the Federal DBE Program for federally-assisted contracts. The federal government determined that there is a compelling governmental interest for race- and gender-based programs at the national level, and that the program is narrowly tailored because of the federal regulations, including the flexibility in

⁴² *Adarand VII*, 228 F.3d at 1174-75; see *H. B. Rowe*, 615 F.3d 233, 247-258 (4th Cir. 2010); *Sherbrooke Turf*, 345 F.3d at 973-4.

⁴³ Pub L. 114-94, H.R. 22, §1101(b), December 4, 2015, 129 Stat 1312; Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

⁴⁴ *Id.* at § 1101(b)(1).

⁴⁵ *Appendix-The Compelling Interest for Affirmative Action in Federal Procurement*, 61 Fed. Reg. 26,050, 26,051-63 & nn. 1-136 (May 23, 1996) (hereinafter “The Compelling Interest”); see *Adarand VII*, 228 F.3d at 1167-1176, citing *The Compelling Interest*.

⁴⁶ Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

⁴⁷ Pub. L. 114-94, H.R. 22, § 1101(b), December 4, 2015, 129 Stat. 1312.

implementation provided to individual federal aid recipients by the regulations. State and local governments are not required to implement race- and gender-based measures where they are not necessary to achieve DBE goals and those goals may be achieved by race- and gender-neutral measures.⁴⁸

The Federal DBE Program established responsibility for implementing the DBE Program to state and local government recipients of federal funds. A recipient of federal financial assistance must set an annual DBE goal specific to conditions in the relevant marketplace. Even though an overall annual 10 percent aspirational goal applies at the federal level, it does not affect the goals established by individual state or local governmental recipients. The Federal DBE Program outlines certain steps a state or local government recipient can follow in establishing a goal, and USDOT considers and must approve the goal and the recipient's DBE program. The implementation of the Federal DBE Program is substantially in the hands of the state or local government recipient and is set forth in detail in the federal regulations, including 49 CFR Part 26 and section 26.45.

Provided in 49 CFR § 26.45 are instructions as to how recipients of federal funds should set the overall goals for their DBE programs. In summary, the recipient establishes a base figure for relative availability of DBEs.⁴⁹ This is accomplished by determining the relative number of ready, willing, and able DBEs in the recipient's market.⁵⁰ Second, the recipient must determine an appropriate adjustment, if any, to the base figure to arrive at the overall goal.⁵¹ There are many types of evidence considered when determining if an adjustment is appropriate, according to 49 CFR § 26.45(d). These include, among other types, the current capacity of DBEs to perform work on the recipient's contracts as measured by the volume of work DBEs have performed in recent years. If available, recipients consider evidence from related fields that affect the opportunities for DBEs to form, grow, and compete, such as statistical disparities between the ability of DBEs to obtain financing, bonding, and insurance, as well as data on employment, education, and training.⁵² This process, based on the federal regulations, aims to establish a goal that reflects a determination of the level of DBE participation one would expect absent the effects of discrimination.⁵³

Further, the Federal DBE Program requires state and local government recipients of federal funds to assess how much of the DBE goal can be met through race- and gender-neutral efforts and what percentage, if any, should be met through race- and gender-based efforts.⁵⁴

A state or local government recipient is responsible for seriously considering and determining race- and gender-neutral measures that can be implemented.⁵⁵ A recipient of federal funds must

⁴⁸ 49 CFR § 26.51.

⁴⁹ 49 CFR § 26.45(a), (b), (c).

⁵⁰ *Id.*

⁵¹ *Id.* at § 26.45(d).

⁵² *Id.*

⁵³ 49 CFR § 26.45(b)-(d).

⁵⁴ 49 CFR § 26.51.

establish a contract clause requiring prime contractors to promptly pay subcontractors in the Federal DBE Program (42 CFR § 26.29). The Federal DBE Program also established certain record-keeping requirements, including maintaining a bidders list containing data on contractors and subcontractors seeking federally-assisted contracts from the agency (42 CFR § 26.11). There are multiple administrative requirements that recipients must comply with in accordance with the regulations.⁵⁶

Federal aid recipients are to certify DBEs according to their race/gender, size, net worth and other factors related to defining an economically and socially disadvantaged business as outlined in 49 CFR §§ 26.61-26.73.

Fixing America's Surface Transportation Act" or the "FAST Act" (December 4, 2015)

On December 3, 2015, the Fixing America's Surface Transportation Act" or the "FAST Act" was passed by Congress, and it was signed by the President on December 4, 2015, as the new five year surface transportation authorization law. The FAST Act continues the Federal DBE Program and makes the following "Findings" in Section 1101 (b) of the Act:

SEC. 1101. AUTHORIZATION OF APPROPRIATIONS.

(b) Disadvantaged Business Enterprises-

(1) FINDINGS- Congress finds that—

(A) while significant progress has occurred due to the establishment of the disadvantaged business enterprise program, discrimination and related barriers continue to pose significant obstacles for minority- and women-owned businesses seeking to do business in federally assisted surface transportation markets across the United States;

(B) the continuing barriers described in subparagraph (A) merit the continuation of the disadvantaged business enterprise program;

(C) Congress has received and reviewed testimony and documentation of race and gender discrimination from numerous sources, including congressional hearings and roundtables, scientific reports, reports issued by public and private agencies, news stories, reports of discrimination by organizations and individuals, and discrimination lawsuits, which show that race- and gender-neutral efforts alone are insufficient to address the problem;

(D) the testimony and documentation described in subparagraph (C) demonstrate that discrimination across the United States poses a barrier to full and fair participation in surface transportation-related businesses of women business owners and minority business owners and has impacted firm development and many aspects of surface transportation-related business in the public and private markets; and

⁵⁵ 49 CFR § 26.51(b).

⁵⁶ 49 CFR §§ 26.21-26.37.

(E) the testimony and documentation described in subparagraph (C) provide a strong basis that there is a compelling need for the continuation of the disadvantaged business enterprise program to address race and gender discrimination in surface transportation-related business.

Therefore, Congress in the FAST Act passed on December 3, 2015, found based on testimony, evidence and documentation updated since MAP-21 was adopted in 2012 as follows: (1) discrimination and related barriers continue to pose significant obstacles for minority- and women-owned businesses seeking to do business in federally assisted surface transportation markets across the United States; (2) the continuing barriers described in § 1101(b), subparagraph (A) above merit the continuation of the disadvantaged business enterprise program; and (3) there is a compelling need for the continuation of the disadvantaged business enterprise program to address race and gender discrimination in surface transportation-related business.⁵⁷

MAP-21 (July 2012).

In the 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21), Congress provided “Findings” that “discrimination and related barriers” “merit the continuation of the” Federal DBE Program.⁵⁸ In MAP-21, Congress specifically found as follows:

“(A) while significant progress has occurred due to the establishment of the disadvantaged business enterprise program, discrimination and related barriers continue to pose significant obstacles for minority- and women-owned businesses seeking to do business in federally-assisted surface transportation markets across the United States;

(B) the continuing barriers described in subparagraph (A) merit the continuation of the disadvantaged business enterprise program;

(C) Congress has received and reviewed testimony and documentation of race and gender discrimination from numerous sources, including congressional hearings and roundtables, scientific reports, reports issued by public and private agencies, news stories, reports of discrimination by organizations and individuals, and discrimination lawsuits, which show that race- and gender-neutral efforts alone are insufficient to address the problem;

(D) the testimony and documentation described in subparagraph (C) demonstrate that discrimination across the United States poses a barrier to full and fair participation in surface transportation-related businesses of women business owners and minority business owners and has impacted firm development and many aspects of surface transportation-related business in the public and private markets; and

(E) the testimony and documentation described in subparagraph (C) provide a strong basis that there is a compelling need for the continuation of the

⁵⁷ Pub L. 114-94, H.R. 22, § 1101(b), December 4, 2015, 129 Stat 1312.

⁵⁸ Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

disadvantaged business enterprise program to address race and gender discrimination in surface transportation-related business.”⁵⁹

Thus, Congress in MAP-21 determined based on testimony and documentation of race and gender discrimination that there was “a compelling need for the continuation of the” Federal DBE Program.⁶⁰

USDOT Final Rule, 76 Fed. Reg. 5083 (January 28, 2011).

The United States Department of Transportation promulgated a Final Rule on January 28, 2011, effective February 28, 2011, 76 Fed. Reg. 5083 (January 28, 2011) (“2011 Final Rule”) amending the Federal DBE Program at 49 CFR Part 26.

The Department stated in the 2011 Final Rule with regard to disparity studies and in calculating goals, that it agrees “it is reasonable, in calculating goals and in doing disparity studies, to consider potential DBEs (*e.g.*, firms apparently owned and controlled by minorities or women that have not been certified under the DBE program) as well as certified DBEs. This is consistent with good practice in the field as well as with DOT guidance.”⁶¹

The United States DOT in the 2011 Final Rule stated that there was a continuing compelling need for the DBE program.⁶² The DOT concluded that, as court decisions have noted, the DOT’s DBE regulations and the statutes authorizing them, “are supported by a compelling need to address discrimination and its effects.”⁶³ The DOT said that the “basis for the program has been established by Congress and applies on a nationwide basis...”, noted that both the House and Senate Federal Aviation Administration (“FAA”) Reauthorization Bills contained findings reaffirming the compelling need for the program, and referenced additional information presented to the House of Representatives in a March 26, 2009 hearing before the Transportation and Infrastructure Committee, and a Department of Justice document entitled “The Compelling Interest for Race- and Gender-Conscious Federal Contracting Programs: A Decade Later An Update to the May 23, 1996 Review of Barriers for Minority- and Women-Owned Businesses.”⁶⁴ This information, the DOT stated, “confirms the continuing compelling need for race- and gender-conscious programs such as the DOT DBE program.”⁶⁵

Burden of Proof.

Under the strict scrutiny analysis, and to the extent a state or local governmental entity has implemented a race- and gender-conscious program, the governmental entity has the initial burden of showing a strong basis in evidence (including statistical and anecdotal evidence) to

⁵⁹ Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

⁶⁰ *Id.*

⁶¹ 76 F.R. at 5092.

⁶² 76 F.R. at 5095.

⁶³ 76 F.R. at 5095.

⁶⁴ *Id.*

⁶⁵ *Id.*

support its remedial action.⁶⁶ If the government makes its initial showing, the burden shifts to the challenger to rebut that showing.⁶⁷ The challenger bears the ultimate burden of showing that the governmental entity's evidence "did not support an inference of prior discrimination."⁶⁸

In applying the strict scrutiny analysis, the courts hold that the burden is on the government to show both a compelling interest and narrow tailoring.⁶⁹ It is well established that "remediating the effects of past or present racial discrimination" is a compelling interest.⁷⁰ In addition, the government must also demonstrate "a strong basis in evidence for its conclusion that remedial action [is] necessary."⁷¹

Since the decision by the Supreme Court in *Croson*, "numerous courts have recognized that disparity studies provide probative evidence of discrimination."⁷² "An inference of discrimination may be made with empirical evidence that demonstrates 'a significant statistical disparity between a number of qualified minority contractors ... and the number of such

⁶⁶ See *AGC, SDC v. Caltrans*, 713 F.3d at 1195; *H. B. Rowe Co., Inc. v. NCDOT*, 615 F.3d 233, 241-242, 247-258 (4th Cir. 2010); *Rothe Development Corp. v. Department of Defense*, 545 F.3d 1023, 1036 (Fed. Cir. 2008); *N. Contracting, Inc. Illinois*, 473 F.3d at 715, 721 (7th Cir. 2007) (Federal DBE Program); *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983, 990-991 (9th Cir. 2005) (Federal DBE Program); *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d 964, 969 (8th Cir. 2003) (Federal DBE Program); *Adarand Constructors Inc. v. Slater* ("Adarand VII"), 228 F.3d 1147, 1166 (10th Cir. 2000) (Federal DBE Program); *Eng'g Contractors Ass'n*, 122 F.3d at 916; *Monterey Mechanical Co. v. Wilson*, 125 F.3d 702, 713 (9th Cir. 1997); *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP II"), 91 F.3d 586, 596-598 (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP I"), 6 F.3d 996, 1005-1007 (3d Cir. 1993); *Geyer Signal, Inc.*, 2014 WL 1309092; *DynaLantic*, 885 F.Supp.2d 237, 2012 WL 3356813; *Hershell Gill Consulting Engineers, Inc. v. Miami Dade County*, 333 F. Supp.2d 1305, 1316 (S.D. Fla. 2004).

⁶⁷ *Adarand VII*, 228 F.3d at 1166; *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP II"), 91 F.3d 586, 596-598 (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP I"), 6 F.3d 996, 1005-1007 (3d Cir. 1993); *Eng'g Contractors Ass'n*, 122 F.3d at 916; *Geyer Signal, Inc.*, 2014 WL 1309092.

⁶⁸ See, e.g., *Adarand VII*, 228 F.3d at 1166; *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP II"), 91 F.3d 586, 596-598 (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP I"), 6 F.3d 996, 1005-1007 (3d Cir. 1993); *Eng'g Contractors Ass'n*, 122 F.3d at 916; see also *Sherbrooke Turf*, 345 F.3d at 971; *N. Contracting*, 473 F.3d at 721; *Geyer Signal, Inc.*, 2014 WL 1309092.

⁶⁹ *Id.*; *Midwest Fence*, 840 F.3d 932, 935, 948-954 (7th Cir. 2016); *H. B. Rowe Co., Inc. v. NCDOT*, 615 F.3d 233, 241-242 (4th Cir. 2010); *Western States Paving*, 407 F.3d at 990; See also *Majeske v. City of Chicago*, 218 F.3d 816, 820 (7th Cir. 2000); *Geyer Signal, Inc.*, 2014 WL 1309092.

⁷⁰ *Shaw v. V. Hunt*, 517 U.S. 899, 909 (1996); *City of Richmond v. J. A. Croson Co.*, 488 U.S. 469, 492 (1989); see, e.g., *Midwest Fence*, 840 F.3d 932, 935, 948-954 (7th Cir. 2016); *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP II"), 91 F.3d 586, 596-598 (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP I"), 6 F.3d 996, 1005-1007 (3d Cir. 1993).

⁷¹ *Croson*, 488 U.S. at 500; see, e.g., *Midwest Fence*, 840 F.3d 932, 935, 948-954 (7th Cir. 2016); *H. B. Rowe Co., Inc. v. NCDOT*, 615 F.3d 233, 241-242; *Sherbrooke Turf*, 345 F.3d at 971-972; *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP II"), 91 F.3d 586, 596-598 (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP I"), 6 F.3d 996, 1005-1007 (3d Cir. 1993); *Geyer Signal, Inc.*, 2014 WL 1309092.

⁷² *Midwest Fence*, 2015 W.L. 1396376 at *7 (N.D. Ill. 2015), *affirmed*, 840 F.3d 932, 2016 WL 6543514 (7th Cir. 2016); see, e.g., *Midwest Fence*, 840 F.3d 932, 935, 948-954 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d at 1195-1200; *H. B. Rowe Co., Inc. v. NCDOT*, 615 F.3d 233, 241-242 (4th Cir. 2010); *Concrete Works of Colo. Inc. v. City and County of Denver*, 36 F.3d 1513, 1522 (10th Cir. 1994); *Geyer Signal*, 2014 WL 1309092 (D. Minn., 2014); see also *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP II"), 91 F.3d 586, 596-598 (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia* ("CAEP I"), 6 F.3d 996, 1005-1007 (3d Cir. 1993).

contractors actually engaged by the locality or the locality's prime contractors."⁷³ Anecdotal evidence may be used in combination with statistical evidence to establish a compelling governmental interest.⁷⁴

In addition to providing "hard proof" to support its compelling interest, the government must also show that the challenged program is narrowly tailored.⁷⁵ Once the governmental entity has shown acceptable proof of a compelling interest and remedying past discrimination and illustrated that its plan is narrowly tailored to achieve this goal, the party challenging the affirmative action plan bears the ultimate burden of proving that the plan is unconstitutional.⁷⁶ Therefore, notwithstanding the burden of initial production rests with the government, the ultimate burden remains with the party challenging the application of a DBE or MBE/WBE Program to demonstrate the unconstitutionality of an affirmative-action type program.⁷⁷

To successfully rebut the government's evidence, the courts hold, including the Third Circuit Court of Appeals in *Contractors Ass'n of E. Pa. v. City of Philadelphia (CAEP II)*⁷⁸, that a challenger must introduce "credible, particularized evidence" of its own that rebuts the government's showing of a strong basis in evidence for the necessity of remedial action.⁷⁹ This rebuttal can be accomplished by providing a neutral explanation for the disparity between MBE/WBE/DBE utilization and availability, showing that the government's data is flawed, demonstrating that the

⁷³ See e.g., *H. B. Rowe v. NCDOT*, 615 F.3d 233, 241-242 (4th Cir. 2010); *Midwest Fence*, 2015 W.L. 1396376 at *7, quoting *Concrete Works*; 36 F.3d 1513, 1522 (quoting *Croson*, 488 U.S. at 509), affirmed, 840 F.3d 932, 2016 WL 6543514 (7th Cir. 2016); see also, *Sherbrooke Turf*, 345 F.3d 233, 241-242 (8th Cir. 2003); *Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP II")*, 91 F.3d 586, 596-598 (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP I")*, 6 F.3d 996, 1005-1007 (3d Cir. 1993).

⁷⁴ *Croson*, 488 U.S. at 509; see, e.g., *AGC, SDC v. Caltrans*, 713 R.3d at 1196; *H. B. Rowe v. NCDOT*, 615 F.3d 233, 241-242 (4th Cir. 2010); *Midwest Fence*, 84 F.Supp. 3d 705, 2015 WL 1396376 at *7, affirmed, 840 F.3d 932, 2016 WL 6543514 (7th Cir. 2016); *Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP II")*, 91 F.3d 586, 596-598 (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP I")*, 6 F.3d 996, 1005-1007 (3d Cir. 1993).

⁷⁵ *Adarand Constructors, Inc. v. Peña ("Adarand III")*, 515 U.S. 200 at 235 (1995); see, e.g., *Midwest Fence*, 840 F.3d 932, 952-954 (7th Cir. 2016); *Majeske v. City of Chicago*, 218 F.3d at 820; *Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP II")*, 91 F.3d 586, 596-598 (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP I")*, 6 F.3d 996, 1005-1007 (3d Cir. 1993).

⁷⁶ *Majeske*, 218 F.3d at 820; see, e.g. *Wygant v. Jackson Bd. Of Educ.*, 476 U.S. 267, 277-78; *Midwest Fence*, 840 F.3d 932, 952-954 (7th Cir. 2016); *Midwest Fence*, 2015 WL 1396376 *7, affirmed, 840 F.3d 932, 2016 WL 6543514 (7th Cir. 2016); *Geyer Signal, Inc.*, 2014 WL 1309092; *Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP II")*, 91 F.3d 586, 596-598; 603; (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP I")*, 6 F.3d 996, 1002-1007 (3d Cir. 1993);

⁷⁷ *Id.*; *Adarand VII*, 228 F.3d at 1166.

⁷⁸ *Contractors Ass'n of E. Pa. v. City of Philadelphia*, 91 F.3d 586 (3d Cir. 1996).

⁷⁹ See, *Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP II")*, 91 F.3d 586, 596-598; 603; (3d Cir. 1996); *Contractors Ass'n of E. Pa. v. City of Philadelphia ("CAEP I")*, 6 F.3d 996, 1002-1007 (3d Cir. 1993); see, e.g., *H.B. Rowe v.NCDOT*, 615 F.3d 233, at 241-242(4th Cir. 2010); *Concrete Works*, 321 F.3d 950, 959 (quoting *Adarand Constructors, Inc. vs. Slater*, 228 F.3d 1147, 1175 (10th Cir. 2000)); *Midwest Fence*, 84 F.Supp. 3d 705, 2015 W.L. 1396376 at *7, affirmed, 840 F.3d 932, 2016 WL 6543514 (7th Cir. 2016); see also, *Sherbrooke Turf*, 345 F.3d at 971-974; *Geyer Signal, Inc.*, 2014 WL 1309092.

observed disparities are statistically insignificant, or presenting contrasting statistical data.⁸⁰ Conjecture and unsupported criticisms of the government’s methodology are insufficient.⁸¹ The courts have held that mere speculation the government’s evidence is insufficient or methodologically flawed does not suffice to rebut a government’s showing.⁸²

The Third Circuit in *CAEP II* held that a government must justify its conclusions regarding discrimination in connection with the award of its construction contracts and the necessity for a remedy of the scope chosen.⁸³ While this does not mean that the municipality must convince a court of the accuracy of its conclusions, the Third Circuit stated that it does mean that the program cannot be sustained unless there is a strong basis in evidence for those conclusions.⁸⁴ The party challenging the race-based preferences can succeed by showing either (1) that the subjective intent of the legislative body was not to remedy race discrimination in which the municipality played a role, or (2) that there is no “strong basis in evidence” for the conclusions that race-based discrimination existed and that the remedy chosen was necessary.⁸⁵

The Third Circuit in *CAEP II* noted that it and other courts have concluded that when the race-based classifications of an affirmative action plan are challenged, the proponents of the plan have the burden of coming forward with evidence providing a firm basis for inferring that the legislatively identified discrimination in fact exists or existed and that the race-based classifications are necessary to remedy the effects of the identified discrimination.⁸⁶ Once the proponents of the program meet this burden of production, the opponents of the program must be permitted to attack the tendered evidence and offer evidence of their own tending to show that the identified discrimination did or does not exist and/or that the means chosen as a remedy do not “fit” the identified discrimination.⁸⁷

Ultimately, however, the Third Circuit held in *CAEP II* that plaintiffs challenging an MBE/WBE race conscious type program retain the burden of persuading a court that a violation of the Equal

⁸⁰ *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP II”)*, 91 F.3d 586, 596-598; 603; (3d Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”)*, 6 F.3d 996, 1002-1007 (3d Cir. 1993); see, e.g., *H.B. Rowe v. NCDOT*, 615 F.3d 233, at 241-242 (4th Cir. 2010); *Concrete Works*, 321 F.3d 950, 959 (quoting *Adarand Constructors, Inc. vs. Slater*, 228 F.3d 1147, 1175 (10th Cir. 2000)); *Midwest Fence*, 84 F.Supp. 3d 705, 2015 W.L. 1396376 at *7, affirmed, 840 F.3d 932, 2016 WL 6543514 (7th Cir. 2016); see also, *Sherbrooke Turf*, 345 F.3d at 971-974; *Geyer Signal, Inc.*, 2014 WL 1309092; see, generally, *Engineering Contractors*, 122 F.3d at 916; *Coral Construction, Co. v. King County*, 941 F.2d 910, 921 (9th Cir. 1991).

⁸¹ *Id.* at footnote 80; *H. B. Rowe*, 615 F.3d at 242; see also, *Midwest Fence*, 840 F.3d 932, 952-954 (7th Cir. 2016); *Sherbrooke Turf*, 345 F.3d at 971-974; *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP II”)*, 91 F.3d 586, 596-598; 603; (3d Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”)*, 6 F.3d 996, 1002-1007 (3d Cir. 1993); *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (S.D. Tex. 2016); *Geyer Signal*, 2014 WL 1309092.

⁸² *H.B. Rowe*, 615 F.3d at 242; see *Midwest Fence*, 840 F.3d 932, 952-954 (7th Cir. 2016); *Concrete Works*, 321 F.3d at 991; see also, *Sherbrooke Turf*, 345 F.3d at 971-974; *Geyer Signal, Inc.*, 2014 WL 1309092; *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (S.D. Tex. 2016).

⁸³ *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d 586, 597 (3d Cir. 1996).

⁸⁴ *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d 586, 597 (3d Cir. 1996).

⁸⁵ *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d 586, 597 (3d Cir. 1996).

⁸⁶ *Id.*

⁸⁷ *Id.*

Protection Clause has occurred.⁸⁸ This means that the plaintiffs bear the burden of persuading the court that the race-based preferences were not intended to serve the identified compelling interest or that there is no strong basis in the evidence as a whole for the conclusions the local or state government needed to have reached with respect to the identified discrimination and the necessity of the remedy chosen.⁸⁹

The courts have noted that “there is no ‘precise mathematical formula to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark.”⁹⁰ The courts hold that a state need not conclusively prove the existence of past or present racial discrimination to establish a strong basis in evidence for concluding that remedial action is necessary.⁹¹ Instead, the Supreme Court stated that a government may meet its burden by relying on “a significant statistical disparity” between the availability of qualified, willing, and able minority subcontractors and the utilization of such subcontractors by the governmental entity or its prime contractors.⁹² It has been further held by the courts that the statistical evidence be “corroborated by significant anecdotal evidence of racial discrimination” or bolstered by anecdotal evidence supporting an inference of discrimination.⁹³

The Third Circuit in *CAEP II* held that to justify a race-conscious measure, a government must identify discrimination, public or private, with some specificity, and must have a strong basis in evidence for its conclusion that remedial action is necessary.⁹⁴ In holding, that there is no ‘precise mathematical formula to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark, courts have stated the sufficiency of the State’s evidence of discrimination “must be evaluated on a case-by-case basis.”⁹⁵

⁸⁸ *Id.* at 597.

⁸⁹ *Id.*

⁹⁰ *H.B. Rowe*, 615 F.3d at 241, quoting *Rothe Dev. Corp. v. Dep’t of Def.*, 545 F.3d 1023, 1049 (Fed. Cir. 2008) (quoting *W.H. Scott Constr. Co. v. City of Jackson*, 199 F.3d 206, 218 n. 11 (5th Cir. 1999)); *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206, 217-218 (5th Cir. 1999); see, *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP II”)*, 91 F.3d 586, 596-598; 603; (3d. Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”)*, 6 F.3d 996, 1002-1007 (3d. Cir. 1993);

⁹¹ *H.B. Rowe Co.*, 615 F.3d at 241; see, e.g., *Midwest Fence*, 840 F.3d 932, 952-954 (7th Cir. 2016); *Concrete Works*, 321 F.3d at 958; see, *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP II”)*, 91 F.3d 586, 596-598; 603; (3d. Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”)*, 6 F.3d 996, 1002-1007 (3d. Cir. 1993).

⁹² *Croson*, 488 U.S. 509, see, e.g., *Midwest Fence*, 840 F.3d 932, 952-954 (7th Cir. 2016); *H.B. Rowe*, 615 F.3d at 241; *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP II”)*, 91 F.3d 586, 596-598; 603; (3d. Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”)*, 6 F.3d 996, 1002-1007 (3d. Cir. 1993).

⁹³ *H.B. Rowe*, 615 F.3d at 241, quoting *Maryland Troopers Association, Inc. v. Evans*, 993 F.2d 1072, 1077 (4th Cir. 1993); see, e.g., *Midwest Fence*, 840 F.3d 932, 952-954 (7th Cir. 2016); *AGC, San Diego v. Caltrans*, 713 F.3d at 1196; see also, *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP II”)*, 91 F.3d 586, 596-598; 603; (3d. Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”)*, 6 F.3d 996, 1002-1007 (3d. Cir. 1993); *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (S.D. Tex. 2016).

⁹⁴ *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d 586, 596-605; *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d 990, 999, 1002, 1005-1008 (3d. Cir. 1993); see, e.g. 615 F.3d 233 at 241 citing, *Croson*, 488 U.S. at 504 and *Wygant v. Jackson Board of Education*, 476 U.S. 267, 277 (1986)(plurality opinion).

⁹⁵ *H. B. Rowe*, 615 F.3d at 241. (internal quotation marks omitted).

Statistical evidence. Statistical evidence of discrimination is a primary method used to determine whether or not a strong basis in evidence exists to develop, adopt and support a remedial program (i.e., to prove a compelling governmental interest), or in the case of a recipient complying with the Federal DBE Program, to prove narrow tailoring of program implementation at the state recipient level.⁹⁶ “Where gross statistical disparities can be shown, they alone in a proper case may constitute prima facie proof of a pattern or practice of discrimination.”⁹⁷

One form of statistical evidence is the comparison of a government’s utilization of MBE/WBEs compared to the relative availability of qualified, willing and able MBE/WBEs.⁹⁸ The federal courts have held that a significant statistical disparity between the utilization and availability of minority- and women-owned firms may raise an inference of discriminatory exclusion.⁹⁹ However, a small statistical disparity, standing alone, may be insufficient to establish discrimination.¹⁰⁰

Other considerations regarding statistical evidence include:

- **Availability analysis.** A disparity index requires an availability analysis. MBE/WBE and DBE availability measures the relative number of MBE/WBEs and DBEs among all firms ready, willing and able to perform a certain type of work within a particular geographic market area.¹⁰¹ There is authority in the Third Circuit Court of Appeals and other courts that measures of availability may be approached with different levels of specificity and

⁹⁶ See, e.g., *Croson*, 488 U.S. at 509; *Midwest Fence*, 840 F.3d 932, 935, 948-954 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d at 1195-1196; *N. Contracting*, 473 F.3d at 718-19, 723-24; *Western States Paving*, 407 F.3d at 991; *Sherbrooke Turf*, 345 F.3d at 973-974; *Adarand VII*, 228 F.3d at 1166; *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206, 217-218 (5th Cir. 1999); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d 586, 596-605; *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d 990, 999, 1002, 1005-1008 (3d Cir. 1993); see also, *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (S.D. Tex. 2016); *Geyer Signal*, 2014 WL 1309092.

⁹⁷ *Croson*, 488 U.S. at 501, quoting *Hazelwood School Dist. v. United States*, 433 U.S. 299, 307-08 (1977); see *Midwest Fence*, 840 F.3d 932, 948-954 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d at 1196-1197; *N. Contracting*, 473 F.3d at 718-19, 723-24; *Western States Paving*, 407 F.3d at 991; *Sherbrooke Turf*, 345 F.3d at 973-974; *Adarand VII*, 228 F.3d at 1166; *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206, 217-218 (5th Cir. 1999).

⁹⁸ *Croson*, 448 U.S. at 509; see *Midwest Fence*, 840 F.3d 932, 935, 948-954 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d at 1191-1197; *H. B. Rowe v. NCDOT*, 615 F.3d 233, 241-244 (4th Cir. 2010); *Rothe*, 545 F.3d at 1041-1042; *Concrete Works of Colo., Inc. v. City and County of Denver (“Concrete Works II”)*, 321 F.3d 950, 959 (10th Cir. 2003); *Drabik II*, 214 F.3d 730, 734-736; *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206, 217-218 (5th Cir. 1999); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d 586, 596-605; *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d 990, 999, 1002, 1005-1008 (3d Cir. 1993); see also, *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (S.D. Tex. 2016).

⁹⁹ See, e.g., *Croson*, 488 U.S. at 509; *Midwest Fence*, 840 F.3d 932, 935, 948-954 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d at 1191-1197; *H. B. Rowe v. NCDOT*, 615 F.3d 233, 241-244 (4th Cir. 2010); *Rothe*, 545 F.3d at 1041; *Concrete Works II*, 321 F.3d at 970; *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206, 217-218 (5th Cir. 1999); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d 586, 596-605; *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d 990, 999, 1002, 1005-1008 (3d Cir. 1993); see also *Western States Paving*, 407 F.3d at 1001; *Kossmann Contracting*, 2016 WL 1104363 (S.D. Tex. 2016).

¹⁰⁰ *Western States Paving*, 407 F.3d at 1001.

¹⁰¹ See, e.g., *Croson*, 448 U.S. at 509; 49 CFR § 26.35; *AGC, SDC v. Caltrans*, 713 F.3d at 1191-1197; *Rothe*, 545 F.3d at 1041-1042; *N. Contracting*, 473 F.3d at 718, 722-23; *Western States Paving*, 407 F.3d at 995; *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206, 217-218 (5th Cir. 1999); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d 586, 602-603 (3d Cir. 1996); see also, *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (S.D. Tex. 2016).

the practicality of various approaches must be considered.¹⁰² The Third Circuit has held: “An analysis is not devoid of probative value simply because it may theoretically be possible to adopt a more refined approach.”¹⁰³

- **Utilization analysis.** Courts have accepted measuring utilization based on the proportion of an agency’s contract dollars going to MBE/WBEs and DBEs.¹⁰⁴
- **Disparity index.** An important component of statistical evidence is the “disparity index.”¹⁰⁵ A disparity index is defined as the ratio of the percent utilization to the percent availability times 100. A disparity index below 80 has been accepted as evidence of adverse impact. This has been referred to as “The Rule of Thumb” or “The 80 percent Rule.”¹⁰⁶
- **Two standard deviation test.** The standard deviation figure describes the probability that the measured disparity is the result of mere chance. Some courts have held that a statistical disparity corresponding to a standard deviation of less than two is not considered statistically significant.¹⁰⁷

In terms of statistical evidence, Courts have held that a state “need not conclusively prove the existence of past or present racial discrimination to establish a strong basis in evidence”, but rather it may rely on “a significant statistical disparity” between the

¹⁰² *Contractors Ass’n of Eastern Pennsylvania, Inc. v. City of Philadelphia (“CAEP II”)*, 91 F.3d 586, 603 (3d Cir. 1996); see, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1197, quoting *Croson*, 488 U.S. at 706 (“degree of specificity required in the findings of discrimination ... may vary.”); *H.B. Rowe, v. NCDOT*, 615 F.3d 233, 241-244 (4th Cir. 2010); *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206, 217-218 (5th Cir. 1999); see also, *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (S.D. Tex. 2016).

¹⁰³ *Contractors Ass’n of Eastern Pennsylvania, Inc. v. City of Philadelphia (“CAEP II”)*, 91 F.3d 586, 603 (3d Cir. 1996); see, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1197, quoting *Croson*, 488 U.S. at 706 (“degree of specificity required in the findings of discrimination ... may vary.”); *H.B. Rowe, v. NCDOT*, 615 F.3d 233, 241-244 (4th Cir. 2010); *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206, 217-218 (5th Cir. 1999); see also, *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (S.D. Tex. 2016).

¹⁰⁴ See, e.g., *Midwest Fence*, 840 F.3d 932, 949-953 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d at 1191-1197; *H.B. Rowe, v. NCDOT*, 615 F.3d 233, 241-244 (4th Cir. 2010); *Eng’g Contractors Ass’n*, 122 F.3d at 912; *N. Contracting*, 473 F.3d at 717-720; *Sherbrooke Turf*, 345 F.3d at 973.

¹⁰⁵ *Midwest Fence*, 840 F.3d 932, 949-953 (7th Cir. 2016); *H.B. Rowe, v. NCDOT*, 615 F.3d 233, 241-244 (4th Cir. 2010); *Eng’g Contractors Ass’n*, 122 F.3d at 914; *W.H. Scott Constr. Co. v. City of Jackson*, 199 F.3d 206, 218 (5th Cir. 1999); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d 586, 602-603 (3d Cir. 1996); *Contractors Ass’n of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 6 F.3d 990 at 1005 (3rd Cir. 1993).

¹⁰⁶ See, e.g., *Ricci v. DeStefano*, 557 U.S. 557, 129 S.Ct. 2658, 2678 (2009); *Midwest Fence*, 840 F.3d 932, 950 (7th Cir. 2016); *H.B. Rowe, v. NCDOT*, 615 F.3d 233, 241-244 (4th Cir. 2010); *AGC, SDC v. Caltrans*, 713 F.3d at 1191; *H.B. Rowe Co.*, 615 F.3d 233, 243-245; *Rothe*, 545 F.3d at 1041; *Eng’g Contractors Ass’n*, 122 F.3d at 914, 923; *Concrete Works I*, 36 F.3d at 1524.

¹⁰⁷ See, e.g., *H.B. Rowe, v. NCDOT*, 615 F.3d 233, 241-244 (4th Cir. 2010); *Eng’g Contractors Ass’n*, 122 F.3d at 914, 917, 923. The Eleventh Circuit found that a disparity greater than two or three standard deviations has been held to be statistically significant and may create a presumption of discriminatory conduct; *Peightal v. Metropolitan Eng’g Contractors Ass’n*, 26 F.3d 1545, 1556 (11th Cir. 1994). The Seventh Circuit Court of Appeals in *Kadas v. MCI Systemhouse Corp.*, 255 F.3d 359 (7th Cir. 2001), raised questions as to the use of the standard deviation test alone as a controlling factor in determining the admissibility of statistical evidence to show discrimination. Rather, the Court concluded it is for the judge to say, on the basis of the statistical evidence, whether a particular significance level, in the context of a particular study in a particular case, is too low to make the study worth the consideration of judge or jury. 255 F.3d at 363.

availability of qualified, willing, and able minority subcontractors and the utilization of such subcontractors by the governmental entity or its prime contractors.¹⁰⁸

The Third Circuit in *CAEP II* considered the statistical evidence from a disparity study in considering the equal protection challenge to the City of Philadelphia minority-and woman-owned participation program and looked to disparity indices, or to computations of disparity percentages, in determining whether *Croson's* evidentiary burden was satisfied.¹⁰⁹ The Third Circuit pointed out that disparity studies and indices potentially can be probative evidence of discrimination.¹¹⁰

Anecdotal evidence. Anecdotal evidence includes personal accounts of incidents, including of discrimination, told from the witness' perspective. Anecdotal evidence of discrimination, standing alone, generally is insufficient to show a systematic pattern of discrimination.¹¹¹ But personal accounts of actual discrimination may complement empirical evidence and play an important role in bolstering statistical evidence.¹¹² It has been held that anecdotal evidence of a local or state government's institutional practices that exacerbate discriminatory market conditions are often particularly probative.¹¹³

Examples of anecdotal evidence may include:

- Testimony of MBE/WBE or DBE owners regarding whether they face difficulties or barriers;
- Descriptions of instances in which MBE/WBE or DBE owners believe they were treated unfairly or were discriminated against based on their race, ethnicity, or gender or believe they were treated fairly without regard to race, ethnicity, or gender;
- Statements regarding whether firms solicit, or fail to solicit, bids or price quotes from MBE/WBEs or DBEs on non-goal projects; and

¹⁰⁸ *H. B. Rowe*, 615 F.3d 233 at 241, citing *Croson*, 488 U.S. at 509 (plurality opinion), and citing *Concrete Works*, 321 F.3d at 958.

¹⁰⁹ *Contractors Ass'n of E. Pa. v. City of Philadelphia*, 91 F.3d at 602-605 (3d Cir. 1996).

¹¹⁰ *Id.*; see, *H. B. Rowe*, 615 F.3d 233, 241-242, 248-249 (4th Cir. 2010).

¹¹¹ See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1192, 1196-1198; *Eng'g Contractors Ass'n*, 122 F.3d at 924-25; *Contractors Ass'n of E. Pa. v. City of Philadelphia*, 6 F.3d 990, 1002-1003 (3d Cir. 1993); *Coral Constr. Co. v. King County*, 941 F.2d 910, 919 (9th Cir. 1991); *O'Donnell Constr. Co. v. District of Columbia*, 963 F.2d 420, 427 (D.C. Cir. 1992).

¹¹² See, e.g., *Midwest Fence*, 840 F.3d 932, 953 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d at 1192, 1196-1198; *H. B. Rowe*, 615 F.3d 233, 248-249; *Eng'g Contractors Ass'n*, 122 F.3d at 925-26; *Concrete Works*, 36 F.3d at 1520; *Contractors Ass'n*, 6 F.3d at 1003 (3d Cir. 1993); *Coral Constr. Co. v. King County*, 941 F.2d 910, 919 (9th Cir. 1991); see also, *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (S.D. Tex. 2016).

¹¹³ *Concrete Works I*, 36 F.3d at 1520.

- Statements regarding whether there are instances of discrimination in bidding on specific contracts and in the financing and insurance markets.¹¹⁴

Courts have accepted and recognize that anecdotal evidence is the witness' narrative of incidents told from his or her perspective, including the witness' thoughts, feelings, and perceptions, and thus anecdotal evidence need not be verified.¹¹⁵

The Third Circuit in *CAEP I* stated that the City contended the district court understated the evidence of prior discrimination available to the Philadelphia City Council when it enacted the 1982 ordinance. The City Council Finance Committee received testimony from at least fourteen minority contractors who recounted personal experiences with racial discrimination.¹¹⁶ In certain instances, these contractors lost out despite being low bidders. The Court found this anecdotal evidence significantly outweighed that presented in *Croson*, where the Richmond City Council heard "no direct evidence of race discrimination on the part of the city in letting contracts or any evidence that the city's prime contractors had discriminated against minority-owned subcontractors."¹¹⁷

The Third Circuit in *CAEP I* held, however, given *Croson's* emphasis on statistical evidence, even had the district court credited the City's anecdotal evidence, the Court did not believe this amount of anecdotal evidence by itself was sufficient to satisfy strict scrutiny¹¹⁸ ("anecdotal evidence ... rarely, if ever, can ... show a systemic pattern of discrimination necessary for the adoption of an affirmative action plan."). Although anecdotal evidence alone may, in an exceptional case, be so dominant or pervasive that it passes muster under *Croson*, the Third Circuit in *CAEP I* found it was insufficient in that case.¹¹⁹ The Third Circuit recognized that the combination of "anecdotal and statistical evidence is potent."¹²⁰

b. The Narrow Tailoring Requirement.

The second prong of the strict scrutiny analysis requires that a race- or ethnicity-based program or legislation implemented to remedy past identified discrimination in the relevant market be "narrowly tailored" to reach that objective.

¹¹⁴ See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1197; *H. B. Rowe*, 615 F.3d 233, 241-242; 249-251; *Northern Contracting*, 2005 WL 2230195, at 13-15 (N.D. Ill. 2005), *affirmed*, 473 F.3d 715 (7th Cir. 2007); *Concrete Works*, 321 F.3d at 989; *Adarand VII*, 228 F.3d at 1166-76; see also, *Contractors Ass'n of E. Pa.*, 6 F.3d at 1002-1003 (3d Cir. 1993). For additional examples of anecdotal evidence, see *Eng'g Contractors Ass'n*, 122 F.3d at 924; *Concrete Works*, 36 F.3d at 1520; *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 915 (11th Cir. 1990); *DynaLantic*, 885 F.Supp.2d 237; *Florida A.G.C. Council, Inc. v. State of Florida*, 303 F. Supp.2d 1307, 1325 (N.D. Fla. 2004).

¹¹⁵ See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1197; *H. B. Rowe*, 615 F.3d 233, 241-242, 248-249; *Concrete Works II*, 321 F.3d at 989; *Eng'g Contractors Ass'n*, 122 F.3d at 924-26; *Cone Corp.*, 908 F.2d at 915; *Northern Contracting, Inc. v. Illinois*, 2005 WL 2230195 at *21, N. 32 (N.D. Ill. Sept. 8, 2005), *aff'd* 473 F.3d 715 (7th Cir. 2007).

¹¹⁶ *Contractors Ass'n of E. Pa.*, 6 F.3d at 1002-1003 (3d Cir. 1993).

¹¹⁷ *Id.*, quoting, *Croson*, 488 U.S. at 480.

¹¹⁸ *Id.* at 1003, quoting, *Coral Constr.*, 941 F.2d at 919 (9th Cir. 1991),

¹¹⁹ *Id.*

¹²⁰ *Id.*, quoting, *Coral Constr.*, 941 F.2d at 919 (9th Cir. 1991).

The narrow tailoring requirement has several components and the courts, including the Third Circuit Court of Appeals, analyze several criteria or factors in determining whether a program or legislation satisfies this requirement including:

- The necessity for the relief and the efficacy of alternative race-, ethnicity-, and gender-neutral remedies;
- The flexibility and duration of the relief, including the availability of waiver provisions;
- The relationship of numerical goals to the relevant labor market; and
- The impact of a race-, ethnicity-, or gender-conscious remedy on the rights of third parties.¹²¹

The Third Circuit in *Contractors Ass'n of E. Pa. v. City of Philadelphia* in determining whether a racial preference was “narrowly tailored” to the compelling government interest of eradicating racial discrimination in the award of City construction contracts, followed the Supreme Court in *Croson*, which held this inquiry turns on four factors: (1) whether the city has first considered and found ineffective “race-neutral measures,” such as enhanced access to capital and relaxation of bonding requirements, (2) the basis offered for the percentage selected, (3) whether the program provides for waivers of the preference or other means of affording individualized treatment to contractors, and (4) whether the Ordinance applies only to minority businesses who operate in the geographic jurisdiction covered by the Ordinance.¹²²

The Eleventh Circuit described the “the essence of the ‘narrowly tailored’ inquiry [as] the notion that explicitly racial preferences ... must only be a ‘last resort’ option.”¹²³ Courts have found that “[w]hile narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require serious, good faith consideration of whether such alternatives could serve the governmental interest at stake.”¹²⁴

Similarly, the Sixth Circuit Court of Appeals in *Associated Gen. Contractors v. Drabik (“Drabik II”)*, stated: “*Adarand* teaches that a court called upon to address the question of narrow tailoring must ask, “for example, whether there was ‘any consideration of the use of race-neutral means to increase minority business participation’ in government contracting ... or whether the program

¹²¹ See, e.g., *Midwest Fence*, 840 F.3d 932, 942, 953-954 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d at 1198-1199; *H. B. Rowe*, 615 F.3d 233, 252-255; *Rothe*, 545 F.3d at 1036; *Western States Paving*, 407 F.3d at 993-995; *Sherbrooke Turf*, 345 F.3d at 971; *Adarand VII*, 228 F.3d at 1181; *W.H. Scott Constr. Co. v. City of Jackson, Mississippi*, 199 F.3d 206 (5th Cir. 1999); *Eng’g Contractors Ass’n*, 122 F.3d at 927 (internal quotations and citations omitted); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d 586, 605-610 (3d Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d 990, 1008-1009 (3d Cir. 1993); see also, *Geyer Signal, Inc.*, 2014 WL 1309092.

¹²² 6 F.3d at 1008; see, *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d at 605-609 (3d Cir. 1996).

¹²³ *Eng’g Contractors Ass’n*, 122 F.3d at 926 (internal citations omitted); see also *Virdi v. DeKalb County School District*, 135 Fed. Appx. 262, 264, 2005 WL 138942 (11th Cir. 2005) (unpublished opinion); *Webster v. Fulton County*, 51 F. Supp.2d 1354, 1380 (N.D. Ga. 1999), *aff’d per curiam* 218 F.3d 1267 (11th Cir. 2000).

¹²⁴ See *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003); *Richmond v. J.A. Croson Co.*, 488 U.S. 469, 509-10 (1989); *H. B. Rowe*, 615 F.3d 233, 252-255; *Western States Paving*, 407 F.3d at 993; *Sherbrooke Turf*, 345 F.3d at 972; see also *Adarand I*, 515 U.S. at 237-38.

was appropriately limited such that it ‘will not last longer than the discriminatory effects it is designed to eliminate.’”¹²⁵

The Supreme Court in *Parents Involved in Community Schools v. Seattle School District*¹²⁶ also found that race- and ethnicity-based measures should be employed as a last resort. The majority opinion stated: “Narrow tailoring requires ‘serious, good faith consideration of workable race-neutral alternatives,’ and yet in Seattle several alternative assignment plans—many of which would not have used express racial classifications—were rejected with little or no consideration.”¹²⁷ The Court found that the District failed to show it seriously considered race-neutral measures.

The “narrowly tailored” analysis is instructive in terms of developing any potential legislation or programs that involve MBE/WBE/DBEs or in connection with determining appropriate remedial measures to achieve legislative objectives.

Implementation of the Federal DBE Program: Narrow tailoring. The second prong of the strict scrutiny analysis requires the implementation of the Federal DBE Program by recipients of federal funds be “narrowly tailored” to remedy identified discrimination in the particular recipient’s contracting and procurement market.¹²⁸ The narrow tailoring requirement has several components.

In *Western States Paving*, the Ninth Circuit held the recipient of federal funds must have independent evidence of discrimination within the recipient’s own transportation contracting and procurement marketplace in order to determine whether or not there is the need for race-, ethnicity-, or gender-conscious remedial action.¹²⁹ Thus, the Ninth Circuit held in *Western States Paving* that mere compliance with the Federal DBE Program does not satisfy strict scrutiny.¹³⁰

In *Western States Paving*, and in *AGC, SDC v. Caltrans*, the Court found that even where evidence of discrimination is present in a recipient’s market, a narrowly tailored program must apply only to those minority groups who have actually suffered discrimination. Thus, under a race- or ethnicity-conscious program, for each of the minority groups to be included in any race- or ethnicity-conscious elements in a recipient’s implementation of the Federal DBE Program, there must be evidence that the minority group suffered discrimination within the recipient’s marketplace.¹³¹

¹²⁵ *Associated Gen. Contractors of Ohio, Inc. v. Drabik* (“Drabik II”), 214 F.3d 730, 738 (6th Cir. 2000).

¹²⁶ 551 U.S. 701, 734-37, 127 S.Ct. 2738, 2760-61 (2007).

¹²⁷ 551 U.S. 701, 734-37, 127 S.Ct. at 2760-61; see also *Fisher v. University of Texas*, 133 S.Ct. 2411 (2013); *Grutter v. Bollinger*, 539 U.S. 305 (2003).

¹²⁸ *Western States Paving*, 407 F.3d at 995-998; *Sherbrooke Turf*, 345 F.3d at 970-71; see, e.g., *Midwest Fence*, 840 F.3d 932, 949-953.

¹²⁹ *Western States Paving*, 407 F.3d at 997-98, 1002-03; see *AGC, SDC v. Caltrans*, 713 F.3d at 1197-1199.

¹³⁰ *Id.* at 995-1003. The Seventh Circuit Court of Appeals in *Northern Contracting* stated in a footnote that the court in *Western States Paving* “misread” the decision in *Milwaukee County Pavers*. 473 F.3d at 722, n. 5.

¹³¹ 407 F.3d at 996-1000; See *AGC, SDC v. Caltrans*, 713 F.3d at 1197-1199.

In *Northern Contracting* decision (2007) the Seventh Circuit Court of Appeals cited its earlier precedent in *Milwaukee County Pavers v. Fielder* to hold “that a state is insulated from [a narrow tailoring] constitutional attack, absent a showing that the state exceeded its federal authority. IDOT [Illinois DOT] here is acting as an instrument of federal policy and Northern Contracting (NCI) cannot collaterally attack the federal regulations through a challenge to IDOT’s program.”¹³² The Seventh Circuit Court of Appeals distinguished both the Ninth Circuit Court of Appeals decision in *Western States Paving* and the Eighth Circuit Court of Appeals decision in *Sherbrooke Turf*, relating to an as-applied narrow tailoring analysis.

The Seventh Circuit Court of Appeals held that the state DOT’s [Illinois DOT] application of a federally mandated program is limited to the question of whether the state exceeded its grant of federal authority under the Federal DBE Program.¹³³ The Seventh Circuit Court of Appeals analyzed IDOT’s compliance with the federal regulations regarding calculation of the availability of DBEs, adjustment of its goal based on local market conditions and its use of race-neutral methods set forth in the federal regulations.¹³⁴ The court held NCI failed to demonstrate that IDOT did not satisfy compliance with the federal regulations (49 CFR Part 26).¹³⁵ Accordingly, the Seventh Circuit Court of Appeals affirmed the district court’s decision upholding the validity of IDOT’s DBE program.¹³⁶

The recent 2015 and 2016 Seventh Circuit Court of Appeals decisions in *Dunnet Bay Construction Company v. Borggren, Illinois DOT, et al* and *Midwest Fence Corp. v. U. S. DOT, Federal Highway Administration, Illinois DOT* followed the ruling in *Northern Contracting* that a state DOT implementing the Federal DBE Program is insulated from a constitutional challenge absent a showing that the state exceeded its federal authority.¹³⁷ The court held the Illinois DOT DBE Program implementing the Federal DBE Program was valid, finding there was not sufficient evidence to show the Illinois DOT exceeded its authority under the federal regulations.¹³⁸ The court found Dunnet Bay had not established sufficient evidence that IDOT’s implementation of the Federal DBE Program constituted unlawful discrimination.¹³⁹ In addition, the court in *Midwest Fence* upheld the constitutionality of the Federal DBE Program, and upheld the Illinois DOT DBE Program and Illinois State Tollway Highway Authority DBE Program that did not involve federal funds under the Federal DBE Program.¹⁴⁰

¹³² 473 F.3d at 722.

¹³³ *Id.* at 722.

¹³⁴ *Id.* at 723-24.

¹³⁵ *Id.*

¹³⁶ *Id.*; See, e.g., *Midwest Fence*, 840 F.3d 932 (7th Cir. 2016); *Midwest Fence*, 84 F. Supp. 3d 705, 2015 WL 1396376 (N.D. Ill. 2015), *affirmed*, 840 F.3d 932 (7th Cir. 2016); *Geod Corp. v. New Jersey Transit Corp., et al.*, 746 F.Supp 2d 642 (D.N.J. 2010); *South Florida Chapter of the A.G.C. v. Broward County, Florida*, 544 F.Supp.2d 1336 (S.D. Fla. 2008).

¹³⁷ *Midwest Fence*, 840 F.3d 932 (7th Cir. 2016); *Dunnet Bay Construction Company v. Borggren, Illinois DOT, et al.*, 799 F. 3d 676, 2015 WL 4934560 at **18-22 (7th Cir. 2015).

¹³⁸ *Dunnet Bay*, 799 F.3d 676, 2015 WL 4934560 at **18-22.

¹³⁹ *Id.*

¹⁴⁰ 840 F.3d 932 (7th Cir. 2016).

To satisfy the narrowly tailored prong of the strict scrutiny analysis in the context of the Federal DBE Program, which is instructive to the study, the federal courts that have evaluated state and local DBE Programs and their implementation of the Federal DBE Program, held the following factors are pertinent:

- Evidence of discrimination or its effects in the state transportation contracting industry;
- Flexibility and duration of a race- or ethnicity-conscious remedy;
- Relationship of any numerical DBE goals to the relevant market;
- Effectiveness of alternative race- and ethnicity-neutral remedies;
- Impact of a race- or ethnicity-conscious remedy on third parties; and
- Application of any race- or ethnicity-conscious program to only those minority groups who have actually suffered discrimination.¹⁴¹

Race-, ethnicity-, and gender-neutral measures. To the extent a “strong basis in evidence” exists concerning discrimination in a local or state government’s relevant contracting and procurement market, the courts analyze several criteria or factors to determine whether a state’s implementation of a race- or ethnicity-conscious program is necessary and thus narrowly tailored to achieve remedying identified discrimination. One of the key factors discussed above is consideration of race-, ethnicity- and gender-neutral measures.

The courts require that a local or state government seriously consider race-, ethnicity- and gender-neutral efforts to remedy identified discrimination.¹⁴² And the courts have held unconstitutional those race- and ethnicity-conscious programs implemented without consideration of race- and ethnicity-neutral alternatives to increase minority business participation in state and local contracting.¹⁴³

The Court in *Croson* followed by decisions from federal courts of appeal found that local and state governments have at their disposal a “whole array of race-neutral devices to increase the accessibility of city contracting opportunities to small entrepreneurs of all races.”¹⁴⁴

¹⁴¹ See, e.g., *Midwest Fence*, 840 F.3d 932, 942, 953-954 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d at 1198-1199; *H. B. Rowe*, 615 F.3d 233, 243-245, 252-255; *Western States Paving*, 407 F.3d at 998; *Sherbrooke Turf*, 345 F.3d at 971; *Adarand VII*, 228 F.3d at 1181; *Kornhass Construction, Inc. v. State of Oklahoma, Department of Central Services*, 140 F.Supp.2d at 1247-1248; see also *Geyer Signal, Inc.*, 2014 WL 1309092.

¹⁴² See, e.g., *Midwest Fence*, 840 F.3d 932, 937-938, 953-954 (7th Cir. 2016); *AGC, SDC v. Caltrans*, 713 F.3d at 1199; *H. B. Rowe*, 615 F.3d 233, 252-255; *Western States Paving*, 407 F.3d at 993; *Sherbrooke Turf*, 345 F.3d at 972; *Adarand VII*, 228 F.3d at 1179; *Eng’g Contractors Ass’n*, 122 F.3d at 927; *Contractors Ass’n of E. Pa. v. City of Philadelphia (CAEP II)*, 91 F.3d at 608-609 (3d. Cir. 1996); *Contractors Ass’n (CAEP I)*, 6 F.3d at 1008-1009 (3d. Cir. 1993); *Coral Constr.*, 941 F.2d at 923.

¹⁴³ See, *Croson*, 488 U.S. at 507; *Drabik I*, 214 F.3d at 738 (citations and internal quotations omitted); see also, *Eng’g Contractors Ass’n*, 122 F.3d at 927; *Virdi*, 135 Fed. Appx. At 268; *Contractors Ass’n of E. Pa. v. City of Philadelphia (CAEP II)*, 91 F.3d at 608-609 (3d. Cir. 1996); *Contractors Ass’n (CAEP I)*, 6 F.3d at 1008-1009 (3d. Cir. 1993).

¹⁴⁴ *Croson*, 488 U.S. at 509-510.

Examples of race-, ethnicity-, and gender-neutral alternatives include, but are not limited to, the following:

- Providing assistance in overcoming bonding and financing obstacles;
- Relaxation of bonding requirements;
- Providing technical, managerial and financial assistance;
- Establishing programs to assist start-up firms;
- Simplification of bidding procedures;
- Training and financial aid for all disadvantaged entrepreneurs;
- Non-discrimination provisions in contracts and in state law;
- Mentor-protégé programs and mentoring;
- Efforts to address prompt payments to smaller businesses;
- Small contract solicitations to make contracts more accessible to smaller businesses;
- Expansion of advertisement of business opportunities;
- Outreach programs and efforts;
- “How to do business” seminars;
- Sponsoring networking sessions throughout the state acquaint small firms with large firms;
- Creation and distribution of MBE/WBE and DBE directories; and
- Streamlining and improving the accessibility of contracts to increase small business participation.¹⁴⁵

The courts have held that while the narrow tailoring analysis does not require a governmental entity to exhaust every possible race-, ethnicity-, and gender-neutral alternative, it does “require serious, good faith consideration of workable race-neutral alternatives.”¹⁴⁶

¹⁴⁵ See, e.g., *Croson*, 488 U.S. at 509-510; *H. B. Rowe*, 615 F.3d 233, 252-255; *N. Contracting*, 473 F.3d at 724; *Adarand VII*, 228 F.3d 1179; 49 CFR § 26.51(b); see also, *Eng’g Contractors Ass’n*, 122 F.3d at 927-29; *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d at 608-609 (3d. Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d at 1008-1009 (3d. Cir. 1993).

¹⁴⁶ *Parents Involved in Community Schools v. Seattle School District*, 551 U.S. 701, 732-47, 127 S.Ct 2738, 2760-61 (2007); *AGC, SDC v. Caltrans*, 713 F.3d at 1199, citing *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003); *H. B. Rowe*, 615 F.3d 233, 252-255; *Western States Paving*, 407 F.3d at 993; *Sherbrooke Turf*, 345 F.3d at 972; *Eng’g Contractors Ass’n*, 122 F.3d at 927.

Additional factors considered under narrow tailoring.

In addition to the required consideration of the necessity for the relief and the efficacy of alternative remedies (race- and ethnicity-neutral efforts), the courts require evaluation of additional factors as listed above.¹⁴⁷ For example, to be considered narrowly tailored, courts have held that a MBE/WBE- or DBE-type program should include: (1) built-in flexibility;¹⁴⁸ (2) good faith efforts provisions;¹⁴⁹ (3) waiver provisions;¹⁵⁰ (4) a rational basis for goals;¹⁵¹ (5) graduation provisions;¹⁵² (6) remedies only for groups for which there were findings of discrimination;¹⁵³ (7) sunset provisions;¹⁵⁴ and (8) limitation in its geographical scope to the boundaries of the enacting jurisdiction.¹⁵⁵

2. Intermediate scrutiny analysis

Certain Federal Courts of Appeal, including the Third Circuit Court of Appeals, apply intermediate scrutiny to gender-conscious programs.¹⁵⁶ The Third Circuit has applied “intermediate scrutiny” to classifications based on gender.¹⁵⁷ Restrictions subject to

¹⁴⁷ See *Midwest Fence*, 840 F.3d 932, 937-939, 947-954 (7th Cir. 2016); *H. B. Rowe*, 615 F.3d 233, 252-255; *Sherbrooke Turf*, 345 F.3d at 971-972; *Eng’g Contractors Ass’n*, 122 F.3d at 927; *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d at 608-609 (3d Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d at 1008-1009 (3d Cir. 1993).

¹⁴⁸ *Midwest Fence*, 840 F.3d 932, 937-939, 947-954 (7th Cir. 2016); *H. B. Rowe*, 615 F.3d 233, 253; *Sherbrooke Turf*, 345 F.3d at 971-972; *CAEPI*, 6 F.3d at 1009; *Associated Gen. Contractors of Ca., Inc. v. Coalition for Economic Equality* (“AGC of Ca.”), 950 F.2d 1401, 1417 (9th Cir. 1991); *Coral Constr. Co. v. King County*, 941 F.2d 910, 923 (9th Cir. 1991); *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 917 (11th Cir. 1990).

¹⁴⁹ *Midwest Fence*, 840 F.3d 932, 937-939, 947-954 (7th Cir. 2016); *H. B. Rowe*, 615 F.3d 233, 253; *Sherbrooke Turf*, 345 F.3d at 971-972; *CAEPI*, 6 F.3d at 1019; *Cone Corp.*, 908 F.2d at 917.

¹⁵⁰ *Midwest Fence*, 840 F.3d 932, 937-939, 947-954 (7th Cir. 2016); *H. B. Rowe*, 615 F.3d 233, 253; *CAEPI*, 6 F.3d at 1009; *AGC of Ca.*, 950 F.2d at 1417; *Cone Corp.*, 908 F.2d at 917; *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d at 606-608 (3d Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d at 1008-1009 (3d Cir. 1993).

¹⁵¹ *Id.*; *Sherbrooke Turf*, 345 F.3d at 971-973; *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d at 606-608 (3d Cir. 1996); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d at 1008-1009 (3d Cir. 1993).

¹⁵² *Id.*

¹⁵³ See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1198-1199; *H. B. Rowe*, 615 F.3d 233, 253-255; *Western States Paving*, 407 F.3d at 998; *AGC of Ca.*, 950 F.2d at 1417; *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 91 F.3d at 593-594, 605-609 (3d Cir. 1996); *Contractors Ass’n (CAEPI)*, 6 F.3d at 1009, 1012 (3d Cir. 1993); *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (W.D. Tex. 2016); *Sherbrooke Turf*, 2001 WL 150284 (unpublished opinion), *aff’d* 345 F.3d 964.

¹⁵⁴ See, e.g., *H. B. Rowe*, 615 F.3d 233, 254; *Sherbrooke Turf*, 345 F.3d at 971-972; *Peightal*, 26 F.3d at 1559; . see also, *Kossmann Contracting Co., Inc. v. City of Houston*, 2016 WL 1104363 (W.D. Tex. 2016).

¹⁵⁵ *Coral Constr.*, 941 F.2d at 925.

¹⁵⁶ *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d at 1009-1011 (3d Cir. 1993); see, *H. B. Rowe Co., Inc. v. NCDOT*, 615 F.3d 233, 242 (4th Cir. 2010); See generally, *AGC, SDC v. Caltrans*, 713 F.3d at 1195; *Western States Paving*, 407 F.3d at 990 n. 6; *Coral Constr. Co.*, 941 F.2d at 931-932 (9th Cir. 1991); *Equal Found. v. City of Cincinnati*, 128 F.3d 289 (6th Cir. 1997); *Eng’g Contractors Ass’n*, 122 F.3d at 905, 908, 910; *Ensley Branch N.A.A.C.P. v. Seibels*, 31 F.3d 1548 (11th Cir. 1994); *Associated Utility Contractors of Maryland, Inc. v. The Mayor and City Council of Baltimore, et al.*, 83 F. Supp. 2d 613, 619-620 (2000); see also *U.S. v. Virginia*, 518 U.S. 515, 532 and n. 6 (1996) (“exceedingly persuasive justification.”); *Geyer Signal*, 2014 WL 1309092.

¹⁵⁷ *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d at 1009-1011 (3d Cir. 1993); see, *H. B. Rowe Co., Inc. v. NCDOT*, 615 F.3d 233, 242 (4th Cir. 2010); see, e.g., *Cunningham v. Beavers*, 858 F.2d 269, 273 (5th Cir. 1988), *cert. denied*, 489 U.S. 1067 (1989) (citing *Craig v. Boren*, 429 U.S. 190 (1976), and *Lalli v. Lalli*, 439 U.S. 259(1978)); *Associated Utility Contractors of Maryland, Inc. v. The Mayor and City Council of Baltimore, et al.*, 83 F. Supp. 2d 613, 619-620 (2000).

intermediate scrutiny are permissible so long as they are substantially related to serve an important governmental interest.¹⁵⁸

The courts have interpreted this intermediate scrutiny standard to require that gender-based classifications be:

1. Supported by both “sufficient probative” evidence or “exceedingly persuasive justification” in support of the stated rationale for the program; and
2. Substantially related to the achievement of that underlying objective.¹⁵⁹

Under the traditional intermediate scrutiny standard, the court reviews a gender-conscious program by analyzing whether the state actor has established a sufficient factual predicate for the claim that female-owned businesses have suffered discrimination, and whether the gender-conscious remedy is an appropriate response to such discrimination. This standard requires the state actor to present “sufficient probative” evidence in support of its stated rationale for the program.¹⁶⁰

Intermediate scrutiny, as interpreted by federal circuit courts of appeal, requires a direct, substantial relationship between the objective of the gender preference and the means chosen to accomplish the objective.¹⁶¹ The measure of evidence required to satisfy intermediate scrutiny is less than that necessary to satisfy strict scrutiny. Unlike strict scrutiny, it has been held that the intermediate scrutiny standard does not require a showing of government involvement, active or passive, in the discrimination it seeks to remedy.¹⁶²

The Eleventh Circuit has held “[w]hen a gender-conscious affirmative action program rests on sufficient evidentiary foundation, the government is not required to implement the program

¹⁵⁸ *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d at 1009-1011 (3d Cir. 1993); *H. B. Rowe Co., Inc. v. NCDOT*, 615 F.3d 233, 242 (4th Cir. 2010); see, e.g., *Serv. Emp. Int’l Union, Local 5 v. City of Hous.*, 595 F.3d 588, 596 (5th Cir. 2010); *Associated Utility Contractors of Maryland, Inc. v. The Mayor and City Council of Baltimore, et al.*, 83 F. Supp. 2d 613, 619-620 (2000).

¹⁵⁹ See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1195; *H. B. Rowe Co., Inc. v. NCDOT*, 615 F.3d 233, 242 (4th Cir. 2010); *Western States Paving*, 407 F.3d at 990 n. 6; *Coral Constr. Co.*, 941 F.2d at 931-932 (9th Cir. 1991); *Equal Found. v. City of Cincinnati*, 128 F.3d 289 (6th Cir. 1997); *Eng’g Contractors Ass’n*, 122 F.3d at 905, 908, 910; *Ensley Branch N.A.A.C.P. v. Seibels*, 31 F.3d 1548 (11th Cir. 1994); *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d at 1009-1011 (3d Cir. 1993); *Associated Utility Contractors of Maryland, Inc. v. The Mayor and City Council of Baltimore, et al.*, 83 F. Supp. 2d 613, 619-620 (2000); see also *U.S. v. Virginia*, 518 U.S. 515, 532 and n. 6 (1996) (“exceedingly persuasive justification.”).

¹⁶⁰ *Id.* The Seventh Circuit Court of Appeals, however, in *Builders Ass’n of Greater Chicago v. County of Cook, Chicago*, did not hold there is a different level of scrutiny for gender discrimination or gender based programs. 256 F.3d 642, 644-45 (7th Cir. 2001). The Court in *Builders Ass’n* rejected the distinction applied by the Eleventh Circuit in *Engineering Contractors*.

¹⁶¹ See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1195; *H. B. Rowe, Inc. v. NCDOT*, 615 F.3d 233, 242 (4th Cir. 2010); *Western States Paving*, 407 F.3d at 990 n. 6; *Coral Constr. Co.*, 941 F.2d at 931-932 (9th Cir. 1991); *Equal Found. v. City of Cincinnati*, 128 F.3d 289 (6th Cir. 1997); *Eng’g Contractors Ass’n*, 122 F.3d at 905, 908, 910; *Ensley Branch N.A.A.C.P. v. Seibels*, 31 F.3d 1548 (11th Cir. 1994); *Assoc. Utility Contractors of Maryland, Inc. v. The Mayor and City Council of Baltimore, et al.*, 83 F. Supp. 2d 613, 619-620 (2000); see also, *U.S. v. Virginia*, 518 U.S. 515, 532 and n. 6 (1996) (“exceedingly persuasive justification.”)

¹⁶² *Coral Constr. Co.*, 941 F.2d at 931-932; See *Eng’g Contractors Ass’n*, 122 F.3d at 910.

only as a last resort Additionally, under intermediate scrutiny, a gender-conscious program need not closely tie its numerical goals to the proportion of qualified women in the market.”¹⁶³

The Supreme Court has stated that an affirmative action program survives intermediate scrutiny if the proponent can show it was “a product of analysis rather than a stereotyped reaction based on habit.”¹⁶⁴ The Third Circuit found this standard required the City of Philadelphia to present probative evidence in support of its stated rationale for the gender preference, discrimination against women-owned contractors.¹⁶⁵ The Court in *Contractors Ass’n of E. Pa. (CAEP I)* held the City had not produced enough evidence of discrimination, noting that in its brief, the City relied on statistics in the City Council Finance Committee Report and one affidavit from a woman engaged in the catering business, but the Court found this evidence only reflected the participation of women in City contracting generally, rather than in the construction industry, which was the only cognizable issue in that case.¹⁶⁶

The Third Circuit in *CAEP I* held the evidence offered by the City of Philadelphia regarding women-owned construction businesses was insufficient to create an issue of fact. The study in *CAEP I* contained no disparity index for women-owned construction businesses in City contracting, such as that presented for minority-owned businesses.¹⁶⁷ Given the absence of probative statistical evidence, the City, according to the Court, must rely solely on anecdotal evidence to establish gender discrimination necessary to support the Ordinance.¹⁶⁸ But the record contained only one three-page affidavit alleging gender discrimination in the construction industry.¹⁶⁹ The only other testimony on this subject, the Court found in *CAEP I*, consisted of a single, conclusory sentence of one witness who appeared at a City Council hearing.¹⁷⁰ This evidence the Court held was not enough to create a triable issue of fact regarding gender discrimination under the intermediate scrutiny standard.

Therefore, the Court in *CAEP I* affirmed the grant of summary judgment invalidating the gender preference for construction contracts.¹⁷¹ The Third Circuit noted that it saw no impediment to the City re-enacting the gender preference if it could provide probative evidence of discrimination.¹⁷²

¹⁶³ 122 F.3d at 929 (internal citations omitted); see, *H. B. Rowe*, 615 F.3d 233, 242 (4th Cir. 2010).

¹⁶⁴ *Contractors Ass’n of E. Pa. (CAEP I)*, 6 F.3d at 1010 (3d. Cir. 1993).

¹⁶⁵ *Contractors Ass’n of E. Pa. (CAEP I)*, 6 F.3d at 1010 (3d. Cir. 1993).

¹⁶⁶ *Contractors Ass’n of E. Pa. (CAEP I)*, 6 F.3d at 1011 (3d. Cir. 1993).

¹⁶⁷ *Contractors Ass’n of E. Pa. (CAEP I)*, 6 F.3d at 1011 (3d. Cir. 1993).

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² *Id.*

3. Rational basis analysis

Where a challenge to the constitutionality of a statute or a regulation does not involve a fundamental right or a suspect class, the appropriate level of scrutiny to apply is the rational basis standard.¹⁷³ When applying rational basis review under the Equal Protection Clause of the Fourteenth Amendment of the United States Constitution, a court is required to inquire “whether the challenged classification has a legitimate purpose and whether it was reasonable [for the legislature] to believe that use of the challenged classification would promote that purpose.”¹⁷⁴

The Third Circuit in *Contractors Ass’n of E. Pa. (CAEP I)* addressed the City’s two-percent preference for businesses owned by “handicapped” persons.¹⁷⁵ The district court struck down this preference under the rational basis test, based on the belief, according to the Third Circuit, that *Crososon* required some evidence of discrimination against business enterprises owned by “handicapped” persons, and therefore that the City could not rely on testimony of discrimination against “handicapped” individuals.¹⁷⁶ The Court in *CAEP I* stated, however, that a classification will pass the rational basis test if it is “rationally related to a legitimate government purpose.”¹⁷⁷

The Third Circuit noted that the Supreme Court affirmed the permissiveness of this test in *Heller v. Doe*, indicating that “a [statutory] classification” subject to rational basis review “is accorded a strong presumption of validity,” and that “a state ... has no obligation to produce evidence to sustain the rationality of [the] classification.”¹⁷⁸ Moreover, “the burden is on the one attacking the legislative arrangement to negative every conceivable basis which might support it, whether or not the basis has a foundation in the record.”¹⁷⁹

The City of Philadelphia in *CAEP I* stated it sought to minimize discrimination against businesses owned by “handicapped” persons and encourage them to seek City contracts. The Court in *CAEP I* agreed with the district court that these were legitimate goals, but unlike the district court, the Third Circuit held the two-percent preference was rationally related to this goal.¹⁸⁰

Moreover, “courts are compelled under rational-basis review to accept a legislature’s generalizations even when there is an imperfect fit between means and ends. A classification

¹⁷³ *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d at 1011 (3d. Cir. 1993); see, e.g., *Heller v. Doe*, 509 U.S. 312, 320 (1993); *Hettinga v. United States*, 677 F.3d 471, 478 (D.C. Cir 2012); *Cunningham v. Beavers* 858 F.2d 269, 273 (5th Cir. 1988); see also *Lundeen v. Canadian Pac. R. Co.*, 532 F.3d 682, 689 (8th Cir. 2008) (stating that federal courts review legislation regulating economic and business affairs under a ‘highly deferential rational basis’ standard of review.”); *H. B. Rowe, Inc. v. NCDOT*, 615 F.3d 233 at 254.

¹⁷⁴ *Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d at 1011 (3d. Cir. 1993); see, e.g., *Heller v. Doe*, 509 U.S. 312, 320 (1993); *Hettinga v. United States*, 677 F.3d 471, 478 (D.C. Cir 2012); *Cunningham v. Beavers* 858 F.2d 269, 273 (5th Cir. 1988).

¹⁷⁵ 6 F.3d *Id.* at 1011 (3d. Cir. 1993).

¹⁷⁶ *Id.*, citing 735 F.Supp. at 1308.

¹⁷⁷ *Id.*, citing, *Cleburne*, 473 U.S. at 440.

¹⁷⁸ 6 F.3d at 1011, citing, 509 U.S. 312–43 (1993)

¹⁷⁹ *Id.* at 1011; see, e.g., *United States v. Timms*, 664 F.3d 436, 448-49 (4th Cir. 2012), *cert. denied*, 133 S. Ct. 189 (2012) (citing *Heller v. Doe*, 509 U.S. 312, 320-21 (1993) (quotation marks and citation omitted).

¹⁸⁰ 6 F.3d at 1011.

does not fail rational-basis review because it is not made with mathematical nicety or because in practice it results in some inequality”.¹⁸¹

Under a rational basis review standard, a legislative classification will be upheld “if there is a rational relationship between the disparity of treatment and some legitimate governmental purpose.”¹⁸² Because all legislation classifies its objects, differential treatment is justified by “any reasonably conceivable state of facts.”¹⁸³

A federal court decision, which is instructive to the study, involved a challenge to and the application of a small business goal in a pre-bid process for a federal procurement. *Firstline Transportation Security, Inc. v. United States*, is instructive and analogous to some of the issues in a small business program, or a program providing preferences not based on race, gender or ethnicity. The case is informative as to the use, estimation and determination of goals (small business goals) in a procurement under the Federal Acquisition Regulations (“FAR”).¹⁸⁴

Firstline involved a solicitation that established a small business subcontracting goal requirement. In *Firstline*, the Transportation Security Administration (“TSA”) issued a solicitation for security screening services at the Kansas City Airport. The solicitation stated that the: “Government anticipates an overall Small Business goal of 40 percent,” and that “[w]ithin that goal, the government anticipates further small business goals of: Small, Disadvantaged business[:] 14.5%; Woman Owned[:] 5 percent; HUBZone[:] 3 percent; Service Disabled, Veteran Owned[:] 3 percent.”¹⁸⁵

The court applied the rational basis test in construing the challenge to the establishment by the TSA of a 40 percent small business participation goal as unlawful and irrational.¹⁸⁶ The court stated it “cannot say that the agency’s approach is clearly unlawful, or that the approach lacks a rational basis.”¹⁸⁷

The court found that “an agency may rationally establish aspirational small business subcontracting goals for prospective offerors....” Consequently, the court held one rational method by which the Government may attempt to maximize small business participation is to establish a rough subcontracting goal for a given contract, and then allow potential contractors to compete in designing innovative ways to structure and maximize small business subcontracting within their proposals.¹⁸⁸ The court, in an exercise of judicial restraint, found the “40 percent

¹⁸¹ *Heller v. Doe*, 509 U.S. 312, 321 (1993).

¹⁸² *Heller v. Doe*, 509 U.S. 312, 320 (1993); see, e.g., *Hettinga v. United States*, 677 F.3d 471, 478 (D.C. Cir 2012).

¹⁸³ *Id.*

¹⁸⁴ 2012 WL 5939228 (Fed. Cl. 2012).

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

¹⁸⁷ *Id.*

¹⁸⁸ *Id.*

goal is a rational expression of the Government’s policy of affording small business concerns...the maximum practicable opportunity to participate as subcontractors....”¹⁸⁹

4. Pending cases (at the time of this report)

There are no significant pending cases on appeal at the time of this report, which may potentially directly impact and be instructive to the study. The most recent case, cited below, was just settled and voluntarily dismissed on March 14, 2018 by order of the district court and stipulated to by the parties, after remand from the Ninth Circuit Court of Appeals.

Mountain West Holding Co., Inc. v. Montana, 2017 WL 2179120 (9th Cir. May 16, 2017), Memorandum Opinion (Not For Publication), U.S. Court of Appeals for the Ninth Circuit, May 16, 2017, Docket Nos. 14-26097 and 15-35003, dismissing in part, reversing in part and remanding the U.S. District Court decision at 2014 WL 6686734 (D. Mont. 2014). *Petition for Panel Rehearing and Rehearing En Banc* filed with the U.S. Court of Appeals for the Ninth Circuit by Montana DOT, May 30, 2017, *denied* on June 27, 2017. The case on remand was voluntarily dismissed by stipulation of the parties after the parties entered into a Settlement Agreement (February 23, 2018). The case was ordered dismissed by the district court on March 14, 2018 after the parties performed the Settlement Agreement. (See Section F below.)

United States v. Taylor, 232 F. Supp. 3d 741 (W.D. Penn. 2017). It is instructive to the study to note the recent decision by the federal District Court for the Western District of Pennsylvania in *United States v. Taylor*, 232 F. Supp. 3d 741 (W. D. Penn. 2017) (See Section D. 3 below). The court upheld the Indictment by the United States against Defendant Taylor who had been indicted on multiple counts arising out of a scheme to defraud the United States Department of Transportation’s Disadvantaged Business Enterprise Program (“Federal DBE Program”). *United States v. Taylor*, 232 F.Supp. 3d 741, 743 (W.D. Penn. 2017). The court in denying the motion to dismiss the Indictment upheld the federal DBE regulations in issue against a challenge to the Federal DBE Program.

The court rejected a challenge to the authority of the U.S. DOT to promulgate the federal DBE regulations claiming the U.S. DOT exceeded its authority. 232 F.Supp. at 757. The court found that the legislative history and executive rulemaking with respect to the relevant statutory provisions and regulations were sufficient to demonstrate that the federal DBE regulations were made under the broad grant of rights authorized by Congressional statutes. *Id.* at 757, *citing*, 49 U.S.C. Section 322, 23 U.S.C. Section 304, and 23 U.S.C. Section 315.

In addition, the court in *Taylor*, pointed out that the Federal DBE Program has been upheld in various contexts, “even surviving strict scrutiny,” with multiple courts holding that the DBE Program is narrowly tailored to further compelling governmental interests. *Id.* at 757, *citing*, *Midwest Fence Corp.*, 840 F.3d at 942 (*citing Western States Paving Co. v. Washington State Dep’t of Transportation*, 407 F.3d 983, 993 (9th Cir. 2005); *Sherbrooke Turf, Inc. v. Minnesota Dep’t of Transportation*, 345 F.3d 964, 973 (8th Cir. 2003); *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1155 (10th Cir. 2000)).

¹⁸⁹ *Id.*

After the court denied Defendant Taylor's motion to dismiss the Indictment, the Defendant subsequently pleaded guilty. Recently on March 13, 2018, the court issued the final Judgment sentencing the Defendant, and ordered restitution and a fine. The case also was terminated on March 13, 2018. See Section D. 3 below.

Rothe Development, Inc. v. U. S. D.O.D. and S.B.A., 2016 WL 4719049 (D.C. Cir. 2016). Also, it is instructive to the study to point out the recent decision in *Rothe Development, Inc. v. U.S. Department of Defense and Small Business Administration*, 2016 WL 4719049 (D.C. Cir. Sept. 9, 2016), *affirming on other grounds, Rothe Development, Inc. v. United States Department of Defense, U.S. Small Business Administration, et al*, 107 F. Supp. 3d 183, 2015 WL 3536271 (D.D.C., 2015), *certiorari denied* in 2017.

Rothe filed this action against the U.S. Department of Defense and the U.S. Small Business Administration challenging the constitutionality of the Section 8(a) Program on its face. The *Rothe* case is nearly identical to the challenge brought in *DynaLantic Corp. v. U.S. Department of Defense*, 885 F.Supp.2d 237 (D.D.C. 2012). *DynaLantic's* court rejected the plaintiff's facial attack and held the Section 8(a) Program facially constitutional.

Plaintiff Rothe relies on substantially the same record evidence and nearly identical legal arguments as in *DynaLantic*, and urged the court to strike down the race-conscious provisions of Section 8(a) on their face. The district court in *Rothe* agreed with the court's findings, holdings and reasoning in *DynaLantic*, and thus concluded that Section 8(a) is constitutional on its face.

The district court concluded that plaintiff's facial constitutional challenge to the Section 8(a) Program failed, that the government demonstrated a compelling interest for the racial classification, the need for remedial action is supported by strong and un rebutted evidence, and the Section 8(a) program is narrowly tailored.

Rothe appealed the decision to the United States Court of Appeals for the District of Columbia Circuit. The majority of the three judge panel affirmed the district court's decision, but on other grounds.¹⁹⁰

The Court of Appeals in *Rothe* found that the challenge was only to the Section 8(a) statute, not the implementing regulations, and thus held the Section 8(a) statute was race-neutral.¹⁹¹ Therefore, the court held the rational basis test applied and not strict scrutiny.¹⁹² The court affirmed the grant of summary judgment to the government defendants applying the rational basis standard, and upheld the validity of Section 8(a) based on the limited challenge by Rothe to the statute and not the regulations.

The Court of Appeals held that Section 8(a) of the Small Business Act does not warrant strict scrutiny because it does not on its face classify individuals by race.¹⁹³ Section 8(a), the Court said,

¹⁹⁰ 2016 WL 4719049 (September 9, 2016).

¹⁹¹ 2016 WL4719049, at *1-2.

¹⁹² *Id.*

¹⁹³ 2016 WL 4719049 at **1-2.

unlike the implementing regulations, uses facially race-neutral terms of eligibility to identify individual victims of discrimination, prejudice, or bias, without presuming that members of certain racial, ethnic, or cultural groups qualify as such.¹⁹⁴ See Section G below.

Rothe filed a Petition for Rehearing and Rehearing En Banc to the full Court of Appeals. The court denied the Petition. Rothe then filed a Petition for a Writ of Certiorari to the U.S. Supreme Court, which was denied on October 16, 2017. 2017 WL 1375832.

Ongoing review. The above represents a summary of the legal framework pertinent to the study and implementation of DBE/MBE/WBE, or race-, ethnicity-, or gender-neutral programs, the Federal DBE Program, and the implementation of the Federal DBE Program by state DOTs and local government recipients of federal funds. Because this is a dynamic area of the law, the framework is subject to ongoing review as the law continues to evolve. The following provides more detailed summaries of key recent decisions.

¹⁹⁴ *Id.*

SUMMARIES OF RECENT DECISIONS

D. Recent Decisions Involving State or Local Government MBE/WBE/DBE Programs in the Third Circuit Court of Appeals

1. Contractors Association of Eastern Pennsylvania, Inc., et. al. v. City of Philadelphia, et. al., 91 F. 3d 586 (3d Cir. 1996).

The City of Philadelphia (City) and intervening defendant United Minority Enterprise Associates (UMEA) appealed from the district court's judgment declaring that the City's DBE/MBE/WBE program for black construction contractors, violated the Equal Protection rights of the Contractors Association of Eastern Pennsylvania (CAEP) and eight other contracting associations (Contractors). The Third Circuit affirmed the district court that the Ordinance was not narrowly tailored to serve a compelling state interest. 91 F. 3d 586, 591 (3d Cir. 1996), *affirming*, *Contractors Ass'n of Eastern Pa. v. City of Philadelphia*, 893 F.Supp. 419 (E.D.Pa.1995).

The Ordinance. The City's Ordinance sought to increase the participation of "disadvantaged business enterprises" (DBEs) in City contracting. *Id.* at 591. DBEs are businesses defined as those at least 51% owned by "socially and economically disadvantaged" persons. "Socially and economically disadvantaged" persons are, in turn, defined as "individuals who have ... been subjected to racial, sexual or ethnic prejudice because of their identity as a member of a group or differential treatment because of their handicap without regard to their individual qualities, and whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same business area who are not socially disadvantaged. *Id.* The Third Circuit found in *Contractors Ass'n of Eastern Pa. v. City of Philadelphia*, 6 F.3d 990, 999 (3d Cir.1993) (*Contractors II*), this definition "includes only individuals who are both victims of prejudice based on status and economically deprived." Businesses majority-owned by racial minorities (minority business enterprises or MBEs) and women are rebuttably presumed to be DBEs, but businesses that would otherwise qualify as DBEs are rebuttably presumed not to be DBEs if they have received more than \$5 million in City contracts. *Id.* at 591-592.

The Ordinance set participation "goals" for different categories of DBEs: racial minorities (15%), women (10%) and handicapped (2%). *Id.* at 592. These percentage goals were percentages of the total dollar amount spent by the City in each of the three contract categories: vending contracts, construction contracts, and personal and professional service contracts. Dollars received by DBE *subcontractors* in connection with City financed prime contracts are counted towards the goals as well as dollars received by DBE *prime* contractors. *Id.*

Two different strategies were authorized. When there were sufficient DBEs qualified to perform a City contract to ensure competitive bidding, a contract could be let on a sheltered market basis—i.e., only DBEs will be permitted to bid. In other instances, the contract would be let on a non-sheltered basis—i.e., any firm may bid—with the goals requirements being met through subcontracting. *Id.* at 592 The sheltered market strategy saw little use. It was attempted on a trial basis, but there were too few DBEs in any given area of expertise to ensure reasonable prices, and the program was abandoned. *Id.* Evidence submitted by the City indicated that no

construction contract was let on a sheltered market basis from 1988 to 1990, and there was no evidence that the City had since pursued that approach. *Id.* Consequently, the Ordinance's participation goals were achieved almost entirely by requiring that prime contractors subcontract work to DBEs in accordance with the goals. *Id.*

The Court stated that the significance of complying with the goals is determined by a series of presumptions. *Id.* at 593. Where at least one bidding contractor submitted a satisfactory Schedule for Participation, it was presumed that all contractors who did not submit a satisfactory Schedule did not exert good faith efforts to meet the program goals, and the "lowest responsible, responsive contractor" received the contract. *Id.* Where none of the bidders submitted a satisfactory Schedule, it was presumed that all but the bidder who proposed "the highest goals" of DBE participation at a "reasonable price" did not exert good faith efforts, and the contract was awarded to the "lowest, responsible, responsive contractor" who was granted a Waiver and proposed the highest level of DBE participation at a reasonable price. *Id.* Non-complying bidders in either situation must rebut the presumption in order to secure a waiver.

Procedural History. This appeal is the third appeal to consider this challenge to the Ordinance. On the first appeal, the Third Circuit affirmed the district court's ruling that the Contractors had standing to challenge the set-aside program, but reversed the grant of summary judgment in their favor because UMEA had not been afforded a fair opportunity to develop the record. *Id.* at 593 citing, *Contractors Ass'n of Eastern Pa. v. City of Philadelphia*, 945 F.2d 1260 (3d Cir.1991) (*Contractors I*).

On the second appeal, the Third Circuit reviewed a second grant of summary judgment for the Contractors. *Id.*, citing, *Contractors II*, 6 F.3d 990. The Court in that appeal concluded that the Contractors had standing to challenge the program only as it applied to the award of construction contracts, and held that the pre-enactment evidence available to the City Council in 1982 did "not provide a sufficient evidentiary basis" for a conclusion that there had been discrimination against women and minorities in the construction industry. *Id.* citing, 6 F.3d at 1003. The Court further held, however, that evidence of discrimination obtained after 1982 could be considered in determining whether there was a sufficient evidentiary basis for the Ordinance. *Id.*

In the second appeal, 6 F.3d 990 (3d. Cir. 1993), after evaluating both the pre-enactment and post-enactment evidence in the summary judgment record, the Court affirmed the grant of summary judgment insofar as it declared to be unconstitutional those portions of the program requiring set-asides for women and non-black minority contractors. *Id.* at 594. The Court also held that the two percent set-aside for the handicapped passed rational basis review and ordered the court to enter summary judgment for the City with respect to that portion of the program. *Id.* In addition, the Court concluded that the portions of the program requiring a set-aside for black contractors could stand only if they met the "strict scrutiny" standard of Equal Protection review and that the record reflected a genuine issue of material fact as to whether they were narrowly tailored to serve a compelling interest of the City as required under that standard. *Id.*

This third appeal followed a nine-day bench trial and a resolution by the district court of the issues thus presented. That trial and this appeal thus concerned only the constitutionality of the Ordinance's preferences for black contractors. *Id.*

Trial. At trial, the City presented a study done in 1992 after the filing of this suit, which was reflected in two pretrial affidavits by the expert study consultant and his trial testimony. *Id.* at 594. The core of his analysis concerning discrimination by the City centered on disparity indices prepared using data from fiscal years 1979–81. The disparity indices were calculated by dividing the percentage of all City construction dollars received by black construction firms by their percentage representation among all area construction firms, multiplied by 100.

The consultant testified that the disparity index for black construction firms in the Philadelphia metropolitan area for the period studied was about 22.5. According to the consultant, the smaller the resulting figure was, the greater the inference of discrimination, and he believed that 22.5 was a disparity attributable to discrimination. *Id.* at 595. A number of witnesses testified to discrimination in City contracting before the City Council, prior to the enactment of the Ordinance, and the consultant testified that his statistical evidence was corroborated by their testimony. *Id.* at 595.

Based on information provided in an affidavit by a former City employee (John Macklin), the study consultant also concluded that black representation in contractor associations was disproportionately low in 1981 and that between 1979 and 1981 black firms had received no subcontracts on City-financed construction projects. *Id.* at 595. The City also offered evidence concerning two programs instituted by others prior to 1982 which were intended to remedy the effects of discrimination in the construction industry but which, according to the City, had been unsuccessful. *Id.* The first was the Philadelphia Plan, a program initiated in the late 1960s to increase the hiring of minorities on public construction sites.

The second program was a series of programs implemented by the Philadelphia Urban Coalition, a non-profit organization (Urban Coalition programs). These programs were established around 1970, and offered loans, loan guarantees, bonding assistance, training, and various forms of non-financial assistance concerning the management of a construction firm and the procurement of public contracts. *Id.* According to testimony from a former City Council member and others, neither program succeeded in eradicating the effects of discrimination. *Id.*

The City pointed to the waiver and exemption sections of the Ordinance as proof that there was adequate flexibility in its program. The City contended that its fifteen percent goal was appropriate. The City maintained that the goal of fifteen percent may be required to account for waivers and exemptions allowed by the City, was a flexible goal rather than a rigid quota in light of the waivers and exemptions allowed by the Ordinance, and was justified in light of the discrimination in the construction industry. *Id.* at 595.

The Contractors presented testimony from an expert witness challenging the validity and reliability of the study and its conclusions, including, *inter alia*, the data used, the assumptions underlying the study, and the failure to include federally-funded contracts let through the City Procurement Department. *Id.* at 595. The Contractors relied heavily on the legislative history of the Ordinance, pointing out that it reflected no identification of any specific discrimination

against black contractors and no data from which a Council person could find that specific discrimination against black contractors existed or that it was an appropriate remedy for any such discrimination. *Id.* at 595 They pointed as well to the absence of any consideration of race-neutral alternatives by the City Council prior to enacting the Ordinance. *Id.* at 596.

On cross-examination, the Contractors elicited testimony that indicated that the Urban Coalition programs were relatively successful, which the Court stated undermined the contention that race-based preferences were needed. *Id.* The Contractors argued that the fifteen percent figure must have been simply picked from the air and had no relationship to any legitimate remedial goal because the City Council had no evidence of identified discrimination before it. *Id.*

At the conclusion of the trial, the district court made findings of fact and conclusions of law. It determined that the record reflected no “strong basis in evidence” for a conclusion that discrimination against black contractors was practiced by the City, non-minority prime contractors, or contractors associations during any relevant period. *Id.* at 596 *citing*, 893 F.Supp. at 447. The court also determined that the Ordinance was “not ‘narrowly tailored’ to even the perceived objective declared by City Council as the reason for the Ordinance.” *Id.* at 596, *citing*, 893 F. Supp. at 441.

Burden of Persuasion. The Court held affirmative action programs, when challenged, must be subjected to “strict scrutiny” review. *Id.* at 596. Accordingly, a program can withstand a challenge only if it is narrowly tailored to serve a compelling state interest. The municipality has a compelling state interest that can justify race-based preferences only when it has acted to remedy identified present or past discrimination in which it engaged or was a “passive participant;” race-based preferences cannot be justified by reference to past “societal” discrimination in which the municipality played no material role. *Id.* Moreover, the Court found the remedy must be tailored to the discrimination identified. *Id.*

The Court said that a municipality must justify its conclusions regarding discrimination in connection with the award of its construction contracts and the necessity for a remedy of the scope chosen. *Id.* at 597. While this does not mean the municipality must convince a court of the accuracy of its conclusions, the Court stated that it does mean the program cannot be sustained unless there is a strong basis in evidence for those conclusions. *Id.* The party challenging the race-based preferences can succeed by showing either (1) the subjective intent of the legislative body was not to remedy race discrimination in which the municipality played a role, or (2) there is no “strong basis in evidence” for the conclusions that race-based discrimination existed and that the remedy chosen was necessary. *Id.*

The Third Circuit noted it and other courts have concluded that when the race-based classifications of an affirmative action plan are challenged, the proponents of the plan have the burden of coming forward with evidence providing a firm basis for inferring that the legislatively identified discrimination in fact exists or existed and that the race-based classifications are necessary to remedy the effects of the identified discrimination. *Id.* at 597. Once the proponents of the program meet this burden of production, the opponents of the program must be permitted to attack the tendered evidence and offer evidence of their own tending to show that the identified discrimination did or does not exist and/or that the means chosen as a remedy do not “fit” the identified discrimination. *Id.*

Ultimately, however, the Court found that plaintiffs challenging the program retain the burden of persuading the district court that a violation of the Equal Protection Clause has occurred. *Id.* at 597. This means that the plaintiffs bear the burden of persuading the court that the race-based preferences were not intended to serve the identified compelling interest or that there is no strong basis in the evidence as a whole for the conclusions the municipality needed to have reached with respect to the identified discrimination and the necessity of the remedy chosen. *Id.*

The Court explained the significance of the allocation of the burden of persuasion differs depending on the theory of constitutional invalidity that is being considered. If the theory is that the race-based preferences were adopted by the municipality with an intent unrelated to remedying its past discrimination, the plaintiff has the burden of convincing the court that the identified remedial motivation is a pretext and that the real motivation was something else. *Id.* at 597. As noted in *Contractors II*, the Third Circuit held the burden of persuasion here is analogous to the burden of persuasion in Title VII cases. *Id.* at 598, *citing*, 6 F.3d at 1006. The ultimate issue under this theory is one of fact, and the burden of persuasion on that ultimate issue can be very important. *Id.*

The Court said the situation is different when the plaintiff's theory of constitutional invalidity is that, although the municipality may have been thinking of past discrimination and a remedy therefor, its conclusions with respect to the existence of discrimination and the necessity of the remedy chosen have no strong basis in evidence. In such a situation, when the municipality comes forward with evidence of facts alleged to justify its conclusions, the Court found that the plaintiff has the burden of persuading the court that those facts are not accurate. *Id.* The ultimate issue as to whether a strong basis in evidence exists is an issue of law, however. The burden of persuasion in the traditional sense plays no role in the court's resolution of that ultimate issue. *Id.*

The Court held the district court's opinion explicitly demonstrates its recognition that the plaintiffs bore the burden of persuading it that an equal protection violation occurred. *Id.* at 598. The Court found the district court applied the appropriate burdens of production and persuasion, conducted the required evaluation of the evidence, examined the credited record evidence as a whole, and concluded that the "strong basis in evidence" for the City's position did not exist. *Id.*

Three forms of discrimination advanced by the City. The Court pointed out that several distinct forms of racial discrimination were advanced by the City as establishing a pattern of discrimination against minority contractors. The first was discrimination by prime contractors in the awarding of subcontracts. The second was discrimination by contractor associations in admitting members. The third was discrimination by the City in the awarding of prime contracts. The City and UMEA argued that the City may have "passively participated" in the first two forms of discrimination. *Id.* at 599.

A. The evidence of discrimination by private prime contractors. One of the City's theories is that discrimination by prime contractors in the selection of subcontractors existed and may be remedied by the City. The Court noted that as Justice O'Connor observed in *Croson*: if the city could show that it had essentially become a "passive participant" in a system of racial exclusion practiced by elements of the local construction industry, ... the city could take affirmative steps to

dismantle such a system. It is beyond dispute that any public entity ... has a compelling government interest in assuring that public dollars ... do not serve to finance the evil of private prejudice. *Id.* at 599, *citing*, 488 U.S. at 492.

The Court found the disparity study focused on just one aspect of the Philadelphia construction industry—the award of prime contracts by the City. *Id.* at 600. The City’s expert consultant acknowledged that the only information he had about subcontracting came from an affidavit of one person, John Macklin, supplied to him in the course of his study. As he stated on cross-examination, “I have made no presentation to the Court as to participation by black minorities or blacks in subcontracting.” *Id.* at 600. The only record evidence with respect to black participation in the subcontracting market comes from Mr. Macklin who was a member of the MBEC staff and a proponent of the Ordinance. *Id.* Based on a review of City records, found by the district court to be “cursory,” Mr. Macklin reported that not a single subcontract was awarded to minority subcontractors in connection with City-financed construction contracts during fiscal years 1979 through 1981. The district court did not credit this assertion. *Id.*

Prior to 1982, for solely City-financed projects, the City did not require subcontractors to prequalify, did not keep consolidated records of the subcontractors working on prime contracts let by the City, and did not record whether a particular contractor was an MBE. *Id.* at 600. To prepare a report concerning the participation of minority businesses in public works, Mr. Macklin examined the records at the City’s Procurement Department. The department kept procurement logs, project engineer logs, and contract folders. The subcontractors involved in a project were only listed in the engineer’s log. The court found Mr. Macklin’s testimony concerning his methodology was hesitant and unclear, but it does appear that he examined only 25 to 30 percent of the project engineer logs, and that his only basis for identifying a name in that segment of the logs as an MBE was his personal memory of the information he had received in the course of approximately a year of work with the OMO that certified minority contractors. *Id.* The Court quoted the district court finding as to Macklin’s testimony:

Macklin] went to the contract files and looked for contracts in excess of \$30,000.00 that in his view appeared to provide opportunities for subcontracting. (*Id.* at 13.) With that information, Macklin examined some of the project engineer logs for those projects to determine whether minority subcontractors were used by the prime contractors. (*Id.*) Macklin did not look at every available project engineer log. (*Id.*) Rather, he looked at a random 25 to 30 percent of all the project engineer logs. (*Id.*) As with his review of the Procurement Department log, Macklin determined that a minority subcontractor was used on the project only if he personally recognized the firm to be a minority. (*Id.*) Quite plainly, Macklin was unable to determine whether minorities were used on the remaining 65 to 70 percent of the projects that he did not review. When questioned whether it was possible that minority subcontractors did perform work on some City public works projects during fiscal years 1979 to 1981, and that he just did not see them in the project logs that he looked at, Macklin answered “it is a very good possibility.” 893 F.Supp. at 434.

Id. at 600.

The district court found two other portions of the record significant on this point. First, during the trial, the City presented Oscar Gaskins (“Gaskins”), former general counsel to the General and Specialty Contractors Association of Philadelphia (“GASCAP”) and the Philadelphia Urban Coalition, to testify about minority participation in the Philadelphia construction industry during the 1970s and early 1980s. Gaskins testified that, in his opinion, black contractors are still being subjected to racial discrimination in the private construction industry, and in subcontracting within the City limits. However, the Court pointed out, when Gaskins was asked by the district court to identify even one instance where a minority contractor was denied a private contract or subcontract after submitting the lowest bid, Gaskins was unable to do so. *Id.* at 600-601.

Second, the district court noted that since 1979 the City’s “standard requirements warn [would-be prime contractors] that discrimination will be deemed a ‘substantial breach’ of the public works contract which could subject the prime contractor to an investigation by the Commission and, if warranted, fines, penalties, termination of the contract and forfeiture of all money due.” Like the Supreme Court in *Croson*, the Court stated the district court found significant the City’s inability to point to any allegations that this requirement was being violated. *Id.* at 601.

The Court held the district court did not err by declining to accept Mr. Macklin’s conclusion that there were no subcontracts awarded to black contractors in connection with City-financed construction contracts in fiscal years 1979 to 1981. *Id.* at 601. Accepting that refusal, the Court agreed with the district court’s conclusion that the record provides no firm basis for inferring discrimination by prime contractors in the subcontracting market during that period. *Id.*

B. The evidence of discrimination by contractor associations. The Court stated that a city may seek to remedy discrimination by local trade associations to prevent its passive participation in a system of private discrimination. Evidence of “extremely low” membership by MBEs, standing by itself, however, is not sufficient to support remedial action; the city must “link [low MBE membership] to the number of local MBEs eligible for membership.” *Id.* at 601.

The City’s expert opined that there was statistically low representation of eligible MBEs in the local trade associations. He testified that, while numerous MBEs were eligible to join these associations, three such associations had only one MBE member, and one had only three MBEs. In concluding that there were many eligible MBEs not in the associations, however, he again relied entirely upon the work of Mr. Macklin. The district court rejected the expert’s conclusions because it found his reliance on Mr. Macklin’s work misplaced. *Id.* at 601. Mr. Macklin formed an opinion that a listed number of MBE and WBE firms were eligible to be members of the plaintiff Associations. *Id.* Because Mr. Macklin did not set forth the criteria for association membership and because the OMO certification list did not provide any information about the MBEs and WBEs other than their names and the fact that they were such, the Court found the district court was without a basis for evaluating Mr. Macklin’s opinions. *Id.*

On the other hand, the district court credited “the uncontroverted testimony of John Smith [a former general manager of the CAEP and member of the MBEC] that no black contractor who has ever applied for membership in the CAEP has been denied.” *Id.* at 601 *citing*, 893 F.Supp. at 440. The Court pointed out the district court noted as well that the City had not “identified even a single black contractor who was eligible for membership in any of the plaintiffs’ associations, who applied for membership, and was denied.” *Id.* at 601, *quoting*, 893 F.Supp at 441.

The Court held that given the City's failure to present more than the essentially unexplained opinion of Mr. Macklin, the opposing, uncontradicted testimony of Mr. Smith, and the failure of anyone to identify a single victim of the alleged discrimination, it was appropriate for the district court to conclude that a constitutionally sufficient basis was not established in the evidence. *Id.* at 601. The Court found that even if it accepted Mr. Macklin's opinions, however, it could not hold that the Ordinance was justified by that discrimination. *Id.* at 602. Racial discrimination can justify a race-based remedy only if the City has somehow participated in or supported that discrimination. *Id.* The Court said that this record would not support a finding that this occurred. *Id.*

Contrary to the City's argument, the Court stated nothing in *Croson* suggests that awarding contracts pursuant to a competitive bidding scheme and without reference to association membership could alone constitute passive participation by the City in membership discrimination by contractor associations. *Id.* Prior to 1982, the City let construction contracts on a competitive bid basis. It did not require bidders to be association members, and nothing in the record suggests that it otherwise favored the associations or their members. *Id.*

C. The evidence of discrimination by the City. The Court found the record provided substantially more support for the proposition that there was discrimination on the basis of race in the award of prime contracts by the City in the fiscal 1979–1981 period. *Id.* The Court also found the Contractors' critique of that evidence less cogent than did the district court. *Id.*

The centerpiece of the City's evidence was its expert's calculation of disparity indices which gauge the disparity in the award of prime contracts by the City. *Id.* at 602. Following *Contractors II*, the expert calculated a disparity index for black construction firms of 11.4, based on a figure of 114 such firms available to perform City contracts. At trial, he recognized that the 114 figure included black engineering and architecture firms, so he recalculated the index, using only black construction firms (i.e., 57 firms). This produced a disparity index of 22.5. Thus, based on this analysis, black construction firms would have to have received approximately 4.5 times more public works dollars than they did receive in order to have achieved an amount proportionate to their representation among all construction firms. The expert found the disparity sufficiently large to be attributable to discrimination against black contractors. *Id.*

The district court found the study did not provide a strong basis in evidence for an inference of discrimination in the prime contract market. It reached this conclusion primarily for three reasons. The study, in the district court's view, (1) did not take into account whether the black construction firms were qualified and willing to perform City contracts; (2) mixed statistical data from different sources; and (3) did not account for the "neutral" explanation that qualified black firms were too preoccupied with large, federally-assisted projects to perform City projects. *Id.* at 602-3.

The Court said the district court was correct in concluding that a statistical analysis should focus on the minority population capable of performing the relevant work. *Id.* at 603. As *Croson* indicates, "[w]hen special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value." *Id.*, citing, 488 U.S. at 501. In *Croson* and other cases, the Court pointed out, however, the discussion by the Supreme Court concerning

qualifications came in the context of a rejection of an analysis using the percentage of a particular minority in the general population. *Id.*

The issue of qualifications can be approached at different levels of specificity, however, the Court stated, and some consideration of the practicality of various approaches is required. An analysis is not devoid of probative value, the Court concluded, simply because it may theoretically be possible to adopt a more refined approach. *Id.* at 603.

To the extent the district court found fault with the analysis for failing to limit its consideration to those black contractors “willing” to undertake City work, the Court found its criticism more problematic. *Id.* at 603. In the absence of some reason to believe otherwise, the Court said one can normally assume that participants in a market with the ability to undertake gainful work will be “willing” to undertake it. Moreover, past discrimination in a marketplace may provide reason to believe the minorities who would otherwise be willing are discouraged from trying to secure the work. *Id.* at 603.

The Court stated that it seemed a substantial overstatement to assert that the study failed to take into account the qualifications and willingness of black contractors to participate in public works. *Id.* at 603. During the time period in question, fiscal years 1979–81, those firms seeking to bid on City contracts had to prequalify for *each and every* contract they bid on, and the criteria could be set differently from contract to contract. *Id.* The Court said it would be highly impractical to review the hundreds of contracts awarded each year and compare them to each and every MBE. *Id.* The expert chose instead to use as the relevant minority population the black firms listed in the 1982 OMO Directory. The Court found this would appear to be a reasonable choice that, if anything, may have been on the conservative side. *Id.*

When a firm applied to be certified, the OMO required it to detail its bonding experience, prior experience, the size of prior contracts, number of employees, financial integrity, and equipment owned. *Id.* at 603. The OMO visited each firm to substantiate its claims. Although this additional information did not go into the final directory, the OMO was confident that those firms on the list were capable of doing the work required on large scale construction projects. *Id.*

The Contractors point to the small number of black firms that sought to prequalify for City-funded contracts as evidence that black firms were unwilling to work on projects funded solely by the City. *Id.* at 603. During the time period in question, City records showed that only seven black firms sought to prequalify, and only three succeeded in prequalifying. The Court found it inappropriate, however, to conclude that this evidence undermines the inference of discrimination. As the expert indicated in his testimony, the Court noted, if there has been discrimination in City contracting, it is to be expected that black firms may be discouraged from applying, and the low numbers may tend to corroborate the existence of discrimination rather than belie it. The Court stated that in a sense, to weigh this evidence for or against either party required it to presume the conclusion to be proved. *Id.* at 604.

The Court found that while it was true that the study “mixed data,” the weight given that fact by the district court seemed excessive. *Id.* at 604. The study expert used data from only two sources in calculating the disparity index of 22.5. He used data that originated from the City to determine the total amount of contract dollars awarded by the City, the amount that went to MBEs, and the

number of black construction firms. *Id.* He “mixed” this with data from the Bureau of the Census concerning the number of total construction firms in the Philadelphia Standard Metropolitan Statistical Area (PSMSA). The data from the City is not geographically bounded to the same extent that the Census information is. *Id.* Any firm could bid on City work, and any firm could seek certification from the OMO.

Nevertheless, the Court found that due to the burdens of conducting construction at a distant location, the vast majority of the firms were from the Philadelphia region and the Census data offers a reasonable approximation of the total number of firms that might vie for City contracts. *Id.* Although there is a minor mismatch in the geographic scope of the data, given the size of the disparity index calculated by the study, the Court was not persuaded that it was significant. *Id.* at 604.

Considering the use of the OMO Directory and the Census data, the Court found that the index of 22.5 may be a conservative estimate of the actual disparity. *Id.* at 604. While the study used a figure for black firms that took into account qualifications and willingness, it used a figure for total firms that did not. *Id.* If the study under-counted the number of black firms qualified and willing to undertake City construction contracts or over-counted the total number of firms qualified and willing to undertake City construction contracts, the actual disparity would be greater than 22.5. *Id.* Further, while the study limited the index to black firms, the study did not similarly reduce the dollars awarded to minority firms. The study used the figure of \$667,501, which represented the total amount going to all MBEs. If minorities other than blacks received some of that amount, the actual disparity would again be greater. *Id.* at 604.

The Court then considered the district court’s suggestion that the extensive participation of black firms in federally-assisted projects, which were also procured through the City’s Procurement Office, accounted for their low participation in the other construction contracts awarded by the City. *Id.* The Court found the district court was right in suggesting that the availability of substantial amounts of federally funded work and the federal set-aside undoubtedly had an impact on the number of black contractors available to bid on other City contracts. *Id.* at 605.

The extent of that impact, according to the Court, was more difficult to gauge, however. That such an impact existed does not necessarily mean that the study’s analysis was without probative force. *Id.* at 605. If, the Court noted for example, one reduced the 57 available black contractors by the 20 to 22 that participated in federally assisted projects in fiscal years 1979–81 and used 35 as a fair approximation of the black contractors available to bid on the remaining City work, the study’s analysis produces a disparity index of 37, which the Court found would be a disparity that still suggests a substantial under-participation of black contractors among the successful bidders on City prime contracts. *Id.*

The court in conclusion stated whether this record provided a strong basis in evidence for an inference of discrimination in the prime contract market “was a close call.” *Id.* at 605. In the final analysis, however, the Court held it was a call that it found unnecessary to make, and thus it chose not to make it. *Id.* Even assuming that the record presents an adequately firm basis for that inference, the Court held the judgment of the district court must be affirmed because the Ordinance was clearly not narrowly tailored to remedy that discrimination. *Id.*

Narrowly Tailored. The Court said that strict scrutiny review requires it to examine the “fit” between the identified discrimination and the remedy chosen in an affirmative action plan. *Croson* teaches that there must be a strong basis in evidence not only for a conclusion that there is, or has been, discrimination, but also for a conclusion that the particular remedy chosen is made “necessary” by that discrimination. *Id.* at 605. The Court concluded that issue is shaped by its prior conclusions regarding the absence of a strong basis in evidence reflecting discrimination by prime contractors in selecting subcontractors and by contractor associations in admitting members. *Id.* at 606.

This left as a possible justification for the Ordinance only the assumption that the record provided a strong basis in evidence for believing the City discriminated against black contractors in the award of prime contracts during fiscal years 1979 to 1981. *Id.* at 606. If the remedy reflected in the Ordinance cannot fairly be said to be necessary in light of the assumed discrimination in awarding prime construction projects, the Court said that the Ordinance cannot stand. The Court held, as did the district court, that the Ordinance was not narrowly tailored. *Id.*

A. Inclusion of preferences in the subcontracting market. The Court found the primary focus of the City’s program was the market for subcontracts to perform work included in prime contracts awarded by the City. *Id.* at 606. While the program included authorization for the award of prime contracts on a “sheltered market” basis, that authorization had been sparsely invoked by the City. Its goal with respect to dollars for black contractors had been pursued primarily through requiring that bidding prime contractors subcontract to black contractors in stipulated percentages. *Id.* The 15 percent participation goal and the system of presumptions, which in practice required non-black contractors to meet the goal on virtually every contract, the Court found resulted in a 15% set-aside for black contractors in the subcontracting market. *Id.*

Here, as in *Croson*, the Court stated “[t]o a large extent, the set aside of subcontracting dollars seems to rest on the unsupported assumption that white contractors simply will not hire minority firms.” *Id.* at 606, *citing*, 488 U.S. at 502. Here, as in *Croson*, the Court found there is no firm evidentiary basis for believing that non-minority contractors will not hire black subcontractors. *Id.* Rather, the Court concluded the evidence, to the extent it suggests that racial discrimination had occurred, suggested discrimination by the City’s Procurement Department against black contractors who were capable of bidding on prime City construction contracts. *Id.* To the considerable extent that the program sought to constrain decision making by private contractors and favor black participation in the subcontracting market, the Court held it was ill-suited as a remedy for the discrimination identified. *Id.*

The Court pointed out it did not suggest that an appropriate remedial program for discrimination by a municipality in the award of primary contracts could never include a component that affects the subcontracting market in some way. *Id.* at 606. It held, however, that a program, like Philadelphia’s program, which focused almost exclusively on the subcontracting market, was not narrowly tailored to address discrimination by the City in the market for prime contracts. *Id.*

B. The amount of the set-aside in the prime contract market. Having decided that the Ordinance is overbroad in its inclusion of subcontracting, the Court considered whether the 15

percent goal was narrowly tailored to address discrimination in prime contracting. *Id.* at 606. The Court found the record supported the district court's findings that the Council's attention at the time of the original enactment and at the time of the subsequent extension was focused solely on the percentage of minorities and women in the general population, and that Council made no effort at either time to determine how the Ordinance might be drafted to remedy particular discrimination—to achieve, for example, the approximate market share for black contractors that would have existed, had the purported discrimination not occurred. *Id.* at 607. While the City Council did not tie the 15% participation goal directly to the proportion of minorities in the local population, the Court said the goal was either arbitrarily chosen or, at least, the Council's sole reference point was the minority percentage in the local population. *Id.*

The Court stated that it was clear that the City, in the entire course of this litigation, had been unable to provide an evidentiary basis from which to conclude that a 15% set-aside was necessary to remedy discrimination against black contractors in the market for prime contracts. *Id.* at 607. The study data indicated that, at most, only 0.7% of the construction firms qualified to perform City-financed prime contracts in the 1979–1981 period were black construction firms. *Id.* at 607. This, the Court found, indicated that the 15 percent figure chosen is an impermissible one. *Id.*

The Court said it was not suggesting that the percentage of the preferred group in the universe of qualified contractors is necessarily the ceiling for all set-asides. It well may be that some premium could be justified under some circumstances. *Id.* at 608. However, the Court noted that the *only* evidentiary basis in the record that appeared at all relevant to fashioning a remedy for discrimination in the prime contracting market was the 0.7% figure. That figure did not provide a strong basis in evidence for concluding that a 15% set-aside was necessary to remedy discrimination against black contractors in the prime contract market. *Id.*

C. Program alternatives that are either race-neutral or less burdensome to non-minority contractors. In holding that the Richmond plan was not narrowly tailored, the Court pointed out, the Supreme Court in *Croson* considered it significant that race-neutral remedial alternatives were available and that the City had not considered the use of these means to increase minority business participation in City contracting. *Id.* at 608. It noted, in particular, that barriers to entry like capital and bonding requirements could be addressed by a race-neutral program of city financing for small firms and could be expected to lead to greater minority participation. Nevertheless, such alternatives were not pursued or even considered in connection with the Richmond's efforts to remedy past discrimination. *Id.*

The district court found that the City's procurement practices created significant barriers to entering the market for City-awarded construction contracts. *Id.* at 608. Small contractors, in particular, were deterred by the City's prequalification and bonding requirements from competing in that market. *Id.* Relaxation of those requirements, the district court found, was an available race-neutral alternative that would be likely to lead to greater participation by black contractors. No effort was made by the City, however, to identify barriers to entry in its procurement process and that process was not altered before or in conjunction with the adoption of the Ordinance. *Id.*

The district court also found that the City could have implemented training and financial assistance programs to assist disadvantaged contractors of all races. *Id.* at 608. The record established that certain neutral City programs had achieved substantial success in fulfilling its goals. The district court concluded, however, that the City had not supported the programs and had not considered emulating and/or expanding the programs in conjunction with the adoption of the Ordinance. *Id.*

The Court held the record provided ample support for the finding of the district court that alternatives to race-based preferences were available in 1982, which would have been either race neutral or, at least, less burdensome to non-minority contractors. *Id.* at 609. The Court found the City could have lowered administrative barriers to entry, instituted a training and financial assistance program, and carried forward the OMO's certification of minority contractor qualifications. *Id.* The record likewise provided ample support for the district court's conclusion that the "City Council was not interested in considering race-neutral measures, and it did not do so." *Id.* at 609. To the extent the City failed to consider or adopt these alternatives, the Court held it failed to narrowly tailor its remedy to prior or existing discrimination against black contractors. *Id.*

The Court found it particularly noteworthy that the Ordinance, since its extension, in 1987, for an additional 12 years, had been targeted exclusively toward benefiting only minority and women contractors "whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same business area who are not socially disadvantaged." *Id.* at 609. The City's failure to consider a race-neutral program designed to encourage investment in and/or credit extension to small contractors or minority contractors, the Court stated, seemed particularly telling in light of the limited classification of victims of discrimination that the Ordinance sought to favor. *Id.*

Conclusion. The Court held the remedy provided by the program substantially exceeds the limited justification that the record provided. *Id.* at 609. The program provided race-based preferences for blacks in the market for subcontracts where the Court found there was no strong basis in the evidence for concluding that discrimination occurred. *Id.* at 610. The program authorized a 15% set-aside applicable to all prime City contracts for black contractors when, the Court concluded there was no basis in the record for believing that such a set-aside of that magnitude was necessary to remedy discrimination by the City in that market. *Id.* Finally, the Court stated the City's program failed to include race-neutral or less burdensome remedial steps to encourage and facilitate greater participation of black contractors, measures that the record showed to be available. *Id.*

The Court concluded that a city may adopt race-based preferences only when there is a "strong basis in evidence for its conclusion that [the] remedial action was necessary." *Id.* at 610. Only when such a basis exists is there sufficient assurance that the racial classification is not "merely the product of unthinking stereotypes or a form of racial politics." *Id.* at 610. That assurance, the Court held was lacking here, and, accordingly, found that the race-based preferences provided by the Ordinance could not stand. *Id.*

2. Contractors Association of Eastern Pennsylvania, Inc, et. al. v. City of Philadelphia, 6 F. 3d 990 (3d Cir. 1993)

An association of construction contractors filed suit challenging, on equal protection grounds, a city of Philadelphia ordinance that established a set-aside program for “disadvantaged business enterprises” owned by minorities, women, and handicapped persons. 6 F.3d. at 993. The United States District Court for the Eastern District of Pennsylvania, 735 F.Supp. 1274 (E.D. Phila. 1990), granted summary judgment for the contractors 739 F.Supp. 227, and denied the City’s motion to stay the injunctive relief. Appeal was taken. The Third Circuit Court of Appeals, 945 F.2d 1260 (3d. Cir. 1991), affirmed in part and vacated in part the district court’s decision. *Id.* On remand, the district court again granted summary judgment for the contractors. The City appealed. The Third Circuit Court of Appeals, held that: (1) the contractors association had standing, but only to challenge the portions of the ordinance that applied to construction contracts; (2) the City presented sufficient evidence to withstand summary judgment with respect to the race and gender preferences; and (3) the preference for businesses owned by handicapped persons was rationally related to a legitimate government purpose and, thus, did not violate equal protection. *Id.*

Procedural history. Nine associations of construction contractors challenged on equal protection grounds a City of Philadelphia ordinance creating preferences in City contracting for businesses owned by racial and ethnic minorities, women, and handicapped persons. *Id.* at 993. The district court granted summary judgment to the Contractors, holding they had standing to bring this lawsuit and invalidating the Ordinance in all respects. *Contractors Association v. City of Philadelphia*, 735 F.Supp. 1274 (E.D.Pa.1990). In an earlier opinion, the Third Circuit affirmed the district court’s ruling on standing, but vacated summary judgment on the merits because the City had outstanding discovery requests. *Contractors Association v. City of Philadelphia*, 945 F.2d 1260 (3d Cir.1991). On remand after discovery, the district court again entered summary judgment for the Contractors. The Third Circuit in this case affirmed in part, vacated in part, and reversed in part. 6 F.3d 990, 993.

In 1982, the Philadelphia City Council enacted an ordinance to increase participation in City contracts by minority-owned and women-owned businesses. Phila.Code § 17-500. *Id.* The Ordinance established “goals” for the participation of “disadvantaged business enterprises.” § 17-503. “Disadvantaged business enterprises” (DBEs) were defined as those enterprises at least 51 percent owned by “socially and economically disadvantaged individuals,” defined in turn as: those individuals who have been subjected to racial, sexual or ethnic prejudice because of their identity as a member of a group or differential treatment because of their handicap without regard to their individual qualities, and whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same business area who are not socially disadvantaged. *Id.* at 994. The Ordinance further provided that racial minorities and women are rebuttably presumed to be socially and economically disadvantaged individuals, § 17-501(11)(a), but that a business which has received more than \$5 million in City contracts, even if owned by such an individual, is rebuttably presumed not to be a DBE, § 17-501(10). *Id.* at 994.

The Ordinance set goals for participation of DBEs in city contracts: 15 percent for minority-owned businesses, 10 percent for women-owned businesses, and 2 percent for businesses

owned by handicapped persons. § 17-503(1). *Id.* at 994. The Ordinance applied to all City contracts, which are divided into three types—vending, construction, and personal and professional services. § 17-501(6). The percentage goals related to the total dollar amounts of City contracts and are calculated separately for each category of contracts and each City agency. *Id.* at 994.

In 1989, nine contractors associations brought suit in the Eastern District of Pennsylvania against the City of Philadelphia and two city officials, challenging the Ordinance as a facial violation of the Equal Protection Clause of the Fourteenth Amendment. *Id.* at 994. After the City moved for judgment on the pleadings contending the Contractors lacked standing, the Contractors moved for summary judgment on the merits. The district court granted the Contractors' motion. It ruled the Contractors had standing, based on affidavits of individual association members alleging they had been denied contracts for failure to meet the DBE goals despite being low bidders. *Id.* at 995 *citing*, 735 F.Supp. at 1283 & n. 3.

Turning to the merits of the Contractors' equal protection claim, the district court held that *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989), required it to apply the strict scrutiny standard to review the sections of the Ordinance creating a preference for minority-owned businesses. *Id.* Under that standard, the Third Circuit held a law will be invalidated if it is not "narrowly tailored" to a "compelling government interest." *Id.* at 995.

Applying *Croson*, the district court struck down the Ordinance because the City had failed to adduce sufficiently specific evidence of past racial discrimination against minority construction contractors in Philadelphia to establish a "compelling government interest." *Id.* at 995, *quoting*, 735 F.Supp. at 1295-98. The court also held the Ordinance was not "narrowly tailored," emphasizing the City had not considered using race-neutral means to increase minority participation in City contracting and had failed to articulate a rationale for choosing 15 percent as the goal for minority participation. *Id.* at 995; 735 F.Supp. at 1298-99. The court held the Ordinance's preferences for businesses owned by women and handicapped persons were similarly invalid under the less rigorous intermediate scrutiny and rational basis standards of review. *Id.* at 995 *citing*, 735 F.Supp. at 1299-1309.

On appeal, the Third Circuit in 1991 affirmed the district court's ruling on standing, but vacated its judgment on the merits as premature because the Contractors had not responded to certain discovery requests at the time the court ruled. 945 F.2d 1260 (3d Cir.1991). The Court remanded so discovery could be completed and explicitly reserved judgment on the merits. *Id.* at 1268. On remand, all parties moved for summary judgment, and the district court reaffirmed its prior decision, holding discovery had not produced sufficient evidence of discrimination in the Philadelphia construction industry against businesses owned by racial minorities, women, and handicapped persons to withstand summary judgment. The City and United Minority Enterprise Associates, Inc. (UMEA), which had intervened filed an appeal. *Id.*

This appeal, the Court said, presented three sets of questions: whether and to what extent the Contractors have standing to challenge the Ordinance, which standards of equal protection review govern the different sections of the Ordinance, and whether these standards justify invalidation of the Ordinance in whole or in part. *Id.* at 995.

Standing. The Supreme Court has confirmed that construction contractors have standing to challenge a minority preference ordinance upon a showing they are “able and ready to bid on contracts [subject to the ordinance] and that a discriminatory policy prevents [them] from doing so on an equal basis.” *Id.* at 995. Because the affidavits submitted to the district court established the Contractors were able and ready to bid on construction contracts, but could not do so for failure to meet the DBE percentage requirements, the court held they had standing to challenge the sections of the Ordinance covering construction contracts. *Id.* at 996.

Standards of equal protection review. The Contractors challenge the preferences given by the Ordinance to businesses owned and operated by minorities, women, and handicapped persons. In analyzing these classifications separately, the Court first considered which standard of equal protection review applies to each classification. *Id.* at 999.

Race, ethnicity, and gender. The Court found that choice of the appropriate standard of review turns on the nature of the classification. *Id.* at 999. Because under equal protection analysis classifications based on race, ethnicity, or gender are inherently suspect, they merit closer judicial attention. *Id.* Accordingly, the Court determined whether the Ordinance contains race- or gender-based classifications. The Ordinance’s classification scheme is spelled out in its definition of “socially and economically disadvantaged. *Id.* The district court interpreted this definition to apply only to minorities, women, and handicapped persons and viewed the definition’s economic criteria as in addition to rather than in lieu of race, ethnicity, gender, and handicap. *Id.* Therefore, it applied strict scrutiny to the racial preference under *Croson* and intermediate scrutiny to the gender preference under *Mississippi University for Women v. Hogan*, 458 U.S. 718, 724 (1982). *Id.* at 999.

A. Strict scrutiny. Under strict scrutiny, a law may only stand if it is “narrowly tailored” to a “compelling government interest.” *Id.* at 999. Under intermediate scrutiny, a law must be “substantially related” to the achievement of “important government objectives.” *Id.*

The Court agreed with the district court that the definition of “socially and economically disadvantaged individuals” included only individuals who are both victims of prejudice based on status and economically deprived. *Id.* at 999. Additionally, the last clause of the definition described economically disadvantaged individuals as those “whose ability to compete in the free enterprise system has been impaired ... as compared to others ... who are not socially disadvantaged.” *Id.* This clause, the Court found, demonstrated the drafters wished to rectify only economic disadvantage that results from social disadvantage, i.e., prejudice based on race, ethnicity, gender, or handicapped status. *Id.* The Court said the plain language of the Ordinance foreclosed the City’s argument that a white male contractor could qualify for preferential treatment solely on the basis of economic disadvantage. *Id.* at 1000.

B. Intermediate scrutiny. The Court considered the proper standard of review for the Ordinance’s gender preference. The Court held a gender-based classification favoring women merited intermediate scrutiny. *Id.* at 1000, *citing, Hogan* 458 U.S. at 728. The Ordinance, the Court stated, is such a program. *Id.* Several federal courts, the Court noted, have applied intermediate scrutiny to similar gender preferences contained in state and municipal affirmative action contracting programs. *Id.* at 1001, *citing, Coral Constr. Co. v. King County*, 941 F.2d 910, 930 (9th Cir.1991), *cert. denied*, 502 U.S. 1033 (1992); *Michigan Road Builders Ass’n, Inc. v.*

Milliken, 834 F.2d 583, 595 (6th Cir.1987), *aff'd mem.*, 489 U.S. 1061(1989); *Associated General Contractors of Cal. v. City and County of San Francisco*, 813 F.2d 922, 942 (9th Cir.1987); *Main Line Paving Co. v. Board of Educ.*, 725 F.Supp. 1349, 1362 (E.D.Pa.1989).

Application of intermediate scrutiny to the Ordinance's gender preference, the Court said, also follows logically from *Croson*, which held municipal affirmative action programs benefiting racial minorities merit the same standard of review as that given other race-based classifications. *Id.* For these reasons, the Third Circuit rejected, as did the district court, those cases applying strict scrutiny to gender-based classifications. *Cone Corp. v. Hillsborough County*, 908 F.2d 908 (11th Cir.), *cert. denied*, 498 U.S. 983, 111 S.Ct. 516, 112 L.Ed.2d 528 (1990). *Id.* at 1000-1001. The Court agreed with the district court's choice of intermediate scrutiny to review the Ordinance's gender preference. *Id.*

Handicap. The district court reviewed the preference for handicapped business owners under the rational basis test. *Id.* at 1000, citing 735 F.Supp. at 1307. That standard validates the classification if it is "rationally related to a legitimate governmental purpose." *Id.* at 1001, citing *Cleburne*, 473 U.S. at 445. The Court held the district court properly chose the rational basis standard in reviewing the Ordinance's preference for handicapped persons. *Id.*

Constitutionality of the ordinance: race and ethnicity. Because strict scrutiny applies to the Ordinance's racial and ethnic preferences, the Court stated it may only uphold them if they are "narrowly tailored" to a "compelling government interest." *Id.* at 1001-2. The Court noted that in *Croson*, the Supreme Court made clear that combatting racial discrimination is a "compelling government interest." *Id.* at 1002, quoting, 488 U.S. at 492, 509. It also held a city can enact such a preference to remedy past or present discrimination where it has actively discriminated in its award of contracts or has been a " 'passive participant' in a system of racial exclusion practiced by elements of the local construction industry." *Id.* at 1002, quoting, 488 U.S. at 492.

In the Supreme Court's view, the "relevant statistical pool" was not the minority population, but the number of qualified minority contractors. It stressed the city did not know the number of qualified minority businesses in the area and had offered no evidence of the percentage of contract dollars minorities received as subcontractors. *Id.* at 1002, citing 488 U.S. at 502.

Ruling the Philadelphia Ordinance's racial preference failed to overcome strict scrutiny, the district court concluded the Ordinance "possesses four of the five characteristics fatal to the constitutionality of the Richmond Plan," *Id.* at 1002, quoting, 735 F.Supp. at 1298. As in *Croson*, the district court reasoned, the City relied on national statistics, a comparison between prime contract awards and the percentage of minorities in Philadelphia's population, the Ordinance's declaration it was remedial, and "conclusory" testimony of witnesses regarding discrimination in the Philadelphia construction industry. *Id.* at 1002, quoting, 1295-98.

In a footnote, the Court pointed out the district court also interpreted *Croson* to require "specific evidence of systematic prior discrimination in the industry in question by th[e] governmental unit" enacting the ordinance. 735 F.Supp. at 1295. The Court said this reading overlooked the statement in *Croson* that a City can be a "passive participant" in private discrimination by

awarding contracts to firms that practice racial discrimination, and that a city “has a compelling interest in assuring that public dollars ... do not serve to finance the evil of private prejudice.” *Id.* at 1002, n. 10, *quoting*, 488 U.S. at 492.

Anecdotal evidence of racial discrimination. The City contended the district court understated the evidence of prior discrimination available to the Philadelphia City Council when it enacted the 1982 ordinance. The City Council Finance Committee received testimony from at least fourteen minority contractors who recounted personal experiences with racial discrimination. *Id.* at 1002. In certain instances, these contractors lost out despite being low bidders. The Court found this anecdotal evidence significantly outweighed that presented in *Croson*, where the Richmond City Council heard “no direct evidence of race discrimination on the part of the city in letting contracts or any evidence that the city’s prime contractors had discriminated against minority-owned subcontractors.” *Id.*, *quoting*, 488 U.S. at 480.

Although the district court acknowledged the minority contractors’ testimony was relevant under *Croson*, it discounted this evidence because “other evidence of the type deemed impermissible by the Supreme Court ... unsupported general testimony, impermissible statistics and information on the national set-aside program, ... overwhelmingly formed the basis for the enactment of the set-aside ... and therefore taint[ed] the minds of city councilmembers.” *Id.* at 1002, *quoting*, 735 F.Supp. at 1296.

The Third Circuit held, however, given *Croson*’s emphasis on statistical evidence, even had the district court credited the City’s anecdotal evidence, the Court did not believe this amount of anecdotal evidence was sufficient to satisfy strict scrutiny. *Id.* at 1003, *quoting*, *Coral Constr.*, 941 F.2d at 919 (“anecdotal evidence ... rarely, if ever, can ... show a systemic pattern of discrimination necessary for the adoption of an affirmative action plan.”). Although anecdotal evidence alone may, the Court said, in an exceptional case, be so dominant or pervasive that it passes muster under *Croson*, it is insufficient here. *Id.* But because the combination of “anecdotal and statistical evidence is potent,” *Coral Constr.*, 941 F.2d at 919, the Court considered the statistical evidence proffered in support of the Ordinance.

Statistical evidence of racial discrimination. There are two categories of statistical evidence here, evidence undisputedly considered by City Council before it enacted the Ordinance in 1982 (the “pre-enactment” evidence), and evidence developed by the City on remand (the “post-enactment” evidence). *Id.* at 1003.

Pre–Enactment statistical evidence. The principal pre-enactment statistical evidence appeared in the 1982 Report of the City Council Finance Committee and recited that minority contractors were awarded only .09 percent of City contract dollars during the preceding three years, 1979 through 1981, although businesses owned by Blacks and Hispanics accounted for 6.4 percent of all businesses licensed to operate in Philadelphia. The Court found these statistics did not satisfy *Croson* because they did not indicate what proportion of the 6.4 percent of minority-owned businesses were available or qualified to perform City construction contracts. *Id.* at 1003. Under *Croson*, available minority-owned businesses comprise the “relevant statistical pool.” *Id.* at 1003. Therefore, the Court held the data in the Finance Committee Report did not provide a sufficient evidentiary basis for the Ordinance.

Post-Enactment statistical evidence. The “post-enactment” evidence consists of a study conducted by an economic consultant to demonstrate the disproportionately low share of public and private construction contracts awarded to minority-owned businesses in Philadelphia. The study provided the “relevant statistical pool” needed to satisfy *Croson*—the percentage of minority businesses engaged in the Philadelphia construction industry. *Id.* at 1003. The study also presented data showing that minority subcontractors were underrepresented in the private sector construction market. This data may be relevant, the Court said, if at trial the City can link it to discrimination occurring in the public sector construction market because the Ordinance covers subcontracting. *Id.* at n. 13.

The Court noted that several courts have held post-enactment evidence is admissible in determining whether an Ordinance satisfies *Croson*. *Id.* at 1004. Consideration of post-enactment evidence, the Court found was appropriate here, where the principal relief sought and the only relief granted by the district court, was an injunction. Because injunctions are prospective only, it makes sense the Court said to consider all available evidence before the district court, including the post-enactment evidence, which the district court did. *Id.*

Sufficiency of the statistical and anecdotal evidence and burden of proof. In determining whether the statistical evidence was adequate, the Court looked to what it referred to as its critical component—the “disparity index.” The index consists of the percentage of minority contractor participation in City contracts divided by the percentage of minority contractor availability or composition in the “population” of Philadelphia area construction firms. This equation yields a percentage figure which is then multiplied by 100 to generate a number between 0 and 100, with 100 consisting of full participation by minority contractors given the amount of the total contracting population they comprise. *Id.* at 1005.

The Court noted that other courts considering equal protection challenges to similar ordinances have relied on disparity indices in determining whether *Croson*’s evidentiary burden is satisfied. *Id.* Disparity indices are highly probative evidence of discrimination because they ensure that the “relevant statistical pool” of minority contractors is being considered. *Id.*

A. Statistical evidence. The study reported a disparity index for City of Philadelphia construction contracts during the years 1979 through 1981 of 4 out of a possible 100. This index, the Court stated, was significantly worse than that in other cases where ordinances have withstood constitutional attack. *Id.* at 1004, citing, *Cone Corp.*, 908 F.2d at 916 (10.78 disparity index); *AGC of California*, 950 F.2d at 1414 (22.4 disparity index); *Concrete Works*, 823 F.Supp. at 834 (disparity index “significantly less than” 100); see also *Stuart*, 951 F.2d at 451 (disparity index of 10 in police promotion program); compare *O’Donnell*, 963 F.2d at 426 (striking down ordinance given disparity indices of approximately 100 in two categories). Therefore, the Court found the disparity index probative of discrimination in City contracting in the Philadelphia construction industry prior to enactment of the Ordinance. *Id.*

The Contractors contended the study was methodologically flawed because it considered only prime contractors and because it failed to consider the qualifications of the minority businesses or their interest in performing City contracts. The Contractors maintained the study did not indicate why there was a disparity between available minority contractors and their participation in contracting. The Contractors contended that these objections, without more,

entitled them to summary judgment, arguing that under the strict scrutiny standard they do not bear the burden of proof, and therefore need not offer a neutral explanation for the disparity to prevail. *Id.* at 1005.

The Contractors, the Court found, misconceived the allocation of the burden of proof in affirmative action cases. *Id.* at 1005. The Supreme Court has indicated that “[t]he ultimate burden remains with [plaintiffs] to demonstrate the unconstitutionality of an affirmative action program.” *Id.* 1005. Thus, the Court held the Contractors, not the City, bear the burden of proof. *Id.* Where there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of contractors actually engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise. *Id.* Moreover, evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified. *Id.*

The Court, following *Croson*, held where a city defends an affirmative action ordinance as a remedy for past discrimination, issues of proof are handled as they are in other cases involving a pattern or practice of discrimination. *Id.* at 1006. *Croson*’s reference to an “inference of discriminatory exclusion” based on statistics, as well as its citation to Title VII pattern cases, the Court stated, supports this interpretation. *Id.* The plaintiff bears the burden in such a case. *Id.* The Court noted the Third Circuit has indicated statistical proof of discrimination is handled similarly under Title VII and equal protection principles. *Id.*

The Court found the City’s statistical evidence had created an inference of discrimination which the Contractors would have to rebut at trial either by proving a “neutral explanation” for the disparity, “showing the statistics are flawed, ... demonstrating that the disparities shown by the statistics are not significant or actionable, ... or presenting contrasting statistical data.” *Id.* at 1007. *A fortiori*, this evidence, the Court said is sufficient for the City to withstand summary judgment. The Court stated that the Contractors’ objections to the study were properly presented to the trier of fact. *Id.* Accordingly, the Court found the City’s statistical evidence established a prima facie case of racial discrimination in the award of City of Philadelphia construction contracts. *Id.*

Consistent with strict scrutiny, the Court stated it must examine the data for each minority group contained in the Ordinance. *Id.* The Census data on which the study relied demonstrated that in 1982, the year the Ordinance was enacted, there were construction firms owned in Philadelphia by Blacks, Hispanics, and Asian–Americans, but not Native Americans. *Id.* Therefore, the Court held neither the City nor prime contractors could have discriminated against construction companies owned by Native Americans at the time of the Ordinance, and the Court affirmed summary judgment as to them. *Id.*

The Census Report indicated there were 12 construction firms owned by Hispanic persons, 6 firms owned by Asian–American persons, 3 firms owned by persons of Pacific Islands descent, and 1 other minority-owned firm. *Id.* at 1008. The study calculated Hispanic firms represented .15% of the available firms and Asian–American, Pacific–Islander, and “other” minorities represented .12% of the available firms, and that these firms received no City contracts during the years 1979 through 1981. The Court did not believe these numbers were large enough to

create a triable issue of discrimination. The mere fact that .27 percent of City construction firms—the percentage of all of these groups combined—received no contracts does not rise to the “significant statistical disparity” . *Id.* at 1008.

B. Anecdotal evidence. Nor, the Court found, does it appear that there was any anecdotal evidence of discrimination against construction businesses owned by people of Hispanic or Asian–American descent. *Id.* at 1008. The district court found “there is no evidence whatsoever in the legislative history of the Philadelphia Ordinance that an American Indian, Eskimo, Aleut or Native Hawaiian has ever been discriminated against in the procurement of city contracts,” *Id.* at 1008, *quoting*, 735 F.Supp. at 1299, and there was no evidence of any witnesses who were members of these groups or who were Hispanic. *Id.*

The Court recognized that the small number of Philadelphia-area construction businesses owned by Hispanic or Asian–American persons did not eliminate the possibility of discrimination against these firms. *Id.* at 1008. The small number itself, the Court said, may reflect barriers to entry caused in part by discrimination. *Id.* But, the Court held, plausible hypotheses are not enough to satisfy strict scrutiny, even at the summary judgment stage. *Id.*

Conclusion on compelling government interest. The Court found that nothing in its decision prevented the City from re-enacting a preference for construction firms owned by Hispanic, Asian–American, or Native American persons based on more concrete evidence of discrimination. *Id.* In sum, the Court held, the City adduced enough evidence of racial discrimination against Blacks in the award of City construction contracts to withstand summary judgment on the compelling government interest prong of the *Croson* test. *Id.*

Narrowly Tailored. The Court then decided whether the Ordinance’s racial preference was “narrowly tailored” to the compelling government interest of eradicating racial discrimination in the award of City construction contracts. *Id.* at 1008. *Croson* held this inquiry turns on four factors: (1) whether the city has first considered and found ineffective “race-neutral measures,” such as enhanced access to capital and relaxation of bonding requirements, (2) the basis offered for the percentage selected, (3) whether the program provides for waivers of the preference or other means of affording individualized treatment to contractors, and (4) whether the Ordinance applies only to minority businesses who operate in the geographic jurisdiction covered by the Ordinance. *Id.*

The City contended it enacted the Ordinance only after race-neutral alternatives proved insufficient to improve minority participation in City contracting. *Id.* It relied on the affidavits of City Council President and former Philadelphia Urban Coalition General Counsel who testified regarding the race-neutral precursors of the Ordinance—the Philadelphia Plan, which set goals for employment of minorities on public construction sites, and the Urban Coalition’s programs, which included such race-neutral measures as a revolving loan fund, a technical assistance and training program, and bonding assistance efforts. *Id.* The Court found the information in these affidavits sufficiently established the City’s prior consideration of race-neutral programs to withstand summary judgment. *Id.* at 1009.

Unlike the Richmond Ordinance, the Philadelphia Ordinance provided for several types of waivers of the fifteen percent goal. *Id.* at 1009. It exempted individual contracts or classes of

contracts from the Ordinance where there were an insufficient number of available minority-owned businesses “to ensure adequate competition and an expectation of reasonable prices on bids or proposals,” and allowed a prime contractor to request a waiver of the fifteen percent requirement where the contractor shows he has been unable after “a good faith effort to comply with the goals for DBE participation.” *Id.*

Furthermore, as the district court noted, the Ordinance eliminated from the program successful minority businesses—those who have won \$5 million in city contracts. *Id.* Also unlike the Richmond program, the City’s program was geographically targeted to Philadelphia businesses, as waivers and exemptions are permitted where there exist an insufficient number of MBEs “within the Philadelphia Standard Metropolitan Statistical Area.” *Id.* The Court noted other courts have found these targeting mechanisms significant in concluding programs are narrowly tailored. *Id.*

The Court said a closer question was presented by the Ordinance’s fifteen percent goal. The City’s data demonstrated that, prior to the Ordinance, only 2.4 percent of available construction contractors were minority-owned. The Court found that the goal need not correspond precisely to the percentage of available contractors. *Id.* *Croson* does not impose this requirement, the Third Circuit concluded, as the Supreme Court stated only that Richmond’s 30 percent goal inappropriately assumed “minorities [would] choose a particular trade in lockstep proportion to their representation in the local population.” *Id.*, quoting, 488 U.S. at 507.

The Court pointed out that imposing a fifteen percent goal for each contract may reflect the need to account for those contractors who received a waiver because insufficient minority businesses were available, and the contracts exempted from the program. *Id.* Given the strength of the Ordinance’s showing with respect to other *Croson* factors, the Court concluded the City had created a dispute of fact on whether the minority preference in the Ordinance was “narrowly tailored.” *Id.*

Gender and intermediate scrutiny. Under the intermediate scrutiny standard, the gender preference is valid if it was “substantially related to an important governmental objective.” *Id.* at 1009.

The City contended the gender preference was aimed at the “important government objective” of remedying economic discrimination against women, and that the ten percent goal was substantially related to this objective. In assessing this argument, the Court noted that “[i]n the context of women-business enterprise preferences, the two prongs of this intermediate scrutiny test tend to converge into one.” *Id.* at 1009. The Court held it could uphold the construction provisions of this program if the City had established a sufficient factual predicate for the claim that women-owned construction businesses have suffered economic discrimination and the ten percent gender preference is an appropriate response. *Id.* at 1010.

Few cases have considered the evidentiary burden needed to satisfy intermediate scrutiny in this context, the Court pointed out, and there is no *Croson* analogue to provide a ready reference point. *Id.* at 1010. In particular, the Court said, it is unclear whether statistical evidence as well as anecdotal evidence is required to establish the discrimination necessary to satisfy intermediate scrutiny, and if so, how much statistical evidence is necessary. *Id.* The Court stated that the

Supreme Court gender-preference cases are inconclusive. The Supreme Court, the Court concluded, had not squarely ruled on the necessity of statistical evidence of gender discrimination, and its decisions, according to the Court, were difficult to reconcile on the point. *Id.* The Court noted the Supreme Court has upheld gender preferences where no statistics were offered. *Id.*

The Supreme Court has stated that an affirmative action program survives intermediate scrutiny if the proponent can show it was “a product of analysis rather than a stereotyped reaction based on habit.” *Id.* at 1010. The Third Circuit found this standard requires the City to present probative evidence in support of its stated rationale for the gender preference, discrimination against women-owned contractors. *Id.* The Court held the City had not produced enough evidence of discrimination, noting that in its brief, the City relied on statistics in the City Council Finance Committee Report and one affidavit from a woman engaged in the catering business. *Id.*, But, the Court found this evidence only reflected the participation of women in City contracting generally, rather than in the construction industry, which was the only cognizable issue in this case. *Id.* at 1011.

The Court concluded the evidence offered by the City regarding women-owned construction businesses was insufficient to create an issue of fact. *Id.* at 1011. Significantly, the Court said the study contained no disparity index for women-owned construction businesses in City contracting, such as that presented for minority-owned businesses. *Id.* at 1011. Given the absence of probative statistical evidence, the City, according to the Court, must rely solely on anecdotal evidence to establish gender discrimination necessary to support the Ordinance. *Id.* But the record contained only one three-page affidavit alleging gender discrimination in the construction industry. *Id.* The only other testimony on this subject, the Court found, consisted of a single, conclusory sentence of one witness who appeared at a City Council hearing. *Id.*

This evidence the Court held was not enough to create a triable issue of fact regarding gender discrimination under the intermediate scrutiny standard. Therefore, the Court affirmed the grant of summary judgment invalidating the gender preference for construction contracts. *Id.* at 1011. The Court noted that it saw no impediment to the City re-enacting the preference if it can provide probative evidence of discrimination. *Id.* at 1011.

Handicap and rational basis. The Court then addressed the two-percent preference for businesses owned by handicapped persons. *Id.* at 1011. The district court struck down this preference under the rational basis test, based on the belief according to the Third Circuit, that *Croson* required some evidence of discrimination against business enterprises owned by handicapped persons and therefore that the City could not rely on testimony of discrimination against handicapped individuals. *Id.*, citing 735 F.Supp. at 1308. The Court stated that a classification will pass the rational basis test if it is “rationally related to a legitimate government purpose,” *Id.*, citing, *Cleburne*, 473 U.S. at 440.

The Court pointed out that the Supreme Court had affirmed the permissiveness of the rational basis test in *Heller v. Doe*, 509 U.S. 312–43 (1993), indicating that “a [statutory] classification” subject to rational basis review “is accorded a strong presumption of validity,” and that “a state ... has no obligation to produce evidence to sustain the rationality of [the] classification.” *Id.* at 1011. Moreover, “the burden is on the one attacking the legislative arrangement to negative

every conceivable basis which might support it, whether or not the basis has a foundation in the record.” *Id.* at 1011.

The City stated it sought to minimize discrimination against businesses owned by handicapped persons and encouraged them to seek City contracts. The Court agreed with the district court that these are legitimate goals, but unlike the district court, the Court held the two-percent preference was rationally related to this goal. *Id.* at 1011.

The City offered anecdotal evidence of discrimination against handicapped persons. *Id.* at 1011. Prior to amending the Ordinance in 1988 to include the preference, City Council held a hearing where eight witnesses testified regarding employment discrimination against handicapped persons both nationally and in Philadelphia. *Id.* Four witnesses spoke of discrimination against blind people, and three testified to discrimination against people with other physical handicaps. *Id.* Two of the witnesses, who were physically disabled, spoke of discrimination they and others had faced in the work force. *Id.* One of these disabled witnesses testified he was in the process of forming his own residential construction company. *Id.* at 1011-12. Additionally, two witnesses testified that the preference would encourage handicapped persons to own and operate their own businesses. *Id.* at 1012.

The Court held that under the rational basis standard, the Contractors did not carry their burden of negating every basis which supported the legislative arrangement, and that City Council was entitled to infer discrimination against the handicapped from this evidence and was entitled to conclude the Ordinance would encourage handicapped persons to form businesses to win City contracts. *Id.* at 1012. Therefore, the Court reversed the district court’s grant of summary judgment invalidating this aspect of the Ordinance and remanded for entry of an order granting summary judgment to the City on this issue. *Id.*

Holding. The Court vacated the district court’s grant of summary judgment on the non-construction provisions of the Ordinance, reversed the grant of summary judgment to plaintiff contractors on the construction provisions of the Ordinance as applied to businesses owned by Black persons and handicapped persons, affirmed the grant of summary judgment to the plaintiff contractors on the construction provisions of the Ordinance as applied to businesses owned by Hispanic, Asian–American, or Native American persons or women, and remanded the case for further proceedings and a trial in accordance with the opinion. *United States v. Taylor*, 232 F.Supp. 3d 741 (W.D. Penn. 2017)

In a recent criminal case that is noteworthy because it is in the Third Circuit and involved a challenge to the Federal DBE Program, a federal district court in the Western District of Pennsylvania upheld the Indictment by the United States against Defendant Taylor who had been indicted on multiple counts arising out of a scheme to defraud the United States Department of Transportation’s Disadvantaged Business Enterprise Program (“Federal DBE Program”). *United States v. Taylor*, 232 F.Supp. 3d 741, 743 (W.D. Penn. 2017). Also, the court in denying the motion to dismiss the Indictment upheld the federal regulations in issue against a challenge to the Federal DBE Program.

Procedural and case history. This was a white collar criminal case arising from a fraud on the Federal DBE Program by Century Steel Erectors (“CSE”) and WMCC, Inc., and their respective

principals. In this case, the Government charged one of the owners of CSE, Defendant Donald Taylor, with fourteen separate criminal offenses. The Government asserted that Defendant and CSE used WMCC, Inc., a certified DBE as a “front” to obtain 13 federally funded highway construction contracts requiring DBE status, and that CSE performed the work on the jobs while it was represented to agencies and contractors that WMCC would be performing the work. *Id.* at 743.

The Government contended that WMCC did not perform a “commercially useful function” on the jobs as the DBE regulations require and that CSE personnel did the actual work concealing from general contractors and government entities that CSE and its personnel were doing the work. *Id.* WMCC’s principal was paid a relatively nominal “fixed-fee” for permitting use of WMCC’s name on each of these subcontracts. *Id.* at 744.

Defendant’s contentions. This case concerned *inter alia* a motion to dismiss the Indictment. Defendant argued that Count One must be dismissed because he had been mischarged under the “defraud clause” of 18 U.S.C. § 371, in that the allegations did not support a charge that he defrauded the United States. *Id.* at 745. He contended that the DBE program is administered through state and county entities, such that he could not have defrauded the United States, which he argued merely provides funding to the states to administer the DBE program. *Id.*

Defendant also argued that the Indictment must be dismissed because the underlying federal regulations, 49 C.F.R. § 26.55(c), that support the counts against him were void for vagueness as applied to the facts at issue. *Id.* More specifically, he challenged the definition of “commercially useful function” set forth in the regulations and also contended that Congress improperly delegated its duties to the Executive branch in promulgating the federal regulations at issue. *Id.* at 745.

Federal government position. The Government argued that the charge at Count One was supported by the allegations in the Indictment which made clear that the charge was for defrauding the United States’ Federal DBE Program rather than the state and county entities. *Id.* The Government also argued that the challenged federal regulations are neither unconstitutionally vague nor were they promulgated in violation of the principles of separation of powers. *Id.*

Material facts in Indictment. The court pointed out that the Pennsylvania Department of Transportation (“PennDOT”) and the Pennsylvania Turnpike Commission (“PTC”) receive federal funds from FHWA for federally funded highway projects and, as a result, are required to establish goals and objectives in administering the DBE Program. *Id.* at 745. State and local authorities, the court stated, are also delegated the responsibility to administer the program by, among other things, certifying entities as DBEs; tracking the usage of DBEs on federally funded highway projects through the award of credits to general contractors on specific projects; and reporting compliance with the participation goals to the federal authorities. *Id.* at 745-746.

WMCC received 13 federally-funded subcontracts totaling approximately \$2.34 million under PennDOT’s and PTC’s DBE program and WMCC was paid a total of \$1.89 million.” *Id.* at 746 . These subcontracts were between WMCC and a general contractor, and required WMCC to furnish and erect steel and/or precast concrete on federally funded Pennsylvania highway

projects. *Id.* Under PennDOT’s program, the entire amount of WMCC’s subcontract with the general contractor, including the cost of materials and labor, was counted toward the general contractor’s DBE goal because WMCC was certified as a DBE and “ostensibly performed a commercially useful function in connection with the subcontract.” *Id.*

The stated purpose of the conspiracy was for Defendant and his co-conspirators to enrich themselves by using WMCC as a “front” company to fraudulently obtain the profits on DBE subcontracts slotted for legitimate DBE’s and to increase CSE profits by marketing CSE to general contractors as a “one-stop shop,” which could not only provide the concrete or steel beams, but also erect the beams and provide the general contractor with DBE credits. *Id.* at 746 .

As a result of these efforts, the court said the “conspirators” caused the general contractors to pay WMCC for DBE subcontracts and were deceived into crediting expenditures toward DBE participation goals, although they were not eligible for such credits because WMCC was not performing a commercially useful function on the jobs. *Id.* at 747. CSE also obtained profits from DBE subcontracts that it was not entitled to receive as it was not a DBE and thereby precluded legitimate DBE’s from obtaining such contracts. *Id.*

Motion to Dismiss—challenges to Federal DBE Regulations. Defendant sought dismissal of the Indictment by contesting the propriety of the underlying federal regulations in several different respects, including claiming that 49 C.F.R. § 26.55(c) was “void for vagueness” because the phrase “commercially useful function” and other phrases therein were not sufficiently defined. *Id.* at 754. Defendant also presented a non-delegation challenge to the regulatory scheme involving the DBE Program. *Id.* The Government countered that dismissal of the Indictment was not justified under these theories and that the challenges to the regulations should be overruled. The court agreed with the Government’s position and denied the motion to dismiss. *Id.* at 754.

The court disagreed with Defendant’s assessment that the challenged DBE regulations are so vague that people of ordinary intelligence cannot ascertain the meaning of same, including the phrases “commercially useful function,” “industry practices,” and “other relevant factors.” *Id.* at 755, *citing*, 49 C.F.R. § 26.55(c). The court noted that other federal courts have rejected vagueness and related challenges to the federal DBE regulations in both civil, *see Midwest Fence Corp. v. United States Dep’t of Transp.*, 840 F.3d 932 (7th Cir. 2016) (rejecting vagueness challenge to 49 C.F.R. § 26.53(a) and “good faith efforts” language), and criminal matters, *United States v. Maxwell*, 579 F.3d 1282, at 1302 (11th Cir. 2009).

With respect to the alleged vagueness of the phrase “commercially useful function,” the court found the regulations both specifically describes the types of activities that: (1) fall within the definition of that phrase in § 26.55(c)(1); and, (2) are beyond the scope of the definition of that phrase in § 26.55(c)(2). *Id.* at 755, *citing*, 49 C.F.R. §§ 26.55(c)(1)–(2). The phrases “industry practices” and “other relevant factors” are undefined, the court said, but “an undefined word or phrase does not render a statute void when a court could ascertain the term’s meaning by reading it in context.” *Id.* at 756.

The context, according to the court, is that these federal DBE regulations are used in a comprehensive regulatory scheme by the DOT and FHWA to ensure participation of DBEs in federally funded highway construction projects. *Id.* at 756. These particular phrases, the court

pointed out, are also not the most prominently featured in the regulations as they are utilized in a sentence describing how to determine if the activities of a DBE constitute a “commercially useful function.” *Id.*, citing, 49 C.F.R. § 26.55(c).

While Defendant suggested that the language of these undefined phrases was overbroad, the court held it is necessarily limited by § 26.55(c)(2), expressly stating that “[a] DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.” *Id.* at 756, quoting, 49 C.F.R. § 26.55(c).

The district court in this case also found persuasive the reasoning of both the United States District Court for the Southern District of Florida and the United States Court of Appeals for the Eleventh Circuit, construing the federal DBE regulations in *United States v. Maxwell*. *Id.* at 756. The court noted that in *Maxwell*, the defendant argued in a post-trial motion that § 26.55(c) was “ambiguous” and the evidence presented at trial showing that he violated this regulation could not support his convictions for various mail and wire fraud offenses. *Id.* at 756. The trial court disagreed, holding that:

the rules involving which entities must do the DBE/CSBE work are not ambiguous, or susceptible to different but equally plausible interpretations. Rather, the rules clearly state that a DBE [...] is required to do its own work, which includes managing, supervising and performing the work involved.... And, under the federal program, it is clear that the DBE is also required to negotiate, order, pay for, and install its own materials.

Id. at 756, quoting, *United States v. Maxwell*, 579 F.3d 1282, 1302 (11th Cir. 2009). The defendant in *Maxwell*, the court said, made this same argument on appeal to the Eleventh Circuit, which soundly rejected it, explaining that:

[b]oth the County and federal regulations explicitly say that a CSBE or DBE is required to perform a commercially useful function. Both regulatory schemes define a commercially useful function as being responsible for the execution of the contract and actually performing, managing, and supervising the work involved. And the DBE regulations make clear that a DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. 49 C.F.R. § 26.55(c)(2). There is no obvious ambiguity about whether a CSBE or DBE subcontractor performs a commercially useful function when the job is managed by the primary contractor, the work is performed by the employees of the primary contractor, the primary contractor does all of the negotiations, evaluations, and payments for the necessary materials, and the subcontractor does nothing more than provide a minimal amount of labor and serve as a signatory on two-party checks. In short, no matter how these regulations are read, the jury could conclude that what FLP did was not the performance of a “commercially useful function.”

Id. at 756, quoting, *United States v. Maxwell*, 579 F.3d 1282, 1302 (11th Cir. 2009).

Thus, the Western District of Pennsylvania federal district court in this case concluded the Eleventh Circuit in *Maxwell* found that the federal regulations were sufficient in the context of a scheme similar to that charged against Defendant Taylor in this case: WMCC was “fronted” as the DBE, receiving a fixed fee for passing through funds to CSE, which utilized its personnel to perform virtually all of the work under the subcontracts. *Id.* at 757.

Federal DBE regulations are authorized by Congress and the Federal DBE Program has been upheld by the courts. The court stated Defendant’s final argument to dismiss the charges relied upon his unsupported claims that the U.S. DOT lacked the authority to promulgate the DBE regulations and that it exceeded its authority in doing so. *Id.* at 757. The court found that the Government’s exhaustive summary of the legislative history and executive rulemaking that has taken place with respect to the relevant statutory provisions and regulations suffices to demonstrate that the federal DBE regulations were made under the broad grant of rights authorized by Congressional statutes. *Id., citing*, 49 U.S.C. § 322(a) (“The Secretary of Transportation may prescribe regulations to carry out the duties and powers of the Secretary. An officer of the Department of Transportation may prescribe regulations to carry out the duties and powers of the officer.”); 23 U.S.C. § 304 (The Secretary of Transportation “should assist, insofar as feasible, small business enterprises in obtaining contracts in connection with the prosecution of the highway system.”); 23 U.S.C. § 315 (“[Subject to certain exceptions related to tribal lands and national forests], the Secretary is authorized to prescribe and promulgate all needful rules and regulations for the carrying out of the provisions of this Title.”).

Also, significantly, the court pointed out that the Federal DBE Program has been upheld in various contexts, “even surviving strict scrutiny review,” with courts holding that the program is narrowly tailored to further compelling governmental interests. *Id.* at 757, *citing*, *Midwest Fence Corp.*, 840 F.3d at 942 (citing *Western States Paving Co. v. Washington State Dep’t of Transportation*, 407 F.3d 983, 993 (9th Cir. 2005); *Sherbrooke Turf, Inc. v. Minnesota Dep’t of Transportation*, 345 F.3d 964, 973 (8th Cir. 2003); *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1155 (10th Cir. 2000)).

In light of this authority as to the validity of the federal regulations and the Federal DBE Program, the Western District of Pennsylvania federal district court in this case held that Defendant failed to meet his burden to demonstrate that dismissal of the Indictment was warranted. *Id.*

Conclusion. The court denied the Defendant’s motion to dismiss the Indictment. The Defendant subsequently pleaded guilty. Recently on March 13, 2018, the court issued the final Judgment sentencing the Defendant to Probation for 3 years; ordered Restitution in the amount of \$85,221.21; and a \$30,000 fine. The case also was terminated on March 13, 2018.

E. Recent Decisions Involving State or Local Government MBE/WBE/DBE Programs in Other Jurisdictions

Recent Decisions in Federal Circuit Courts of Appeal

1. H. B. Rowe Co., Inc. v. W. Lyndo Tippet, NCDOT, et al., 615 F.3d 233 (4th Cir. 2010)

The State of North Carolina enacted statutory legislation that required prime contractors to engage in good faith efforts to satisfy participation goals for minority and women subcontractors on state-funded projects. (See facts as detailed in the decision of the United States District Court for the Eastern District of North Carolina discussed below.). The plaintiff, a prime contractor, brought this action after being denied a contract because of its failure to demonstrate good faith efforts to meet the participation goals set on a particular contract that it was seeking an award to perform work with the North Carolina Department of Transportation (“NCDOT”). Plaintiff asserted that the participation goals violated the Equal Protection Clause and sought injunctive relief and money damages.

After a bench trial, the district court held the challenged statutory scheme constitutional both on its face and as applied, and the plaintiff prime contractor appealed. 615 F.3d 233 at 236. The Court of Appeals held that the State did not meet its burden of proof in all respects to uphold the validity of the state legislation. But, the Court agreed with the district court that the State produced a strong basis in evidence justifying the statutory scheme on its face, and as applied to African American and Native American subcontractors, and that the State demonstrated that the legislative scheme is narrowly tailored to serve its compelling interest in remedying discrimination against these racial groups. The Court thus affirmed the decision of the district court in part, reversed it in part and remanded for further proceedings consistent with the opinion. *Id.*

The Court found that the North Carolina statutory scheme “largely mirrored the federal Disadvantaged Business Enterprise (“DBE”) program, with which every state must comply in awarding highway construction contracts that utilize federal funds.” 615 F.3d 233 at 236. The Court also noted that federal courts of appeal “have uniformly upheld the Federal DBE Program against equal-protection challenges.” *Id.*, at footnote 1, *citing, Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10th Cir. 2000).

In 2004, the State retained a consultant to prepare and issue a third study of subcontractors employed in North Carolina’s highway construction industry. The study, according to the Court, marshaled evidence to conclude that disparities in the utilization of minority subcontractors persisted. 615 F.3d 233 at 238. The Court pointed out that in response to the study, the North Carolina General Assembly substantially amended state legislation section 136-28.4 and the new law went into effect in 2006. The new statute modified the previous statutory scheme, according to the Court in five important respects. *Id.*

First, the amended statute expressly conditions implementation of any participation goals on the findings of the 2004 study. Second, the amended statute eliminates the 5 and 10 percent annual goals that were set in the predecessor statute. 615 F.3d 233 at 238-239. Instead, as amended, the

statute requires the NCDOT to “establish annual aspirational goals, not mandatory goals, ... for the overall participation in contracts by disadvantaged minority-owned and women-owned businesses ... [that] shall not be applied rigidly on specific contracts or projects.” *Id.* at 239, *quoting*, N.C. Gen.Stat. § 136-28.4(b)(2010). The statute further mandates that the NCDOT set “contract-specific goals or project-specific goals ... for each disadvantaged minority-owned and women-owned business category that has demonstrated significant disparity in contract utilization” based on availability, as determined by the study. *Id.*

Third, the amended statute narrowed the definition of “minority” to encompass only those groups that have suffered discrimination. *Id.* at 239. The amended statute replaced a list of defined minorities to any certain groups by defining “minority” as “only those racial or ethnicity classifications identified by [the study] ... that have been subjected to discrimination in the relevant marketplace and that have been adversely affected in their ability to obtain contracts with the Department.” *Id.* at 239 *quoting* section 136-28.4(c)(2)(2010).

Fourth, the amended statute required the NCDOT to reevaluate the Program over time and respond to changing conditions. 615 F.3d 233 at 239. Accordingly, the NCDOT must conduct a study similar to the 2004 study at least every five years. *Id.* § 136-28.4(b). Finally, the amended statute contained a sunset provision which was set to expire on August 31, 2009, but the General Assembly subsequently extended the sunset provision to August 31, 2010. *Id.* Section 136-28.4(e) (2010).

The Court also noted that the statute required only good faith efforts by the prime contractors to utilize subcontractors, and that the good faith requirement, the Court found, proved permissive in practice: prime contractors satisfied the requirement in 98.5 percent of cases, failing to do so in only 13 of 878 attempts. 615 F.3d 233 at 239.

Strict scrutiny. The Court stated the strict scrutiny standard was applicable to justify a race-conscious measure, and that it is a substantial burden but not automatically “fatal in fact.” 615 F.3d 233 at 241. The Court pointed out that “[t]he unhappy persistence of both the practice and the lingering effects of racial discrimination against minority groups in this country is an unfortunate reality, and government is not disqualified from acting in response to it.” *Id.* at 241 *quoting Alexander v. Estep*, 95 F.3d 312, 315 (4th Cir. 1996). In so acting, a governmental entity must demonstrate it had a compelling interest in “remedying the effects of past or present racial discrimination.” *Id.*, *quoting Shaw v. Hunt*, 517 U.S. 899, 909 (1996).

Thus, the Court found that to justify a race-conscious measure, a state must identify that discrimination, public or private, with some specificity, and must have a strong basis in evidence for its conclusion that remedial action is necessary. 615 F.3d 233 at 241 *quoting Croson*, 488 U.S. at 504 and *Wygant v. Jackson Board of Education*, 476 U.S. 267, 277 (1986)(plurality opinion).

The Court significantly noted that: “There is no ‘precise mathematical formula to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark.” 615 F.3d 233 at 241, *quoting Rothe Dev. Corp. v. Department of Defense*, 545 F.3d 1023, 1049 (Fed.Cir. 2008). The Court stated that the sufficiency of the State’s evidence of discrimination “must be evaluated on a case-by-case basis.” *Id.* at 241. (internal quotation marks omitted).

The Court held that a state “need not conclusively prove the existence of past or present racial discrimination to establish a strong basis in evidence for concluding that remedial action is necessary. 615 F.3d 233 at 241, *citing Concrete Works*, 321 F.3d at 958. “Instead, a state may meet its burden by relying on “a significant statistical disparity” between the availability of qualified, willing, and able minority subcontractors and the utilization of such subcontractors by the governmental entity or its prime contractors. *Id.* at 241, *citing Croson*, 488 U.S. at 509 (plurality opinion). The Court stated that we “further require that such evidence be ‘corroborated by significant anecdotal evidence of racial discrimination.’” *Id.* at 241, *quoting Maryland Troopers Association, Inc. v. Evans*, 993 F.2d 1072, 1077 (4th Cir. 1993).

The Court pointed out that those challenging race-based remedial measures must “introduce credible, particularized evidence to rebut” the state’s showing of a strong basis in evidence for the necessity for remedial action. *Id.* at 241-242, *citing Concrete Works*, 321 F.3d at 959. Challengers may offer a neutral explanation for the state’s evidence, present contrasting statistical data, or demonstrate that the evidence is flawed, insignificant, or not actionable. *Id.* at 242 (citations omitted). However, the Court stated “that mere speculation that the state’s evidence is insufficient or methodologically flawed does not suffice to rebut a state’s showing. *Id.* at 242, *citing Concrete Works*, 321 F.3d at 991.

The Court held that to satisfy strict scrutiny, the state’s statutory scheme must also be “narrowly tailored” to serve the state’s compelling interest in not financing private discrimination with public funds. 615 F.3d 233 at 242, *citing Alexander*, 95 F.3d at 315 (*citing Adarand*, 515 U.S. at 227).

Intermediate scrutiny. The Court held that courts apply “intermediate scrutiny” to statutes that classify on the basis of gender. *Id.* at 242. The Court found that a defender of a statute that classifies on the basis of gender meets this intermediate scrutiny burden “by showing at least that the classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives.” *Id.*, *quoting Mississippi University for Women v. Hogan*, 458 U.S. 718, 724 (1982). The Court noted that intermediate scrutiny requires less of a showing than does “the most exacting” strict scrutiny standard of review. *Id.* at 242. The Court found that its “sister circuits” provide guidance in formulating a governing evidentiary standard for intermediate scrutiny. These courts agree that such a measure “can rest safely on something less than the ‘strong basis in evidence’ required to bear the weight of a race- or ethnicity-conscious program.” *Id.* at 242, *quoting Engineering Contractors*, 122 F.3d at 909 (other citations omitted).

In defining what constitutes “something less” than a ‘strong basis in evidence,’ the courts, ... also agree that the party defending the statute must ‘present [] sufficient probative evidence in support of its stated rationale for enacting a gender preference, *i.e.*,...the evidence [must be] sufficient to show that the preference rests on evidence-informed analysis rather than on stereotypical generalizations.” 615 F.3d 233 at 242 *quoting Engineering Contractors*, 122 F.3d at 910 and *Concrete Works*, 321 F.3d at 959. The gender-based measures must be based on “reasoned analysis rather than on the mechanical application of traditional, often inaccurate, assumptions.” *Id.* at 242 *quoting Hogan*, 458 U.S. at 726.

Plaintiff's burden. The Court found that when a plaintiff alleges that a statute violates the Equal Protection Clause as applied and on its face, the plaintiff bears a heavy burden. In its facial challenge, the Court held that a plaintiff “has a very heavy burden to carry, and must show that [a statutory scheme] cannot operate constitutionally under any circumstance.” *Id.* at 243, quoting *West Virginia v. U.S. Department of Health & Human Services*, 289 F.3d 281, 292 (4th Cir. 2002). **Statistical evidence.** The Court examined the State’s statistical evidence of discrimination in public-sector subcontracting, including its disparity evidence and regression analysis. The Court noted that the statistical analysis analyzed the difference or disparity between the amount of subcontracting dollars minority- and women-owned businesses actually won in a market and the amount of subcontracting dollars they would be expected to win given their presence in that market. 615 F.3d 233 at 243. The Court found that the study grounded its analysis in the “disparity index,” which measures the participation of a given racial, ethnic, or gender group engaged in subcontracting. *Id.* In calculating a disparity index, the study divided the percentage of total subcontracting dollars that a particular group won by the percent that group represents in the available labor pool, and multiplied the result by 100. *Id.* The closer the resulting index is to 100, the greater that group’s participation. *Id.* The Court held that after *Croson*, a number of our sister circuits have recognized the utility of the disparity index in determining statistical disparities in the utilization of minority- and women-owned businesses. *Id.* at 243-244 (Citations to multiple federal circuit court decisions omitted.) The Court also found that generally “courts consider a disparity index lower than 80 as an indication of discrimination.” *Id.* at 244. Accordingly, the study considered only a disparity index lower than 80 as warranting further investigation. *Id.*

The Court pointed out that after calculating the disparity index for each relevant racial or gender group, the consultant tested for the statistical significance of the results by conducting standard deviation analysis through the use of t-tests. The Court noted that standard deviation analysis “describes the probability that the measured disparity is the result of mere chance.” 615 F.3d 233 at 244, quoting *Eng’g Contractors*, 122 F.3d at 914. The consultant considered the finding of two standard deviations to demonstrate “with 95 percent certainty that disparity, as represented by either overutilization or underutilization, is actually present.” *Id.*, citing *Eng’g Contractors*, 122 F.3d at 914.

The study analyzed the participation of minority and women subcontractors in construction contracts awarded and managed from the central NCDOT office in Raleigh, North Carolina. 615 F.3d 233 at 244. To determine utilization of minority and women subcontractors, the consultant developed a master list of contracts mainly from State-maintained electronic databases and hard copy files; then selected from that list a statistically valid sample of contracts, and calculated the percentage of subcontracting dollars awarded to minority- and women-owned businesses during the 5-year period ending in June 2003. (The study was published in 2004). *Id.* at 244.

The Court found that the use of data for centrally-awarded contracts was sufficient for its analysis. It was noted that data from construction contracts awarded and managed from the NCDOT divisions across the state and from preconstruction contracts, which involve work from engineering firms and architectural firms on the design of highways, was incomplete and not accurate. 615 F.3d 233 at 244, n.6. These data were not relied upon in forming the opinions relating to the study. *Id.* at 244, n. 6.

To estimate availability, which the Court defined as the percentage of a particular group in the relevant market area, the consultant created a vendor list comprising: (1) subcontractors approved by the department to perform subcontract work on state-funded projects, (2) subcontractors that performed such work during the study period, and (3) contractors qualified to perform prime construction work on state-funded contracts. 615 F.3d 233 at 244. The Court noted that prime construction work on state-funded contracts was included based on the testimony by the consultant that prime contractors are qualified to perform subcontracting work and often do perform such work. *Id.* at 245. The Court also noted that the consultant submitted its master list to the NCDOT for verification. *Id.* at 245.

Based on the utilization and availability figures, the study prepared the disparity analysis comparing the utilization based on the percentage of subcontracting dollars over the five year period, determining the availability in numbers of firms and their percentage of the labor pool, a disparity index which is the percentage of utilization in dollars divided by the percentage of availability multiplied by 100, and a T Value. 615 F.3d 233 at 245.

The Court concluded that the figures demonstrated prime contractors underutilized all of the minority subcontractor classifications on state-funded construction contracts during the study period. 615 F.3d 233 245. The disparity index for each group was less than 80 and, thus, the Court found warranted further investigation. *Id.* The t-test results, however, demonstrated marked underutilization only of African American and Native American subcontractors. *Id.* For African Americans the t-value fell outside of two standard deviations from the mean and, therefore, was statistically significant at a 95 percent confidence level. *Id.* The Court found there was at least a 95 percent probability that prime contractors' underutilization of African American subcontractors was *not* the result of mere chance. *Id.*

For Native American subcontractors, the t-value of 1.41 was significant at a confidence level of approximately 85 percent. 615 F.3d 233 at 245. The t-values for Hispanic American and Asian American subcontractors, demonstrated significance at a confidence level of approximately 60 percent. The disparity index for women subcontractors found that they were overutilized during the study period. The overutilization was statistically significant at a 95 percent confidence level. *Id.*

To corroborate the disparity study, the consultant conducted a regression analysis studying the influence of certain company and business characteristics – with a particular focus on owner race and gender – on a firm's gross revenues. 615 F.3d 233 at 246. The consultant obtained the data from a telephone survey of firms that conducted or attempted to conduct business with the NCDOT. The survey pool consisted of a random sample of such firms. *Id.*

The consultant used the firms' gross revenues as the dependent variable in the regression analysis to test the effect of other variables, including company age and number of full-time employees, and the owners' years of experience, level of education, race, ethnicity, and gender. 615 F.3d 233 at 246. The analysis revealed that minority and women ownership universally had a negative effect on revenue, and African American ownership of a firm had the largest negative effect on that firm's gross revenue of all the independent variables included in the regression model. *Id.* These findings led to the conclusion that for African Americans the disparity in firm revenue was not due to capacity-related or managerial characteristics alone. *Id.*

The Court rejected the arguments by the plaintiffs attacking the availability estimates. The Court rejected the plaintiff's expert, Dr. George LaNoue, who testified that bidder data – reflecting the number of subcontractors that actually bid on Department subcontracts – estimates availability better than “vendor data.” 615 F.3d 233 at 246. Dr. LaNoue conceded, however, that the State does not compile bidder data and that bidder data actually reflects skewed availability in the context of a goals program that urges prime contractors to solicit bids from minority and women subcontractors. *Id.* The Court found that the plaintiff's expert did not demonstrate that the vendor data used in the study was unreliable, or that the bidder data would have yielded less support for the conclusions reached. In sum, the Court held that the plaintiffs challenge to the availability estimate failed because it could not demonstrate that the 2004 study's availability estimate was inadequate. *Id.* at 246. The Court cited *Concrete Works*, 321 F.3d at 991 for the proposition that a challenger cannot meet its burden of proof through conjecture and unsupported criticisms of the state's evidence,” and that the plaintiff Rowe presented no viable alternative for determining availability. *Id.* at 246-247, citing *Concrete Works*, 321 F.3d 991 and *Sherbrooke Turf, Inc. v. Minn. Department of Transportation*, 345 F.3d 964, 973 (8th Cir. 2003).

The Court also rejected the plaintiff's argument that minority subcontractors participated on state-funded projects at a level consistent with their availability in the relevant labor pool, based on the state's response that evidence as to the *number* of minority subcontractors working with state-funded projects does not effectively rebut the evidence of discrimination in terms of subcontracting *dollars*. 615 F.3d 233 at 247. The State pointed to evidence indicating that prime contractors used minority businesses for low-value work in order to comply with the goals, and that African American ownership had a significant negative impact on firm revenue unrelated to firm capacity or experience. *Id.* The Court concluded plaintiff did not offer any contrary evidence. *Id.*

The Court found that the State bolstered its position by presenting evidence that minority subcontractors have the capacity to perform higher-value work. 615 F.3d 233 at 247. The study concluded, based on a sample of subcontracts and reports of annual firm revenue, that exclusion of minority subcontractors from contracts under \$500,000 was not a function of capacity. *Id.* at 247. Further, the State showed that over 90 percent of the NCDOT's subcontracts were valued at \$500,000 or less, and that capacity constraints do not operate with the same force on subcontracts as they may on prime contracts because subcontracts tend to be relatively small. *Id.* at 247. The Court pointed out that the Court in *Rothe II*, 545 F.3d at 1042-45, faulted disparity analyses of total construction dollars, including prime contracts, for failing to account for the relative capacity of firms in that case. *Id.* at 247.

The Court pointed out that in addition to the statistical evidence, the State also presented evidence demonstrating that from 1991 to 1993, during the Program's suspension, prime contractors awarded substantially fewer subcontracting dollars to minority and women subcontractors on state-funded projects. The Court rejected the plaintiff's argument that evidence of a decline in utilization does not raise an inference of discrimination. 615 F.3d 233 at 247-248. The Court held that the very significant decline in utilization of minority and women-subcontractors – nearly 38 percent – “surely provides a basis for a fact finder to infer that discrimination played some role in prime contractors' reduced utilization of these groups during the suspension.” *Id.* at 248, citing *Adarand v. Slater*, 228 F.3d at 1174 (finding that evidence of declining minority utilization after a program has been discontinued “strongly supports the

government's claim that there are significant barriers to minority competition in the public subcontracting market, raising the specter of racial discrimination.") The Court found such an inference is particularly compelling for minority-owned businesses because, even during the study period, prime contractors continue to underutilize them on state-funded road projects. *Id.* at 248.

Anecdotal evidence. The State additionally relied on three sources of anecdotal evidence contained in the study: a telephone survey, personal interviews, and focus groups. The Court found the anecdotal evidence showed an informal "good old boy" network of white contractors that discriminated against minority subcontractors. 615 F.3d 233 at 248. The Court noted that three-quarters of African American respondents to the telephone survey agreed that an informal network of prime and subcontractors existed in the State, as did the majority of other minorities, that more than half of African American respondents believed the network excluded their companies from bidding or awarding a contract as did many of the other minorities. *Id.* at 248. The Court found that nearly half of nonminority male respondents corroborated the existence of an informal network, however, only 17 percent of them believed that the network excluded their companies from bidding or winning contracts. *Id.*

Anecdotal evidence also showed a large majority of African American respondents reported that double standards in qualifications and performance made it more difficult for them to win bids and contracts, that prime contractors view minority firms as being less competent than nonminority firms, and that nonminority firms change their bids when not required to hire minority firms. 615 F.3d 233 at 248. In addition, the anecdotal evidence showed African American and Native American respondents believed that prime contractors sometimes dropped minority subcontractors after winning contracts. *Id.* at 248. The Court found that interview and focus-group responses echoed and underscored these reports. *Id.*

The anecdotal evidence indicated that prime contractors already know who they will use on the contract before they solicit bids: that the "good old boy network" affects business because prime contractors just pick up the phone and call their buddies, which excludes others from that market completely; that prime contractors prefer to use other less qualified minority-owned firms to avoid subcontracting with African American-owned firms; and that prime contractors use their preferred subcontractor regardless of the bid price. 615 F.3d 233 at 248-249. Several minority subcontractors reported that prime contractors do not treat minority firms fairly, pointing to instances in which prime contractors solicited quotes the day before bids were due, did not respond to bids from minority subcontractors, refused to negotiate prices with them, or gave minority subcontractors insufficient information regarding the project. *Id.* at 249.

The Court rejected the plaintiffs' contention that the anecdotal data was flawed because the study did not verify the anecdotal data and that the consultant oversampled minority subcontractors in collecting the data. The Court stated that the plaintiffs offered no rationale as to why a fact finder could not rely on the State's "unverified" anecdotal data, and pointed out that a fact finder could very well conclude that anecdotal evidence need not- and indeed cannot-be verified because it "is nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions." 615 F.3d 233 at 249, *quoting Concrete Works*, 321 F.3d at 989.

The Court held that anecdotal evidence simply supplements statistical evidence of discrimination. *Id.* at 249. The Court rejected plaintiffs’ argument that the study oversampled representatives from minority groups, and found that surveying more non-minority men would not have advanced the inquiry. *Id.* at 249. It was noted that the samples of the minority groups were randomly selected. *Id.* The Court found the state had compelling anecdotal evidence that minority subcontractors face race-based obstacles to successful bidding. *Id.* at 249.

Strong basis in evidence that the minority participation goals were necessary to remedy discrimination. The Court held that the State presented a “strong basis in evidence” for its conclusion that minority participation goals were necessary to remedy discrimination against African American and Native American subcontractors.” 615 F.3d 233 at 250. Therefore, the Court held that the State satisfied the strict scrutiny test. The Court found that the State’s data demonstrated that prime contractors grossly underutilized African American and Native American subcontractors in public sector subcontracting during the study. *Id.* at 250. The Court noted that these findings have particular resonance because since 1983, North Carolina has encouraged minority participation in state-funded highway projects, and yet African American and Native American subcontractors continue to be underutilized on such projects. *Id.* at 250. In addition, the Court found the disparity index in the study demonstrated statistically significant underutilization of African American subcontractors at a 95 percent confidence level, and of Native American subcontractors at a confidence level of approximately 85 percent. 615 F.3d 233 at 250. The Court concluded the State bolstered the disparity evidence with regression analysis demonstrating that African American ownership correlated with a significant, negative impact on firm revenue, and demonstrated there was a dramatic decline in the utilization of minority subcontractors during the suspension of the program in the 1990s. *Id.*

Thus, the Court held the State’s evidence showing a gross statistical disparity between the availability of qualified American and Native American subcontractors and the amount of subcontracting dollars they win on public sector contracts established the necessary statistical foundation for upholding the minority participation goals with respect to these groups. 615 F.3d 233 at 250. The Court then found that the State’s anecdotal evidence of discrimination against these two groups sufficiently supplemented the State’s statistical showing. *Id.* The survey in the study exposed an informal, racially exclusive network that systemically disadvantaged minority subcontractors. *Id.* at 251. The Court held that the State could conclude with good reason that such networks exert a chronic and pernicious influence on the marketplace that calls for remedial action. *Id.* The Court found the anecdotal evidence indicated that racial discrimination is a critical factor underlying the gross statistical disparities presented in the study. *Id.* at 251. Thus, the Court held that the State presented substantial statistical evidence of gross disparity, corroborated by “disturbing” anecdotal evidence.

The Court held in circumstances like these, the Supreme Court has made it abundantly clear a state can remedy a public contracting system that withholds opportunities from minority groups because of their race. 615 F.3d 233 at 251-252.

Narrowly tailored. The Court then addressed whether the North Carolina statutory scheme was narrowly tailored to achieve the State’s compelling interest in remedying discrimination against African American and Native American subcontractors in public-sector subcontracting. The

following factors were considered in determining whether the statutory scheme was narrowly tailored.

Neutral measures. The Court held that narrowly tailoring requires “serious, good faith consideration of workable race-neutral alternatives,” but a state need not “exhaust [] ... every conceivable race-neutral alternative.” 615 F.3d 233 at 252 *quoting Grutter v. Bollinger*, 539 U.S. 306, 339 (2003). The Court found that the study details numerous alternative race-neutral measures aimed at enhancing the development and competitiveness of small or otherwise disadvantaged businesses in North Carolina. *Id.* at 252. The Court pointed out various race-neutral alternatives and measures, including a Small Business Enterprise Program; waiving institutional barriers of bonding and licensing requirements on certain small business contracts of \$500,000 or less; and the Department contracts for support services to assist disadvantaged business enterprises with bookkeeping and accounting, taxes, marketing, bidding, negotiation, and other aspects of entrepreneurial development. *Id.* at 252.

The Court found that plaintiff identified no viable race-neutral alternatives that North Carolina had failed to consider and adopt. The Court also found that the State had undertaken most of the race-neutral alternatives identified by USDOT in its regulations governing the Federal DBE Program. 615 F.3d 233 at 252, *citing* 49 CFR § 26.51(b). The Court concluded that the State gave serious good faith consideration to race-neutral alternatives prior to adopting the statutory scheme. *Id.*

The Court concluded that despite these race-neutral efforts, the study demonstrated disparities continue to exist in the utilization of African American and Native American subcontractors in state-funded highway construction subcontracting, and that these “persistent disparities indicate the necessity of a race-conscious remedy.” 615 F.3d 233 at 252.

Duration. The Court agreed with the district court that the program was narrowly tailored in that it set a specific expiration date and required a new disparity study every five years. 615 F.3d 233 at 253. The Court found that the program’s inherent time limit and provisions requiring regular reevaluation ensure it is carefully designed to endure only until the discriminatory impact has been eliminated. *Id.* at 253, *citing Adarand Constructors v. Slater*, 228 F.3d at 1179 (*quoting United States v. Paradise*, 480 U.S. 149, 178 (1987)).

Program’s goals related to percentage of minority subcontractors. The Court concluded that the State had demonstrated that the Program’s participation goals are related to the percentage of minority subcontractors in the relevant markets in the State. 615 F.3d 233 at 253. The Court found that the NCDOT had taken concrete steps to ensure that these goals accurately reflect the availability of minority-owned businesses on a project-by-project basis. *Id.*

Flexibility. The Court held that the Program was flexible and thus satisfied this indicator of narrow tailoring. 615 F.3d 233 at 253. The Program contemplated a waiver of project-specific goals when prime contractors make good faith efforts to meet those goals, and that the good faith efforts essentially require only that the prime contractor solicit and consider bids from minorities. *Id.* The State does not require or expect the prime contractor to accept any bid from an unqualified bidder, or any bid that is not the lowest bid. *Id.* The Court found there was a lenient standard and flexibility of the “good faith” requirement, and noted the evidence showed only 13 of 878 good faith submissions failed to demonstrate good faith efforts. *Id.*

Burden on non-MWBE/DBEs. The Court rejected the two arguments presented by plaintiff that the Program created onerous solicitation and follow-up requirements, finding that there was no need for additional employees dedicated to the task of running the solicitation program to obtain MBE/WBEs, and that there was no evidence to support the claim that plaintiff was required to subcontract millions of dollars of work that it could perform itself for less money. 615 F.3d 233 at 254. The State offered evidence from the study that prime contractors need not submit subcontract work that they can self-perform. *Id.*

Overinclusive. The Court found by its own terms the statutory scheme is not overinclusive because it limited relief to only those racial or ethnicity classifications that have been subjected to discrimination in the relevant marketplace and that had been adversely affected in their ability to obtain contracts with the Department. 615 F.3d 233 at 254. The Court concluded that in tailoring the remedy this way, the legislature did not randomly include racial groups that may never have suffered from discrimination in the construction industry, but rather, contemplated participation goals only for those groups shown to have suffered discrimination. *Id.*

In sum, the Court held that the statutory scheme is narrowly tailored to achieve the State's compelling interest in remedying discrimination in public-sector subcontracting against African American and Native American subcontractors. *Id.* at 254.

Women-owned businesses overutilized. The study's public-sector disparity analysis demonstrated that women-owned businesses won far more than their expected share of subcontracting dollars during the study period. 615 F.3d 233 at 254. In other words, the Court concluded that prime contractors substantially overutilized women subcontractors on public road construction projects. *Id.* The Court found the public-sector evidence did not evince the "exceedingly persuasive justification" the Supreme Court requires. *Id.* at 255.

The Court noted that the State relied heavily on private-sector data from the study attempting to demonstrate that prime contractors significantly underutilized women subcontractors in the general construction industry statewide and in the Asheville, North Carolina area. 615 F.3d 233 at 255. However, because the study did not provide a t-test analysis on the private-sector disparity figures to calculate statistical significance, the Court could not determine whether this private underutilization was "the result of mere chance." *Id.* at 255. The Court found troubling the "evidentiary gap" that there was no evidence indicating the extent to which women-owned businesses competing on public-sector road projects vied for private-sector subcontracts in the general construction industry. *Id.* at 255. The Court also found that the State did not present any anecdotal evidence indicating that women subcontractors successfully bidding on State contracts faced private-sector discrimination. *Id.* In addition, the Court found missing any evidence prime contractors that discriminate against women subcontractors in the private sector nevertheless win public-sector contracts. *Id.*

The Court pointed out that it did not suggest that the proponent of a gender-conscious program "must always tie private discrimination to public action." 615 F.3d 233 at 255, n. 11. But, the Court held where, as here, there existed substantial probative evidence of overutilization in the relevant public sector, a state must present something more than generalized private-sector data unsupported by compelling anecdotal evidence to justify a gender-conscious program. *Id.* at 255, n. 11.

Moreover, the Court found the state failed to establish the amount of overlap between general construction and road construction subcontracting. 615 F.3d 233 at 256. The Court said that the dearth of evidence as to the correlation between public road construction subcontracting and private general construction subcontracting severely limits the private data's probative value in this case. *Id.*

Thus, the Court held that the State could not overcome the strong evidence of overutilization in the public sector in terms of gender participation goals, and that the proffered private-sector data failed to establish discrimination in the particular field in question. 615 F.3d 233 at 256. Further, the anecdotal evidence, the Court concluded, indicated that most women subcontractors do not experience discrimination. *Id.* Thus, the Court held that the State failed to present sufficient evidence to support the Program's current inclusion of women subcontractors in setting participation goals. *Id.*

Holding. The Court held that the state legislature had crafted legislation that withstood the constitutional scrutiny. 615 F.3d 233 at 257. The Court concluded that in light of the statutory scheme's flexibility and responsiveness to the realities of the marketplace, and given the State's strong evidence of discrimination against African American and Native American subcontractors in public-sector subcontracting, the State's application of the statute to these groups is constitutional. *Id.* at 257. However, the Court also held that because the State failed to justify its application of the statutory scheme to women, Asian American, and Hispanic American subcontractors, the Court found those applications were not constitutional.

Therefore, the Court affirmed the judgment of the district court with regard to the facial validity of the statute, and with regard to its application to African American and Native American subcontractors. 615 F.3d 233 at 258. The Court reversed the district court's judgment insofar as it upheld the constitutionality of the state legislature as applied to women, Asian American and Hispanic American subcontractors. *Id.* The Court thus remanded the case to the district court to fashion an appropriate remedy consistent with the opinion. *Id.*

Concurring opinions. It should be pointed out that there were two concurring opinions by the three Judge panel: one judge concurred in the judgment, and the other judge concurred fully in the majority opinion and the judgment.

2. Jana-Rock Construction, Inc. v. New York State Dept. of Economic Development, 438 F.3d 195 (2d Cir. 2006)

This recent case is instructive in connection with the determination of the groups that may be included in a MBE/WBE-type program, and the standard of analysis utilized to evaluate a local government's non-inclusion of certain groups. In this case, the Second Circuit Court of Appeals held racial classifications that are challenged as "under-inclusive" (*i.e.*, those that exclude persons from a particular racial classification) are subject to a "rational basis" review, not strict scrutiny.

Plaintiff Luiere, a 70 percent shareholder of Jana-Rock Construction, Inc. ("Jana Rock") and the "son of a Spanish mother whose parents were born in Spain," challenged the constitutionality of the State of New York's definition of "Hispanic" under its local minority-owned business program. 438 F.3d 195, 199-200 (2d Cir. 2006). Under the USDOT regulations, 49 CFR § 26.5,

“Hispanic Americans” are defined as “persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race.” *Id.* at 201. Upon proper application, Jana-Rock was certified by the New York Department of Transportation as a Disadvantaged Business Enterprise (“DBE”) under the federal regulations. *Id.*

However, unlike the federal regulations, the State of New York’s local minority-owned business program included in its definition of minorities “Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American of either Indian or Hispanic origin, regardless of race.” The definition did not include all persons from, or descendants of persons from, Spain or Portugal. *Id.* Accordingly, Jana-Rock was denied MBE certification under the local program; Jana-Rock filed suit alleging a violation of the Equal Protection Clause. *Id.* at 202-03. The plaintiff conceded that the overall minority-owned business program satisfied the requisite strict scrutiny, but argued that the definition of “Hispanic” was fatally under-inclusive. *Id.* at 205.

The Second Circuit found that the narrow-tailoring prong of the strict scrutiny analysis “allows New York to identify which groups it is prepared to prove are in need of affirmative action without demonstrating that no other groups merit consideration for the program.” *Id.* at 206. The court found that evaluating under-inclusiveness as an element of the strict scrutiny analysis was at odds with the United States Supreme Court decision in *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989) which required that affirmative action programs be no broader than necessary. *Id.* at 207-08. The court similarly rejected the argument that the state should mirror the federal definition of “Hispanic,” finding that Congress has more leeway than the states to make broader classifications because Congress is making such classifications on the national level. *Id.* at 209.

The court opined — without deciding — that it may be impermissible for New York to simply adopt the “federal USDOT definition of Hispanic without at least making an independent assessment of discrimination against Hispanics of Spanish Origin in New York.” *Id.* Additionally, finding that the plaintiff failed to point to any discriminatory purpose by New York in failing to include persons of Spanish or Portuguese descent, the court determined that the rational basis analysis was appropriate. *Id.* at 213.

The court held that the plaintiff failed the rational basis test for three reasons: (1) because it was not irrational nor did it display animus to exclude persons of Spanish and Portuguese descent from the definition of Hispanic; (2) because the fact the plaintiff could demonstrate evidence of discrimination that he personally had suffered did not render New York’s decision to exclude persons of Spanish and Portuguese descent irrational; and (3) because the fact New York may have relied on Census data including a small percentage of Hispanics of Spanish descent did not mean that it was irrational to conclude that Hispanics of Latin American origin were in greater need of remedial legislation. *Id.* at 213-14. Thus, the Second Circuit affirmed the conclusion that New York had a rational basis for its definition to not include persons of Spanish and Portuguese descent, and thus affirmed the district court decision upholding the constitutionality of the challenged definition.

3. Rapid Test Prods., Inc. v. Durham Sch. Servs., Inc., 460 F.3d 859 (7th Cir. 2006)

In *Rapid Test Products, Inc. v. Durham School Services Inc.*, the Seventh Circuit Court of Appeals held that 42 U.S.C. § 1981 (the federal anti-discrimination law) did not provide an “entitlement” in disadvantaged businesses to receive contracts subject to set aside programs; rather, § 1981 provided a remedy for individuals who were subject to discrimination.

Durham School Services, Inc. (“Durham”), a prime contractor, submitted a bid for and won a contract with an Illinois school district. The contract was subject to a set-aside program reserving some of the subcontracts for disadvantaged business enterprises (a race- and gender-conscious program). Prior to bidding, Durham negotiated with Rapid Test Products, Inc. (“Rapid Test”), made one payment to Rapid Test as an advance, and included Rapid Test in its final bid. Rapid Test believed it had received the subcontract. However, after the school district awarded the contract to Durham, Durham gave the subcontract to one of Rapid Test’s competitor’s, a business owned by an Asian male. The school district agreed to the substitution. Rapid Test brought suit against Durham under 42 U.S.C. § 1981 alleging that Durham discriminated against it because Rapid’s owner was a black woman.

The district court granted summary judgment in favor of Durham holding the parties’ dealing had been too indefinite to create a contract. On appeal, the Seventh Circuit Court of Appeals stated that “§ 1981 establishes a rule against discrimination in contracting and does not create any entitlement to be the beneficiary of a contract reserved for firms owned by specified racial, sexual, ethnic, or religious groups. Arguments that a particular set-aside program is a lawful remedy for prior discrimination may or may not prevail if a potential subcontractor claims to have been excluded, but it is to victims of discrimination rather than frustrated beneficiaries that § 1981 assigns the right to litigate.”

The court held that if race or sex discrimination is the reason why Durham did not award the subcontract to Rapid Test, then § 1981 provides relief. Having failed to address this issue, the Seventh Circuit Court of Appeals remanded the case to the district court to determine whether Rapid Test had evidence to back up its claim that race and sex discrimination, rather than a nondiscriminatory reason such as inability to perform the services Durham wanted, accounted for Durham’s decision to hire Rapid Test’s competitor.

4. *Viridi v. DeKalb County School District*, 135 Fed. Appx. 262, 2005 WL 138942 (11th Cir. 2005) (unpublished opinion)

Although it is an unpublished opinion, *Viridi v. DeKalb County School District* is a recent Eleventh Circuit decision reviewing a challenge to a local government MBE/WBE-type program, which is instructive to the disparity study. In *Viridi*, the Eleventh Circuit struck down a MBE/WBE goal program that the court held contained racial classifications. The court based its ruling primarily on the failure of the DeKalb County School District (the “District”) to seriously consider and implement a race-neutral program and to the infinite duration of the program.

Plaintiff Viridi, an Asian American architect of Indian descent, filed suit against the District, members of the DeKalb County Board of Education (both individually and in their official capacities) (the “Board”) and the Superintendent (both individually and in his official capacity) (collectively “defendants”) pursuant to 42 U.S.C. §§ 1981 and 1983 and the Fourteenth

Amendment alleging that they discriminated against him on the basis of race when awarding architectural contracts. 135 Fed. Appx. 262, 264 (11th Cir. 2005). Virdi also alleged the school district's Minority Vendor Involvement Program was facially unconstitutional. *Id.*

The district court initially granted the defendants' Motions for Summary Judgment on all of Virdi's claims and the Eleventh Circuit Court of Appeals reversed in part, vacated in part, and remanded. *Id.* On remand, the district court granted the defendants' Motion for Partial Summary Judgment on the facial challenge, and then granted the defendants' motion for a judgment as a matter of law on the remaining claims at the close of Virdi's case. *Id.*

In 1989, the Board appointed the Tillman Committee (the "Committee") to study participation of female- and minority-owned businesses with the District. *Id.* The Committee met with various District departments and a number of minority contractors who claimed they had unsuccessfully attempted to solicit business with the District. *Id.* Based upon a "general feeling" that minorities were under-represented, the Committee issued the Tillman Report (the "Report") stating "the Committee's impression that '[m]inorities ha[d] not participated in school board purchases and contracting in a ratio reflecting the minority make-up of the community.'" *Id.* The Report contained no specific evidence of past discrimination nor any factual findings of discrimination. *Id.*

The Report recommended that the District: (1) Advertise bids and purchasing opportunities in newspapers targeting minorities, (2) conduct periodic seminars to educate minorities on doing business with the District, (3) notify organizations representing minority firms regarding bidding and purchasing opportunities, and (4) publish a "how to" booklet to be made available to any business interested in doing business with the District.

Id. The Report also recommended that the District adopt annual, aspirational participation goals for women- and minority-owned businesses. *Id.* The Report contained statements indicating the selection process should remain neutral and recommended that the Board adopt a non-discrimination statement. *Id.*

In 1991, the Board adopted the Report and implemented several of the recommendations, including advertising in the AJC, conducting seminars, and publishing the "how to" booklet. *Id.* The Board also implemented the Minority Vendor Involvement Program (the "MVP") which adopted the participation goals set forth in the Report. *Id.* at 265.

The Board delegated the responsibility of selecting architects to the Superintendent. *Id.* Virdi sent a letter to the District in October 1991 expressing interest in obtaining architectural contracts. *Id.* Virdi sent the letter to the District Manager and sent follow-up literature; he re-contacted the District Manager in 1992 and 1993. *Id.* In August 1994, Virdi sent a letter and a qualifications package to a project manager employed by Heery International. *Id.* In a follow-up conversation, the project manager allegedly told Virdi that his firm was not selected not based upon his qualifications, but because the "District was only looking for 'black-owned firms.'" *Id.* Virdi sent a letter to the project manager requesting confirmation of his statement in writing and the project manager forwarded the letter to the District. *Id.*

After a series of meetings with District officials, in 1997, Virdi met with the newly hired Executive Director. *Id.* at 266. Upon request of the Executive Director, Virdi re-submitted his qualifications but was informed that he would be considered only for future projects (Phase III SPLOST projects). *Id.* Virdi then filed suit before any Phase III SPLOST projects were awarded. *Id.*

The Eleventh Circuit considered whether the MVP was facially unconstitutional and whether the defendants intentionally discriminated against Virdi on the basis of his race. The court held that strict scrutiny applies to all racial classifications and is not limited to merely set-asides or mandatory quotas; therefore, the MVP was subject to strict scrutiny because it contained racial classifications. *Id.* at 267. The court first questioned whether the identified government interest was compelling. *Id.* at 268. However, the court declined to reach that issue because it found the race-based participation goals were not narrowly tailored to achieving the identified government interest. *Id.*

The court held the MVP was not narrowly tailored for two reasons. *Id.* First, because no evidence existed that the District considered race-neutral alternatives to “avoid unwitting discrimination.” The court found that “[w]hile narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require serious, good faith consideration of whether such alternatives could serve the governmental interest at stake.” *Id.*, citing *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003), and *Richmond v. J.A. Croson Co.*, 488 U.S. 469, 509-10 (1989). The court found that District could have engaged in any number of equally effective race-neutral alternatives, including using its outreach procedure and tracking the participation and success of minority-owned business as compared to non-minority-owned businesses. *Id.* at 268, n.8. Accordingly, the court held the MVP was not narrowly tailored. *Id.* at 268.

Second, the court held that the unlimited duration of the MVP’s racial goals negated a finding of narrow tailoring. *Id.* “[R]ace conscious ... policies must be limited in time.” *Id.*, citing *Grutter*, 539 U.S. at 342, and *Walker v. City of Mesquite, TX*, 169 F.3d 973, 982 (5th Cir. 1999). The court held that because the government interest could have been achieved utilizing race-neutral measures, and because the racial goals were not temporally limited, the MVP could not withstand strict scrutiny and was unconstitutional on its face. *Id.* at 268.

With respect to Virdi’s claims of intentional discrimination, the court held that although the MVP was facially unconstitutional, no evidence existed that the MVP or its unconstitutionality caused Virdi to lose a contract that he would have otherwise received. *Id.* Thus, because Virdi failed to establish a causal connection between the unconstitutional aspect of the MVP and his own injuries, the court affirmed the district court’s grant of judgment on that issue. *Id.* at 269. Similarly, the court found that Virdi presented insufficient evidence to sustain his claims against the Superintendent for intentional discrimination. *Id.*

The court reversed the district court’s order pertaining to the facial constitutionality of the MVP’s racial goals, and affirmed the district court’s order granting defendants’ motion on the issue of intentional discrimination against Virdi. *Id.* at 270.

5. *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950 (10th Cir. 2003), cert. denied, 540 U.S. 1027, 124 S. Ct. 556 (2003) (Scalia, Justice with whom the Chief Justice Rehnquist, joined, dissenting from the denial of certiorari)

This case is instructive to the disparity study because it is one of the only recent decisions to uphold the validity of a local government MBE/WBE program. It is significant to note that the Tenth Circuit did not apply the narrowly tailored test and thus did not rule on an application of the narrowly tailored test, instead finding that the plaintiff had waived that challenge in one of the earlier decisions in the case. This case also is one of the only cases to have found private sector marketplace discrimination as a basis to uphold an MBE/WBE-type program.

In *Concrete Works* the United States Court of Appeals for the Tenth Circuit held that the City and County of Denver had a compelling interest in limiting race discrimination in the construction industry, that the City had an important governmental interest in remedying gender discrimination in the construction industry, and found that the City and County of Denver had established a compelling governmental interest to have a race- and gender-based program. In *Concrete Works*, the Court of Appeals did not address the issue of whether the MWBE Ordinance was narrowly tailored because it held the district court was barred under the law of the case doctrine from considering that issue since it was not raised on appeal by the plaintiff construction companies after they had lost that issue on summary judgment in an earlier decision. Therefore, the Court of Appeals did not reach a decision as to narrowly tailoring or consider that issue in the case.

Case history. Plaintiff, Concrete Works of Colorado, Inc. (“CWC”) challenged the constitutionality of an “affirmative action” ordinance enacted by the City and County of Denver (hereinafter the “City” or “Denver”). 321 F.3d 950, 954 (10th Cir. 2003). The ordinance established participation goals for racial minorities and women on certain City construction and professional design projects. *Id.*

The City enacted an Ordinance No. 513 (“1990 Ordinance”) containing annual goals for MBE/WBE utilization on all competitively bid projects. *Id.* at 956. A prime contractor could also satisfy the 1990 Ordinance requirements by using “good faith efforts.” *Id.* In 1996, the City replaced the 1990 Ordinance with Ordinance No. 304 (the “1996 Ordinance”). The district court stated that the 1996 Ordinance differed from the 1990 Ordinance by expanding the definition of covered contracts to include some privately financed contracts on City-owned land; added updated information and findings to the statement of factual support for continuing the program; refined the requirements for MBE/WBE certification and graduation; mandated the use of MBEs and WBEs on change orders; and expanded sanctions for improper behavior by MBEs, WBEs or majority-owned contractors in failing to perform the affirmative action commitments made on City projects. *Id.* at 956-57.

The 1996 Ordinance was amended in 1998 by Ordinance No. 948 (the “1998 Ordinance”). The 1998 Ordinance reduced annual percentage goals and prohibited an MBE or a WBE, acting as a bidder, from counting self-performed work toward project goals. *Id.* at 957.

CWC filed suit challenging the constitutionality of the 1990 Ordinance. *Id.* The district court conducted a bench trial on the constitutionality of the three ordinances. *Id.* The district court ruled in favor of CWC and concluded that the ordinances violated the Fourteenth Amendment.

Id. The City then appealed to the Tenth Circuit Court of Appeals. *Id.* The Court of Appeals reversed and remanded. *Id.* at 954.

The Court of Appeals applied strict scrutiny to race-based measures and intermediate scrutiny to the gender-based measures. *Id.* at 957-58, 959. The Court of Appeals also cited *Richmond v. J.A. Croson Co.*, for the proposition that a governmental entity “can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment.” 488 U.S. 469, 492 (1989) (plurality opinion). Because “an effort to alleviate the effects of *societal* discrimination is not a compelling interest,” the Court of Appeals held that Denver could demonstrate that its interest is compelling only if it (1) identified the past or present discrimination “with some specificity,” and (2) demonstrated that a “strong basis in evidence” supports its conclusion that remedial action is necessary. *Id.* at 958, quoting *Shaw v. Hunt*, 517 U.S. 899, 909-10 (1996).

The court held that Denver could meet its burden without conclusively proving the existence of past or present racial discrimination. *Id.* Rather, Denver could rely on “empirical evidence that demonstrates ‘a significant statistical disparity between the number of qualified minority contractors ... and the number of such contractors actually engaged by the locality or the locality’s prime contractors.’” *Id.*, quoting *Croson*, 488 U.S. at 509 (plurality opinion). Furthermore, the Court of Appeals held that Denver could rely on statistical evidence gathered from the six-county Denver Metropolitan Statistical Area (MSA) and could supplement the statistical evidence with anecdotal evidence of public and private discrimination. *Id.*

The Court of Appeals held that Denver could establish its compelling interest by presenting evidence of its own direct participation in racial discrimination or its passive participation in private discrimination. *Id.* The Court of Appeals held that once Denver met its burden, CWC had to introduce “credible, particularized evidence to rebut [Denver’s] initial showing of the existence of a compelling interest, which could consist of a neutral explanation for the statistical disparities.” *Id.* (internal citations and quotations omitted). The Court of Appeals held that CWC could also rebut Denver’s statistical evidence “by (1) showing that the statistics are flawed; (2) demonstrating that the disparities shown by the statistics are not significant or actionable; or (3) presenting contrasting statistical data.” *Id.* (internal citations and quotations omitted). The Court of Appeals held that the burden of proof at all times remained with CWC to demonstrate the unconstitutionality of the ordinances. *Id.* at 960.

The Court of Appeals held that to meet its burden of demonstrating an important governmental interest per the intermediate scrutiny analysis, Denver must show that the gender-based measures in the ordinances were based on “reasoned analysis rather than through the mechanical application of traditional, often inaccurate, assumptions.” *Id.*, quoting *Miss. Univ. for Women v. Hogan*, 458 U.S. 718, 726 (1982).

The studies. Denver presented historical, statistical and anecdotal evidence in support of its MBE/WBE programs. Denver commissioned a number of studies to assess its MBE/WBE programs. *Id.* at 962. The consulting firm hired by Denver utilized disparity indices in part. *Id.* at 962. The 1990 Study also examined MBE and WBE utilization in the overall Denver MSA construction market, both public and private. *Id.* at 963.

The consulting firm also interviewed representatives of MBEs, WBEs, majority-owned construction firms, and government officials. *Id.* Based on this information, the 1990 Study concluded that, despite Denver's efforts to increase MBE and WBE participation in Denver Public Works projects, some Denver employees and private contractors engaged in conduct designed to circumvent the goals program. *Id.* After reviewing the statistical and anecdotal evidence contained in the 1990 Study, the City Council enacted the 1990 Ordinance. *Id.*

After the Tenth Circuit decided Concrete Works II, Denver commissioned another study (the "1995 Study"). *Id.* at 963. Using 1987 Census Bureau data, the 1995 Study again examined utilization of MBEs and WBEs in the construction and professional design industries within the Denver MSA. *Id.* The 1995 Study concluded that MBEs and WBEs were more likely to be one-person or family-run businesses. The Study concluded that Hispanic-owned firms were less likely to have paid employees than white-owned firms but that Asian/Native American-owned firms were more likely to have paid employees than white- or other minority-owned firms. To determine whether these factors explained overall market disparities, the 1995 Study used the Census data to calculate disparity indices for all firms in the Denver MSA construction industry and separately calculated disparity indices for firms with paid employees and firms with no paid employees. *Id.* at 964.

The Census Bureau information was also used to examine average revenues per employee for Denver MSA construction firms with paid employees. Hispanic-, Asian-, Native American-, and women-owned firms with paid employees all reported lower revenues per employee than majority-owned firms. The 1995 Study also used 1990 Census data to calculate rates of self-employment within the Denver MSA construction industry. The Study concluded that the disparities in the rates of self-employment for blacks, Hispanics, and women persisted even after controlling for education and length of work experience. The 1995 Study controlled for these variables and reported that blacks and Hispanics working in the Denver MSA construction industry were less than half as likely to own their own businesses as were whites of comparable education and experience. *Id.*

In late 1994 and early 1995, a telephone survey of construction firms doing business in the Denver MSA was conducted. *Id.* at 965. Based on information obtained from the survey, the consultant calculated percentage utilization and percentage availability of MBEs and WBEs. Percentage utilization was calculated from revenue information provided by the responding firms. Percentage availability was calculated based on the number of MBEs and WBEs that responded to the survey question regarding revenues. Using these utilization and availability percentages, the 1995 Study showed disparity indices of 64 for MBEs and 70 for WBEs in the construction industry. In the professional design industry, disparity indices were 67 for MBEs and 69 for WBEs. The 1995 Study concluded that the disparity indices obtained from the telephone survey data were more accurate than those obtained from the 1987 Census data because the data obtained from the telephone survey were more recent, had a narrower focus, and included data on C corporations. Additionally, it was possible to calculate disparity indices for professional design firms from the survey data. *Id.*

In 1997, the City conducted another study to estimate the availability of MBEs and WBEs and to examine, *inter alia*, whether race and gender discrimination limited the participation of MBEs and WBEs in construction projects of the type typically undertaken by the City (the "1997

Study”). *Id.* at 966. The 1997 Study used geographic and specialization information to calculate MBE/WBE availability. Availability was defined as “the ratio of MBE/WBE firms to the total number of firms in the four-digit SIC codes and geographic market area relevant to the City’s contracts.” *Id.*

The 1997 Study compared MBE/WBE availability and utilization in the Colorado construction industry. *Id.* The statewide market was used because necessary information was unavailable for the Denver MSA. *Id.* at 967. Additionally, data collected in 1987 by the Census Bureau was used because more current data was unavailable. The Study calculated disparity indices for the statewide construction market in Colorado as follows: 41 for African American firms, 40 for Hispanic firms, 14 for Asian and other minorities, and 74 for women-owned firms. *Id.*

The 1997 Study also contained an analysis of whether African Americans, Hispanics, or Asian Americans working in the construction industry are less likely to be self-employed than similarly situated whites. *Id.* Using data from the Public Use Microdata Samples (“PUMS”) of the 1990 Census of Population and Housing, the Study used a sample of individuals working in the construction industry. The Study concluded that in both Colorado and the Denver MSA, African Americans, Hispanics, and Native Americans working in the construction industry had lower self-employment rates than whites. Asian Americans had higher self-employment rates than whites.

Using the availability figures calculated earlier in the Study, the Study then compared the actual availability of MBE/WBEs in the Denver MSA with the potential availability of MBE/WBEs if they formed businesses at the same rate as whites with the same characteristics. *Id.* Finally, the Study examined whether self-employed minorities and women in the construction industry have lower earnings than white males with similar characteristics. *Id.* at 968. Using linear regression analysis, the Study compared business owners with similar years of education, of similar age, doing business in the same geographic area, and having other similar demographic characteristics. Even after controlling for several factors, the results showed that self-employed African Americans, Hispanics, Native Americans, and women had lower earnings than white males. *Id.*

The 1997 Study also conducted a mail survey of both MBE/WBEs and non-MBE/WBEs to obtain information on their experiences in the construction industry. Of the MBE/WBEs who responded, 35 percent indicated that they had experienced at least one incident of disparate treatment within the last five years while engaged in business activities. The survey also posed the following question: “How often do prime contractors who use your firm as a subcontractor on public sector projects with [MBE/WBE] goals or requirements ... also use your firm on public sector or private sector projects without [MBE/WBE] goals or requirements?” Fifty-eight percent of minorities and 41 percent of white women who responded to this question indicated they were “seldom or never” used on non-goals projects. *Id.*

MBE/WBEs were also asked whether the following aspects of procurement made it more difficult or impossible to obtain construction contracts: (1) bonding requirements, (2) insurance requirements, (3) large project size, (4) cost of completing proposals, (5) obtaining working capital, (6) length of notification for bid deadlines, (7) prequalification requirements, and (8) previous dealings with an agency. This question was also asked of non-MBE/WBEs in a separate

survey. With one exception, MBE/WBEs considered each aspect of procurement more problematic than non-MBE/WBEs. To determine whether a firm's size or experience explained the different responses, a regression analysis was conducted that controlled for age of the firm, number of employees, and level of revenues. The results again showed that with the same, single exception, MBE/WBEs had more difficulties than non-MBE/WBEs with the same characteristics. *Id.* at 968-69.

After the 1997 Study was completed, the City enacted the 1998 Ordinance. The 1998 Ordinance reduced the annual goals to 10 percent for both MBEs and WBEs and eliminated a provision which previously allowed MBE/WBEs to count their own work toward project goals. *Id.* at 969.

The anecdotal evidence included the testimony of the senior vice-president of a large, majority-owned construction firm who stated that when he worked in Denver, he received credible complaints from minority and women-owned construction firms that they were subject to different work rules than majority-owned firms. *Id.* He also testified that he frequently observed graffiti containing racial or gender epithets written on job sites in the Denver metropolitan area. Further, he stated that he believed, based on his personal experiences, that many majority-owned firms refused to hire minority- or women-owned subcontractors because they believed those firms were not competent. *Id.*

Several MBE/WBE witnesses testified that they experienced difficulty prequalifying for private sector projects and projects with the City and other governmental entities in Colorado. One individual testified that her company was required to prequalify for a private sector project while no similar requirement was imposed on majority-owned firms. Several others testified that they attempted to prequalify for projects but their applications were denied even though they met the prequalification requirements. *Id.*

Other MBE/WBEs testified that their bids were rejected even when they were the lowest bidder; that they believed they were paid more slowly than majority-owned firms on both City projects and private sector projects; that they were charged more for supplies and materials; that they were required to do additional work not part of the subcontracting arrangement; and that they found it difficult to join unions and trade associations. *Id.* There was testimony detailing the difficulties MBE/WBEs experienced in obtaining lines of credit. One WBE testified that she was given a false explanation of why her loan was declined; another testified that the lending institution required the co-signature of her husband even though her husband, who also owned a construction firm, was not required to obtain her co-signature; a third testified that the bank required her father to be involved in the lending negotiations. *Id.*

The court also pointed out anecdotal testimony involving recitations of racially- and gender-motivated harassment experienced by MBE/WBEs at work sites. There was testimony that minority and female employees working on construction projects were physically assaulted and fondled, spat upon with chewing tobacco, and pelted with two-inch bolts thrown by males from a height of 80 feet. *Id.* at 969-70.

The legal framework applied by the court. The Court held that the district court incorrectly believed Denver was required to prove the existence of discrimination. Instead of considering whether Denver had demonstrated strong evidence from which an inference of past or present

discrimination could be drawn, the district court analyzed whether Denver's evidence showed that there is pervasive discrimination. *Id.* at 970. The court, *quoting Concrete Works II*, stated that "the Fourteenth Amendment does not require a court to make an ultimate finding of discrimination before a municipality may take affirmative steps to eradicate discrimination." *Id.* at 970, *quoting Concrete Works II*, 36 F.3d 1513, 1522 (10th Cir. 1994). Denver's initial burden was to demonstrate that strong evidence of discrimination supported its conclusion that remedial measures were necessary. Strong evidence is that "approaching a prima facie case of a constitutional or statutory violation," not irrefutable or definitive proof of discrimination. *Id.* at 97, *quoting Croson*, 488 U.S. at 500. The burden of proof at all times remained with the contractor plaintiff to prove by a preponderance of the evidence that Denver's "evidence did not support an inference of prior discrimination and thus a remedial purpose." *Id.*, *quoting Adarand VII*, 228 F.3d at 1176.

Denver, the Court held, did introduce evidence of discrimination against each group included in the ordinances. *Id.* at 971. Thus, Denver's evidence did not suffer from the problem discussed by the court in *Croson*. The Court held the district court erroneously concluded that Denver must demonstrate that the private firms directly engaged in any discrimination in which Denver passively participates do so intentionally, with the purpose of disadvantaging minorities and women. The *Croson* majority concluded that a "city would have a compelling interest in preventing its tax dollars from assisting [local trade] organizations in maintaining a racially segregated construction market." *Id.* at 971, *quoting Croson*, 488 U.S. 503. Thus, the Court held Denver's burden was to introduce evidence which raised the inference of discriminatory exclusion in the local construction industry and linked its spending to that discrimination. *Id.*

The Court noted the Supreme Court has stated that the inference of discriminatory exclusion can arise from statistical disparities. *Id.*, *citing Croson*, 488 U.S. at 503. Accordingly, it concluded that Denver could meet its burden through the introduction of statistical and anecdotal evidence. To the extent the district court required Denver to introduce additional evidence to show discriminatory motive or intent on the part of private construction firms, the district court erred. Denver, according to the Court, was under no burden to identify any specific practice or policy that resulted in discrimination. Neither was Denver required to demonstrate that the purpose of any such practice or policy was to disadvantage women or minorities. *Id.* at 972.

The court found Denver's statistical and anecdotal evidence relevant because it identifies discrimination in the local construction industry, not simply discrimination in society. The court held the genesis of the identified discrimination is irrelevant and the district court erred when it discounted Denver's evidence on that basis. *Id.*

The court held the district court erroneously rejected the evidence Denver presented on marketplace discrimination. *Id.* at 973. The court rejected the district court's erroneous legal conclusion that a municipality may only remedy its own discrimination. The court stated this conclusion is contrary to the holdings in *Concrete Works II* and the plurality opinion in *Croson*. *Id.* The court held it previously recognized in this case that "a municipality has a compelling interest in taking affirmative steps to remedy both public *and private* discrimination specifically identified in its area." *Id.*, *quoting Concrete Works II*, 36 F.3d at 1529 (emphasis added). In *Concrete Works II*, the court stated that "we do not read *Croson* as requiring the municipality to

identify an exact linkage between its award of public contracts and private discrimination.” *Id.*, quoting *Concrete Works II*, 36 F.3d at 1529.

The court stated that Denver could meet its burden of demonstrating its compelling interest with evidence of private discrimination in the local construction industry coupled with evidence that it has become a passive participant in that discrimination. *Id.* at 973. Thus, Denver was not required to demonstrate that it is “guilty of prohibited discrimination” to meet its initial burden. *Id.*

Additionally, the court had previously concluded that Denver’s statistical studies, which compared utilization of MBE/WBEs to availability, supported the inference that “local prime contractors” are engaged in racial and gender discrimination. *Id.* at 974, quoting *Concrete Works II*, 36 F.3d at 1529. Thus, the court held Denver’s disparity studies should not have been discounted because they failed to specifically identify those individuals or firms responsible for the discrimination. *Id.*

The Court’s rejection of CWC’s arguments and the district court findings.

Use of marketplace data. The court held the district court, *inter alia*, erroneously concluded that the disparity studies upon which Denver relied were significantly flawed because they measured discrimination in the overall Denver MSA construction industry, not discrimination by the City itself. *Id.* at 974. The court found that the district court’s conclusion was directly contrary to the holding in *Adarand VII* that evidence of both public and private discrimination in the construction industry is relevant. *Id.*, citing *Adarand VII*, 228 F.3d at 1166-67).

The court held the conclusion reached by the majority in *Croson* that marketplace data are relevant in equal protection challenges to affirmative action programs was consistent with the approach later taken by the court in *Shaw v. Hunt*. *Id.* at 975. In *Shaw*, a majority of the court relied on the majority opinion in *Croson* for the broad proposition that a governmental entity’s “interest in remedying the effects of past or present racial discrimination may in the proper case justify a government’s use of racial distinctions.” *Id.*, quoting *Shaw*, 517 U.S. at 909. The *Shaw* court did not adopt any requirement that only discrimination by the governmental entity, either directly or by utilizing firms engaged in discrimination on projects funded by the entity, was remediable. The court, however, did set out two conditions that must be met for the governmental entity to show a compelling interest. “First, the discrimination must be identified discrimination.” *Id.* at 976, quoting *Shaw*, 517 U.S. at 910. The City can satisfy this condition by identifying the discrimination, “‘public or private, with some specificity.’” *Id.* at 976, citing *Shaw*, 517 U.S. at 910, quoting *Croson*, 488 U.S. at 504 (emphasis added). The governmental entity must also have a “strong basis in evidence to conclude that remedial action was necessary.” *Id.* Thus, the court concluded *Shaw* specifically stated that evidence of either public or private discrimination could be used to satisfy the municipality’s burden of producing strong evidence. *Id.* at 976.

In *Adarand VII*, the court noted it concluded that evidence of marketplace discrimination can be used to support a compelling interest in remedying past or present discrimination through the use of affirmative action legislation. *Id.*, citing *Adarand VII*, 228 F.3d at 1166-67 (“[W]e may consider public and private discrimination not only in the specific area of government

procurement contracts but also in the construction industry generally; thus *any findings Congress has made as to the entire construction industry are relevant.*" (emphasis added)). Further, the court pointed out in this case it earlier rejected the argument CWC reasserted here that marketplace data are irrelevant and remanded the case to the district court to determine whether Denver could link its public spending to "the Denver MSA evidence of industry-wide discrimination." *Id.*, quoting *Concrete Works II*, 36 F.3d at 1529. The court stated that evidence explaining "the Denver government's role in contributing to the underutilization of MBEs and WBEs in the *private construction market in the Denver MSA*" was relevant to Denver's burden of producing strong evidence. *Id.*, quoting *Concrete Works II*, 36 F.3d at 1530 (emphasis added).

Consistent with the court's mandate in *Concrete Works II*, the City attempted to show at trial that it "indirectly contributed to private discrimination by awarding public contracts to firms that in turn discriminated against MBE and/or WBE subcontractors in other private portions of their business." *Id.* The City can demonstrate that it is a "'passive participant' in a system of racial exclusion practiced by elements of the local construction industry" by compiling evidence of marketplace discrimination and then linking its spending practices to the private discrimination. *Id.*, quoting *Croson*, 488 U.S. at 492.

The court rejected CWC's argument that the lending discrimination studies and business formation studies presented by Denver were irrelevant. In *Adarand VII*, the court concluded that evidence of discriminatory barriers to the formation of businesses by minorities and women and fair competition between MBE/WBEs and majority-owned construction firms shows a "strong link" between a government's "disbursements of public funds for construction contracts and the channeling of those funds due to private discrimination." *Id.* at 977, quoting *Adarand VII*, 228 F.3d at 1167-68. The court found that evidence that private discrimination resulted in barriers to business formation is relevant because it demonstrates that MBE/WBEs are precluded *at the outset* from competing for public construction contracts. The court also found that evidence of barriers to fair competition is relevant because it again demonstrates that *existing* MBE/WBEs are precluded from competing for public contracts. Thus, like the studies measuring disparities in the utilization of MBE/WBEs in the Denver MSA construction industry, studies showing that discriminatory barriers to business formation exist in the Denver construction industry are relevant to the City's showing that it indirectly participates in industry discrimination. *Id.* at 977.

The City presented evidence of lending discrimination to support its position that MBE/WBEs in the Denver MSA construction industry face discriminatory barriers to business formation. Denver introduced a disparity study prepared in 1996 and sponsored by the Denver Community Reinvestment Alliance, Colorado Capital Initiatives, and the City. The Study ultimately concluded that "despite the fact that loan applicants of three different racial/ethnic backgrounds in this sample were not appreciably different as businesspeople, they were ultimately treated differently by the lenders on the crucial issue of loan approval or denial." *Id.* at 977-78. In *Adarand VII*, the court concluded that this study, among other evidence, "strongly support[ed] an initial showing of discrimination in lending." *Id.* at 978, quoting, *Adarand VII*, 228 F.3d at 1170, n. 13 ("Lending discrimination alone of course does not justify action in the construction market. However, the persistence of such discrimination ... supports the assertion that the formation, as well as utilization, of minority-owned construction enterprises has been impeded."). The City also introduced anecdotal evidence of lending discrimination in the Denver construction industry.

CWC did not present any evidence that undermined the reliability of the lending discrimination evidence but simply repeated the argument, foreclosed by circuit precedent, that it is irrelevant. The court rejected the district court criticism of the evidence because it failed to determine whether the discrimination resulted from discriminatory attitudes or from the neutral application of banking regulations. The court concluded that discriminatory motive can be inferred from the results shown in disparity studies. The court held the district court's criticism did not undermine the study's reliability as an indicator that the City is passively participating in marketplace discrimination. The court noted that in *Adarand VII* it took "judicial notice of the obvious causal connection between access to capital and ability to implement public works construction projects." *Id.* at 978, quoting *Adarand VII*, 228 F.3d at 1170.

Denver also introduced evidence of discriminatory barriers to competition faced by MBE/WBEs in the form of business formation studies. The 1990 Study and the 1995 Study both showed that all minority groups in the Denver MSA formed their own construction firms at rates lower than the total population but that women formed construction firms at higher rates. The 1997 Study examined self-employment rates and controlled for gender, marital status, education, availability of capital, and personal/family variables. As discussed, *supra*, the Study concluded that African Americans, Hispanics, and Native Americans working in the construction industry have lower rates of self-employment than similarly situated whites. Asian Americans had higher rates. The 1997 Study also concluded that minority and female business owners in the construction industry, with the exception of Asian American owners, have lower earnings than white male owners. This conclusion was reached after controlling for education, age, marital status, and disabilities. *Id.* at 978.

The court held that the district court's conclusion that the business formation studies could not be used to justify the ordinances conflicts with its holding in *Adarand VII*. "[T]he existence of evidence indicating that the number of [MBEs] would be significantly (but unquantifiably) higher but for such barriers is nevertheless relevant to the assessment of whether a disparity is sufficiently significant to give rise to an inference of discriminatory exclusion." *Id.* at 979, quoting *Adarand VII*, 228 F.3d at 1174.

In sum, the court held the district court erred when it refused to consider or give sufficient weight to the lending discrimination study, the business formation studies, and the studies measuring marketplace discrimination. That evidence was legally relevant to the City's burden of demonstrating a strong basis in evidence to support its conclusion that remedial legislation was necessary. *Id.* at 979-80.

Variables. CWC challenged Denver's disparity studies as unreliable because the disparities shown in the studies may be attributable to firm size and experience rather than discrimination. Denver countered, however, that a firm's size has little effect on its qualifications or its ability to provide construction services and that MBE/WBEs, like all construction firms, can perform most services either by hiring additional employees or by employing subcontractors. CWC responded that elasticity itself is relative to size and experience; MBE/WBEs are less capable of expanding because they are smaller and less experienced. *Id.* at 980.

The court concluded that even if it assumed that MBE/WBEs are less able to expand because of their smaller size and more limited experience, CWC did not respond to Denver's argument and

the evidence it presented showing that experience and size are not race- and gender-neutral variables and that MBE/WBE construction firms are generally smaller and less experienced *because of industry discrimination. Id.* at 981. The lending discrimination and business formation studies, according to the court, both strongly supported Denver’s argument that MBE/WBEs are smaller and less experienced because of marketplace and industry discrimination. In addition, Denver’s expert testified that discrimination by banks or bonding companies would reduce a firm’s revenue and the number of employees it could hire. *Id.*

Denver also argued its Studies controlled for size and the 1995 Study controlled for experience. It asserted that the 1990 Study measured revenues per employee for construction for MBE/WBEs and concluded that the resulting disparities, “suggest[] that even among firms of the same employment size, industry utilization of MBEs and WBEs was lower than that of non-minority male-owned firms.” *Id.* at 982. Similarly, the 1995 Study controlled for size, calculating, *inter alia*, disparity indices for firms with no paid employees which presumably are the same size.

Based on the uncontroverted evidence presented at trial, the court concluded that the district court did not give sufficient weight to Denver’s disparity studies because of its erroneous conclusion that the studies failed to adequately control for size and experience. The court held that Denver is permitted to make assumptions about capacity and qualification of MBE/WBEs to perform construction services if it can support those assumptions. The court found the assumptions made in this case were consistent with the evidence presented at trial and supported the City’s position that a firm’s size does not affect its qualifications, willingness, or ability to perform construction services and that the smaller size and lesser experience of MBE/WBEs are, themselves, the result of industry discrimination. Further, the court pointed out CWC did not conduct its own disparity study using marketplace data and thus did not demonstrate that the disparities shown in Denver’s studies would decrease or disappear if the studies controlled for size and experience to CWC’s satisfaction. Consequently, the court held CWC’s rebuttal evidence was insufficient to meet its burden of discrediting Denver’s disparity studies on the issue of size and experience. *Id.* at 982.

Specialization. The district court also faulted Denver’s disparity studies because they did not control for firm specialization. The court noted the district court’s criticism would be appropriate only if there was evidence that MBE/WBEs are more likely to specialize in certain construction fields. *Id.* at 982.

The court found there was no identified evidence showing that certain construction specializations require skills less likely to be possessed by MBE/WBEs. The court found relevant the testimony of the City’s expert, that the data he reviewed showed that MBEs were represented “widely across the different [construction] specializations.” *Id.* at 982-83. There was no contrary testimony that aggregation bias caused the disparities shown in Denver’s studies. *Id.* at 983.

The court held that CWC failed to demonstrate that the disparities shown in Denver’s studies are eliminated when there is control for firm specialization. In contrast, one of the Denver studies, which controlled for SIC-code subspecialty and still showed disparities, provided support for Denver’s argument that firm specialization does not explain the disparities. *Id.* at 983.

The court pointed out that disparity studies may make assumptions about availability as long as the same assumptions can be made for all firms. *Id.* at 983.

Utilization of MBE/WBEs on City projects. CWC argued that Denver could not demonstrate a compelling interest because it overutilized MBE/WBEs on City construction projects. This argument, according to the court, was an extension of CWC's argument that Denver could justify the ordinances only by presenting evidence of discrimination by the City itself or by contractors while working on City projects. Because the court concluded **that** Denver could satisfy its burden by showing that it is an indirect participant in industry discrimination, CWC's argument relating to the utilization of MBE/WBEs on City projects goes only to the weight of Denver's evidence. *Id.* at 984.

Consistent with the court's mandate in *Concrete Works II*, at trial Denver sought to demonstrate that the utilization data from projects subject to the goals program were tainted by the program and "reflect[ed] the intended remedial effect on MBE and WBE utilization." *Id.* at 984, quoting *Concrete Works II*, 36 F.3d at 1526. Denver argued that the non-goals data were the better indicator of past discrimination in public contracting than the data on all City construction projects. *Id.* at 984-85. The court concluded that Denver presented ample evidence to support the conclusion that the evidence showing MBE/WBE utilization on City projects not subject to the ordinances or the goals programs is the better indicator of discrimination in City contracting. *Id.* at 985.

The court rejected CWC's argument that the marketplace data were irrelevant but agreed that the non-goals data were also relevant to Denver's burden. The court noted that Denver did not rely heavily on the non-goals data at trial but focused primarily on the marketplace studies to support its burden. *Id.* at 985.

In sum, the court held Denver demonstrated that the utilization of MBE/WBEs on City projects had been affected by the affirmative action programs that had been in place in one form or another since 1977. Thus, the non-goals data were the better indicator of discrimination in public contracting. The court concluded that, on balance, the non-goals data provided some support for Denver's position that racial and gender discrimination existed in public contracting before the enactment of the ordinances. *Id.* at 987-88.

Anecdotal evidence. The anecdotal evidence, according to the court, included several incidents involving profoundly disturbing behavior on the part of lenders, majority-owned firms, and individual employees. *Id.* at 989. The court found that the anecdotal testimony revealed behavior that was not merely sophomoric or insensitive, but which resulted in real economic or physical harm. While CWC also argued that all new or small contractors have difficulty obtaining credit and that treatment the witnesses characterized as discriminatory is experienced by all contractors, Denver's witnesses specifically testified that they believed the incidents they experienced were motivated by race or gender discrimination. The court found they supported those beliefs with testimony that majority-owned firms were not subject to the same requirements imposed on them. *Id.*

The court held there was no merit to CWC's argument that the witnesses' accounts must be verified to provide support for Denver's burden. The court stated that anecdotal evidence is

nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions. *Id.*

After considering Denver's anecdotal evidence, the district court found that the evidence "shows that race, ethnicity and gender affect the construction industry and those who work in it" and that the egregious mistreatment of minority and women employees "had direct financial consequences" on construction firms. *Id.* at 989, quoting *Concrete Works III*, 86 F. Supp.2d at 1074, 1073. Based on the district court's findings regarding Denver's anecdotal evidence and its review of the record, the court concluded that the anecdotal evidence provided persuasive, un rebutted support for Denver's initial burden. *Id.* at 989-90, citing *Int'l Bhd. of Teamsters v. United States*, 431 U.S. 324, 339 (1977) (concluding that anecdotal evidence presented in a pattern or practice discrimination case was persuasive because it "brought the cold [statistics] convincingly to life").

Summary. The court held the record contained extensive evidence supporting Denver's position that it had a strong basis in evidence for concluding that the 1990 Ordinance and the 1998 Ordinance were necessary to remediate discrimination against both MBEs and WBEs. *Id.* at 990. The information available to Denver and upon which the ordinances were predicated, according to the court, indicated that discrimination was persistent in the local construction industry and that Denver was, at least, an indirect participant in that discrimination.

To rebut Denver's evidence, the court stated CWC was required to "establish that Denver's evidence did not constitute strong evidence of such discrimination." *Id.* at 991, quoting *Concrete Works II*, 36 F.3d at 1523. CWC could not meet its burden of proof through conjecture and unsupported criticisms of Denver's evidence. Rather, it must present "credible, particularized evidence." *Id.*, quoting *Adarand VII*, 228 F.3d at 1175. The court held that CWC did not meet its burden. CWC hypothesized that the disparities shown in the studies on which Denver relies could be explained by any number of factors other than racial discrimination. However, the court found it did not conduct its own marketplace disparity study controlling for the disputed variables and presented no other evidence from which the court could conclude that such variables explain the disparities. *Id.* at 991-92.

Narrow tailoring. Having concluded that Denver demonstrated a compelling interest in the race-based measures and an important governmental interest in the gender-based measures, the court held it must examine whether the ordinances were narrowly tailored to serve the compelling interest and are substantially related to the achievement of the important governmental interest. *Id.* at 992.

The court stated it had previously concluded in its earlier decisions that Denver's program was narrowly tailored. CWC appealed the grant of summary judgment and that appeal culminated in the decision in *Concrete Works II*. The court reversed the grant of summary judgment on the compelling-interest issue and concluded that CWC had waived any challenge to the narrow tailoring conclusion reached by the district court. Because the court found *Concrete Works* did not challenge the district court's conclusion with respect to the second prong of *Croson's* strict scrutiny standard — *i.e.*, that the Ordinance is narrowly tailored to remedy past and present discrimination — the court held it need not address this issue. *Id.* at 992, citing *Concrete Works II*, 36 F.3d at 1531, n. 24.

The court concluded that the district court lacked authority to address the narrow tailoring issue on remand because none of the exceptions to the law of the case doctrine are applicable. The district court's earlier determination that Denver's affirmative-action measures were narrowly tailored is law of the case and binding on the parties.

6. *In re City of Memphis*, 293 F.3d 345 (6th Cir. 2002)

This case is instructive to the disparity study based on its holding that a local or state government may be prohibited from utilizing post-enactment evidence in support of a MBE/WBE-type program. 293 F.3d at 350-351. The United States Court of Appeals for the Sixth Circuit held that pre-enactment evidence was required to justify the City of Memphis' MBE/WBE Program. *Id.* The Sixth Circuit held that a government must have had sufficient evidentiary justification for a racially conscious statute in *advance* of its passage.

The district court had ruled that the City could not introduce a post-enactment study as evidence of a compelling interest to justify its MBE/WBE Program. *Id.* at 350-351. The Sixth Circuit denied the City's application for an interlocutory appeal on the district court's order and refused to grant the City's request to appeal this issue. *Id.* at 350-351.

The City argued that a substantial ground for difference of opinion existed in the federal courts of appeal. 293 F.3d at 350. The court stated some circuits permit post-enactment evidence to supplement pre-enactment evidence. *Id.* This issue, according to the Court, appears to have been resolved in the Sixth Circuit. *Id.* The Court noted the Sixth Circuit decision in *AGC v. Drabik*, 214 F.3d 730 (6th Cir. 2000), which held that under *Croson* a State must have sufficient evidentiary justification for a racially-conscious statute in advance of its enactment, and that governmental entities must identify that discrimination with some specificity *before* they may use race-conscious relief. *Memphis*, 293 F.3d at 350-351, *citing Drabik*, 214 F.3d at 738.

The Court in *Memphis* said that although *Drabik* did not directly address the admissibility of post-enactment evidence, it held a governmental entity must have pre-enactment evidence sufficient to justify a racially-conscious statute. 293 R.3d at 351. The court concluded *Drabik* indicates the Sixth Circuit would not favor using post-enactment evidence to make that showing. *Id.* at 351. Under *Drabik*, the Court in *Memphis* held the City must present pre-enactment evidence to show a compelling state interest. *Id.* at 351.

7. *Builders Ass'n of Greater Chicago v. County of Cook, Chicago*, 256 F.3d 642 (7th Cir. 2001)

This case is instructive to the disparity study because of its analysis of the Cook County MBE/WBE program and the evidence used to support that program. The decision emphasizes the need for any race-conscious program to be based upon credible evidence of discrimination by the local government against MBE/WBEs and to be narrowly tailored to remedy only that identified discrimination.

In *Builders Ass'n of Greater Chicago v. County of Cook, Chicago*, 256 F.3d 642 (7th Cir. 2001) the United States Court of Appeals for the Seventh Circuit held the Cook County, Chicago MBE/WBE Program was unconstitutional. The court concluded there was insufficient evidence of a compelling interest. The court held there was no credible evidence that Cook County in the

award of construction contracts discriminated against any of the groups “favored” by the Program. The court also found that the Program was not “narrowly tailored” to remedy the wrong sought to be redressed, in part because it was over-inclusive in the definition of minorities. The court noted the list of minorities included groups that have not been subject to discrimination by Cook County.

The court considered as an unresolved issue whether a different, and specifically a more permissive, standard than strict scrutiny is applicable to preferential treatment on the basis of sex, rather than race or ethnicity. 256 F.3d at 644. The court noted that the United States Supreme Court in *United States v. Virginia* (“*VMI*”), 518 U.S. 515, 532 and n.6 (1996), held racial discrimination to a stricter standard than sex discrimination, although the court in *Cook County* stated the difference between the applicable standards has become “vanishingly small.” *Id.* The court pointed out that the Supreme Court said in the *VMI* case, that “parties who seek to defend gender-based government action must demonstrate an ‘exceedingly persuasive’ justification for that action ...” and, realistically, the law can ask no more of race-based remedies either.” 256 F.3d at 644, *quoting in part VMI*, 518 U.S. at 533. The court indicated that the Eleventh Circuit Court of Appeals in the *Engineering Contract Association of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 910 (11th Cir. 1997) decision created the “paradox that a public agency can provide stronger remedies for sex discrimination than for race discrimination; it is difficult to see what sense that makes.” 256 F.3d at 644. But, since Cook County did not argue for a different standard for the minority and women’s “set aside programs,” the women’s program the court determined must clear the same “hurdles” as the minority program.” 256 F.3d at 644-645.

The court found that since the ordinance requires prime contractors on public projects to reserve a substantial portion of the subcontracts for minority contractors, which is inapplicable to private projects, it is “to be expected that there would be more soliciting of these contractors on public than on private projects.” *Id.* Therefore, the court did not find persuasive that there was discrimination based on this difference alone. 256 F.3d at 645. The court pointed out the County “conceded that [it] had no specific evidence of pre-enactment discrimination to support the ordinance.” 256 F.3d at 645 quoting the district court decision, 123 F.Supp.2d at 1093. The court held that a “public agency must have a strong evidentiary basis for thinking a discriminatory remedy appropriate *before* it adopts the remedy.” 256 F.3d at 645 (emphasis in original).

The court stated that minority enterprises in the construction industry “tend to be subcontractors, moreover, because as the district court found not clearly erroneously, 123 F.Supp.2d at 1115, they tend to be new and therefore small and relatively untested — factors not shown to be attributable to discrimination by the County.” 256 F.3d at 645. The court held that there was no basis for attributing to the County any discrimination that prime contractors may have engaged in. *Id.* The court noted that “[i]f prime contractors on County projects were discriminating against minorities and this was known to the County, whose funding of the contracts thus knowingly perpetuated the discrimination, the County might be deemed sufficiently complicit ... to be entitled to take remedial action.” *Id.* But, the court found “of that there is no evidence either.” *Id.*

The court stated that if the County had been complicit in discrimination by prime contractors, it found “puzzling” to try to remedy that discrimination by requiring discrimination in favor of minority stockholders, as distinct from employees. 256 F.3d at 646. The court held that even if the record made a case for remedial action of the general sort found in the MWBE ordinance by the County, it would “flunk the constitutional test” by not being carefully designed to achieve the ostensible remedial aim and no more. 256 F.3d at 646. The court held that a state and local government that has discriminated just against blacks may not by way of remedy discriminate in favor of blacks and Asian Americans and women. *Id.* Nor, the court stated, may it discriminate more than is necessary to cure the effects of the earlier discrimination. *Id.* “Nor may it continue the remedy in force indefinitely, with no effort to determine whether, the remedial purpose attained, continued enforcement of the remedy would be a gratuitous discrimination against nonminority persons.” *Id.* The court, therefore, held that the ordinance was not “narrowly tailored” to the wrong that it seeks to correct. *Id.*

The court thus found that the County both failed to establish the premise for a racial remedy, and also that the remedy goes further than is necessary to eliminate the evil against which it is directed. 256 F.3d at 647. The court held that the list of “favored minorities” included groups that have never been subject to significant discrimination by Cook County. *Id.* The court found it unreasonable to “presume” discrimination against certain groups merely on the basis of having an ancestor who had been born in a particular country. *Id.* Therefore, the court held the ordinance was overinclusive.

The court found that the County did not make any effort to show that, were it not for a history of discrimination, minorities would have 30 percent, and women 10 percent, of County construction contracts. 256 F.3d at 647. The court also rejected the proposition advanced by the County in this case—“that a comparison of the fraction of minority subcontractors on public and private projects established discrimination against minorities by prime contractors on the latter type of project.” 256 F.3d at 647-648.

8. *Associated Gen. Contractors v. Drabik*, 214 F.3d 730 (6th Cir. 2000), affirming Case No. C2-98-943, 998 WL 812241 (S.D. Ohio 1998)

This case is instructive to the disparity study based on the analysis applied in finding the evidence insufficient to justify an MBE/WBE program, and the application of the narrowly tailored test. The Sixth Circuit Court of Appeals enjoined the enforcement of the state MBE program, and in so doing reversed state court precedent finding the program constitutional. This case affirmed a district court decision enjoining the award of a “set-aside” contract based on the State of Ohio’s MBE program with the award of construction contracts.

The court held, among other things, that the mere existence of societal discrimination was insufficient to support a racial classification. The court found that the economic data were insufficient and too outdated. The court concluded the State could not establish a compelling governmental interest and that the statute was not narrowly tailored. The court said the statute failed the narrow tailoring test, including because there was no evidence that the State had considered race-neutral remedies.

This case involves a suit by the Associated General Contractors of Ohio and Associated General Contractors of Northwest Ohio, representing Ohio building contractors to stop the award of a construction contract for the Toledo Correctional Facility to a minority-owned business (“MBE”), in a bidding process from which non-minority-owned firms were statutorily excluded from participating under Ohio’s state Minority Business Enterprise Act. 214 F.3d at 733.

AGC of Ohio and AGC of Northwest Ohio (Plaintiffs-Appellees) claimed the Ohio Minority Business Enterprise Act (“MBEA”) was unconstitutional in violation of the Equal Protection Clause of the Fourteenth Amendment. The district court agreed, and permanently enjoined the state from awarding any construction contracts under the MBEA. Drabik, Director of the Ohio Department of Administrative Services and others appealed the district court’s Order. *Id.* at 733. The Sixth Circuit Court of Appeals affirmed the Order of the district court, holding unconstitutional the MBEA and enjoining the state from awarding any construction contracts under that statute. *Id.*

Ohio passed the MBEA in 1980. *Id.* at 733. This legislation “set aside” 5%, by value, of all state construction projects for bidding by certified MBEs exclusively. *Id.* Pursuant to the MBEA, the state decided to set aside, for MBEs only, bidding for construction of the Toledo Correctional Facility’s Administration Building. Non-MBEs were excluded on racial grounds from bidding on that aspect of the project and restricted in their participation as subcontractors. *Id.*

The Court noted it ruled in 1983 that the MBEA was constitutional, see *Ohio Contractors Ass’n v. Keip*, 713 F.2d 167 (6th Cir. 1983). *Id.* Subsequently, the United States Supreme Court in two landmark decisions applied the criteria of strict scrutiny under which such “racially preferential set-asides” were to be evaluated. *Id.* (see *City of Richmond v. J.A. Croson Co.* (1989) and *Adarand Constructors, Inc. v. Peña* (1995), citation omitted.) The Court noted that the decision in *Keip* was a more relaxed treatment accorded to equal protection challenges to state contracting disputes prior to *Croson*. *Id.* at 733-734.

Strict scrutiny. The Court found it is clear a government has a compelling interest in assuring that public dollars do not serve to finance the evil of private prejudice. *Id.* at 734-735, citing *Croson*, 488 U.S. at 492. But, the Court stated “statistical disparity in the proportion of contracts awarded to a particular group, standing alone does not demonstrate such an evil.” *Id.* at 735.

The Court said there is no question that remedying the effects of past discrimination constitutes a compelling governmental interest. *Id.* at 735. The Court stated to make this showing, a state cannot rely on mere speculation, or legislative pronouncements, of past discrimination, but rather, the Supreme Court has held the state bears the burden of demonstrating a strong basis in evidence for its conclusion that remedial action was necessary by proving either that the state itself discriminated in the past or was a passive participant in private industry’s discriminatory practices. *Id.* at 735, quoting *Croson*, 488 U.S. at 486-92.

Thus, the Court concluded that the linchpin of the *Croson* analysis is its mandating of strict scrutiny, the requirement that a program be narrowly tailored to achieve a compelling government interest, but above all its holding that governments must identify discrimination with some specificity before they may use race-conscious relief; explicit findings of a constitutional or statutory violation must be made. *Id.* at 735, quoting *Croson*, 488 U.S. at 497.

Statistical evidence: compelling interest. The Court pointed out that proponents of “racially discriminatory systems” such as the MBEA have sought to generate the necessary evidence by a variety of means, however, such efforts have generally focused on “mere underrepresentation” by showing a lesser percentage of contracts awarded to a particular group than that group’s percentage in the general population. *Id.* at 735. “Raw statistical disparity” of this sort is part of the evidence offered by Ohio in this case, according to the Court. *Id.* at 736. The Court stated however, “such evidence of mere statistical disparities has been firmly rejected as insufficient by the Supreme Court, particularly in a context such as contracting, where special qualifications are so relevant.” *Id.*

The Court said that although Ohio’s most “compelling” statistical evidence in this case compared the percentage of contracts awarded to minorities to the percentage of minority-owned businesses in Ohio, which the Court noted provided stronger statistics than the statistics in *Croson*, it was still insufficient. *Id.* at 736. The Court found the problem with Ohio’s statistical comparison was that the percentage of minority-owned businesses in Ohio “did not take into account how many of those businesses were construction companies of any sort, let alone how many were qualified, willing, and able to perform state construction contracts.” *Id.*

The Court held the statistical evidence that the Ohio legislature had before it when the MBEA was enacted consisted of data that was deficient. *Id.* at 736. The Court said that much of the data was severely limited in scope (ODOT contracts) or was irrelevant to this case (ODOT purchasing contracts). *Id.* The Court again noted the data did not distinguish minority construction contractors from minority businesses generally, and therefore “made no attempt to identify minority construction contracting firms that are ready, willing, and able to perform state construction contracts of any particular size.” *Id.* The Court also pointed out the program was not narrowly tailored, because the state conceded the AGC showed that the State had not performed a recent study. *Id.*

The Court also concluded that even statistical comparisons that might be apparently more pertinent, such as with the percentage of all firms qualified, in some minimal sense, to perform the work in question, would also fail to satisfy the Court’s criteria. *Id.* at 736. “If MBEs comprise 10% of the total number of contracting firms in the state, but only get 3% of the dollar value of certain contracts, that does not alone show discrimination, or even disparity. It does not account for the relative size of the firms, either in terms of their ability to do particular work or in terms of the number of tasks they have the resources to complete.” *Id.* at 736.

The Court stated the only cases found to present the necessary “compelling interest” sufficient to justify a narrowly tailored race-based remedy, are those that expose “pervasive, systematic, and obstinate discriminatory conduct. ...” *Id.* at 737, quoting *Adarand*, 515 U.S. at 237. The Court said that Ohio had made no such showing in this case.

Narrow tailoring. A second and separate hurdle for the MBEA, the Court held, is its failure of narrow tailoring. The Court noted the Supreme Court in *Adarand* taught that a court called upon to address the question of narrow tailoring must ask, “for example, whether there was ‘any consideration of the use of race-neutral means to increase minority business participation’ in government contracting” *Id.* at 737, quoting *Croson*, 488 U.S. at 507. The Court stated a narrowly-tailored set-aside program must be appropriately limited such that it will not last

longer than the discriminatory effects it is designed to eliminate and must be linked to identified discrimination. *Id.* at 737. The Court said that the program must also not suffer from “overinclusiveness.” *Id.* at 737, quoting *Croson*, 515 U.S. at 506.

The Court found the MBEA suffered from defects both of over and under-inclusiveness. *Id.* at 737. By lumping together the groups of Blacks, Native Americans, Hispanics and Orientals, the MBEA may well provide preference where there has been no discrimination, and may not provide relief to groups where discrimination might have been proven. *Id.* at 737. Thus, the Court said, the MBEA was satisfied if contractors of Thai origin, who might never have been seen in Ohio until recently, receive 10% of state contracts, while African-Americans receive none. *Id.*

In addition, the Court found that Ohio’s own underutilization statistics suffer from a fatal conceptual flaw: they do not report the actual use of minority firms; they only report the use of minority firms who have gone to the trouble of being certified and listed among the state’s 1,180 MBEs. *Id.* at 737. The Court said there was no examination of whether contracts are being awarded to minority firms who have never sought such preference to take advantage of the special minority program, for whatever reason, and who have been awarded contracts in open bidding. *Id.*

The Court pointed out the district court took note of the outdated character of any evidence that might have been marshaled in support of the MBEA, and added that even if such data had been sufficient to justify the statute twenty years ago, it would not suffice to continue to justify it forever. *Id.* at 737-738. The MBEA, the Court noted, has remained in effect for twenty years and has no set expiration. *Id.* at 738. The Court reiterated a race-based preference program must be appropriately limited such that it will not last longer than the discriminatory effects it is designed to eliminate. *Id.* at 737.

Finally, the Court mentioned that one of the factors *Croson* identified as indicative of narrow tailoring is whether non-race-based means were considered as alternatives to the goal. *Id.* at 738. The Court concluded the historical record contained no evidence that the Ohio legislature gave any consideration to the use of race-neutral means to increase minority participation in state contracting before resorting to race-based quotas. *Id.* at 738.

The district court had found that the supplementation of the state’s existing data which might be offered given a continuance of the case would not sufficiently enhance the relevance of the evidence to justify delay in the district court’s hearing. *Id.* at 738. The Court stated that under *Croson*, the state must have had sufficient evidentiary justification for a racially-conscious statute in *advance* of its passage. *Id.* The Court said that *Croson* required governmental entities must identify that discrimination with some specificity *before* they may use race-conscious relief. *Id.* at 738.

The Court also referenced the district court finding that the state had been lax in maintaining the type of statistics that would be necessary to undergird its affirmative action program, and that the proper maintenance of current statistics is relevant to the requisite narrow tailoring of such a program. *Id.* at 738-739. But, the Court noted the state does not know how many minority-owned businesses are not certified as MBEs, and how many of them have been successful in obtaining state contracts. *Id.* at 739.

The court was mindful of the fact it was striking down an entire class of programs by declaring the State of Ohio MBE statute in question unconstitutional, and noted that its decision was “not reconcilable” with the Ohio Supreme Court’s decision in *Ritchie Produce*, 707 N.E.2d 871 (Ohio 1999) (upholding the Ohio State MBE Program).

9. W.H. Scott Constr. Co. v. City of Jackson, Mississippi, 199 F.3d 206 (5th Cir. 1999)

A non-minority general contractor brought this action against the City of Jackson and City officials asserting that a City policy and its minority business enterprise program for participation and construction contracts violated the Equal Protection Clause of the U.S. Constitution.

City of Jackson MBE Program. In 1985 the City of Jackson adopted a MBE Program, which initially had a goal of 5% of all city contracts. 199 F.3d at 208. *Id.* The 5% goal was not based on any objective data. *Id.* at 209. Instead, it was a “guess” that was adopted by the City. *Id.* The goal was later increased to 15% because it was found that 10% of businesses in Mississippi were minority-owned. *Id.*

After the MBE Program’s adoption, the City’s Department of Public Works included a Special Notice to bidders as part of its specifications for all City construction projects. *Id.* The Special Notice encouraged prime construction contractors to include in their bid 15% participation by subcontractors certified as Disadvantaged Business Enterprises (DBEs) and 5% participation by those certified as WBEs. *Id.*

The Special Notice defined a DBE as a small business concern that is owned and controlled by socially and economically disadvantaged individuals, which had the same meaning as under Section 8(d) of the Small Business Act and subcontracting regulations promulgated pursuant to that Act. *Id.* The court found that Section 8(d) of the SBA states that prime contractors are to presume that socially and economically disadvantaged individuals include certain racial and ethnic groups or any other individual found to be disadvantaged by the SBA. *Id.*

In 1991, the Mississippi legislature passed a bill that would allow cities to set aside 20% of procurement for minority business. *Id.* at 209-210. The City of Jackson City Council voted to implement the set-aside, contingent on the City’s adoption of a disparity study. *Id.* at 210. The City conducted a disparity study in 1994 and concluded that the total underutilization of African-American and Asian-American-owned firms was statistically significant. *Id.* The study recommended that the City implement a range of MBE goals from 10-15%. *Id.* The City, however, was not satisfied with the study, according to the court, and chose not to adopt its conclusions. *Id.* Instead, the City retained its 15% MBE goal and did not adopt the disparity study. *Id.*

W.H. Scott did not meet DBE goal. In 1997 the City advertised for the construction of a project and the W.H. Scott Construction Company, Inc. (Scott) was the lowest bidder. *Id.* Scott obtained 11.5% WBE participation, but it reported that the bids from DBE subcontractors had not been low bids and, therefore, its DBE-participation percentage would be only 1%. *Id.*

Although Scott did not achieve the DBE goal and subsequently would not consider suggestions for increasing its minority participation, the Department of Public Works and the Mayor, as well as the City’s Financial Legal Departments, approved Scott’s bid and it was placed on the agenda

to be approved by the City Council. *Id.* The City Council voted against the Scott bid without comment. Scott alleged that it was told the City rejected its bid because it did not achieve the DBE goal, but the City alleged that it was rejected because it exceeded the budget for the project. *Id.*

The City subsequently combined the project with another renovation project and awarded that combined project to a different construction company. *Id.* at 210-211. Scott maintained the rejection of his bid was racially motivated and filed this suit. *Id.* at 211.

District court decision. The district court granted Scott's motion for summary judgment agreeing with Scott that the relevant Policy included not just the Special Notice, but that it also included the MBE Program and Policy document regarding MBE participation. *Id.* at 211. The district court found that the MBE Policy was unconstitutional because it lacked requisite findings to justify the 15% minority-participation goal and survive strict scrutiny based on the 1989 decision in the *City of Richmond, v. J.A. Croson Co.* *Id.* The district court struck down minority-participation goals for the City's construction contracts only. *Id.* at 211. The district court found that Scott's bid was rejected because Scott lacked sufficient minority participation, not because it exceeded the City's budget. *Id.* In addition, the district court awarded Scott lost profits. *Id.*

Standing. The Fifth Circuit determined that in equal protection cases challenging affirmative action policies, "injury in fact" for purposes of establishing standing is defined as the inability to compete on an equal footing in the bidding process. *Id.* at 213. The court stated that Scott need not prove that it lost contracts because of the Policy, but only prove that the Special Notice forces it to compete on an unequal basis. *Id.* The question, therefore, the court said is whether the Special Notice imposes an obligation that is born unequally by DBE contractors and non-DBE contractors. *Id.* at 213.

The court found that if a non-DBE contractor is unable to procure 15% DBE participation, it must still satisfy the City that adequate good faith efforts have been made to meet the contract goal or risk termination of its contracts, and that such efforts include engaging in advertising, direct solicitation and follow-up, assistance in attaining bonding or insurance required by the contractor. *Id.* at 214. The court concluded that although the language does not expressly authorize a DBE contractor to satisfy DBE-participation goals by keeping the requisite percentage of work for itself, it would be nonsensical to interpret it as precluding a DBE contractor from doing so. *Id.* at 215.

If a DBE contractor performed 15% of the contract dollar amount, according to the court, it could satisfy the participation goal and avoid both a loss of profits to subcontractors and the time and expense of complying with the good faith requirements. *Id.* at 215. The court said that non-DBE contractors do not have this option, and thus, Scott and other non-DBE contractors are at a competitive disadvantage with DBE contractors. *Id.*

The court, therefore, found Scott had satisfied standing to bring the lawsuit.

Constitutional strict scrutiny analysis and guidance in determining types of evidence to justify a remedial MBE program. The court first rejected the City's contention that the Special Notice should not be subject to strict scrutiny because it establishes goals rather than mandate quotas

for DBE participation. *Id.* at 215-217. The court stated the distinction between goals or quotas is immaterial because these techniques induce an employer to hire with an eye toward meeting a numerical target, and as such, they will result in individuals being granted a preference because of their race. *Id.* at 215. The court also rejected the City's argument that the DBE classification created a preference based on "disadvantage," not race. *Id.* at 215-216. The court found that the Special Notice relied on Section 8(d) and Section 8(a) of the Small Business Act, which provide explicitly for a race-based presumption of social disadvantage, and thus requires strict scrutiny. *Id.* at 216-217.

The court discussed the *City of Richmond v. Croson* case as providing guidance in determining what types of evidence would justify the enactment of an MBE-type program. *Id.* at 217-218. The court noted the Supreme Court stressed that a governmental entity must establish a factual predicate, tying its set-aside percentage to identified injuries in the particular local industry. *Id.* at 217. The court pointed out given the Supreme Court in *Croson's* emphasis on statistical evidence, other courts considering equal protection challenges to minority-participation programs have looked to disparity indices, or to computations of disparity percentages, in determining whether *Croson's* evidentiary burden is satisfied. *Id.* at 218. The court found that disparity studies are probative evidence for discrimination because they ensure that the "relevant statistical pool," of qualified minority contractors is being considered. *Id.* at 218.

The court in a footnote stated that it did not attempt to craft a precise mathematical formula to assess the quantum of evidence that rises to the *Croson* "strong basis in evidence" benchmark. *Id.* at 218, n.11. The sufficiency of a municipality's findings of discrimination in a local industry must be evaluated on a case-by-case basis. *Id.*

The City argued that it was error for the district court to ignore its statistical evidence supporting the use of racial presumptions in its DBE-participation goals, and highlighted the disparity study it commissioned in response to *Croson*. *Id.* at 218. The court stated, however, that whatever probity the study's findings might have had on the analysis is irrelevant to the case, because the City refused to adopt the study when it was issued in 1995. *Id.* In addition, the court said the study was restricted to the letting of prime contracts by the City under the City's Program, and did not include an analysis of the availability and utilization of qualified minority subcontractors, the relevant statistical pool, in the City's construction projects. *Id.* at 218.

The court noted that had the City adopted particularized findings of discrimination within its various agencies, and set participation goals for each accordingly, the outcome of the decision might have been different. *Id.* at 219. Absent such evidence in the City's construction industry, however, the court concluded the City lacked the factual predicates required under the Equal Protection Clause to support the City's 15% DBE-participation goal. *Id.* Thus, the court held the City failed to establish a compelling interest justifying the MBE program or the Special Notice, and because the City failed a strict scrutiny analysis on this ground, the court declined to address whether the program was narrowly tailored.

Lost profits and damages. Scott sought damages from the City under 42 U.S.C. § 1983, including lost profits. *Id.* at 219. The court, affirming the district court, concluded that in light of the entire record the City Council rejected Scott's low bid because Scott failed to meet the Special Notice's

DBE-participation goal, not because Scott's bid exceeded the City's budget. *Id.* at 220. The court, therefore, affirmed the award of lost profits to Scott.

10. *Monterey Mechanical v. Wilson*, 125 F.3d 702 (9th Cir. 1997)

This case is instructive in that the Ninth Circuit analyzed and held invalid the enforcement of a MBE/WBE-type program. Although the program at issue utilized the term "goals" as opposed to "quotas," the Ninth Circuit rejected such a distinction, holding "[t]he relevant question is not whether a statute requires the use of such measures, but whether it authorizes or encourages them." The case also is instructive because it found the use of "goals" and the application of "good faith efforts" in connection with achieving goals to trigger strict scrutiny.

Monterey Mechanical Co. (the "plaintiff") submitted the low bid for a construction project for the California Polytechnic State University (the "University"). 125 F.3d 702, 704 (9th Cir. 1994). The University rejected the plaintiff's bid because the plaintiff failed to comply with a state statute requiring prime contractors on such construction projects to subcontract 23 percent of the work to MBE/WBEs or, alternatively, demonstrate good faith outreach efforts. *Id.* The plaintiff conducted good faith outreach efforts but failed to provide the requisite documentation; the awardee prime contractor did not subcontract any portion of the work to MBE/WBEs but did include documentation of good faith outreach efforts. *Id.*

Importantly, the University did not conduct a disparity study, and instead argued that because "the 'goal requirements' of the scheme '[did] not involve racial or gender quotas, set-asides or preferences,'" the University did not need a disparity study. *Id.* at 705. The plaintiff protested the contract award and sued the University's trustees, and a number of other individuals (collectively the "defendants") alleging the state law was violative of the Equal Protection Clause. *Id.* The district court denied the plaintiff's motion for an interlocutory injunction and the plaintiff appealed to the Ninth Circuit Court of Appeals. *Id.*

The defendants first argued that the statute was constitutional because it treated all general contractors alike, by requiring all to comply with the MBE/WBE participation goals. *Id.* at 708. The court held, however, that a minority or women business enterprise could satisfy the participation goals by allocating the requisite percentage of work to itself. *Id.* at 709. The court held that contrary to the district court's finding, such a difference was not *de minimis*. *Id.*

The defendant's also argued that the statute was not subject to strict scrutiny because the statute did not impose rigid quotas, but rather only required good faith outreach efforts. *Id.* at 710. The court rejected the argument finding that although the statute permitted awards to bidders who did not meet the percentage goals, "they are rigid in requiring precisely described and monitored efforts to attain those goals." *Id.* The court cited its own earlier precedent to hold that "the provisions are not immunized from scrutiny because they purport to establish goals rather than quotas ... [T]he relevant question is not whether a statute requires the use of such measures, but whether it authorizes or encourages them." *Id.* at 710-11 (internal citations and quotations omitted). The court found that the statute encouraged set asides and cited *Concrete Works of Colorado v. Denver*, 36 F.3d 1512 (10th Cir. 1994), as analogous support for the proposition. *Id.* at 711.

The court found that the statute treated contractors differently based upon their race, ethnicity and gender, and although “worded in terms of goals and good faith, the statute imposes mandatory requirements with concreteness.” *Id.* The court also noted that the statute may impose additional compliance expenses upon non-MBE/WBE firms who are required to make good faith outreach efforts (*e.g.*, advertising) to MBE/WBE firms. *Id.* at 712.

The court then conducted strict scrutiny (race), and an intermediate scrutiny (gender) analyses. *Id.* at 712-13. The court found the University presented “no evidence” to justify the race- and gender-based classifications and thus did not consider additional issues of proof. *Id.* at 713. The court found that the statute was not narrowly tailored because the definition of “minority” was overbroad (*e.g.*, inclusion of Aleuts). *Id.* at 714, citing *Wygant v. Jackson Board of Education*, 476 U.S. 267, 284, n. 13 (1986) and *City of Richmond v. J.A. Croson, Co.*, 488 U.S. 469, 505-06 (1989). The court found “[a] broad program that sweeps in all minorities with a remedy that is in no way related to past harms cannot survive constitutional scrutiny.” *Id.* at 714, citing *Hopwood v. State of Texas*, 78 F.3d 932, 951 (5th Cir. 1996). The court held that the statute violated the Equal Protection Clause.

11. Eng’g Contractors Ass’n of S. Florida v. Metro. Dade County, 122 F.3d 895 (11th Cir. 1997)

Engineering Contractors Association of South Florida v. Metropolitan Engineering Contractors Association is a paramount case in the Eleventh Circuit and is instructive to the disparity study. This decision has been cited and applied by the courts in various circuits that have addressed MBE/WBE-type programs or legislation involving local government contracting and procurement.

In *Engineering Contractors Association*, six trade organizations (the “plaintiffs”) filed suit in the district court for the Southern District of Florida, challenging three affirmative action programs administered by Engineering Contractors Association, Florida, (the “County”) as violative of the Equal Protection Clause. 122 F.3d 895, 900 (11th Cir. 1997). The three affirmative action programs challenged were the Black Business Enterprise program (“BBE”), the Hispanic Business Enterprise program (“HBE”), and the Woman Business Enterprise program, (“WBE”), (collectively “MWBE” programs). *Id.* The plaintiffs challenged the application of the program to County construction contracts. *Id.*

For certain classes of construction contracts valued over \$25,000, the County set participation goals of 15 percent for BBes, 19 percent for HBEs, and 11 percent for WBEs. *Id.* at 901. The County established five “contract measures” to reach the participation goals: (1) set asides, (2) subcontractor goals, (3) project goals, (4) bid preferences, and (5) selection factors. Once a contract was identified as covered by a participation goal, a review committee would determine whether a contract measure should be utilized. *Id.* The County Commission would make the final determination and its decision was appealable to the County Manager. *Id.* The County reviewed the efficacy of the MWBE programs annually, and reevaluated the continuing viability of the MWBE programs every five years. *Id.*

In a bench trial, the district court applied strict scrutiny to the BBE and HBE programs and held that the County lacked the requisite “strong basis in evidence” to support the race- and ethnicity-

conscious measures. *Id.* at 902. The district court applied intermediate scrutiny to the WBE program and found that the “County had presented insufficient probative evidence to support its stated rationale for implementing a gender preference.” *Id.* Therefore, the County had failed to demonstrate a “compelling interest” necessary to support the BBE and HBE programs, and failed to demonstrate an “important interest” necessary to support the WBE program. *Id.* The district court assumed the existence of a sufficient evidentiary basis to support the existence of the MWBE programs but held the BBE and HBE programs were not narrowly tailored to the interests they purported to serve; the district court held the WBE program was not substantially related to an important government interest. *Id.* The district court entered a final judgment enjoining the County from continuing to operate the MWBE programs and the County appealed. The Eleventh Circuit Court of Appeals affirmed. *Id.* at 900, 903.

On appeal, the Eleventh Circuit considered four major issues:

1. Whether the plaintiffs had standing. [The Eleventh Circuit answered this in the affirmative and that portion of the opinion is omitted from this summary];
2. Whether the district court erred in finding the County lacked a “strong basis in evidence” to justify the existence of the BBE and HBE programs;
3. Whether the district court erred in finding the County lacked a “sufficient probative basis in evidence” to justify the existence of the WBE program; and
4. Whether the MWBE programs were narrowly tailored to the interests they were purported to serve.

Id. at 903.

The Eleventh Circuit held that the BBE and HBE programs were subject to the strict scrutiny standard enunciated by the U.S. Supreme Court in *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989). *Id.* at 906. Under this standard, “an affirmative action program must be based upon a ‘compelling government interest’ and must be ‘narrowly tailored’ to achieve that interest.” *Id.* The Eleventh Circuit further noted:

“In practice, the interest that is alleged in support of racial preferences is almost always the same — remedying past or present discrimination. That interest is widely accepted as compelling. As a result, the true test of an affirmative action program is usually not the nature of the government’s interest, but rather the adequacy of the evidence of discrimination offered to show that interest.”

Id. (internal citations omitted).

Therefore, strict scrutiny requires a finding of a “‘strong basis in evidence’ to support the conclusion that remedial action is necessary.” *Id.*, citing *Croson*, 488 U.S. at 500). The requisite “‘strong basis in evidence’ cannot rest on ‘an amorphous claim of societal discrimination, on simple legislative assurances of good intention, or on congressional findings of discrimination in the national economy.’” *Id.* at 907, citing *Ensley Branch, NAACP v. Seibels*, 31 F.3d 1548, 1565 (11th Cir. 1994) (citing and applying *Croson*). However, the Eleventh Circuit found that a

governmental entity can “justify affirmative action by demonstrating ‘gross statistical disparities’ between the proportion of minorities hired ... and the proportion of minorities willing and able to do the work ... Anecdotal evidence may also be used to document discrimination, especially if buttressed by relevant statistical evidence.” *Id.* (internal citations omitted).

Notwithstanding the “exceedingly persuasive justification” language utilized by the Supreme Court in *United States v. Virginia*, 116 S. Ct. 2264 (1996) (evaluating gender-based government action), the Eleventh Circuit held that the WBE program was subject to traditional intermediate scrutiny. *Id.* at 908. Under this standard, the government must provide “sufficient probative evidence” of discrimination, which is a lesser standard than the “strong basis in evidence” under strict scrutiny. *Id.* at 910.

The County provided two types of evidence in support of the MWBE programs: (1) statistical evidence, and (2) non-statistical “anecdotal” evidence. *Id.* at 911. As an initial matter, the Eleventh Circuit found that in support of the BBE program, the County permissibly relied on substantially “post-enactment” evidence (*i.e.*, evidence based on data related to years following the initial enactment of the BBE program). *Id.* However, “such evidence carries with it the hazard that the program at issue may itself be masking discrimination that might otherwise be occurring in the relevant market.” *Id.* at 912. A district court should not “speculate about what the data *might* have shown had the BBE program never been enacted.” *Id.*

The statistical evidence. The County presented five basic categories of statistical evidence: (1) County contracting statistics; (2) County subcontracting statistics; (3) marketplace data statistics; (4) The Wainwright Study; and (5) The Brimmer Study. *Id.* In summary, the Eleventh Circuit held that the County’s statistical evidence (described more fully below) was subject to more than one interpretation. *Id.* at 924. The district court found that the evidence was “insufficient to form the requisite strong basis in evidence for implementing a racial or ethnic preference, and that it was insufficiently probative to support the County’s stated rationale for imposing a gender preference.” *Id.* The district court’s view of the evidence was a permissible one. *Id.*

County contracting statistics. The County presented a study comparing three factors for County non-procurement construction contracts over two time periods (1981-1991 and 1993): (1) the percentage of bidders that were MWBE firms; (2) the percentage of awardees that were MWBE firms; and (3) the proportion of County contract dollars that had been awarded to MWBE firms. *Id.* at 912.

The Eleventh Circuit found that notably, for the BBE and HBE statistics, generally there were no “consistently negative disparities between the bidder and awardee percentages. In fact, by 1993, the BBE and HBE bidders are being awarded *more* than their proportionate ‘share’ ... when the bidder percentages are used as the baseline.” *Id.* at 913. For the WBE statistics, the bidder/awardee statistics were “decidedly mixed” as across the range of County construction contracts. *Id.*

The County then refined those statistics by adding in the total percentage of annual County construction dollars awarded to MBE/WBEs, by calculating “disparity indices” for each program and classification of construction contract. The Eleventh Circuit explained:

“[A] disparity index compares the amount of contract awards a group actually got to the amount we would have expected it to get based on that group’s bidding activity and awardee success rate. More specifically, a disparity index measures the participation of a group in County contracting dollars by dividing that group’s contract dollar percentage by the related bidder or awardee percentage, and multiplying that number by 100 percent.”

Id. at 914. “The utility of disparity indices or similar measures ... has been recognized by a number of federal circuit courts.” *Id.*

The Eleventh Circuit found that “[i]n general ... disparity indices of 80 percent or greater, which are close to full participation, are not considered indications of discrimination.” *Id.* The Eleventh Circuit noted that “the EEOC’s disparate impact guidelines use the 80 percent test as the boundary line for determining a prima facie case of discrimination.” *Id.*, citing 29 CFR § 1607.4D. In addition, no circuit that has “explicitly endorsed the use of disparity indices [has] indicated that an index of 80 percent or greater might be probative of discrimination.” *Id.*, citing *Concrete Works v. City & County of Denver*, 36 F.3d 1513, 1524 (10th Cir. 1994) (crediting disparity indices ranging from 0 % to 3.8%); *Contractors Ass’n v. City of Philadelphia*, 6 F.3d 990 (3d Cir. 1993) (crediting disparity index of 4%).

After calculation of the disparity indices, the County applied a standard deviation analysis to test the statistical significance of the results. *Id.* at 914. “The standard deviation figure describes the probability that the measured disparity is the result of mere chance.” *Id.* The Eleventh Circuit had previously recognized “[s]ocial scientists consider a finding of two standard deviations significant, meaning there is about one chance in 20 that the explanation for the deviation could be random and the deviation must be accounted for by some factor other than chance.” *Id.*

The statistics presented by the County indicated “statistically significant underutilization of BBEs in County construction contracting.” *Id.* at 916. The results were “less dramatic” for HBEs and mixed as between favorable and unfavorable for WBEs. *Id.*

The Eleventh Circuit then explained the burden of proof:

“[O]nce the proponent of affirmative action introduces its statistical proof as evidence of its remedial purpose, thereby supplying the [district] court with the means for determining that [it] had a firm basis for concluding that remedial action was appropriate, it is incumbent upon the [plaintiff] to prove their case; they continue to bear the ultimate burden of persuading the [district] court that the [defendant’s] evidence did not support an inference of prior discrimination and thus a remedial purpose, or that the plan instituted on the basis of this evidence was not sufficiently ‘narrowly tailored.’”

Id. (internal citations omitted).

The Eleventh Circuit noted that a plaintiff has at least three methods to rebut the inference of discrimination with a “neutral explanation” by: “(1) showing that the statistics are flawed; (2) demonstrating that the disparities shown by the statistics are not significant or actionable; or (3) presenting contrasting statistical data.” *Id.* (internal quotations and citations omitted). The Eleventh Circuit held that the plaintiffs produced “sufficient evidence to establish a neutral explanation for the disparities.” *Id.*

The plaintiffs alleged that the disparities were “better explained by firm size than by discrimination ... [because] minority and female-owned firms tend to be smaller, and that it stands to reason smaller firms will win smaller contracts.” *Id.* at 916-17. The plaintiffs produced Census data indicating, on average, minority- and female-owned construction firms in Engineering Contractors Association were smaller than non-MBE/WBE firms. *Id.* at 917. The Eleventh Circuit found that the plaintiff’s explanation of the disparities was a “plausible one, in light of the uncontroverted evidence that MBE/WBE construction firms tend to be substantially smaller than non-MBE/WBE firms.” *Id.*

Additionally, the Eleventh Circuit noted that the County’s own expert admitted that “firm size plays a significant role in determining which firms win contracts.” *Id.* The expert stated:

The size of the firm has got to be a major determinant because of course some firms are going to be larger, are going to be better prepared, are going to be in a greater natural capacity to be able to work on some of the contracts while others simply by virtue of their small size simply would not be able to do it. *Id.*

The Eleventh Circuit then summarized:

Because they are bigger, bigger firms have a bigger chance to win bigger contracts. It follows that, all other factors being equal and in a perfectly nondiscriminatory market, one would expect the bigger (on average) non-MWBE firms to get a disproportionately higher percentage of total construction dollars awarded than the smaller MWBE firms. *Id.*

In anticipation of such an argument, the County conducted a regression analysis to control for firm size. *Id.* A regression analysis is “a statistical procedure for determining the relationship between a dependent and independent variable, *e.g.*, the dollar value of a contract award and firm size.” *Id.* (internal citations omitted). The purpose of the regression analysis is “to determine whether the relationship between the two variables is statistically meaningful.” *Id.*

The County’s regression analysis sought to identify disparities that could not be explained by firm size, and theoretically instead based on another factor, such as discrimination. *Id.* The County conducted two regression analyses using two different proxies for firm size: (1) total awarded value of all contracts bid on; and (2) largest single contract awarded. *Id.* The regression analyses accounted for most of the negative disparities regarding MBE/WBE participation in County construction contracts (*i.e.*, most of the unfavorable disparities became statistically insignificant, corresponding to standard deviation values less than two). *Id.*

Based on an evaluation of the regression analysis, the district court held that the demonstrated disparities were attributable to firm size as opposed to discrimination. *Id.* at 918. The district

court concluded that the few unexplained disparities that remained after regressing for firm size were insufficient to provide the requisite “strong basis in evidence” of discrimination of BBEs and HBEs. *Id.* The Eleventh Circuit held that this decision was not clearly erroneous. *Id.*

With respect to the BBE statistics, the regression analysis explained all but one negative disparity, for one type of construction contract between 1989-1991. *Id.* The Eleventh Circuit held the district court permissibly found that this did not constitute a “strong basis in evidence” of discrimination. *Id.*

With respect to the HBE statistics, one of the regression methods failed to explain the unfavorable disparity for one type of contract between 1989-1991, and both regression methods failed to explain the unfavorable disparity for another type of contract during that same time period. *Id.* However, by 1993, both regression methods accounted for all of the unfavorable disparities, and one of the disparities for one type of contract was actually favorable for HBEs. *Id.* The Eleventh Circuit held the district court permissibly found that this did not constitute a “strong basis in evidence” of discrimination. *Id.*

Finally, with respect to the WBE statistics, the regression analysis explained all but one negative disparity, for one type of construction contract in the 1993 period. *Id.* The regression analysis explained all of the other negative disparities, and in the 1993 period, a disparity for one type of contract was actually favorable to WBEs. *Id.* The Eleventh Circuit held the district court permissibly found that this evidence was not “sufficiently probative of discrimination.” *Id.*

The County argued that the district court erroneously relied on the disaggregated data (*i.e.*, broken down by contract type) as opposed to the consolidated statistics. *Id.* at 919. The district court declined to assign dispositive weight to the aggregated data for the BBE statistics for 1989-1991 because (1) the aggregated data for 1993 did not show negative disparities when regressed for firm size, (2) the BBE disaggregated data left only one unexplained negative disparity for one type of contract for 1989-1991 when regressed for firm size, and (3) “the County’s own expert testified as to the utility of examining the disaggregated data ‘insofar as they reflect different kinds of work, different bidding practices, perhaps a variety of other factors that could make them heterogeneous with one another.’” *Id.*

Additionally, the district court noted, and the Eleventh Circuit found that “the aggregation of disparity statistics for nonheterogenous data populations can give rise to a statistical phenomenon known as ‘Simpson’s Paradox,’ which leads to illusory disparities in improperly aggregated data that disappear when the data are disaggregated.” *Id.* at 919, n. 4 (internal citations omitted). “Under those circumstances,” the Eleventh Circuit held that the district court did not err in assigning less weight to the aggregated data, in finding the aggregated data for BBEs for 1989-1991 did not provide a “strong basis in evidence” of discrimination, or in finding that the disaggregated data formed an insufficient basis of support for any of the MBE/WBE programs given the applicable constitutional requirements. *Id.* at 919.

County subcontracting statistics. The County performed a subcontracting study to measure MBE/WBE participation in the County’s subcontracting businesses. For each MBE/WBE category (BBE, HBE, and WBE), “the study compared the proportion of the designated group that filed a subcontractor’s release of lien on a County construction project between 1991 and 1994 with

the proportion of sales and receipt dollars that the same group received during the same time period.” *Id.*

The district court found the statistical evidence insufficient to support the use of race- and ethnicity-conscious measures, noting problems with some of the data measures. *Id.* at 920.

Most notably, the denominator used in the calculation of the MWBE sales and receipts percentages is based upon the total sales and receipts from all sources for the firm filing a subcontractor’s release of lien with the County. That means, for instance, that if a nationwide non-MWBE company performing 99 percent of its business outside of Dade County filed a single subcontractor’s release of lien with the County during the relevant time frame, all of its sales and receipts for that time frame would be counted in the denominator against which MWBE sales and receipts are compared. As the district court pointed out, that is not a reasonable way to measure Dade County subcontracting participation.

Id. The County’s argument that a strong majority (72%) of the subcontractors were located in Dade County did not render the district court’s decision to fail to credit the study erroneous. *Id.*

Marketplace data statistics. The County conducted another statistical study “to see what the differences are in the marketplace and what the relationships are in the marketplace.” *Id.* The study was based on a sample of 568 contractors, from a pool of 10,462 firms, that had filed a “certificate of competency” with Dade County as of January 1995. *Id.* The selected firms participated in a telephone survey inquiring about the race, ethnicity, and gender of the firm’s owner, and asked for information on the firm’s total sales and receipts from all sources. *Id.* The County’s expert then studied the data to determine “whether meaningful relationships existed between (1) the race, ethnicity, and gender of the surveyed firm owners, and (2) the reported sales and receipts of that firm. *Id.* The expert’s hypothesis was that unfavorable disparities may be attributable to marketplace discrimination. The expert performed a regression analysis using the number of employees as a proxy for size. *Id.*

The Eleventh Circuit first noted that the statistical pool used by the County was substantially larger than the actual number of firms, willing, able, and qualified to do the work as the statistical pool represented all those firms merely licensed as a construction contractor. *Id.* Although this factor did not render the study meaningless, the district court was entitled to consider that in evaluating the weight of the study. *Id.* at 921. The Eleventh Circuit quoted the Supreme Court for the following proposition: “[w]hen special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value.” *Id.*, quoting *Croson*, 488 U.S. at 501, quoting *Hazelwood Sch. Dist. v. United States*, 433 U.S. 299, 308 n. 13 (1977).

The Eleventh Circuit found that after regressing for firm size, neither the BBE nor WBE data showed statistically significant unfavorable disparities. *Id.* Although the marketplace data did reveal unfavorable disparities even after a regression analysis, the district court was not required to assign those disparities controlling weight, especially in light of the dissimilar results of the County Contracting Statistics, discussed *supra*. *Id.*

The Wainwright Study. The County also introduced a statistical analysis prepared by Jon Wainwright, analyzing “the personal and financial characteristics of self-employed persons working full-time in the Dade County construction industry, based on data from the 1990 Public Use Microdata Sample database” (derived from the decennial census). *Id.* The study “(1) compared construction business ownership rates of MBE/WBEs to those of non-MBE/WBEs, and (2) analyzed disparities in personal income between MBE/WBE and non-MBE/WBE business owners.” *Id.* “The study concluded that blacks, Hispanics, and women are less likely to own construction businesses than similarly situated white males, and MBE/WBEs that do enter the construction business earn less money than similarly situated white males.” *Id.*

With respect to the first conclusion, Wainwright controlled for “human capital” variables (education, years of labor market experience, marital status, and English proficiency) and “financial capital” variables (interest and dividend income, and home ownership). *Id.* The analysis indicated that blacks, Hispanics and women enter the construction business at lower rates than would be expected, once numerosity, and identified human and financial capital are controlled for. *Id.* The disparities for blacks and women (but not Hispanics) were substantial and statistically significant. *Id.* at 922. The underlying theory of this business ownership component of the study is that any significant disparities remaining after control of variables are due to the ongoing effects of past and present discrimination. *Id.*

The Eleventh Circuit held, in light of *Croson*, the district court need not have accepted this theory. *Id.* The Eleventh Circuit quoted *Croson*, in which the Supreme Court responded to a similar argument advanced by the plaintiffs in that case: “There are numerous explanations for this dearth of minority participation, including past societal discrimination in education and economic opportunities *as well as both black and white career and entrepreneurial choices. Blacks may be disproportionately attracted to industries other than construction.*” *Id.*, quoting *Croson*, 488 U.S. at 503. Following the Supreme Court in *Croson*, the Eleventh Circuit held “the disproportionate attraction of a minority group to non-construction industries does not mean that discrimination in the construction industry is the reason.” *Id.*, quoting *Croson*, 488 U.S. at 503. Additionally, the district court had evidence that between 1982 and 1987, there was a substantial growth rate of MBE/WBE firms as opposed to non-MBE/WBE firms, which would further negate the proposition that the construction industry was discriminating against minority- and women-owned firms. *Id.* at 922.

With respect to the personal income component of the Wainwright study, after regression analyses were conducted, only the BBE statistics indicated a statistically significant disparity ratio. *Id.* at 923. However, the Eleventh Circuit held the district court was not required to assign the disparity controlling weight because the study did not regress for firm size, and in light of the conflicting statistical evidence in the County Contracting Statistics and Marketplace Data Statistics, discussed supra, which did regress for firm size. *Id.*

The Brimmer Study. The final study presented by the County was conducted under the supervision of Dr. Andrew F. Brimmer and concerned only black-owned firms. *Id.* The key component of the study was an analysis of the business receipts of black-owned construction firms for the years of 1977, 1982 and 1987, based on the Census Bureau’s Survey of Minority- and Women-Owned Businesses, produced every five years. *Id.* The study sought to determine the

existence of disparities between sales and receipts of black-owned firms in Dade County compared to the sales and receipts of all construction firms in Dade County. *Id.*

The study indicated substantial disparities in 1977 and 1987 but not 1982. *Id.* The County alleged that the absence of disparity in 1982 was due to substantial race-conscious measures for a major construction contract (Metrorail project), and not due to a lack of discrimination in the industry. *Id.* However, the study made no attempt to filter for the Metrorail project and “complete[ly] fail[ed]” to account for firm size. *Id.* Accordingly, the Eleventh Circuit found the district court permissibly discounted the results of the Brimmer study. *Id.* at 924.

Anecdotal evidence. In addition, the County presented a substantial amount of anecdotal evidence of perceived discrimination against BBEs, a small amount of similar anecdotal evidence pertaining to WBEs, and no anecdotal evidence pertaining to HBEs. *Id.* The County presented three basic forms of anecdotal evidence: “(1) the testimony of two County employees responsible for administering the MBE/WBE programs; (2) the testimony, primarily by affidavit, of twenty-three MBE/WBE contractors and subcontractors; and (3) a survey of black-owned construction firms.” *Id.*

The County employees testified that the decentralized structure of the County construction contracting system affords great discretion to County employees, which in turn creates the opportunity for discrimination to infect the system. *Id.* They also testified to specific incidents of discrimination, for example, that MBE/WBEs complained of receiving lengthier punch lists than their non-MBE/WBE counterparts. *Id.* They also testified that MBE/WBEs encounter difficulties in obtaining bonding and financing. *Id.*

The MBE/WBE contractors and subcontractors testified to numerous incidents of perceived discrimination in the Dade County construction market, including:

Situations in which a project foreman would refuse to deal directly with a black or female firm owner, instead preferring to deal with a white employee; instances in which an MWBE owner knew itself to be the low bidder on a subcontracting project, but was not awarded the job; instances in which a low bid by an MWBE was “shopped” to solicit even lower bids from non-MWBE firms; instances in which an MWBE owner received an invitation to bid on a subcontract within a day of the bid due date, together with a “letter of unavailability” for the MWBE owner to sign in order to obtain a waiver from the County; and instances in which an MWBE subcontractor was hired by a prime contractor, but subsequently was replaced with a non-MWBE subcontractor within days of starting work on the project.

Id. at 924-25.

Finally, the County submitted a study prepared by Dr. Joe E. Feagin, comprised of interviews of 78 certified black-owned construction firms. *Id.* at 925. The interviewees reported similar instances of perceived discrimination, including: “difficulty in securing bonding and financing; slow payment by general contractors; unfair performance evaluations that were tainted by racial

stereotypes; difficulty in obtaining information from the County on contracting processes; and higher prices on equipment and supplies than were being charged to non-MBE/WBE firms.” *Id.*

The Eleventh Circuit found that numerous black- and some female-owned construction firms in Dade County perceived that they were the victims of discrimination and two County employees also believed that discrimination could taint the County’s construction contracting process. *Id.* However, such anecdotal evidence is helpful “only when it [is] combined with and reinforced by sufficiently probative statistical evidence.” *Id.* In her plurality opinion in *Croson*, Justice O’Connor found that “evidence of a pattern of individual discriminatory acts can, *if supported by appropriate statistical proof*, lend support to a local government’s determination that broader remedial relief is justified.” *Id.*, quoting *Croson*, 488 U.S. at 509 (emphasis added by the Eleventh Circuit). Accordingly, the Eleventh Circuit held that “anecdotal evidence can play an important role in bolstering statistical evidence, but that only in the rare case will anecdotal evidence suffice standing alone.” *Id.* at 925. The Eleventh Circuit also cited to opinions from the Third, Ninth and Tenth Circuits as supporting the same proposition. *Id.* at 926. The Eleventh Circuit affirmed the decision of the district court enjoining the continued operation of the MBE/WBE programs because they did not rest on a “constitutionally sufficient evidentiary foundation.” *Id.*

Although the Eleventh Circuit determined that the MBE/WBE program did not survive constitutional muster due to the absence of a sufficient evidentiary foundation, the Eleventh Circuit proceeded with the second prong of the strict scrutiny analysis of determining whether the MBE/WBE programs were narrowly tailored (BBE and HBE programs) or substantially related (WBE program) to the legitimate government interest they purported to serve, *i.e.*, “remedying the effects of present and past discrimination against blacks, Hispanics, and women in the Dade County construction market.” *Id.*

Narrow tailoring. “The essence of the ‘narrowly tailored’ inquiry is the notion that explicitly racial preferences ... must only be a ‘last resort’ option.” *Id.*, quoting *Hayes v. North Side Law Enforcement Officers Ass’n*, 10 F.3d 207, 217 (4th Cir. 1993) and citing *Croson*, 488 U.S. at 519 (Kennedy, J., concurring in part and concurring in the judgment) (“[T]he strict scrutiny standard ... forbids the use of even narrowly drawn racial classifications except as a last resort.”).

The Eleventh Circuit has identified four factors to evaluate whether a race- or ethnicity-conscious affirmative action program is narrowly tailored: (1) “the necessity for the relief and the efficacy of alternative remedies; (2) the flexibility and duration of the relief; (3) the relationship of numerical goals to the relevant labor market; and (4) the impact of the relief on the rights of innocent third parties.” *Id.* at 927, citing *Ensley Branch*, 31 F.3d at 1569. The four factors provide “a useful analytical structure.” *Id.* at 927. The Eleventh Circuit focused only on the first factor in the present case “because that is where the County’s MBE/WBE programs are most problematic.” *Id.*

The Eleventh Circuit

flatly reject[ed] the County’s assertion that ‘given a strong basis in evidence of a race-based problem, a race-based remedy is necessary.’ That is simply not the law. If a race-neutral remedy is sufficient to cure a race-based problem, then a race-conscious remedy can never be narrowly tailored to that problem.” *Id.*,

citing Croson, 488 U.S. at 507 (holding that affirmative action program was not narrowly tailored where “there does not appear to have been any consideration of the use of race-neutral means to increase minority business participation in city contracting”) ... Supreme Court decisions teach that a race-conscious remedy is not merely one of many equally acceptable medications the government may use to treat a race-based problem. Instead, it is the strongest of medicines, with many potential side effects, and must be reserved for those severe cases that are highly resistant to conventional treatment.

Id. at 927.

The Eleventh Circuit held that the County “clearly failed to give serious and good faith consideration to the use of race- and ethnicity-neutral measures.” *Id.* Rather, the determination of the necessity to establish the MWBE programs was based upon a conclusory legislative statement as to its necessity, which in turn was based upon an “equally conclusory analysis” in the Brimmer study, and a report that the SBA only was able to direct 5 percent of SBA financing to black-owned businesses between 1968-1980. *Id.*

The County admitted, and the Eleventh Circuit concluded, that the County failed to give any consideration to any alternative to the HBE affirmative action program. *Id.* at 928. Moreover, the Eleventh Circuit found that the testimony of the County’s own witnesses indicated the viability of race- and ethnicity-neutral measures to remedy many of the problems facing black- and Hispanic-owned construction firms. *Id.* The County employees identified problems, virtually all of which were related to the County’s own processes and procedures, including: “the decentralized County contracting system, which affords a high level of discretion to County employees; the complexity of County contract specifications; difficulty in obtaining bonding; difficulty in obtaining financing; unnecessary bid restrictions; inefficient payment procedures; and insufficient or inefficient exchange of information.” *Id.* The Eleventh Circuit found that the problems facing MBE/WBE contractors were “institutional barriers” to entry facing every new entrant into the construction market, and were perhaps affecting the MBE/WBE contractors disproportionately due to the “institutional youth” of black- and Hispanic-owned construction firms. *Id.* “It follows that those firms should be helped the most by dismantling those barriers, something the County could do at least in substantial part.” *Id.*

The Eleventh Circuit noted that the race- and ethnicity-neutral options available to the County mirrored those available and cited by Justice O’Connor in *Croson*:

[T]he city has at its disposal a whole array of race-neutral measures to increase the accessibility of city contracting opportunities to small entrepreneurs of all races. Simplification of bidding procedures, relaxation of bonding requirements, and training and financial aid for disadvantaged entrepreneurs of all races would open the public contracting market to all those who have suffered the effects of past societal discrimination and neglect ... The city may also act to prohibit discrimination in the provision of credit or bonding by local suppliers and banks.

Id., quoting *Croson*, 488 U.S. at 509-10. The Eleventh Circuit found that except for some “half-hearted programs” consisting of “limited technical and financial aid that might benefit BBEs and HBEs,” the County had not “seriously considered” or tried most of the race- and ethnicity-neutral alternatives available. *Id.* at 928. “Most notably ... the County has not taken any action whatsoever to ferret out and respond to instances of discrimination if and when they have occurred in the County’s own contracting process.” *Id.*

The Eleventh Circuit found that the County had taken no steps to “inform, educate, discipline, or penalize” discriminatory misconduct by its own employees. *Id.* at 929. Nor had the County passed any local ordinances expressly prohibiting discrimination by local contractors, subcontractors, suppliers, bankers, or insurers. *Id.* “Instead of turning to race- and ethnicity-conscious remedies as a last resort, the County has turned to them as a first resort.” Accordingly, the Eleventh Circuit held that even if the BBE and HBE programs were supported by the requisite evidentiary foundation, they violated the Equal Protection Clause because they were not narrowly tailored. *Id.*

Substantial relationship. The Eleventh Circuit held that due to the relaxed “substantial relationship” standard for gender-conscious programs, if the WBE program rested upon a sufficient evidentiary foundation, it could pass the substantial relationship requirement. *Id.* However, because it did not rest upon a sufficient evidentiary foundation, the WBE program could not pass constitutional muster. *Id.*

For all of the foregoing reasons, the Eleventh Circuit affirmed the decision of the district court declaring the MBE/WBE programs unconstitutional and enjoining their continued operation.

12. Associated Gen. Contractors of California, Inc. v. Coalition for Econ. Equity (“AGCC”), 950 F.2d 1401 (9th Cir. 1991)

In *Associated Gen. Contractors of California, Inc. v. Coalition for Econ. Equity (“AGCC”)*, the Ninth Circuit Court of Appeals denied plaintiffs request for preliminary injunction to enjoin enforcement of the city’s bid preference program. 950 F.2d 1401 (9th Cir. 1991). Although an older case, *AGCC* is instructive as to the analysis conducted by the Ninth Circuit. The court discussed the utilization of statistical evidence and anecdotal evidence in the context of the strict scrutiny analysis. *Id.* at 1413-18.

The City of San Francisco adopted an ordinance in 1989 providing bid preferences to prime contractors who were members of groups found disadvantaged by previous bidding practices, and specifically provided a 5 percent bid preference for LBEs, WBEs and MBEs. 950 F.2d at 1405. Local MBEs and WBEs were eligible for a 10 percent total bid preference, representing the cumulative total of the five percent preference given Local Business Enterprises (“LBEs”) and the 5 percent preference given MBEs and WBEs. *Id.* The ordinance defined “MBE” as an economically disadvantaged business that was owned and controlled by one or more minority persons, which were defined to include Asian, blacks and Latinos. “WBE” was defined as an economically disadvantaged business that was owned and controlled by one or more women. Economically disadvantaged was defined as a business with average gross annual receipts that did not exceed \$14 million. *Id.*

The Motion for Preliminary Injunction challenged the constitutionality of the MBE provisions of the 1989 Ordinance insofar as it pertained to Public Works construction contracts. *Id.* at 1405. The district court denied the Motion for Preliminary Injunction on the AGCC's constitutional claim on the ground that AGCC failed to demonstrate a likelihood of success on the merits. *Id.* at 1412.

The Ninth Circuit Court of Appeals applied the strict scrutiny analysis following the decision of the U.S. Supreme Court in *City of Richmond v. Croson*. The court stated that according to the U.S. Supreme Court in *Croson*, a municipality has a compelling interest in redressing, not only discrimination committed by the municipality itself, but also discrimination committed by private parties within the municipalities' legislative jurisdiction, so long as the municipality in some way perpetuated the discrimination to be remedied by the program. *Id.* at 1412-13, *citing Croson* at 488 U.S. at 491-92, 537-38. To satisfy this requirement, "the governmental actor need not be an active perpetrator of such discrimination; passive participation will satisfy this sub-part of strict scrutiny review." *Id.* at 1413, *quoting Coral Construction Company v. King County*, 941 F.2d 910 at 916 (9th Cir. 1991). In addition, the [m]ere infusion of tax dollars into a discriminatory industry may be sufficient governmental involvement to satisfy this prong." *Id.* at 1413 *quoting Coral Construction*, 941 F.2d at 916.

The court pointed out that the City had made detailed findings of prior discrimination in construction and building within its borders, had testimony taken at more than ten public hearings and received numerous written submissions from the public as part of its anecdotal evidence. *Id.* at 1414. The City Departments continued to discriminate against MBEs and WBEs and continued to operate under the "old boy network" in awarding contracts, thereby disadvantaging MBEs and WBEs. *Id.* And, the City found that large statistical disparities existed between the percentage of contracts awarded to MBEs and the percentage of available MBEs. 950 F.2d at 1414. The court stated the City also found "discrimination in the private sector against MBEs and WBEs that is manifested in and exacerbated by the City's procurement practices." *Id.* at 1414.

The Ninth Circuit found the study commissioned by the City indicated the existence of large disparities between the award of city contracts to available non-minority businesses and to MBEs. *Id.* at 1414. Using the City and County of San Francisco as the "relevant market," the study compared the number of available MBE prime construction contractors in San Francisco with the amount of contract dollars awarded by the City to San Francisco-based MBEs for a particular year. *Id.* at 1414. The study found that available MBEs received far fewer city contracts in proportion to their numbers than their available non-minority counterparts. *Id.* Specifically, the study found that with respect to prime construction contracting, disparities between the number of available local Asian-, black- and Hispanic-owned firms and the number of contracts awarded to such firms were statistically significant and supported an inference of discrimination. *Id.* For example, in prime contracting for construction, although MBE availability was determined to be at 49.5 percent, MBE dollar participation was only 11.1 percent. *Id.* The Ninth Circuit stated that in its decision in *Coral Construction*, it emphasized that such statistical disparities are "an invaluable tool and demonstrating the discrimination necessary to establish a compelling interest. *Id.* at 1414, *citing to Coral Construction*, 941 F.2d at 918 and *Croson*, 488 U.S. at 509.

The court noted that the record documents a vast number of individual accounts of discrimination, which bring “the cold numbers convincingly to life. *Id.* at 1414, *quoting Coral Construction*, 941 F.2d at 919. These accounts include numerous reports of MBEs being denied contracts despite being the low bidder, MBEs being told they were not qualified although they were later found qualified when evaluated by outside parties, MBEs being refused work even after they were awarded contracts as low bidder, and MBEs being harassed by city personnel to discourage them from bidding on city contracts. *Id.* at 1415. The City pointed to numerous individual accounts of discrimination, that an “old boy network” still exists, and that racial discrimination is still prevalent within the San Francisco construction industry. *Id.* The court found that such a “combination of convincing anecdotal and statistical evidence is potent.” *Id.* at 1415 *quoting Coral Construction*, 941 F.2d at 919.

The court also stated that the 1989 Ordinance applies only to resident MBEs. The City, therefore, according to the court, appropriately confined its study to the city limits in order to focus on those whom the preference scheme targeted. *Id.* at 1415. The court noted that the statistics relied upon by the City to demonstrate discrimination in its contracting processes considered only MBEs located within the City of San Francisco. *Id.*

The court pointed out the City’s findings were based upon dozens of specific instances of discrimination that are laid out with particularity in the record, as well as the significant statistical disparities in the award of contracts. The court noted that the City must simply demonstrate the existence of past discrimination with specificity, but there is no requirement that the legislative findings specifically detail each and every incidence that the legislative body has relied upon in support of this decision that affirmative action is necessary. *Id.* at 1416.

In its analysis of the “narrowly tailored” requirement, the court focused on three characteristics identified by the decision in *Croson* as indicative of narrow tailoring. First, an MBE program should be instituted either after, or in conjunction with, race-neutral means of increasing minority business participation in public contracting. *Id.* at 1416. Second, the plan should avoid the use of “rigid numerical quotas.” *Id.* According to the Supreme Court, systems that permit waiver in appropriate cases and therefore require some individualized consideration of the applicants pose a lesser danger of offending the Constitution. *Id.* Mechanisms that introduce flexibility into the system also prevent the imposition of a disproportionate burden on a few individuals. *Id.* Third, “an MBE program must be limited in its effective scope to the boundaries of the enacting jurisdiction. *Id.* at 1416 *quoting Coral Construction*, 941 F.2d at 922.

The court found that the record showed the City considered, but rejected as not viable, specific race-neutral alternatives including a fund to assist newly established MBEs in meeting bonding requirements. The court stated that “while strict scrutiny requires serious, good faith consideration of race-neutral alternatives, strict scrutiny does not require exhaustion of every possible such alternative ... however irrational, costly, unreasonable, and unlikely to succeed such alternative may be.” *Id.* at 1417 *quoting Coral Construction*, 941 F.2d at 923. The court found the City ten years before had attempted to eradicate discrimination in city contracting through passage of a race-neutral ordinance that prohibited city contractors from discriminating against their employees on the basis of race and required contractors to take steps to integrate their work force; and that the City made and continues to make efforts to enforce the anti-

discrimination ordinance. *Id.* at 1417. The court stated inclusion of such race-neutral measures is one factor suggesting that an MBE plan is narrowly tailored. *Id.* at 1417.

The court also found that the Ordinance possessed the requisite flexibility. Rather than a rigid quota system, the City adopted a more modest system according to the court, that of bid preferences. *Id.* at 1417. The court pointed out that there were no goals, quotas, or set-asides and moreover, the plan remedies only specifically identified discrimination: the City provides preferences only to those minority groups found to have previously received a lower percentage of specific types of contracts than their availability to perform such work would suggest. *Id.* at 1417.

The court rejected the argument of AGCC that to pass constitutional muster any remedy must provide redress only to specific individuals who have been identified as victims of discrimination. *Id.* at 1417, n. 12. The Ninth Circuit agreed with the district court that an iron-clad requirement limiting any remedy to individuals personally proven to have suffered prior discrimination would render any race-conscious remedy “superfluous,” and would thwart the Supreme Court’s directive in *Croson* that race-conscious remedies may be permitted in some circumstances. *Id.* at 1417, n. 12. The court also found that the burdens of the bid preferences on those not entitled to them appear “relatively light and well distributed.” *Id.* at 1417. The court stated that the Ordinance was “limited in its geographical scope to the boundaries of the enacting jurisdiction. *Id.* at 1418, quoting *Coral Construction*, 941 F.2d at 925. The court found that San Francisco had carefully limited the ordinance to benefit only those MBEs located within the City’s borders. *Id.* 1418.

13. Coral Construction Co. v. King County, 941 F.2d 910 (9th Cir. 1991)

In *Coral Construction Co. v. King County*, 941 F.2d 910 (9th Cir. 1991), the Ninth Circuit examined the constitutionality of King County, Washington’s minority and women business set-aside program in light of the standard set forth in *City of Richmond v. J.A. Croson Co.* The court held that although the County presented ample anecdotal evidence of disparate treatment of MBE contractors and subcontractors, the total absence of pre-program enactment statistical evidence was problematic to the compelling government interest component of the strict scrutiny analysis. The court remanded to the district court for a determination of whether the post-program enactment studies constituted a sufficient compelling government interest. Per the narrow tailoring prong of the strict scrutiny test, the court found that although the program included race-neutral alternative measures and was flexible (*i.e.*, included a waiver provision), the over breadth of the program to include MBEs outside of King County was fatal to the narrow tailoring analysis.

The court also remanded on the issue of whether the plaintiffs were entitled to damages under 42 U.S.C. §§ 1981 and 1983, and in particular to determine whether evidence of causation existed. With respect to the WBE program, the court held the plaintiff had standing to challenge the program, and applying the intermediate scrutiny analysis, held the WBE program survived the facial challenge.

In finding the absence of any statistical data in support of the County’s MBE Program, the court made it clear that statistical analyses have served and will continue to serve an important role in

cases in which the existence of discrimination is a disputed issue. 941 F.2d at 918. The court noted that it has repeatedly approved the use of statistical proof to establish a prima facie case of discrimination. *Id.* The court pointed out that the U.S. Supreme Court in *Croson* held that where “gross statistical disparities can be shown, they alone may in a proper case constitute prima facie proof of a pattern or practice of discrimination.” *Id.* at 918, quoting *Hazelwood School Dist. v. United States*, 433 U.S. 299, 307-08, and *Croson*, 488 U.S. at 501.

The court points out that statistical evidence may not fully account for the complex factors and motivations guiding employment decisions, many of which may be entirely race-neutral. *Id.* at 919. The court noted that the record contained a plethora of anecdotal evidence, but that anecdotal evidence, standing alone, suffers the same flaws as statistical evidence. *Id.* at 919. While anecdotal evidence may suffice to prove individual claims of discrimination, rarely, according to the court, if ever, can such evidence show a systemic pattern of discrimination necessary for the adoption of an affirmative action plan. *Id.*

Nonetheless, the court held that the combination of convincing anecdotal and statistical evidence is potent. *Id.* at 919. The court pointed out that individuals who testified about their personal experiences brought the cold numbers of statistics “convincingly to life.” *Id.* at 919, quoting *International Brotherhood of Teamsters v. United States*, 431 U.S. 324, 339 (1977). The court also pointed out that the Eleventh Circuit Court of Appeals, in passing upon a minority set aside program similar to the one in King County, concluded that the testimony regarding complaints of discrimination combined with the gross statistical disparities uncovered by the County studies provided more than enough evidence on the question of prior discrimination and need for racial classification to justify the denial of a Motion for Summary Judgment. *Id.* at 919, citing *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 916 (11th Cir. 1990).

The court found that the MBE Program of the County could not stand without a proper statistical foundation. *Id.* at 919. The court addressed whether post-enactment studies done by the County of a statistical foundation could be considered by the court in connection with determining the validity of the County MBE Program. The court held that a municipality must have *some* concrete evidence of discrimination in a particular industry before it may adopt a remedial program. *Id.* at 920. However, the court said this requirement of *some* evidence does not mean that a program will be automatically struck down if the evidence before the municipality at the time of enactment does not completely fulfill both prongs of the strict scrutiny test. *Id.* Rather, the court held, the factual predicate for the program should be evaluated based upon all evidence presented to the district court, whether such evidence was adduced before or after enactment of the MBE Program. *Id.* Therefore, the court adopted a rule that a municipality should have before it some evidence of discrimination before adopting a race-conscious program, while allowing post-adoption evidence to be considered in passing on the constitutionality of the program. *Id.*

The court, therefore, remanded the case to the district court for determination of whether the consultant studies that were performed after the enactment of the MBE Program could provide an adequate factual justification to establish a “propelling government interest” for King County’s adopting the MBE Program. *Id.* at 922.

The court also found that *Croson* does not require a showing of active discrimination by the enacting agency, and that passive participation, such as the infusion of tax dollars into a

discriminatory industry, suffices. *Id.* at 922, citing *Croson*, 488 U.S. at 492. The court pointed out that the Supreme Court in *Croson* concluded that if the City had evidence before it, that non-minority contractors were systematically excluding minority businesses from subcontracting opportunities, it could take action to end the discriminatory exclusion. *Id.* at 922. The court points out that if the record ultimately supported a finding of systemic discrimination, the County adequately limited its program to those businesses that receive tax dollars, and the program imposed obligations upon only those businesses which voluntarily sought King County tax dollars by contracting with the County. *Id.*

The court addressed several factors in terms of the narrowly tailored analysis, and found that first, an MBE program should be instituted either after, or in conjunction with, race-neutral means of increasing minority business participation and public contracting. *Id.* at 922, citing Croson, 488 U.S. at 507. The second characteristic of the narrowly-tailored program, according to the court, is the use of minority utilization goals on a case-by-case basis, rather than upon a system of rigid numerical quotas. *Id.* Finally, the court stated that an MBE program must be limited in its effective scope to the boundaries of the enacting jurisdiction. *Id.*

Among the various narrowly tailored requirements, the court held consideration of race-neutral alternatives is among the most important. *Id.* at 922. Nevertheless, the court stated that while strict scrutiny requires serious, good faith consideration of race-neutral alternatives, strict scrutiny does not require exhaustion of every possible such alternative. *Id.* at 923. The court noted that it does not intend a government entity exhaust *every* alternative, however irrational, costly, unreasonable, and unlikely to succeed such alternative might be. *Id.* Thus, the court required only that a state exhausts race-neutral measures that the state is authorized to enact, and that have a reasonable possibility of being effective. *Id.* The court noted in this case the County considered alternatives, but determined that they were not available as a matter of law. *Id.* The County cannot be required to engage in conduct that may be illegal, nor can it be compelled to expend precious tax dollars on projects where potential for success is marginal at best. *Id.*

The court noted that King County had adopted some race-neutral measures in conjunction with the MBE Program, for example, hosting one or two training sessions for small businesses, covering such topics as doing business with the government, small business management, and accounting techniques. *Id.* at 923. In addition, the County provided information on assessing Small Business Assistance Programs. *Id.* The court found that King County fulfilled its burden of considering race-neutral alternative programs. *Id.*

A second indicator of a program's narrowly tailoring is program flexibility. *Id.* at 924. The court found that an important means of achieving such flexibility is through use of case-by-case utilization goals, rather than rigid numerical quotas or goals. *Id.* at 924. The court pointed out that King County used a "percentage preference" method, which is not a quota, and while the preference is locked at five percent, such a fixed preference is not unduly rigid in light of the waiver provisions. The court found that a valid MBE Program should include a waiver system that accounts for both the availability of qualified MBEs and whether the qualified MBEs have suffered from the effects of past discrimination by the County or prime contractors. *Id.* at 924. The court found that King County's program provided waivers in both instances, including where neither minority nor a woman's business is available to provide needed goods or services

and where available minority and/or women's businesses have given price quotes that are unreasonably high. *Id.*

The court also pointed out other attributes of the narrowly tailored and flexible MBE program, including a bidder that does not meet planned goals, may nonetheless be awarded the contract by demonstrating a good faith effort to comply. *Id.* The actual percentages of required MBE participation are determined on a case-by-case basis. Levels of participation may be reduced if the prescribed levels are not feasible, if qualified MBEs are unavailable, or if MBE price quotes are not competitive. *Id.*

The court concluded that an MBE program must also be limited in its geographical scope to the boundaries of the enacting jurisdiction. *Id.* at 925. Here the court held that King County's MBE program fails this third portion of "narrowly tailored" requirement. The court found the definition of "minority business" included in the Program indicated that a minority-owned business may qualify for preferential treatment if the business has been discriminated against in the particular geographical areas in which it operates. The court held this definition as overly broad. *Id.* at 925. The court held that the County should ask the question whether a business has been discriminated against in King County. *Id.* This determination, according to the court, is not an insurmountable burden for the County, as the rule does not require finding specific instances of discriminatory exclusion for each MBE. *Id.* Rather, if the County successfully proves malignant discrimination within the King County business community, an MBE would be presumptively eligible for relief if it had previously sought to do business in the County. *Id.*

In other words, if systemic discrimination in the County is shown, then it is fair to presume that an MBE was victimized by the discrimination. *Id.* at 925. For the presumption to attach to the MBE, however, it must be established that the MBE is, or attempted to become, an active participant in the County's business community. *Id.* Because King County's program permitted MBE participation even by MBEs that have no prior contact with King County, the program was overbroad to that extent. *Id.* Therefore, the court reversed the grant of summary judgment to King County on the MBE program on the basis that it was geographically overbroad.

The court considered the gender-specific aspect of the MBE program. The court determined the degree of judicial scrutiny afforded gender-conscious programs was intermediate scrutiny, rather than strict scrutiny. *Id.* at 930. Under intermediate scrutiny, gender-based classification must serve an important governmental objective, and there must be a direct, substantial relationship between the objective and the means chosen to accomplish the objective. *Id.* at 931.

In this case, the court concluded, that King County's WBE preference survived a facial challenge. *Id.* at 932. The court found that King County had a legitimate and important interest in remedying the many disadvantages that confront women business owners and that the means chosen in the program were substantially related to the objective. *Id.* The court found the record adequately indicated discrimination against women in the King County construction industry, noting the anecdotal evidence including an affidavit of the president of a consulting engineering firm. *Id.* at 933. Therefore, the court upheld the WBE portion of the MBE program and affirmed the district court's grant of summary judgment to King County for the WBE program.

Recent District Court Decisions

14. Kossman Contracting Co., Inc. v. City of Houston, 2016 WL 1104363 (S.D. Tex. 2016).

Plaintiff Kossman is a company engaged in the business of providing erosion control services and is majority owned by a white male. 2016 WL 1104363 at *1. Kossman brought this action as an equal protection challenge to the City of Houston's Minority and Women Owned Business Enterprise ("MWBE") program. *Id.* The MWBE program that is challenged has been in effect since 2013 and sets a 34 percent MWBE goal for construction projects. *Id.* Houston set this goal based on a disparity study issued in 2012. *Id.* The study analyzed the status of minority-owned and women-owned business enterprises in the geographic and product markets of Houston's construction contracts. *Id.*

Kossman alleges that the MWBE program is unconstitutional on the ground that it denies non-MWBEs equal protection of the law, and asserts that it has lost business as a result of the MWBE program because prime contractors are unwilling to subcontract work to a non-MWBE firm like Kossman. *Id.* at *1. Kossman filed a motion for summary judgment; Houston filed a motion to exclude the testimony of Kossman's expert; and Houston filed a motion for summary judgment. *Id.*

The district court referred these motions to the Magistrate Judge. The Magistrate Judge, on February 17, 2016, issued its Memorandum & Recommendation to the district court in which it found that Houston's motion to exclude Kossman's expert should be granted because the expert articulated no method and had no training in statistics or economics that would allow him to comment on the validity of the disparity study. *Id.* at *1 The Magistrate Judge also found that the MWBE program was constitutional under strict scrutiny, except with respect to the inclusion of Native-American-owned businesses. *Id.* The Magistrate Judge found there was insufficient evidence to establish a need for remedial action for businesses owned by Native Americans, but found there was sufficient evidence to justify remedial action and inclusion of other racial and ethnic minorities and women-owned businesses. *Id.*

After the Magistrate Judge issued its Memorandum & Recommendation, Kossman filed objections, which the district court subsequently in its order adopting Memorandum & Recommendation, decided on March 22, 2016, affirmed and adopted the Memorandum & Recommendation of the magistrate judge and overruled the objections by Kossman. *Id.* at *2.

District court order adopting Memorandum & Recommendation of Magistrate Judge.

Dun & Bradstreet underlying data properly withheld and Kossman's proposed expert properly excluded. The district court first rejected Kossman's objection that the City of Houston improperly withheld the Dun & Bradstreet data that was utilized in the disparity study. This ruling was in connection with the district court's affirming the decision of the Magistrate Judge granting the motion of Houston to exclude the testimony of Kossman's proposed expert. Kossman had conceded that the Magistrate Judge correctly determined that Kossman's proposed expert articulated no method and relied on untested hypotheses. *Id.* at *2. Kossman also acknowledged that the expert was unable to produce data to confront the disparity study. *Id.*

Kossman had alleged that Houston withheld the underlying data from Dun & Bradstreet. The court found that under the contractual agreement between Houston and its consultant, the consultant for Houston had a licensing agreement with Dun & Bradstreet that prohibited it from providing the Dun & Bradstreet data to any third-party. *Id.* at *2. In addition, the court agreed with Houston that Kossman would not be able to offer admissible analysis of the Dun & Bradstreet data, even if it had access to the data. *Id.* As the Magistrate Judge pointed out, the court found Kossman's expert had no training in statistics or economics, and thus would not be qualified to interpret the Dun & Bradstreet data or challenge the disparity study's methods. *Id.* Therefore, the court affirmed the grant of Houston's motion to exclude Kossman's expert.

Dun & Bradstreet data is reliable and accepted by courts; bidding data rejected as problematic. The court rejected Kossman's argument that the disparity study was based on insufficient, unverified information furnished by others, and rejected Kossman's argument that bidding data is a superior measure of determining availability. *Id.* at *3.

The district court held that because the disparity study consultant did not collect the data, but instead utilized data that Dun & Bradstreet had collected, the consultant could not guarantee the information it relied on in creating the study and recommendations. *Id.* at *3. The consultant's role was to analyze that data and make recommendations based on that analysis, and it had no reason to doubt the authenticity or accuracy of the Dun & Bradstreet data, nor had Kossman presented any evidence that would call that data into question. *Id.* As Houston pointed out, Dun & Bradstreet data is extremely reliable, is frequently used in disparity studies, and has been consistently accepted by courts throughout the country. *Id.*

Kossman presented no evidence indicating that bidding data is a comparably more accurate indicator of availability than the Dun & Bradstreet data, but rather Kossman relied on pure argument. *Id.* at *3. The court agreed with the Magistrate Judge that bidding data is inherently problematic because it reflects only those firms actually solicited for bids. *Id.* Therefore, the court found the bidding data would fail to identify those firms that were not solicited for bids due to discrimination. *Id.*

The anecdotal evidence is valid and reliable. The district court rejected Kossman's argument that the study improperly relied on anecdotal evidence, in that the evidence was unreliable and unverified. *Id.* at *3. The district court held that anecdotal evidence is a valid supplement to the statistical study. *Id.* The MWBE program is supported by both statistical and anecdotal evidence, and anecdotal evidence provides a valuable narrative perspective that statistics alone cannot provide. *Id.*

The district court also found that Houston was not required to independently verify the anecdotes. *Id.* at *3. Kossman, the district court concluded, could have presented contrary evidence, but it did not. *Id.* The district court cited other courts for the proposition that the combination of anecdotal and statistical evidence is potent, and that anecdotal evidence is nothing more than a witness's narrative of an incident told from the witness's perspective and including the witness's perceptions. *Id.* Also, the court held the city was not required to present corroborating evidence, and the plaintiff was free to present its own witness to either refute the incident described by the city's witnesses or to relate their own perceptions on discrimination in the construction industry. *Id.*

The data relied upon by the study was not stale. The court rejected Kossman’s argument that the study relied on data that is too old and no longer relevant. *Id.* at *4. The court found that the data was not stale and that the study used the most current available data at the time of the study, including Census Bureau data (2006-2008) and Federal Reserve data (1993, 1998 and 2003), and the study performed regression analyses on the data. *Id.*

Moreover, Kossman presented no evidence to suggest that Houston’s consultant could have accessed more recent data or that the consultant would have reached different conclusions with more recent data. *Id.*

The Houston MWBE program is narrowly tailored. The district court agreed with the Magistrate Judge that the study provided substantial evidence that Houston engaged in race-neutral alternatives, which were insufficient to eliminate disparities, and that despite race-neutral alternatives in place in Houston, adverse disparities for MWBEs were consistently observed. *Id.* at *4. Therefore, the court found there was strong evidence that a remedial program was necessary to address discrimination against MWBEs. *Id.* Moreover, Houston was not required to exhaust every possible race-neutral alternative before instituting the MWBE program. *Id.*

The district court also found that the MWBE program did not place an undue burden on Kossman or similarly situated companies. *Id.* at *4. Under the MWBE program, a prime contractor may substitute a small business enterprise like Kossman for an MWBE on a race and gender-neutral basis for up to four percent of the value of a contract. *Id.* Kossman did not present evidence that he ever bid on more than four percent of a Houston contract. *Id.* In addition, the court stated the fact the MWBE program placed *some* burden on Kossman is insufficient to support the conclusion that the program is not nearly tailored. *Id.* The court concurred with the Magistrate Judge’s observation that the proportional sharing of opportunities is, at the core, the point of a remedial program. *Id.* The district court agreed with the Magistrate Judge’s conclusion that the MWBE program is nearly tailored.

Native-American-owned businesses. The study found that Native-American-owned businesses were utilized at a higher rate in Houston’s construction contracts than would be anticipated based on their rate of availability in the relevant market area. *Id.* at *4. The court noted this finding would tend to negate the presence of discrimination against Native Americans in Houston’s construction industry. *Id.*

This Houston disparity study consultant stated that the high utilization rate for Native Americans stems largely from the work of two Native-American-owned firms. *Id.* The Houston consultant suggested that without these two firms, the utilization rate for Native Americans would decline significantly, yielding a statistically significant disparity ratio. *Id.*

The Magistrate Judge, according to the district court, correctly held and found that there was insufficient evidence to support including Native Americans in the MWBE program. *Id.* The court approved and adopted the Magistrate Judge explanation that the opinion of the disparity study consultant that a significant statistical disparity would exist if two of the contracting Native-American-owned businesses were disregarded, is not evidence of the need for remedial action. *Id.* at *5. The district court found no equal-protection significance to the fact the majority of contracts let to Native-American-owned businesses were to only two firms. *Id.* Therefore, the

utilization goal for businesses owned by Native Americans is not supported by a strong evidentiary basis. *Id.* at *5.

The district court agreed with the Magistrate Judge's recommendation that the district court grant summary judgment in favor of Kossman with respect to the utilization goal for Native-American-owned business. *Id.* The court found there was limited significance to the Houston consultant's opinion that utilization of Native-American-owned businesses would drop to statistically significant levels if two Native-American-owned businesses were ignored. *Id.* at *5.

The court stated the situation presented by the Houston disparity study consultant of a "hypothetical non-existence" of these firms is not evidence and cannot satisfy strict scrutiny. *Id.* at *5. Therefore, the district court adopted the Magistrate Judge's recommendation with respect to excluding the utilization goal for Native-American-owned businesses. *Id.* The court noted that a preference for Native-American-owned businesses could become constitutionally valid in the future if there were sufficient evidence of discrimination against Native-American-owned businesses in Houston's construction contracts. *Id.* at *5.

Conclusion. The district court held that the Memorandum & Recommendation of the Magistrate Judge is adopted in full; Houston's motion to exclude the Kossman's proposed expert witness is granted; Kossman's motion for summary judgment is granted with respect to excluding the utilization goal for Native-American-owned businesses and denied in all other respects; Houston's motion for summary judgment is denied with respect to including the utilization goal for Native-American-owned businesses and granted in all other respects as to the MWBE program for other minorities and women-owned firms. *Id.* at *5.

Memorandum and Recommendation by Magistrate Judge, dated February 17, 2016, S.D. Texas, Civil Action No. H-14-1203.

Kossman's proposed expert excluded and not admissible. Kossman in its motion for summary judgment solely relied on the testimony of its proposed expert, and submitted no other evidence in support of its motion. The Magistrate Judge (hereinafter "MJ") granted Houston's motion to exclude testimony of Kossman's proposed expert, which the district court adopted and approved, for multiple reasons. The MJ found that his experience does not include designing or conducting statistical studies, and he has no education or training in statistics or economics. *See*, MJ, Memorandum and Recommendation ("M&R") by MJ, dated February 17, 2016, at 31, S.D. Texas, Civil Action No. H-14-1203. The MJ found he was not qualified to collect, organize or interpret numerical data, has no experience extrapolating general conclusions about a subset of the population by sampling it, has demonstrated no knowledge of sampling methods or understanding of the mathematical concepts used in the interpretation of raw data, and thus, is not qualified to challenge the methods and calculations of the disparity study. *Id.*

The MJ found that the proposed expert report is only a theoretical attack on the study with no basis and objective evidence, such as data or testimony of construction firms in the relative market area that support his assumptions regarding available MWBEs or comparative studies that control the factors about which he complained. *Id.* at 31. The MJ stated that the proposed expert is not an economist and thus is not qualified to challenge the disparity study explanation of its economic considerations. *Id.* at 31. The proposed expert failed to provide econometric

support for the use of bidder data, which he argued was the better source for determining availability, cited no personal experience for the use of bidder data, and provided no proof that would more accurately reflect availability of MWBEs absent discriminatory influence. *Id.* Moreover, he acknowledged that no bidder data had been collected for the years covered by the study. *Id.*

The court found that the proposed expert articulated no method at all to do a disparity study, but merely provided untested hypotheses. *Id.* at 33. The proposed expert's criticisms of the study, according to the MJ, were not founded in cited professional social science or econometric standards. *Id.* at 33. The MJ concludes that the proposed expert is not qualified to offer the opinions contained in his report, and that his report is not relevant, not reliable, and, therefore, not admissible. *Id.* at 34.

Relevant geographic market area. The MJ found the market area of the disparity analysis was geographically confined to area codes in which the majority of the public contracting construction firms were located. *Id.* at 3-4, 51. The relevant market area, the MJ said, was weighted by industry, and therefore the study limited the relevant market area by geography and industry based on Houston's past years' records from prior construction contracts. *Id.* at 3-4, 51.

Availability of MWBEs. The MJ concluded disparity studies that compared the availability of MWBEs in the relevant market with their utilization in local public contracting have been widely recognized as strong evidence to find a compelling interest by a governmental entity for making sure that its public dollars do not finance racial discrimination. *Id.* at 52-53. Here, the study defined the market area by reviewing past contract information, and defined the relevant market according to two critical factors, geography and industry. *Id.* at 3-4, 53. Those parameters, weighted by dollars attributable to each industry, were used to identify for comparison MWBEs that were available and MWBEs that had been utilized in Houston's construction contracting over the last five and one-half years. *Id.* at 4-6, 53. The study adjusted for owner labor market experience and educational attainment in addition to geographic location and industry affiliation. *Id.* at 6, 53.

Kossman produced no evidence that the availability estimate was inadequate. *Id.* at 53. Plaintiff's criticisms of the availability analysis, including for capacity, the court stated was not supported by any contrary evidence or expert opinion. *Id.* at 53-54. The MJ rejected Plaintiff's proposed expert's suggestion that analysis of bidder data is a better way to identify MWBEs. *Id.* at 54. The MJ noted that Kossman's proposed expert presented no comparative evidence based on bidder data, and the MJ found that bidder data may produce availability statistics that are skewed by active and passive discrimination in the market. *Id.*

In addition to being underinclusive due to discrimination, the MJ said bidder data may be overinclusive due to inaccurate self-evaluation by firms offering bids despite the inability to fulfill the contract. *Id.* at 54. It is possible that unqualified firms would be included in the availability figure simply because they bid on a particular project. *Id.* The MJ concluded that the law does not require an individualized approach that measures whether MWBEs are qualified on a contract-by-contract basis. *Id.* at 55.

Disparity analysis. The study indicated significant statistical adverse disparities as to businesses owned by African Americans and Asians, which the MJ found provided a *prima facie* case of a strong basis in evidence that justified the Program's utilization goals for businesses owned by African Americans, Asian-Pacific Americans, and subcontinent Asian Americans. *Id.* at 55.

The disparity analysis did not reflect significant statistical disparities as to businesses owned by Hispanic Americans, Native Americans or non-minority women. *Id.* at 55-56. The MJ found, however, the evidence of significant statistical adverse disparity in the utilization of Hispanic-owned businesses in the unremediated, private sector met Houston's *prima facie* burden of producing a strong evidentiary basis for the continued inclusion of businesses owned by Hispanic Americans. *Id.* at 56. The MJ said the difference between the private sector and Houston's construction contracting was especially notable because the utilization of Hispanic-owned businesses by Houston has benefitted from Houston's remedial program for many years. *Id.* Without a remedial program, the MJ stated the evidence suggests, and no evidence contradicts, a finding that utilization would fall back to private sector levels. *Id.*

With regard to businesses owned by Native Americans, the study indicated they were utilized to a higher percentage than their availability in the relevant market area. *Id.* at 56. Although the consultant for Houston suggested that a significant statistical disparity would exist if two of the contracting Native-American-owned businesses were disregarded, the MJ found that opinion is not evidence of the need for remedial action. *Id.* at 56. The MJ concluded there was no-equal protection significance to the fact the majority of contracts let to Native-American-owned businesses were to only two firms, which was indicated by Houston's consultant. *Id.*

The utilization of women-owned businesses (WBEs) declined by fifty percent when they no longer benefitted from remedial goals. *Id.* at 57. Because WBEs were eliminated during the period studied, the significance of statistical disparity, according to the MJ, is not reflected in the numbers for the period as a whole. *Id.* at 57. The MJ said during the time WBEs were not part of the program, the statistical disparity between availability and utilization was significant. *Id.* The precipitous decline in the utilization of WBEs after WBEs were eliminated and the significant statistical disparity when WBEs did not benefit from preferential treatment, the MJ found, provided a strong basis in evidence for the necessity of remedial action. *Id.* at 57. Kossman, the MJ pointed out, offered no evidence of a gender-neutral reason for the decline. *Id.*

The MJ rejected Plaintiff's argument that prime contractor and subcontractor data should not have been combined. *Id.* at 57. The MJ said that prime contractor and subcontractor data is not required to be evaluated separately, but that the evidence should contain reliable subcontractor data to indicate discrimination by prime contractors. *Id.* at 58. Here, the study identified the MWBEs that contracted with Houston by industry and those available in the relevant market by industry. *Id.* at 58. The data, according to the MJ, was specific and complete, and separately considering prime contractors and subcontractors is not only unnecessary but may be misleading. *Id.* The anecdotal evidence indicated that construction firms had served, on different contracts, in both roles. *Id.*

The MJ stated the law requires that the targeted discrimination be identified with particularity, not that every instance of explicit or implicit discrimination be exposed. *Id.* at 58. The study, the MJ found, defined the relevant market at a sufficient level of particularity to produce evidence of

past discrimination in Houston's awarding of construction contracts and to reach constitutionally sound results. *Id.*

Anecdotal evidence. Kossman criticized the anecdotal evidence with which a study supplemented its statistical analysis as not having been verified and investigated. *Id.* at 58-59. The MJ said that Kossman could have presented its own evidence, but did not. *Id.* at 59. Kossman presented no contrary body of anecdotal evidence and pointed to nothing that called into question the specific results of the market surveys and focus groups done in the study. *Id.* The court rejected any requirement that the anecdotal evidence be verified and investigated. *Id.* at 59.

Regression analyses. Kossman challenged the regression analyses done in the study of business formation, earnings and capital markets. *Id.* at 59. Kossman criticized the regression analyses for failing to precisely point to where the identified discrimination was occurring. *Id.* The MJ found that the focus on identifying where discrimination is occurring misses the point, as regression analyses is not intended to point to specific sources of discrimination, but to eliminate factors other than discrimination that might explain disparities. *Id.* at 59-60. Discrimination, the MJ said, is not revealed through evidence of explicit discrimination, but is revealed through unexplainable disparity. *Id.* at 60.

The MJ noted that data used in the regression analyses were the most current available data at the time, and for the most part data dated from within a couple of years or less of the start of the study period. *Id.* at 60. Again, the MJ stated, Kossman produced no evidence that the data on which the regression analyses were based were invalid. *Id.*

Narrow Tailoring factors. The MJ found that the Houston MWBE program satisfied the narrow tailoring prong of a strict scrutiny analysis. The MJ said that the 2013 MWBE program contained a variety of race-neutral remedies, including many educational opportunities, but that the evidence of their efficacy or lack thereof is found in the disparity analyses. *Id.* at 60-61. The MJ concluded that while the race-neutral remedies may have a positive effect, they have not eliminated the discrimination. *Id.* at 61. The MJ found Houston's race-neutral programming sufficient to satisfy the requirements of narrow tailoring. *Id.*

As to the factors of flexibility and duration of the 2013 Program, the MJ also stated these aspects satisfy narrow tailoring. *Id.* at 61. The 2013 Program employs goals as opposed to quotas, sets goals on a contract-by-contract basis, allows substitution of small business enterprises for MWBEs for up to four percent of the contract, includes a process for allowing good-faith waivers, and builds in due process for suspensions of contractors who fail to make good-faith efforts to meet contract goals or MWSBEs that fail to make good-faith efforts to meet all participation requirements. *Id.* at 61. Houston committed to review the 2013 Program at least every five years, which the MJ found to be a reasonably brief duration period. *Id.*

The MJ concluded that the thirty-four percent annual goal is proportional to the availability of MWBEs historically suffering discrimination. *Id.* at 61. Finally, the MJ found that the effect of the 2013 Program on third parties is not so great as to impose an unconstitutional burden on non-minorities. *Id.* at 62. The burden on non-minority SBEs, such as Kossman, is lessened by the four-percent substitution provision. *Id.* at 62. The MJ noted another district court's opinion that the

mere possibility that innocent parties will share the burden of a remedial program is itself insufficient to warrant the conclusion that the program is not narrowly tailored. *Id.* at 62.

Holding. The MJ held that Houston established a *prima facie* case of compelling interest and narrow tailoring for all aspects of the MWBE program, except goals for Native-American-owned businesses. *Id.* at 62. The MJ also held that Plaintiff failed to produce any evidence, much less the greater weight of evidence, that would call into question the constitutionality of the 2013 MWBE program. *Id.* at 62.

15. H. B. Rowe Corp., Inc. v. W. Lyndo Tippett, North Carolina DOT, et al., 589 F. Supp.2d 587 (E.D.N.C. 2008), affirmed in part, reversed in part, and remanded, 615 F.3d 233 (4th Cir. 2010)

In *H.B. Rowe Company v. Tippett, North Carolina Department of Transportation, et al.* (“Rowe”), the United States District Court for the Eastern District of North Carolina, Western Division, heard a challenge to the State of North Carolina MBE and WBE Program, which is a State of North Carolina “affirmative action” program administered by the NCDOT. The NCDOT MWBE Program challenged in *Rowe* involves projects funded solely by the State of North Carolina and not funded by the USDOT. 589 F.Supp.2d 587.

Background. In this case plaintiff, a family-owned road construction business, bid on a NCDOT initiated state-funded project. NCDOT rejected plaintiff’s bid in favor of the next low bid that had proposed higher minority participation on the project as part of its bid. According to NCDOT, plaintiff’s bid was rejected because of plaintiff’s failure to demonstrate “good faith efforts” to obtain pre-designated levels of minority participation on the project.

As a prime contractor, plaintiff Rowe was obligated under the MWBE Program to either obtain participation of specified levels of MBE and WBE participation as subcontractors, or to demonstrate good faith efforts to do so. For this particular project, NCDOT had set MBE and WBE subcontractor participation goals of 10 percent and 5 percent, respectively. Plaintiff’s bid included 6.6 percent WBE participation, but no MBE participation. The bid was rejected after a review of plaintiff’s good faith efforts to obtain MBE participation. The next lowest bidder submitted a bid including 3.3 percent MBE participation and 9.3 percent WBE participation, and although not obtaining a specified level of MBE participation, it was determined to have made good faith efforts to do so. (Order of the District Court, dated March 29, 2007).

NCDOT’s MWBE Program “largely mirrors” the Federal DBE Program, which NCDOT is required to comply with in awarding construction contracts that utilize Federal funds. (589 F.Supp.2d 587; Order of the District Court, dated September 28, 2007). Like the Federal DBE Program, under NCDOT’s MWBE Program, the goals for minority and female participation are aspirational rather than mandatory. *Id.* An individual target for MBE participation was set for each project. *Id.*

Historically, NCDOT had engaged in several disparity studies. The most recent study was done in 2004. *Id.* The 2004 study, which followed the study in 1998, concluded that disparities in utilization of MBEs persist and that a basis remains for continuation of the MWBE Program. The new statute as revised was approved in 2006, which modified the previous MBE statute by eliminating the 10 percent and 5 percent goals and establishing a fixed expiration date of 2009.

Plaintiff filed its complaint in this case in 2003 against the NCDOT and individuals associated with the NCDOT, including the Secretary of NCDOT, W. Lyndo Tippet. In its complaint, plaintiff alleged that the MWBE statute for NCDOT was unconstitutional on its face and as applied. 589 F.Supp.2d 587.

March 29, 2007 Order of the District Court. The matter came before the district court initially on several motions, including the defendants' Motion to Dismiss or for Partial Summary Judgment, defendants' Motion to Dismiss the Claim for Mootness and plaintiff's Motion for Summary Judgment. The court in its October 2007 Order granted in part and denied in part defendants' Motion to Dismiss or for partial summary judgment; denied defendants' Motion to Dismiss the Claim for Mootness; and dismissed without prejudice plaintiff's Motion for Summary Judgment.

The court held the Eleventh Amendment to the United States Constitution bars plaintiff from obtaining any relief against defendant NCDOT, and from obtaining a retrospective damages award against any of the individual defendants in their official capacities. The court ruled that plaintiff's claims for relief against the NCDOT were barred by the Eleventh Amendment, and the NCDOT was dismissed from the case as a defendant. Plaintiff's claims for interest, actual damages, compensatory damages and punitive damages against the individual defendants sued in their official capacities also was held barred by the Eleventh Amendment and were dismissed. But, the court held that plaintiff was entitled to sue for an injunction to prevent state officers from violating a federal law, and under the *Ex Parte Young* exception, plaintiff's claim for declaratory and injunctive relief was permitted to go forward as against the individual defendants who were acting in an official capacity with the NCDOT. The court also held that the individual defendants were entitled to qualified immunity, and therefore dismissed plaintiff's claim for money damages against the individual defendants in their individual capacities. Order of the District Court, dated March 29, 2007.

Defendants argued that the recent amendment to the MWBE statute rendered plaintiff's claim for declaratory injunctive relief moot. The new MWBE statute adopted in 2006, according to the court, does away with many of the alleged shortcomings argued by the plaintiff in this lawsuit. The court found the amended statute has a sunset date in 2009; specific aspirational participation goals by women and minorities are eliminated; defines "minority" as including only those racial groups which disparity studies identify as subject to underutilization in state road construction contracts; explicitly references the findings of the 2004 Disparity Study and requires similar studies to be conducted at least once every five years; and directs NCDOT to enact regulations targeting discrimination identified in the 2004 and future studies.

The court held, however, that the 2004 Disparity Study and amended MWBE statute do not remedy the primary problem which the plaintiff complained of: the use of remedial race- and gender- based preferences allegedly without valid evidence of past racial and gender discrimination. In that sense, the court held the amended MWBE statute continued to present a live case or controversy, and accordingly denied the defendants' Motion to Dismiss Claim for Mootness as to plaintiff's suit for prospective injunctive relief. Order of the District Court, dated March 29, 2007.

The court also held that since there had been no analysis of the MWBE statute apart from the briefs regarding mootness, plaintiff's pending Motion for Summary Judgment was dismissed without prejudice. Order of the District Court, dated March 29, 2007.

September 28, 2007 Order of the District Court. On September 28, 2007, the district court issued a new order in which it denied both the plaintiff's and the defendants' Motions for Summary Judgment. Plaintiff claimed that the 2004 Disparity Study is the sole basis of the MWBE statute, that the study is flawed, and therefore it does not satisfy the first prong of strict scrutiny review. Plaintiff also argued that the 2004 study tends to prove non-discrimination in the case of women; and finally the MWBE Program fails the second prong of strict scrutiny review in that it is not narrowly tailored.

The court found summary judgment was inappropriate for either party and that there are genuine issues of material fact for trial. The first and foremost issue of material fact, according to the court, was the adequacy of the 2004 Disparity Study as used to justify the MWBE Program. Therefore, because the court found there was a genuine issue of material fact regarding the 2004 Study, summary judgment was denied on this issue.

The court also held there was confusion as to the basis of the MWBE Program, and whether it was based solely on the 2004 Study or also on the 1993 and 1998 Disparity Studies. Therefore, the court held a genuine issue of material fact existed on this issue and denied summary judgment. Order of the District Court, dated September 28, 2007.

December 9, 2008 Order of the District Court (589 F.Supp.2d 587). The district court on December 9, 2008, after a bench trial, issued an Order that found as a fact and concluded as a matter of law that plaintiff failed to satisfy its burden of proof that the North Carolina Minority and Women's Business Enterprise program, enacted by the state legislature to affect the awarding of contracts and subcontracts in state highway construction, violated the United States Constitution.

Plaintiff, in its complaint filed against the NCDOT alleged that N.C. Gen. St. § 136-28.4 is unconstitutional on its face and as applied, and that the NCDOT while administering the MWBE program violated plaintiff's rights under the federal law and the United States Constitution. Plaintiff requested a declaratory judgment that the MWBE program is invalid and sought actual and punitive damages.

As a prime contractor, plaintiff was obligated under the MWBE program to either obtain participation of specified levels of MBE and WBE subcontractors, or to demonstrate that good faith efforts were made to do so. Following a review of plaintiff's good faith efforts to obtain minority participation on the particular contract that was the subject of plaintiff's bid, the bid was rejected. Plaintiff's bid was rejected in favor of the next lowest bid, which had proposed higher minority participation on the project as part of its bid. According to NCDOT, plaintiff's bid was rejected because of plaintiff's failure to demonstrate good faith efforts to obtain pre-designated levels of minority participation on the project. 589 F.Supp.2d 587.

North Carolina's MWBE program. The MWBE program was implemented following amendments to N.C. Gen. Stat. §136-28.4. Pursuant to the directives of the statute, the NCDOT

promulgated regulations governing administration of the MWBE program. See N.C. Admin. Code tit. 19A, § 2D.1101, *et seq.* The regulations had been amended several times and provide that NCDOT shall ensure that MBEs and WBEs have the maximum opportunity to participate in the performance of contracts financed with non-federal funds. N.C. Admin. Code Tit. 19A § 2D.1101.

North Carolina's MWBE program, which affected only highway bids and contracts funded solely with state money, according to the district court, largely mirrored the Federal DBE Program which NCDOT is required to comply with in awarding construction contracts that utilize federal funds. 589 F.Supp.2d 587. Like the Federal DBE Program, under North Carolina's MWBE program, the targets for minority and female participation were aspirational rather than mandatory, and individual targets for disadvantaged business participation were set for each individual project. N.C. Admin. Code tit. 19A § 2D.1108. In determining what level of MBE and WBE participation was appropriate for each project, NCDOT would take into account "the approximate dollar value of the contract, the geographical location of the proposed work, a number of the eligible funds in the geographical area, and the anticipated value of the items of work to be included in the contract." *Id.* NCDOT would also consider "the annual goals mandated by Congress and the North Carolina General Assembly." *Id.*

A firm could be certified as a MBE or WBE by showing NCDOT that it is "owner controlled by one or more socially and economically disadvantaged individuals." NC Admin. Code tit. 1980, § 2D.1102.

The district court stated the MWBE program did not directly discriminate in favor of minority and women contractors, but rather "encouraged prime contractors to favor MBEs and WBEs in subcontracting before submitting bids to NCDOT." 589 F.Supp.2d 587. In determining whether the lowest bidder is "responsible," NCDOT would consider whether the bidder obtained the level of certified MBE and WBE participation previously specified in the NCDOT project proposal. If not, NCDOT would consider whether the bidder made good faith efforts to solicit MBE and WBE participation. N.C. Admin. Code tit. 19A§ 2D.1108.

There were multiple studies produced and presented to the North Carolina General Assembly in the years 1993, 1998 and 2004. The 1998 and 2004 studies concluded that disparities in the utilization of minority and women contractors persist, and that there remains a basis for continuation of the MWBE program. The MWBE program as amended after the 2004 study includes provisions that eliminated the 10 percent and 5 percent goals and instead replaced them with contract-specific participation goals created by NCDOT; established a sunset provision that has the statute expiring on August 31, 2009; and provides reliance on a disparity study produced in 2004.

The MWBE program, as it stood at the time of this decision, provides that NCDOT "dictates to prime contractors the express goal of MBE and WBE subcontractors to be used on a given project. However, instead of the state hiring the MBE and WBE subcontractors itself, the NCDOT makes the prime contractor solely responsible for vetting and hiring these subcontractors. If a prime contractor fails to hire the goal amount, it must submit efforts of 'good faith' attempts to do so." 589 F.Supp.2d 587.

Compelling interest. The district court held that NCDOT established a compelling governmental interest to have the MWBE program. The court noted that the United States Supreme Court in *Croson* made clear that a state legislature has a compelling interest in eradicating and remedying private discrimination in the private subcontracting inherent in the letting of road construction contracts. 589 F.Supp.2d 587, *citing Croson*, 488 U.S. at 492. The district court found that the North Carolina Legislature established it relied upon a strong basis of evidence in concluding that prior race discrimination in North Carolina’s road construction industry existed so as to require remedial action.

The court held that the 2004 Disparity Study demonstrated the existence of previous discrimination in the specific industry and locality at issue. The court stated that disparity ratios provided for in the 2004 Disparity Study highlighted the underutilization of MBEs by prime contractors bidding on state funded highway projects. In addition, the court found that evidence relied upon by the legislature demonstrated a dramatic decline in the utilization of MBEs during the program’s suspension in 1991. The court also found that anecdotal support relied upon by the legislature confirmed and reinforced the general data demonstrating the underutilization of MBEs. The court held that the NCDOT established that, “based upon a clear and strong inference raised by this Study, they concluded minority contractors suffer from the lingering effects of racial discrimination.” 589 F.Supp.2d 587.

With regard to WBEs, the court applied a different standard of review. The court held the legislative scheme as it relates to MWBEs must serve an important governmental interest and must be substantially related to the achievement of those objectives. The court found that NCDOT established an important governmental interest. The 2004 Disparity Study provided that the average contracts awarded WBEs are significantly smaller than those awarded non-WBEs. The court held that NCDOT established based upon a clear and strong inference raised by the Study, women contractors suffer from past gender discrimination in the road construction industry.

Narrowly tailored. The district court noted that the Fourth Circuit of Appeals lists a number of factors to consider in analyzing a statute for narrow tailoring: (1) the necessity of the policy and the efficacy of alternative race neutral policies; (2) the planned duration of the policy; (3) the relationship between the numerical goal and the percentage of minority group members in the relevant population; (4) the flexibility of the policy, including the provision of waivers if the goal cannot be met; and (5) the burden of the policy on innocent third parties. 589 F.Supp.2d 587, *quoting Belk v. Charlotte-Mecklenburg Board of Education*, 269 F.3d 305, 344 (4th Cir. 2001).

The district court held that the legislative scheme in N.C. Gen. Stat. § 136-28.4 is narrowly tailored to remedy private discrimination of minorities and women in the private subcontracting inherent in the letting of road construction contracts. The district court’s analysis focused on narrowly tailoring factors (2) and (4) above, namely the duration of the policy and the flexibility of the policy. With respect to the former, the court held the legislative scheme provides the program be reviewed at least every five years to revisit the issue of utilization of MWBEs in the road construction industry. N.C. Gen. Stat. §136-28.4(b). Further, the legislative scheme includes a sunset provision so that the program will expire on August 31, 2009, unless renewed by an act of the legislature. *Id.* at § 136-28.4(e). The court held these provisions ensured the legislative scheme last no longer than necessary.

The court also found that the legislative scheme enacted by the North Carolina legislature provides flexibility insofar as the participation goals for a given contract or determined on a project by project basis. § 136-28.4(b)(1). Additionally, the court found the legislative scheme in question is not overbroad because the statute applies only to “those racial or ethnicity classifications identified by a study conducted in accordance with this section that had been subjected to discrimination in a relevant marketplace and that had been adversely affected in their ability to obtain contracts with the Department.” § 136-28.4(c)(2). The court found that plaintiff failed to provide any evidence that indicates minorities from non-relevant racial groups had been awarded contracts as a result of the statute.

The court held that the legislative scheme is narrowly tailored to remedy private discrimination of minorities and women in the private subcontracting inherent in the letting of road construction contracts, and therefore found that § 136-28.4 is constitutional.

The decision of the district court was appealed to the United States Court of Appeals for the Fourth Circuit, which affirmed in part and reversed in part the decision of the district court. *See* 615 F.3d 233 (4th Cir. 2010), discussed above.

16. *Thomas v. City of Saint Paul*, 526 F. Supp.2d 959 (D. Minn 2007), affirmed, 321 Fed. Appx. 541, 2009 WL 777932 (8th Cir. March 26, 2009) (unpublished opinion), cert. denied, 130 S.Ct. 408 (2009)

In *Thomas v. City of Saint Paul*, the plaintiffs are African American business owners who brought this lawsuit claiming that the City of Saint Paul, Minnesota discriminated against them in awarding publicly-funded contracts. The City moved for summary judgment, which the United States District Court granted and issued an order dismissing the plaintiff's lawsuit in December 2007.

The background of the case involves the adoption by the City of Saint Paul of a Vendor Outreach Program (“VOP”) that was designed to assist minority and other small business owners in competing for City contracts. Plaintiffs were VOP-certified minority business owners. Plaintiffs contended that the City engaged in racially discriminatory illegal conduct in awarding City contracts for publicly-funded projects. Plaintiff Thomas claimed that the City denied him opportunities to work on projects because of his race arguing that the City failed to invite him to bid on certain projects, the City failed to award him contracts and the fact independent developers had not contracted with his company. 526 F. Supp.2d at 962. The City contended that Thomas was provided opportunities to bid for the City's work.

Plaintiff Brian Conover owned a trucking firm, and he claimed that none of his bids as a subcontractor on 22 different projects to various independent developers were accepted. 526 F. Supp.2d at 962. The court found that after years of discovery, plaintiff Conover offered no admissible evidence to support his claim, had not identified the subcontractors whose bids were accepted, and did not offer any comparison showing the accepted bid and the bid he submitted. *Id.* Plaintiff Conover also complained that he received bidding invitations only a few days before a bid was due, which did not allow him adequate time to prepare a competitive bid. *Id.* The court found, however, he failed to identify any particular project for which he had only a single day of bid, and did not identify any similarly situated person of any race who was afforded a longer period of time in which to submit a bid. *Id.* at 963. Plaintiff Newell claimed he submitted

numerous bids on the City's projects all of which were rejected. *Id.* The court found, however, that he provided no specifics about why he did not receive the work. *Id.*

The VOP. Under the VOP, the City sets annual bench marks or levels of participation for the targeted minorities groups. *Id.* at 963. The VOP prohibits quotas and imposes various "good faith" requirements on prime contractors who bid for City projects. *Id.* at 964. In particular, the VOP requires that when a prime contractor rejects a bid from a VOP-certified business, the contractor must give the City its basis for the rejection, and evidence that the rejection was justified. *Id.* The VOP further imposes obligations on the City with respect to vendor contracts. *Id.* The court found the City must seek where possible and lawful to award a portion of vendor contracts to VOP-certified businesses. *Id.* The City contract manager must solicit these bids by phone, advertisement in a local newspaper or other means. Where applicable, the contract manager may assist interested VOP participants in obtaining bonds, lines of credit or insurance required to perform under the contract. *Id.* The VOP ordinance provides that when the contract manager engages in one or more possible outreach efforts, he or she is in compliance with the ordinance. *Id.*

Analysis and Order of the Court. The district court found that the City is entitled to summary judgment because plaintiffs lack standing to bring these claims and that no genuine issue of material fact remains. *Id.* at 965. The court held that the plaintiffs had no standing to challenge the VOP because they failed to show they were deprived of an opportunity to compete, or that their inability to obtain any contract resulted from an act of discrimination. *Id.* The court found they failed to show any instance in which their race was a determinant in the denial of any contract. *Id.* at 966. As a result, the court held plaintiffs failed to demonstrate the City engaged in discriminatory conduct or policy which prevented plaintiffs from competing. *Id.* at 965-966.

The court held that in the absence of any showing of intentional discrimination based on race, the mere fact the City did not award any contracts to plaintiffs does not furnish that causal nexus necessary to establish standing. *Id.* at 966. The court held the law does not require the City to voluntarily adopt "aggressive race-based affirmative action programs" in order to award specific groups publicly-funded contracts. *Id.* at 966. The court found that plaintiffs had failed to show a violation of the VOP ordinance, or any illegal policy or action on the part of the City. *Id.*

The court stated that the plaintiffs must identify a discriminatory policy in effect. *Id.* at 966. The court noted, for example, even assuming the City failed to give plaintiffs more than one day's notice to enter a bid, such a failure is not, per se, illegal. *Id.* The court found the plaintiffs offered no evidence that anyone else of any other race received an earlier notice, or that he was given this allegedly tardy notice as a result of his race. *Id.*

The court concluded that even if plaintiffs may not have been hired as a subcontractor to work for prime contractors receiving City contracts, these were independent developers and the City is not required to defend the alleged bad acts of others. *Id.* Therefore, the court held plaintiffs had no standing to challenge the VOP. *Id.* at 966.

Plaintiff's claims. The court found that even assuming plaintiffs possessed standing, they failed to establish facts which demonstrated a need for a trial, primarily because each theory of recovery is viable only if the City "intentionally" treated plaintiffs unfavorably because of their

race. *Id.* at 967. The court held to establish a prima facie violation of the equal protection clause, there must be state action. *Id.* Plaintiffs must offer facts and evidence that constitute proof of “racially discriminatory intent or purpose.” *Id.* at 967. Here, the court found that plaintiff failed to allege any single instance showing the City “intentionally” rejected VOP bids based on their race. *Id.*

The court also found that plaintiffs offered no evidence of a specific time when any one of them submitted the lowest bid for a contract or a subcontract, or showed any case where their bids were rejected on the basis of race. *Id.* The court held the alleged failure to place minority contractors in a preferred position, without more, is insufficient to support a finding that the City failed to treat them equally based upon their race. *Id.*

The City rejected the plaintiff’s claims of discrimination because the plaintiffs did not establish by evidence that the City “intentionally” rejected their bid due to race or that the City “intentionally” discriminated against these plaintiffs. *Id.* at 967-968. The court held that the plaintiffs did not establish a single instance showing the City deprived them of their rights, and the plaintiffs did not produce evidence of a “discriminatory motive.” *Id.* at 968. The court concluded that plaintiffs had failed to show that the City’s actions were “racially motivated.” *Id.*

The Eighth Circuit Court of Appeals affirmed the ruling of the district court. *Thomas v. City of Saint Paul*, 2009 WL 777932 (8th Cir. 2009)(unpublished opinion). The Eighth Circuit affirmed based on the decision of the district court and finding no reversible error.

17. *Thompson Building Wrecking Co. v. Augusta, Georgia, No. 1:07CV019, 2007 WL 926153 (S.D. Ga. Mar. 14, 2007)(Slip. Op.)*

This case considered the validity of the City of Augusta’s local minority DBE program. The district court enjoined the City from favoring any contract bid on the basis of racial classification and based its decision principally upon the outdated and insufficient data proffered by the City in support of its program. 2007 WL 926153 at *9-10.

The City of Augusta enacted a local DBE program based upon the results of a disparity study completed in 1994. The disparity study examined the disparity in socioeconomic status among races, compared black-owned businesses in Augusta with those in other regions and those owned by other racial groups, examined “Georgia’s racist history” in contracting and procurement, and examined certain data related to Augusta’s contracting and procurement. *Id.* at *1-4. The plaintiff contractors and subcontractors challenged the constitutionality of the DBE program and sought to extend a temporary injunction enjoining the City’s implementation of racial preferences in public bidding and procurement.

The City defended the DBE program arguing that it did not utilize racial classifications because it only required vendors to make a “good faith effort” to ensure DBE participation. *Id.* at *6. The court rejected this argument noting that bidders were required to submit a “Proposed DBE Participation” form and that bids containing DBE participation were treated more favorably than those bids without DBE participation. The court stated: “Because a person’s business can qualify for the favorable treatment based on that person’s race, while a similarly situated person of another race would not qualify, the program contains a racial classification.” *Id.*

The court noted that the DBE program harmed subcontractors in two ways: first, because prime contractors will discriminate between DBE and non-DBE subcontractors and a bid with a DBE subcontractor would be treated more favorably; and second, because the City would favor a bid containing DBE participation over an equal or even superior bid containing no DBE participation. *Id.*

The court applied the strict scrutiny standard set forth in *Croson* and *Engineering Contractors Association* to determine whether the City had a compelling interest for its program and whether the program was narrowly tailored to that end. The court noted that pursuant to *Croson*, the City would have a compelling interest in assuring that tax dollars would not perpetuate private prejudice. But, the court found (*citing to Croson*), that a state or local government must identify that discrimination, “public or private, with some specificity before they may use race-conscious relief.” The court cited the Eleventh Circuit’s position that “‘gross statistical disparities’ between the proportion of minorities hired by the public employer and the proportion of minorities willing and able to work” may justify an affirmative action program. *Id.* at *7. The court also stated that anecdotal evidence is relevant to the analysis.

The court determined that while the City’s disparity study showed some statistical disparities buttressed by anecdotal evidence, the study suffered from multiple issues. *Id.* at *7-8. Specifically, the court found that those portions of the study examining discrimination outside the area of subcontracting (*e.g.*, socioeconomic status of racial groups in the Augusta area) were irrelevant for purposes of showing a compelling interest. The court also cited the failure of the study to differentiate between different minority races as well as the improper aggregation of race- and gender-based discrimination referred to as Simpson’s Paradox.

The court assumed for purposes of its analysis that the City could show a compelling interest but concluded that the program was not narrowly tailored and thus could not satisfy strict scrutiny. The court found that it need look no further beyond the fact of the thirteen-year duration of the program absent further investigation, and the absence of a sunset or expiration provision, to conclude that the DBE program was not narrowly tailored. *Id.* at *8. Noting that affirmative action is permitted only sparingly, the court found: “[i]t would be impossible for Augusta to argue that, 13 years after last studying the issue, racial discrimination is so rampant in the Augusta contracting industry that the City must affirmatively act to avoid being complicit.” *Id.* The court held in conclusion, that the plaintiffs were “substantially likely to succeed in proving that, when the City requests bids with minority participation and in fact favors bids with such, the plaintiffs will suffer racial discrimination in violation of the Equal Protection Clause.” *Id.* at *9.

In a subsequent Order dated September 5, 2007, the court denied the City’s motion to continue plaintiff’s Motion for Summary Judgment, denied the City’s Rule 12(b)(6) motion to dismiss, and stayed the action for 30 days pending mediation between the parties. Importantly, in this Order, the court reiterated that the female- and locally-owned business components of the program (challenged in plaintiff’s Motion for Summary Judgment) would be subject to intermediate scrutiny and rational basis scrutiny, respectively. The court also reiterated its rejection of the City’s challenge to the plaintiffs’ standing. The court noted that under *Adarand*, preventing a contractor from competing on an equal footing satisfies the particularized injury prong of standing. And showing that the contractor will sometime in the future bid on a City contract

“that offers financial incentives to a prime contractor for hiring disadvantaged subcontractors” satisfies the second requirement that the particularized injury be actual or imminent. Accordingly, the court concluded that the plaintiffs have standing to pursue this action.

18. *Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County*, 333 F. Supp.2d 1305 (S.D. Fla. 2004)

The decision in *Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County*, is significant to the disparity study because it applied and followed the *Engineering Contractors Association* decision in the context of contracting and procurement for goods and services (including architect and engineer services). Many of the other cases focused on construction, and thus *Hershell Gill* is instructive as to the analysis relating to architect and engineering services. The decision in *Hershell Gill* also involved a district court in the Eleventh Circuit imposing compensatory and punitive damages upon individual County Commissioners due to the district court’s finding of their willful failure to abrogate an unconstitutional MBE/WBE Program. In addition, the case is noteworthy because the district court refused to follow the 2003 Tenth Circuit Court of Appeals decision in *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950 (10th Cir. 2003). See discussion, *infra*.

Six years after the decision in *Engineering Contractors Association*, two white male-owned engineering firms (the “plaintiffs”) brought suit against Engineering Contractors Association (the “County”), the former County Manager, and various current County Commissioners (the “Commissioners”) in their official and personal capacities (collectively the “defendants”), seeking to enjoin the same “participation goals” in the same MWBE program deemed to violate the Fourteenth Amendment in the earlier case. 333 F. Supp. 1305, 1310 (S.D. Fla. 2004). After the Eleventh Circuit’s decision in *Engineering Contractors Association* striking down the MWBE programs as applied to construction contracts, the County enacted a Community Small Business Enterprise (“CSBE”) program for construction contracts, “but continued to apply racial, ethnic, and gender criteria to its purchases of goods and services in other areas, including its procurement of A&E services.” *Id.* at 1311.

The plaintiffs brought suit challenging the Black Business Enterprise (BBE) program, the Hispanic Business Enterprise (HBE) program, and the Women Business Enterprise (WBE) program (collectively “MBE/WBE”). *Id.* The MBE/WBE programs applied to A&E contracts in excess of \$25,000. *Id.* at 1312. The County established five “contract measures” to reach the participation goals: (1) set asides, (2) subcontractor goals, (3) project goals, (4) bid preferences, and (5) selection factors. *Id.* Once a contract was identified as covered by a participation goal, a review committee would determine whether a contract measure should be utilized. *Id.* The County was required to review the efficacy of the MBE/WBE programs annually, and reevaluated the continuing viability of the MBE/WBE programs every five years. *Id.* at 1313. However, the district court found “the participation goals for the three MBE/WBE programs challenged ... remained unchanged since 1994.” *Id.*

In 1998, counsel for plaintiffs contacted the County Commissioners requesting the discontinuation of contract measures on A&E contracts. *Id.* at 1314. Upon request of the Commissioners, the county manager then made two reports (an original and a follow-up) measuring parity in terms of dollars awarded and dollars paid in the areas of A&E for blacks,

Hispanics, and women, and concluded both times that the “County has reached parity for black, Hispanic, and Women-owned firms in the areas of [A&E] services.” The final report further stated “Based on all the analyses that have been performed, the County does not have a basis for the establishment of participation goals which would allow staff to apply contract measures.” *Id.* at 1315. The district court also found that the Commissioners were informed that “there was even less evidence to support [the MBE/WBE] programs as applied to architects and engineers than there was in contract construction.” *Id.* Nonetheless, the Commissioners voted to continue the MBE/WBE participation goals at their previous levels. *Id.*

In May of 2000 (18 months after the lawsuit was filed), the County commissioned Dr. Manuel J. Carvajal, an econometrician, to study architects and engineers in the county. His final report had four parts:

(1) data identification and collection of methodology for displaying the research results; (2) presentation and discussion of tables pertaining to architecture, civil engineering, structural engineering, and awards of contracts in those areas; (3) analysis of the structure and empirical estimates of various sets of regression equations, the calculation of corresponding indices, and an assessment of their importance; and (4) a conclusion that there is discrimination against women and Hispanics — but not against blacks — in the fields of architecture and engineering.

Id. The district court issued a preliminary injunction enjoining the use of the MBE/WBE programs for A&E contracts, pending the United States Supreme Court decisions in *Gratz v. Bollinger*, 539 U.S. 244 (2003) and *Grutter v. Bollinger*, 539 U.S. 306 (2003). *Id.* at 1316.

The court considered whether the MBE/WBE programs were violative of Title VII of the Civil Rights Act, and whether the County and the County Commissioners were liable for compensatory and punitive damages.

The district court found that the Supreme Court decisions in *Gratz* and *Grutter* did not alter the constitutional analysis as set forth in *Adarand* and *Croson*. *Id.* at 1317. Accordingly, the race- and ethnicity-based classifications were subject to strict scrutiny, meaning the County must present “a strong basis of evidence” indicating the MBE/WBE program was necessary and that it was narrowly tailored to its purported purpose. *Id.* at 1316. The gender-based classifications were subject to intermediate scrutiny, requiring the County to show the “gender-based classification serves an important governmental objective, and that it is substantially related to the achievement of that objective.” *Id.* at 1317 (internal citations omitted). The court found that the proponent of a gender-based affirmative action program must present “sufficient probative evidence” of discrimination. *Id.* (internal citations omitted). The court found that under the intermediate scrutiny analysis, the County must (1) demonstrate past discrimination against women but not necessarily at the hands of the County, and (2) that the gender-conscious affirmative action program need not be used only as a “last resort.” *Id.*

The County presented both statistical and anecdotal evidence. *Id.* at 1318. The statistical evidence consisted of Dr. Carvajal’s report, most of which consisted of “post-enactment” evidence. *Id.* Dr. Carvajal’s analysis sought to discover the existence of racial, ethnic and gender disparities in the A&E industry, and then to determine whether any such disparities could be attributed to discrimination. *Id.* The study used four data sets: three were designed to establish

the marketplace availability of firms (architecture, structural engineering, and civil engineering), and the fourth focused on awards issued by the County. *Id.* Dr. Carvajal used the phone book, a list compiled by infoUSA, and a list of firms registered for technical certification with the County's Department of Public Works to compile a list of the "universe" of firms competing in the market. *Id.* For the architectural firms only, he also used a list of firms that had been issued an architecture professional license. *Id.*

Dr. Carvajal then conducted a phone survey of the identified firms. Based on his data, Dr. Carvajal concluded that disparities existed between the percentage of A&E firms owned by blacks, Hispanics, and women, and the percentage of annual business they received. *Id.* Dr. Carvajal conducted regression analyses "in order to determine the effect a firm owner's gender or race had on certain dependent variables." *Id.* Dr. Carvajal used the firm's annual volume of business as a dependent variable and determined the disparities were due in each case to the firm's gender and/or ethnic classification. *Id.* at 1320. He also performed variants to the equations including: (1) using certification rather than survey data for the experience / capacity indicators, (2) with the outliers deleted, (3) with publicly-owned firms deleted, (4) with the dummy variables reversed, and (5) using only currently certified firms." *Id.* Dr. Carvajal's results remained substantially unchanged. *Id.*

Based on his analysis of the marketplace data, Dr. Carvajal concluded that the "gross statistical disparities" in the annual business volume for Hispanic- and women-owned firms could be attributed to discrimination; he "did not find sufficient evidence of discrimination against blacks." *Id.*

The court held that Dr. Carvajal's study constituted neither a "strong basis in evidence" of discrimination necessary to justify race- and ethnicity-conscious measures, nor did it constitute "sufficient probative evidence" necessary to justify the gender-conscious measures. *Id.* The court made an initial finding that no disparity existed to indicate underutilization of MBE/WBEs in the award of A&E contracts by the County, nor was there underutilization of MBE/WBEs in the contracts they were awarded. *Id.* The court found that an analysis of the award data indicated, "[i]f anything, the data indicates an overutilization of minority-owned firms by the County in relation to their numbers in the marketplace." *Id.*

With respect to the marketplace data, the County conceded that there was insufficient evidence of discrimination against blacks to support the BBE program. *Id.* at 1321. With respect to the marketplace data for Hispanics and women, the court found it "unreliable and inaccurate" for three reasons: (1) the data failed to properly measure the geographic market, (2) the data failed to properly measure the product market, and (3) the marketplace survey was unreliable. *Id.* at 1321-25.

The court ruled that it would not follow the Tenth Circuit decision of *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950 (10th Cir. 2003), as the burden of proof enunciated by the Tenth Circuit conflicts with that of the Eleventh Circuit, and the "Tenth Circuit's decision is flawed for the reasons articulated by Justice Scalia in his dissent from the denial of certiorari." *Id.* at 1325 (internal citations omitted).

The defendant intervenors presented anecdotal evidence pertaining only to discrimination against women in the County's A&E industry. *Id.* The anecdotal evidence consisted of the testimony of three A&E professional women, "nearly all" of which was related to discrimination in the award of County contracts. *Id.* at 1326. However, the district court found that the anecdotal evidence contradicted Dr. Carvajal's study indicating that no disparity existed with respect to the award of County A&E contracts. *Id.*

The court quoted the Eleventh Circuit in *Engineering Contractors Association* for the proposition "that only in the rare case will anecdotal evidence suffice standing alone." *Id.* (internal citations omitted). The court held that "[t]his is not one of those rare cases." The district court concluded that the statistical evidence was "unreliable and fail[ed] to establish the existence of discrimination," and the anecdotal evidence was insufficient as it did not even reach the level of anecdotal evidence in *Engineering Contractors Association* where the County employees themselves testified. *Id.*

The court made an initial finding that a number of minority groups provided preferential treatment were in fact majorities in the County in terms of population, voting capacity, and representation on the County Commission. *Id.* at 1326-1329. For purposes only of conducting the strict scrutiny analysis, the court then assumed that Dr. Carvajal's report demonstrated discrimination against Hispanics (note the County had conceded it had insufficient evidence of discrimination against blacks) and sought to determine whether the HBE program was narrowly tailored to remedying that discrimination. *Id.* at 1330. However, the court found that because the study failed to "identify who is engaging in the discrimination, what form the discrimination might take, at what stage in the process it is taking place, or how the discrimination is accomplished ... it is virtually impossible to narrowly tailor any remedy, and the HBE program fails on this fact alone." *Id.*

The court found that even after the County Managers informed the Commissioners that the County had reached parity in the A&E industry, the Commissioners declined to enact a CSBE ordinance, a race-neutral measure utilized in the construction industry after *Engineering Contractors Association*. *Id.* Instead, the Commissioners voted to continue the HBE program. *Id.* The court held that the County's failure to even explore a program similar to the CSBE ordinance indicated that the HBE program was not narrowly tailored. *Id.* at 1331.

The court also found that the County enacted a broad anti-discrimination ordinance imposing harsh penalties for a violation thereof. *Id.* However, "not a single witness at trial knew of any instance of a complaint being brought under this ordinance concerning the A&E industry," leading the court to conclude that the ordinance was either not being enforced, or no discrimination existed. *Id.* Under either scenario, the HBE program could not be narrowly tailored. *Id.*

The court found the waiver provisions in the HBE program inflexible in practice. *Id.* Additionally, the court found the County had failed to comply with the provisions in the HBE program requiring adjustment of participation goals based on annual studies, because the County had not in fact conducted annual studies for several years. *Id.* The court found this even "more problematic" because the HBE program did not have a built-in durational limit, and thus blatantly violated Supreme Court jurisprudence requiring that racial and ethnic preferences

“must be limited in time.” *Id.* at 1332, *citing Grutter*, 123 S. Ct. at 2346. For the foregoing reasons, the court concluded the HBE program was not narrowly tailored. *Id.* at 1332.

With respect to the WBE program, the court found that “the failure of the County to identify who is discriminating and where in the process the discrimination is taking place indicates (though not conclusively) that the WBE program is not substantially related to eliminating that discrimination.” *Id.* at 1333. The court found that the existence of the anti-discrimination ordinance, the refusal to enact a small business enterprise ordinance, and the inflexibility in setting the participation goals rendered the WBE program unable to satisfy the substantial relationship test. *Id.*

The court held that the County was liable for any compensatory damages. *Id.* at 1333-34. The court held that the Commissioners had absolute immunity for their legislative actions; however, they were not entitled to qualified immunity for their actions in voting to apply the race-, ethnicity-, and gender-conscious measures of the MBE/WBE programs if their actions violated “clearly established statutory or constitutional rights of which a reasonable person would have known ... Accordingly, the question is whether the state of the law at the time the Commissioners voted to apply [race-, ethnicity-, and gender-conscious measures] gave them ‘fair warning’ that their actions were unconstitutional.” *Id.* at 1335-36 (internal citations omitted).

The court held that the Commissioners were not entitled to qualified immunity because they “had before them at least three cases that gave them fair warning that their application of the MBE/WBE programs ... were unconstitutional: *Croson*, *Adarand* and [*Engineering Contractors Association*].” *Id.* at 1137. The court found that the Commissioners voted to apply the contract measures after the Supreme Court decided both *Croson* and *Adarand*. *Id.* Moreover, the Eleventh Circuit had already struck down the construction provisions of the same MBE/WBE programs. *Id.* Thus, the case law was “clearly established” and gave the Commissioners fair warning that the MBE/WBE programs were unconstitutional. *Id.*

The court also found the Commissioners had specific information from the County Manager and other internal studies indicating the problems with the MBE/WBE programs and indicating that parity had been achieved. *Id.* at 1338. Additionally, the Commissioners did not conduct the annual studies mandated by the MBE/WBE ordinance itself. *Id.* For all the foregoing reasons, the court held the Commissioners were subject to individual liability for any compensatory and punitive damages.

The district court enjoined the County, the Commissioners, and the County Manager from using, or requiring the use of, gender, racial, or ethnic criteria in deciding (1) whether a response to an RFP submitted for A&E work is responsive, (2) whether such a response will be considered, and (3) whether a contract will be awarded to a consultant submitting such a response. The court awarded the plaintiffs \$100 each in nominal damages and reasonable attorneys’ fees and costs, for which it held the County and the Commissioners jointly and severally liable.

19. Florida A.G.C. Council, Inc. v. State of Florida, 303 F. Supp.2d 1307 (N.D. Fla. 2004)

This case is instructive to the disparity study as to the manner in which district courts within the Eleventh Circuit are interpreting and applying *Engineering Contractors Association*. It is also

instructive in terms of the type of legislation to be considered by the local and state governments as to what the courts consider to be a “race-conscious” program and/or legislation, as well as to the significance of the implementation of the legislation to the analysis.

The plaintiffs, A.G.C. Council, Inc. and the South Florida Chapter of the Associated General Contractors brought this case challenging the constitutionality of certain provisions of a Florida statute (Section 287.09451, *et seq.*). The plaintiffs contended that the statute violated the Equal Protection Clause of the Fourteenth Amendment by instituting race- and gender-conscious “preferences” in order to increase the numeric representation of “MBEs” in certain industries.

According to the court, the Florida Statute enacted race-conscious and gender-conscious remedial programs to ensure minority participation in state contracts for the purchase of commodities and in construction contracts. The State created the Office of Supplier Diversity (“OSD”) to assist MBEs to become suppliers of commodities, services and construction to the state government. The OSD had certain responsibilities, including adopting rules meant to assess whether state agencies have made good faith efforts to solicit business from MBEs, and to monitor whether contractors have made good faith efforts to comply with the objective of greater overall MBE participation.

The statute enumerated measures that contractors should undertake, such as minority-centered recruitment in advertising as a means of advancing the statute’s purpose. The statute provided that each State agency is “encouraged” to spend 21 percent of the monies actually expended for construction contracts, 25 percent of the monies actually expended for architectural and engineering contracts, 24 percent of the monies actually expended for commodities and 50.5 percent of the monies actually expended for contractual services during the fiscal year for the purpose of entering into contracts with certified MBEs. The statute also provided that state agencies are allowed to allocate certain percentages for black Americans, Hispanic Americans and for American women, and the goals are broken down by construction contracts, architectural and engineering contracts, commodities and contractual services.

The State took the position that the spending goals were “precatory.” The court found that the plaintiffs had standing to maintain the action and to pursue prospective relief. The court held that the statute was unconstitutional based on the finding that the spending goals were not narrowly tailored to achieve a governmental interest. The court did not specifically address whether the articulated reasons for the goals contained in the statute had sufficient evidence, but instead found that the articulated reason would, “if true,” constitute a compelling governmental interest necessitating race-conscious remedies. Rather than explore the evidence, the court focused on the narrowly tailored requirement and held that it was not satisfied by the State.

The court found that there was no evidence in the record that the State contemplated race-neutral means to accomplish the objectives set forth in Section 287.09451 *et seq.*, such as “simplification of bidding procedures, relaxation of bonding requirements, training or financial aid for disadvantaged entrepreneurs of all races [which] would open the public contracting market to all those who have suffered the effects of past discrimination.” *Florida A.G.C. Council*, 303 F.Supp.2d at 1315, *quoting Eng’g Contractors Ass’n*, 122 F.3d at 928, *quoting Croson*, 488 U.S. at 509-10.

The court noted that defendants did not seem to disagree with the report issued by the State of Florida Senate that concluded there was little evidence to support the spending goals outlined in the statute. Rather, the State of Florida argued that the statute is “permissive.” The court, however, held that “there is no distinction between a statute that is precatory versus one that is compulsory when the challenged statute ‘induces an employer to hire with an eye toward meeting ... [a] numerical target.’ *Florida A.G.C. Council*, 303 F.Supp.2d at 1316.

The court found that the State applies pressure to State agencies to meet the legislative objectives of the statute extending beyond simple outreach efforts. The State agencies, according to the court, were required to coordinate their MBE procurement activities with the OSD, which includes adopting a MBE utilization plan. If the State agency deviated from the utilization plan in two consecutive and three out of five total fiscal years, then the OSD could review any and all solicitations and contract awards of the agency as deemed necessary until such time as the agency met its utilization plan. The court held that based on these factors, although alleged to be “permissive,” the statute textually was not.

Therefore, the court found that the statute was not narrowly tailored to serve a compelling governmental interest, and consequently violated the Equal Protection Clause of the Fourteenth Amendment.

20. The Builders Ass’n of Greater Chicago v. The City of Chicago, 298 F. Supp.2d 725 (N.D. Ill. 2003)

This case is instructive because of the court’s focus and analysis on whether the City of Chicago’s MBE/WBE program was narrowly tailored. The basis of the court’s holding that the program was not narrowly tailored is instructive for any program considered because of the reasons provided as to why the program did not pass muster.

The plaintiff, the Builders Association of Greater Chicago, brought this suit challenging the constitutionality of the City of Chicago’s construction Minority- and Women-Owned Business (“MWBE”) Program. The court held that the City of Chicago’s MWBE program was unconstitutional because it did not satisfy the requirement that it be narrowly tailored to achieve a compelling governmental interest. The court held that it was not narrowly tailored for several reasons, including because there was no “meaningful individualized review” of MBE/WBEs; it had no termination date nor did it have any means for determining a termination; the “graduation” revenue amount for firms to graduate out of the program was very high, \$27,500,000, and in fact very few firms graduated; there was no net worth threshold; and, waivers were rarely or never granted on construction contracts. The court found that the City program was a “rigid numerical quota,” not related to the number of available, willing and able firms. Formulistic percentages, the court held, could not survive the strict scrutiny.

The court held that the goals plan did not address issues raised as to discrimination regarding market access and credit. The court found that a goals program does not directly impact prime contractor’s selection of subcontractors on non-goals private projects. The court found that a set-aside or goals program does not directly impact difficulties in accessing credit, and does not address discriminatory loan denials or higher interest rates. The court found the City has not sought to attack discrimination by primes directly, “but it could.” 298 F.2d 725. “To monitor

possible discriminatory conduct it could maintain its certification list and require those contracting with the City to consider unsolicited bids, to maintain bidding records, and to justify rejection of any certified firm submitting the lowest bid. It could also require firms seeking City work to post private jobs above a certain minimum on a website or otherwise provide public notice ..." *Id.*

The court concluded that other race-neutral means were available to impact credit, high interest rates, and other potential marketplace discrimination. The court pointed to race-neutral means including linked deposits, with the City banking at institutions making loans to startup and smaller firms. Other race-neutral programs referenced included quick pay and contract downsizing; restricting self-performance by prime contractors; a direct loan program; waiver of bonds on contracts under \$100,000; a bank participation loan program; a 2 percent local business preference; outreach programs and technical assistance and workshops; and seminars presented to new construction firms.

The court held that race and ethnicity do matter, but that racial and ethnic classifications are highly suspect, can be used only as a last resort, and cannot be made by some mechanical formulation. Therefore, the court concluded the City's MWBE Program could not stand in its present guise. The court held that the present program was not narrowly tailored to remedy past discrimination and the discrimination demonstrated to now exist.

The court entered an injunction, but delayed the effective date for six months from the date of its Order, December 29, 2003. The court held that the City had a "compelling interest in not having its construction projects slip back to near monopoly domination by white male firms." The court ruled a brief continuation of the program for six months was appropriate "as the City rethinks the many tools of redress it has available." Subsequently, the court declared unconstitutional the City's MWBE Program with respect to construction contracts and permanently enjoined the City from enforcing the Program. 2004 WL 757697 (N.D. Ill 2004).

21. Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore, 218 F. Supp.2d 749 (D. Md. 2002)

This case is instructive because the court found the Executive Order of the Mayor of the City of Baltimore was precatory in nature (creating no legal obligation or duty) and contained no enforcement mechanism or penalties for noncompliance and imposed no substantial restrictions; the Executive Order announced goals that were found to be aspirational only.

The Associated Utility Contractors of Maryland, Inc. ("AUC") sued the City of Baltimore challenging its ordinance providing for minority and women-owned business enterprise ("MWBE") participation in city contracts. Previously, an earlier City of Baltimore MWBE program was declared unconstitutional. *Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore*, 83 F. Supp.2d 613 (D. Md. 2000). The City adopted a new ordinance that provided for the establishment of MWBE participation goals on a contract-by-contract basis, and made several other changes from the previous MWBE program declared unconstitutional in the earlier case.

In addition, the Mayor of the City of Baltimore issued an Executive Order that announced a goal of awarding 35 percent of all City contracting dollars to MBE/WBEs. The court found this goal of

35 percent participation was aspirational only and the Executive Order contained no enforcement mechanism or penalties for noncompliance. The Executive Order also specified many “noncoercive” outreach measures to be taken by the City agencies relating to increasing participation of MBE/WBEs. These measures were found to be merely aspirational and no enforcement mechanism was provided.

The court addressed in this case only a motion to dismiss filed by the City of Baltimore arguing that the Associated Utility Contractors had no standing. The court denied the motion to dismiss holding that the association had standing to challenge the new MBE/WBE ordinance, although the court noted that it had significant issues with the AUC having representational standing because of the nature of the MBE/WBE plan and the fact the AUC did not have any of its individual members named in the suit. The court also held that the AUC was entitled to bring an as applied challenge to the Executive Order of the Mayor, but rejected it having standing to bring a facial challenge based on a finding that it imposes no requirement, creates no sanctions, and does not inflict an injury upon any member of the AUC in any concrete way. Therefore, the Executive Order did not create a “case or controversy” in connection with a facial attack. The court found the wording of the Executive Order to be precatory and imposing no substantive restrictions.

After this decision the City of Baltimore and the AUC entered into a settlement agreement and a dismissal with prejudice of the case. An order was issued by the court on October 22, 2003 dismissing the case with prejudice.

22. Kornhass Construction, Inc. v. State of Oklahoma, Department of Central Services, 140 F.Supp.2d 1232 (W.D. OK. 2001)

Plaintiffs, non-minority contractors, brought this action against the State of Oklahoma challenging minority bid preference provisions in the Oklahoma Minority Business Enterprise Assistance Act (“MBE Act”). The Oklahoma MBE Act established a bid preference program by which certified minority business enterprises are given favorable treatment on competitive bids submitted to the state. 140 F.Supp.2d at 1235–36. Under the MBE Act, the bids of non-minority contractors were raised by 5 percent, placing them at a competitive disadvantage according to the district court. *Id.* at 1235–1236.

The named plaintiffs bid on state contracts in which their bids were increased by 5 percent as they were non-minority business enterprises. Although the plaintiffs actually submitted the lowest dollar bids, once the 5 percent factor was applied, minority bidders became the successful bidders on certain contracts. 140 F.Supp. at 1237.

In determining the constitutionality or validity of the Oklahoma MBE Act, the district court was guided in its analysis by the Tenth Circuit Court of Appeals decision in *Adarand Constructors, Inc. v. Slater*, 288 F.3d 1147 (10th Cir. 2000). The district court pointed out that in *Adarand VII*, the Tenth Circuit found compelling evidence of barriers to both minority business formation and existing minority businesses. *Id.* at 1238. In sum, the district court noted that the Tenth Circuit concluded that the Government had met its burden of presenting a strong basis in evidence sufficient to support its articulated, constitutionally valid, compelling interest. 140 F.Supp.2d at 1239, *citing Adarand VII*, 228 F.3d 1147, 1174.

Compelling state interest. The district court, following *Adarand VII*, applied the strict scrutiny analysis, arising out of the Fourteenth Amendment’s Equal Protection Clause, in which a race-based affirmative action program withstands strict scrutiny only if it is narrowly tailored to serve a compelling governmental interest. *Id.* at 1239. The district court pointed out that it is clear from Supreme Court precedent, there may be a compelling interest sufficient to justify race-conscious affirmative action measures. *Id.* The Fourteenth Amendment permits race-conscious programs that seek both to eradicate discrimination by the governmental entity itself and to prevent the governmental entity from becoming a “passive participant” in a system of racial exclusion practiced by private businesses. *Id.* at 1240. Therefore, the district court concluded that both the federal and state governments have a compelling interest assuring that public dollars do not serve to finance the evil of private prejudice. *Id.*

The district court stated that a “mere statistical disparity in the proportion of contracts awarded to a particular group, standing alone, does not demonstrate the evil of private or public racial prejudice.” *Id.* Rather, the court held that the “benchmark for judging the adequacy of a state’s factual predicate for affirmative action legislation is whether there exists a strong basis in the evidence of the state’s conclusion that remedial action was necessary.” *Id.* The district court found that the Supreme Court made it clear that the state bears the burden of demonstrating a strong basis in evidence for its conclusion that remedial action was necessary by proving either that the state itself discriminated in the past or was “a passive participant” in private industry’s discriminatory practices. *Id.* at 1240, citing to *Associated General Contractors of Ohio, Inc. v. Drabik*, 214 F.3d 730, 735 (6th Cir. 2000) and *City of Richmond v. J.A. Croson Company*, 488 U.S. 469 at 486-492 (1989).

With this background, the State of Oklahoma stated that its compelling state interest “is to promote the economy of the State and to ensure that minority business enterprises are given an opportunity to compete for state contracts.” *Id.* at 1240. Thus, the district court found the State admitted that the MBE Act’s bid preference “is not based on past discrimination,” rather, it is based on a desire to “encourag[e] economic development of minority business enterprises which in turn will benefit the State of Oklahoma as a whole.” *Id.* In light of *Adarand VII*, and prevailing Supreme Court case law, the district court found that this articulated interest is not “compelling” in the absence of evidence of past or present racial discrimination. *Id.*

The district court considered testimony presented by Intervenors who participated in the case for the defendants and asserted that the Oklahoma legislature conducted an interim study prior to adoption of the MBE Act, during which testimony and evidence were presented to members of the Oklahoma Legislative Black Caucus and other participating legislators. The study was conducted more than 14 years prior to the case and the Intervenors did not actually offer any of the evidence to the court in this case. The Intervenors submitted an affidavit from the witness who serves as the Title VI Coordinator for the Oklahoma Department of Transportation. The court found that the affidavit from the witness averred in general terms that minority businesses were discriminated against in the awarding of state contracts. The district court found that the Intervenors have not produced — or indeed even described — the evidence of discrimination. *Id.* at 1241. The district court found that it cannot be discerned from the documents which minority businesses were the victims of discrimination, or which racial or ethnic groups were targeted by such alleged discrimination. *Id.*

The court also found that the Intervenor's evidence did not indicate what discriminatory acts or practices allegedly occurred, or when they occurred. *Id.* The district court stated that the Intervenor's did not identify "a single qualified, minority-owned bidder who was excluded from a state contract." *Id.* The district court, thus, held that broad allegations of "systematic" exclusion of minority businesses were not sufficient to constitute a compelling governmental interest in remedying past or current discrimination. *Id.* at 1242. The district court stated that this was particularly true in light of the "State's admission here that the State's governmental interest was not in remedying past discrimination in the state competitive bidding process, but in 'encouraging economic development of minority business enterprises which in turn will benefit the State of Oklahoma as a whole.'" *Id.* at 1242.

The court found that the State defendants failed to produce any admissible evidence of a single, specific discriminatory act, or any substantial evidence showing a pattern of deliberate exclusion from state contracts of minority-owned businesses. *Id.* at 1241 - 1242, footnote 11.

The district court also noted that the Sixth Circuit Court of Appeals in *Drabik* rejected Ohio's statistical evidence of underutilization of minority contractors because the evidence did not report the actual use of minority firms; rather, they reported only the use of those minority firms that had gone to the trouble of being certified and listed by the state. *Id.* at 1242, footnote 12. The district court stated that, as in *Drabik*, the evidence presented in support of the Oklahoma MBE Act failed to account for the possibility that some minority contractors might not register with the state, and the statistics did not account for any contracts awarded to businesses with minority ownership of less than 51 percent, or for contracts performed in large part by minority-owned subcontractors where the prime contractor was not a certified minority-owned business. *Id.*

The district court found that the MBE Act's minority bidding preference was not predicated upon a finding of discrimination in any particular industry or region of the state, or discrimination against any particular racial or ethnic group. The court stated that there was no evidence offered of actual discrimination, past or present, against the specific racial and ethnic groups to whom the preference was extended, other than an attempt to show a history of discrimination against African Americans. *Id.* at 1242.

Narrow tailoring. The district court found that even if the State's goals could not be considered "compelling," the State did not show that the MBE Act was narrowly tailored to serve those goals. The court pointed out that the Tenth Circuit in *Adarand VII* identified six factors the court must consider in determining whether the MBE Act's minority preference provisions were sufficiently narrowly tailored to satisfy equal protection: (1) the availability of race-neutral alternative remedies; (2) limits on the duration of the challenged preference provisions; (3) flexibility of the preference provisions; (4) numerical proportionality; (5) the burden on third parties; and (6) over- or under-inclusiveness. *Id.* at 1242-1243.

First, in terms of race-neutral alternative remedies, the court found that the evidence offered showed, at most, that nominal efforts were made to assist minority-owned businesses prior to the adoption of the MBE Act's racial preference program. *Id.* at 1243. The court considered evidence regarding the Minority Assistance Program, but found that to be primarily informational services only, and was not designed to actually assist minorities or other

disadvantaged contractors to obtain contracts with the State of Oklahoma. *Id.* at 1243. In contrast to this “informational” program, the court noted the Tenth Circuit in *Adarand VII* favorably considered the federal government’s use of racially neutral alternatives aimed at disadvantaged businesses, including assistance with obtaining project bonds, assistance with securing capital financing, technical assistance, and other programs designed to assist start-up businesses. *Id.* at 1243 citing *Adarand VII*, 228 F.3d at 1178-1179.

The district court found that it does not appear from the evidence that Oklahoma’s Minority Assistance Program provided the type of race-neutral relief required by the Tenth Circuit in *Adarand VII*, in the Supreme Court in the *Croson* decision, nor does it appear that the Program was racially neutral. *Id.* at 1243. The court found that the State of Oklahoma did not show any meaningful form of assistance to new or disadvantaged businesses prior to the adoption of the MBE Act, and thus, the court found that the state defendants had not shown that Oklahoma considered race-neutral alternative means to achieve the state’s goal prior to adoption of the minority bid preference provisions. *Id.* at 1243.

In a footnote, the district court pointed out that the Tenth Circuit has recognized racially neutral programs designed to assist *all* new or financially disadvantaged businesses in obtaining government contracts tend to benefit minority-owned businesses, and can help alleviate the effects of past and present-day discrimination. *Id.* at 1243, footnote 15 citing *Adarand VII*.

The court considered the evidence offered of post-enactment efforts by the State to increase minority participation in State contracting. The court found that most of these efforts were directed toward encouraging the participation of certified minority business enterprises, “and are thus not racially neutral. This evidence fails to demonstrate that the State employed race-neutral alternative measures prior to or after adopting the Minority Business Enterprise Assistance Act.” *Id.* at 1244. Some of the efforts the court found were directed toward encouraging the participation of certified minority business enterprises and thus not racially neutral, included mailing vendor registration forms to minority vendors, telephoning and mailing letters to minority vendors, providing assistance to vendors in completing registration forms, assuring the vendors received bid information, preparing a minority business directory and distributing it to all state agencies, periodically mailing construction project information to minority vendors, and providing commodity information to minority vendors upon request. *Id.* at 1244, footnote 16.

In terms of durational limits and flexibility, the court found that the “goal” of 10 percent of the state’s contracts being awarded to certified minority business enterprises had never been reached, or even approached, during the thirteen years since the MBE Act was implemented. *Id.* at 1244. The court found the defendants offered no evidence that the bid preference was likely to end at any time in the foreseeable future, or that it is otherwise limited in its duration. *Id.* Unlike the federal programs at issue in *Adarand VII*, the court stated the Oklahoma MBE Act has no inherent time limit, and no provision for disadvantaged minority-owned businesses to “graduate” from preference eligibility. *Id.* The court found the MBE Act was not limited to those minority-owned businesses which are shown to be economically disadvantaged. *Id.*

The court stated that the MBE Act made no attempt to address or remedy any actual, demonstrated past or present racial discrimination, and the MBE Act’s duration was not tied in

any way to the eradication of such discrimination. *Id.* Instead, the court found the MBE Act rests on the “questionable assumption that 10 percent of all state contract dollars should be awarded to certified minority-owned and operated businesses, without any showing that this assumption is reasonable.” *Id.* at 1244.

By the terms of the MBE Act, the minority preference provisions would continue in place for five years after the goal of 10 percent minority participation was reached, and thus the district court concluded that the MBE Act’s minority preference provisions lacked reasonable durational limits. *Id.* at 1245.

With regard to the factor of “numerical proportionality” between the MBE Act’s aspirational goal and the number of existing available minority-owned businesses, the court found the MBE Act’s 10 percent goal was not based upon demonstrable evidence of the availability of minority contractors who were either qualified to bid or who were ready, willing and able to become qualified to bid on state contracts. *Id.* at 1246–1247. The court pointed out that the MBE Act made no attempt to distinguish between the four minority racial groups, so that contracts awarded to members of all of the preferred races were aggregated in determining whether the 10 percent aspirational goal had been reached. *Id.* at 1246. In addition, the court found the MBE Act aggregated all state contracts for goods and services, so that minority participation was determined by the total number of dollars spent on state contracts. *Id.*

The court stated that in *Adarand VII*, the Tenth Circuit rejected the contention that the aspirational goals were required to correspond to an actual finding as to the number of existing minority-owned businesses. *Id.* at 1246. The court noted that the government submitted evidence in *Adarand VII*, that the effects of past discrimination had excluded minorities from entering the construction industry, and that the number of available minority subcontractors reflected that discrimination. *Id.* In light of this evidence, the district court said the Tenth Circuit held that the existing percentage of minority-owned businesses is “not necessarily an absolute cap” on the percentage that a remedial program might legitimately seek to achieve. *Id.* at 1246, citing *Adarand VII*, 228 F.3d at 1181.

Unlike *Adarand VII*, the court found that the Oklahoma State defendants did not offer “substantial evidence” that the minorities given preferential treatment under the MBE Act were prevented, through past discrimination, from entering any particular industry, or that the number of available minority subcontractors in that industry reflects that discrimination. 140 F.Supp.2d at 1246. The court concluded that the Oklahoma State defendants did not offer any evidence of the number of minority-owned businesses doing business in any of the many industries covered by the MBE Act. *Id.* at 1246–1247.

With regard to the impact on third parties factor, the court pointed out the Tenth Circuit in *Adarand VII* stated the mere possibility that innocent parties will share the burden of a remedial program is itself insufficient to warrant the conclusion that the program is not narrowly tailored. *Id.* at 1247. The district court found the MBE Act’s bid preference provisions prevented non-minority businesses from competing on an equal basis with certified minority business enterprises, and that in some instances plaintiffs had been required to lower their intended bids because they knew minority firms were bidding. *Id.* The court pointed out that the 5 percent

preference is applicable to *all* contracts awarded under the state’s Central Purchasing Act with no time limitation. *Id.*

In terms of the “under- and over-inclusiveness” factor, the court observed that the MBE Act extended its bidding preference to several racial minority groups without regard to whether each of those groups had suffered from the effects of past or present racial discrimination. *Id.* at 1247. The district court reiterated the Oklahoma State defendants did not offer any evidence at all that the minority racial groups identified in the Act had actually suffered from discrimination. *Id.*

Second, the district court found the MBE Act’s bidding preference extends to all contracts for goods and services awarded under the State’s Central Purchasing Act, without regard to whether members of the preferred minority groups had been the victims of past or present discrimination within that particular industry or trade. *Id.*

Third, the district court noted the preference extends to all businesses certified as minority-owned and controlled, without regard to whether a particular business is economically or socially disadvantaged, or has suffered from the effects of past or present discrimination. *Id.* The court thus found that the factor of over-inclusiveness weighs against a finding that the MBE Act was narrowly tailored. *Id.*

The district court in conclusion found that the Oklahoma MBE Act violated the Constitution’s Fifth Amendment guarantee of equal protection and granted the plaintiffs’ Motion for Summary Judgment.

23. Associated Utility Contractors of Maryland, Inc. v. The Mayor and City Council of Baltimore and Maryland Minority Contractors Association, Inc., 83 F. Supp.2d 613 (D. Md. 2000)

Plaintiff Associated Utility Contractors of Maryland, Inc. (“AUC”) filed this action to challenge the continued implementation of the affirmative action program created by Baltimore City Ordinance (“the Ordinance”). 83 F.Supp.2d 613 (D. Md. 2000)

The Ordinance was enacted in 1990 and authorized the City to establish annually numerical set-aside goals applicable to a wide range of public contracts, including construction subcontracts. *Id.*

AUC filed a motion for summary judgment, which the City and intervening defendant Maryland Minority Contractors Association, Inc. (“MMCA”) opposed. *Id.* at 614. In 1999, the court issued an order granting in part and denying in part the motion for summary judgment (“the December injunction”). *Id.* Specifically, as to construction contracts entered into by the City, the court enjoined enforcement of the Ordinance (and, consequently, continued implementation of the affirmative action program it authorized) in respect to the City’s 1999 numerical set-aside goals for Minority-and Women-Owned Business Enterprises (“MWBs”), which had been established at 20% and 3%, respectively. *Id.* The court denied the motion for summary judgment as to the plaintiff’s facial attack on the constitutionality of the Ordinance, concluding that there existed “a dispute of material fact as to whether the enactment of the Ordinance was adequately supported

by a factual record of unlawful discrimination properly remediable through race- and gender-based affirmative action.” *Id.*

The City appealed the entry of the December injunction to the United States Court of Appeals for the Fourth Circuit. In addition, the City filed a motion for stay of the injunction. *Id.* In support of the motion for stay, the City contended that AUC lacked organizational standing to challenge the Ordinance. The court held the plaintiff satisfied the requirements for organizational standing as to the set-aside goals established by the City for 1999. *Id.*

The City also contended that the court erred in failing to forebear from the adjudication of this case and of the motion for summary judgment until after it had completed an alleged disparity study which, it contended, would establish a justification for the set-aside goals established for 1999. *Id.* The court said this argument, which the court rejected, rested on the notion that a governmental entity might permissibly adopt an affirmative action plan including set-aside goals and wait until such a plan is challenged in court before undertaking the necessary studies upon which the constitutionality of the plan depends. *Id.*

Therefore, because the City offered no contemporaneous justification for the 1999 set-aside goals it adopted on the authority of the Ordinance, the court issued an injunction in its 1999 decision and declined to stay its effectiveness. *Id.* Since the injunction awarded complete relief to the AUC, and any effort to adjudicate the issue of whether the City would adopt revised set-aside goals on the authority of the Ordinance was wholly speculative undertaking, the court dismissed the case without prejudice. *Id.*

Facts and Procedural History. In 1986, the City Council enacted in Ordinance 790 the first city-wide affirmative action set-aside goals, which required, *inter alia*, that for all City contracts, 20% of the value of subcontracts be awarded to Minority-Owned Business Enterprises (“MBEs”) and 3% to Women-Owned Business Enterprises (“WBEs”). *Id.* at 615. As permitted under then controlling Supreme Court precedent, the court said Ordinance 790 was justified by a finding that general societal discrimination had disadvantaged MWBEs. Apparently, no disparity statistics were offered to justify Ordinance 790. *Id.*

After the Supreme Court announced its decision in *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989), the City convened a Task Force to study the constitutionality of Ordinance 790. *Id.* The Task Force held hearings and issued a Public Comment Draft Report on November 1, 1989. *Id.* It held additional hearings, reviewed public comments and issued its final report on April 11, 1990, recommending several amendments to Ordinance 790. *Id.* The City Council conducted hearings, and in June 1990, enacted Ordinance 610, the law under attack in this case. *Id.*

In enacting Ordinance 610, the City Council found that it was justified as an appropriate remedy of “[p]ast discrimination in the City’s contracting process by prime contractors against minority and women’s business enterprises....” *Id.* The City Council also found that “[m]inority and women’s business enterprises ... have had difficulties in obtaining financing, bonding, credit and insurance;” that “[t]he City of Baltimore has created a number of different assistance programs to help small businesses with these problems ... [but that t]hese assistance programs have not been effective in either remedying the effects of past discrimination ... or in preventing ongoing discrimination.” *Id.*

The operative section of Ordinance 610 relevant to this case mandated a procedure by which set-aside goals were to be established each year for minority and women owned business participation in City contracts. *Id.* The Ordinance itself did not establish any goals, but directed the Mayor to consult with the Chief of Equal Opportunity Compliance and “contract authorities” and to annually specify goals for each separate category of contracting “such as public works, professional services, concession and purchasing contracts, as well as any other categories that the Mayor deems appropriate.” *Id.*

In 1990, upon its enactment of the Ordinance, the City established across-the-board set-aside goals of 20% MBE and 3% WBE for all City contracts with no variation by market. *Id.* The court found the City simply readopted the 20% MBE and 3% WBE subcontractor participation goals from the prior law, Ordinance 790, which the Ordinance had specifically repealed. *Id.* at 616. These same set-aside goals, the court said, were adopted without change and without factual support in each succeeding year since 1990. *Id.*

No annual study ever was undertaken to support the implementation of the affirmative action program generally or to support the establishment of any annual goals, the court concluded, and the City did not collect the data which could have permitted such findings. *Id.* No disparity study existed or was undertaken until the commencement of this law suit. *Id.* Thus, the court held the City had no reliable record of the availability of MWBEs for each category of contracting, and thus no way of determining whether its 20% and 3% goals were rationally related to extant discrimination (or the continuing effects thereof) in the letting of public construction contracts. *Id.*

AUC has associational standing. AUC established that it had associational standing to challenge the set-aside goals adopted by the City in 1999. *Id.* Specifically, AUC sufficiently established that its members were “ready and able” to bid for City public works contracts. *Id.* No more, the court noted, was required. *Id.*

The court found that AUC’s members were disadvantaged by the goals in the bidding process, and this alone was a cognizable injury. *Id.* For the purposes of an equal protection challenge to affirmative action set-aside goals, the court stated the Supreme Court has held that the “ ‘injury in fact’ is the inability to compete on an equal footing in the bidding process ...” *Id.* at 617, quoting *Northeastern Florida Chapter*, 508 U.S. at 666, and citing *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200, 211 (1995).

The Supreme Court in *Northeastern Florida Chapter* held that individual standing is established to challenge a set-aside program when a party demonstrates “that it is able and ready to bid on contracts and that a discriminatory policy prevents it from doing so on an equal basis.” *Id.* at 616 quoting, *Northeastern*, 508 U.S. at 666. The Supreme Court further held that once a party shows it is “ready and able” to bid in this context, the party will have sufficiently shown that the set-aside goals are “the ‘cause’ of its injury and that a judicial decree directing the city to discontinue its program would ‘redress’ the injury,” thus satisfying the remaining requirements for individual standing. *Id.* quoting *Northeastern*, at 666 & n. 5.

The court found there was ample evidence that AUC members were “ready and able” to bid on City public works contracts based on several documents in the record, and that members of AUC

would have individual standing in their own right to challenge the constitutionality of the City's set-aside goals applicable to construction contracting, satisfying the associational standing test. *Id.* at 617-18. The court held AUC had associational standing to challenge the constitutionality of the public works contracts set-aside provisions established in 1999. *Id.* at 618.

Strict scrutiny analysis. AUC complained that since their initial promulgation in 1990, the City's set-aside goals required AUC members to "select or reject certain subcontractors based upon the race, ethnicity, or gender of such subcontractors" in order to bid successfully on City public works contracts for work exceeding \$25,000 ("City public works contracts"). *Id.* at 618. AUC claimed, therefore, that the City's set-aside goals violated the Fourteenth Amendment's guarantee of equal protection because they required prime contractors to engage in discrimination which the government itself cannot perpetrate. *Id.*

The court stated that government classifications based upon race and ethnicity are reviewed under strict scrutiny, citing the Supreme Court in *Adarand*, 515 U.S. at 227; and that those based upon gender are reviewed under the less stringent intermediate scrutiny. *Id.* at 618, *citing United States v. Virginia*, 518 U.S. 515, 531 (1996). *Id.* "[A]ll racial classifications, imposed by whatever federal, state, or local governmental actor, must be analyzed by a reviewing court under strict scrutiny." *Id.* at 619, *quoting Adarand*, 515 U.S. at 227. The government classification must be narrowly tailored to achieve a compelling government interest. *Id.* *citing Croson*, 488 U.S. at 493-95. The court then noted that the Fourth Circuit has explained:

The rationale for this stringent standard of review is plain. Of all the criteria by which men and women can be judged, the most pernicious is that of race. The injustice of judging human beings by the color of their skin is so apparent that racial classifications cannot be rationalized by the casual invocation of benign remedial aims.... While the inequities and indignities visited by past discrimination are undeniable, the use of race as a reparational device risks perpetuating the very race-consciousness such a remedy purports to overcome.

Id. at 619, *quoting Maryland Troopers Ass'n, Inc. v. Evans*, 993 F.2d 1072, 1076 (4th Cir.1993) (citation omitted).

The court also pointed out that in *Croson*, a plurality of the Supreme Court concluded that state and local governments have a compelling interest in remedying identified past and present race discrimination within their borders. *Id.* at 619, *citing Croson*, 488 U.S. at 492. The plurality of the Supreme Court, according to the court, explained that the Fourteenth Amendment permits race-conscious programs that seek both to eradicate discrimination by the governmental entity itself, and to prevent the public entity from acting as a " 'passive participant' in a system of racial exclusion practiced by elements of the local construction industry" by allowing tax dollars "to finance the evil of private prejudice." *Id.* at 619, *quoting Croson*, 488 U.S. at 492. Thus, the court found *Croson* makes clear that the City has a compelling interest in eradicating and remedying *private discrimination* in the *private subcontracting* inherent in the letting of City construction contracts. *Id.*

The Fourth Circuit, the court stated, has interpreted *Croson* to impose a "two step analysis for evaluating a race-conscious remedy." *Id.* at 619 *citing Maryland Troopers Ass'n*, 993 F.2d at 1076.

“First, the [government] must have a ‘strong basis in evidence for its conclusion that remedial action [is] necessary....’ ‘Absent searching judicial inquiry into the justification for such race-based measures, there is simply no way of determining what classifications are ... in fact motivated by illegitimate notions of racial inferiority or simple racial politics.’ ” *Id.* at 619, quoting *Maryland Troopers Ass’n*, 993 F.2d at 1076 (citing *Croson*).

The second step in the *Croson* analysis, according to the court, is to determine whether the government has adopted programs that “ ‘narrowly tailor’ any preferences based on race to meet their remedial goal.” *Id.* at 619. The court found that the Fourth Circuit summarized Supreme Court jurisprudence on “narrow tailoring” as follows:

The preferences may remain in effect only so long as necessary to remedy the discrimination at which they are aimed; they may not take on a life of their own. The numerical goals must be waivable if qualified minority applications are scarce, and such goals must bear a reasonable relation to minority percentages in the relevant qualified labor pool, not in the population as a whole. Finally, the preferences may not supplant race-neutral alternatives for remedying the same discrimination.

Id. at 620, quoting *Maryland Troopers Ass’n*, 993 F.2d at 1076–77 (citations omitted).

Intermediate scrutiny analysis. The court stated the intermediate scrutiny analysis for gender-based discrimination as follows: “Parties who seek to defend gender-based government action must demonstrate an ‘exceedingly persuasive justification’ for that action.” *Id.* at 620, quoting *Virginia*, 518 U.S. at 531, 116. This burden is a “demanding [one] and it rests entirely on the State.” *Id.* at 620 quoting *Virginia*, 518 U.S. at 533.

Although gender is not “a proscribed classification,” in the way race or ethnicity is, the courts nevertheless “carefully inspect[] official action that closes a door or denies opportunity” on the basis of gender. *Id.* at 620, quoting *Virginia*, 518 U.S. at 532-533. At bottom, the court concluded, a government wishing to discriminate on the basis of gender must demonstrate that its doing so serves “important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives.” *Id.* at 620, quoting *Virginia*, 518 U.S. at 533 (citations and quotations omitted).

As with the standards for race-based measures, the court found no formula exists by which to determine what evidence will justify every different type of gender-conscious measure. *Id.* at 620. However, as the Third Circuit has explained, “[l]ogically, a city must be able to rely on less evidence in enacting a gender preference than a racial preference because applying *Croson*’s evidentiary standard to a gender preference would eviscerate the difference between strict and intermediate scrutiny.” *Id.* at 620, quoting *Contractors Ass’n*, 6 F.3d at 1010.

The court pointed out that the Supreme Court has stated an affirmative action program survives intermediate scrutiny if the proponent can show it was “a product of analysis rather than a stereotyped reaction based on habit.” *Id.* at 620, quoting *Metro Broadcasting, Inc. v. F.C.C.*, 497 U.S. 547, 582–83 (1990)(internal quotations omitted). The Third Circuit, the court said, determined that “this standard requires the City to present probative evidence in support of its

stated rationale for the [10% gender set-aside] preference, discrimination against women-owned contractors.” *Id.* at 620, quoting *Contractors Ass’n*, 6 F.3d at 1010.

Preenactment versus postenactment evidence. In evaluating the first step of the Croson test, whether the City had a “strong basis in evidence for its conclusion that [race-conscious] remedial action was necessary,” the court held that it must limit its inquiry to evidence which the City actually considered before enacting the numerical goals. *Id.* at 620. The court found the Supreme Court has established the standard that preenactment evidence must provide the “strong basis in evidence” that race-based remedial action is necessary. *Id.* at 620-621.

The court noted the Supreme Court in *Wygant*, the plurality opinion, joined by four justices including Justice O’Connor, held that a state entity “must ensure that, before it embarks on an affirmative-action program, it has convincing evidence that remedial action is warranted. That is, it must have sufficient evidence to justify the conclusion that there has been prior discrimination.” *Id.* at 621, quoting *Wygant*, 476 U.S. at 277.

The court stated that because of this controlling precedent, it was compelled to analyze the evidence before the City when it adopted the 1999 set-aside goals specifying the 20% MBE participation in City construction subcontracts, and for analogous reasons, the 3% WBE preference must also be justified by preenactment evidence. *Id.* at 621.

The court said the Fourth Circuit has not ruled on the issue whether affirmative action measures must be justified by a strong basis in preenactment evidence. The court found that in the Fourth Circuit decisions invalidating state affirmative action policies in *Podberesky v. Kirwan*, 38 F.3d 147 (4th Cir.1994), and *Maryland Troopers Ass’n, Inc. v. Evans*, 993 F.2d 1072 (4th Cir.1993), the court apparently relied without comment upon post enactment evidence when evaluating the policies for *Croson* “strong basis in evidence.” *Id.* at 621, n.6, citing *Podberesky*, 38 F.3d at 154 (referring to post enactment surveys of African-American students at College Park campus); *Maryland Troopers*, 993 F.2d at 1078 (evaluating statistics about the percentage of black troopers in 1991 when deciding whether there was a statistical disparity great enough to justify the affirmative action measures in a 1990 consent decree). The court concluded, however, this issue was apparently not raised in these cases, and both were decided before the 1996 Supreme Court decision in *Shaw v. Hunt*, 517 U.S. 899, which clarified that the *Wygant* plurality decision was controlling authority on this issue. *Id.* at 621, n.6.

The court noted that three courts had held, prior to *Shaw*, that post enactment evidence may be relied upon to satisfy the *Croson* “strong basis in evidence” requirement. *Concrete Works of Colorado, Inc. v. Denver*, 36 F.3d 1513 (10th Cir.1994), cert. denied, 514 U.S. 1004, 115 S.Ct. 1315, 131 L.Ed.2d 196 (1995); *Harrison & Burrowes Bridge Constructors, Inc. v. Cuomo*, 981 F.2d 50, 60 (2d Cir.1992); *Coral Construction Co. v. King County*, 941 F.2d 910 (9th Cir.1991). *Id.* In addition, the Eleventh Circuit held in 1997 that “post enactment evidence is admissible to determine whether an affirmative action program” satisfies *Croson*. *Engineering Contractors Ass’n of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 911–12 (11th Cir.1997), cert. denied, 523 U.S. 1004 (1998). Because the court believed that *Shaw* and *Wygant* provided controlling authority on the role of post enactment evidence in the “strong basis in evidence” inquiry, it did not find these cases persuasive. *Id.* at 621.

City did not satisfy strict or intermediate scrutiny: no disparity study was completed or preenactment evidence established. In this case, the court found that the City considered no evidence in 1999 before promulgating the construction subcontracting set-aside goals of 20% for MBEs and 3% for WBEs. *Id.* at 621. Based on the absence of any record of what evidence the City considered prior to promulgating the set-aside goals for 1999, the court held there was no dispute of material fact foreclosing summary judgment in favor of plaintiff. *Id.* The court thus found that the 20% preference is not supported by a “strong basis in evidence” showing a need for a race-conscious remedial plan in 1999; nor is the 3% preference shown to be “substantially related to achievement” of the important objective of remedying gender discrimination in 1999, in the construction industry in Baltimore. *Id.*

The court rejected the City’s assertions throughout the case that the court should uphold the set-aside goals based upon statistics, which the City was in the process of gathering in a disparity study it had commissioned. *Id.* at 622. The court said the City did not provide any legal support for the proposition that a governmental entity might permissibly adopt an affirmative action plan including set-aside goals and wait until such a plan is challenged in court before undertaking the necessary studies upon which the constitutionality of the plan depends. *Id.* The in process study was not complete as of the date of this decision by the court. *Id.* The court thus stated the study could not have produced data upon which the City actually relied in establishing the set-aside goals for 1999. *Id.*

The court noted that if the data the study produced were reliable and complete, the City could have the statistical basis upon which to make the findings Ordinance 610 required, and which could satisfy the constitutionally required standards for the promulgation and implementation of narrowly tailored set-aside race-and gender conscious goals. *Id.* at 622. Nonetheless, as the record stood when the court entered the December 1999 injunction and as it stood as of the date of the decision, there were no data in evidence showing a disparity, let alone a gross disparity, between MWBE availability and utilization in the subcontracting construction market in Baltimore City. *Id.* The City possessed no such evidence when it established the 1999 set-aside goals challenged in the case. *Id.*

A percentage set-aside measure, like the MWBE goals at issue, the court held could only be justified by reference to the overall availability of minority- and women-owned businesses in the relevant markets. *Id.* In the absence of such figures, the 20% MBE and 3% WBE set aside figures were arbitrary and unenforceable in light of controlling Supreme Court and Fourth Circuit authority. *Id.*

Holding. The court held that for these reasons it entered the injunction against the City on December 1999 and it remained fully in effect. *Id.* at 622. Accordingly, the City’s motion for stay of the injunction order was denied and the action was dismissed without prejudice. *Id.* at 622.

The court held unconstitutional the City of Baltimore’s “affirmative action” program, which had construction subcontracting “set-aside” goals of 20 percent for MBEs and 3 percent for WBEs. The court held there was no data or statistical evidence submitted by the City prior to enactment of the Ordinance. There was no evidence showing a disparity between MBE/WBE availability and utilization in the subcontracting construction market in Baltimore. The court enjoined the City Ordinance.

24. *Webster v. Fulton County*, 51 F. Supp.2d 1354 (N.D. Ga. 1999), affirmed per curiam 218 F.3d 1267 (11th Cir. 2000)

This case is instructive as it is another instance in which a court has considered, analyzed, and ruled upon a race-, ethnicity- and gender-conscious program, holding the local government MBE/WBE-type program failed to satisfy the strict scrutiny constitutional standard. The case also is instructive in its application of the *Engineering Contractors Association* case, including to a disparity analysis, the burdens of proof on the local government, and the narrowly tailored prong of the strict scrutiny test.

In this case, plaintiff Webster brought an action challenging the constitutionality of Fulton County's (the "County") minority and female business enterprise program ("M/FBE") program. 51 F. Supp.2d 1354, 1357 (N.D. Ga. 1999). [The district court first set forth the provisions of the M/FBE program and conducted a standing analysis at 51 F. Supp.2d at 1356-62].

The court, citing *Engineering Contractors Association of S. Florida, Inc. v. Metro. Engineering Contractors Association*, 122 F.3d 895 (11th Cir. 1997), held that "[e]xplicit racial preferences may not be used except as a 'last resort.'" *Id.* at 1362-63. The court then set forth the strict scrutiny standard for evaluating racial and ethnic preferences and the four factors enunciated in *Engineering Contractors Association*, and the intermediate scrutiny standard for evaluating gender preferences. *Id.* at 1363. The court found that under *Engineering Contractors Association*, the government could utilize both post-enactment and pre-enactment evidence to meet its burden of a "strong basis in evidence" for strict scrutiny, and "sufficient probative evidence" for intermediate scrutiny. *Id.*

The court found that the defendant bears the initial burden of satisfying the aforementioned evidentiary standard, and the ultimate burden of proof remains with the challenging party to demonstrate the unconstitutionality of the M/FBE program. *Id.* at 1364. The court found that the plaintiff has at least three methods "to rebut the inference of discrimination with a neutral explanation: (1) demonstrate that the statistics are flawed; (2) demonstrate that the disparities shown by the statistics are not significant; or (3) present conflicting statistical data." *Id.*, citing *Eng'g Contractors Ass'n*, 122 F.3d at 916.

[The district court then set forth the *Engineering Contractors Association* opinion in detail.]

The court first noted that the Eleventh Circuit has recognized that disparity indices greater than 80 percent are generally not considered indications of discrimination. *Id.* at 1368, citing *Eng'g Contractors Assoc.*, 122 F.3d at 914. The court then considered the County's pre-1994 disparity study (the "Brimmer-Marshall Study") and found that it failed to establish a strong basis in evidence necessary to support the M/FBE program. *Id.* at 1368.

First, the court found that the study rested on the inaccurate assumption that a statistical showing of underutilization of minorities in the marketplace as a whole was sufficient evidence of discrimination. *Id.* at 1369. The court cited *City of Richmond v. J.A. Croson Co.*, 488 U.S. 496 (1989) for the proposition that discrimination must be focused on contracting by the entity that is considering the preference program. *Id.* Because the Brimmer-Marshall Study contained no statistical evidence of discrimination by the County in the award of contracts, the court found the County must show that it was a "passive participant" in discrimination by the private sector. *Id.*

The court found that the County could take remedial action if it had evidence that prime contractors were systematically excluding minority-owned businesses from subcontracting opportunities, or if it had evidence that its spending practices are “exacerbating a pattern of prior discrimination that can be identified with specificity.” *Id.* However, the court found that the Brimmer-Marshall Study contained no such data. *Id.*

Second, the Brimmer-Marshall study contained no regression analysis to account for relevant variables, such as firm size. *Id.* at 1369-70. At trial, Dr. Marshall submitted a follow-up to the earlier disparity study. However, the court found the study had the same flaw in that it did not contain a regression analysis. *Id.* The court thus concluded that the County failed to present a “strong basis in evidence” of discrimination to justify the County’s racial and ethnic preferences. *Id.*

The court next considered the County’s post-1994 disparity study. *Id.* at 1371. The study first sought to determine the availability and utilization of minority- and female-owned firms. *Id.* The court explained:

Two methods may be used to calculate availability: (1) bid analysis; or (2) bidder analysis. In a bid analysis, the analyst counts the number of bids submitted by minority or female firms over a period of time and divides it by the total number of bids submitted in the same period. In a bidder analysis, the analyst counts the number of minority or female firms submitting bids and divides it by the total number of firms which submitted bids during the same period.

Id. The court found that the information provided in the study was insufficient to establish a firm basis in evidence to support the M/FBE program. *Id.* at 1371-72. The court also found it significant to conduct a regression analysis to show whether the disparities were either due to discrimination or other neutral grounds. *Id.* at 1375-76.

The plaintiff and the County submitted statistical studies of data collected between 1994 and 1997. *Id.* at 1376. The court found that the data were potentially skewed due to the operation of the M/FBE program. *Id.* Additionally, the court found that the County’s standard deviation analysis yielded non-statistically significant results (noting the Eleventh Circuit has stated that scientists consider a finding of two standard deviations significant). *Id.* (internal citations omitted).

The court considered the County’s anecdotal evidence, and quoted *Engineering Contractors Association* for the proposition that “[a]necdotal evidence can play an important role in bolstering statistical evidence, but that only in the rare case will anecdotal evidence suffice standing alone.” *Id.*, quoting *Eng’g Contractors Ass’n*, 122 F.3d at 907. The Brimmer-Marshall Study contained anecdotal evidence. *Id.* at 1379. Additionally, the County held hearings but after reviewing the tape recordings of the hearings, the court concluded that only two individuals testified to discrimination by the County; one of them complained that the County used the M/FBE program to only benefit African Americans. *Id.* The court found the most common complaints concerned barriers in bonding, financing, and insurance and slow payment by prime

contractors. *Id.* The court concluded that the anecdotal evidence was insufficient in and of itself to establish a firm basis for the M/FBE program. *Id.*

The court also applied a narrow tailoring analysis of the M/FBE program. “The Eleventh Circuit has made it clear that the essence of this inquiry is whether racial preferences were adopted only as a ‘last resort.’” *Id.* at 1380, citing *Eng’g Contractors Assoc.*, 122 F.3d at 926. The court cited the Eleventh Circuit’s four-part test and concluded that the County’s M/FBE program failed on several grounds. First, the court found that a race-based problem does not necessarily require a race-based solution. “If a race-neutral remedy is sufficient to cure a race-based problem, then a race-conscious remedy can never be narrowly tailored to that problem.” *Id.*, quoting *Eng’g Contractors Ass’n*, 122 F.3d at 927. The court found that there was no evidence of discrimination by the County. *Id.* at 1380.

The court found that even though a majority of the Commissioners on the County Board were African American, the County had continued the program for decades. *Id.* The court held that the County had not seriously considered race-neutral measures:

There is no evidence in the record that any Commissioner has offered a resolution during this period substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity. There is no evidence in the record of any proposal by the staff of Fulton County of substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity. There has been no evidence offered of any debate within the Commission about substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity *Id.*

The court found that the random inclusion of ethnic and racial groups who had not suffered discrimination by the County also mitigated against a finding of narrow tailoring. *Id.* The court found that there was no evidence that the County considered race-neutral alternatives as an alternative to race-conscious measures nor that race-neutral measures were initiated and failed. *Id.* at 1381. The court concluded that because the M/FBE program was not adopted as a last resort, it failed the narrow tailoring test. *Id.*

Additionally, the court found that there was no substantial relationship between the numerical goals and the relevant market. *Id.* The court rejected the County’s argument that its program was permissible because it set “goals” as opposed to “quotas,” because the program in *Engineering Contractors Association* also utilized “goals” and was struck down. *Id.*

Per the M/FBE program’s gender-based preferences, the court found that the program was sufficiently flexible to satisfy the substantial relationship prong of the intermediate scrutiny standard. *Id.* at 1383. However, the court held that the County failed to present “sufficient probative evidence” of discrimination necessary to sustain the gender-based preferences portion of the M/FBE program. *Id.*

The court found the County’s M/FBE program unconstitutional and entered a permanent injunction in favor of the plaintiff. *Id.* On appeal, the Eleventh Circuit affirmed per curiam, stating only that it affirmed on the basis of the district court’s opinion. *Webster v. Fulton County, Georgia*, 218 F.3d 1267 (11th Cir. 2000).

25. **Associated Gen. Contractors v. Drabik, 50 F. Supp.2d 741 (S.D. Ohio 1999)**

The district court in this case pointed out that it had struck down Ohio's MBE statute that provided race-based preferences in the award of state construction contracts in 1998. 50 F.Supp.2d at 744. Two weeks earlier, the district court for the Northern District of Ohio, likewise, found the same Ohio law unconstitutional when it was relied upon to support a state mandated set-aside program adopted by the Cuyahoga Community College. *See F. Buddie Contracting, Ltd. v. Cuyahoga Community College District*, 31 F.Supp.2d 571 (N.D. Ohio 1998). *Id.* at 741.

The state defendant's appealed this court's decision to the United States court of Appeals for the Sixth Circuit. *Id.* Thereafter, the Supreme Court of Ohio held in the case of *Ritchey Produce, Co., Inc. v. The State of Ohio, Department of Administrative*, 704 N.E. 2d 874 (1999), that the Ohio statute, which provided race-based preferences in the state's purchase of nonconstruction-related goods and services, was constitutional. *Id.* at 744.

While this court's decision related to construction contracts and the Ohio Supreme Court's decision related to other goods and services, the decisions could not be reconciled, according to the district court. *Id.* at 744. Subsequently, the state defendants moved this court to stay its order of November 2, 1998 in light of the Ohio State Supreme Court's decision in *Ritchey Produce*. The district court took the opportunity in this case to reconsider its decision of November 2, 1998, and to the reasons given by the Supreme Court of Ohio for reaching the opposite result in *Ritchey Produce*, and decide in this case that its original decision was correct, and that a stay of its order would only serve to perpetuate a "blatantly unconstitutional program of race-based benefits. *Id.* at 745.

In this decision, the district court reaffirmed its earlier holding that the State of Ohio's MBE program of construction contract awards is unconstitutional. The court cited to *F. Buddie Contracting v. Cuyahoga Community College*, 31 F. Supp.2d 571 (N.D. Ohio 1998), holding a similar local Ohio program unconstitutional. The court repudiated the Ohio Supreme Court's holding in *Ritchey Produce*, 707 N.E. 2d 871 (Ohio 1999), which held that the State of Ohio's MBE program as applied to the state's purchase of non-construction-related goods and services was constitutional. The court found the evidence to be insufficient to justify the Ohio MBE program. The court held that the program was not narrowly tailored because there was no evidence that the State had considered a race-neutral alternative.

Strict Scrutiny. The district court held that the Supreme Court of Ohio decision in *Ritchey Produce* was wrongly decided for the following reasons:

(1) Ohio's MBE program of race-based preferences in the award of state contracts was unconstitutional because it is unlimited in duration. *Id.* at 745.

(2) a program of race-based benefits can not be supported by evidence of discrimination which is over 20 years old. *Id.*

(3) the state Supreme Court found that there was a severe numerical imbalance in the amount of business the State did with minority-owned enterprises, based on its uncritical acceptance of essentially "worthless calculations contained in a twenty-one year-old report, which miscalculated the percentage of minority-owned businesses in

Ohio and misrepresented data on the percentage of state purchase contracts they had received, all of which was easily detectable by examining the data cited by the authors of the report.” *Id.* at 745.

(4) The state Supreme Court failed to recognize that the incorrectly calculated percentage of minority-owned businesses in Ohio (6.7 percent) bears no relationship to the 15 percent set-aside goal of the Ohio Act. *Id.*

(5) the state Supreme Court applied an incorrect rule of law when it announced that Ohio’s program must be upheld unless it is clearly unconstitutional beyond a reasonable doubt, whereas according to the district court in this case, the Supreme Court of the United States has said that all racial class classifications are highly suspect and must be subjected to strict judicial scrutiny. *Id.*

(6) the evidence of past discrimination that the Ohio General Assembly had in 1980 did not provide a firm basis in evidence for a race-based remedy. *Id.*

Thus, the district court determined the evidence could not support a compelling state-interest for race-based preferences for the state of Ohio MBE Act, in part based on the fact evidence of past discrimination was stale and twenty years old, and the statistical analysis was insufficient because the state did not know how many MBE’s in the relevant market are qualified to undertake prime or subcontracting work in public construction contracts. *Id.* at 763-771. The statistical evidence was fatally flawed because the relevant universe of minority businesses is not all minority businesses in the state of Ohio, but only those willing and able to enter into contracts with the state of Ohio. *Id.* at 761. In the case of set-aside program in state construction, the relevant universe is minority-owned construction firms willing and able to enter into state construction contracts. *Id.*

Narrow Tailoring. The court addressed the second prong of the strict scrutiny analysis, and found that the Ohio MBE program at issue was not narrowly tailored. The court concluded that the state could not satisfy the four factors to be considered in determining whether race-conscious remedies are appropriate. *Id.* at 763. First, the court stated that there was no consideration of race-neutral alternatives to increase minority participation in state contracting before resorting to “race-based quotas”. *Id.* at 763-764. The court held that failure to consider race-neutral means was fatal to the set-aside program in *Croson*, and the failure of the State of Ohio to consider race-neutral means before adopting the MBE Act in 1980 likewise “dooms Ohio’s program of race-based quotas”. *Id.* at 765.

Second, the court found the Ohio MBE Act was not flexible. The court stated that instead of allowing flexibility to ameliorate harmful effects of the program, the imprecision of the statutory goals has been used to justify bureaucratic decisions which increase its impact on non-minority business.” *Id.* at 765. The court said the waiver system for prime contracts focuses solely on the availability of MBEs. *Id.* at 766. The court noted the awarding agency may remove the contract from the set aside program and open it up for bidding by non-minority contractors if no certified MBE submits a bid, or if all bids submitted by MBEs are considered unacceptably high. *Id.* But, in either event, the court pointed out the agency is then required to set aside additional contracts to satisfy the numerical quota required by the statute. *Id.* The court concluded that there is no

consideration given to whether the particular MBE seeking a racial preference has suffered from the effects of past discrimination by the state or prime contractors. *Id.*

Third, the court found the Ohio MBE Act was not appropriately limited such that it will not last longer than the discriminatory effects it was designed to eliminate. *Id.* at 766. The court stated the 1980 MBE Act is unlimited in duration, and there is no evidence the state has ever reconsidered whether a compelling state interest exists that would justify the continuation of a race-based remedy at any time during the two decades the Act has been in effect. *Id.*

Fourth, the court found the goals of the Ohio MBE Act were not related to the relevant market and that the Act failed this element of the “narrowly tailored” requirement of strict scrutiny. *Id.* at 767-768. The court said the goal of 15 percent far exceeds the percentage of available minority firms, and thus bears no relationship to the relevant market. *Id.*

Fifth, the court found the conclusion of the Ohio Supreme Court that the burdens imposed on non-MBEs by virtue of the set-aside requirements were relatively light was incorrect. *Id.* at 768. The court concluded non-minority contractors in various trades were effectively excluded from the opportunity to bid on any work from large state agencies, departments, and institutions solely because of their race. *Id.* at 678.

Sixth, the court found the Ohio MBE Act provided race-based benefits based on a random inclusion of minority groups. *Id.* at 770-771. The court stated there was no evidence about the number of each racial or ethnic group or the respective shares of the total capital improvement expenditures they received. *Id.* at 770. None of the statistical information, the court said, broke down the percentage of all firms that were owned by specific minority groups or the dollar amounts of contracts received by firms in specific minority groups. *Id.* The court, thus, concluded that the Ohio MBE Act included minority groups randomly without any specific evidence that any group suffered from discrimination in the construction industry in Ohio. *Id.* at 771.

Conclusion. The court thus denied the motion of the state defendants to stay the court’s prior order holding unconstitutional the Ohio MBE Act pending the appeal of the court’s order. *Id.* at 771. This opinion underscored that governments must show several factors to demonstrate narrow tailoring: (1) the necessity for the relief and the efficacy of alternative remedies, (2) flexibility and duration of the relief, (3) relationship of numerical goals to the relevant labor market, and (4) impact of the relief on the rights of third parties. The court held the Ohio MBE program failed to satisfy this test.

26. *Phillips & Jordan, Inc. v. Watts*, 13 F. Supp.2d 1308 (N.D. Fla. 1998)

This case is instructive because it addressed a challenge to a state and local government MBE/WBE-type program and considered the requisite evidentiary basis necessary to support the program. In *Phillips & Jordan*, the district court for the Northern District of Florida held that the Florida Department of Transportation’s (“FDOT”) program of “setting aside” certain highway maintenance contracts for African American- and Hispanic-owned businesses violated the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution. The parties stipulated that the plaintiff, a non-minority business, had been excluded in the past and may be excluded in the future from competing for certain highway maintenance contracts “set aside” for

business enterprises owned by Hispanic and African American individuals. The court held that the evidence of statistical disparities was insufficient to support the Florida DOT program.

The district court pointed out that Florida DOT did not claim that it had evidence of intentional discrimination in the award of its contracts. The court stated that the essence of FDOT's claim was that the two year disparity study provided evidence of a disparity between the proportion of minorities awarded FDOT road maintenance contracts and a portion of the minorities "supposedly willing and able to do road maintenance work," and that FDOT did not itself engage in any racial or ethnic discrimination, so FDOT must have been a passive participant in "somebody's" discriminatory practices.

Since it was agreed in the case that FDOT did not discriminate against minority contractors bidding on road maintenance contracts, the court found that the record contained insufficient proof of discrimination. The court found the evidence insufficient to establish acts of discrimination against African American- and Hispanic-owned businesses.

The court raised questions concerning the choice and use of the statistical pool of available firms relied upon by the disparity study. The court expressed concern about whether it was appropriate to use Census data to analyze and determine which firms were available (qualified and/or willing and able) to bid on FDOT road maintenance contracts.

F. Recent Decisions Involving the Federal DBE Program and its Implementation by State and Local Governments

There are several recent and pending cases involving challenges to the United States Federal DBE Program and its implementation by the states and their governmental entities for federally-funded projects. These cases could have a significant impact on the nature and provisions of contracting and procurement on federally-funded projects, including and relating to the utilization of DBEs. In addition, these cases provide an instructive analysis of the recent application of the strict scrutiny test to MBE/WBE- and DBE-type programs.

Recent Decisions in Federal Circuit Courts of Appeal

1. *Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.*, 2017 WL 2179120 (9th Cir. May 16, 2017), Memorandum opinion, (Not for Publication) United States Court of Appeals for the Ninth Circuit, May 16, 2017, Docket Nos. 14-26097 and 15-35003, *dismissing in part, reversing in part and remanding* the U.S. District Court decision at 2014 WL 6686734 (D. Mont. Nov. 26, 2014)

Note: The Ninth Circuit Court of Appeals Memorandum provides: "This disposition is not appropriate for publication and is not precedent except as provided by Ninth Circuit Rule 36-3."

Introduction. Mountain West Holding Company installs signs, guardrails, and concrete barriers on highways in Montana. It competes to win subcontracts from prime contractors who have contracted with the State. It is not owned and controlled by women or minorities. Some of its competitors are disadvantaged business enterprises (DBEs) owned by women or minorities. In this case it claims that Montana's DBE goal-setting program unconstitutionally required prime

contractors to give preference to these minority or female-owned competitors, which Mountain West Holdings Company argues is a violation of the Equal Protection Clause, 42 U.S.C. § 1983 and Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d, *et seq.*

Factual and procedural background. *In Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.*, 2014 WL 6686734 (D. Mont. Nov. 26, 2014); Case No. 1:13-CV-00049-DLC, United States District Court for the District of Montana, Billings Division, plaintiff Mountain West Holding Co., Inc. (“Mountain West”), alleged it is a contractor that provides construction-specific traffic planning and staffing for construction projects as well as the installation of signs, guardrails, and concrete barriers. Mountain West sued the Montana Department of Transportation (“MDT”) and the State of Montana, challenging their implementation of the Federal DBE Program. Mountain West brought this action alleging violation of the Equal Protection Clause of the Fourteenth Amendment of the United States Constitution, Title VI of the Civil Rights Act, 42 USC § 2000(d)(7), and 42 USC § 1983.

Following the Ninth Circuit’s 2005 decision in *Western States Paving v. Washington DOT, et al.*, MDT commissioned a disparity study which was completed in 2009. MDT utilized the results of the disparity study to establish its overall DBE goal. MDT determined that to meet its overall goal, it would need to implement race-conscious contract specific goals. Based upon the disparity study, Mountain West alleges the State of Montana utilized race, national origin, and gender-conscious goals in highway construction contracts. Mountain West claims the State did not have a strong basis in evidence to show there was past discrimination in the highway construction industry in Montana and that the implementation of race, gender, and national origin preferences were necessary or appropriate. Mountain West also alleges that Montana has instituted policies and practices which exceed the United States Department of Transportation DBE requirements.

Mountain West asserts that the 2009 study concluded all “relevant” minority groups were underutilized in “professional services” and Asian Pacific Americans and Hispanic Americans were underutilized in “business categories combined,” but it also concluded that all “relevant” minority groups were significantly overutilized in construction. Mountain West thus alleges that although the disparity study demonstrates that DBE groups are “significantly overrepresented” in the highway construction field, MDT has established preferences for DBE construction subcontractor firms over non-DBE construction subcontractor firms in the award of contracts.

Mountain West also asserts that the Montana DBE Program does not have a valid statistical basis for the establishment or inclusion of race, national origin, and gender conscious goals, that MDT inappropriately relies upon the 2009 study as the basis for its DBE Program, and that the study is flawed. Mountain West claims the Montana DBE Program is not narrowly tailored because it disregards large differences in DBE firm utilization in MDT contracts as among three different categories of subcontractors: business categories combined, construction, and professional services; the MDT DBE certification process does not require the applicant to specify any specific racial or ethnic prejudice or cultural bias that had a negative impact upon his or her business success; and the certification process does not require the applicant to certify that he or she was discriminated against in the State of Montana in highway construction.

Mountain West and the State of Montana and the MDT filed cross Motions for Summary Judgment. Mountain West asserts that there was no evidence that all relevant minority groups had suffered discrimination in Montana's transportation contracting industry because, while the study had determined there were substantial disparities in the utilization of all minority groups in professional services contracts, there was no disparity in the utilization of minority groups in construction contracts.

AGC, San Diego v. California DOT and Western States Paving Co. v. Washington DOT. The Ninth Circuit and the district court in *Mountain West* applied the decision in *Western States*, 407 F.3d 983 (9th Cir. 2005), and the decision in *AGC, San Diego v. California DOT*, 713 F.3d 1187 (9th Cir. 2013) as establishing the law to be followed in this case. The district court noted that in *Western States*, the Ninth Circuit held that a state's implementation of the Federal DBE Program can be subject to an as-applied constitutional challenge, despite the facial validity of the Federal DBE Program. 2014 WL 6686734 at *2 (D. Mont. November 26, 2014). The Ninth Circuit and the district court stated the Ninth Circuit has held that whether a state's implementation of the DBE Program "is narrowly tailored to further Congress's remedial objective depends upon the presence or absence of discrimination in the State's transportation contracting industry." *Mountain West*, 2014 WL 6686734 at *2, quoting *Western States*, at 997-998, and *Mountain West*, 2017 WL 2179120 at *2 (9th Cir. May 16, 2017) Memorandum, May 16, 2017, at 5-6, quoting *AGC, San Diego v. California DOT*, 713 F.3d 1187, 1196. The Ninth Circuit in *Mountain West* also pointed out it had held that "even when discrimination is present within a State, a remedial program is only narrowly tailored if its application is limited to those minority groups that have actually suffered discrimination." *Mountain West*, 2017 WL 2179120 at *2, Memorandum, May 16, 2017, at 6, and 2014 WL 6686734 at *2, quoting *Western States*, 407 F.3d at 997-999.

MDT study. MDT obtained a firm to conduct a disparity study that was completed in 2009. The district court in *Mountain West* stated that the results of the study indicated significant underutilization of DBEs in all minority groups in "professional services" contracts, significant underutilization of Asian Pacific Americans and Hispanic Americans in "business categories combined," slight underutilization of nonminority women in "business categories combined," and overutilization of all groups in subcontractor "construction" contracts. *Mountain West*, 2014 WL 6686734 at *2.

In addition to the statistical evidence, the 2009 disparity study gathered anecdotal evidence through surveys and other means. The district court stated the anecdotal evidence suggested various forms of discrimination existed within Montana's transportation contracting industry, including evidence of an exclusive "good ole boy network" that made it difficult for DBEs to break into the market. *Id.* at *3. The district court said that despite these findings, the consulting firm recommended that MDT continue to monitor DBE utilization while employing only race-neutral means to meet its overall goal. *Id.* The consulting firm recommended that MDT consider the use of race-conscious measures if DBE utilization decreased or did not improve.

Montana followed the recommendations provided in the study, and continued using only race-neutral means in its effort to accomplish its overall goal for DBE utilization. *Id.* Based on the statistical analysis provided in the study, Montana established an overall DBE utilization goal of 5.83 percent. *Id.*

Montana’s DBE utilization after ceasing the use of contract goals. The district court found that in 2006, Montana achieved a DBE utilization rate of 13.1 percent, however, after Montana ceased using contract goals to achieve its overall goal, the rate of DBE utilization declined sharply. 2014 WL 6686734 at *3. The utilization rate dropped, according to the district court, to 5 percent in 2007, 3 percent in 2008, 2.5 percent in 2009, 0.8 percent in 2010, and in 2011, it was 2.8 percent *Id.* In response to this decline, for fiscal years 2011-2014, the district court said MDT employed contract goals on certain USDOT contracts in order to achieve 3.27 percentage points of Montana’s overall goal of 5.83 percent DBE utilization.

MDT then conducted and prepared a new Goal Methodology for DBE utilization for federal fiscal years 2014-2016. *Id.* US DOT approved the new and current goal methodology for MDT, which does not provide for the use of contract goals to meet the overall goal. *Id.* Thus, the new overall goal is to be made entirely through the use of race-neutral means. *Id.*

Mountain West’s claims for relief. Mountain West sought declaratory and injunctive relief, including prospective relief, against the individual defendants, and sought monetary damages against the State of Montana and the MDT for alleged violation of Title VI. 2014 WL 6686734 at *3. Mountain West’s claim for monetary damages is based on its claim that on three occasions it was a low-quoting subcontractor to a prime contractor submitting a bid to the MDT on a project that utilized contract goals, and that despite being a low-quoting bidder, Mountain West was not awarded the contract. *Id.* Mountain West brings an as-applied challenge to Montana’s DBE program. *Id.*

The two-prong test to demonstrate that a DBE program is narrowly tailored. The Court, *citing* AGC, *San Diego v. California DOT*, 713 F.3d 1187, 1196, stated that under the two-prong test established in *Western States*, in order to demonstrate that its DBE program is narrowly tailored, (1) the state must establish the presence of discrimination within its transportation contracting industry, and (2) the remedial program must be limited to those minority groups that have actually suffered discrimination. *Mountain West*, 2017 WL 2179120 at *2, Memorandum, May 16, 2017, at 6-7.

District Court Holding in 2014 and the Appeal. The district court granted summary judgment to the State, and Mountain West appealed. *See Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.* 2014 WL 6686734 (D. Mont. Nov. 26, 2014) , *dismissed in part, reversed in part, and remanded*, U.S. Court of Appeals, Ninth Circuit, Docket Nos. 14-36097 and 15-35003, Memorandum 2017 WL 2179120 at **1-4 (9th Cir. May 16, 2017). Montana also appealed the district court’s threshold determination that Mountain West had a private right of action under Title VI, and it appealed the district court’s denial of the State’s motion to strike an expert report submitted in support of Mountain West’s motion.

Ninth Circuit Holding. The Ninth Circuit Court of Appeals in its Memorandum opinion dismissed Mountain West’s appeal as moot to the extent Mountain West pursues equitable remedies, affirmed the district court’s determination that Mountain West has a private right to enforce Title VI, affirmed the district court’s decision to consider the disputed expert report by Mountain West’s expert witness, and reversed the order granting summary judgment to the State. 2017 WL 2179120 at **1-4 (9th Cir. May 16, 2017), U.S. Court of Appeals, Ninth Circuit, Docket Nos. 14-36097 and 15-35003, Memorandum, at 3, 5, 11.

Mootness. The Ninth Circuit found that Montana does not currently employ gender- or race-conscious goals, and the data it relied upon as justification for its previous goals are now several years old. The Court thus held that Mountain West's claims for injunctive and declaratory relief are therefore moot. *Mountain West*, 2017 WL 2179120 at *2 (9th Cir.), Memorandum, May 16, 2017, at 4.

The Court also held, however, that Mountain West's Title VI claim for damages is not moot. 2017 WL 2179120 at **1-2. The Court stated that a plaintiff may seek damages to remedy violations of Title VI, *see* 42 U.S.C. § 2000d-7(a)(1)-(2); and Mountain West has sought damages. Claims for damages, according to the Court, do not become moot even if changes to a challenged program make claims for prospective relief moot. *Id.*

The appeal, the Ninth Circuit held, is therefore dismissed with respect to Mountain West's claims for injunctive and declaratory relief; and only the claim for damages under Title VI remains in the case. *Mountain West*, 2017 WL 2179120 at **1 (9th Cir.), Memorandum, May 16, 2017, at 4.

Private Right of Action and Discrimination under Title VI. The Court concluded for the reasons found in the district court's order that Mountain West may state a private claim for damages against Montana under Title VI. *Id.* at *2. The district court had granted summary judgment to Montana on Mountain West's claims for discrimination under Title VI.

Montana does not dispute that its program took race into account. The Ninth Circuit held that classifications based on race are permissible "only if they are narrowly tailored measures that further compelling governmental interests." *Mountain West*, 2017 WL 2179120 (9th Cir.) at *2, Memorandum, May 16, 2017, at 6-7. *W. States Paving*, 407 F.3d at 990 (quoting *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200, 227 (1995)). As in *Western States Paving*, the Court applied the same test to claims of unconstitutional discrimination and discrimination in violation of Title VI. *Mountain West*, 2017 WL 2179120 at *2, n.2, Memorandum, May 16, 2017, at 6, n. 2; *see*, 407 F.3d at 987.

Montana, the Court found bears the burden to justify any racial classifications. *Id.* In an as-applied challenge to a state's DBE contracting program, "(1) the state must establish the presence of discrimination within its transportation contracting industry, and (2) the remedial program must be 'limited to those minority groups that have actually suffered discrimination.'" *Mountain West*, 2017 WL 2179120 at *2 (9th Cir.), Memorandum, May 16, 2017, at 6-7, quoting, *Assoc. Gen. Contractors of Am. v. Cal. Dep't of Transp.*, 713 F.3d 1187, 1196 (9th Cir. 2013) (quoting *W. States Paving*, 407 F.3d at 997-99). Discrimination may be inferred from "a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality's prime contractors." *Mountain West*, 2017 WL 2179120 at *2 (9th Cir.), Memorandum, May 16, 2017, at 6-7, quoting, *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 509 (1989).

Here, the district court held that Montana had satisfied its burden. In reaching this conclusion, the district court relied on three types of evidence offered by Montana. First, it cited a study, which reported disparities in professional services contract awards in Montana. Second, the district court noted that participation by DBEs declined after Montana abandoned race-

conscious goals in the years following the decision in *Western States Paving*, 407 F.3d 983. Third, the district court cited anecdotes of a “good ol’ boys” network within the State’s contracting industry. *Mountain West*, 2017 WL 2179120 at *3 (9th Cir.), Memorandum, May 16, 2017, at 7.

The Ninth Circuit reversed the district court and held that summary judgment was improper in light of genuine disputes of material fact as to the study’s analysis, and because the second two categories of evidence were insufficient to prove a history of discrimination. *Mountain West*, 2017 WL 2179120 at *3 (9th Cir.), Memorandum, May 16, 2017, at 7.

Disputes of fact as to study. Mountain West’s expert testified that the study relied on several questionable assumptions and an opaque methodology to conclude that professional services contracts were awarded on a discriminatory basis. *Id.* at *3. The Ninth Circuit pointed out a few examples that it found illustrated the areas in which there are disputes of fact as to whether the study sufficiently supported Montana’s actions:

1. Ninth Circuit stated that its cases require states to ascertain whether lower-than-expected DBE participation is attributable to factors other than race or gender. *W. States Paving*, 407 F.3d at 1000-01. Mountain West argues that the study did not explain whether or how it accounted for a given firm’s size, age, geography, or other similar factors. The report’s authors were unable to explain their analysis in depositions for this case. Indeed, the Court noted, even Montana appears to have questioned the validity of the study’s statistical results *Mountain West*, 2017 WL 2179120 at *3 (9th Cir.), Memorandum, May 16, 2017, at 8.
2. The study relied on a telephone survey of a sample of Montana contractors. Mountain West argued that (a) it is unclear how the study selected that sample, (b) only a small percentage of surveyed contractors responded to questions, and (c) it is unclear whether responsive contractors were representative of nonresponsive contractors. 2017 WL 2179120 at *3 (9th Cir. May 16, 2017), Memorandum at 8-9.
3. The study relied on very small sample sizes but did no tests for statistical significance, and the study consultant admitted that “some of the population samples were very small and the result may not be significant statistically.” 2017 WL 2179120 at *3 (9th Cir. May 16, 2017), Memorandum at 8-9.
4. Mountain West argued that the study gave equal weight to professional services contracts and construction contracts, but professional services contracts composed less than ten percent of total contract volume in the State’s transportation contracting industry. 2017 WL 2179120 at *3 (9th Cir. May 16, 2017), Memorandum at 9.
5. Mountain West argued that Montana incorrectly compared the proportion of available subcontractors to the proportion of *prime* contract dollars awarded. The district court did not address this criticism or explain why the study’s comparison was appropriate. 2017 WL 2179120 at *3 (9th Cir. May 16, 2017), Memorandum at 9.

The post-2005 decline in participation by DBEs. The Ninth Circuit was unable to affirm the district court’s order in reliance on the decrease in DBE participation after 2005. In *Western States Paving*, it was held that a decline in DBE participation after race- and gender- based preferences are halted is not necessarily evidence of discrimination against DBEs. *Mountain*

West, 2017 WL 2179120 at *3 (9th Cir.), Memorandum, May 16, 2017, at 9, quoting *Western States*, 407 F.3d at 999 (“If [minority groups have not suffered from discrimination], then the DBE program provides minorities who have not encountered discriminatory barriers with an unconstitutional competitive advantage at the expense of both non-minorities and any minority groups that have actually been targeted for discrimination.”); *id.* at 1001 (“The disparity between the proportion of DBE performance on contracts that include affirmative action components and on those without such provisions does not provide any evidence of discrimination against DBEs.”). *Id.*

The Ninth Circuit also cited to the U.S. DOT statement made to the Court in *Western States Mountain West*, 2017 WL 2179120 at *3 (9th Cir.), Memorandum, May 16, 2017, at 10, quoting, U.S. Dep’t of Transp., *Western States Paving Co. Case Q&A* (Dec. 16, 2014) (“In calculating availability of DBEs, [a state’s] study should not rely on numbers that may have been inflated by race-conscious programs that may not have been narrowly tailored.”).

Anecdotal evidence of discrimination. The Ninth Circuit said that without a statistical basis, the State cannot rely on anecdotal evidence alone. *Mountain West*, 2017 WL 2179120 at *3 (9th Cir.), Memorandum, May 16, 2017, at 10, quoting, *Coral Const. Co. v. King Cty.*, 941 F.2d 910, 919 (9th Cir. 1991) (“While anecdotal evidence may suffice to prove individual claims of discrimination, rarely, if ever, can such evidence show a systemic pattern of discrimination necessary for the adoption of an affirmative action plan.”); and quoting, *Croson*, 488 U.S. at 509 (“[E]vidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified.”). *Id.*

In sum, the Ninth Circuit found that because it must view the record in the light most favorable to *Mountain West*’s case, it concluded that the record provides an inadequate basis for summary judgment in *Montana*’s favor. 2017 WL 2179120 at *3.

Conclusion. The Ninth Circuit thus reversed and remanded for the district court to conduct whatever further proceedings it considers most appropriate, including trial or the resumption of pretrial litigation. Therefore, the case was dismissed in part, reversed in part, and remanded to the district court. *Mountain West*, 2017 WL 2179120 at *4 (9th Cir.), Memorandum, May 16, 2017, at 11. On remand to the district court, the parties voluntarily entered into a Settlement Agreement and stipulated to the dismissal of the case on February 23, 2018. Subsequently, the district court entered an order dismissing the case on March 14, 2018.

2. Midwest Fence Corporation v. U.S. Department of Transportation, Illinois Department of Transportation, Illinois State Toll Highway Authority, 840 F.3d 932, 2016 WL 6543514 (7th Cir. 2016), cert. denied, 2017 WL 497345 (2017)

Plaintiff Midwest Fence Corporation is a guardrails and fencing specialty contractor that usually bids on projects as a subcontractor. 2016 WL 6543514 at *1. Midwest Fence is not a DBE. *Id.* Midwest Fence alleges that the defendants’ DBE programs violated its Fourteenth Amendment right to equal protection under the law, and challenges the United States DOT Federal DBE Program and the implementation of the Federal DBE Program by the Illinois DOT (IDOT). *Id.* Midwest Fence also challenges the Illinois State Toll Highway Authority (Tollway) and its implementation of its DBE Program. *Id.*

The district court granted all the defendants' motions for summary judgment. *Id.* at *1. See *Midwest Fence Corp. v. U.S. Department of Transportation, et al.*, 84 F. Supp. 3d 705 (N.D. Ill. 2015) (see discussion of district court decision below). The Seventh Circuit Court of Appeals affirmed the grant of summary judgment by the district court. *Id.* The court held that it joins the other federal circuit courts of appeal in holding that the Federal DBE Program is facially constitutional, the program serves a compelling government interest in remedying a history of discrimination in highway construction contracting, the program provides states with ample discretion to tailor their DBE programs to the realities of their own markets and requires the use of race- and gender-neutral measures before turning to race- and gender-conscious measures. *Id.*

The court of appeals also held the IDOT and Tollway programs survive strict scrutiny because these state defendants establish a substantial basis in evidence to support the need to remedy the effects of past discrimination in their markets, and the programs are narrowly tailored to serve that remedial purpose. *Id.* at *1.

Procedural history. Midwest Fence asserted the following primary theories in its challenge to the Federal DBE Program, IDOT's implementation of it, and the Tollway's own program:

1. The federal regulations prescribe a method for setting individual contract goals that places an undue burden on non-DBE subcontractors, especially certain kinds of subcontractors, including guardrail and fencing contractors like Midwest Fence.
2. The presumption of social and economic disadvantage is not tailored adequately to reflect differences in the circumstances actually faced by women and the various racial and ethnic groups who receive that presumption.
3. The federal regulations are unconstitutionally vague, particularly with respect to good faith efforts to justify a front-end waiver.

Id. at *3-4. Midwest Fence also asserted that IDOT's implementation of the Federal DBE Program is unconstitutional for essentially the same reasons. And, Midwest Fence challenges the Tollway's program on its face and as applied. *Id.* at *4.

The district court found that Midwest Fence had standing to bring most of its claims and on the merits, and the court upheld the facial constitutionality of the Federal DBE Program. 84 F. Supp. 3d at 722-23 729; *id.* at *4.

The district court also concluded Midwest Fence did not rebut the evidence of discrimination that IDOT offered to justify its program, and Midwest Fence had presented no "affirmative evidence" that IDOT's implementation unduly burdened non-DBEs, failed to make use of race-neutral alternatives, or lacked flexibility. 84 F. Supp. 3d at 733, 737; *id.* at *4.

The district court noted that Midwest Fence's challenge to the Tollway's program paralleled the challenge to IDOT's program, and concluded that the Tollway, like IDOT, had established a strong basis in evidence for its program. 84 F. Supp. 3d at 737, 739; *id.* at *4. In addition, the court concluded that, like IDOT's program, the Tollway's program imposed a minimal burden on non-DBEs, employed a number of race-neutral measures, and offered substantial flexibility. 84 F. Supp. 3d at 739-740; *id.* at *4.

Standing to challenge the DBE Programs generally. The defendants argued that Midwest Fence lacked standing. The court of appeals held that the district court correctly found that Midwest Fence has standing. *Id.* at *5. The court of appeals stated that by alleging and then offering evidence of lost bids, decreased revenue, difficulties keeping its business afloat as a result of the DBE program, and its inability to compete for contracts on an equal footing with DBEs, Midwest Fence showed both causation and redressability. *Id.* at *5.

The court of appeals distinguished its ruling in the *Dunnet Bay Construction Co. v. Borggren*, 799 F. 3d 676 (7th Cir. 2015), holding that there was no standing for the plaintiff Dunnet Bay based on an unusual and complex set of facts under which it would have been impossible for the plaintiff Dunnet Bay to have won the contract it sought and for which it sought damages. IDOT did not award the contract to anyone under the first bid and had re-let the contract, thus Dunnet Bay suffered no injury because of the DBE program in the first bid. *Id.* at *5. The court of appeals held this case is distinguishable from *Dunnet Bay* because Midwest Fence seeks prospective relief that would enable it to compete with DBEs on an equal basis more generally than in *Dunnet Bay*. *Id.* at *5.

Standing to challenge the IDOT Target Market Program. The district court had carved out one narrow exception to its finding that Midwest Fence had standing generally, finding that Midwest Fence lacked standing to challenge the IDOT “target market program.” *Id.* at *6. The court of appeals found that no evidence in the record established Midwest Fence bid on or lost any contracts subject to the IDOT target market program. *Id.* at *6. The court stated that IDOT had not set aside any guardrail and fencing contracts under the target market program. *Id.* Therefore, Midwest Fence did not show that it had suffered from an inability to compete on an equal footing in the bidding process with respect to contracts within the target market program. *Id.*

Facial versus as-applied challenge to the USDOT Program. In this appeal, Midwest Fence did not challenge whether USDOT had established a “compelling interest” to remedy the effects of past or present discrimination. Thus, it did not challenge the national compelling interest in remedying past discrimination in its claims against the Federal DBE Program. *Id.* at *6. Therefore, the court of appeals focused on whether the federal program is narrowly tailored. *Id.*

First, the court addressed a preliminary issue, namely, whether Midwest Fence could maintain an as-applied challenge against USDOT and the Federal DBE Program or whether, as the district court held, the claim against USDOT is limited to a facial challenge. *Id.* Midwest Fence sought a declaration that the federal regulations are unconstitutional as applied in Illinois. *Id.* The district court rejected the attempt to bring that claim against USDOT, treating it as applying only to IDOT. *Id.* at *6 citing *Midwest Fence*, 84 F. Supp. 3d at 718. The court of appeals agreed with the district court. *Id.*

The court of appeals pointed out that a principal feature of the federal regulations is their flexibility and adaptability to local conditions, and that flexibility is important to the constitutionality of the Federal DBE Program, including because a race- and gender-conscious program must be narrowly tailored to serve the compelling governmental interest. *Id.* at *6. The flexibility in regulations, according to the court, makes the state, not USDOT, primarily responsible for implementing their own programs in ways that comply with the Equal Protection Clause. *Id.* at *6. The court said that a state, not USDOT, is the correct party to defend

a challenge to its implementation of its program. *Id.* Thus, the court held the district court did not err by treating the claims against USDOT as only a facial challenge to the federal regulations. *Id.*

Federal DBE Program: Narrow Tailoring. The Seventh Circuit noted that the Eighth, Ninth, and Tenth Circuits all found the Federal DBE Program constitutional on its face, and the Seventh Circuit agreed with these other circuits. *Id.* at *7. The court found that narrow tailoring requires “a close match between the evil against which the remedy is directed and the terms of the remedy.” *Id.* The court stated it looks to four factors in determining narrow tailoring: (a) “the necessity for the relief and the efficacy of alternative [race-neutral] remedies,” (b) “the flexibility and duration of the relief, including the availability of waiver provisions,” (c) “the relationship of the numerical goals to the relevant labor [or here, contracting] market,” and (d) “the impact of the relief on the rights of third parties.” *Id.* at *7 quoting *United States v. Paradise*, 480 U.S. 149, 171 (1987). The Seventh Circuit also pointed out that the Tenth Circuit added to this analysis the question of over- or under- inclusiveness. *Id.* at *7.

In applying these factors to determine narrow tailoring, the court said that first, the Federal DBE Program requires states to meet as much as possible of their overall DBE participation goals through race- and gender-neutral means. *Id.* at *7, citing 49 C.F.R. § 26.51(a). Next, on its face, the federal program is both flexible and limited in duration. *Id.* Quotas are flatly prohibited, and states may apply for waivers, including waivers of “any provisions regarding administrative requirements, overall goals, contract goals or good faith efforts,” § 26.15(b). *Id.* at *7. The regulations also require states to remain flexible as they administer the program over the course of the year, including continually reassessing their DBE participation goals and whether contract goals are necessary. *Id.*

The court pointed out that a state need not set a contract goal on every USDOT-assisted contract, nor must they set those goals at the same percentage as the overall participation goal. *Id.* at *7. Together, the court found, all of these provisions allow for significant and ongoing flexibility. *Id.* at *8. States are not locked into their initial DBE participation goals. *Id.* Their use of contract goals is meant to remain fluid, reflecting a state’s progress towards overall DBE goal. *Id.*

As for duration, the court said that Congress has repeatedly reauthorized the program after taking new looks at the need for it. *Id.* at *8. And, as noted, states must monitor progress toward meeting DBE goals on a regular basis and alter the goals if necessary. *Id.* They must stop using race- and gender-conscious measures if those measures are no longer needed. *Id.*

The court found that the numerical goals are also tied to the relevant markets. *Id.* at *8. In addition, the regulations prescribe a process for setting a DBE participation goal that focuses on information about the specific market, and that it is intended to reflect the level of DBE participation you would expect absent the effects of discrimination. *Id.* at *8, citing § 26.45(b). The court stated that the regulations thus instruct states to set their DBE participation goals to reflect actual DBE availability in their jurisdictions, as modified by other relevant factors like DBE capacity. *Id.* at *8.

Midwest Fence “mismatch” argument: burden on third parties. Midwest Fence, the court said, focuses its criticism on the burden of third parties and argues the program is over-inclusive. *Id.* at *8. But, the court found, the regulations include mechanisms to minimize the burdens the

program places on non-DBE third parties. *Id.* A primary example, the court points out, is supplied in § 26.33(a), which requires states to take steps to address overconcentration of DBEs in certain types of work if the overconcentration unduly burdens non-DBEs to the point that they can no longer participate in the market. *Id.* at *8. The court concluded that standards can be relaxed if uncompromising enforcement would yield negative consequences, for example, states can obtain waivers if special circumstances make the state’s compliance with part of the federal program “impractical,” and contractors who fail to meet a DBE contract goal can still be awarded the contract if they have documented good faith efforts to meet the goal. *Id.* at *8, *citing* § 26.51(a) and § 26.53(a)(2).

Midwest Fence argued that a “mismatch” in the way contract goals are calculated results in a burden that falls disproportionately on specialty subcontractors. *Id.* at *8. Under the federal regulations, the court noted, states’ overall goals are set as a percentage of all their USDOT-assisted contracts. *Id.* However, states may set contract goals “only on those [USDOT]-assisted contracts that have subcontracting possibilities.” *Id.*, *quoting* § 26.51(e)(1)(emphasis added).

Midwest Fence argued that because DBEs must be small, they are generally unable to compete for prime contracts, and this they argue is the “mismatch.” *Id.* at *8. Where contract goals are necessary to meet an overall DBE participation goal, those contract goals are met almost entirely with *subcontractor* dollars, which, Midwest Fence asserts, places a heavy burden on non-DBE subcontractors while leaving non-DBE prime contractors in the clear. *Id.* at *8.

The court goes through a hypothetical example to explain the issue Midwest Fence has raised as a mismatch that imposes a disproportionate burden on specialty subcontractors like Midwest Fence. *Id.* at *8. In the example provided by the court, the overall participation goal for a state calls for DBEs to receive a certain percentage of *total* funds, but in practice in the hypothetical it requires the state to award DBEs for less than all of the available subcontractor funds because it determines that there are no subcontracting possibilities on half the contracts, thus rendering them ineligible for contract goals. *Id.* The mismatch is that the federal program requires the state to set its overall goal on all funds it will spend on contracts, but at the same time the contracts eligible for contract goals must be ones that have subcontracting possibilities. *Id.* Therefore, according to Midwest Fence, in practice the participation goals set would require the state to award DBEs from the available subcontractor funds while taking no business away from the prime contractors. *Id.*

The court stated that it found “[t]his prospect is troubling.” *Id.* at *9. The court said that the DBE program can impose a disproportionate burden on small, specialized non-DBE subcontractors, especially when compared to larger prime contractors with whom DBEs would compete less frequently. *Id.* This potential, according to the court, for a disproportionate burden, however, does not render the program facially unconstitutional. *Id.* The court said that the constitutionality of the Federal DBE Program depends on how it is implemented. *Id.*

The court pointed out that some of the suggested race- and gender-neutral means that states can use under the federal program are designed to increase DBE participation in prime contracting and other fields where DBE participation has historically been low, such as specifically encouraging states to make contracts more accessible to small businesses. *Id.* at *9, *citing* § 26.39(b). The court also noted that the federal program contemplates DBEs’ ability to compete

equally requiring states to report DBE participation as prime contractors and makes efforts to develop that potential. *Id.* at *9.

The court stated that states will continue to resort to contract goals that open the door to the type of mismatch that Midwest Fence describes, but the program on its face does not compel an unfair distribution of burdens. *Id.* at *9. Small specialty contractors may have to bear at least some of the burdens created by remedying past discrimination under the Federal DBE Program, but the Supreme Court has indicated that innocent third parties may constitutionally be required to bear at least some of the burden of the remedy. *Id.* at *9.

Over-Inclusive argument. Midwest Fence also argued that the federal program is over-inclusive because it grants preferences to groups without analyzing the extent to which each group is actually disadvantaged. *Id.* at *9. In response, the court mentioned two federal-specific arguments, noting that Midwest Fence’s criticisms are best analyzed as part of its as-applied challenge against the state defendants. *Id.* First, Midwest Fence contends nothing proves that the disparities relied upon by the study consultant were caused by discrimination. *Id.* at *9. The court found that to justify its program, USDOT does not need definitive proof of discrimination, but must have a strong basis in evidence that remedial action is necessary to remedy past discrimination. *Id.*

Second, Midwest Fence attacks what it perceives as the one-size-fits-all nature of the program, suggesting that the regulations ought to provide different remedies for different groups, but instead the federal program offers a single approach to all the disadvantaged groups, regardless of the degree of disparities. *Id.* at *9. The court pointed out Midwest Fence did not argue that any of the groups were not in fact disadvantaged at all, and that the federal regulations ultimately require individualized determinations. *Id.* at *10. Each presumptively disadvantaged firm owner must certify that he or she is, in fact, socially and economically disadvantaged, and that presumption can be rebutted. *Id.* In this way, the court said, the federal program requires states to extend benefits only to those who are actually disadvantaged. *Id.*

Therefore the court agreed with the district court that the Federal DBE Program is narrowly tailored on its face, so it survives strict scrutiny.

Claims against IDOT and the Tollway: void for vagueness. Midwest Fence argued that the federal regulations are unconstitutionally vague as applied by IDOT because the regulations fail to specify what good faith efforts a contractor must make to qualify for a waiver, and focuses its attack on the provisions of the regulations, which address possible cost differentials in the use of DBEs. *Id.* at *11. Midwest Fence argued that Appendix A of 49 C.F.R., Part 26 at ¶ IV(D)(2) is too vague in its language on when a difference in price is significant enough to justify falling short of the DBE contract goal. *Id.* The court found if the standard seems vague, that is likely because it was meant to be flexible, and a more rigid standard could easily be too arbitrary and hinder prime contractors’ ability to adjust their approaches to the circumstances of particular projects. *Id.* at *11.

The court said Midwest Fence’s real argument seems to be that in practice, prime contractors err too far on the side of caution, granting significant price preferences to DBEs instead of taking the risk of losing a contract for failure to meet the DBE goal. *Id.* at *12. Midwest Fence contends this

creates a *de facto* system of quotas because contractors believe they must meet the DBE goal or lose the contract. *Id.* But Appendix A to the regulations, the court noted, cautions against this very approach. *Id.* The court found flexibility and the availability of waivers affect whether a program is narrowly tailored, and that the regulations caution against quotas, provide examples of good faith efforts prime contractors can make and states can consider, and instruct a bidder to use good business judgment to decide whether a price difference is reasonable or excessive. *Id.* For purposes of contract awards, the court holds this is enough to give fair notice of conduct that is forbidden or required. *Id.* at *12.

Equal Protection challenge: compelling interest with strong basis in evidence. In ruling on the merits of Midwest Fence’s equal protection claims based on the actions of IDOT and the Tollway, the first issue the court addresses is whether the state defendants had a compelling interest in enacting their programs. *Id.* at *12. The court stated that it, along with the other circuit courts of appeal, have held a state agency is entitled to rely on the federal government’s compelling interest in remedying the effects of past discrimination to justify its own DBE plan for highway construction contracting. *Id.* But, since not all of IDOT’s contracts are federally funded, and the Tollway did not receive federal funding at all, with respect to those contracts, the court said it must consider whether IDOT and the Tollway established a strong basis in evidence to support their programs. *Id.*

IDOT program. IDOT relied on an availability and a disparity study to support its program. The disparity study found that DBEs were significantly underutilized as prime contractors comparing firm availability of prime contractors in the construction field to the amount of dollars they received in prime contracts. The disparity study collected utilization records, defined IDOT’s market area, identified businesses that were willing and able to provide needed services, weighted firm availability to reflect IDOT’s contracting pattern with weights assigned to different areas based on the percentage of dollars expended in those areas, determined whether there was a statistically significant under-utilization of DBEs by calculating the dollars each group would be expected to receive based on availability, calculated the difference between the expected and actual amount of contract dollars received, and ensured that results were not attributable to chance. *Id.* at *13.

The court said that the disparity study determined disparity ratios that were statistically significant and the study found that DBEs were significantly underutilized as prime contractors, noting that a figure below 0.80 is generally considered “solid evidence of systematic under-utilization calling for affirmative action to correct it.” *Id.* at *13. The study found that DBEs made up 25.55% of prime contractors in the construction field, received 9.13% of prime contracts valued below \$500,000 and 8.25% of the available contract dollars in that range, yielding a disparity ratio of 0.32 for prime contracts under \$500,000. *Id.*

In the realm of contraction subcontracting, the study showed that DBEs may have 29.24% of available subcontractors, and in the construction industry they receive 44.62% of available subcontracts, but those subcontracts amounted to only 10.65% of available subcontracting dollars. *Id.* at *13. This, according to the study, yielded a statistically significant disparity ratio of 0.36, which the court found low enough to signal systemic under-utilization. *Id.*

IDOT relied on additional data to justify its program, including conducting a zero-goal experiment in 2002 and in 2003, when it did not apply DBE goals to contracts. *Id.* at *13. Without contract goals, the share of the contracts' value that DBEs received dropped dramatically, to just 1.5% of the total value of the contracts. *Id.* at *13. And in those contracts advertised without a DBE goal, the DBE subcontractor participation rate was 0.84%.

Tollway program. Tollway also relied on a disparity study limited to the Tollway's contracting market area. The study used a "custom census" process, creating a database of representative projects, identifying geographic and product markets, counting businesses in those markets, identifying and verifying which businesses are minority- and women-owned, and verifying the ownership status of all the other firms. *Id.* at *13. The study examined the Tollway's historical contract data, reported its DBE utilization as a percentage of contract dollars, and compared DBE utilization and DBE availability, coming up with disparity indices divided by race and sex, as well as by industry group. *Id.*

The study found that out of 115 disparity indices, 80 showed statistically significant under-utilization of DBEs. *Id.* at *14. The study discussed statistical disparities in earnings and the formation of businesses by minorities and women, and concluded that a statistically significant adverse impact on earnings was observed in both the economy at large and in the construction and construction-related professional services sector." *Id.* at *14. The study also found women and minorities are not as likely to start their own business, and that minority business formation rates would likely be substantially and significantly higher if markets operated in a race- and sex-neutral manner. *Id.*

The study used regression analysis to assess differences in wages, business-owner earnings, and business-formation rates between white men and minorities and women in the wider construction economy. *Id.* at *14. The study found statistically significant disparities remained between white men and other groups, controlling for various independent variables such as age, education, location, industry affiliation, and time. *Id.* The disparities, according to the study, were consistent with a market affected by discrimination. *Id.*

The Tollway also presented additional evidence, including that the Tollway set aspirational participation goals on a small number of contracts, and those attempts failed. *Id.* at *14. In 2004, the court noted the Tollway did not award a single prime contract or subcontract to a DBE, and the DBE participation rate in 2005 was 0.01% across all construction contracts. *Id.* In addition, the Tollway also considered, like IDOT, anecdotal evidence that provided testimony of several DBE owners regarding barriers that they themselves faced. *Id.*

Midwest Fence's criticisms. Midwest Fence's expert consultant argued that the study consultant failed to account for DBEs' readiness, willingness, and ability to do business with IDOT and the Tollway, and that the method of assessing readiness and willingness was flawed. *Id.* at *14. In addition, the consultant for Midwest Fence argued that one of the studies failed to account for DBEs' relative capacity, "meaning a firm's ability to take on more than one contract at a time." The court noted that one of the study consultants did not account for firm capacity and the other study consultant found no effective way to account for capacity. *Id.* at *14, n. 2. The court said one study did perform a regression analysis to measure relative capacity and limited its

disparity analysis to contracts under \$500,000, which was, according to the study consultant, to take capacity into account to the extent possible. *Id.*

The court pointed out that one major problem with Midwest Fence's report is that the consultant did not perform any substantive analysis of his own. *Id.* at *15. The evidence offered by Midwest Fence and its consultant was, according to the court, "speculative at best." *Id.* at *15. The court said the consultant's relative capacity analysis was similarly speculative, arguing that the assumption that firms have the same ability to provide services up to \$500,000 may not be true in practice, and that if the estimates of capacity are too low the resulting disparity index overstates the degree of disparity that exists. *Id.* at *15.

The court stated Midwest Fence's expert similarly argued that the existence of the DBE program "may" cause an upward bias in availability, that any observations of the public sector in general "may" be affected by the DBE program's existence, and that data become less relevant as time passes. *Id.* at *15. The court found that given the substantial utilization disparity as shown in the reports by IDOT and the Tollway defendants, Midwest Fence's speculative critiques did not raise a genuine issue of fact as to whether the defendants had a substantial basis in evidence to believe that action was needed to remedy discrimination. *Id.* at *15.

The court rejected Midwest Fence's argument that requiring it to provide an independent statistical analysis places an impossible burden on it due to the time and expense that would be required. *Id.* at *15. The court noted that the burden is initially on the government to justify its programs, and that since the state defendants offered evidence to do so, the burden then shifted to Midwest Fence to show a genuine issue of material fact as to whether the state defendants had a substantial basis in evidence for adopting their DBE programs. *Id.* Speculative criticism about potential problems, the court found, will not carry that burden. *Id.*

With regard to the capacity question, the court noted it was Midwest Fence's strongest criticism and that courts had recognized it as a serious problem in other contexts. *Id.* at *15. The court said the failure to account for relative capacity did not undermine the substantial basis in evidence in this particular case. *Id.* at *15. Midwest Fence did not explain how to account for relative capacity. *Id.* In addition, it has been recognized, the court stated, that defects in capacity analyses are not fatal in and of themselves. *Id.* at *15.

The court concluded that the studies show striking utilization disparities in specific industries in the relevant geographic market areas, and they are consistent with the anecdotal and less formal evidence defendants had offered. *Id.* at *15. The court found Midwest Fence's expert's "speculation" that failure to account for relative capacity might have biased DBE availability upward does not undermine the statistical core of the strong basis in evidence required. *Id.*

In addition, the court rejected Midwest Fence's argument that the disparity studies do not prove discrimination, noting again that a state need not conclusively prove the existence of discrimination to establish a strong basis in evidence for concluding that remedial action is necessary, and that where gross statistical disparities can be shown, they alone may constitute prima facie proof of a pattern or practice of discrimination. *Id.* at *15. The court also rejected Midwest Fence's attack on the anecdotal evidence stating that the anecdotal evidence bolsters the state defendants' statistical analyses. *Id.* at *15.

In connection with Midwest Fence’s argument relating to the Tollway defendant, Midwest Fence argued that the Tollway’s supporting data was from before it instituted its DBE program. *Id.* at *16. The Tollway responded by arguing that it used the best data available and that in any event its data sets show disparities. *Id.* at *16. The court found this point persuasive even assuming some of the Tollway’s data were not exact. *Id.* The court said that while every single number in the Tollway’s “arsenal of evidence” may not be exact, the overall picture still shows beyond reasonable dispute a marketplace with systemic under-utilization of DBEs far below the disparity index lower than 80 as an indication of discrimination, and that Midwest Fence’s “abstract criticisms” do not undermine that core of evidence. *Id.* at *16.

Narrow Tailoring. The court applied the narrow tailoring factors to determine whether IDOT’s and the Tollway’s implementation of their DBE programs yielded a close match between the evil against which the remedy is directed and the terms of the remedy. *Id.* at *16. First the court addressed the necessity for the relief and the efficacy of alternative race-neutral remedies factor. *Id.* The court reiterated that Midwest Fence has not undermined the defendants’ strong combination of statistical and other evidence to show that their programs are needed to remedy discrimination. *Id.*

Both IDOT and the Tollway, according to the court, use race- and gender-neutral alternatives, and the undisputed facts show that those alternatives have not been sufficient to remedy discrimination. *Id.* The court noted that the record shows IDOT uses nearly all of the methods described in the federal regulations to maximize a portion of the goal that will be achieved through race-neutral means. *Id.*

As for flexibility, both IDOT and the Tollway make front-end waivers available when a contractor has made good faith efforts to comply with a DBE goal. *Id.* at *17. The court rejected Midwest Fence’s arguments that there were a low number of waivers granted, and that contractors fear of having a waiver denied showed the system was a *de facto* quota system. *Id.* The court found that IDOT and the Tollway have not granted large numbers of waivers, but there was also no evidence that they have *denied* large numbers of waivers. *Id.* The court pointed out that the evidence from Midwest Fence does not show that defendants are responsible for failing to grant front-end waivers that the contractors do not request. *Id.*

The court stated in the absence of evidence that defendants failed to adhere to the general good faith effort guidelines and arbitrarily deny or discourage front-end waiver requests, Midwest Fence’s contention that contractors fear losing contracts if they ask for a waiver does not make the system a quota system. *Id.* at *17. Midwest Fence’s own evidence, the court stated, shows that IDOT granted in 2007, 57 of 63 front-end waiver requests, and in 2010, it granted 21 of 35 front-end waiver requests. *Id.* at *17. In addition, the Tollway granted at least some front-end waivers involving 1.02% of contract dollars. *Id.* Without evidence that far more waivers were requested, the court was satisfied that even this low total by the Tollway does not raise a genuine dispute of fact. *Id.*

The court also rejected as “underdeveloped” Midwest Fence’s argument that the court should look at the dollar value of waivers granted rather than the raw number of waivers granted. *Id.* at *17. The court found that this argument does not support a different outcome in this case because the defendants grant more front-end waiver requests than they deny, regardless of the

dollar amounts those requests encompass. Midwest Fence presented no evidence that IDOT and the Tollway have an unwritten policy of granting only low-value waivers. *Id.*

The court stated that Midwest's "best argument" against narrowed tailoring is its "mismatch" argument, which was discussed above. *Id.* at *17. The court said Midwest's broad condemnation of the IDOT and Tollway programs as failing to create a "light" and "diffuse" burden for third parties was not persuasive. *Id.* The court noted that the DBE programs, which set DBE goals on only some contracts and allow those goals to be waived if necessary, may end up foreclosing one of several opportunities for a non-DBE specialty subcontractor like Midwest Fence. *Id.* But, there was no evidence that they impose the entire burden on that subcontractor by shutting it out of the market entirely. *Id.* However, the court found that Midwest Fence's point that subcontractors appear to bear a disproportionate share of the burden as compared to prime contractors "is troubling." *Id.* at *17.

Although the evidence showed disparities in both the prime contracting and subcontracting markets, under the federal regulations, individual contract goals are set only for contracts that have subcontracting possibilities. *Id.* The court pointed out that some DBEs are able to bid on prime contracts, but the necessarily small size of DBEs makes that difficult in most cases. *Id.*

But, according to the court, in the end the record shows that the problem Midwest Fence raises is largely "theoretical." *Id.* at *18. Not all contracts have DBE goals, so subcontractors are on an even footing for those contracts without such goals. *Id.* IDOT and the Tollway both use neutral measures including some designed to make prime contracts more assessable to DBEs. *Id.* The court noted that DBE trucking and material suppliers count toward fulfillment of a contract's DBE goal, even though they are not used as line items in calculating the contract goal in the first place, which opens up contracts with DBE goals to non-DBE subcontractors. *Id.*

The court stated that if Midwest Fence "had presented evidence rather than theory on this point, the result might be different." *Id.* at *18. "Evidence that subcontractors were being frozen out of the market or bearing the entire burden of the DBE program would likely require a trial to determine at a minimum whether IDOT or the Tollway were adhering to their responsibility to avoid overconcentration in subcontracting." *Id.* at *18. The court concluded that Midwest Fence "has shown how the Illinois program *could* yield that result but not that it actually does so." *Id.*

In light of the IDOT and Tollway programs' mechanisms to prevent subcontractors from having to bear the entire burden of the DBE programs, including the use of DBE materials and trucking suppliers in satisfying goals, efforts to draw DBEs into prime contracting, and other mechanisms, according to the court, Midwest Fence did not establish a genuine dispute of fact on this point. *Id.* at *18. The court stated that the "theoretical possibility of a 'mismatch' could be a problem, but we have no evidence that it actually is." *Id.* at *18.

Therefore, the court concluded that IDOT and the Tollway DBE programs are narrowly tailored to serve the compelling state interest in remedying discrimination in public contracting. *Id.* at *18. They include race- and gender-neutral alternatives, set goals with reference to actual market conditions, and allow for front-end waivers. *Id.* "So far as the record before us shows, they do not unduly burden third parties in service of remedying discrimination", according to the court. Therefore, Midwest Fence failed to present a genuine dispute of fact "on this point." *Id.*

Petition for a Writ of Certiorari. Midwest Fence filed a Petition for a Writ of Certiorari to the United States Supreme Court in 2017, and Certiorari was denied. 2017 WL 497345 (2017).

3. *Dunnet Bay Construction Company v. Borggren, Illinois DOT, et al.*, 799 F.3d 676, 2015 WL 4934560 (7th Cir. 2015), cert. denied, *Dunnet Bay Construction Co. v. Blankenhorn, Randall S., et al.*, 2016 WL 193809 (Oct. 3, 2016).

Dunnet Bay Construction Company sued the Illinois Department of Transportation (IDOT) asserting that the Illinois DOT's DBE Program discriminates on the basis of race. The district court granted summary judgement to Illinois DOT, concluding that Dunnet Bay lacked standing to raise an equal protection challenge based on race, and held that the Illinois DOT DBE Program survived the constitutional and other challenges. 799 F.3d at 679. (*See* 2014 WL 552213, C.D. Ill. Fed. 12, 2014) (*See* summary of district decision in Section E. below). The Court of Appeals affirmed the grant of summary judgment to IDOT.

Dunnet Bay engages in general highway construction and is owned and controlled by two white males. 799 F. 3d at 679. Its average annual gross receipts between 2007 and 2009 were over \$52 million. *Id.* IDOT administers its DBE Program implementing the Federal DBE Program. IDOT established a statewide aspirational goal for DBE participation of 22.77%. *Id.* at 680. Under IDOT's DBE Program, if a bidder fails to meet the DBE contract goal, it may request a modification of the goal, and provide documentation of its good faith efforts to meet the goal. *Id.* at 681. These requests for modification are also known as "waivers." *Id.*

The record showed that IDOT historically granted goal modification request or waivers: in 2007, it granted 57 of 63 pre-award goal modification requests; the six other bidders ultimately met the contract goal with post-bid assistance. *Id.* at 681. In 2008, IDOT granted 50 of the 55 pre-award goal modification requests; the other five bidders ultimately met the DBE goal. In calendar year 2009, IDOT granted 32 of 58 goal modification requests; the other contractors ultimately met the goals. In calendar year 2010, IDOT received 35 goal modification requests; it granted 21 of them and denied the rest. *Id.*

Dunnet Bay alleged that IDOT had taken the position no waivers would be granted. *Id.* at 697-698. IDOT responded that it was not its policy to not grant waivers, but instead IDOT would aggressively pursue obtaining the DBE participation in their contract goals, including that waivers were going to be reviewed at a high level to make sure the appropriate documentation was provided in order for a waiver to be issued. *Id.*

The U.S. FHWA approved the methodology IDOT used to establish a statewide overall DBE goal of 22.77%. *Id.* at 683, 698. The FHWA reviewed and approved the individual contract goals set for work on a project known as the Eisenhower project that Dunnet Bay bid on in 2010. *Id.* Dunnet Bay submitted to IDOT a bid that was the lowest bid on the project, but it was substantially over the budget estimate for the project. *Id.* at 683-684. Dunnet Bay did not achieve the goal of 22%, but three other bidders each met the DBE goal. *Id.* at 684. Dunnet Bay requested a waiver based on its good faith efforts to obtain the DBE goal. *Id.* at 684. Ultimately, IDOT determined that Dunnet Bay did not properly exercise good faith efforts and its bid was rejected. *Id.* at 684-687, 699.

Because all the bids were over budget, IDOT decided to rebid the Eisenhower project. *Id.* at 687. There were four separate Eisenhower projects advertised for bids, and IDOT granted one of the four goal modification requests from that bid letting. Dunnet Bay bid on one of the rebid projects, but it was not the lowest bid; it was the third out of five bidders. *Id.* at 687. Dunnet Bay did meet the 22.77% contract DBE goal, on the rebid prospect, but was not awarded the contract because it was not the lowest. *Id.*

Dunnet Bay then filed its lawsuit seeking damages as well as a declaratory judgement that the IDOT DBE Program is unconstitutional and injunctive relief against its enforcement.

The district court granted the IDOT Defendants' motion for summary judgement and denied Dunnet Bay's motion. *Id.* at 687. The district court concluded that Dunnet Bay lacked Article III standing to raise an equal protection challenge because it has not suffered a particularized injury that was called by IDOT, and that Dunnet Bay was not deprived of the ability to compete on an equal basis. *Id. Dunnet Bay Construction Company v. Hannig*, 2014 WL 552213, at *30 (C.D. Ill. Feb. 12, 2014).

Even if Dunnet Bay had standing to bring an equal protection claim, the district court held that IDOT was entitled to summary judgment. The district court concluded that Dunnet Bay was held to the same standards as every other bidder, and thus could not establish that it was the victim of racial discrimination. *Id.* at 687. In addition, the district court determined that IDOT had not exceeded its federal authority under the federal rules and that Dunnet Bay's challenge to the DBE Program failed under the Seventh Circuit Court of Appeals decision in *Northern Contracting, Inc. v. Illinois*, 473 F.3d 715, 721 (7th Cir. 2007), which insulates a state DBE Program from a constitutional attack absent a showing that the state exceeded its federal authority. *Id.* at 688. (See discussion of the district court decision in *Dunnet Bay* below in Section E).

Dunnet Bay lacks standing to raise an equal protection claim. The court first addressed the issue whether Dunnet Bay had standing to challenge IDOT's DBE Program on the ground that it discriminated on the basis of race in the award of highway construction contracts.

The court found that Dunnet Bay had not established that it was excluded from competition or otherwise disadvantaged because of race-based measures. *Id.* at 690. Nothing in IDOT's DBE Program, the court stated, excluded Dunnet Bay from competition for any contract. *Id.* IDOT's DBE Program is not a "set aside program," in which non-minority owned businesses could not even bid on certain contracts. *Id.* Under IDOT's DBE Program, all contractors, minority and non-minority contractors, can bid on all contracts. *Id.* at 690-691.

The court said the absence of complete exclusion from competition with minority- or women-owned businesses distinguished the IDOT DBE Program from other cases in which the court ruled there was standing to challenge a program. *Id.* at 691. Dunnet Bay, the court found, has not alleged and has not produced evidence to show that it was treated less favorably than any other contractor because of the race of its owners. *Id.* This lack of an explicit preference from minority-owned businesses distinguishes the IDOT DBE Program from other cases. *Id.* Under IDOT's DBE Program, all contractors are treated alike and subject to the same rules. *Id.*

In addition, the court distinguished other cases in which the contractors were found to have standing because in those cases standing was based in part on the fact they had lost an award of a contract for failing to meet the DBE goal or failing to show good faith efforts, despite being the low bidders on the contract, and the second lowest bidder was awarded the contract. *Id.* at 691. In contrast with these cases where the plaintiffs had standing, the court said Dunnet Bay could not establish that it would have been awarded the contract but for its failure to meet the DBE goal or demonstrate good faith efforts. *Id.* at 692.

The evidence established that Dunnet Bay's bid was substantially over the program estimated budget, and IDOT rebid the contract because the low bid was over the project estimate. *Id.* In addition, Dunnet Bay had been left off the For Bidders List that is submitted to DBEs, which was another reason IDOT decided to rebid the contract. *Id.*

The court found that even assuming Dunnet Bay could establish it was excluded from competition with DBEs or that it was disadvantaged as compared to DBEs, it could not show that any difference in treatment was because of race. *Id.* at 692. For the three years preceding 2010, the year it bid on the project, Dunnet Bay's average gross receipts were over \$52 million. *Id.* Therefore, the court found Dunnet Bay's size makes it ineligible to qualify as a DBE, regardless of the race of its owners. *Id.* Dunnet Bay did not show that any additional costs or burdens that it would incur are because of race, but the additional costs and burdens are equally attributable to Dunnet Bay's size. *Id.* Dunnet Bay had not established, according to the court, that the denial of equal treatment resulted from the imposition of a racial barrier. *Id.* at 693.

Dunnet Bay also alleged that it was forced to participate in a discriminatory scheme and was required to consider race in subcontracting, and thus argued that it may assert third-party rights. *Id.* at 693. The court stated that it has not adopted the broad view of standing regarding asserting third-party rights. *Id.* The court concluded that Dunnet Bay's claimed injury of being forced to participate in a discriminatory scheme amounts to a challenge to the state's application of a federally mandated program, which the Seventh Circuit Court of Appeals has determined "must be limited to the question of whether the state exceeded its authority." *Id.* at 694, quoting, *Northern Contracting*, 473 F.3d at 720-21. The court found Dunnet Bay was not denied equal treatment because of racial discrimination, but instead any difference in treatment was equally attributable to Dunnet Bay's size. *Id.*

The court stated that Dunnet Bay did not establish causational or redressability. *Id.* at 695. It failed to demonstrate that the DBE Program caused it any injury during the first bid process. *Id.* IDOT did not award the contract to anyone under the first bid and re-let the contract. *Id.* Therefore, Dunnet Bay suffered no injury because of the DBE Program. *Id.* The court also found that Dunnet Bay could not establish redressability because IDOT's decision to re-let the contract redressed any injury. *Id.*

In addition, the court concluded that prudential limitations preclude Dunnet Bay from bringing its claim. *Id.* at 695. The court said that a litigant generally must assert his own legal rights and interests, and cannot rest his claim to relief on the legal rights or interests of third parties. *Id.* The court rejected Dunnet Bay's attempt to assert the equal protection rights of a non-minority-owned small business. *Id.* at 695-696.

Dunnet Bay did not produce sufficient evidence that IDOT’s implementation of the Federal DBE Program constitutes race discrimination as it did not establish that IDOT exceeded its federal authority. The court said that in the alternative to denying Dunnet Bay standing, even if Dunnet Bay had standing, IDOT was still entitled to summary judgment. *Id.* at 696. The court stated that to establish an equal protection claim under the Fourteenth Amendment, Dunnet Bay must show that IDOT “acted with discriminatory intent.” *Id.*

The court established the standard based on its previous ruling in the *Northern Contracting v. IDOT* case that in implementing its DBE Program, IDOT may properly rely on “the federal government’s compelling interest in remedying the effects of past discrimination in the national construction market.” *Id.*, at 697, quoting *Northern Contracting*, 473 F.3d at 720. Significantly, the court held following its *Northern Contracting* decision as follows: “[A] state is insulated from [a constitutional challenge as to whether its program is narrowly tailored to achieve this compelling interest], absent a showing that the state exceeded its federal authority.” *Id.* quoting *Northern Contracting*, 473 F.3d at 721.

Dunnet Bay contends that IDOT exceeded its federal authority by effectively creating racial quotas by designing the Eisenhower project to meet a pre-determined DBE goal and eliminating waivers. *Id.* at 697. Dunnet Bay asserts that IDOT exceeds its authority by: (1) setting the contract’s DBE participation goal at 22% without the required analysis; (2) implementing a “no-waiver” policy; (3) preliminarily denying its goal modification request without assessing its good faith efforts; (4) denying it a meaningful reconsideration hearing; (5) determining that its good faith efforts were inadequate; and (6) providing no written or other explanation of the basis for its good-faith-efforts determination. *Id.*

In challenging the DBE contract goal, Dunnet Bay asserts that the 22% goal was “arbitrary” and that IDOT manipulated the process to justify a preordained goal. *Id.* at 698. The court stated Dunnet Bay did not identify any regulation or other authority that suggests political motivations matter, provided IDOT did not exceed its federal authority in setting the contract goal. *Id.* Dunnet Bay does not actually challenge how IDOT went about setting its DBE goal on the contract. *Id.* Dunnet Bay did not point to any evidence to show that IDOT failed to comply with the applicable regulation providing only general guidance on contract goal setting. *Id.*

The FHWA approved IDOT’s methodology to establish its statewide DBE goal and approved the individual contract goals for the Eisenhower project. *Id.* at 698. Dunnet Bay did not identify any part of the regulation that IDOT allegedly violated by reevaluating and then increasing its DBE contract goal, by expanding the geographic area used to determine DBE availability, by adding pavement patching and landscaping work into the contract goal, by including items that had been set aside for small business enterprises, or by any other means by which it increased the DBE contract goal. *Id.*

The court agreed with the district court’s conclusion that because the federal regulations do not specify a procedure for arriving at contract goals, it is not apparent how IDOT could have exceeded its federal authority. *Id.* at 698.

The court found Dunnet Bay did not present sufficient evidence to raise a reasonable inference that IDOT had actually implemented a no-waiver policy. *Id.* at 698. The court noted IDOT had

granted waivers in 2009 and in 2010 that amounted to 60% of the waiver requests. *Id.* The court stated that IDOT's record of granting waivers refutes any suggestion of a no-waiver policy. *Id.* at 699.

The court did not agree with Dunnet Bay's challenge that IDOT rejected its bid without determining whether it had made good faith efforts, pointing out that IDOT in fact determined that Dunnet Bay failed to document adequate good faith efforts, and thus it had complied with the federal regulations. *Id.* at 699. The court found IDOT's determination that Dunnet Bay failed to show good faith efforts was supported in the record. *Id.* The court noted the reasons provided by IDOT, included Dunnet Bay did not utilize IDOT's supportive services, and that the other bidders all met the DBE goal, whereas Dunnet Bay did not come close to the goal in its first bid. *Id.* at 699-700.

The court said the performance of other bidders in meeting the contract goal is listed in the federal regulations as a consideration when deciding whether a bidder has made good faith efforts to obtain DBE participation goals, and was a proper consideration. *Id.* at 700. The court said Dunnet Bay's efforts to secure the DBE participation goal may have been hindered by the omission of Dunnet Bay from the For Bid List, but found the rebidding of the contract remedied that oversight. *Id.*

Conclusion. The court affirmed the district court's grant of summary judgement to the Illinois DOT, concluding that Dunnet Bay lacks standing, and that the Illinois DBE Program implementing the Federal DBE Program survived the constitutional and other challenges made by Dunnet Bay.

Petition for a Writ of Certiorari Denied. Dunnet Bay filed a Petition for a Writ of Certiorari to the United States Supreme Court in January 2016. The Supreme Court denied the Petition on October 3, 2016.

4. Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al., 713 F.3d 1187 (9th Cir. 2013)

The Associated General Contractors of America, Inc., San Diego Chapter, Inc., ("AGC") sought declaratory and injunctive relief against the California Department of Transportation ("Caltrans") and its officers on the grounds that Caltrans' Disadvantaged Business Enterprise ("DBE") program unconstitutionally provided race -and sex-based preferences to African American, Native American-, Asian-Pacific American-, and women-owned firms on certain transportation contracts. The federal district court upheld the constitutionality of Caltrans' DBE program implementing the Federal DBE Program and granted summary judgment to Caltrans. The district court held that Caltrans' DBE program implementing the Federal DBE Program satisfied strict scrutiny because Caltrans had a strong basis in evidence of discrimination in the California transportation contracting industry, and the program was narrowly tailored to those groups that actually suffered discrimination. The district court held that Caltrans' substantial statistical and anecdotal evidence from a disparity study conducted by BBC Research & Consulting, provided a strong basis in evidence of discrimination against the four named groups, and that the program was narrowly tailored to benefit only those groups. 713 F.3d at 1190.

The AGC appealed the decision to the Ninth Circuit Court of Appeals. The Ninth Circuit initially held that because the AGC did not identify any of the members who have suffered or will suffer harm as a result of Caltrans' program, the AGC did not establish that it had associational standing to bring the lawsuit. *Id.* Most significantly, the Ninth Circuit held that even if the AGC could establish standing, its appeal failed because the Court found Caltrans' DBE program implementing the Federal DBE Program is constitutional and satisfied the applicable level of strict scrutiny required by the Equal Protection Clause of the United States Constitution. *Id.* at 1194-1200.

Court Applies *Western States Paving Co. v. Washington State DOT* decision. In 2005 the Ninth Circuit Court of Appeal decided *Western States Paving Co. v. Washington State Department of Transportation*, 407 F.3d. 983 (9th Cir. 2005), which involved a facial challenge to the constitutional validity of the federal law authorizing the United States Department of Transportation to distribute funds to States for transportation-related projects. *Id.* at 1191. The challenge in the *Western States Paving* case also included an as-applied challenge to the Washington DOT program implementing the federal mandate. *Id.* Applying strict scrutiny, the Ninth Circuit upheld the constitutionality of the federal statute and the federal regulations (the Federal DBE Program), but struck down Washington DOT's program because it was not narrowly tailored. *Id.*, citing *Western States Paving Co.*, 407 F.3d at 990-995, 999-1002.

In *Western States Paving*, the Ninth Circuit announced a two-pronged test for "narrow tailoring":

“(1) the state must establish the presence of discrimination within its transportation contracting industry, and (2) the remedial program must be limited to those minority groups that have actually suffered discrimination.” *Id.* 1191, citing *Western States Paving Co.*, 407 F.3d at 997-998.

Evidence gathering and the 2007 Disparity Study. On May 1, 2006, Caltrans ceased to use race- and gender-conscious measures in implementing their DBE program on federally assisted contracts while it gathered evidence in an effort to comply with the *Western States Paving* decision. *Id.* at 1191. Caltrans commissioned a disparity study by BBC Research and Consulting to determine whether there was evidence of discrimination in California's transportation contracting industry. *Id.* The Court noted that disparity analysis involves making a comparison between the availability of minority- and women-owned businesses and their actual utilization, producing a number called a "disparity index." *Id.* An index of 100 represents statistical parity between availability and utilization, and a number below 100 indicates underutilization. *Id.* An index below 80 is considered a substantial disparity that supports an inference of discrimination. *Id.*

The Court found the research firm and the disparity study gathered extensive data to calculate disadvantaged business availability in the California transportation contracting industry. *Id.* at 1191. The Court stated: "Based on review of public records, interviews, assessments as to whether a firm could be considered available, for Caltrans contracts, as well as numerous other adjustments, the firm concluded that minority- and women-owned businesses should be expected to receive 13.5 percent of contact dollars from Caltrans administered federally assisted contracts." *Id.* at 1191-1192.

The Court said the research firm “examined over 10,000 transportation-related contracts administered by Caltrans between 2002 and 2006 to determine actual DBE utilization. The firm assessed disparities across a variety of contracts, separately assessing contracts based on funding source (state or federal), type of contract (prime or subcontract), and type of project (engineering or construction).” *Id.* at 1192.

The Court pointed out a key difference between federally funded and state funded contracts is that race-conscious goals were in place for the federally funded contracts during the 2002–2006 period, but not for the state funded contracts. *Id.* at 1192. Thus, the Court stated: “state funded contracts functioned as a control group to help determine whether previous affirmative action programs skewed the data.” *Id.*

Moreover, the Court found the research firm measured disparities in all twelve of Caltrans’ administrative districts, and computed aggregate disparities based on statewide data. *Id.* at 1192. The firm evaluated statistical disparities by race and gender. The Court stated that within and across many categories of contracts, the research firm found substantial statistical disparities for African American, Asian–Pacific, and Native American firms. *Id.* However, the research firm found that there were not substantial disparities for these minorities in *every* subcategory of contract. *Id.* The Court noted that the disparity study also found substantial disparities in utilization of women-owned firms for some categories of contracts. *Id.* After publication of the disparity study, the Court pointed out the research firm calculated disparity indices for all women-owned firms, including female minorities, showing substantial disparities in the utilization of all women-owned firms similar to those measured for white women. *Id.*

The Court found that the disparity study and Caltrans also developed extensive anecdotal evidence, by (1) conducting twelve public hearings to receive comments on the firm’s findings; (2) receiving letters from business owners and trade associations; and (3) interviewing representatives from twelve trade associations and 79 owners/managers of transportation firms. *Id.* at 1192. The Court stated that some of the anecdotal evidence indicated discrimination based on race or gender. *Id.*

Caltrans’ DBE Program. Caltrans concluded that the evidence from the disparity study supported an inference of discrimination in the California transportation contracting industry. *Id.* at 1192–1193. Caltrans concluded that it had sufficient evidence to make race- and gender-conscious goals for African American-, Asian–Pacific American-, Native American-, and women-owned firms. *Id.* The Court stated that Caltrans adopted the recommendations of the disparity report and set an overall goal of 13.5 percent for disadvantaged business participation. Caltrans expected to meet one-half of the 13.5 percent goal using race-neutral measures. *Id.*

Caltrans submitted its proposed DBE program to the USDOT for approval, including a request for a waiver to implement the program only for the four identified groups. *Id.* at 1193. The Caltrans’ DBE program included 66 race-neutral measures that Caltrans already operated or planned to implement, and subsequent proposals increased the number of race-neutral measures to 150. *Id.* The USDOT granted the waiver, but initially did not approve Caltrans’ DBE program until in 2009, the DOT approved Caltrans’ DBE program for fiscal year 2009.

District Court proceedings. AGC then filed a complaint alleging that Caltrans' implementation of the Federal DBE Program violated the Fourteenth Amendment of the U.S. Constitution, Title VI of the Civil Rights Act, and other laws. Ultimately, the AGC only argued an as-applied challenge to Caltrans' DBE program. The district court on motions of summary judgment held that Caltrans' program was "clearly constitutional," as it "was supported by a strong basis in evidence of discrimination in the California contracting industry and was narrowly tailored to those groups which had actually suffered discrimination. *Id.* at 1193.

Subsequent Caltrans study and program. While the appeal by the AGC was pending, Caltrans commissioned a new disparity study from BBC to update its DBE program as required by the federal regulations. *Id.* at 1193. In August 2012, BBC published its second disparity report, and Caltrans concluded that the updated study provided evidence of continuing discrimination in the California transportation contracting industry against the same four groups and Hispanic Americans. *Id.* Caltrans submitted a modified DBE program that is nearly identical to the program approved in 2009, except that it now includes Hispanic Americans and sets an overall goal of 12.5 percent, of which 9.5 percent will be achieved through race- and gender-conscious measures. *Id.* The USDOT approved Caltrans' updated program in November 2012. *Id.*

Jurisdiction issue. Initially, the Ninth Circuit Court of Appeals considered whether it had jurisdiction over the AGC's appeal based on the doctrines of mootness and standing. The Court held that the appeal is not moot because Caltrans' new DBE program is substantially similar to the prior program and is alleged to disadvantage AGC's members "in the same fundamental way" as the previous program. *Id.* at 1194.

The Court, however, held that the AGC did not establish associational standing. *Id.* at 1194-1195: The Court found that the AGC did not identify any affected members by name nor has it submitted declarations by any of its members attesting to harm they have suffered or will suffer under Caltrans' program. *Id.* at 1194-1195. Because AGC failed to establish standing, the Court held it must dismiss the appeal due to lack of jurisdiction. *Id.* at 1195.

Caltrans' DBE Program held constitutional on the merits. The Court then held that even if AGC could establish standing, its appeal would fail. *Id.* at 1194-1195. The Court held that Caltrans' DBE program is constitutional because it survives the applicable level of scrutiny required by the Equal Protection Clause and jurisprudence. *Id.* at 1195-1200.

The Court stated that race-conscious remedial programs must satisfy strict scrutiny and that although strict scrutiny is stringent, it is not "fatal in fact." *Id.* at 1194-1195 (*quoting Adarand Constructors, Inc. v. Peña*, 515 U.S. 200, 237 (1995) (*Adarand III*)). The Court quoted *Adarand III*: "The unhappy persistence of both the practice and the lingering effects of racial discrimination against minority groups in this country is an unfortunate reality, and government is not disqualified from acting in response to it." *Id.* (*quoting Adarand III*, 515 U.S. at 237.)

The Court pointed out that gender-conscious programs must satisfy intermediate scrutiny which requires that gender-conscious programs be supported by an 'exceedingly persuasive justification' and be substantially related to the achievement of that underlying objective. *Id.* at 1195 (*citing Western States Paving*, 407 F.3d at 990 n. 6.).

The Court held that Caltrans' DBE program contains both race- and gender-conscious measures, and that the "entire program passes strict scrutiny." *Id.* at 1195.

A. Application of strict scrutiny standard articulated in *Western States Paving*. The Court held that the framework for AGC's as-applied challenge to Caltrans' DBE program is governed by *Western States Paving*. The Ninth Circuit in *Western States Paving* devised a two-pronged test for narrow tailoring: (1) the state must establish the presence of discrimination within its transportation contracting industry, and (2) the remedial program must be "limited to those minority groups that have actually suffered discrimination." *Id.* at 1195-1196 (*quoting Western States Paving*, 407 F.3d at 997-99).

1. Evidence of discrimination in California contracting industry. The Court held that in Equal Protection cases, courts consider statistical and anecdotal evidence to identify the existence of discrimination. *Id.* at 1196. The U.S. Supreme Court has suggested that a "significant statistical disparity" could be sufficient to justify race-conscious remedial programs. *Id.* at *7 (*citing City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 509 (1989)). The Court stated that although generally not sufficient, anecdotal evidence complements statistical evidence because of its ability to bring "the cold numbers convincingly to life." *Id.* (*quoting Int'l Bhd. of Teamsters v. United States*, 431 U.S. 324, 339 (1977)).

The Court pointed out that Washington DOT's DBE program in the *Western States Paving* case was held invalid because Washington DOT had performed no statistical studies and it offered no anecdotal evidence. *Id.* at 1196. The Court also stated that the Washington DOT used an oversimplified methodology resulting in little weight being given by the Court to the purported disparity because Washington's data "did not account for the relative capacity of disadvantaged businesses to perform work, nor did it control for the fact that existing affirmative action programs skewed the prior utilization of minority businesses in the state." *Id.* (*quoting Western States Paving*, 407 F.3d at 999-1001). The Court said that it struck down Washington's program after determining that the record was devoid of any evidence suggesting that minorities currently suffer – or have ever suffered – discrimination in the Washington transportation contracting industry." *Id.*

Significantly, the Court held in this case as follows: "In contrast, Caltrans' affirmative action program is supported by substantial statistical and anecdotal evidence of discrimination in the California transportation contracting industry." *Id.* at 1196. The Court noted that the disparity study documented disparities in many categories of transportation firms and the utilization of certain minority- and women-owned firms. *Id.* The Court found the disparity study "accounted for the factors mentioned in *Western States Paving* as well as others, adjusting availability data based on capacity to perform work and controlling for previously administered affirmative action programs." *Id.* (*citing Western States*, 407 F.3d at 1000).

The Court also held: "Moreover, the statistical evidence from the disparity study is bolstered by anecdotal evidence supporting an inference of discrimination. The substantial statistical disparities alone would give rise to an inference of discrimination, *see Croson*, 488 U.S. at 509, and certainly Caltrans' statistical evidence combined with anecdotal evidence passes constitutional muster." *Id.* at 1196.

The Court specifically rejected the argument by AGC that strict scrutiny requires Caltrans to provide evidence of “specific acts” of “deliberate” discrimination by Caltrans employees or prime contractors. *Id.* at 1196-1197. The Court found that the Supreme Court in *Croson* explicitly states that “[t]he degree of specificity required in the findings of discrimination ... may vary.” *Id.* at 1197 (*quoting Croson*, 488 U.S. at 489). The Court concluded that a rule requiring a state to show specific acts of deliberate discrimination by identified individuals would run contrary to the statement in *Croson* that statistical disparities alone could be sufficient to support race-conscious remedial programs. *Id.* (*citing Croson*, 488 U.S. at 509). The Court rejected AGC’s argument that Caltrans’ program does not survive strict scrutiny because the disparity study does not identify individual acts of deliberate discrimination. *Id.*

The Court rejected a second argument by AGC that this study showed inconsistent results for utilization of minority businesses depending on the type and nature of the contract, and thus cannot support an inference of discrimination in the entire transportation contracting industry. *Id.* at 1197. AGC argued that each of these subcategories of contracts must be viewed in isolation when considering whether an inference of discrimination arises, which the Court rejected. *Id.* The Court found that AGC’s argument overlooks the rationale underpinning the constitutional justification for remedial race-conscious programs: they are designed to root out “patterns of discrimination.” *Id.* *quoting Croson*, 488 U.S. at 504.

The Court stated that the issue is not whether Caltrans can show underutilization of disadvantaged businesses in *every* measured category of contract. But rather, the issue is whether Caltrans can meet the evidentiary standard required by *Western States Paving* if, looking at the evidence in its entirety, the data show substantial disparities in utilization of minority firms suggesting that public dollars are being poured into “a system of racial exclusion practiced by elements of the local construction industry.” *Id.* at 1197 *quoting Croson* 488 U.S. at 492.

The Court concluded that the disparity study and anecdotal evidence document a pattern of disparities for the four groups, and that the study found substantial underutilization of these groups in numerous categories of California transportation contracts, which the anecdotal evidence confirms. *Id.* at 1197. The Court held this is sufficient to enable Caltrans to infer that these groups are systematically discriminated against in publicly-funded contracts. *Id.*

Third, the Court considered and rejected AGC’s argument that the anecdotal evidence has little or no probative value in identifying discrimination because it is not verified. *Id.* at *9. The Court noted that the Fourth and Tenth Circuits have rejected the need to verify anecdotal evidence, and the Court stated the AGC made no persuasive argument that the Ninth Circuit should hold otherwise. *Id.*

The Court pointed out that AGC attempted to discount the anecdotal evidence because some accounts ascribe minority underutilization to factors other than overt discrimination, such as difficulties with obtaining bonding and breaking into the “good ol boy” network of contractors. *Id.* at 1197-1198. The Court held, however, that the federal courts and regulations have identified precisely these factors as barriers that disadvantage minority firms because of the lingering effects of discrimination. *Id.* at 1198, *citing Western States Paving*, 407 and *AGCC II*, 950 F.2d at 1414.

The Court found that AGC ignores the many incidents of racial and gender discrimination presented in the anecdotal evidence. *Id.* at 1198. The Court said that Caltrans does not claim, and the anecdotal evidence does not need to prove, that *every* minority-owned business is discriminated against. *Id.* The Court concluded: “It is enough that the anecdotal evidence supports Caltrans’ statistical data showing a pervasive pattern of discrimination.” *Id.* The individual accounts of discrimination offered by Caltrans, according to the Court, met this burden. *Id.*

Fourth, the Court rejected AGC’s contention that Caltrans’ evidence does not support an inference of discrimination against all women because gender-based disparities in the study are limited to white women. *Id.* at 1198. AGC, the Court said, misunderstands the statistical techniques used in the disparity study, and that the study correctly isolates the effect of gender by limiting its data pool to white women, ensuring that statistical results for gender-based discrimination are not skewed by discrimination against minority women on account of their race. *Id.*

In addition, after AGC’s early incorrect objections to the methodology, the research firm conducted a follow-up analysis of all women-owned firms that produced a disparity index of 59. *Id.* at 1198. The Court held that this index is evidence of a substantial disparity that raises an inference of discrimination and is sufficient to support Caltrans’ decision to include all women in its DBE program. *Id.* at 1195.

2. Program tailored to groups who actually suffered discrimination. The Court pointed out that the second prong of the test articulated in *Western States Paving* requires that a DBE program be limited to those groups that actually suffered discrimination in the state’s contracting industry. *Id.* at 1198. The Court found Caltrans’ DBE program is limited to those minority groups that have actually suffered discrimination. *Id.* The Court held that the 2007 disparity study showed systematic and substantial underutilization of African American-, Native American-, Asian-Pacific American-, and women-owned firms across a range of contract categories. *Id.* at 1198-1199. *Id.* These disparities, according to the Court, support an inference of discrimination against those groups. *Id.*

Caltrans concluded that the statistical evidence did not support an inference of a pattern of discrimination against Hispanic or Subcontinent Asian Americans. *Id.* at 1199. California applied for and received a waiver from the USDOT in order to limit its 2009 program to African American, Native American, Asian-Pacific American, and women-owned firms. *Id.* The Court held that Caltrans’ program “adheres precisely to the narrow tailoring requirements of *Western States.*” *Id.*

The Court rejected the AGC contention that the DBE program is not narrowly tailored because it creates race-based preferences for all transportation-related contracts, rather than distinguishing between construction and engineering contracts. *Id.* at 1199. The Court stated that AGC cited no case that requires a state preference program to provide separate goals for disadvantaged business participation on construction and engineering contracts. *Id.* The Court noted that to the contrary, the federal guidelines for implementing the federal program instruct states *not* to separate different types of contracts. *Id.* The Court found there are “sound policy

reasons to not require such parsing, including the fact that there is substantial overlap in firms competing for construction and engineering contracts, as prime *and* subcontractors.” *Id.*

B. Consideration of race–neutral alternatives. The Court rejected the AGC assertion that Caltrans’ program is not narrowly tailored because it failed to evaluate race-neutral measures before implementing the system of racial preferences, and stated the law imposes no such requirement. *Id.* at 1199. The Court held that *Western States Paving* does not require states to independently meet this aspect of narrow tailoring, and instead focuses on whether the federal statute sufficiently considered race-neutral alternatives. *Id.*

Second, the Court found that even if this requirement does apply to Caltrans’ program, narrow tailoring only requires “serious, good faith consideration of workable race-neutral alternatives.” *Id.* at 1199, *citing Grutter v. Bollinger*, 539 U.S. 306, 339 (2003). The Court found that the Caltrans program has considered an increasing number of race-neutral alternatives, and it rejected AGC’s claim that Caltrans’ program does not sufficiently consider race-neutral alternatives. *Id.* at 1199.

C. Certification affidavits for Disadvantaged Business Enterprises. The Court rejected the AGC argument that Caltrans’ program is not narrowly tailored because affidavits that applicants must submit to obtain certification as DBEs do not require applicants to assert they have suffered discrimination *in California*. *Id.* at 1199-1200. The Court held the certification process employed by Caltrans follows the process detailed in the federal regulations, and that this is an impermissible collateral attack on the facial validity of the Congressional Act authorizing the Federal DBE Program and the federal regulations promulgated by the USDOT (The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, Pub.L.No. 109-59, § 1101(b), 119 Sect. 1144 (2005)). *Id.* at 1200.

D. Application of program to mixed state- and federally-funded contracts. The Court also rejected AGC’s challenge that Caltrans applies its program to transportation contracts funded by both federal and state money. *Id.* at 1200. The Court held that this is another impermissible collateral attack on the federal program, which explicitly requires goals to be set for mix-funded contracts. *Id.*

Conclusion. The Court concluded that the AGC did not have standing, and that further, Caltrans’ DBE program survives strict scrutiny by: 1) having a strong basis in evidence of discrimination within the California transportation contracting industry, and 2) being narrowly tailored to benefit only those groups that have actually suffered discrimination. *Id.* at 1200. The Court then dismissed the appeal. *Id.*

5. *Braunstein v. Arizona DOT*, 683 F.3d 1177 (9th Cir. 2012)

Braunstein is an engineering contractor that provided subsurface utility location services for ADOT. Braunstein sued the Arizona DOT and others seeking damages under the Civil Rights Act, pursuant to §§ 1981 and 1983, and challenging the use of Arizona’s former affirmative action program, or race- and gender- conscious DBE program implementing the Federal DBE Program, alleging violation of the equal protection clause.

Factual background. ADOT solicited bids for a new engineering and design contract. Six firms bid on the prime contract, but Braunstein did not bid because he could not satisfy a requirement

that prime contractors complete 50 percent of the contract work themselves. Instead, Braunstein contacted the bidding firms to ask about subcontracting for the utility location work. 683 F.3d at 1181. All six firms rejected Braunstein's overtures, and Braunstein did not submit a quote or subcontracting bid to any of them. *Id.*

As part of the bid, the prime contractors were required to comply with federal regulations that provide states receiving federal highway funds maintain a DBE program. 683 F.3d at 1182. Under this contract, the prime contractor would receive a maximum of 5 points for DBE participation. *Id. at 1182.* All six firms that bid on the prime contract received the maximum 5 points for DBE participation. All six firms committed to hiring DBE subcontractors to perform at least 6 percent of the work. Only one of the six bidding firms selected a DBE as its desired utility location subcontractor. Three of the bidding firms selected another company other than Braunstein to perform the utility location work. *Id.* DMJM won the bid for the 2005 contract using Aztec to perform the utility location work. Aztec was not a DBE. *Id. at 1182.*

District Court rulings. Braunstein brought this suit in federal court against ADOT and employees of the DOT alleging that ADOT violated his right to equal protection by using race and gender preferences in its solicitation and award of the 2005 contract. The district court dismissed as moot Braunstein's claims for injunctive and declaratory relief because ADOT had suspended its DBE program in 2006 following the Ninth Circuit decision in *Western States Paving Co. v. Washington State DOT*, 407 F.3d 9882 (9th Cir. 2005). This left only Braunstein's damages claims against the State and ADOT under §2000d, and against the named individual defendants in their individual capacities under §§ 1981 and 1983. *Id. at 1183.*

The district court concluded that Braunstein lacked Article III standing to pursue his remaining claims because he had failed to show that ADOT's DBE program had affected him personally. The court noted that "Braunstein was afforded the opportunity to bid on subcontracting work, and the DBE goal did not serve as a barrier to doing so, nor was it an impediment to his securing a subcontract." *Id. at 1183.* The district court found that Braunstein's inability to secure utility location work stemmed from his past unsatisfactory performance, not his status as a non-DBE. *Id.*

Lack of standing. The Ninth Circuit Court of Appeals held that Braunstein lacked Article III standing and affirmed the entry of summary judgment in favor of ADOT and the individual employees of ADOT. The Court found that Braunstein had not provided any evidence showing that ADOT's DBE program affected him personally or that it impeded his ability to compete for utility location work on an equal basis. *Id. at 1185.* The Court noted that Braunstein did not submit a quote or a bid to any of the prime contractors bidding on the government contract. *Id.*

The Court also pointed out that Braunstein did not seek prospective relief against the government "affirmative action" program, noting the district court dismissed as moot his claims for declaratory and injunctive relief since ADOT had suspended its DBE program before he brought the suit. *Id. at 1186.* Thus, Braunstein's surviving claims were for damages based on the contract at issue rather than prospective relief to enjoin the DBE Program. *Id.* Accordingly, the Court held he must show more than that he is "able and ready" to seek subcontracting work. *Id.*

The Court found Braunstein presented no evidence to demonstrate that he was in a position to compete equally with the other subcontractors, no evidence comparing himself with the other subcontractors in terms of price or other criteria, and no evidence explaining why the six prospective prime contractors rejected him as a subcontractor. *Id. at 1186*. The Court stated that there was nothing in the record indicating the ADOT DBE program posed a barrier that impeded Braunstein's ability to compete for work as a subcontractor. *Id. at 1187*. The Court held that the existence of a racial or gender barrier is not enough to establish standing, without a plaintiff's showing that he has been subjected to such a barrier. *Id. at 1186*.

The Court noted Braunstein had explicitly acknowledged previously that the winning bidder on the contract would not hire him as a subcontractor for reasons unrelated to the DBE program. *Id. at 1186*. At the summary judgment stage, the Court stated that Braunstein was required to set forth specific facts demonstrating the DBE program impeded his ability to compete for the subcontracting work on an equal basis. *Id. at 1187*.

Summary judgment granted to ADOT. The Court concluded that Braunstein was unable to point to any evidence to demonstrate how the ADOT DBE program adversely affected him personally or impeded his ability to compete for subcontracting work. *Id.* The Court thus held that Braunstein lacked Article III standing and affirmed the entry of summary judgment in favor of ADOT.

6. Northern Contracting, Inc. v. Illinois, 473 F.3d 715 (7th Cir. 2007)

In *Northern Contracting, Inc. v. Illinois*, the Seventh Circuit affirmed the district court decision upholding the validity and constitutionality of the Illinois Department of Transportation's ("IDOT") DBE Program. Plaintiff Northern Contracting Inc. ("NCI") was a white male-owned construction company specializing in the construction of guardrails and fences for highway construction projects in Illinois. 473 F.3d 715, 717 (7th Cir. 2007). Initially, NCI challenged the constitutionality of both the federal regulations and the Illinois statute implementing these regulations. *Id. at 719*. The district court granted the USDOT's Motion for Summary Judgment, concluding that the federal government had demonstrated a compelling interest and that TEA-21 was sufficiently narrowly tailored. NCI did not challenge this ruling and thereby forfeited the opportunity to challenge the federal regulations. *Id. at 720*. NCI also forfeited the argument that IDOT's DBE program did not serve a compelling government interest. *Id.* The sole issue on appeal to the Seventh Circuit was whether IDOT's program was narrowly tailored. *Id.*

IDOT typically adopted a new DBE plan each year. *Id. at 718*. In preparing for Fiscal Year 2005, IDOT retained a consulting firm to determine DBE availability. *Id.* The consultant first identified the relevant geographic market (Illinois) and the relevant product market (transportation infrastructure construction). *Id.* The consultant then determined availability of minority- and women-owned firms through analysis of Dun & Bradstreet's Marketplace data. *Id.* This initial list was corrected for errors in the data by surveying the D&B list. *Id.* In light of these surveys, the consultant arrived at a DBE availability of 22.77 percent. *Id.* The consultant then ran a regression analysis on earnings and business information and concluded that in the absence of discrimination, relative DBE availability would be 27.5 percent. *Id.* IDOT considered this, along with other data, including DBE utilization on IDOT's "zero goal" experiment conducted in 2002 to 2003, in which IDOT did not use DBE goals on 5 percent of its contracts (1.5% utilization) and

data of DBE utilization on projects for the Illinois State Toll Highway Authority which does not receive federal funding and whose goals are completely voluntary (1.6% utilization). *Id.* at 719. On the basis of all of this data, IDOT adopted a 22.77 percent goal for 2005. *Id.*

Despite the fact the NCI forfeited the argument that IDOT's DBE program did not serve a compelling state interest, the Seventh Circuit briefly addressed the compelling interest prong of the strict scrutiny analysis, noting that IDOT had satisfied its burden. *Id.* at 720. The court noted that, post-*Adarand*, two other circuits have held that a state may rely on the federal government's compelling interest in implementing a local DBE plan. *Id.* at 720-21, citing *Western States Paving Co., Inc. v. Washington State DOT*, 407 F.3d 983, 987 (9th Cir. 2005), *cert. denied*, 126 S.Ct. 1332 (Feb. 21, 2006) and *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d 964, 970 (8th Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004). The court stated that NCI had not articulated any reason to break ranks from the other circuits and explained that "[i]nsofar as the state is merely complying with federal law it is acting as the agent of the federal government If the state does exactly what the statute expects it to do, and the statute is conceded for purposes of litigation to be constitutional, we do not see how the state can be thought to have violated the Constitution." *Id.* at 721, quoting *Milwaukee County Pavers Association v. Fielder*, 922 F.2d 419, 423 (7th Cir. 1991). The court did not address whether IDOT had an independent interest that could have survived constitutional scrutiny.

In addressing the narrowly tailored prong with respect to IDOT's DBE program, the court held that IDOT had complied. *Id.* The court concluded its holding in *Milwaukee* that a state is insulated from a constitutional attack absent a showing that the state exceeded its federal authority remained applicable. *Id.* at 721-22. The court noted that the Supreme Court in *Adarand Constructors v. Pena*, 515 U.S. 200 (1995) did not seize the opportunity to overrule that decision, explaining that the Court did not invalidate its conclusion that a challenge to a state's application of a federally mandated program must be limited to the question of whether the state exceeded its authority. *Id.* at 722.

The court further clarified the *Milwaukee* opinion in light of the interpretations of the opinions offered in by the Ninth Circuit in *Western States* and Eighth Circuit in *Sherbrooke*. *Id.* The court stated that the Ninth Circuit in *Western States* misread the *Milwaukee* decision in concluding that *Milwaukee* did not address the situation of an as-applied challenge to a DBE program. *Id.* at 722, n. 5. Relatedly, the court stated that the Eighth Circuit's opinion in *Sherbrooke* (that the *Milwaukee* decision was compromised by the fact that it was decided under the prior law "when the 10 percent federal set-aside was more mandatory") was unconvincing since all recipients of federal transportation funds are still required to have compliant DBE programs. *Id.* at 722. Federal law makes more clear now that the compliance could be achieved even with no DBE utilization if that were the result of a good faith use of the process. *Id.* at 722, n. 5. The court stated that IDOT in this case was acting as an instrument of federal policy and NCI's collateral attack on the federal regulations was impermissible. *Id.* at 722.

The remainder of the court's opinion addressed the question of whether IDOT exceeded its grant of authority under federal law, and held that all of NCI's arguments failed. *Id.* First, NCI challenged the method by which the local base figure was calculated, the first step in the goal-setting process. *Id.* NCI argued that the number of registered and prequalified DBEs in Illinois should have simply been counted. *Id.* The court stated that while the federal regulations list

several examples of methods for determining the local base figure, *Id.* at 723, these examples are not intended as an exhaustive list. The court pointed out that the fifth item in the list is entitled “Alternative Methods,” and states: “You may use other methods to determine a base figure for your overall goal. Any methodology you choose must be based on demonstrable evidence of local market conditions and be designated to ultimately attain a goal that is rationally related to the relative availability of DBEs in your market.” *Id.* (citing 49 CFR § 26.45(c)(5)). According to the court, the regulations make clear that “relative availability” means “the availability of ready, willing and able DBEs relative to all business ready, willing, and able to participate” on DOT contracts. *Id.* The court stated NCI pointed to nothing in the federal regulations that indicated that a recipient must so narrowly define the scope of the ready, willing, and available firms to a simple count of the number of registered and prequalified DBEs. *Id.* The court agreed with the district court that the remedial nature of the federal scheme militates in favor of a method of DBE availability calculation that casts a broader net. *Id.*

Second, NCI argued that the IDOT failed to properly adjust its goal based on local market conditions. *Id.* The court noted that the federal regulations do not require any adjustments to the base figure, but simply provide recipients with authority to make such adjustments if necessary. *Id.* According to the court, NCI failed to identify any aspect of the regulations requiring IDOT to separate prime contractor availability from subcontractor availability, and pointed out that the regulations require the local goal to be focused on overall DBE participation. *Id.*

Third, NCI contended that IDOT violated the federal regulations by failing to meet the maximum feasible portion of its overall goal through race-neutral means of facilitating DBE participation. *Id.* at 723-24. NCI argued that IDOT should have considered DBEs who had won subcontracts on goal projects where the prime contractor did not consider DBE status, instead of only considering DBEs who won contracts on no-goal projects. *Id.* at 724. The court held that while the regulations indicate that where DBEs win subcontracts on goal projects strictly through low bid this can be counted as race-neutral participation, the regulations did not require IDOT to search for this data, for the purpose of calculating past levels of race-neutral DBE participation. *Id.* According to the court, the record indicated that IDOT used nearly all the methods described in the regulations to maximize the portion of the goal that will be achieved through race-neutral means. *Id.*

The court affirmed the decision of the district court upholding the validity of the IDOT DBE program and found that it was narrowly tailored to further a compelling governmental interest. *Id.*

7. *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006)

This case out of the Ninth Circuit struck down a state’s implementation of the Federal DBE Program for failure to pass constitutional muster. In *Western States Paving*, the Ninth Circuit held that the State of Washington’s implementation of the Federal DBE Program was unconstitutional because it did not satisfy the narrow tailoring element of the constitutional test. The Ninth Circuit held that the State must present its own evidence of past discrimination within its own boundaries in order to survive constitutional muster and could not merely rely upon data supplied by Congress. The United States Supreme Court denied certiorari. The analysis in

the decision also is instructive in particular as to the application of the narrowly tailored prong of the strict scrutiny test.

Plaintiff Western States Paving Co. (“plaintiff”) was a white male-owned asphalt and paving company. 407 F.3d 983, 987 (9th Cir. 2005). In July of 2000, plaintiff submitted a bid for a project for the City of Vancouver; the project was financed with federal funds provided to the Washington State DOT (“WSDOT”) under the Transportation Equity Act for the 21st Century (“TEA-21”). *Id.*

Congress enacted TEA-21 in 1991 and after multiple renewals, it was set to expire on May 31, 2004. *Id.* at 988. TEA-21 established minimum minority-owned business participation requirements (10%) for certain federally-funded projects. *Id.* The regulations require each state accepting federal transportation funds to implement a DBE program that comports with the TEA-21. *Id.* TEA-21 indicates the 10 percent DBE utilization requirement is “aspirational,” and the statutory goal “does not authorize or require recipients to set overall or contract goals at the 10 percent level, or any other particular level, or to take any special administrative steps if their goals are above or below 10 percent.” *Id.*

TEA-21 sets forth a two-step process for a state to determine its own DBE utilization goal: (1) the state must calculate the relative availability of DBEs in its local transportation contracting industry (one way to do this is to divide the number of ready, willing and able DBEs in a state by the total number of ready, willing and able firms); and (2) the state is required to “adjust this base figure upward or downward to reflect the proven capacity of DBEs to perform work (as measured by the volume of work allocated to DBEs in recent years) and evidence of discrimination against DBEs obtained from statistical disparity studies.” *Id.* at 989 (citing regulation). A state is also permitted to consider discrimination in the bonding and financing industries and the present effects of past discrimination. *Id.* (citing regulation). TEA-21 requires a generalized, “undifferentiated” minority goal and a state is prohibited from apportioning their DBE utilization goal among different minority groups (*e.g.*, between Hispanics, blacks, and women). *Id.* at 990 (citing regulation).

“A state must meet the maximum feasible portion of this goal through race- [and gender-] neutral means, including informational and instructional programs targeted toward all small businesses.” *Id.* (citing regulation). Race- and gender-conscious contract goals must be used to achieve any portion of the contract goals not achievable through race- and gender-neutral measures. *Id.* (citing regulation). However, TEA-21 does not require that DBE participation goals be used on every contract or at the same level on every contract in which they are used; rather, the overall effect must be to “obtain that portion of the requisite DBE participation that cannot be achieved through race- [and gender-] neutral means.” *Id.* (citing regulation).

A prime contractor must use “good faith efforts” to satisfy a contract’s DBE utilization goal. *Id.* (citing regulation). However, a state is prohibited from enacting rigid quotas that do not contemplate such good faith efforts. *Id.* (citing regulation).

Under the TEA-21 minority utilization requirements, the City set a goal of 14 percent minority participation on the first project plaintiff bid on; the prime contractor thus rejected plaintiff’s bid in favor of a higher bidding minority-owned subcontracting firm. *Id.* at 987. In September of 2000, plaintiff again submitted a bid on a project financed with TEA-21 funds and was again

rejected in favor of a higher bidding minority-owned subcontracting firm. *Id.* The prime contractor expressly stated that he rejected plaintiff's bid due to the minority utilization requirement. *Id.*

Plaintiff filed suit against the WSDOT, Clark County, and the City, challenging the minority preference requirements of TEA-21 as unconstitutional both facially and as applied. *Id.* The district court rejected both of plaintiff's challenges. The district court held the program was facially constitutional because it found that Congress had identified significant evidence of discrimination in the transportation contracting industry and the TEA-21 was narrowly tailored to remedy such discrimination. *Id.* at 988. The district court rejected the as-applied challenge concluding that Washington's implementation of the program comported with the federal requirements and the state was not required to demonstrate that its minority preference program independently satisfied strict scrutiny. *Id.* Plaintiff appealed to the Ninth Circuit Court of Appeals. *Id.*

The Ninth Circuit considered whether the TEA-21, which authorizes the use of race- and gender-based preferences in federally-funded transportation contracts, violated equal protection, either on its face or as applied by the State of Washington.

The court applied a strict scrutiny analysis to both the facial and as-applied challenges to TEA-21. *Id.* at 990-91. The court did not apply a separate intermediate scrutiny analysis to the gender-based classifications because it determined that it "would not yield a different result." *Id.* at 990, n. 6.

Facial challenge (Federal Government). The court first noted that the federal government has a compelling interest in "ensuring that its funding is not distributed in a manner that perpetuates the effects of either public or private discrimination within the transportation contracting industry." *Id.* at 991, citing *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 492 (1989) and *Adarand Constructors, Inc. v. Slater* ("Adarand VII"), 228 F.3d 1147, 1176 (10th Cir. 2000). The court found that "[b]oth statistical and anecdotal evidence are relevant in identifying the existence of discrimination." *Id.* at 991. The court found that although Congress did not have evidence of discrimination against minorities in every state, such evidence was unnecessary for the enactment of nationwide legislation. *Id.* However, citing both the Eighth and Tenth Circuits, the court found that Congress had ample evidence of discrimination in the transportation contracting industry to justify TEA-21. *Id.* The court also found that because TEA-21 set forth flexible race-conscious measures to be used only when race-neutral efforts were unsuccessful, the program was narrowly tailored and thus satisfied strict scrutiny. *Id.* at 992-93. The court accordingly rejected plaintiff's facial challenge. *Id.*

As-applied challenge (State of Washington). Plaintiff alleged TEA-21 was unconstitutional as-applied because there was no evidence of discrimination in Washington's transportation contracting industry. *Id.* at 995. The State alleged that it was not required to independently demonstrate that its application of TEA-21 satisfied strict scrutiny. *Id.* The United States intervened to defend TEA-21's facial constitutionality, and "unambiguously conceded that TEA-21's race conscious measures can be constitutionally applied only in those states where the effects of discrimination are present." *Id.* at 996; see also Br. for the United States at 28 (April 19, 2004) ("DOT's regulations ... are designed to assist States in ensuring that race-conscious

remedies are limited to only those jurisdictions where discrimination or its effects are a problem and only as a last resort when race-neutral relief is insufficient.” (emphasis in original)).

The court found that the Eighth Circuit was the only other court to consider an as-applied challenge to TEA-21 in *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d 964 (8th Cir. 2003), *cert. denied* 124 S. Ct. 2158 (2004). *Id.* at 996. The Eighth Circuit did not require Minnesota and Nebraska to identify a compelling purpose for their programs independent of Congress’s nationwide remedial objective. *Id.* However, the Eighth Circuit did consider whether the states’ implementation of TEA-21 was narrowly tailored to achieve Congress’s remedial objective. *Id.* The Eighth Circuit thus looked to the states’ independent evidence of discrimination because “to be narrowly tailored, a *national* program must be limited to those parts of the country where its race-based measures are demonstrably needed.” *Id.* (internal citations omitted). The Eighth Circuit relied on the states’ statistical analyses of the availability and capacity of DBEs in their local markets conducted by outside consulting firms to conclude that the states satisfied the narrow tailoring requirement. *Id.* at 997.

The court concurred with the Eighth Circuit and found that Washington did not need to demonstrate a compelling interest for its DBE program, independent from the compelling nationwide interest identified by Congress. *Id.* However, the court determined that the district court erred in holding that mere compliance with the federal program satisfied strict scrutiny. *Id.* Rather, the court held that whether Washington’s DBE program was narrowly tailored was dependent on the presence or absence of discrimination in Washington’s transportation contracting industry. *Id.* at 997-98. “If no such discrimination is present in Washington, then the State’s DBE program does not serve a remedial purpose; it instead provides an unconstitutional windfall to minority contractors solely on the basis of their race or sex.” *Id.* at 998. The court held that a Sixth Circuit decision to the contrary, *Tennessee Asphalt Co. v. Farris*, 942 F.2d 969, 970 (6th Cir. 1991), misinterpreted earlier case law. *Id.* at 997, n. 9.

The court found that moreover, even where discrimination is present in a state, a program is narrowly tailored only if it applies only to those minority groups who have actually suffered discrimination. *Id.* at 998, *citing Croson*, 488 U.S. at 478. The court also found that in *Monterey Mechanical Co. v. Wilson*, 125 F.3d 702, 713 (9th Cir. 1997), it had “previously expressed similar concerns about the haphazard inclusion of minority groups in affirmative action programs ostensibly designed to remedy the effects of discrimination.” *Id.* In *Monterey Mechanical*, the court held that “the overly inclusive designation of benefited minority groups was a ‘red flag signaling that the statute is not, as the Equal Protection Clause requires, narrowly tailored.’” *Id.*, *citing Monterey Mechanical*, 125 F.3d at 714. The court found that other courts are in accord. *Id.* at 998-99, *citing Builders Ass’n of Greater Chi. v. County of Cook*, 256 F.3d 642, 647 (7th Cir. 2001); *Associated Gen. Contractors of Ohio, Inc. v. Drabik*, 214 F.3d 730, 737 (6th Cir. 2000); *O’Donnell Constr. Co. v. District of Columbia*, 963 F.2d 420, 427 (D.C. Cir. 1992). Accordingly, the court found that each of the principal minority groups benefited by WSDOT’s DBE program must have suffered discrimination within the State. *Id.* at 999.

The court found that WSDOT’s program closely tracked the sample USDOT DBE program. *Id.* WSDOT calculated its DBE participation goal by first calculating the availability of ready, willing and able DBEs in the State (dividing the number of transportation contracting firms in the Washington State Office of Minority, Women and Disadvantaged Business Enterprises Directory

by the total number of transportation contracting firms listed in the Census Bureau's Washington database, which equaled 11.17%). *Id.* WSDOT then upwardly adjusted the 11.17 percent base figure to 14 percent "to account for the proven capacity of DBEs to perform work, as reflected by the volume of work performed by DBEs [during a certain time period]." *Id.* Although DBEs performed 18 percent of work on State projects during the prescribed time period, Washington set the final adjusted figure at 14 percent because TEA-21 reduced the number of eligible DBEs in Washington by imposing more stringent certification requirements. *Id.* at 999, n. 11. WSDOT did not make an adjustment to account for discriminatory barriers in obtaining bonding and financing. *Id.* WSDOT similarly did not make any adjustment to reflect present or past discrimination "because it lacked any statistical studies evidencing such discrimination." *Id.*

WSDOT then determined that it needed to achieve 5 percent of its 14 percent goal through race-conscious means based on a 9 percent DBE participation rate on state-funded contracts that did not include affirmative action components (*i.e.*, 9% participation could be achieved through race-neutral means). *Id.* at 1000. The USDOT approved WSDOT goal-setting program and the totality of its 2000 DBE program. *Id.*

Washington conceded that it did not have statistical studies to establish the existence of past or present discrimination. *Id.* It argued, however, that it had evidence of discrimination because minority-owned firms had the capacity to perform 14 percent of the State's transportation contracts in 2000 but received only 9 percent of the subcontracting funds on contracts that did not include an affirmative action's component. *Id.* The court found that the State's methodology was flawed because the 14 percent figure was based on the earlier 18 percent figure, discussed *supra*, which included contracts with affirmative action components. *Id.* The court concluded that the 14 percent figure did not accurately reflect the performance capacity of DBEs in a race-neutral market. *Id.* The court also found the State conceded as much to the district court. *Id.*

The court held that a disparity between DBE performance on contracts with an affirmative action component and those without "does not provide any evidence of discrimination against DBEs." *Id.* The court found that the only evidence upon which Washington could rely was the disparity between the proportion of DBE firms in the State (11.17%) and the percentage of contracts awarded to DBEs on race-neutral grounds (9%). *Id.* However, the court determined that such evidence was entitled to "little weight" because it did not take into account a multitude of other factors such as firm size. *Id.*

Moreover, the court found that the minimal statistical evidence was insufficient evidence, standing alone, of discrimination in the transportation contracting industry. *Id.* at 1001. The court found that WSDOT did not present any anecdotal evidence. *Id.* The court rejected the State's argument that the DBE applications themselves constituted evidence of past discrimination because the applications were not properly in the record, and because the applicants were not required to certify that they had been victims of discrimination in the contracting industry. *Id.* Accordingly, the court held that because the State failed to proffer evidence of discrimination within its own transportation contracting market, its DBE program was not narrowly tailored to Congress's compelling remedial interest. *Id.* at 1002-03.

The court affirmed the district court's grant on summary judgment to the United States regarding the facial constitutionality of TEA-21, reversed the grant of summary judgment to Washington on the as-applied challenge, and remanded to determine the State's liability for damages.

The dissent argued that where the State complied with TEA-21 in implementing its DBE program, it was not susceptible to an as-applied challenge.

8. Sherbrooke Turf, Inc. v. Minnesota DOT, and Gross Seed Company v. Nebraska Department of Roads, 345 F.3d 964 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004)

This case is instructive in its analysis of state DOT DBE-type programs and their evidentiary basis and implementation. This case also is instructive in its analysis of the narrowly tailored requirement for state DBE programs. In upholding the challenged Federal DBE Program at issue in this case the Eighth Circuit emphasized the race-, ethnicity- and gender-neutral elements, the ultimate flexibility of the Program, and the fact the Program was tied closely only to labor markets with identified discrimination.

In *Sherbrooke Turf, Inc. v. Minnesota DOT*, and *Gross Seed Company v. Nebraska Department of Roads*, the U.S. Court of Appeals for the Eighth Circuit upheld the constitutionality of the Federal DBE Program (49 CFR Part 26). The court held the Federal Program was narrowly tailored to remedy a compelling governmental interest. The court also held the federal regulations governing the states' implementation of the Federal DBE Program were narrowly tailored, and the state DOT's implementation of the Federal DBE Program was narrowly tailored to serve a compelling governmental interest.

Sherbrooke and Gross Seed both contended that the Federal DBE Program on its face and as applied in Minnesota and Nebraska violated the Equal Protection component of the Fifth Amendment's Due Process Clause. The Eighth Circuit engaged in a review of the Federal DBE Program and the implementation of the Program by the Minnesota DOT and the Nebraska Department of Roads ("Nebraska DOR") under a strict scrutiny analysis and held that the Federal DBE Program was valid and constitutional and that the Minnesota DOT's and Nebraska DOR's implementation of the Program also was constitutional and valid. Applying the strict scrutiny analysis, the court first considered whether the Federal DBE Program established a compelling governmental interest, and found that it did. It concluded that Congress had a strong basis in evidence to support its conclusion that race-based measures were necessary for the reasons stated by the Tenth Circuit in *Adarand*, 228 F.3d at 1167-76. Although the contractors presented evidence that challenged the data, they failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to participation in highway contracts. Thus, the court held they failed to meet their ultimate burden to prove that the DBE Program is unconstitutional on this ground.

Finally, Sherbrooke and Gross Seed argued that the Minnesota DOT and Nebraska DOR must independently satisfy the compelling governmental interest test aspect of strict scrutiny review. The government argued, and the district courts below agreed, that participating states need not independently meet the strict scrutiny standard because under the DBE Program the state must still comply with the DOT regulations. The Eighth Circuit held that this issue was not addressed

by the Tenth Circuit in *Adarand*. The Eighth Circuit concluded that neither side's position is entirely sound.

The court rejected the contention of the contractors that their facial challenges to the DBE Program must be upheld unless the record before Congress included strong evidence of race discrimination in construction contracting in Minnesota and Nebraska. On the other hand, the court held a valid race-based program must be narrowly tailored, and to be narrowly tailored, a national program must be limited to those parts of the country where its race-based measures are demonstrably needed to the extent that the federal government delegates this tailoring function, as a state's implementation becomes relevant to a reviewing court's strict scrutiny. Thus, the court left the question of state implementation to the narrow tailoring analysis.

The court held that a reviewing court applying strict scrutiny must determine if the race-based measure is narrowly tailored. That is, whether the means chosen to accomplish the government's asserted purpose are specifically and narrowly framed to accomplish that purpose. The contractors have the ultimate burden of establishing that the DBE Program is not narrowly tailored. *Id.* The compelling interest analysis focused on the record before Congress; the narrow-tailoring analysis looks at the roles of the implementing highway construction agencies.

For determining whether a race-conscious remedy is narrowly tailored, the court looked at factors such as the efficacy of alternative remedies, the flexibility and duration of the race-conscious remedy, the relationship of the numerical goals to the relevant labor market, and the impact of the remedy on third parties. *Id.* Under the DBE Program, a state receiving federal highway funds must, on an annual basis, submit to USDOT an overall goal for DBE participation in its federally-funded highway contracts. *See*, 49 CFR § 26.45(f)(1). The overall goal "must be based on demonstrable evidence" as to the number of DBEs who are ready, willing, and able to participate as contractors or subcontractors on federally-assisted contracts. 49 CFR § 26.45(b). The number may be adjusted upward to reflect the state's determination that more DBEs would be participating absent the effects of discrimination, including race-related barriers to entry. *See*, 49 CFR § 26.45(d).

The state must meet the "maximum feasible portion" of its overall goal by race-neutral means and must submit for approval a projection of the portion it expects to meet through race-neutral means. *See*, 49 CFR § 26.45(a), (c). If race-neutral means are projected to fall short of achieving the overall goal, the state must give preference to firms it has certified as DBEs. However, such preferences may not include quotas. 49 CFR § 26.45(b). During the course of the year, if a state determines that it will exceed or fall short of its overall goal, it must adjust its use of race-conscious and race-neutral methods "[t]o ensure that your DBE program continues to be narrowly tailored to overcome the effects of discrimination." 49 CFR § 26.51(f).

Absent bad faith administration of the program, a state's failure to achieve its overall goal will not be penalized. *See*, 49 CFR § 26.47. If the state meets its overall goal for two consecutive years through race-neutral means, it is not required to set an annual goal until it does not meet its prior overall goal for a year. *See*, 49 CFR § 26.51(f)(3). In addition, DOT may grant an exemption or waiver from any and all requirements of the Program. *See*, 49 CFR § 26.15(b).

Like the district courts below, the Eighth Circuit concluded that the USDOT regulations, on their face, satisfy the Supreme Court's narrowing tailoring requirements. First, the regulations place strong emphasis on the use of race-neutral means to increase minority business participation in government contracting. 345 F.3d at 972. Narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, but it does require serious good faith consideration of workable race-neutral alternatives. 345 F.3d at 971, *citing Grutter v. Bollinger*, 539 U.S. 306.

Second, the revised DBE program has substantial flexibility. A state may obtain waivers or exemptions from any requirements and is not penalized for a good faith effort to meet its overall goal. In addition, the program limits preferences to small businesses falling beneath an earnings threshold, and any individual whose net worth exceeds \$750,000.00 cannot qualify as economically disadvantaged. *See*, 49 CFR § 26.67(b). Likewise, the DBE program contains built-in durational limits. 345 F.3d at 972. A state may terminate its DBE program if it meets or exceeds its annual overall goal through race-neutral means for two consecutive years. *Id.*; 49 CFR § 26.51(f)(3).

Third, the court found, the USDOT has tied the goals for DBE participation to the relevant labor markets. The regulations require states to set overall goals based upon the likely number of minority contractors that would have received federal assisted highway contracts but for the effects of past discrimination. *See*, 49 CFR § 26.45(c)-(d)(Steps 1 and 2). Though the underlying estimates may be inexact, the exercise requires states to focus on establishing realistic goals for DBE participation in the relevant contracting markets. *Id.* at 972.

Finally, Congress and DOT have taken significant steps, the court held, to minimize the race-based nature of the DBE Program. Its benefits are directed at all small businesses owned and controlled by the socially and economically disadvantaged. While TEA-21 creates a presumption that members of certain racial minorities fall within that class, the presumption is rebuttable, wealthy minority owners and wealthy minority-owned firms are excluded, and certification is available to persons who are not presumptively disadvantaged that demonstrate actual social and economic disadvantage. Thus, race is made relevant in the Program, but it is not a determinative factor. 345 F.3d at 973. For these reasons, the court agreed with the district courts that the revised DBE Program is narrowly tailored on its face.

Sherbrooke and Gross Seed also argued that the DBE Program as applied in Minnesota and Nebraska is not narrowly tailored. Under the Federal Program, states set their own goals, based on local market conditions; their goals are not imposed by the federal government; nor do recipients have to tie them to any uniform national percentage. 345 F.3d at 973, *citing* 64 Fed. Reg. at 5102.

The court analyzed what Minnesota and Nebraska did in connection with their implementation of the Federal DBE Program. Minnesota DOT commissioned a disparity study of the highway contracting market in Minnesota. The study group determined that DBEs made up 11.4 percent of the prime contractors and subcontractors in a highway construction market. Of this number, 0.6 percent were minority-owned and 10.8 percent women-owned. Based upon its analysis of business formation statistics, the consultant estimated that the number of participating minority-owned business would be 34 percent higher in a race-neutral market. Therefore, the consultant adjusted its DBE availability figure from 11.4 percent to 11.6 percent. Based on the

study, Minnesota DOT adopted an overall goal of 11.6 percent DBE participation for federally-assisted highway projects. Minnesota DOT predicted that it would need to meet 9 percent of that overall goal through race and gender-conscious means, based on the fact that DBE participation in State highway contracts dropped from 10.25 percent in 1998 to 2.25 percent in 1999 when its previous DBE Program was suspended by the injunction by the district court in an earlier decision in *Sherbrooke*. Minnesota DOT required each prime contract bidder to make a good faith effort to subcontract a prescribed portion of the project to DBEs, and determined that portion based on several individualized factors, including the availability of DBEs in the extent of subcontracting opportunities on the project.

The contractor presented evidence attacking the reliability of the data in the study, but it failed to establish that better data were available or that Minnesota DOT was otherwise unreasonable in undertaking this thorough analysis and relying on its results. *Id.* The precipitous drop in DBE participation when no race-conscious methods were employed, the court concluded, supports Minnesota DOT's conclusion that a substantial portion of its overall goal could not be met with race-neutral measures. *Id.* On that record, the court agreed with the district court that the revised DBE Program serves a compelling government interest and is narrowly tailored on its face and as applied in Minnesota.

In Nebraska, the Nebraska DOR commissioned a disparity study also to review availability and capability of DBE firms in the Nebraska highway construction market. The availability study found that between 1995 and 1999, when Nebraska followed the mandatory 10 percent set-aside requirement, 9.95 percent of all available and capable firms were DBEs, and DBE firms received 12.7 percent of the contract dollars on federally assisted projects. After apportioning part of this DBE contracting to race-neutral contracting decisions, Nebraska DOR set an overall goal of 9.95 percent DBE participation and predicted that 4.82 percent of this overall goal would have to be achieved by race-and-gender conscious means. The Nebraska DOR required that prime contractors make a good faith effort to allocate a set portion of each contract's funds to DBE subcontractors. The Eighth Circuit concluded that *Gross Seed*, like *Sherbrooke*, failed to prove that the DBE Program is not narrowly tailored as applied in Nebraska. Therefore, the court affirmed the district courts' decisions in *Gross Seed* and *Sherbrooke*. (See district court opinions discussed *infra*.)

9. *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10th Cir. 2000) cert. granted then dismissed as improvidently granted sub nom. *Adarand Constructors, Inc. v. Mineta*, 532 U.S. 941, 534 U.S. 103 (2001)

This is the *Adarand* decision by the United States Court of Appeals for the Tenth Circuit, which was on remand from the earlier Supreme Court decision applying the strict scrutiny analysis to any constitutional challenge to the Federal DBE Program. See *Adarand Constructors, Inc. v. Pena*, 515 U.S. 200 (1995). The decision of the Tenth Circuit in this case was considered by the United States Supreme Court, after that court granted certiorari to consider certain issues raised on appeal. The Supreme Court subsequently dismissed the writ of certiorari “as improvidently granted” without reaching the merits of the case. The court did not decide the constitutionality of the Federal DBE Program as it applies to state DOTs or local governments.

The Supreme Court held that the Tenth Circuit had not considered the issue before the Supreme Court on certiorari, namely whether a race-based program applicable to direct federal contracting is constitutional. This issue is distinguished from the issue of the constitutionality of the USDOT DBE Program as it pertains to procurement of federal funds for highway projects let by states, and the implementation of the Federal DBE Program by state DOTs. Therefore, the Supreme Court held it would not reach the merits of a challenge to federal laws relating to direct federal procurement.

Turning to the Tenth Circuit decision in *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10th Cir. 2000), the Tenth Circuit upheld in general the facial constitutionality of the Federal DBE Program. The court found that the federal government had a compelling interest in not perpetuating the effects of racial discrimination in its own distribution of federal funds and in remediating the effects of past discrimination in government contracting, and that the evidence supported the existence of past and present discrimination sufficient to justify the Federal DBE Program. The court also held that the Federal DBE Program is “narrowly tailored,” and therefore upheld the constitutionality of the Federal DBE Program.

It is significant to note that the court in determining the Federal DBE Program is “narrowly tailored” focused on the current regulations, 49 CFR Part 26, and in particular § 26.1(a), (b), and (f). The court pointed out that the federal regulations instruct recipients as follows:

[y]ou must meet the maximum feasible portion of your overall goal by using race-neutral means of facilitating DBE participation, 49 CFR § 26.51(a)(2000); see also 49 CFR § 26.51(f)(2000) (if a recipient can meet its overall goal through race-neutral means, it must implement its program without the use of race-conscious contracting measures), and enumerate a list of race-neutral measures, see 49 CFR § 26.51(b)(2000). The current regulations also outline several race-neutral means available to program recipients including assistance in overcoming bonding and financing obstacles, providing technical assistance, establishing programs to assist start-up firms, and other methods. See 49 CFR § 26.51(b). We therefore are dealing here with revisions that emphasize the continuing need to employ non-race-conscious methods even as the need for race-conscious remedies is recognized. 228 F.3d at 1178-1179.

In considering whether the Federal DBE Program is narrowly tailored, the court also addressed the argument made by the contractor that the program is over- and under-inclusive for several reasons, including that Congress did not inquire into discrimination against each particular minority racial or ethnic group. The court held that insofar as the scope of inquiry suggested was a particular state's construction industry alone, this would be at odds with its holding regarding the compelling interest in Congress's power to enact nationwide legislation. *Id.* at 1185-1186. The court held that because of the "unreliability of racial and ethnic categories and the fact that discrimination commonly occurs based on much broader racial classifications," extrapolating findings of discrimination against the various ethnic groups "is more a question of nomenclature than of narrow tailoring." *Id.* The court found that the "Constitution does not erect a barrier to the government's effort to combat discrimination based on broad racial classifications that might prevent it from enumerating particular ethnic origins falling within such classifications." *Id.*

Finally, the Tenth Circuit did not specifically address a challenge to the letting of federally-funded construction contracts by state departments of transportation. The court pointed out that plaintiff Adarand "conceded that its challenge in the instant case is to 'the federal program, implemented by federal officials,' and not to the letting of federally-funded construction contracts by state agencies." 228 F.3d at 1187. The court held that it did not have before it a sufficient record to enable it to evaluate the separate question of Colorado DOT's implementation of race-conscious policies. *Id.* at 1187-1188.

Recent District Court Decisions

10. Midwest Fence Corporation v. United States DOT and Federal Highway Administration, the Illinois DOT, the Illinois State Toll Highway Authority, et al., 84 F. Supp. 3d 705, 2015 WL 1396376 (N.D. Ill, 2015), affirmed, 840 F.3d 932 (7th Cir. 2016).¹⁹⁵

In *Midwest Fence Corporation v. USDOT, the FHWA, the Illinois DOT and the Illinois State Toll Highway Authority*, Case No. 1:10-3-CV-5627, United States District Court for the Northern District of Illinois, Eastern Division, Plaintiff Midwest Fence Corporation, which is a guardrail, bridge rail and fencing contractor owned and controlled by white males challenged the constitutionality and the application of the USDOT, Disadvantaged Business Enterprise ("DBE") Program. In addition, Midwest Fence similarly challenged the Illinois Department of Transportation's ("IDOT") implementation of the Federal DBE Program for federally-funded projects, IDOT's implementation of its own DBE Program for state-funded projects and the Illinois State Tollway Highway Authority's ("Tollway") separate DBE Program.

The federal district court in 2011 issued an Opinion and Order denying the Defendants' Motion to Dismiss for lack of standing, denying the Federal Defendants' Motion to Dismiss certain Counts of the Complaint as a matter of law, granting IDOT Defendants' Motion to Dismiss certain

¹⁹⁵ 49 CFR Part 26 (Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs ("Federal DBE Program")). See the Transportation Equity Act for the 21st Century (TEA-21) as amended and reauthorized ("MAP-21," "SAFETEA" and "SAFETEA-LU"), and the United States Department of Transportation ("USDOT" or "DOT") regulations promulgated to implement TEA-21 the Federal regulations known as Moving Ahead for Progress in the 21st Century Act ("MAP-21"), Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.; preceded by Pub L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1156; preceded by Pub L. 105-178, Title I, § 1101(b), June 9, 1998, 112 Stat. 107.

Counts and granting the Tollway Defendants' Motion to Dismiss certain Counts, but giving leave to Midwest to replead subsequent to this Order. *Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.*, 2011 WL 2551179 (N.D. Ill. June 27, 2011).

Midwest Fence in its Third Amended Complaint challenged the constitutionality of the Federal DBE Program on its face and as applied, and challenged the IDOT's implementation of the Federal DBE Program. Midwest Fence also sought a declaration that the USDOT regulations have not been properly authorized by Congress and a declaration that SAFETEA-LU is unconstitutional. Midwest Fence sought relief from the IDOT Defendants, including a declaration that state statutes authorizing IDOT's DBE Program for State-funded contracts are unconstitutional; a declaration that IDOT does not follow the USDOT regulations; a declaration that the IDOT DBE Program is unconstitutional and other relief against the IDOT. The remaining Counts sought relief against the Tollway Defendants, including that the Tollway's DBE Program is unconstitutional, and a request for punitive damages against the Tollway Defendants. The court in 2012 granted the Tollway Defendants' Motion to Dismiss Midwest Fence's request for punitive damages.

Equal protection framework, strict scrutiny and burden of proof. The court held that under a strict scrutiny analysis, the burden is on the government to show both a compelling interest and narrowly tailoring. 84 F. Supp. 3d at 720. The government must demonstrate a strong basis in evidence for its conclusion that remedial action is necessary. *Id.* Since the Supreme Court decision in *Croson*, numerous courts have recognized that disparity studies provide probative evidence of discrimination. *Id.* The court stated that an inference of discrimination may be made with empirical evidence that demonstrates a significant statistical disparity between the number of qualified minority contractors and the number of such contractors actually engaged by the locality or the locality's prime contractors. *Id.* The court said that anecdotal evidence may be used in combination with statistical evidence to establish a compelling governmental interest. *Id.*

In addition to providing "hard proof" to back its compelling interest, the court stated that the government must also show that the challenged program is narrowly tailored. *Id.* at 720. While narrow tailoring requires "serious, good faith consideration of workable race-neutral alternatives," the court said it does not require "exhaustion of every conceivable race-neutral alternative." *Id.*, citing *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003); *Fischer v. Univ. of Texas at Austin*, 133 S.Ct. 2411, 2420 (2013).

Once the governmental entity has shown acceptable proof of a compelling interest in remedying past discrimination and illustrated that its plan is narrowly tailored to achieve this goal, the party challenging the affirmative action plan bears the ultimate burden of proving that the plan is unconstitutional. 84 F. Supp. 3d at 721. To successfully rebut the government's evidence, a challenger must introduce "credible, particularized evidence" of its own. *Id.*

This can be accomplished, according to the court, by providing a neutral explanation for the disparity between DBE utilization and availability, showing that the government's data is flawed, demonstrating that the observed disparities are statistically insignificant, or presenting contrasting statistical data. *Id.* Conjecture and unsupported criticisms of the government's methodology are insufficient. *Id.*

Standing. The court found that Midwest had standing to challenge the Federal DBE Program, IDOT's implementation of it, and the Tollway Program. *Id.* at 722. The court, however, did not find that Midwest had presented any facts suggesting its inability to compete on an equal footing for the Target Market Program contracts. The Target Market Program identified a variety of remedial actions that IDOT was authorized to take in certain Districts, which included individual contract goals, DBE participation incentives, as well as set-asides. *Id.* at 722-723.

The court noted that Midwest did not identify any contracts that were subject to the Target Market Program, nor identify any set-asides that were in place in these districts that would have hindered its ability to compete for fencing and guardrails work. *Id.* at 723. Midwest did not allege that it would have bid on contracts set aside pursuant to the Target Market Program had it not been prevented from doing so. *Id.* Because nothing in the record Midwest provided suggested that the Target Market Program impeded Midwest's ability to compete for work in these Districts, the court dismissed Midwest's claim relating to the Target Market Program for lack of standing. *Id.*

Facial challenge to the Federal DBE Program. The court found that remedying the effects of race and gender discrimination within the road construction industry is a compelling governmental interest. The court also found that the Federal Defendants have supported their compelling interest with a strong basis in evidence. *Id.* at 725. The Federal Defendants, the court said, presented an extensive body of testimony, reports, and studies that they claim provided the strong basis in evidence for their conclusion that race and gender-based classifications are necessary. *Id.* The court took judicial notice of the existence of Congressional hearings and reports and the collection of evidence presented to Congress in support of the Federal DBE Program's 2012 reauthorization under MAP-21, including both statistical and anecdotal evidence. *Id.*

The court also considered a report from a consultant who reviewed 95 disparity and availability studies concerning minority- and women-owned businesses, as well as anecdotal evidence, that were completed from 2000 to 2012. *Id.* at 726. Sixty-four of the studies had previously been presented to Congress. *Id.* The studies examine procurement for over 100 public entities and funding sources across 32 states. *Id.* The consultant's report opined that metrics such as firm revenue, number of employees, and bonding limits should not be considered when determining DBE availability because they are all "likely to be influenced by the presence of discrimination if it exists" and could potentially result in a built-in downward bias in the availability measure. *Id.*

To measure disparity, the consultant divided DBE utilization by availability and multiplied by 100 to calculate a "disparity index" for each study. *Id.* at 726. The report found 66 percent of the studies showed a disparity index of 80 or below, that is, significantly underutilized relative to their availability. *Id.* The report also examined data that showed lower earnings and business formation rates among women and minorities, even when variables such as age and education were held constant. *Id.* The report concluded that the disparities were not attributable to factors other than race and sex and were consistent with the presence of discrimination in construction and related professional services. *Id.*

The court distinguished the Federal Circuit decision in *Rothe Dev. Corp. v. Dep't. of Def.*, 545 F.3d 1023 (Fed. Cir. 2008) where the Federal Circuit Court held insufficient the reliance on only six

disparity studies to support the government's compelling interest in implementing a national program. *Id.* at 727, citing *Rothe*, 545 F. 3d at 1046. The court here noted the consultant report supplements the testimony and reports presented to Congress in support of the Federal DBE Program, which courts have found to establish a "strong basis in evidence" to support the conclusion that race-and gender-conscious action is necessary. *Id.*

The court found through the evidence presented by the Federal Defendants satisfied their burden in showing that the Federal DBE Program stands on a strong basis in evidence. *Id.* at 727. The Midwest expert's suggestion that the studies used in consultant's report do not properly account for capacity, the court stated, does not compel the court to find otherwise. The court quoting *Adarand VII*, 228 F.3d at 1173 (10th Cir. 2000) said that general criticism of disparity studies, as opposed to particular evidence undermining the reliability of the particular disparity studies relied upon by the government, is of little persuasive value and does not compel the court to discount the disparity evidence. *Id.* Midwest failed to present "affirmative evidence" that no remedial action was necessary. *Id.*

Federal DBE Program is narrowly tailored. Once the government has established a compelling interest for implementing a race-conscious program, it must show that the program is narrowly tailored to achieve this interest. *Id.* at 727. In determining whether a program is narrowly tailored, courts examine several factors, including (a) the necessity for the relief and efficacy of alternative race-neutral measures, (b) the flexibility and duration of the relief, including the availability of waiver provisions, (c) the relationship of the numerical goals to the relevant labor market, and (d) the impact of the relief on the rights of third parties. *Id.* The court stated that courts may also assess whether a program is "overinclusive." *Id.* at 728. The court found that each of the above factors supports the conclusion that the Federal DBE Program is narrowly tailored. *Id.*

First, the court said that under the federal regulations, recipients of federal funds can only turn to race- and gender-conscious measures after they have attempted to meet their DBE participation goal through race-neutral means. *Id.* at 728. The court noted that race-neutral means include making contracting opportunities more accessible to small businesses, providing assistance in obtaining bonding and financing, and offering technical and other support services. *Id.* The court found that the regulations require serious, good faith consideration of workable race-neutral alternatives. *Id.*

Second, the federal regulations contain provisions that limit the Federal DBE Program's duration and ensure its flexibility. *Id.* at 728. The court found that the Federal DBE Program lasts only as long as its current authorizing act allows, noting that with each reauthorization, Congress must reevaluate the Federal DBE Program in light of supporting evidence. *Id.* The court also found that the Federal DBE Program affords recipients of federal funds and prime contractors substantial flexibility. *Id.* at 728. Recipients may apply for exemptions or waivers, releasing them from program requirements. *Id.* Prime contractors can apply to IDOT for a "good faith efforts waiver" on an individual contract goal. *Id.*

The court stated the availability of waivers is particularly important in establishing flexibility. *Id.* at 728. The court rejected Midwest's argument that the federal regulations impose a quota in light of the Program's explicit waiver provision. *Id.* Based on the availability of waivers, coupled

with regular congressional review, the court found that the Federal DBE Program is sufficiently limited and flexible. *Id.*

Third, the court said that the Federal DBE Program employs a two-step goal-setting process that ties DBE participation goals by recipients of federal funds to local market conditions. *Id.* at 728. The court pointed out that the regulations delegate goal setting to recipients of federal funds who tailor DBE participation to local DBE availability. *Id.* The court found that the Federal DBE Program's goal-setting process requires states to focus on establishing realistic goals for DBE participation that are closely tied to the relevant labor market. *Id.*

Fourth, the federal regulations, according to the court, contain provisions that seek to minimize the Program's burden on non-DBEs. *Id.* at 729. The court pointed out the following provisions aim to keep the burden on non-DBEs minimal: the Federal DBE Program's presumption of social and economic disadvantage is rebuttable; race is not a determinative factor; in the event DBEs become "overconcentrated" in a particular area of contract work, recipients must take appropriate measures to address the overconcentration; the use of race-neutral measures; and the availability of good faith efforts waivers. *Id.*

The court said Midwest's primary argument is that the practice of states to award prime contracts to the lowest bidder, and the fact the federal regulations prescribe that DBE participation goals be applied to the value of the entire contract, unduly burdens non-DBE subcontractors. *Id.* at 729. Midwest argued that because most DBEs are small subcontractors, setting goals as a percentage of all contract dollars, while requiring a remedy to come only from subcontracting dollars, unduly burdens smaller, specialized non-DBEs. *Id.* The court found that the fact innocent parties may bear some of the burden of a DBE program is itself insufficient to warrant the conclusion that a program is not narrowly tailored. *Id.* The court also found that strong policy reasons support the Federal DBE Program's approach. *Id.*

The court stated that congressional testimony and the expert report from the Federal Defendants provide evidence that the Federal DBE Program is not overly inclusive. *Id.* at 729. The court noted the report observed statistically significant disparities in business formation and earnings rates in all 50 states for all minority groups and for non-minority women. *Id.*

The court said that Midwest did not attempt to rebut the Federal Defendants' evidence. *Id.* at 729. Therefore, because the Federal DBE Program stands on a strong basis in evidence and is narrowly tailored to achieve the goal of remedying discrimination, the court found the Program is constitutional on its face. *Id.* at 729. The court thus granted summary judgment in favor of the Federal Defendants. *Id.*

As-applied challenge to IDOT's implementation of the Federal DBE Program. In addition to challenging the Federal DBE Program on its face, Midwest also argued that it is unconstitutional as applied. *Id.* at 730. The court stated because the Federal DBE Program is applied to Midwest through IDOT, the court must examine IDOT's implementation of the Federal DBE Program. *Id.* Following the Seventh Circuit's decision in *Northern Contracting v. Illinois DOT*, the court said that whether the Federal DBE Program is unconstitutional as applied is a question of whether IDOT exceeded its authority in implementing it. *Id.* at 730, citing *Northern Contracting, Inc. v. Illinois*, 473 F.3d 715 at 722 (7th Cir. 2007). The court, quoting *Northern Contracting*, held that a

challenge to a state's application of a federally mandated program must be limited to the question of whether the state exceeded its authority. *Id.*

IDOT not only applies the Federal DBE Program to USDOT-assisted projects, but it also applies the Federal DBE Program to state-funded projects. *Id.* at 730. The court, therefore, held it must determine whether the IDOT Defendants have established a compelling reason to apply the IDOT Program to state-funded projects in Illinois. *Id.*

The court pointed out that the Federal DBE Program delegates the narrow tailoring function to the state, and thus, IDOT must demonstrate that there is a demonstrable need for the implementation of the Federal DBE Program within its jurisdiction. *Id.* at 730. Accordingly, the court assessed whether IDOT has established evidence of discrimination in Illinois sufficient to (1) support its application of the Federal DBE Program to state-funded contracts, and (2) demonstrate that IDOT's implementation of the Federal DBE Program is limited to a place where race-based measures are demonstrably needed. *Id.*

IDOT's evidence of discrimination and DBE availability in Illinois. The evidence that IDOT has presented to establish the existence of discrimination in Illinois included two studies, one that was done in 2004 and the other in 2011. *Id.* at 730. The court said that the 2004 study uncovered disparities in earnings and business formation rates among women and minorities in the construction and engineering fields that the study concluded were consistent with discrimination. IDOT maintained that the 2004 study and the 2011 study must be read in conjunction with one another. *Id.* The court found that the 2011 study provided evidence to establish the disparity from which IDOT's inference of discrimination primarily arises. *Id.*

The 2011 study compared the proportion of contracting dollars awarded to DBEs (utilization) with the availability of DBEs. *Id.* at 730. The study determined availability through multiple sources, including bidders lists, prequalified business lists, and other methods recommended in the federal regulations. *Id.* The study applied NAICS codes to different types of contract work, assigning greater weight to categories of work in which IDOT had expended the most money. *Id.* at 731. This resulted in a "weighted" DBE availability calculation. *Id.*

The 2011 study examined prime and subcontracts and anecdotal evidence concerning race and gender discrimination in the Illinois road construction industry, including one-on-one interviews and a survey of more than 5,000 contractors. *Id.* at 731. The 2011 study, the court said, contained a regression analysis of private sector data and found disparities in earnings and business ownership rates among minorities and women, even when controlling for race- and gender-neutral variables. *Id.*

The study concluded that there was a statistically significant underutilization of DBEs in the award of both prime and subcontracts in Illinois. *Id.* at 731. For example, the court noted the difference the study found in the percentage of available prime construction contractors to the percentage of prime construction contracts under \$500,000, and the percentage of available construction subcontractors to the amount of percentage of dollars received of construction subcontracts. *Id.*

IDOT presented certain evidence to measure DBE availability in Illinois. The court pointed out that the 2004 study and two subsequent Goal-Setting Reports were used in establishing IDOT's DBE participation goal. *Id.* at 731. The 2004 study arrived at IDOT's 22.77 percent DBE participation goal in accordance with the two-step process defined in the federal regulations. *Id.* The court stated the 2004 study employed a seven-step "custom census" approach to calculate baseline DBE availability under step one of the regulations. *Id.*

The process begins by identifying the relevant markets in which IDOT operates and the categories of businesses that account for the bulk of IDOT spending. *Id.* at 731. The industries and counties in which IDOT expends relatively more contract dollars receive proportionately higher weights in the ultimate calculation of statewide DBE availability. *Id.* The study then counts the number of businesses in the relevant markets, and identifies which are minority- and women-owned. *Id.* To ensure the accuracy of this information, the study provides that it takes additional steps to verify the ownership status of each business. *Id.* Under step two of the regulations, the study adjusted this figure to 27.51 percent based on Census Bureau data. *Id.* According to the study, the adjustment takes into account its conclusion that baseline numbers are artificially lower than what would be expected in a race-neutral marketplace. *Id.*

IDOT used separate Goal-Setting Reports that calculated IDOT's DBE participation goal pursuant to the two-step process in the federal regulations, drawing from bidders lists, DBE directories, and the 2011 study to calculate baseline DBE availability. *Id.* at 731. The study and the Goal-Setting Reports gave greater weight to the types of contract work in which IDOT had expended relatively more money. *Id.* at 732.

Court rejected Midwest arguments as to the data and evidence. The court rejected the challenges by Midwest to the accuracy of IDOT's data. For example, Midwest argued that the anecdotal evidence contained in the 2011 study does not prove discrimination. *Id.* at 732. The court stated, however, where anecdotal evidence has been offered in conjunction with statistical evidence, it may lend support to the government's determination that remedial action is necessary. *Id.* The court noted that anecdotal evidence on its own could not be used to show a general policy of discrimination. *Id.*

The court rejected another argument by Midwest that the data collected after IDOT's implementation of the Federal DBE Program may be biased because anything observed about the public sector may be affected by the DBE Program. *Id.* at 732. The court rejected that argument finding post-enactment evidence of discrimination permissible. *Id.*

Midwest's main objection to the IDOT evidence, according to the court, is that it failed to account for capacity when measuring DBE availability and underutilization. *Id.* at 732. Midwest argued that IDOT's disparity studies failed to rule out capacity as a possible explanation for the observed disparities. *Id.*

IDOT argued that on prime contracts under \$500,000, capacity is a variable that makes little difference. *Id.* at 732-733. Prime contracts of varying sizes under \$500,000 were distributed to DBEs and non-DBEs alike at approximately the same rate. *Id.* at 733. IDOT also argued that through regression analysis, the 2011 study demonstrated factors other than discrimination did not account for the disparity between DBE utilization and availability. *Id.*

The court stated that despite Midwest’s argument that the 2011 study took insufficient measures to rule out capacity as a race-neutral explanation for the underutilization of DBEs, the Supreme Court has indicated that a regression analysis need not take into account “all measurable variables” to rule out race-neutral explanations for observed disparities. *Id.* at 733, quoting *Bazemore v. Friday*, 478 U.S. 385, 400 (1986).

Midwest criticisms insufficient, speculative and conjecture – no independent statistical analysis; IDOT followed Northern Contracting and did not exceed the federal regulations. The court found Midwest’s criticisms insufficient to rebut IDOT’s evidence of discrimination or discredit IDOT’s methods of calculating DBE availability. *Id.* at 733. First, the court said, the “evidence” offered by Midwest’s expert reports “is speculative at best.” *Id.* The court found that for a reasonable jury to find in favor of Midwest, Midwest would have to come forward with “credible, particularized evidence” of its own, such as a neutral explanation for the disparity, or contrasting statistical data. *Id.* The court held that Midwest failed to make the showing in this case. *Id.*

Second, the court stated that IDOT’s method of calculating DBE availability is consistent with the federal regulations and has been endorsed by the Seventh Circuit. *Id.* at 733. The federal regulations, the court said, approve a variety of methods for accurately measuring ready, willing, and available DBEs, such as the use of DBE directories, Census Bureau data, and bidders lists. *Id.* The court found that these are the methods the 2011 study adopted in calculating DBE availability. *Id.*

The court said that the Seventh Circuit Court of Appeals approved the “custom census” approach as consistent with the federal regulations. *Id.* at 733, citing to *Northern Contracting v. Illinois DOT*, 473 F.3d at 723. The court noted the Seventh Circuit rejected the argument that availability should be based on a simple count of registered and prequalified DBEs under Illinois law, finding no requirement in the federal regulations that a recipient must so narrowly define the scope of ready, willing, and available firms. *Id.* The court also rejected the notion that an availability measure should distinguish between prime and subcontractors. *Id.* at 733-734.

The court held that through the 2004 and 2011 studies, and Goal-Setting Reports, IDOT provided evidence of discrimination in the Illinois road construction industry and a method of DBE availability calculation that is consistent with both the federal regulations and the Seventh Circuit decision in *Northern Contract v. Illinois DOT*. *Id.* at 734. The court said that in response to the Seventh Circuit decision and IDOT’s evidence, Midwest offered only conjecture about how these studies supposed failure to account for capacity may or may not have impacted the studies’ result. *Id.*

The court pointed out that although Midwest’s expert’s reports “cast doubt on the validity of IDOT’s methodology, they failed to provide any independent statistical analysis or other evidence demonstrating actual bias.” *Id.* at 734. Without this showing, the court stated, the record fails to demonstrate a lack of evidence of discrimination or actual flaws in IDOT’s availability calculations. *Id.*

Burden on non-DBE subcontractors; overconcentration. The court addressed the narrow tailoring factor concerning whether a program’s burden on third parties is undue or

unreasonable. The parties disagreed about whether the IDOT program resulted in an overconcentration of DBEs in the fencing and guardrail industry. *Id.* at 734-735. IDOT prepared an overconcentration study comparing the total number of prequalified fencing and guardrail contractors to the number of DBEs that also perform that type of work and determined that no overconcentration problem existed. Midwest presented its evidence relating to overconcentration. *Id.* at 735. The court found that Midwest did not show IDOT's determination that overconcentration does not exist among fencing and guardrail contractors to be unreasonable. *Id.* at 735.

The court stated the fact IDOT sets contract goals as a percentage of total contract dollars does not demonstrate that IDOT imposes an undue burden on non-DBE subcontractors, but to the contrary, IDOT is acting within the scope of the federal regulations that requires goals to be set in this manner. *Id.* at 735. The court noted that it recognizes setting goals as a percentage of total contract value addresses the widespread, indirect effects of discrimination that may prevent DBEs from competing as primes in the first place, and that a sharing of the burden by innocent parties, here non-DBE subcontractors, is permissible. *Id.* The court held that IDOT carried its burden in providing persuasive evidence of discrimination in Illinois, and found that such sharing of the burden is permissible here. *Id.*

Use of race-neutral alternatives. The court found that IDOT identified several race-neutral programs it used to increase DBE participation, including its Supportive Services, Mentor-Protégé, and Model Contractor Programs. *Id.* at 735. The programs provide workshops and training that help small businesses build bonding capacity, gain access to financial and project management resources, and learn about specific procurement opportunities. *Id.* IDOT conducted several studies including zero-participation goals contracts in which there was no DBE participation goal, and found that DBEs received only 0.84 percent of the total dollar value awarded. *Id.*

The court held IDOT was compliant with the federal regulations, noting that in the *Northern Contracting v. Illinois DOT* case, the Seventh Circuit found IDOT employed almost all of the methods suggested in the regulations to maximize DBE participation without resorting to race, including providing assistance in obtaining bonding and financing, implementing a supportive services program, and providing technical assistance. *Id.* at 735. The court agreed with the Seventh Circuit, and found that IDOT has made serious, good faith consideration of workable race-neutral alternatives. *Id.*

Duration and flexibility. The court pointed out that the state statute through which the Federal DBE Program is implemented is limited in duration and must be reauthorized every two to five years. *Id.* at 736. The court reviewed evidence that IDOT granted 270 of the 362 good faith waiver requests that it received from 2006 to 2014, and that IDOT granted 1,002 post-award waivers on over \$36 million in contracting dollars. *Id.* The court noted that IDOT granted the only good faith efforts waiver that Midwest requested. *Id.*

The court held the undisputed facts established that IDOT did not have a "no-waiver policy." *Id.* at 736. The court found that it could not conclude that the waiver provisions were impermissibly vague, and that IDOT took into consideration the substantial guidance provided in the federal regulations. *Id.* at 736-737. Because Midwest's own experience demonstrated the flexibility of

the Federal DBE Program in practice, the court said it could not conclude that the IDOT program amounts to an impermissible quota system that is unconstitutional on its face. *Id.* at 737.

The court again stated that Midwest had not presented any affirmative evidence showing that IDOT's implementation of the Federal DBE Program imposes an undue burden on non-DBEs, fails to employ race-neutral measures, or lacks flexibility. *Id.* at 737. Accordingly, the court granted IDOT's motion for summary judgment.

Facial and as-applied challenges to the Tollway program. The Illinois Tollway Program exists independently of the Federal DBE Program. Midwest challenged the Tollway Program as unconstitutional on its face and as applied. *Id.* at 737. Like the Federal and IDOT Defendants, the Tollway was required to show that its compelling interest in remedying discrimination in the Illinois road construction industry rests on a strong basis in evidence. *Id.* The Tollway relied on a 2006 disparity study, which examined the disparity between the Tollway's utilization of DBEs and their availability. *Id.*

The study employed a "custom census" approach to calculate DBE availability, and examined the Tollway's contract data to determine utilization. *Id.* at 737.. The 2006 study reported statistically significant disparities for all race and sex categories examined. *Id.* The study also conducted an "economy-wide analysis" examining other race and sex disparities in the wider construction economy from 1979 to 2002. *Id.* Controlling for race- and gender-neutral variables, the study showed a significant negative correlation between a person's race or sex and their earning power and ability to form a business. *Id.*

Midwest's challenges to the Tollway evidence insufficient and speculative. In 2013, the Tollway commissioned a new study, which the court noted was not complete, but there was an "economy-wide analysis" similar to the analysis done in 2006 that updated census data gathered from 2007 to 2011. *Id.* at 737-738. The updated census analysis, according to the court, controlled for variables such as education, age and occupation and found lower earnings and rates of business formation among women and minorities as compared to white men. *Id.* at 738.

Midwest attacked the Tollway's 2006 study similar to how it attacked the other studies with regard to IDOT's DBE Program. *Id.* at 738. For example, Midwest attacked the 2006 study as being biased because it failed to take into account capacity in determining the disparities. *Id.* The Tollway defended the 2006 study arguing that capacity metrics should not be taken into account because the Tollway asserted they are themselves a product of indirect discrimination, the construction industry is elastic in nature, and that firms can easily ramp up or ratchet down to accommodate the size of a project. *Id.* The Tollway also argued that the "economy-wide analysis" revealed a negative correlation between an individual's race and sex and their earning power and ability to own or form a business, showing that the underutilization of DBEs is consistent with discrimination. *Id.* at 738.

To successfully rebut the Tollway's evidence of discrimination, the court stated that Midwest must come forward with a neutral explanation for the disparity, show that the Tollway's statistics are flawed, demonstrate that the observed disparities are insignificant, or present contrasting data of its own. *Id.* at 738-739. Again, the court found that Midwest failed to make this showing, and that the evidence offered through the expert reports for Midwest was far too

speculative to create a disputed issue of fact suitable for trial. *Id.* at 739. Accordingly, the court found the Tollway Defendants established a strong basis in evidence for the Tollway Program. *Id.*

Tollway Program is narrowly tailored. As to determining whether the Tollway Program is narrowly tailored, Midwest also argued that the Tollway Program imposed an undue burden on non-DBE subcontractors. Like IDOT, the Tollway sets individual contract goals as a percentage of the value of the entire contract based on the availability of DBEs to perform particular line items. *Id.* at 739.

The court reiterated that setting goals as a percentage of total contract dollars does not demonstrate an undue burden on non-DBE subcontractors, and that the Tollway's method of goal setting is identical to that prescribed by the federal regulations, which the court already found to be supported by strong policy reasons. *Id.* at 739. The court stated that the sharing of a remedial program's burden is itself insufficient to warrant the conclusion that the program is not narrowly tailored. *Id.* at 739. The court held the Tollway Program's burden on non-DBE subcontractors to be permissible. *Id.*

In addressing the efficacy of race-neutral measures, the court found the Tollway implemented race-neutral programs to increase DBE participation, including a program that allows smaller contracts to be unbundled from larger ones, a Small Business Initiative that sets aside contracts for small businesses on a race-neutral basis, partnerships with agencies that provide support services to small businesses, and other programs designed to make it easier for smaller contractors to do business with the Tollway in general. *Id.* at 739-740. The court held the Tollway's race-neutral measures are consistent with those suggested under the federal regulations and found that the availability of these programs, which mirror IDOT's, demonstrates serious, good faith consideration of workable race-neutral alternatives. *Id.* at 740.

In considering the issue of flexibility, the court found the Tollway Program, like the Federal DBE Program, provides for waivers where prime contractors are unable to meet DBE participation goals, but have made good faith efforts to do so. *Id.* at 740. Like IDOT, the court said the Tollway adheres to the federal regulations in determining whether a bidder has made good faith efforts. *Id.* As under the Federal DBE Program, the Tollway Program also allows bidders who have been denied waivers to appeal. *Id.*

From 2006 to 2011, the court stated, the Tollway granted waivers on approximately 20 percent of the 200 prime construction contracts it awarded. *Id.* at 740. Because the Tollway demonstrated that waivers are available, routinely granted, and awarded or denied based on guidance found in the federal regulations, the court found the Tollway Program sufficiently flexible. *Id.*

Midwest presented no affirmative evidence. The court held the Tollway Defendants provided a strong basis in evidence for their DBE Program, whereas Midwest, did not come forward with any concrete, affirmative evidence to shake this foundation. *Id.* at 740. The court thus held the Tollway Program was narrowly tailored and granted the Tollway Defendants' motion for summary judgment. *Id.*

11. *Geyer Signal, Inc. v. Minnesota, DOT*, 2014 WL 1309092 (D. Minn. March 31, 2014)

In *Geyer Signal, Inc., et al. v. Minnesota DOT, USDOT, Federal Highway Administration, et al.*, Case No. 11-CV-321, United States District Court for the District Court of Minnesota, the plaintiffs Geyer Signal, Inc. and its owner filed this lawsuit against the Minnesota DOT (MnDOT) seeking a permanent injunction against enforcement and a declaration of unconstitutionality of the Federal DBE Program and Minnesota DOT's implementation of the DBE Program on its face and as applied. Geyer Signal sought an injunction against the Minnesota DOT prohibiting it from enforcing the DBE Program or, alternatively, from implementing the Program improperly; a declaratory judgment declaring that the DBE Program violates the Equal protection element of the Fifth Amendment of the United States Constitution and/or the Equal Protection clause of the Fourteenth Amendment to the United States Constitution and is unconstitutional, or, in the alternative that Minnesota DOT's implementation of the Program is an unconstitutional violation of the Equal Protection Clause, and/or that the Program is void for vagueness; and other relief.

Procedural background. Plaintiff Geyer Signal is a small, family-owned business that performs traffic control work generally on road construction projects. Geyer Signal is a firm owned by a Caucasian male, who also is a named plaintiff.

Subsequent to the lawsuit filed by Geyer Signal, the USDOT and the Federal Highway Administration filed their Motion to permit them to intervene as defendants in this case. The Federal Defendant-Intervenors requested intervention on the case in order to defend the constitutionality of the Federal DBE Program and the federal regulations at issue. The Federal Defendant-Intervenors and the plaintiffs filed a Stipulation that the Federal Defendant-Intervenors have the right to intervene and should be permitted to intervene in the matter, and consequently the plaintiffs did not contest the Federal Defendant-Intervenor's Motion for Intervention. The Court issued an Order that the Stipulation of Intervention, agreeing that the Federal Defendant-Intervenors may intervene in this lawsuit, be approved and that the Federal Defendant-Intervenors are permitted to intervene in this case.

The Federal Defendants moved for summary judgment and the State defendants moved to dismiss, or in the alternative for summary judgment, arguing that the DBE Program on its face and as implemented by MnDOT is constitutional. The Court concluded that the plaintiffs, Geyer Signal and its white male owner, Kevin Kissner, raised no genuine issue of material fact with respect to the constitutionality of the DBE Program facially or as applied. Therefore, the Court granted the Federal Defendants and the State defendants' motions for summary judgment in their entirety.

Plaintiffs alleged that there is insufficient evidence of a compelling governmental interest to support a race based program for DBE use in the fields of traffic control or landscaping. (2014 WL 1309092 at *10) Additionally, plaintiffs alleged that the DBE Program is not narrowly tailored because it (1) treats the construction industry as monolithic, leading to an overconcentration of DBE participation in the areas of traffic signal and landscaping work; (2) allows recipients to set contract goals; and (3) sets goals based on the number of DBEs there are, not the amount of work those DBEs can actually perform. *Id.* *10. Plaintiffs also alleged that the DBE Program is unconstitutionally vague because it allows prime contractors to use bids from

DBEs that are higher than the bids of non-DBEs, provided the increase in price is not unreasonable, without defining what increased costs are “reasonable.” *Id.*

Constitutional claims. The Court states that the “heart of plaintiffs’ claims is that the DBE Program and MnDOT’s implementation of it are unconstitutional because the impact of curing discrimination in the construction industry is overconcentrated in particular sub-categories of work.” *Id.* at *11. The Court noted that because DBEs are, by definition, small businesses, plaintiffs contend they “simply cannot perform the vast majority of the types of work required for federally-funded MnDOT projects because they lack the financial resources and equipment necessary to conduct such work. *Id.*

As a result, plaintiffs claimed that DBEs only compete in certain small areas of MnDOT work, such as traffic control, trucking, and supply, but the DBE goals that prime contractors must meet are spread out over the entire contract. *Id.* Plaintiffs asserted that prime contractors are forced to disproportionately use DBEs in those small areas of work, and that non-DBEs in those areas of work are forced to bear the entire burden of “correcting discrimination”, while the vast majority of non-DBEs in MnDOT contracting have essentially no DBE competition. *Id.*

Plaintiffs therefore argued that the DBE Program is not narrowly tailored because it means that any DBE goals are only being met through a few areas of work on construction projects, which burden non-DBEs in those sectors and do not alleviate any problems in other sectors. *Id.* at #11.

Plaintiffs brought two facial challenges to the Federal DBE Program. *Id.* Plaintiffs allege that the DBE Program is facially unconstitutional because it is “fatally prone to overconcentration” where DBE goals are met disproportionately in areas of work that require little overhead and capital. *Id.* at 11. Second, plaintiffs alleged that the DBE Program is unconstitutionally vague because it requires prime contractors to accept DBE bids even if the DBE bids are higher than those from non-DBEs, provided the increased cost is “reasonable” without defining a reasonable increase in cost. *Id.*

Plaintiffs also brought three as-applied challenges based on MnDOT’s implementation of the DBE Program. *Id.* at 12. First, plaintiffs contended that MnDOT has unconstitutionally applied the DBE Program to its contracting because there is no evidence of discrimination against DBEs in government contracting in Minnesota. *Id.* Second, they contended that MnDOT has set impermissibly high goals for DBE participation. Finally, plaintiffs argued that to the extent the DBE Federal Program allows MnDOT to correct for overconcentration, it has failed to do so, rendering its implementation of the Program unconstitutional. *Id.*

A. Strict scrutiny. It is undisputed that strict scrutiny applied to the Court’s evaluation of the Federal DBE Program, whether the challenge is facial or as - applied. *Id.* at *12. Under strict scrutiny, a “statute’s race-based measures ‘are constitutional only if they are narrowly tailored to further compelling governmental interests.’” *Id.* at *12, quoting *Grutter v. Bollinger*, 539 U.S. 306, 326 (2003).

The Court notes that the DBE Program also contains a gender conscious provision, a classification the Court says that would be subject to intermediate scrutiny. *Id.* at *12, at n.4. Because race is also used by the Federal DBE Program, however, the Program must ultimately

meet strict scrutiny, and the Court therefore analyzes the entire Program for its compliance with strict scrutiny. *Id.*

B. Facial challenge based on overconcentration. The Court says that in order to prevail on a facial challenge, the plaintiff must establish that no set of circumstances exist under which the Federal DBE Program would be valid. *Id.* at *12. The Court states that plaintiffs bear the ultimate burden to prove that the DBE Program is unconstitutional. *Id.* at *.

1. Compelling governmental interest. The Court points out that the Eighth Circuit Court of Appeals has already held the federal government has a compelling interest in not perpetuating the effects of racial discrimination in its own distribution of federal funds and in remediating the effects of past discrimination in the government contracting markets created by its disbursements. *Id.* *13, quoting *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1165 (10th Cir. 2000). The plaintiffs did not dispute that remedying discrimination in federal transportation contracting is a compelling governmental interest. *Id.* at *13. In accessing the evidence offered in support of a finding of discrimination, the Court concluded that defendants have articulated a compelling interest underlying enactment of the DBE Program. *Id.*

Second, the Court states that the government must demonstrate a strong basis in the evidence supporting its conclusion that race-based remedial action was necessary to further the compelling interest. *Id.* at *13. In assessing the evidence offered in support of a finding of discrimination, the Court considers both direct and circumstantial evidence, including post-enactment evidence introduced by defendants as well as the evidence in the legislative history itself. *Id.* The party challenging the constitutionality of the DBE Program bears the burden of demonstrating that the government's evidence did not support an inference of prior discrimination. *Id.*

Congressional evidence of discrimination: disparity studies and barriers. Plaintiffs argued that the evidence relied upon by Congress in reauthorizing the DBE Program is insufficient and generally critique the reports, studies, and evidence from the Congressional record produced by the Federal Defendants. *Id.* at *13. But, the Court found that plaintiffs did not raise any specific issues with respect to the Federal Defendants' proffered evidence of discrimination. *Id.* *14. Plaintiffs had argued that no party could ever afford to retain an expert to analyze the numerous studies submitted as evidence by the Federal Defendants and find all of the flaws. *Id.* *14. Federal Defendants had proffered disparity studies from throughout the United States over a period of years in support of the Federal DBE Program. *Id.* at *14. Based on these studies, the Federal Defendants' consultant concluded that minorities and women formed businesses at disproportionately lower rates and their businesses earn statistically less than businesses owned by men or non-minorities. *Id.* at *6.

The Federal Defendants' consultant also described studies supporting the conclusion that there is credit discrimination against minority- and women-owned businesses, concluded that there is a consistent and statistically significant underutilization of minority- and women-owned businesses in public contracting, and specifically found that discrimination existed in MnDOT contracting when no race-conscious efforts were utilized. *Id.* *6. The Court notes that Congress had considered a plethora of evidence documenting the continued presence of discrimination in transportation projects utilizing Federal dollars. *Id.* at *5.

The Court concluded that neither of the plaintiffs' contentions established that Congress lacked a substantial basis in the evidence to support its conclusion that race-based remedial action was necessary to address discrimination in public construction contracting. *Id.* at *14. The Court rejected plaintiffs' argument that because Congress found multiple forms of discrimination against minority- and women-owned business, that evidence showed Congress failed to also find that such businesses specifically face discrimination in public contracting, or that such discrimination is not relevant to the effect that discrimination has on public contracting. *Id.*

The Court referenced the decision in *Adarand Constructors, Inc.* 228 F.3d at 1175-1176. In *Adarand*, the Court found evidence relevant to Congressional enactment of the DBE Program to include that both race-based barriers to entry and the ongoing race-based impediments to success faced by minority subcontracting enterprises are caused either by continuing discrimination or the lingering effects of past discrimination on the relevant market. *Id.* at *14.

The Court, citing again with approval the decision in *Adarand Constructors, Inc.*, found the evidence presented by the federal government demonstrates the existence of two kinds of discriminatory barriers to minority subcontracting enterprises, both of which show a strong link between racial disparities in the federal government's disbursements of public funds for construction contracts and the channeling of those funds due to private discrimination. *Id.* at *14, quoting, *Adarand Constructors, Inc.* 228 F.3d at 1167-68. The first discriminatory barriers are to the formation of qualified minority subcontracting enterprises due to private discrimination. *Id.* The second discriminatory barriers are to fair competition between minority and non-minority subcontracting enterprises, again due to private discrimination. *Id.* Both kinds of discriminatory barriers preclude existing minority firms from effectively competing for public construction contracts. *Id.*

Accordingly, the Court found that Congress' consideration of discriminatory barriers to entry for DBEs as well as discrimination in existing public contracting establish a strong basis in the evidence for reauthorization of the Federal DBE Program. *Id.* at *14.

Court rejects Plaintiffs' general critique of evidence as failing to meet their burden of proof.

The Court held that plaintiffs' general critique of the methodology of the studies relied upon by the Federal Defendants is similarly insufficient to demonstrate that Congress lacked a substantial basis in the evidence. *Id.* at *14. The Court stated that the Eighth Circuit Court of Appeals has already rejected plaintiffs' argument that Congress was required to find specific evidence of discrimination in Minnesota in order to enact the national Program. *Id.* at *14.

Finally, the Court pointed out that plaintiffs have failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to and participation in highway contracts. *Id.* at *15. Thus, the Court concluded that plaintiffs failed to meet their ultimate burden to prove that the Federal DBE Program is unconstitutional on this ground. *Id.* at *15, quoting *Sherbrooke Turf, Inc.*, 345 F.3d at 971-73.

Therefore, the Court held that plaintiffs did not meet their burden of raising a genuine issue of material fact as to whether the government met its evidentiary burden in reauthorizing the DBE

Federal Program, and granted summary judgment in favor of the Federal Defendants with respect to the government's compelling interest. *Id.* at *15.

2. Narrowly tailored. The Court states that several factors are examined in determining whether race-conscious remedies are narrowly tailored, and that numerous Federal Courts have already concluded that the DBE Federal Program is narrowly tailored. *Id.* at *15. Plaintiffs in this case did not dispute the various aspects of the Federal DBE Program that courts have previously found to demonstrate narrowly tailoring. *Id.* Instead, plaintiffs argue only that the Federal DBE Program is not narrowly tailored on its face because of overconcentration.

Overconcentration. Plaintiffs argued that if the recipients of federal funds use overall industry participation of minorities to set goals, yet limit actual DBE participation to only defined small businesses that are limited in the work they can perform, there is no way to avoid overconcentration of DBE participation in a few, limited areas of MnDOT work. *Id.* at *15. Plaintiffs asserted that small businesses cannot perform most of the types of work needed or necessary for large highway projects, and if they had the capital to do it, they would not be small businesses. *Id.* at *16. Therefore, plaintiffs argued the DBE Program will always be overconcentrated. *Id.*

The Court states that in order for plaintiffs to prevail on this facial challenge, plaintiffs must establish that the overconcentration it identifies is unconstitutional, and that there are no circumstances under which the Federal DBE Program could be operated without overconcentration. *Id.* The Court concludes that plaintiffs' claim fails on the basis that there are circumstances under which the Federal DBE Program could be operated without overconcentration. *Id.*

First, the Court found that plaintiffs fail to establish that the DBE Program goals will always be fulfilled in a manner that creates overconcentration, because they misapprehend the nature of the goal setting mandated by the DBE Program. *Id.* at *16. The Court states that recipients set goals for DBE participation based on evidence of the availability of ready, willing and able DBEs to participate on DOT-assisted contracts. *Id.* The DBE Program, according to the Court, necessarily takes into account, when determining goals, that there are certain types of work that DBEs may never be able to perform because of the capital requirements. *Id.* In other words, if there is a type of work that no DBE can perform, there will be no demonstrable evidence of the availability of ready, willing and able DBEs in that type of work, and those non-existent DBEs will not be factored into the level of DBE participation that a locality would expect absent the effects of discrimination. *Id.*

Second, the Court found that even if the DBE Program could have the incidental effect of overconcentration in particular areas, the DBE Program facially provides ample mechanisms for a recipient of federal funds to address such a problem. *Id.* at *16. The Court notes that a recipient retains substantial flexibility in setting individual contract goals and specifically may consider the type of work involved, the location of the work, and the availability of DBEs for the work of the particular contract. *Id.* If overconcentration presents itself as a problem, the Court points out that a recipient can alter contract goals to focus less on contracts that require work in an already overconcentrated area and instead involve other types of work where overconcentration of DBEs is not present. *Id.*

The federal regulations also require contractors to engage in good faith efforts that require breaking out the contract work items into economically feasible units to facilitate DBE participation. *Id.* Therefore, the Court found, the regulations anticipate the possible issue identified by plaintiffs and require prime contractors to subdivide projects that would otherwise typically require more capital or equipment than a single DBE can acquire. *Id.* Also, the Court, states that recipients may obtain waivers of the DBE Program’s provisions pertaining to overall goals, contract goals, or good faith efforts, if, for example, local conditions of overconcentration threaten operation of the DBE Program. *Id.*

The Court also rejects plaintiffs claim that 49 CFR § 26.45(h), which provides that recipients are not allowed to subdivide their annual goals into “group-specific goals”, but rather must provide for participation by all certified DBEs, as evidence that the DBE Program leads to overconcentration. *Id.* at *16. The Court notes that other courts have interpreted this provision to mean that recipients cannot apportion its DBE goal among different minority groups, and therefore the provision does not appear to prohibit recipients from identifying particular overconcentrated areas and remedying overconcentration in those areas. *Id.* at *16. And, even if the provision operated as plaintiffs suggested, that provision is subject to waiver and does not affect a recipient’s ability to tailor specific contract goals to combat overconcentration. *Id.* at *16, n. 5.

The Court states with respect to overconcentration specifically, the federal regulations provide that recipients may use incentives, technical assistance, business development programs, mentor-protégé programs, and other appropriate measures designed to assist DBEs in performing work outside of the specific field in which the recipient has determined that non-DBEs are unduly burdened. *Id.* at *17. All of these measures could be used by recipients to shift DBEs from areas in which they are overconcentrated to other areas of work. *Id.* at *17.

Therefore, the Court held that because the DBE Program provides numerous avenues for recipients of federal funds to combat overconcentration, the Court concluded that plaintiffs’ facial challenge to the Program fails, and granted the Federal Defendants’ motion for summary judgment. *Id.*

C. Facial challenged based on vagueness. The Court held that plaintiffs could not maintain a facial challenge against the Federal DBE Program for vagueness, as their constitutional challenges to the Program are not based in the First Amendment. *Id.* at *17. The Court states that the Eighth Circuit Court of Appeals has held that courts need not consider facial vagueness challenges based upon constitutional grounds other than the First Amendment. *Id.*

The Court thus granted Federal Defendants’ motion for summary judgment with respect to plaintiffs’ facial claim for vagueness based on the allegation that the Federal DBE Program does not define “reasonable” for purposes of when a prime contractor is entitled to reject a DBEs’ bid on the basis of price alone. *Id.*

D. As-Applied Challenges to MnDOT’s DBE Program: MnDOT’s program held narrowly tailored. Plaintiffs brought three as-applied challenges against MnDOT’s implementation of the Federal DBE Program, alleging that MnDOT has failed to support its implementation of the Program with

evidence of discrimination in its contracting, sets inappropriate goals for DBE participation, and has failed to respond to overconcentration in the traffic control industry. *Id.* at *17.

1. Alleged failure to find evidence of discrimination. The Court held that a state’s implementation of the Federal DBE Program must be narrowly tailored. *Id.* at *18. To show that a state has violated the narrow tailoring requirement of the Federal DBE Program, the Court says a challenger must demonstrate that “better data was available” and the recipient of federal funds “was otherwise unreasonable in undertaking [its] thorough analysis and in relying on its results.” *Id.*, quoting *Sherbrook Turf, Inc.* at 973.

Plaintiffs’ expert critiqued the statistical methods used and conclusions drawn by the consultant for MnDOT in finding that discrimination against DBEs exists in MnDOT contracting sufficient to support operation of the DBE Program. *Id.* at *18. Plaintiffs’ expert also critiqued the measures of DBE availability employed by the MnDOT consultant and the fact he measured discrimination in both prime and subcontracting markets, instead of solely in subcontracting markets. *Id.*

Plaintiffs present no affirmative evidence that discrimination does not exist. The Court held that plaintiffs’ disputes with MnDOT’s conclusion that discrimination exists in public contracting are insufficient to establish that MnDOT’s implementation of the Federal DBE Program is not narrowly tailored. *Id.* at *18. First, the Court found that it is insufficient to show that “data was susceptible to multiple interpretations,” instead, plaintiffs must “present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to and participation in highway contracts.” *Id.* at *18, quoting *Sherbrooke Turf, Inc.*, 345 F.3d at 970. Here, the Court found, plaintiffs’ expert has not presented affirmative evidence upon which the Court could conclude that no discrimination exists in Minnesota’s public contracting. *Id.* at *18.

As for the measures of availability and measurement of discrimination in both prime and subcontracting markets, both of these practices are included in the federal regulations as part of the mechanisms for goal setting. *Id.* at *18. The Court found that it would make little sense to separate prime contractor and subcontractor availability, when DBEs will also compete for prime contracts and any success will be reflected in the recipient’s calculation of success in meeting the overall goal. *Id.* at *18, quoting *Northern Contracting, Inc. v. Illinois*, 473 F.3d 715, 723 (7th Cir. 2007). Because these factors are part of the federal regulations defining state goal setting that the Eighth Circuit Court of Appeals has already approved in assessing MnDOT’s compliance with narrow tailoring in *Sherbrooke Turf*, the Court concluded these criticisms do not establish that MnDOT has violated the narrow tailoring requirement. *Id.* at *18.

In addition, the Court held these criticisms fail to establish that MnDOT was unreasonable in undertaking its thorough analysis and relying on its results, and consequently do not show lack of narrow tailoring. *Id.* at *18. Accordingly, the Court granted the State defendants’ motion for summary judgment with respect to this claim.

2. Alleged inappropriate goal setting. Plaintiffs second challenge was to the aspirational goals MnDOT has set for DBE performance between 2009 and 2015. *Id.* at *19. The Court found that the goal setting violations the plaintiffs alleged are not the types of violations that could reasonably be expected to recur. *Id.* Plaintiffs raised numerous arguments regarding the data

and methodology used by MnDOT in setting its earlier goals. *Id.* But, plaintiffs did not dispute that every three years MnDOT conducts an entirely new analysis of discrimination in the relevant market and establishes new goals. *Id.* Therefore, disputes over the data collection and calculations used to support goals that are no longer in effect are moot. *Id.* Thus, the Court only considered plaintiffs' challenges to the 2013–2015 goals. *Id.*

Plaintiffs raised the same challenges to the 2013–2015 goals as it did to MnDOT's finding of discrimination, namely that the goals rely on multiple approaches to ascertain the availability of DBEs and rely on a measurement of discrimination that accounts for both prime and subcontracting markets. *Id.* at *19. Because these challenges identify only a different interpretation of the data and do not establish that MnDOT was unreasonable in relying on the outcome of the consultants' studies, plaintiffs have failed to demonstrate a material issue of fact related to MnDOT's narrow tailoring as it relates to goal setting. *Id.*

3. Alleged overconcentration in the traffic control market. Plaintiffs' final argument was that MnDOT's implementation of the DBE Program violates the Equal Protection Clause because MnDOT has failed to find overconcentration in the traffic control market and correct for such overconcentration. *Id.* at *20. MnDOT presented an expert report that reviewed four different industries into which plaintiffs' work falls based on NAICs codes that firms conducting traffic control-type work identify themselves by. *Id.* After conducting a disproportionality comparison, the consultant concluded that there was not statistically significant overconcentration of DBEs in plaintiffs' type of work.

Plaintiffs' expert found that there is overconcentration, but relied upon six other contractors that have previously bid on MnDOT contracts, which plaintiffs believe perform the same type of work as plaintiff. *Id.* at *20. But, the Court found plaintiffs have provided no authority for the proposition that the government must conform its implementation of the DBE Program to every individual business' self-assessment of what industry group they fall into and what other businesses are similar. *Id.*

The Court held that to require the State to respond to and adjust its calculations on account of such a challenge by a single business would place an impossible burden on the government because an individual business could always make an argument that some of the other entities in the work area the government has grouped it into are not alike. *Id.* at *20. This, the Court states, would require the government to run endless iterations of overconcentration analyses to satisfy each business that non-DBEs are not being unduly burdened in its self-defined group, which would be quite burdensome. *Id.*

Because plaintiffs did not show that MnDOT's reliance on its overconcentration analysis using NAICs codes was unreasonable or that overconcentration exists in its type of work as defined by MnDOT, it has not established that MnDOT has violated narrow tailoring by failing to identify overconcentration or failing to address it. *Id.* at *20. Therefore, the Court granted the State defendants' motion for summary judgment with respect to this claim.

III. Claims Under 42 U.S.C. § 1981 and 42 U.S.C. § 2000. Because the Court concluded that MnDOT's actions are in compliance with the Federal DBE Program, its adherence to that Program cannot constitute a basis for a violation of § 1981. *Id.* at *21. In addition, because the

Court concluded that plaintiffs failed to establish a violation of the Equal Protection Clause, it granted the defendants' motions for summary judgment on the 42 U.S.C. § 2000d claim.

Holding. Therefore, the Court granted the Federal Defendants' motion for summary judgment and the States' defendants' motion to dismiss/motion for summary judgment, and dismissed all the claims asserted by the plaintiffs.

12. Dunnet Bay Construction Company v. Gary Hannig, in its official capacity as Secretary of Transportation for the Illinois DOT and the Illinois DOT, 2014 WL 552213 (C.D. Ill. 2014), affirmed, Dunnet Bay Construction Co. v. Borggren, Illinois DOT, et al., 799 F.3d 676, 2015 WL 4934560 (7th Cir. 2015).

In Dunnet Bay Construction Company v. Gary Hannig, in its official capacity as Secretary of the Illinois DOT and the Illinois DOT, 2014 WL 552213 (C.D. Ill. Feb. 12, 2014), plaintiff Dunnet Bay Construction Company brought a lawsuit against the Illinois Department of Transportation (IDOT) and the Secretary of IDOT in his official capacity challenging the IDOT DBE Program and its implementation of the Federal DBE Program, including an alleged unwritten "no waiver" policy, and claiming that the IDOT's program is not narrowly tailored.

Motion to Dismiss certain claims granted. IDOT initially filed a Motion to Dismiss certain Counts of the Complaint. The United States District Court granted the Motion to Dismiss Counts I, II and III against IDOT primarily based on the defense of immunity under the Eleventh Amendment to the United States Constitution. The Opinion held that claims in Counts I and II against Secretary Hannig of IDOT in his official capacity remained in the case.

In addition, the other Counts of the Complaint that remained in the case not subject to the Motion to Dismiss, sought declaratory and injunctive relief and damages based on the challenge to the IDOT DBE Program and its application by IDOT. Plaintiff Dunnet Bay alleged the IDOT DBE Program is unconstitutional based on the unwritten no-waiver policy, requiring Dunnet Bay to meet DBE goals and denying Dunnet Bay a waiver of the goals despite its good faith efforts, and based on other allegations. Dunnet Bay sought a declaratory judgment that IDOT's DBE program discriminates on the basis of race in the award of federal-aid highway construction contracts in Illinois.

Motions for Summary Judgment. Subsequent to the Court's Order granting the partial Motion to Dismiss, Dunnet Bay filed a Motion for Summary Judgment, asserting that IDOT had departed from the federal regulations implementing the Federal DBE Program, that IDOT's implementation of the Federal DBE Program was not narrowly tailored to further a compelling governmental interest, and that therefore, the actions of IDOT could not withstand strict scrutiny. 2014 WL 552213 at * 1. IDOT also filed a Motion for Summary Judgment, alleging that all applicable guidelines from the federal regulations were followed with respect to the IDOT DBE Program, and because IDOT is federally mandated and did not abuse its federal authority, IDOT's DBE Program is not subject to attack. *Id.*

IDOT further asserted in its Motion for Summary Judgment that there is no Equal Protection violation, claiming that neither the rejection of the bid by Dunnet Bay, nor the decision to re-bid the project, was based upon Dunnet Bay's race. IDOT also asserted that, because Dunnet Bay

was relying on the rights of others and was not denied equal opportunity to compete for government contracts, Dunnet Bay lacked standing to bring a claim for racial discrimination.

Factual background. Plaintiff Dunnet Bay Construction Company is owned by two white males and is engaged in the business of general highway construction. It has been qualified to work on IDOT highway construction projects. In accordance with the federal regulations, IDOT prepared and submitted to the USDOT for approval a DBE Program governing federally funded highway construction contracts. For fiscal year 2010, IDOT established an overall aspirational DBE goal of 22.77 percent for DBE participation, and it projected that 4.12 percent of the overall goal could be met through race neutral measures and the remaining 18.65 percent would require the use of race-conscious goals. 2014 WL 552213 at *3. IDOT normally achieved somewhere between 10 and 14 percent participation by DBEs. *Id.* The overall aspirational goal was based upon a statewide disparity study conducted on behalf of IDOT in 2004.

Utilization goals under the IDOT DBE Program Document are determined based upon an assessment for the type of work, location of the work, and the availability of DBE companies to do a part of the work. *Id.* at *4. Each pay item for a proposed contract is analyzed to determine if there are at least two ready, willing, and able DBEs to perform the pay item. *Id.* The capacity of the DBEs, their willingness to perform the work in the particular district, and their possession of the necessary workforce and equipment are also factors in the overall determination. *Id.*

Initially, IDOT calculated the DBE goal for the Eisenhower Project to be 8 percent. When goals were first set on the Eisenhower Project, taking into account every item listed for work, the maximum potential goal for DBE participation for the Eisenhower Project was 20.3 percent. Eventually, an overall goal of approximately 22 percent was set. *Id.* at *4.

At the bid opening, Dunnet Bay's bid was the lowest received by IDOT. Its low bid was over IDOT's estimate for the project. Dunnet Bay, in its bid, identified 8.2 percent of its bid for DBEs. The second low bidder projected DBE participation of 22 percent. Dunnet Bay's DBE participation bid did not meet the percentage participation in the bid documents, and thus IDOT considered Dunnet Bay's good faith efforts to meet the DBE goal. IDOT rejected Dunnet Bay's bid determining that Dunnet Bay had not demonstrated a good faith effort to meet the DBE goal. *Id.* at *9.

The Court found that although it was the low bidder for the construction project, Dunnet Bay did not meet the goal for participation of DBEs despite its alleged good faith efforts. IDOT contended it followed all applicable guidelines in handling the DBE Program, and that because it did not abuse its federal authority in administering the Program, the IDOT DBE Program is not subject to attack. *Id.* at *23. IDOT further asserted that neither rejection of Dunnet Bay's bid nor the decision to re-bid the Project was based on its race or that of its owners, and that Dunnet Bay lacked standing to bring a claim for racial discrimination on behalf of others (i.e., small businesses operated by white males). *Id.* at *23.

The Court found that the federal regulations recommend a number of non-mandatory, non-exclusive and non-exhaustive actions when considering a bidder's good faith efforts to obtain DBE participation. *Id.* at *25. The federal regulations also provide the state DOT may consider the ability of other bidders to meet the goal. *Id.*

IDOT implementing the Federal DBE Program is acting as an agent of the federal government insulated from constitutional attack absent showing the state exceeded federal authority. The Court held that a state entity such as IDOT implementing a congressionally mandated program may rely “on the federal government’s compelling interest in remedying the effects of past discrimination in the national construction market.” *Id.* at *26, quoting *Northern Contracting Co., Inc. v. Illinois*, 473 F.3d 715 at 720-21 (7th Cir. 2007). In these instances, the Court stated, the state is acting as an agent of the federal government and is “insulated from this sort of constitutional attack, absent a showing that the state exceeded its federal authority.” *Id.* at *26, quoting *Northern Contracting, Inc.*, 473 F.3d at 721. The Court held that accordingly, any “challenge to a state’s application of a federally mandated program must be limited to the question of whether the state exceeded its authority.” *Id.* at *26, quoting *Northern Contracting, Inc.*, 473 F.3d at 722. Therefore, the Court identified the key issue as determining if IDOT exceeded its authority granted under the federal rules or if Dunnet Bay’s challenges are foreclosed by *Northern Contracting*. *Id.* at *26.

The Court found that IDOT did in fact employ a thorough process before arriving at the 22 percent DBE participation goal for the Eisenhower Project. *Id.* at *26. The Court also concluded “because the federal regulations do not specify a procedure for arriving at contract goals, it is not apparent how IDOT could have exceeded its federal authority. Any challenge on this factor fails under *Northern Contracting*.” *Id.* at *26. Therefore, the Court concluded there is no basis for finding that the DBE goal was arbitrarily set or that IDOT exceeded its federal authority with respect to this factor. *Id.* at *27.

The “no-waiver” policy. The Court held that there was not a no-waiver policy considering all the testimony and factual evidence. In particular, the Court pointed out that a waiver was in fact granted in connection with the same bid letting at issue in this case. *Id.* at *27. The Court found that IDOT granted a waiver of the DBE participation goal for another construction contractor on a different contract, but under the same bid letting involved in this matter. *Id.*

Thus, the Court held that Dunnet Bay’s assertion that IDOT adopted a “no-waiver” policy was unsupported and contrary to the record evidence. *Id.* at *27. The Court found the undisputed facts established that IDOT did not have a “no-waiver” policy, and that IDOT did not exceed its federal authority because it did not adopt a “no-waiver” policy. *Id.* Therefore, the Court again concluded that any challenge by Dunnet Bay on this factor failed pursuant to the *Northern Contracting* decision.

IDOT’s decision to reject Dunnet Bay’s bid based on lack of good faith efforts did not exceed IDOT’s authority under federal law. The Court found that IDOT has significant discretion under federal regulations and is often called upon to make a “judgment call” regarding the efforts of the bidder in terms of establishing good faith attempt to meet the DBE goals. *Id.* at *28. The Court stated it was unable to conclude that IDOT erred in determining Dunnet Bay did not make adequate good faith efforts. *Id.* The Court surmised that the strongest evidence that Dunnet Bay did not take all necessary and reasonable steps to achieve the DBE goal is that its DBE participation was under 9 percent while other bidders were able to reach the 22 percent goal. *Id.* Accordingly, the Court concluded that IDOT’s decision rejecting Dunnet Bay’s bid was consistent with the regulations and did not exceed IDOT’s authority under the federal regulations. *Id.*

The Court also rejected Dunnet Bay's argument that IDOT failed to provide Dunnet Bay with a written explanation as to why its good faith efforts were not sufficient, and thus there were deficiencies with the reconsideration of Dunnet Bay's bid and efforts as required by the federal regulations. *Id.* at *29. The Court found it was unable to conclude that a technical violation such as to provide Dunnet Bay with a written explanation will provide any relief to Dunnet Bay. *Id.* Additionally, the Court found that because IDOT rebid the project, Dunnet Bay was not prejudiced by any deficiencies with the reconsideration. *Id.*

The Court emphasized that because of the decision to rebid the project, IDOT was not even required to hold a reconsideration hearing. *Id.* at *24. Because the decision on reconsideration as to good faith efforts did not exceed IDOT's authority under federal law, the Court held Dunnet Bay's claim failed under the *Northern Contracting* decision. *Id.*

Dunnet Bay lacked standing to raise an equal protection claim. The Court found that Dunnet Bay was not disadvantaged in its ability to compete against a racially favored business, and neither IDOT's rejection of Dunnet Bay's bid nor the decision to rebid was based on the race of Dunnet Bay's owners or any class-based animus. *Id.* at *29. The Court stated that Dunnet Bay did not point to any other business that was given a competitive advantage because of the DBE goals. *Id.* Dunnet Bay did not cite any cases which involve plaintiffs that are similarly situated to it - businesses that are not at a competitive disadvantage against minority-owned companies or DBEs - and have been determined to have standing. *Id.* at *30.

The Court concluded that any company similarly situated to Dunnet Bay had to meet the same DBE goal under the contract. *Id.* Dunnet Bay, the Court held, was not at a competitive disadvantage and/or unable to compete equally with those given preferential treatment. *Id.*

Dunnet Bay did not point to another contractor that did not have to meet the same requirements it did. The Court thus concluded that Dunnet Bay lacked standing to raise an equal protection challenge because it had not suffered a particularized injury that was caused by IDOT. *Id.* at *30. Dunnet Bay was not deprived of the ability to compete on an equal basis. *Id.* Also, based on the amount of its profits, Dunnet Bay did not qualify as a small business, and therefore, it lacked standing to vindicate the rights of a hypothetical white-owned small business. *Id.* at *30. Because the Court found that Dunnet Bay was not denied the ability to compete on an equal footing in bidding on the contract, Dunnet Bay lacked standing to challenge the DBE Program based on the Equal Protection Clause. *Id.* at *30.

Dunnet Bay did not establish equal protection violation even if it had standing. The Court held that even if Dunnet Bay had standing to bring an equal protection claim, IDOT still is entitled to summary judgment. The Court stated the Supreme Court has held that the "injury in fact" in an equal protection case challenging a DBE Program is the denial of equal treatment resulting from the imposition of the barrier, not the ultimate inability to obtain the benefit. *Id.* at *31. Dunnet Bay, the Court said, implied that but for the alleged "no-waiver" policy and DBE goals which were not narrowly tailored to address discrimination, it would have been awarded the contract. The Court again noted the record established that IDOT did not have a "no-waiver" policy. *Id.* at *31.

The Court also found that because the gravamen of equal protection lies not in the fact of deprivation of a right but in the invidious classification of persons, it does not appear Dunnet

Bay can assert a viable claim. *Id.* at *31. The Court stated it is unaware of any authority which suggests that Dunnet Bay can establish an equal protection violation even if it could show that IDOT failed to comply with the regulations relating to the DBE Program. *Id.* The Court said that even if IDOT did employ a “no-waiver policy,” such a policy would not constitute an equal protection violation because the federal regulations do not confer specific entitlements upon any individuals. *Id.* at *31.

In order to support an equal protection claim, the plaintiff would have to establish it was treated less favorably than another entity with which it was similarly situated in all material respects. *Id.* at *51. Based on the record, the Court stated it could only speculate whether Dunnet Bay or another entity would have been awarded a contract without IDOT’s DBE Program. But, the Court found it need not speculate as to whether Dunnet Bay or another company would have been awarded the contract, because what is important for equal protection analysis is that Dunnet Bay was treated the same as other bidders. *Id.* at *31. Every bidder had to meet the same percentage goal for subcontracting to DBEs or make good faith efforts. *Id.* Because Dunnet Bay was held to the same standards as every other bidder, it cannot establish it was the victim of discrimination pursuant to the Equal Protection Clause. *Id.* Therefore, IDOT, the Court held, is entitled to summary judgment on Dunnet Bay’s claims under the Equal Protection Clause and under Title VI.

Conclusion. The Court concluded IDOT is entitled to summary judgment, holding Dunnet Bay lacked standing to raise an equal protection challenge based on race, and that even if Dunnet Bay had standing, Dunnet Bay was unable to show that it would have been awarded the contract in the absence of any violation. *Id.* at *32. Any other federal claims, the Court held, were foreclosed by the *Northern Contracting* decision because there is no evidence IDOT exceeded its authority under federal law. *Id.* Finally, the Court found Dunnet Bay had not established the likelihood of future harm, and thus was not entitled to injunctive relief.

13. M.K. Weeden Construction v. State of Montana, Montana Department of Transportation, et al., 2013 WL 4774517 (D. Mont.) (September 4, 2013)

This case involved a challenge by a prime contractor, M.K. Weeden Construction, Inc. (“Weeden”) against the State of Montana, Montana Department of Transportation and others, to the DBE Program adopted by MDT implementing the Federal DBE Program at 49 CFR Part 26. Weeden sought an application for Temporary Restraining Order and Preliminary Injunction against the State of Montana and the MDT.

Factual background and claims. Weeden was the low dollar bidder with a bid of \$14,770,163.01 on the Arrow Creek Slide Project. The project received federal funding, and as such, was required to comply with the USDOT’s DBE Program. 2013 WL 4774517 at *1. MDT had established an overall goal of 5.83 percent DBE participation in Montana’s highway construction projects. On the Arrow Creek Slide Project, MDT established a DBE goal of 2 percent. *Id.*

Plaintiff Weeden, although it submitted the low dollar bid, did not meet the 2 percent DBE requirement. 2013 WL 4774517 at *1. Weeden claimed that its bid relied upon only 1.87 percent DBE subcontractors (although the court points out that Weeden’s bid actually identified only .81 percent DBE subcontractors). Weeden was the only bidder out of the six bidders who did not

meet the 2 percent DBE goal. The other five bidders exceeded the 2 percent goal, with bids ranging from 2.19 percent DBE participation to 6.98 percent DBE participation. *Id.* at *2.

Weeden attempted to utilize a good faith exception to the DBE requirement under the Federal DBE Program and Montana's DBE Program. MDT's DBE Participation Review Committee considered Weeden's good faith documentation and found that Weeden's bid was non-compliant as to the DBE requirement, and that Weeden failed to demonstrate good faith efforts to solicit DBE subcontractor participation in the contract. 2013 WL 4774517 at *2. Weeden appealed that decision to the MDT DBE Review Board and appeared before the Board at a hearing. The DBE Review Board affirmed the Committee decision finding that Weeden's bid was not in compliance with the contract DBE goal and that Weeden had failed to make a good faith effort to comply with the goal. *Id.* at *2. The DBE Review Board found that Weeden had received a DBE bid for traffic control, but Weeden decided to perform that work itself in order to lower its bid amount. *Id.* at *2. Additionally, the DBE Review Board found that Weeden's mass email to 158 DBE subcontractors without any follow up was a *pro forma* effort not credited by the Review Board as an active and aggressive effort to obtain DBE participation. *Id.*

Plaintiff Weeden sought an injunction in federal district court against MDT to prevent it from letting the contract to another bidder. Weeden claimed that MDT's DBE Program violated the Equal Protection Clause of the U.S. Constitution and the Montana Constitution, asserting that there was no supporting evidence of discrimination in the Montana highway construction industry, and therefore, there was no government interest that would justify favoring DBE entities. 2013 WL 4774517 at *2. Weeden also claimed that its right to Due Process under the U.S. Constitution and Montana Constitution had been violated. Specifically, Weeden claimed that MDT did not provide reasonable notice of the good faith effort requirements. *Id.*

No proof of irreparable harm and balance of equities favor MDT. First, the Court found that Weeden did not prove for a certainty that it would suffer irreparable harm based on the Court's conclusion that in the past four years, Weeden had obtained six state highway construction contracts valued at approximately \$26 million, and that MDT had \$50 million more in highway construction projects to be let during the remainder of 2013 alone. 2013 WL 4774517 at *3. Thus, the Court concluded that as demonstrated by its past performance, Weeden has the capacity to obtain other highway construction contracts and thus there is little risk of irreparable injury in the event MDT awards the Project to another bidder. *Id.*

Second, the Court found the balance of the equities did not tip in Weeden's favor. 2013 WL 4774517 at *3. Weeden had asserted that MDT and USDOT rules regarding good faith efforts to obtain DBE subcontractor participation are confusing, non-specific and contradictory. *Id.* The Court held that it is obvious the other five bidders were able to meet and exceed the 2 percent DBE requirement without any difficulty whatsoever. *Id.* The Court found that Weeden's bid is not responsive to the requirements, therefore is not and cannot be the lowest responsible bid. *Id.* The balance of the equities, according to the Court, do not tilt in favor of Weeden, who did not meet the requirements of the contract, especially when numerous other bidders ably demonstrated an ability to meet those requirements. *Id.*

No standing. The Court also questioned whether Weeden raised any serious issues on the merits of its equal protection claim because Weeden is a prime contractor and not a subcontractor.

Since Weeden is a prime contractor, the Court held it is clear that Weeden lacks Article III standing to assert its equal protection claim. *Id.* at *3. The Court held that a prime contractor, such as Weeden, is not permitted to challenge MDT's DBE Project as if it were a non-DBE subcontractor because Weeden cannot show that *it* was subjected to a racial or gender-based barrier in its competition for the prime contract. *Id.* at *3. Because Weeden was not deprived of the ability to compete on equal footing with the other bidders, the Court found Weeden suffered no equal protection injury and lacks standing to assert an equal protection claim as it were a non-DBE subcontractor. *Id.*

Court applies *AGC v. California DOT* case; evidence supports narrowly tailored DBE program.

Significantly, the Court found that even if Weeden had standing to present an equal protection claim, MDT presented significant evidence of underutilization of DBE's generally, evidence that supports a narrowly tailored race and gender preference program. 2013 WL 4774517 at *4. Moreover, the Court noted that although Weeden points out that some business categories in Montana's highway construction industry do not have a history of discrimination (namely, the category of construction businesses in contrast to the category of professional businesses), the Ninth Circuit "has recently rejected a similar argument requiring the evidence of discrimination in every single segment of the highway construction industry before a preference program can be implemented." *Id.*, citing *Associated General Contractors v. California Dept. of Transportation*, 713 F.3d 1187 (9th Cir. 2013)(holding that Caltrans' DBE program survived strict scrutiny, was narrowly tailored, did not violate equal protection, and was supported by substantial statistical and anecdotal evidence of discrimination).

The Court stated that particularly relevant in this case, "the Ninth Circuit held that California's DBE program need not isolate construction from engineering contracts or prime from subcontracts to determine whether the evidence in each and every category gives rise to an inference of discrimination." *Id.* at 4, citing *Associated General Contractors v. California DOT*, 713 F.3d at 1197. Instead, according to the Court, California – and, by extension, Montana – "is entitled to look at the evidence 'in its entirety' to determine whether there are 'substantial disparities in utilization of minority firms' practiced by some elements of the construction industry." 2013 WL 4774517 at *4, quoting *AGC v. California DOT*, 713 F.3d at 1197. The Court, also quoting the decision in *AGC v. California DOT*, said: "It is enough that the anecdotal evidence supports Caltrans' statistical data showing a pervasive pattern of discrimination." *Id.* at *4, quoting *AGC v. California DOT*, 713 F.3d at 1197.

The Court pointed out that there is no allegation that MDT has exceeded any federal requirement or done other than complied with USDOT regulations. 2013 WL 4774517 at *4. Therefore, the Court concluded that given the similarities between Weeden's claim and AGC's equal protection claim against California DOT in the *AGC v. California DOT* case, it does not appear likely that Weeden will succeed on the merits of its equal protection claim. *Id.* at *4.

Due Process claim. The Court also rejected Weeden's bald assertion that it has a protected property right in the contract that has not been awarded to it where the government agency retains discretion to determine the responsiveness of the bid. The Court found that Montana law requires that an award of a public contract for construction must be made to the lowest *responsible* bidder and that the applicable Montana statute confers upon the government agency broad discretion in the award of a public works contract. Thus, a lower bidder such as Weeden

requires no vested property right in a contract until the contract has been awarded, which here obviously had not yet occurred. 2013 WL 4774517 at *5. In any event, the Court noted that Weeden was granted notice, hearing and appeal for MDT's decision denying the good faith exception to the DBE contract requirement, and therefore it does not appear likely that Weeden would succeed on its due process claim. *Id.* at *5.

Holding and Voluntary Dismissal. The Court denied plaintiff Weeden's application for Temporary Restraining Order and Preliminary Injunction. Subsequently, Weeden filed a Notice of Voluntary Dismissal Without Prejudice on September 10, 2013.

14. *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, U.S.D.C., E.D. Cal. Civil Action No. S-09-1622, Slip Opinion (E.D. Cal. April 20, 2011), appeal dismissed based on standing, on other grounds Ninth Circuit held Caltrans' DBE Program constitutional, *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F.3d 1187 (9th Cir. 2013)

This case involved a challenge by the Associated General Contractors of America, San Diego Chapter, Inc. ("AGC") against the California Department of Transportation ("Caltrans"), to the DBE program adopted by Caltrans implementing the Federal DBE Program at 49 CFR Part 26. The AGC sought an injunction against Caltrans enjoining its use of the DBE program and declaratory relief from the court declaring the Caltrans DBE program to be unconstitutional.

Caltrans' DBE program set a 13.5 percent DBE goal for its federally-funded contracts. The 13.5 percent goal, as implemented by Caltrans, included utilizing half race-neutral means and half race-conscious means to achieve the goal. Slip Opinion Transcript at 42. Caltrans did not include all minorities in the race-conscious component of its goal, excluding Hispanic males and Subcontinent Asian American males. *Id.* at 42. Accordingly, the race-conscious component of the Caltrans DBE program applied only to African Americans, Native Americans, Asian Pacific Americans, and white women. *Id.*

Caltrans established this goal and its DBE program following a disparity study conducted by BBC Research & Consulting, which included gathering statistical and anecdotal evidence of race and gender disparities in the California construction industry. Slip Opinion Transcript at 42.

The parties filed motions for summary judgment. The district court issued its ruling at the hearing on the motions for summary judgment granting Caltrans' motion for summary judgment in support of its DBE program and denying the motion for summary judgment filed by the plaintiffs. Slip Opinion Transcript at 54. The court held Caltrans' DBE program applying and implementing the provisions of the Federal DBE Program is valid and constitutional. *Id.* at 56.

The district court analyzed Caltrans' implementation of the DBE program under the strict scrutiny doctrine and found the burden of justifying different treatment by ethnicity or gender is on the government. The district court applied the Ninth Circuit Court of Appeals ruling in *Western States Paving Company v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005). The court stated that the federal government has a compelling interest "in ensuring that its funding is not distributed in a manner that perpetuates the effects of either public or private discrimination within the transportation contracting industry." Slip Opinion Transcript at 43, *quoting Western*

States Paving, 407 F.3d at 991, citing *City of Richmond v. J.A. Croson Company*, 488 U.S. 469 (1989).

The district court pointed out that the Ninth Circuit in *Western States Paving* and the Tenth Circuit Court of Appeals and the Eighth Circuit Court of Appeals have upheld the facial validity of the Federal DBE Program.

The district court stated that based on *Western States Paving*, the court is required to look at the Caltrans DBE program itself to see if there is a strong basis in evidence to show that Caltrans is acting for a proper purpose and if the program itself has been narrowly tailored. Slip Opinion Transcript at 45. The court concluded that narrow tailoring “does not require exhaustion of every conceivable race-neutral alternative, but it does require serious, good-faith consideration of workable race-neutral alternatives.” Slip Opinion Transcript at 45.

The district court identified the issues as whether Caltrans has established a compelling interest supported by a strong basis in evidence for its program, and does Caltrans’ race-conscious program meet the strict scrutiny required. Slip Opinion Transcript at 51-52. The court also phrased the issue as whether the Caltrans DBE program, “which does give preference based on race and sex, whether that program is narrowly tailored to remedy the effects of identified discrimination...”, and whether Caltrans has complied with the Ninth Circuit’s guidance in *Western States Paving*. Slip Opinion Transcript at 52.

The district court held “that Caltrans has done what the Ninth Circuit has required it to do, what the federal government has required it to do, and that it clearly has implemented a program which is supported by a strong basis in evidence that gives rise to a compelling interest, and that its race-conscious program, the aspect of the program that does implement race-conscious alternatives, it does under a strict-scrutiny standard meet the requirement that it be narrowly tailored as set forth in the case law.” Slip Opinion Transcript at 52.

The court rejected the plaintiff’s arguments that anecdotal evidence failed to identify specific acts of discrimination, finding “there are numerous instances of specific discrimination.” Slip Opinion Transcript at 52. The district court found that after the *Western States Paving* case, Caltrans went to a racially neutral program, and the evidence showed that the program would not meet the goals of the federally-funded program, and the federal government became concerned about what was going on with Caltrans’ program applying only race-neutral alternatives. *Id.* at 52-53. The court then pointed out that Caltrans engaged in an “extensive disparity study, anecdotal evidence, both of which is what was missing” in the *Western States Paving* case. *Id.* at 53.

The court concluded that Caltrans “did exactly what the Ninth Circuit required” and that Caltrans has gone “as far as is required.” Slip Opinion Transcript at 53.

The court held that as a matter of law, the Caltrans DBE program is, under *Western States Paving* and the Supreme Court cases, “clearly constitutional,” and “narrowly tailored.” Slip Opinion Transcript at 56. The court found there are significant differences between Caltrans’ program and the program in the *Western States Paving* case. *Id.* at 54-55. In *Western States Paving*, the court said there were no statistical studies performed to try and establish the discrimination in

the highway contracting industry, and that Washington simply compared the proportion of DBE firms in the state with the percentage of contracting funds awarded to DBEs on race-neutral contracts to calculate a disparity. *Id.* at 55.

The district court stated that the Ninth Circuit in *Western States Paving* found this to be oversimplified and entitled to little weight “because it did not take into account factors that may affect the relative capacity of DBEs to undertake contracting work.” Slip Opinion Transcript at 55. Whereas, the district court held the “disparity study used by Caltrans was much more comprehensive and accounted for this and other factors.” *Id.* at 55. The district noted that the State of Washington did not introduce any anecdotal information. The difference in this case, the district court found, “is that the disparity study includes both extensive statistical evidence, as well as anecdotal evidence gathered through surveys and public hearings, which support the statistical findings of the underutilization faced by DBEs without the DBE program. Add to that the anecdotal evidence submitted in support of the summary judgment motion as well. And this evidence before the Court clearly supports a finding that this program is constitutional.” *Id.* at 56.

The court held that because “Caltrans’ DBE program is based on substantial statistical and anecdotal evidence of discrimination in the California contracting industry and because the Court finds that it is narrowly tailored, the Court upholds the program as constitutional.” Slip Opinion Transcript at 56.

The decision of the district court was appealed to the Ninth Circuit Court of Appeals. The Ninth Circuit dismissed the appeal based on lack of standing by the AGC, San Diego Chapter, but ruled on the merits on alternative grounds holding constitutional Caltrans’ DBE Program. *See discussion above of AGC, SDC v. Cal. DOT.*

15. *Geod Corporation v. New Jersey Transit Corporation, et al.*, 746 F. Supp.2d 642, 2010 WL 4193051 (D. N. J. October 19, 2010)

Plaintiffs, white male owners of Geod Corporation (“Geod”), brought this action against the New Jersey Transit Corporation (“NJT”) alleging discriminatory practices by NJT in designing and implementing the Federal DBE Program. 746 F. Supp 2d at 644. The plaintiffs alleged that the NJT’s DBE program violated the United States Constitution, 42 U.S.C. § 1981, Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000(d) and state law. The district court previously dismissed the complaint against all Defendants except for NJT and concluded that a genuine issue material fact existed only as to whether the method used by NJT to determine its DBE goals during 2010 were sufficiently narrowly tailored, and thus constitutional. *Id.*

New Jersey Transit Program and Disparity Study. NJT relied on the analysis of consultants for the establishment of their goals for the DBE program. The study established the effects of past discrimination, the district court found, by looking at the disparity and utilization of DBEs compared to their availability in the market. *Id.* at 648. The study used several data sets and averaged the findings in order to calculate this ratio, including: (1) the New Jersey DBE vendor List; (2) a Survey of Minority-Owned Business Enterprises (SMOBE) and a Survey of Women-Owned Enterprises (SWOBE) as determined by the U.S. Census Bureau; and (3) detailed contract files for each racial group. *Id.*

The court found the study determined an average annual utilization of 23 percent for DBEs, and to examine past discrimination, several analyses were run to measure the disparity among DBEs by race. *Id.* at 648. The Study found that all but one category was underutilized among the racial and ethnic groups. *Id.* All groups other than Asian DBEs were found to be underutilized. *Id.*

The court held that the test utilized by the study, “conducted to establish a pattern of discrimination against DBEs, proved that discrimination occurred against DBEs during the pre-qualification process and in the number of contracts that are awarded to DBEs. *Id.* at 649. The court found that DBEs are more likely than non-DBEs to be pre-qualified for small construction contracts, but are less likely to pre-qualify for larger construction projects. *Id.*

For fiscal year 2010, the study consultant followed the “three-step process pursuant to USDOT regulations to establish the NJT DBE goal.” *Id.* at 649. First, the consultant determined “the base figure for the relative availability of DBEs in the specific industries and geographical market from which DBE and non-DBE contractors are drawn.” *Id.* In determining the base figure, the consultant (1) defined the geographic marketplace, (2) identified “the relevant industries in which NJ Transit contracts,” and (3) calculated “the weighted availability measure.” *Id.* at 649.

The court found that the study consultant used political jurisdictional methods and virtual methods to pinpoint the location of contracts and/or contractors for NJT, and determined that the geographical market place for NJT contracts included New Jersey, New York and Pennsylvania. *Id.* at 649. The consultant used contract files obtained from NJT and data obtained from Dun & Bradstreet to identify the industries with which NJT contracts in these geographical areas. *Id.* The consultant then used existing and estimated expenditures in these particular industries to determine weights corresponding to NJT contracting patterns in the different industries for use in the availability analysis. *Id.*

The availability of DBEs was calculated by using the following data: Unified Certification Program Business Directories for the states of New Jersey, New York and Pennsylvania; NJT Vendor List; Dun & Bradstreet database; 2002 Survey of Small Business Owners; and NJT Pre-Qualification List. *Id.* at 649-650. The availability rates were then “calculated by comparing the number of ready, willing, and able minority and women-owned firms in the defined geographic marketplace to the total number of ready, willing, and able firms in the same geographic marketplace. *Id.* The availability rates in each industry were weighed in accordance with NJT expenditures to determine a base figure. *Id.*

Second, the consultant adjusted the base figure due to evidence of discrimination against DBE prime contractors and disparities in small purchases and construction pre-qualification. *Id.* at 650. The discrimination analysis examined discrimination in small purchases, discrimination in pre-qualification, two regression analyses, an Essex County disparity study, market discrimination, and previous utilization. *Id.* at 650.

The Final Recommendations Report noted that there were sizeable differences in the small purchases awards to DBEs and non-DBEs with the awards to DBEs being significantly smaller. *Id.* at 650. DBEs were also found to be less likely to be pre-qualified for contracts over \$1 million in comparison to similarly situated non-DBEs. *Id.* The regression analysis using the dummy variable method yielded an average estimate of a discriminatory effect of -28.80 percent. *Id.* The

discrimination regression analysis using the residual difference method showed that on average 12.2 percent of the contract amount disparity awarded to DBEs and non-DBEs was unexplained. *Id.*

The consultant also considered evidence of discrimination in the local market in accordance with 49 CFR § 26.45(d). The Final Recommendations Report cited in the 2005 Essex County Disparity Study suggested that discrimination in the labor market contributed to the unexplained portion of the self-employment, employment, unemployment, and wage gaps in Essex County, New Jersey. *Id.* at 650.

The consultant recommended that NJT focus on increasing the number of DBE prime contractors. Because qualitative evidence is difficult to quantify, according to the consultant, only the results from the regression analyses were used to adjust the base goal. *Id.* The base goal was then adjusted from 19.74 percent to 23.79 percent. *Id.*

Third, in order to partition the DBE goal by race-neutral and race-conscious methods, the consultant analyzed the share of all DBE contract dollars won with no goals. *Id.* at 650. He also performed two different regression analyses: one involving predicted DBE contract dollars and DBE receipts if the goal was set at zero. *Id.* at 651. The second method utilized predicted DBE contract dollars with goals and predicted DBE contract dollars without goals to forecast how much firms with goals would receive had they not included the goals. *Id.* The consultant averaged his results from all three methods to conclude that the fiscal year 2010 NJT a portion of the race-neutral DBE goal should be 11.94 percent and a portion of the race-conscious DBE goal should be 11.84 percent. *Id.* at 651.

The district court applied the strict scrutiny standard of review. The district court already decided, in the course of the motions for summary judgment, that compelling interest was satisfied as New Jersey was entitled to adopt the federal government's compelling interest in enacting TEA-21 and its implementing regulations. *Id.* at 652, *citing Geod v. N.J. Transit Corp.*, 678 F.Supp.2d 276, 282 (D.N.J. 2009). Therefore, the court limited its analysis to whether NJT's DBE program was narrowly tailored to further that compelling interest in accordance with "its grant of authority under federal law." *Id.* at 652 *citing Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715, 722 (7th Cir. 2007).

Applying *Northern Contracting v. Illinois*. The district court clarified its prior ruling in 2009 (see 678 F.Supp.2d 276) regarding summary judgment, that the court agreed with the holding in *Northern Contracting, Inc. v. Illinois*, that "a challenge to a state's application of a federally mandated program must be limited to the question of whether the state exceeded its authority." *Id.* at 652 *quoting Northern Contracting*, 473 F.3d at 721. The district court in *Geod* followed the Seventh Circuit explanation that when a state department of transportation is acting as an instrument of federal policy, a plaintiff cannot collaterally attack the federal regulations through a challenge to a state's program. *Id.* at 652, *citing Northern Contracting*, 473 F.3d at 722. Therefore, the district court held that the inquiry is limited to the question of whether the state department of transportation "exceeded its grant of authority under federal law." *Id.* at 652-653, *quoting Northern Contracting*, 473 F.3d at 722 and *citing also Tennessee Asphalt Co. v. Farris*, 942 F.2d 969, 975 (6th Cir. 1991).

The district court found that the holding and analysis in *Northern Contracting* does not contradict the Eighth Circuit's analysis in *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964, 970-71 (8th Cir. 2003). *Id.* at 653. The court held that the Eighth Circuit's discussion of whether the DBE programs as implemented by the State of Minnesota and the State of Nebraska were narrowly tailored focused on whether the states were following the USDOT regulations. *Id.* at 653 *citing Sherbrooke Turf*, 345 F.3d 973-74. Therefore, "only when the state exceeds its federal authority is it susceptible to an as-applied constitutional challenge." *Id.* at 653 *quoting Western States Paving Co., Inc. v. Washington State Department of Transportation*, 407 F.3d 983 (9th Cir. 2005)(McKay, C.J.)(concurring in part and dissenting in part) and *citing South Florida Chapter of the Associated General Contractors v. Broward County*, 544 F.Supp.2d 1336, 1341 (S.D.Fla.2008).

The court held the initial burden of proof falls on the government, but once the government has presented proof that its affirmative action plan is narrowly tailored, the party challenging the affirmative action plan bears the ultimate burden of proving that the plan is unconstitutional. *Id.* at 653.

In analyzing whether NJT's DBE program was constitutionally defective, the district court focused on the basis of plaintiffs' argument that it was not narrowly tailored because it includes in the category of DBEs racial or ethnic groups as to which the plaintiffs alleged NJT had no evidence of past discrimination. *Id.* at 653. The court found that most of plaintiffs' arguments could be summarized as questioning whether NJT presented demonstrable evidence of the availability of ready, willing and able DBEs as required by 49 CFR § 26.45. *Id.* The court held that NJT followed the goal setting process required by the federal regulations. *Id.* The court stated that NJT began this process with the 2002 disparity study that examined past discrimination and found that all of the groups listed in the regulations were underutilized with the exception of Asians. *Id.* at 654. In calculating the fiscal year 2010 goals, the consultant used contract files and data from Dun & Bradstreet to determine the geographical location corresponding to NJT contracts and then further focused that information by weighting the industries according to NJT's use. *Id.*

The consultant used various methods to calculate the availability of DBEs, including: the UCP Business Directories for the states of New Jersey, New York and Pennsylvania; NJT Vendor List; Dun & Bradstreet database; 2002 Survey of Small Business Owners; and NJT Pre-Qualification List. *Id.* at 654. The court stated that NJT only utilized one of the examples listed in 49 CFR § 26.45(c), the DBE directories method, in formulating the fiscal year 2010 goals. *Id.*

The district court pointed out, however, the regulations state that the "examples are provided as a starting point for your goal setting process and that the examples are not intended as an exhaustive list. *Id.* at 654, *citing* 46 CFR § 26.45(c). The court concluded the regulations clarify that other methods or combinations of methods to determine a base figure may be used. *Id.* at 654.

The court stated that NJT had used these methods in setting goals for prior years as demonstrated by the reports for 2006 and 2009. *Id.* at 654. In addition, the court noted that the Seventh Circuit held that a custom census, the Dun & Bradstreet database, and the IDOT's list of

DBEs were an acceptable combination of methods with which to determine the base figure for TEA-21 purposes. *Id.* at 654, *citing Northern Contracting*, 473 F.3d at 718.

The district court found that the expert witness for plaintiffs had not convinced the court that the data were faulty, and the testimony at trial did not persuade the court that the data or regression analyses relied upon by NJT were unreliable or that another method would provide more accurate results. *Id.* at 654-655.

The court in discussing step two of the goals setting process pointed out that the data examined by the consultant is listed in the regulations as proper evidence to be used to adjust the base figure. *Id.* at 655, *citing* 49 CFR § 26.45(d). These data included evidence from disparity studies and statistical disparities in the ability of DBEs to get pre-qualification. *Id.* at 655. The consultant stated that evidence of societal discrimination was not used to adjust the base goal and that the adjustment to the goal was based on the discrimination analysis, which controls for size of firm and effect of having a DBE goal. *Id.* at 655.

The district court then analyzed NJT's division of the adjusted goal into race-conscious and race-neutral portions. *Id.* at 655. The court noted that narrowly tailoring does not require exhaustion of every conceivable race-neutral alternative, but instead requires serious, good faith consideration of workable race-neutral alternatives. *Id.* at 655. The court agreed with *Western States Paving* that only "when race-neutral efforts prove inadequate do these regulations authorize a State to resort to race-conscious measures to achieve the remainder of its DBE utilization goal." *Id.* at 655, *quoting Western States Paving*, 407 F.3d at 993-94.

The court found that the methods utilized by NJT had been used by it on previous occasions, which were approved by the USDOT. *Id.* at 655. The methods used by NJT, the court found, also complied with the examples listed in 49 CFR § 26.51, including arranging solicitations, times for the presentation of bids, quantities, specifications, and delivery schedules in ways that facilitate DBE participation; providing pre-qualification assistance; implementing supportive services programs; and ensuring distribution of DBE directories. *Id.* at 655. The court held that based on these reasons and following the *Northern Contracting, Inc. v. Illinois* line of cases, NJT's DBE program did not violate the Constitution as it did not exceed its federal authority. *Id.* at 655.

However, the district court also found that even under the *Western States Paving Co., Inc. v. Washington State DOT* standard, the NJT program still was constitutional. *Id.* at 655. Although the court found that the appropriate inquiry is whether NJT exceeded its federal authority as detailed in *Northern Contracting, Inc. v. Illinois*, the court also examined the NJT DBE program under *Western States Paving Co. v. Washington State DOT*. *Id.* at 655-656. The court stated that under *Western States Paving*, a Court must "undertake an as-applied inquiry into whether [the state's] DBE program is narrowly tailored." *Id.* at 656, *quoting Western States Paving*, 407 F.3d at 997.

Applying *Western States Paving*. The district court then analyzed whether the NJT program was narrowly tailored applying *Western States Paving*. Under the first prong of the narrowly tailoring analysis, a remedial program is only narrowly tailored if its application is limited to those minority groups that have actually suffered discrimination. *Id.* at 656, *citing Western States Paving*, 407 F.3d at 998. The court acknowledged that according to the 2002 Final Report, the

ratios of DBE utilization to DBE availability was 1.31. *Id. at 656*. However, the court found that the plaintiffs' argument failed as the facts in *Western States Paving* were distinguishable from those of NJT, because NJT did receive complaints, i.e., anecdotal evidence, of the lack of opportunities for Asian firms. *Id. at 656*. NJT employees testified that Asian firms informally and formally complained of a lack of opportunity to grow and indicated that the DBE Program was assisting with this issue. *Id.* In addition, plaintiff's expert conceded that Asian firms have smaller average contract amounts in comparison to non-DBE firms. *Id.*

The plaintiff relied solely on the utilization rate as evidence that Asians are not discriminated against in NJT contracting. *Id. at 656*. The court held this was insufficient to overcome the consultant's determination that discrimination did exist against Asians, and thus this group was properly included in the DBE program. *Id. at 656*.

The district court rejected Plaintiffs' argument that the first step of the narrow tailoring analysis was not met because NJT focuses its program on sub-contractors when NJT's expert identified "prime contracting" as the area in which NJT procurements evidence discrimination. *Id. at 656*. The court held that narrow tailoring does not require exhaustion of every conceivable race-neutral alternative but it does require serious, good faith consideration of workable race-neutral alternatives. *Id. at 656, citing Sherbrook Turf, 345 F.3d at 972 (quoting Grutter v. Bollinger, 539 U.S. 306, 339, (2003))*. In its efforts to implement race-neutral alternatives, the court found NJT attempted to break larger contracts up in order to make them available to smaller contractors and continues to do so when logistically possible and feasible to the procurement department. *Id. at 656-657*.

The district court found NJT satisfied the third prong of the narrowly tailored analysis, the "relationship of the numerical goals to the relevant labor market." *Id. at 657*. Finally, under the fourth prong, the court addressed the impact on third-parties. *Id. at 657*. The court noted that placing a burden on third parties is not impermissible as long as that burden is minimized. *Id. at 657, citing Western States Paving, 407 F.3d at 995*. The court stated that instances will inevitably occur where non-DBEs will be bypassed for contracts that require DBE goals. However, TEA-21 and its implementing regulations contain provisions intended to minimize the burden on non-DBEs. *Id. at 657, citing Western States Paving, 407 F.3d at 994-995*.

The court pointed out the Ninth Circuit in *Western States Paving* found that inclusion of regulations allowing firms that were not presumed to be DBEs to demonstrate that they were socially and economically disadvantaged, and thus qualified for DBE programs, as well as the net worth limitations, were sufficient to minimize the burden on DBEs. *Id. at 657, citing Western States Paving, 407 F.3d at 955*. The court held that the plaintiffs did not provide evidence that NJT was not complying with implementing regulations designed to minimize harm to third parties. *Id.*

Therefore, even if the district court utilized the as-applied narrow tailoring inquiry set forth in *Western States Paving*, NJT's DBE program would not be found to violate the Constitution, as the court held it was narrowly tailored to further a compelling governmental interest. *Id. at 657*.

16. *Geod Corporation v. New Jersey Transit Corporation, et seq.* 678 F.Supp.2d 276, 2009 WL 2595607 (D.N.J. August 20, 2009)

Plaintiffs Geod and its officers, who are white males, sued the NJT and state officials seeking a declaration that NJT's DBE program was unconstitutional and in violation of the United States 5th and 14th Amendment to the United States Constitution and the Constitution of the State of New Jersey, and seeking a permanent injunction against NJT for enforcing or utilizing its DBE program. The NJT's DBE program was implemented in accordance with the Federal DBE Program and TEA-21 and 49 CFR Part 26.

The parties filed cross Motions for Summary Judgment. The plaintiff Geod challenged the constitutionality of NJT's DBE program for multiple reasons, including alleging NJT could not justify establishing a program using race- and sex-based preferences; the NJT's disparity study did not provide a sufficient factual predicate to justify the DBE Program; NJT's statistical evidence did not establish discrimination; NJT did not have anecdotal data evidencing a "strong basis in evidence" of discrimination which justified a race- and sex-based program; NJT's program was not narrowly tailored and over-inclusive; NJT could not show an exceedingly persuasive justification for gender preferences; and that NJT's program was not narrowly tailored because race-neutral alternatives existed. In opposition, NJT filed a Motion for Summary Judgment asserting that its DBE program was narrowly tailored because it fully complied with the requirements of the Federal DBE Program and TEA-21.

The district court held that states and their agencies are entitled to adopt the federal governments' compelling interest in enacting TEA-21 and its implementing regulations. 2009 WL 2595607 at *4. The court stated that plaintiff's argument that NJT cannot establish the need for its DBE program was a "red herring, which is unsupported." The plaintiff did not question the constitutionality of the compelling interest of the Federal DBE Program. The court held that all states "inherit the federal governments' compelling interest in establishing a DBE program." *Id.*

The court found that establishing a DBE program "is not contingent upon a state agency demonstrating a need for same, as the federal government has already done so." *Id.* The court concluded that this reasoning rendered plaintiff's assertions that NJT's disparity study did not have sufficient factual predicate for establishing its DBE program, and that no exceedingly persuasive justification was found to support gender based preferences, as without merit. *Id.* The court held that NJT does not need to justify establishing its DBE program, as it has already been justified by the legislature. *Id.*

The court noted that both plaintiff's and defendant's arguments were based on an alleged split in the Federal Circuit Courts of Appeal. Plaintiff Geod relies on *Western States Paving Company v. Washington State DOT*, 407 F.3d 983(9th Cir. 2005) for the proposition that an as-applied challenge to the constitutionality of a particular DBE program requires a demonstration by the recipient of federal funds that the program is narrowly tailored. *Id.* at *5. In contrast, the NJT relied primarily on *Northern Contracting, Inc. v. State of Illinois*, 473 F.3d 715 (7th Cir. 2007) for the proposition that if a DBE program complies with TEA-21, it is narrowly tailored. *Id.*

The court viewed the various Federal Circuit Court of Appeals decisions as fact specific determinations which have led to the parties distinguishing cases without any substantive difference in the application of law. *Id.*

The court reviewed the decisions by the Ninth Circuit in *Western States Paving* and the Seventh Circuit of *Northern Contracting*. In *Western States Paving*, the district court stated that the Ninth Circuit held for a DBE program to pass constitutional muster, it must be narrowly tailored; specifically, the recipient of federal funds must evidence past discrimination in the relevant market in order to utilize race conscious DBE goals. *Id.* at *5. The Ninth Circuit, according to district court, made a fact specific determination as to whether the DBE program complied with TEA-21 in order to decide if the program was narrowly tailored to meet the federal regulation's requirements. The district court stated that the requirement that a recipient must evidence past discrimination "is nothing more than a requirement of the regulation." *Id.*

The court stated that the Seventh Circuit in *Northern Contracting* held a recipient must demonstrate that its program is narrowly tailored, and that generally a recipient is insulated from this sort of constitutional attack absent a showing that the state exceeded its federal authority. *Id.*, citing *Northern Contracting*, 473 F.3d at 721. The district court held that implicit in *Northern Contracting* is the fact one may challenge the constitutionality of a DBE program, as it is applied, to the extent that the program exceeds its federal authority. *Id.*

The court, therefore, concluded that it must determine first whether NJT's DBE program complies with TEA-21, then whether NJT exceeded its federal authority in its application of its DBE program. In other words, the district court stated it must determine whether the NJT DBE program complies with TEA-21 in order to determine whether the program, as implemented by NJT, is narrowly tailored. *Id.*

The court pointed out that the Eighth Circuit Court of Appeals in *Sherbrook Turf, Inc. v. Minnesota DOT*, 345 F.3d 964 (8th Cir. 2003) found Minnesota's DBE program was narrowly tailored because it was in compliance with TEA-21's requirements. The Eighth Circuit in *Sherbrook*, according to the district court, analyzed the application of Minnesota's DBE program to ensure compliance with TEA-21's requirements to ensure that the DBE program implemented by Minnesota DOT was narrowly tailored. *Id.* at *5.

The court held that TEA-21 delegates to each state that accepts federal transportation funds the responsibility of implementing a DBE program that comports with TEA-21. In order to comport with TEA-21, the district court stated a recipient must (1) determine an appropriate DBE participation goal, (2) examine all evidence and evaluate whether an adjustment, if any, is needed to arrive at their goal, and (3) if the adjustment is based on continuing effects of past discrimination, provide demonstrable evidence that is logically and directly related to the effect for which the adjustment is sought. *Id.* at *6, citing *Western States Paving Company*, 407 F.3d at 983, 988.

First, the district court stated a recipient of federal funds must determine, at the local level, the figure that would constitute an appropriate DBE involvement goal, based on their relative availability of DBEs. *Id.* at *6, citing 49 CFR § 26.45(c). In this case, the court found that NJT did determine a base figure for the relative availability of DBEs, which accounted for demonstrable

evidence of local market conditions and was designed to be rationally related to the relative availability of DBEs. *Id.* The court pointed out that NJT conducted a disparity study, and the disparity study utilized NJT's DBE lists from fiscal years 1995-1999 and Census Data to determine its base DBE goal. The court noted that the plaintiffs' argument that the data used in the disparity study were stale was without merit and had no basis in law. The court found that the disparity study took into account the primary industries, primary geographic market, and race neutral alternatives, then adjusted its goal to encompass these characteristics. *Id.* at *6.

The court stated that the use of DBE directories and Census data are what the legislature intended for state agencies to utilize in making a base DBE goal determination. *Id.* Also, the court stated that "perhaps more importantly, NJT's DBE goal was approved by the USDOT every year from 2002 until 2008." *Id.* at *6. Thus, the court found NJT appropriately determined their DBE availability, which was approved by the USDOT, pursuant to 49 CFR § 26.45(c). *Id.* at *6. The court held that NJT demonstrated its overall DBE goal is based on demonstrable evidence of the availability of ready, willing, and able DBEs relative to all businesses ready, willing, and able to participate in DOT assisted contracts and reflects its determination of the level of DBE participation it would expect absent the effects of discrimination. *Id.*

Also of significance, the court pointed out that plaintiffs did not provide any evidence that NJT did not set a DBE goal based upon 49 C.F. § 26.45(c). The court thus held that genuine issues of material fact remain only as to whether a reasonable jury may find that the method used by NJT to determine its DBE goal was sufficiently narrowly tailored. *Id.* at *6.

The court pointed out that to determine what adjustment to make, the disparity study examined qualitative data such as focus groups on the pre-qualification status of DBEs, working with prime contractors, securing credit, and its effect on DBE participation, as well as procurement officer interviews to analyze, and compare and contrast their relationships with non-DBE vendors and DBE vendors. *Id.* at *7. This qualitative information was then compared to DBE bids and DBE goals for each year in question. NJT's adjustment to its DBE goal also included an analysis of the overall disparity ratio, as well as, DBE utilization based on race, gender and ethnicity. *Id.* A decomposition analysis was also performed. *Id.*

The court concluded that NJT provided evidence that it, at a minimum, examined the current capacity of DBEs to perform work in its DOT-assisted contracting program, as measured by the volume of work DBEs have performed in recent years, as well as utilizing the disparity study itself. The court pointed out there were two methods specifically approved by 49 CFR § 26.45(d). *Id.*

The court also found that NJT took into account race neutral measures to ensure that the greatest percentage of DBE participation was achieved through race and gender neutral means. The district court concluded that "critically," plaintiffs failed to provide evidence of another, more perfect, method that could have been utilized to adjust NJT's DBE goal. *Id.* at *7. The court held that genuine issues of material fact remain only as to whether NJT's adjustment to its DBE goal is sufficiently narrowly tailored and thus constitutional. *Id.*

NJT, the court found, adjusted its DBE goal to account for the effects of past discrimination, noting the disparity study took into account the effects of past discrimination in the pre-

qualification process of DBEs. *Id.* at *7. The court quoted the disparity study as stating that it found non-trivial and statistically significant measures of discrimination in contract amounts awarded during the study period. *Id.* at *8.

The court found, however, that what was “gravely critical” about the finding of the past effects of discrimination is that it only took into account six groups including American Indian, Hispanic, Asian, blacks, women and “unknown,” but did not include an analysis of past discrimination for the ethnic group “Iraqi,” which is now a group considered to be a DBE by the NJT. *Id.* Because the disparity report included a category entitled “unknown,” the court held a genuine issue of material fact remains as to whether “Iraqi” is legitimately within NJT’s defined DBE groups and whether a demonstrable finding of discrimination exists for Iraqis. Therefore, the court denied both plaintiffs’ and defendants’ Motions for Summary Judgment as to the constitutionality of NJT’s DBE program.

The court also held that because the law was not clearly established at the time NJT established its DBE program to comply with TEA-21, the individual state defendants were entitled to qualified immunity and their Motion for Summary Judgment as to the state officials was granted. The court, in addition, held that plaintiff’s Title VI claims were dismissed because the individual defendants were not recipients of federal funds, and that the NJT as an instrumentality of the State of New Jersey is entitled to sovereign immunity. Therefore, the court held that the plaintiff’s claims based on the violation of 42 U.S.C. § 1983 were dismissed and NJT’s Motion for Summary Judgment was granted as to that claim.

17. South Florida Chapter of the Associated General Contractors v. Broward County, Florida, 544 F. Supp.2d 1336 (S.D. Fla. 2008)

Plaintiff, the South Florida Chapter of the Associated General Contractors, brought suit against the Defendant, Broward County, Florida challenging Broward County’s implementation of the Federal DBE Program and Broward County’s issuance of contracts pursuant to the Federal DBE Program. Plaintiff filed a Motion for a Preliminary Injunction. The court considered only the threshold legal issue raised by plaintiff in the Motion, namely whether or not the decision in *Western States Paving Company v. Washington State Department of Transportation*, 407 F.3d 983 (9th Cir. 2005) should govern the Court’s consideration of the merits of plaintiffs’ claim. 544 F.Supp.2d at 1337. The court identified the threshold legal issue presented as essentially, “whether compliance with the federal regulations is all that is required of Defendant Broward County.” *Id.* at 1338.

The Defendant County contended that as a recipient of federal funds implementing the Federal DBE Program, all that is required of the County is to comply with the federal regulations, relying on case law from the Seventh Circuit in support of its position. 544 F.Supp.2d at 1338, *citing Northern Contracting v. Illinois*, 473 F.3d 715 (7th Cir. 2007). The plaintiffs disagreed, and contended that the County must take additional steps beyond those explicitly provided for in the federal regulations to ensure the constitutionality of the County’s implementation of the Federal DBE Program, as administered in the County, *citing Western States Paving*, 407 F.3d 983. The court found that there was no case law on point in the Eleventh Circuit Court of Appeals. *Id.* at 1338.

Ninth Circuit Approach: *Western States*. The district court analyzed the Ninth Circuit Court of Appeals approach in *Western States Paving* and the Seventh Circuit approach in *Milwaukee County Pavers Association v. Fiedler*, 922 F.2d 419 (7th Cir. 1991) and *Northern Contracting*, 473 F.3d 715. The district court in Broward County concluded that the Ninth Circuit in *Western States Paving* held that whether Washington’s DBE program is narrowly tailored to further Congress’s remedial objective depends upon the presence or absence of discrimination in the State’s transportation contracting industry, and that it was error for the district court in *Western States Paving* to uphold Washington’s DBE program simply because the state had complied with the federal regulations. 544 F.Supp.2d at 1338-1339. The district court in Broward County pointed out that the Ninth Circuit in *Western States Paving* concluded it would be necessary to undertake an as-applied inquiry into whether the state’s program is narrowly tailored. 544 F.Supp.2d at 1339, citing *Western States Paving*, 407 F.3d at 997.

In a footnote, the district court in *Broward County* noted that the USDOT “appears not to be of one mind on this issue, however.” 544 F.Supp.2d at 1339, n. 3. The district court stated that the “United States DOT has, in analysis posted on its Web site, implicitly instructed states and localities outside of the Ninth Circuit to ignore the *Western States Paving* decision, which would tend to indicate that this agency may not concur with the ‘opinion of the United States’ as represented in *Western States*.” 544 F.Supp.2d at 1339, n. 3. The district court noted that the United States took the position in the *Western States Paving* case that the “state would have to have evidence of past or current effects of discrimination to use race-conscious goals.” 544 F.Supp.2d at 1338, quoting *Western States Paving*.

The Court also pointed out that the Eighth Circuit Court of Appeals in *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964 (8th Cir. 2003) reached a similar conclusion as in *Western States Paving*. 544 F.Supp.2d at 1339. The Eighth Circuit in *Sherbrooke*, like the court in *Western States Paving*, “concluded that the federal government had delegated the task of ensuring that the state programs are narrowly tailored, and looked to the underlying data to determine whether those programs were, in fact, narrowly tailored, rather than simply relying on the states’ compliance with the federal regulations.” 544 F.Supp.2d at 1339.

Seventh Circuit Approach: *Milwaukee County* and *Northern Contracting*. The district court in Broward County next considered the Seventh Circuit approach. The Defendants in Broward County agreed that the County must make a local finding of discrimination for its program to be constitutional. 544 F.Supp.2d at 1339. The County, however, took the position that it must make this finding through the process specified in the federal regulations, and should not be subject to a lawsuit if that process is found to be inadequate. *Id.* In support of this position, the County relied primarily on the Seventh Circuit’s approach, first articulated in *Milwaukee County Pavers Association v. Fiedler*, 922 F.2d 419 (7th Cir. 1991), then *reaffirmed* in *Northern Contracting*, 473 F.3d 715 (7th Cir. 2007). 544 F.Supp.2d at 1339.

Based on the Seventh Circuit approach, insofar as the state is merely doing what the statute and federal regulations envisage and permit, the attack on the state is an impermissible collateral attack on the federal statute and regulations. 544 F.Supp.2d at 1339-1340. This approach concludes that a state’s role in the federal program is simply as an agent, and insofar “as the state is merely complying with federal law it is acting as the agent of the federal government and is no more subject to being enjoined on equal protection grounds than the federal civil servants

who drafted the regulations.” 544 F.Supp.2d at 1340, quoting *Milwaukee County Pavers*, 922 F.2d at 423.

The Ninth Circuit addressed the *Milwaukee County Pavers* case in *Western States Paving*, and attempted to distinguish that case, concluding that the constitutionality of the federal statute and regulations were not at issue in *Milwaukee County Pavers*. 544 F.Supp.2d at 1340. In 2007, the Seventh Circuit followed up the critiques made in *Western States Paving* in the *Northern Contracting* decision. *Id.* The Seventh Circuit in *Northern Contracting* concluded that the majority in *Western States Paving* misread its decision in *Milwaukee County Pavers* as did the Eighth Circuit Court of Appeals in *Sherbrooke*. 544 F.Supp.2d at 1340, citing *Northern Contracting*, 473 F.3d at 722, n.5. The district court in Broward County pointed out that the Seventh Circuit in *Northern Contracting* emphasized again that the state DOT is acting as an instrument of federal policy, and a plaintiff cannot collaterally attack the federal regulations through a challenge to the state DOT’s program. 544 F.Supp.2d at 1340, citing *Northern Contracting*, 473 F.3d at 722.

The district court in *Broward County* stated that other circuits have concurred with this approach, including the Sixth Circuit Court of Appeals decision in *Tennessee Asphalt Company v. Farris*, 942 F.2d 969 (6th Cir. 1991). 544 F.Supp.2d at 1340. The district court in *Broward County* held that the Tenth Circuit Court of Appeals took a similar approach in *Ellis v. Skinner*, 961 F.2d 912 (10th Cir. 1992). 544 F.Supp.2d at 1340. The district court in *Broward County* held that these Circuit Courts of Appeal have concluded that “where a state or county fully complies with the federal regulations, it cannot be enjoined from carrying out its DBE program, because any such attack would simply constitute an improper collateral attack on the constitutionality of the regulations.” 544 F.Supp.2d at 1340-41.

The district court in *Broward County* held that it agreed with the approach taken by the Seventh Circuit Court of Appeals in *Milwaukee County Pavers* and *Northern Contracting* and concluded that “the appropriate factual inquiry in the instant case is whether or not Broward County has fully complied with the federal regulations in implementing its DBE program.” 544 F.Supp.2d at 1341. It is significant to note that the plaintiffs did not challenge the as-applied constitutionality of the federal regulations themselves, but rather focused their challenge on the constitutionality of Broward County’s actions in carrying out the DBE program. 544 F.Supp.2d at 1341. The district court in *Broward County* held that this type of challenge is “simply an impermissible collateral attack on the constitutionality of the statute and implementing regulations.” *Id.*

The district court concluded that it would apply the case law as set out in the Seventh Circuit Court of Appeals and concurring circuits, and that the trial in this case would be conducted solely for the purpose of establishing whether or not the County has complied fully with the federal regulations in implementing its DBE program. 544 F.Supp.2d at 1341.

Subsequently, there was a Stipulation of Dismissal filed by all parties in the district court, and an Order of Dismissal was filed without a trial of the case in November 2008.

18. *Western States Paving Co. v. Washington DOT, USDOT & FHWA*, 2006 WL 1734163 (W.D. Wash. June 23, 2006) (unpublished opinion)

This case was before the district court pursuant to the Ninth Circuit’s remand order in *Western States Paving Co. Washington DOT, USDOT, and FHWA*, 407 F.3d 983 (9th Cir. 2005), *cert. denied*,

546 U.S. 1170 (2006). In this decision, the district court adjudicated cross Motions for Summary Judgment on plaintiff's claim for injunction and for damages under 42 U.S.C. §§1981, 1983, and §2000d.

Because the WSDOT voluntarily discontinued its DBE program after the Ninth Circuit decision, *supra*, the district court dismissed plaintiff's claim for injunctive relief as moot. The court found "it is absolutely clear in this case that WSDOT will not resume or continue the activity the Ninth Circuit found unlawful in *Western States*," and cited specifically to the informational letters WSDOT sent to contractors informing them of the termination of the program.

Second, the court dismissed Western States Paving's claims under 42 U.S.C. §§ 1981, 1983, and 2000d against Clark County and the City of Vancouver holding neither the City or the County acted with the requisite discriminatory intent. The court held the County and the City were merely implementing the WSDOT's unlawful DBE program and their actions in this respect were involuntary and required no independent activity. The court also noted that the County and the City were not parties to the precise discriminatory actions at issue in the case, which occurred due to the conduct of the "State defendants." Specifically, the WSDOT — and not the County or the City — developed the DBE program without sufficient anecdotal and statistical evidence, and improperly relied on the affidavits of contractors seeking DBE certification "who averred that they had been subject to 'general societal discrimination.'"

Third, the court dismissed plaintiff's 42 U.S.C. §§ 1981 and 1983 claims against WSDOT, finding them barred by the Eleventh Amendment sovereign immunity doctrine. However, the court allowed plaintiff's 42 U.S.C. §2000d claim to proceed against WSDOT because it was not similarly barred. The court held that Congress had conditioned the receipt of federal highway funds on compliance with Title VI (42 U.S.C. § 2000d *et seq.*) and the waiver of sovereign immunity from claims arising under Title VI. Section 2001 specifically provides that "a State shall not be immune under the Eleventh Amendment of the Constitution of the United States from suit in Federal court for a violation of ... Title VI." The court held that this language put the WSDOT on notice that it faced private causes of action in the event of noncompliance.

The court held that WSDOT's DBE program was not narrowly tailored to serve a compelling government interest. The court stressed that discriminatory intent is an essential element of a plaintiff's claim under Title VI. The WSDOT argued that even if sovereign immunity did not bar plaintiff's §2000d claim, WSDOT could be held liable for damages because there was no evidence that WSDOT staff knew of or consciously considered plaintiff's race when calculating the annual utilization goal. The court held that since the policy was not "facially neutral" — and was in fact "specifically race conscious" — any resulting discrimination was therefore intentional, whether the reason for the classification was benign or its purpose remedial. As such, WSDOT's program was subject to strict scrutiny.

In order for the court to uphold the DBE program as constitutional, WSDOT had to show that the program served a compelling interest and was narrowly tailored to achieve that goal. The court found that the Ninth Circuit had already concluded that the program was not narrowly tailored and the record was devoid of any evidence suggesting that minorities currently suffer or have suffered discrimination in the Washington transportation contracting industry. The court

therefore denied WSDOT's Motion for Summary Judgment on the §2000d claim. The remedy available to Western States remains for further adjudication and the case is currently pending.

19. *Northern Contracting, Inc. v. Illinois*, 2005 WL 2230195 (N.D. Ill., 2005), affirmed, 473 F.3d 715 (7th Cir. 2007)

This decision is the district court's order that was affirmed by the Seventh Circuit Court of Appeals. This decision is instructive in that it is one of the recent cases to address the validity of the Federal DBE Program and local and state governments' implementation of the program as recipients of federal funds. The case also is instructive in that the court set forth a detailed analysis of race-, ethnicity-, and gender-neutral measures as well as evidentiary data required to satisfy constitutional scrutiny.

The district court conducted a trial after denying the parties' Motions for Summary Judgment in *Northern Contracting, Inc. v. State of Illinois, Illinois DOT, and USDOT*, 2004 WL 422704 (N.D. Ill. March 3, 2004), discussed *infra*. The following summarizes the opinion of the district court.

Northern Contracting, Inc. (the "plaintiff"), an Illinois highway contractor, sued the State of Illinois, the Illinois DOT, the United States DOT, and federal and state officials seeking a declaration that federal statutory provisions, the federal implementing regulations ("TEA-21"), the state statute authorizing the DBE program, and the Illinois DBE program itself were unlawful and unconstitutional. 2005 WL 2230195 at *1 (N.D. Ill. Sept. 8, 2005).

Under TEA-21, a recipient of federal funds is required to meet the "maximum feasible portion" of its DBE goal through race-neutral means. *Id.* at *4 (citing regulations). If a recipient projects that it cannot meet its overall DBE goal through race-neutral means, it must establish contract goals to the extent necessary to achieve the overall DBE goal. *Id.* (citing regulation). [The court provided an overview of the pertinent regulations including compliance requirements and qualifications for DBE status.]

Statistical evidence. To calculate its 2005 DBE participation goals, IDOT followed the two-step process set forth in TEA-21: (1) calculation of a base figure for the relative availability of DBEs, and (2) consideration of a possible adjustment of the base figure to reflect the effects of the DBE program and the level of participation that would be expected but for the effects of past and present discrimination. *Id.* at *6. IDOT engaged in a study to calculate its base figure and conduct a custom census to determine whether a more reliable method of calculation existed as opposed to its previous method of reviewing a bidder's list. *Id.*

In compliance with TEA-21, IDOT used a study to evaluate the base figure using a six-part analysis: (1) the study identified the appropriate and relevant geographic market for its contracting activity and its prime contractors; (2) the study identified the relevant product markets in which IDOT and its prime contractors contract; (3) the study sought to identify all available contractors and subcontractors in the relevant industries within Illinois using Dun & Bradstreet's *Marketplace*; (4) the study collected lists of DBEs from IDOT and 20 other public and private agencies; (5) the study attempted to correct for the possibility that certain businesses listed as DBEs were no longer qualified or, alternatively, businesses not listed as DBEs but qualified as such under the federal regulations; and (6) the study attempted to correct for the possibility that not all DBE businesses were listed in the various directories. *Id.* at *6-7.

The study utilized a standard statistical sampling procedure to correct for the latter two biases. *Id.* at *7. The study thus calculated a weighted average base figure of 22.7 percent. *Id.*

IDOT then adjusted the base figure based upon two disparity studies and some reports considering whether the DBE availability figures were artificially low due to the effects of past discrimination. *Id.* at *8. One study examined disparities in earnings and business formation rates as between DBEs and their white male-owned counterparts. *Id.* Another study included a survey reporting that DBEs are rarely utilized in non-goals projects. *Id.*

IDOT considered three reports prepared by expert witnesses. *Id.* at *9. The first report concluded that minority- and women-owned businesses were underutilized relative to their capacity and that such underutilization was due to discrimination. *Id.* The second report concluded, after controlling for relevant variables such as credit worthiness, “that minorities and women are less likely to form businesses, and that when they do form businesses, those businesses achieve lower earnings than did businesses owned by white males.” *Id.* The third report, again controlling for relevant variables (education, age, marital status, industry and wealth), concluded that minority- and female-owned businesses’ formation rates are lower than those of their white male counterparts, and that such businesses engage in a disproportionate amount of government work and contracts as a result of their inability to obtain private sector work. *Id.*

IDOT also conducted a series of public hearings in which a number of DBE owners who testified that they “were rarely, if ever, solicited to bid on projects not subject to disadvantaged-firm hiring goals.” *Id.* Additionally, witnesses identified 20 prime contractors in IDOT District 1 alone who rarely or never solicited bids from DBEs on non-goals projects. *Id.* The prime contractors did not respond to IDOT’s requests for information concerning their utilization of DBEs. *Id.*

Finally, IDOT reviewed unremediated market data from four different markets (the Illinois State Toll Highway Authority, the Missouri DOT, Cook County’s public construction contracts, and a “non-goals” experiment conducted by IDOT between 2001 and 2002), and considered past utilization of DBEs on IDOT projects. *Id.* at *11. After analyzing all of the data, the study recommended an upward adjustment to 27.51 percent. However, IDOT decided to maintain its figure at 22.77 percent. *Id.*

IDOT’s representative testified that the DBE program was administered on a “contract-by-contract basis.” *Id.* She testified that DBE goals have no effect on the award of prime contracts but that contracts are awarded exclusively to the “lowest responsible bidder.” IDOT also allowed contractors to petition for a waiver of individual contract goals in certain situations (*e.g.*, where the contractor has been unable to meet the goal despite having made reasonable good faith efforts). *Id.* at *12. Between 2001 and 2004, IDOT received waiver requests on 8.53 percent of its contracts and granted three out of four; IDOT also provided an appeal procedure for a denial from a waiver request. *Id.*

IDOT implemented a number of race- and gender-neutral measures both in its fiscal year 2005 plan and in response to the district court’s earlier summary judgment order, including:

1. A “prompt payment provision” in its contracts, requiring that subcontractors be paid promptly after they complete their work, and prohibiting prime contractors from delaying such payments;
2. An extensive outreach program seeking to attract and assist DBE and other small firms enter and achieve success in the industry (including retaining a network of consultants to provide management, technical and financial assistance to small businesses, and sponsoring networking sessions throughout the state to acquaint small firms with larger contractors and to encourage the involvement of small firms in major construction projects);
3. Reviewing the criteria for prequalification to reduce any unnecessary burdens;
4. “Unbundling” large contracts; and
5. Allocating some contracts for bidding only by firms meeting the SBA’s definition of small businesses.

Id. (internal citations omitted). IDOT was also in the process of implementing bonding and financing initiatives to assist emerging contractors obtain guaranteed bonding and lines of credit, and establishing a mentor-protégé program. *Id.*

The court found that IDOT attempted to achieve the “maximum feasible portion” of its overall DBE goal through race- and gender-neutral measures. *Id.* at *13. The court found that IDOT determined that race- and gender-neutral measures would account for 6.43 percent of its DBE goal, leaving 16.34 percent to be reached using race- and gender-conscious measures. *Id.*

Anecdotal evidence. A number of DBE owners testified to instances of perceived discrimination and to the barriers they face. *Id.* The DBE owners also testified to difficulties in obtaining work in the private sector and “unanimously reported that they were rarely invited to bid on such contracts.” *Id.* The DBE owners testified to a reluctance to submit unsolicited bids due to the expense involved and identified specific firms that solicited bids from DBEs for goals projects but not for non-goals projects. *Id.* A number of the witnesses also testified to specific instances of discrimination in bidding, on specific contracts, and in the financing and insurance markets. *Id.* at *13-14. One witness acknowledged that all small firms face difficulties in the financing and insurance markets, but testified that it is especially burdensome for DBEs who “frequently are forced to pay higher insurance rates due to racial and gender discrimination.” *Id.* at *14. The DBE witnesses also testified they have obstacles in obtaining prompt payment. ***Id.***

The plaintiff called a number of non-DBE business owners who unanimously testified that they solicit business equally from DBEs and non-DBEs on non-goals projects. *Id.* Some non-DBE firm owners testified that they solicit bids from DBEs on a goals project for work they would otherwise complete themselves absent the goals; others testified that they “occasionally award work to a DBE that was not the low bidder in order to avoid scrutiny from IDOT.” *Id.* A number of non-DBE firm owners accused of failing to solicit bids from DBEs on non-goals projects testified and denied the allegations. *Id.* at *15.

Strict scrutiny. The court applied strict scrutiny to the program as a whole (including the gender-based preferences). *Id.* at *16. The court, however, set forth a different burden of proof, finding that the government must demonstrate identified discrimination with specificity and must have

a “‘strong basis in evidence’ to conclude that remedial action was necessary, before it embarks on an affirmative action program ... If the government makes such a showing, the party challenging the affirmative action plan bears the ‘ultimate burden’ of demonstrating the unconstitutionality of the program.” *Id.* The court held that challenging party’s burden “can only be met by presenting credible evidence to rebut the government’s proffered data.” *Id.* at *17.

To satisfy strict scrutiny, the court found that IDOT did not need to demonstrate an independent compelling interest; however, as part of the narrowly tailored prong, IDOT needed to show “that there is a demonstrable need for the implementation of the Federal DBE Program within its jurisdiction.” *Id.* at *16.

The court found that IDOT presented “an abundance” of evidence documenting the disparities between DBEs and non-DBEs in the construction industry. *Id.* at *17. The plaintiff argued that the study was “erroneous because it failed to limit its DBE availability figures to those firms ... registered and pre-qualified with IDOT.” *Id.* The plaintiff also alleged the calculations of the DBE utilization rate were incorrect because the data included IDOT subcontracts and prime contracts, despite the fact that the latter are awarded to the lowest bidder as a matter of law. *Id.* Accordingly, the plaintiff alleged that IDOT’s calculation of DBE availability and utilization rates was incorrect. *Id.*

The court found that other jurisdictions had utilized the custom census approach without successful challenge. *Id.* at *18. Additionally, the court found “that the remedial nature of the federal statutes counsels for the casting of a broader net when measuring DBE availability.” *Id.* at *19. The court found that IDOT presented “an array of statistical studies concluding that DBEs face disproportionate hurdles in the credit, insurance, and bonding markets.” *Id.* at *21. The court also found that the statistical studies were consistent with the anecdotal evidence. *Id.* The court did find, however, that “there was no evidence of even a single instance in which a prime contractor failed to award a job to a DBE that offered the low bid. This ... is [also] supported by the statistical data ... which shows that at least at the level of subcontracting, DBEs are generally utilized at a rate in line with their ability.” *Id.* at *21, n. 31. Additionally, IDOT did not verify the anecdotal testimony of DBE firm owners who testified to barriers in financing and bonding. However, the court found that such verification was unnecessary. *Id.* at *21, n. 32.

The court further found:

That such discrimination indirectly affects the ability of DBEs to compete for prime contracts, despite the fact that they are awarded solely on the basis of low bid, cannot be doubted: ‘[E]xperience and size are not race- and gender-neutral variables ... [DBE] construction firms are generally smaller and less experienced because of industry discrimination.’

Id. at *21, citing *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950 (10th Cir. 2003).

The parties stipulated to the fact that DBE utilization goals exceed DBE availability for 2003 and 2004. *Id.* at *22. IDOT alleged, and the court so found, that the high utilization on goals projects was due to the success of the DBE program, and not to an absence of discrimination. *Id.* The

court found that the statistical disparities coupled with the anecdotal evidence indicated that IDOT's fiscal year 2005 goal was a "plausible lower-bound estimate' of DBE participation in the absence of discrimination." *Id.* The court found that the plaintiff did not present persuasive evidence to contradict or explain IDOT's data. *Id.*

The plaintiff argued that even if accepted at face value, IDOT's marketplace data did not support the imposition of race- and gender-conscious remedies because there was no evidence of direct discrimination by prime contractors. *Id.* The court found first that IDOT's indirect evidence of discrimination in the bonding, financing, and insurance markets was sufficient to establish a compelling purpose. *Id.* Second, the court found:

[M]ore importantly, plaintiff fails to acknowledge that, in enacting its DBE program, IDOT acted not to remedy its own prior discriminatory practices, but pursuant to federal law, which both authorized and required IDOT to remediate the effects of *private* discrimination on federally-funded highway contracts. This is a fundamental distinction ... [A] state or local government need not independently identify a compelling interest when its actions come in the course of enforcing a federal statute.

Id. at *23. The court distinguished *Builders Ass'n of Greater Chicago v. County of Cook*, 123 F. Supp.2d 1087 (N.D. Ill. 2000), *aff'd* 256 F.3d 642 (7th Cir. 2001), noting that the program in that case was not federally-funded. *Id.* at *23, n. 34.

The court also found that "IDOT has done its best to maximize the portion of its DBE goal" through race- and gender-neutral measures, including anti-discrimination enforcement and small business initiatives. *Id.* at *24. The anti-discrimination efforts included: an internet website where a DBE can file an administrative complaint if it believes that a prime contractor is discriminating on the basis of race or gender in the award of sub-contracts; and requiring contractors seeking prequalification to maintain and produce solicitation records on all projects, both public and private, with and without goals, as well as records of the bids received and accepted. *Id.* The small business initiative included: "unbundling" large contracts; allocating some contracts for bidding only by firms meeting the SBA's definition of small businesses; a "prompt payment provision" in its contracts, requiring that subcontractors be paid promptly after they complete their work, and prohibiting prime contractors from delaying such payments; and an extensive outreach program seeking to attract and assist DBE and other small firms DBE and other small firms enter and achieve success in the industry (including retaining a network of consultants to provide management, technical and financial assistance to small businesses, and sponsoring networking sessions throughout the state to acquaint small firms with larger contractors and to encourage the involvement of small firms in major construction projects). *Id.*

The court found "[s]ignificantly, plaintiff did not question the efficacy or sincerity of these race- and gender-neutral measures." *Id.* at *25. Additionally, the court found the DBE program had significant flexibility in that utilized contract-by-contract goal setting (without a fixed DBE participation minimum) and contained waiver provisions. *Id.* The court found that IDOT approved 70 percent of waiver requests although waivers were requested on only 8 percent of all contracts. *Id.*, citing *Adarand Constructors, Inc. v. Slater "Adarand VII"*, 228 F.3d 1147, 1177 (10th Cir. 2000) (citing for the proposition that flexibility and waiver are critically important).

The court held that IDOT's DBE plan was narrowly tailored to the goal of remedying the effects of racial and gender discrimination in the construction industry, and was therefore constitutional.

20. Northern Contracting, Inc. v. State of Illinois, Illinois DOT, and USDOT, 2004 WL 422704 (N.D. Ill. March 3, 2004)

This is the earlier decision in *Northern Contracting, Inc.*, 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005), *see above*, which resulted in the remand of the case to consider the implementation of the Federal DBE Program by the IDOT. This case involves the challenge to the Federal DBE Program. The plaintiff contractor sued the IDOT and the USDOT challenging the facial constitutionality of the Federal DBE Program (TEA-21 and 49 CFR Part 26) as well as the implementation of the Federal Program by the IDOT (*i.e.*, the IDOT DBE Program). The court held valid the Federal DBE Program, finding there is a compelling governmental interest and the federal program is narrowly tailored. The court also held there are issues of fact regarding whether IDOT's DBE Program is narrowly tailored to achieve the federal government's compelling interest. The court denied the Motions for Summary Judgment filed by the plaintiff and by IDOT, finding there were issues of material fact relating to IDOT's implementation of the Federal DBE Program.

The court in *Northern Contracting*, held that there is an identified compelling governmental interest for implementing the Federal DBE Program and that the Federal DBE Program is narrowly tailored to further that interest. Therefore, the court granted the Federal defendants' Motion for Summary Judgment challenging the validity of the Federal DBE Program. In this connection, the district court followed the decisions and analysis in *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964 (8th Cir. 2003) and *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10th Cir. 2000) ("*Adarand VII*"), *cert. granted then dismissed as improvidently granted*, 532 U.S. 941, 534 U.S. 103 (2001). The court held, like these two Courts of Appeals that have addressed this issue, that Congress had a strong basis in evidence to conclude that the DBE Program was necessary to redress private discrimination in federally-assisted highway subcontracting. The court agreed with the *Adarand VII* and *Sherbrooke Turf* courts that the evidence presented to Congress is sufficient to establish a compelling governmental interest, and that the contractors had not met their burden of introducing credible particularized evidence to rebut the Government's initial showing of the existence of a compelling interest in remedying the nationwide effects of past and present discrimination in the federal construction procurement subcontracting market. 2004 WL422704 at *34, *citing Adarand VII*, 228 F.3d at 1175.

In addition, the court analyzed the second prong of the strict scrutiny test, whether the government provided sufficient evidence that its program is narrowly tailored. In making this determination, the court looked at several factors, such as the efficacy of alternative remedies; the flexibility and duration of the race-conscious remedies, including the availability of waiver provisions; the relationships between the numerical goals and relevant labor market; the impact of the remedy on third parties; and whether the program is over-or-under-inclusive. The narrow tailoring analysis with regard to the as-applied challenge focused on IDOT's implementation of the Federal DBE Program.

First, the court held that the Federal DBE Program does not mandate the use of race-conscious measures by recipients of federal dollars, but in fact requires only that the goal reflect the recipient's determination of the level of DBE participation it would expect absent the effects of the discrimination. 49 CFR § 26.45(b). The court recognized, as found in the *Sherbrooke Turf* and *Adarand VII* cases, that the Federal Regulations place strong emphasis on the use of race-neutral means to increase minority business participation in government contracting, that although narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require "serious, good faith consideration of workable race-neutral alternatives." 2004 WL422704 at *36, citing and quoting *Sherbrooke Turf*, 345 F.3d at 972, quoting *Grutter v. Bollinger*, 539 U.S. 306 (2003). The court held that the Federal regulations, which prohibit the use of quotas and severely limit the use of set-asides, meet this requirement. The court agreed with the *Adarand VII* and *Sherbrooke Turf* courts that the Federal DBE Program does require recipients to make a serious good faith consideration of workable race-neutral alternatives before turning to race-conscious measures.

Second, the court found that because the Federal DBE Program is subject to periodic reauthorization, and requires recipients of Federal dollars to review their programs annually, the Federal DBE scheme is appropriately limited to last no longer than necessary.

Third, the court held that the Federal DBE Program is flexible for many reasons, including that the presumption that women and minority are socially disadvantaged is deemed rebutted if an individual's personal net worth exceeds \$750,000.00, and a firm owned by individual who is not presumptively disadvantaged may nevertheless qualify for such status if the firm can demonstrate that its owners are socially and economically disadvantaged. 49 CFR § 26.67(b)(1)(d). The court found other aspects of the Federal Regulations provide ample flexibility, including recipients may obtain waivers or exemptions from any requirements. Recipients are not required to set a contract goal on every USDOT-assisted contract. If a recipient estimates that it can meet the entirety of its overall goals for a given year through race-neutral means, it must implement the Program without setting contract goals during the year. If during the course of any year in which it is using contract goals a recipient determines that it will exceed its overall goals, it must adjust the use of race-conscious contract goals accordingly. 49 CFR § 26.51(e)(f). Recipients also administering a DBE Program in good faith cannot be penalized for failing to meet their DBE goals, and a recipient may terminate its DBE Program if it meets its annual overall goal through race-neutral means for two consecutive years. 49 CFR § 26.51(f). Further, a recipient may award a contract to a bidder/offeror that does not meet the DBE Participation goals so long as the bidder has made adequate good faith efforts to meet the goals. 49 CFR § 26.53(a)(2). The regulations also prohibit the use of quotas. 49 CFR § 26.43.

Fourth, the court agreed with the *Sherbrooke Turf* court's assessment that the Federal DBE Program requires recipients to base DBE goals on the number of ready, willing and able disadvantaged business in the local market, and that this exercise requires recipients to establish realistic goals for DBE participation in the relevant labor markets.

Fifth, the court found that the DBE Program does not impose an unreasonable burden on third parties, including non-DBE subcontractors and taxpayers. The court found that the Federal DBE Program is a limited and properly tailored remedy to cure the effects of prior discrimination, a sharing of the burden by parties such as non-DBEs is not impermissible.

Finally, the court found that the Federal DBE Program was not over-inclusive because the regulations do not provide that every woman and every member of a minority group is disadvantaged. Preferences are limited to small businesses with a specific average annual gross receipts over three fiscal years of \$16.6 million or less (at the time of this decision), and businesses whose owners' personal net worth exceed \$750,000.00 are excluded. 49 CFR § 26.67(b)(1). In addition, a firm owned by a white male may qualify as socially and economically disadvantaged. 49 CFR § 26.67(d).

The court analyzed the constitutionality of the IDOT DBE Program. The court adopted the reasoning of the Eighth Circuit in *Sherbrooke Turf*, that a recipient's implementation of the Federal DBE Program must be analyzed under the narrow tailoring analysis but not the compelling interest inquiry. Therefore, the court agreed with *Sherbrooke Turf* that a recipient need not establish a distinct compelling interest before implementing the Federal DBE Program, but did conclude that a recipient's implementation of the Federal DBE Program must be narrowly tailored. The court found that issues of fact remain in terms of the validity of the IDOT's DBE Program as implemented in terms of whether it was narrowly tailored to achieve the Federal Government's compelling interest. The court, therefore, denied the contractor plaintiff's Motion for Summary Judgment and the Illinois DOT's Motion for Summary Judgment.

21. *Sherbrooke Turf, Inc. v. Minnesota DOT*, 2001 WL 1502841, No. 00-CV-1026 (D. Minn. 2001) (unpublished opinion), affirmed 345 F.3d 964 (8th Cir. 2003)

Sherbrooke involved a landscaping service contractor owned and operated by Caucasian males. The contractor sued the Minnesota DOT claiming the Federal DBE provisions of the TEA-21 are unconstitutional. *Sherbrooke* challenged the "federal affirmative action programs," the USDOT implementing regulations, and the Minnesota DOT's participation in the DBE Program. The USDOT and the FHWA intervened as Federal defendants in the case. *Sherbrooke*, 2001 WL 1502841 at *1.

The United States District Court in *Sherbrooke* relied substantially on the Tenth Circuit Court of Appeals decision in *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10th Cir. 2000), in holding that the Federal DBE Program is constitutional. The district court addressed the issue of "random inclusion" of various groups as being within the Program in connection with whether the Federal DBE Program is "narrowly tailored." The court held that Congress cannot enact a national program to remedy discrimination without recognizing classes of people whose history has shown them to be subject to discrimination and allowing states to include those people in its DBE Program.

The court held that the Federal DBE Program attempts to avoid the "potentially invidious effects of providing blanket benefits to minorities" in part,

by restricting a state's DBE preference to identified groups actually appearing in the target state. In practice, this means Minnesota can only certify members of one or another group as potential DBEs if they are present in the local market. This minimizes the chance that individuals — simply on the basis of their birth — will benefit from Minnesota's DBE program. If a group is not present in the local market, or if they are found in such small numbers that they cannot be

expected to be able to participate in the kinds of construction work TEA-21 covers, that group will not be included in the accounting used to set Minnesota's overall DBE contracting goal.

Sherbrooke, 2001 WL 1502841 at *10 (D. Minn.).

The court rejected plaintiff's claim that the Minnesota DOT must independently demonstrate how its program comports with *Croson's* strict scrutiny standard. The court held that the "Constitution calls out for different requirements when a state implements a federal affirmative action program, as opposed to those occasions when a state or locality initiates the Program." *Id.* at *11 (emphasis added). The court in a footnote ruled that TEA-21, being a federal program, "relieves the state of any burden to independently carry the strict scrutiny burden." *Id.* at *11 n. 3. The court held states that establish DBE programs under TEA-21 and 49 CFR Part 26 are implementing a Congressionally-required program and not establishing a local one. As such, the court concluded that the state need not independently prove its DBE program meets the strict scrutiny standard. *Id.*

22. *Gross Seed Co. v. Nebraska Department of Roads*, Civil Action File No. 4:00CV3073 (D. Neb. May 6, 2002), affirmed 345 F.3d 964 (8th Cir. 2003)

The United States District Court for the District of Nebraska held in *Gross Seed Co. v. Nebraska* (with the USDOT and FHWA as Interveners), that the Federal DBE Program (codified at 49 CFR Part 26) is constitutional. The court also held that the Nebraska Department of Roads ("Nebraska DOR") DBE Program adopted and implemented solely to comply with the Federal DBE Program is "approved" by the court because the court found that 49 CFR Part 26 and TEA-21 were constitutional.

The court concluded, similar to the court in *Sherbrooke Turf*, that the State of Nebraska did not need to independently establish that its program met the strict scrutiny requirement because the Federal DBE Program satisfied that requirement, and was therefore constitutional. The court did not engage in a thorough analysis or evaluation of the Nebraska DOR Program or its implementation of the Federal DBE Program. The court points out that the Nebraska DOR Program is adopted in compliance with the Federal DBE Program, and that the USDOT approved the use of Nebraska DOR's proposed DBE goals for fiscal year 2001, pending completion of USDOT's review of those goals. Significantly, however, the court in its findings does note that the Nebraska DOR established its overall goals for fiscal year 2001 based upon an independent availability/disparity study.

The court upheld the constitutionality of the Federal DBE Program by finding the evidence presented by the federal government and the history of the federal legislation are sufficient to demonstrate that past discrimination does exist "in the construction industry" and that racial and gender discrimination "within the construction industry" is sufficient to demonstrate a compelling interest in individual areas, such as highway construction. The court held that the Federal DBE Program was sufficiently "narrowly tailored" to satisfy a strict scrutiny analysis based again on the evidence submitted by the federal government as to the Federal DBE Program.

23. Klaver Construction, Inc. v. Kansas DOT, 211 F. Supp.2d 1296 (D. Kan. 2002)

This is another case that involved a challenge to the USDOT Regulations that implement TEA-21 (49 CFR Part 26), in which the plaintiff contractor sought to enjoin the Kansas Department of Transportation (“DOT”) from enforcing its DBE Program on the grounds that it violates the Equal Protection Clause under the Fourteenth Amendment. This case involves a direct constitutional challenge to racial and gender preferences in federally-funded state highway contracts. This case concerned the constitutionality of the Kansas DOT’s implementation of the Federal DBE Program, and the constitutionality of the gender-based policies of the federal government and the race- and gender-based policies of the Kansas DOT. The court granted the federal and state defendants’ (USDOT and Kansas DOT) Motions to Dismiss based on lack of standing. The court held the contractor could not show the specific aspects of the DBE Program that it contends are unconstitutional have caused its alleged injuries.

G. Recent Decisions and Authorities Involving Federal Procurement That May Impact DBE and MBE/WBE Programs

1. Rothe Development, Inc. v. U.S. Dept. of Defense, U.S. Small Business Administration, et al., 836 F.3d 57, 2016 WL 4719049 (D.C. Cir. 2016), cert. denied, 2017 WL 1375832 (2017), affirming on other grounds, Rothe Development, Inc. v. U.S. Dept. of Defense, U.S. Small Business Administration, et al., 107 F.Supp. 3d 183 (D.D.C. 2015)

In a split decision, the majority of a three judge panel of the United States Court of Appeals for the District of Columbia Circuit upheld the constitutionality of section 8(a) of the Small Business Act, which was challenged by Plaintiff-Appellant Rothe Development Inc. (Rothe). Rothe alleged that the statutory basis of the United States Small Business Administration’s 8(a) business development program (codified at 15 U.S.C. § 637), violated its right to equal protection under the Due Process Clause of the Fifth Amendment. 836 F.3d 57, 2016 WL 4719049, at *1. Rothe contends the statute contains a racial classification that presumes certain racial minorities are eligible for the program. *Id.* The court held, however, that Congress considered and rejected statutory language that included a racial presumption. *Id.* Congress, according to the court, chose instead to hinge participation in the program on the facially race-neutral criterion of social disadvantage, which it defined as having suffered racial, ethnic, or cultural bias. *Id.*

The challenged statute authorizes the Small Business Administration (SBA) to enter into contracts with other federal agencies, which the SBA then subcontracts to eligible small businesses that compete for the subcontracts in a sheltered market. *Id.* *1. Businesses owned by “socially and economically disadvantaged” individuals are eligible to participate in the 8(a) program. *Id.* The statute defines socially disadvantaged individuals as persons “who have been subjected to racial or ethnic prejudice or cultural bias because of their identity as a member of a group without regard to their individual qualities.” *Id.*, quoting 15 U.S.C. § 627(a)(5).

The Section 8(a) statute is race-neutral. The court rejected Rothe’s allegations, finding instead that the provisions of the Small Business Act that Rothe challenges do not on their face classify individuals by race. *Id.* *1. The court stated that Section 8(a) uses facially race-neutral terms of eligibility to identify individual victims of discrimination, prejudice, or bias, without presuming

that members of certain racial, ethnic, or cultural groups qualify as such. *Id.* The court said that makes this statute different from other statutes, which expressly limit participation in contracting programs to racial or ethnic minorities or specifically direct third parties to presume that members of certain racial or ethnic groups, or minorities generally, are eligible. *Id.*

In contrast to the *statute*, the court found that the SBA's *regulation* implementing the 8(a) program does contain a racial classification in the form of a presumption that an individual who is a member of one of five designated racial groups is socially disadvantaged. *Id* *2, *citing* 13 C.F.R. § 124.103(b). This case, the court held, does not permit it to decide whether the race-based regulatory presumption is constitutionally sound, because Rothe has elected to challenge only the statute. *Id.* Rothe's definition of the racial classification it attacks in this case, according to the court, does not include the SBA's regulation. *Id.*

Because the court held the statute, unlike the regulation, lacks a racial classification, and because Rothe has not alleged that the statute is otherwise subject to strict scrutiny, the court applied rational-basis review. *Id* at *2. The court stated the statute "readily survives" the rational basis scrutiny standards. *Id* *2. The court, therefore, affirmed the judgment of the district court granting summary judgment to the SBA and the Department of Defense, albeit on different grounds. *Id.*

Thus, the court held the central question on appeal is whether Section 8(a) warrants strict judicial scrutiny, which the court noted the parties and the district court believe that it did. *Id* *2. Rothe, the court said, advanced only the theory that the statute, on its face, Section 8(a) of the Small Business Act, contains a racial classification. *Id* *2.

The court found that the definition of the term "socially disadvantaged" does not contain a racial classification because it does not distribute burdens or benefits on the basis of individual classifications, it is race-neutral on its face, and it speaks of individual victims of discrimination. *Id* *3. On its face, the court stated the term envisions a individual-based approach that focuses on experience rather than on a group characteristic, and the statute recognizes that not all members of a minority group have necessarily been subjected to racial or ethnic prejudice or cultural bias. *Id.* The court said that the statute definition of the term "social disadvantaged" does not provide for preferential treatment based on an applicant's race, but rather on an individual applicant's experience of discrimination. *Id* *3.

The court distinguished cases involving situations in which disadvantaged non-minority applicants could not participate, but the court said the plain terms of the statute permit individuals in any race to be considered "socially disadvantaged." *Id* *3. The court noted its key point is that the statute is easily read not to require any group-based racial or ethnic classification, stating the statute defines socially disadvantaged *individuals* as those individuals who have been subjected to racial or ethnic prejudice or cultural bias, not those individuals who are *members or groups* that have been subjected to prejudice or bias. *Id.*

The court pointed out that the SBA's implementation of the statute's definition may be based on a racial classification if the regulations carry it out in a manner that gives preference based on race instead of individual experience. *Id* *4. But, the court found, Rothe has expressly disclaimed any challenge to the SBA's implementation of the statute, and as a result, the only question

before them is whether the statute itself classifies based on race, which the court held makes no such classification. *Id* *4. The court determined the statutory language does not create a presumption that a member of a particular racial or ethnic group is necessarily socially disadvantaged, nor that a white person is not. *Id* *5.

The definition of social disadvantage, according to the court, does not amount to a racial classification, for it ultimately turns on a business owner's experience of discrimination. *Id* *6. The statute does not instruct the agency to limit the field to certain racial groups, or to racial groups in general, nor does it tell the agency to presume that anyone who is a member of any particular group is, by that membership alone, socially disadvantaged. *Id*.

The court noted that the Supreme Court and this court's discussions of the 8(a) program have identified the regulations, not the statute, as the source of its racial presumption. *Id* *8. The court distinguished Section 8(d) of the Small Business Act as containing a race-based presumption, but found in the 8(a) program the Supreme Court has explained that the agency (not Congress) presumes that certain racial groups are socially disadvantaged. *Id*. at *7.

The SBA statute does not trigger strict scrutiny. The court held that the statute does not trigger strict scrutiny because it is race-neutral. *Id* *10. The court pointed out that Rothe does not argue that the statute could be subjected to strict scrutiny, even if it is facially neutral, on the basis that Congress enacted it with a discriminatory purpose. *Id* *9. In the absence of such a claim by Rothe, the court determined it would not subject a facially race-neutral statute to strict scrutiny. *Id*. The foreseeability of racially disparate impact, without invidious purpose, the court stated, does not trigger strict constitutional scrutiny. *Id*.

Because the statute does not trigger strict scrutiny, the court found that it need not and does not decide whether the district court correctly concluded that the statute is narrowly tailored to meet a compelling interest. *Id* *10. Instead, the court considered whether the statute is supported by a rational basis. *Id*. The court held that it plainly is supported by a rational basis, because it bears a rational relation to some legitimate end. *Id* *10.

The statute, the court stated, aims to remedy the effects of prejudice and bias that impede business formation and development and suppress fair competition for government contracts. *Id*. Counteracting discrimination, the court found, is a legitimate interest, and in certain circumstances qualifies as compelling. *Id* *11. The statutory scheme, the court said, is rationally related to that end. *Id*.

The court declined to review the district court's admissibility determinations as to the expert witnesses because it stated that it would affirm the district court's grant of summary judgment even if the district court abused its discretion in making those determinations. *Id* *11. The court noted the expert witness testimony is not necessary to, nor in conflict with, its conclusion that Section 8(a) is subject to and survives rational-basis review. *Id*.

Other issues. The court declined to review the district court's admissibility determinations as to the expert witnesses because it stated that it would affirm the district court's grant of summary judgment even if the district court abused its discretion in making those determinations. *Id* *11.

The court noted the expert witness testimony is not necessary to, nor in conflict with, its conclusion that Section 8(a) is subject to and survives rational-basis review. *Id.*

In addition, the court rejected Rothe's contention that Section 8(a) is an unconstitutional delegation of legislative power. *Id.**11. Because the argument is premised on the idea that Congress created a racial classification, which the court has held it did not, Rothe's alternative argument on delegation also fails. *Id.*

Dissenting Opinion. There was a dissenting opinion by one of the three members of the court. The dissenting judge stated in her view that the provisions of the Small Business Act at issue are not facially race-neutral, but contain a racial classification. *Id.**12. The dissenting judge said that the act provides members of certain racial groups an advantage in qualifying for Section 8(a)'s contract preference by virtue of their race. *Id.**13.

The dissenting opinion pointed out that all the parties and the district court found that strict scrutiny should be applied in determining whether the Section 8(a) program violates Rothe's right to equal protection of the laws. *Id.**16. In the view of the dissenting opinion the statutory language includes a racial classification, and therefore, the statute should be subject to strict scrutiny. *Id.**22.

2. Rothe Development Corp. v. U.S. Dept. of Defense, et al., 545 F.3d 1023 (Fed. Cir. 2008)

Although this case does not involve the Federal DBE Program (49 CFR Part 26), it is an analogous case that may impact the legal analysis and law related to the validity of programs implemented by recipients of federal funds, including the Federal DBE Program. Additionally, it underscores the requirement that race-, ethnic- and gender-based programs of any nature must be supported by substantial evidence. In *Rothe*, an unsuccessful bidder on a federal defense contract brought suit alleging that the application of an evaluation preference, pursuant to a federal statute, to a small disadvantaged bidder (SDB) to whom a contract was awarded, violated the Equal Protection clause of the U.S. Constitution. The federal statute challenged is Section 1207 of the National Defense Authorization Act of 1987 and as reauthorized in 2003. The statute provides a goal that 5 percent of the total dollar amount of defense contracts for each fiscal year would be awarded to small businesses owned and controlled by socially and economically disadvantaged individuals. 10 U.S.C. § 2323. Congress authorized the Department of Defense ("DOD") to adjust bids submitted by non-socially and economically disadvantaged firms upwards by 10 percent (the "Price Evaluation Adjustment Program" or "PEA").

The district court held the federal statute, as reauthorized in 2003, was constitutional on its face. The court held the 5 percent goal and the PEA program as reauthorized in 1992 and applied in 1998 was unconstitutional. The basis of the decision was that Congress considered statistical evidence of discrimination that established a compelling governmental interest in the reauthorization of the statute and PEA program in 2003. Congress had not documented or considered substantial statistical evidence that the DOD discriminated against minority small businesses when it enacted the statute in 1992 and reauthorized it in 1998. The plaintiff appealed the decision.

The Federal Circuit found that the “analysis of the facial constitutionality of an act is limited to evidence before Congress prior to the date of reauthorization.” 413 F.3d 1327 (Fed. Cir. 2005)(affirming in part, vacating in part, and remanding 324 F. Supp.2d 840 (W.D. Tex. 2004). The court limited its review to whether Congress had sufficient evidence in 1992 to reauthorize the provisions in 1207. The court held that for evidence to be relevant to a strict scrutiny analysis, “the evidence must be proven to have been before Congress prior to enactment of the racial classification.” The Federal Circuit held that the district court erred in relying on the statistical studies without first determining whether the studies were before Congress when it reauthorized section 1207. The Federal Circuit remanded the case and directed the district court to consider whether the data presented was so outdated that it did not provide the requisite strong basis in evidence to support the reauthorization of section 1207.

On August 10, 2007 the Federal District Court for the Western District of Texas in *Rothe Development Corp. v. U.S. Dept. of Defense*, 499 F.Supp.2d 775 (W.D.Tex. Aug 10, 2007) issued its Order on remand from the Federal Circuit Court of Appeals decision in *Rothe*, 413 F.3d 1327 (Fed Cir. 2005). The district court upheld the constitutionality of the 2006 Reauthorization of Section 1207 of the National Defense Authorization Act of 1987 (10 USC § 2323), which permits the U.S. Department of Defense to provide preferences in selecting bids submitted by small businesses owned by socially and economically disadvantaged individuals (“SDBs”). The district court found the 2006 Reauthorization of the 1207 Program satisfied strict scrutiny, holding that Congress had a compelling interest when it reauthorized the 1207 Program in 2006, that there was sufficient statistical and anecdotal evidence before Congress to establish a compelling interest, and that the reauthorization in 2006 was narrowly tailored.

The district court, among its many findings, found certain evidence before Congress was “stale,” that the plaintiff (Rothe) failed to rebut other evidence which was not stale, and that the decisions by the Eighth, Ninth and Tenth Circuits in the decisions in *Concrete Works*, *Adarand Constructors*, *Sherbrooke Turf* and *Western States Paving* (discussed above and below) were relevant to the evaluation of the facial constitutionality of the 2006 Reauthorization.

2007 Order of the District Court (499 F.Supp.2d 775). In the Section 1207 Act, Congress set a goal that 5 percent of the total dollar amount of defense contracts for each fiscal year would be awarded to small businesses owned and controlled by socially and economically disadvantaged individuals. In order to achieve that goal, Congress authorized the DOD to adjust bids submitted by non-socially and economically disadvantaged firms up to 10 percent. 10 U.S.C. § 2323(e)(3). *Rothe*, 499 F.Supp.2d. at 782. Plaintiff Rothe did not qualify as an SDB because it was owned by a Caucasian female. Although Rothe was technically the lowest bidder on a DOD contract, its bid was adjusted upward by 10 percent, and a third party, who qualified as a SDB, became the “lowest” bidder and was awarded the contract. *Id.* Rothe claims that the 1207 Program is facially unconstitutional because it takes race into consideration in violation of the Equal Protection component of the Due Process Clause of the Fifth Amendment. *Id.* at 782-83. The district court’s decision only reviewed the facial constitutionality of the 2006 Reauthorization of the 2007 Program.

The district court initially rejected six legal arguments made by *Rothe* regarding strict scrutiny review based on the rejection of the same arguments by the Eighth, Ninth, and Tenth Circuit

Courts of Appeal in the *Sherbrooke Turf*, *Western States Paving*, *Concrete Works*, *Adarand VII* cases, and the Federal Circuit Court of Appeal in *Rothe*. *Rothe* at 825-833.

The district court discussed and cited the decisions in *Adarand VII* (2000), *Sherbrooke Turf* (2003), and *Western States Paving* (2005), as holding that Congress had a compelling interest in eradicating the economic roots of racial discrimination in highway transportation programs funded by federal monies, and concluding that the evidence cited by the government, particularly that contained in *The Compelling Interest* (a.k.a. the Appendix), more than satisfied the government's burden of production regarding the compelling interest for a race-conscious remedy. *Rothe* at 827. Because the Urban Institute Report, which presented its analysis of 39 state and local disparity studies, was cross-referenced in the Appendix, the district court found the courts in *Adarand VII*, *Sherbrooke Turf*, and *Western States Paving*, also relied on it in support of their compelling interest holding. *Id.* at 827.

The district court also found that the Tenth Circuit decision in *Concrete Works IV*, 321 F.3d 950 (10th Cir. 2003), established legal principles that are relevant to the court's strict scrutiny analysis. First, *Rothe's* claims for declaratory judgment on the racial constitutionality of the earlier 1999 and 2002 Reauthorizations were moot. Second, the government can meet its burden of production without conclusively proving the existence of past or present racial discrimination. Third, the government may establish its own compelling interest by presenting evidence of its own direct participation in racial discrimination or its passive participation in private discrimination. Fourth, once the government meets its burden of production, *Rothe* must introduce "credible, particularized" evidence to rebut the government's initial showing of the existence of a compelling interest. Fifth, *Rothe* may rebut the government's statistical evidence by giving a race-neutral explanation for the statistical disparities, showing that the statistics are flawed, demonstrating that the disparities shown are not significant or actionable, or presenting contrasting statistical data. Sixth, the government may rely on disparity studies to support its compelling interest, and those studies may control for the effect that pre-existing affirmative action programs have on the statistical analysis. *Id.* at 829-32.

Based on *Concrete Works IV*, the district court did not require the government to conclusively prove that there is pervasive discrimination in the relevant market, that each presumptively disadvantaged group suffered equally from discrimination, or that private firms intentionally and purposefully discriminated against minorities. The court found that the inference of discriminatory exclusion can arise from statistical disparities. *Id.* at 830-31.

The district court held that Congress had a compelling interest in the 2006 Reauthorization of the 1207 Program, which was supported by a strong basis in the evidence. The court relied in significant part upon six state and local disparity studies that were before Congress prior to the 2006 Reauthorization of the 1207 Program. The court based this evidence on its finding that Senator Kennedy had referenced these disparity studies, discussed and summarized findings of the disparity studies, and Representative Cynthia McKinney also cited the same six disparity studies that Senator Kennedy referenced. The court stated that based on the content of the floor debate, it found that these studies were put before Congress prior to the date of the Reauthorization of Section 1207. *Id.* at 838.

The district court found that these six state and local disparity studies analyzed evidence of discrimination from a diverse cross-section of jurisdictions across the United States, and “they constitute prima facie evidence of a nation-wide pattern or practice of discrimination in public and private contracting.” *Id.* at 838-39. The court found that the data used in these six disparity studies is not “stale” for purposes of strict scrutiny review. *Id.* at 839. The court disagreed with Rothe’s argument that all the data were stale (data in the studies from 1997 through 2002), “because this data was the most current data available at the time that these studies were performed.” *Id.* The court found that the governmental entities should be able to rely on the most recently available data so long as those data are reasonably up-to-date. *Id.* The court declined to adopt a “bright-line rule for determining staleness.” *Id.*

The court referred to the reliance by the Ninth Circuit and the Eighth Circuit on the *Appendix* to affirm the constitutionality of the USDOT MBE [now DBE] Program, and rejected five years as a bright-line rule for considering whether data are “stale.” *Id.* at n.86. The court also stated that it “accepts the reasoning of the *Appendix*, which the court found stated that for the most part “the federal government does business in the same contracting markets as state and local governments. Therefore, the evidence in state and local studies of the impact of discriminatory barriers to minority opportunity in contracting markets throughout the country is relevant to the question of whether the federal government has a compelling interest to take remedial action in its own procurement activities.” *Id.* at 839, quoting 61 *Fed.Reg.* 26042-01, 26061 (1996).

The district court also discussed additional evidence before Congress that it found in Congressional Committee Reports and Hearing Records. *Id.* at 865-71. The court noted SBA Reports that were before Congress prior to the 2006 Reauthorization. *Id.* at 871.

The district court found that the data contained in the *Appendix*, the Benchmark Study, and the Urban Institute Report were “stale,” and the court did not consider those reports as evidence of a compelling interest for the 2006 Reauthorization. *Id.* at 872-75. The court stated that the Eighth, Ninth and Tenth Circuits relied on the *Appendix* to uphold the constitutionality of the Federal DBE Program, citing to the decisions in *Sherbrooke Turf*, *Adarand VII*, and *Western States Paving*. *Id.* at 872. The court pointed out that although it does not rely on the data contained in the *Appendix* to support the 2006 Reauthorization, the fact the Eighth, Ninth, and Tenth Circuits relied on these data to uphold the constitutionality of the Federal DBE Program as recently as 2005, convinced the court that a bright-line staleness rule is inappropriate. *Id.* at 874.

Although the court found that the data contained in the *Appendix*, the Urban Institute Report, and the Benchmark Study were stale for purposes of strict scrutiny review regarding the 2006 Reauthorization, the court found that Rothe introduced no concrete, particularized evidence challenging the reliability of the methodology or the data contained in the six state and local disparity studies, and other evidence before Congress. The court found that Rothe failed to rebut the data, methodology or anecdotal evidence with “concrete, particularized” evidence to the contrary. *Id.* at 875. The district court held that based on the studies, the government had satisfied its burden of producing evidence of discrimination against African Americans, Asian Americans, Hispanic Americans, and Native Americans in the relevant industry sectors. *Id.* at 876.

The district court found that Congress had a compelling interest in reauthorizing the 1207 Program in 2006, which was supported by a strong basis of evidence for remedial action. *Id.* at 877. The court held that the evidence constituted prima facie proof of a nationwide pattern or practice of discrimination in both public and private contracting, that Congress had sufficient evidence of discrimination throughout the United States to justify a nationwide program, and the evidence of discrimination was sufficiently pervasive across racial lines to justify granting a preference to all five purportedly disadvantaged racial groups. *Id.*

The district court also found that the 2006 Reauthorization of the 1207 Program was narrowly tailored and designed to correct present discrimination and to counter the lingering effects of past discrimination. The court held that the government's involvement in both present discrimination and the lingering effects of past discrimination was so pervasive that the DOD and the Department of Air Force had become passive participants in perpetuating it. *Id.* The court stated it was law of the case and could not be disturbed on remand that the Federal Circuit in *Rothe III* had held that the 1207 Program was flexible in application, limited in duration and it did not unduly impact on the rights of third parties. *Id.*, quoting *Rothe III*, 262 F.3d at 1331.

The district court thus conducted a narrowly tailored analysis that reviewed three factors:

1. The efficacy of race-neutral alternatives;
2. Evidence detailing the relationship between the stated numerical goal of 5 percent and the relevant market; and
3. Over- and under-inclusiveness.

Id. The court found that Congress examined the efficacy of race-neutral alternatives prior to the enactment of the 1207 Program in 1986 and that these programs were unsuccessful in remedying the effects of past and present discrimination in federal procurement. *Id.* The court concluded that Congress had attempted to address the issues through race-neutral measures, discussed those measures, and found that Congress' adoption of race-conscious provisions were justified by the ineffectiveness of such race-neutral measures in helping minority-owned firms overcome barriers. *Id.* The court found that the government seriously considered and enacted race-neutral alternatives, but these race-neutral programs did not remedy the widespread discrimination that affected the federal procurement sector, and that Congress was not required to implement or exhaust every conceivable race-neutral alternative. *Id.* at 880. Rather, the court found that narrow tailoring requires only "serious, good faith consideration of workable race-neutral alternatives." *Id.*

The district court also found that the 5 percent goal was related to the minority business availability identified in the six state and local disparity studies. *Id.* at 881. The court concluded that the 5 percent goal was aspirational, not mandatory. *Id.* at 882. The court then examined and found that the regulations implementing the 1207 Program were not over-inclusive for several reasons.

November 4, 2008 decision by the Federal Circuit Court of Appeals. On November 4, 2008, the Federal Circuit Court of Appeals reversed the judgment of the district court in part, and remanded with instructions to enter a judgment (1) denying Rothe any relief regarding the facial

constitutionality of Section 1207 as enacted in 1999 or 2002, (2) declaring that Section 1207 as enacted in 2006 (10 U.S.C. § 2323) is facially unconstitutional, and (3) enjoining application of Section 1207 (10 U.S.C. § 2323).

The Federal Circuit Court of Appeals held that Section 1207, on its face, as reenacted in 2006, violated the Equal Protection component of the Fifth Amendment right to due process. The court found that because the statute authorized the DOD to afford preferential treatment on the basis of race, the court applied strict scrutiny, and because Congress did not have a “strong basis in evidence” upon which to conclude that the DOD was a passive participant in pervasive, nationwide racial discrimination — at least not on the evidence produced by the DOD and relied on by the district court in this case — Section 1207 failed to meet this strict scrutiny test. 545 F.3d at 1050.

Strict scrutiny framework. The Federal Circuit Court of Appeals recognized that the Supreme Court has held a government may have a compelling interest in remedying the effects of past or present racial discrimination. 545 F.3d at 1036. The court cited the decision in *Croson*, 488 U.S. at 492, that it is “beyond dispute that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of private prejudice.” 545 F.3d. at 1036, *quoting Croson*, 488 U.S. at 492.

The court held that before resorting to race-conscious measures, the government must identify the discrimination to be remedied, public or private, with some specificity, and must have a strong basis of evidence upon which to conclude that remedial action is necessary. 545 F.3d at 1036, *quoting Croson*, 488 U.S. at 500, 504. Although the party challenging the statute bears the ultimate burden of persuading the court that it is unconstitutional, the Federal Circuit stated that the government first bears a burden to produce strong evidence supporting the legislature’s decision to employ race-conscious action. 545 F.3d at 1036.

Even where there is a compelling interest supported by strong basis in evidence, the court held the statute must be narrowly tailored to further that interest. *Id.* The court noted that a narrow tailoring analysis commonly involves six factors: (1) the necessity of relief; (2) the efficacy of alternative, race-neutral remedies; (3) the flexibility of relief, including the availability of waiver provisions; (4) the relationship with the stated numerical goal to the relevant labor market; (5) the impact of relief on the rights of third parties; and (6) the overinclusiveness or underinclusiveness of the racial classification. *Id.*

Compelling interest – strong basis in evidence. The Federal Circuit pointed out that the statistical and anecdotal evidence relied upon by the district court in its ruling below included six disparity studies of state or local contracting. The Federal Circuit also pointed out that the district court found that the data contained in the Appendix, the Urban Institute Report, and the Benchmark Study were stale for purposes of strict scrutiny review of the 2006 Authorization, and therefore, the district court concluded that it would not rely on those three reports as evidence of a compelling interest for the 2006 reauthorization of the 1207 Program. 545 F.3d 1023, *citing to Rothe VI*, 499 F.Supp.2d at 875. Since the DOD did not challenge this finding on appeal, the Federal Circuit stated that it would not consider the Appendix, the Urban Institute Report, or the Department of Commerce Benchmark Study, and instead determined whether the evidence relied on by the district court was sufficient to demonstrate a compelling interest. *Id.*

Six state and local disparity studies. The Federal Circuit found that disparity studies can be relevant to the compelling interest analysis because, as explained by the Supreme Court in *Croson*, “[w]here there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by [a] locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.” 545 F.3d at 1037-1038, *quoting Croson*, 488 U.S.C. at 509. The Federal Circuit also cited to the decision by the Fifth Circuit Court of Appeals in *W.H. Scott Constr. Co. v. City of Jackson*, 199 F.3d 206 (5th Cir. 1999) that given *Croson*’s emphasis on statistical evidence, other courts considering equal protection challenges to minority-participation programs have looked to disparity indices, or to computations of disparity percentages, in determining whether *Croson*’s evidentiary burden is satisfied. 545 F.3d at 1038, *quoting W.H. Scott*, 199 F.3d at 218.

The Federal Circuit noted that a disparity study is a study attempting to measure the difference- or disparity- between the number of contracts or contract dollars actually awarded minority-owned businesses in a particular contract market, on the one hand, and the number of contracts or contract dollars that one would expect to be awarded to minority-owned businesses given their presence in that particular contract market, on the other hand. 545 F.3d at 1037.

Staleness. The Federal Circuit declined to adopt a per se rule that data more than five years old are stale per se, which rejected the argument put forth by *Rothe*. 545 F.3d at 1038. The court pointed out that the district court noted other circuit courts have relied on studies containing data more than five years old when conducting compelling interest analyses, *citing to Western States Paving v. Washington State Department of Transportation*, 407 F.3d 983, 992 (9th Cir. 2005) and *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964, 970 (8th Cir. 2003)(relying on the Appendix, published in 1996).

The Federal Circuit agreed with the district court that Congress “should be able to rely on the most recently available data so long as that data is reasonably up-to-date.” 545 F.3d at 1039. The Federal Circuit affirmed the district court’s conclusion that the data analyzed in the six disparity studies were not stale at the relevant time because the disparity studies analyzed data pertained to contracts awarded as recently as 2000 or even 2003, and because *Rothe* did not point to more recent, available data. *Id.*

Before Congress. The Federal Circuit found that for evidence to be relevant in the strict scrutiny analysis, it “must be proven to have been before Congress prior to enactment of the racial classification.” 545 F.3d at 1039, *quoting Rothe V*, 413 F.3d at 1338. The Federal Circuit had issues with determining whether the six disparity studies were actually before Congress for several reasons, including that there was no indication that these studies were debated or reviewed by members of Congress or by any witnesses, and because Congress made no findings concerning these studies. 545 F.3d at 1039-1040. However, the court determined it need not decide whether the six studies were put before Congress, because the court held in any event that the studies did not provide a substantially probative and broad-based statistical foundation necessary for the strong basis in evidence that must be the predicate for nation-wide, race-conscious action. *Id.* at 1040.

The court did note that findings regarding disparity studies are to be distinguished from formal findings of discrimination by the DOD “which Congress was emphatically not required to make.” *Id.* at 1040, footnote 11 (emphasis in original). The Federal Circuit cited the *Dean v. City of Shreveport* case that the “government need not incriminate itself with a formal finding of discrimination prior to using a race-conscious remedy.” 545 F.3d at 1040, footnote 11 quoting *Dean v. City of Shreveport*, 438 F.3d 448, 445 (5th Cir. 2006).

Methodology. The Federal Circuit found that there were methodological defects in the six disparity studies. The court found that the objections to the parameters used to select the relevant pool of contractors was one of the major defects in the studies. 545 F.3d at 1040-1041.

The court stated that in general, “[a] disparity ratio less than 0.80” — *i.e.*, a finding that a given minority group received less than 80 percent of the expected amount — “indicates a relevant degree of disparity,” and “might support an inference of discrimination.” 545 F.3d at 1041, quoting the district court opinion in *Rothe VI*, 499 F.Supp.2d at 842; and citing *Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 914 (11th Cir. 1997). The court noted that this disparity ratio attempts to calculate a ratio between the expected contract amount of a given race/gender group and the actual contract amount received by that group. 545 F.3d at 1041.

The court considered the availability analysis, or benchmark analysis, which is utilized to ensure that only those minority-owned contractors who are qualified, willing and able to perform the prime contracts at issue are considered when performing the denominator of a disparity ratio. 545 F.3d at 1041. The court cited to an expert used in the case that a “crucial question” in disparity studies is to develop a credible methodology to estimate this benchmark share of contracts minorities would receive in the absence of discrimination and the touchstone for measuring the benchmark is to determine whether the firm is ready, willing, and able to do business with the government. 545 F.3d at 1041-1042.

The court concluded the contention by Rothe, that the six studies misapplied this “touchstone” of *Croson* and erroneously included minority-owned firms that were deemed willing or potentially willing and able, without regard to whether the firm was qualified, was not a defect that substantially undercut the results of four of the six studies, because “the bulk of the businesses considered in these studies were identified in ways that would tend to establish their qualifications, such as by their presence on city contract records and bidder lists.” 545 F.3d at 1042. The court noted that with regard to these studies available prime contractors were identified via certification lists, willingness survey of chamber membership and trade association membership lists, public agency and certification lists, utilized prime contractor, bidder lists, county and other government records and other type lists. *Id.*

The court stated it was less confident in the determination of qualified minority-owned businesses by the two other studies because the availability methodology employed in those studies, the court found, appeared less likely to have weeded out unqualified businesses. *Id.* However, the court stated it was more troubled by the failure of five of the studies to account officially for potential differences in size, or “relative capacity,” of the business included in those studies. 545 F.3d at 1042-1043.

The court noted that qualified firms may have substantially different capacities and thus might be expected to bring in substantially different amounts of business even in the absence of discrimination. 545 F.3d at 1043. The Federal Circuit referred to the Eleventh Circuit explanation similarly that because firms are bigger, bigger firms have a bigger chance to win bigger contracts, and thus one would expect the bigger (on average) non-MWBE firms to get a disproportionately higher percentage of total construction dollars awarded than the smaller MWBE firms. 545 F.3d at 1043 quoting *Engineering Contractors Association*, 122 F.3d at 917. The court pointed out its issues with the studies accounting for the relative sizes of contracts awarded to minority-owned businesses, but not considering the relative sizes of the businesses themselves. *Id.* at 1043.

The court noted that the studies measured the availability of minority-owned businesses by the percentage of firms in the market owned by minorities, instead of by the percentage of total marketplace capacity those firms could provide. *Id.* The court said that for a disparity ratio to have a significant probative value, the same time period and metric (dollars or numbers) should be used in measuring the utilization and availability shares. 545 F.3d at 1044, n. 12.

The court stated that while these parameters relating to the firm size may have ensured that each minority-owned business in the studies met a capacity threshold, these parameters did not account for the relative capacities of businesses to bid for more than one contract at a time, which failure rendered the disparity ratios calculated by the studies substantially less probative on their own, of the likelihood of discrimination. *Id.* at 1044. The court pointed out that the studies could have accounted for firm size even without changing the disparity ratio methodologies by employing regression analysis to determine whether there was a statistically significant correlation between the size of a firm and the share of contract dollars awarded to it. 545 F.3d at 1044 citing to *Engineering Contractors Association*, 122 F.3d at 917. The court noted that only one of the studies conducted this type of regression analysis, which included the independent variables of a firm-age of a company, owner education level, number of employees, percent of revenue from the private sector and owner experience for industry groupings. *Id.* at 1044-1045.

The court stated, to “be clear,” that it did not hold that the defects in the availability and capacity analyses in these six disparity studies render the studies wholly unreliable for any purpose. *Id.* at 1045. The court said that where the calculated disparity ratios are low enough, the court does not foreclose the possibility that an inference of discrimination might still be permissible for some of the minority groups in some of the studied industries in some of the jurisdictions. *Id.* The court recognized that a minority-owned firm’s capacity and qualifications may themselves be affected by discrimination. *Id.* The court held, however, that the defects it noted detracted dramatically from the probative value of the six studies, and in conjunction with their limited geographic coverage, rendered the studies insufficient to form the statistical core of the strong basis and evidence required to uphold the statute. *Id.*

Geographic coverage. The court pointed out that whereas municipalities must necessarily identify discrimination in the immediate locality to justify a race-based program, the court does not think that Congress needs to have had evidence before it of discrimination in all 50 states in order to justify the 1207 program. *Id.* The court stressed, however, that in holding the six studies insufficient in this particular case, “we do not necessarily disapprove of decisions by other

circuit courts that have relied, directly or indirectly, on municipal disparity studies to establish a federal compelling interest.” 545 F.3d at 1046. The court stated in particular, the Appendix relied on by the Ninth and Tenth Circuits in the context of certain race-conscious measures pertaining to federal highway construction, references the Urban Institute Report, which itself analyzed over 50 disparity studies and relied for its conclusions on over 30 of those studies, a far broader basis than the six studies provided in this case. *Id.*

Anecdotal evidence. The court held that given its holding regarding statistical evidence, it did not review the anecdotal evidence before Congress. The court did point out, however, that there was not evidence presented of a single instance of alleged discrimination by the DOD in the course of awarding a prime contract, or to a single instance of alleged discrimination by a private contractor identified as the recipient of a prime defense contract. 545 F.3d at 1049. The court noted this lack of evidence in the context of the opinion in *Croson* that if a government has become a passive participant in a system of racial exclusion practiced by elements of the local construction industry, then that government may take affirmative steps to dismantle the exclusionary system. 545 F.3d at 1048, *citing Croson*, 488 U.S. at 492.

The Federal Circuit pointed out that the Tenth Circuit in *Concrete Works* noted the City of Denver offered more than dollar amounts to link its spending to private discrimination, but instead provided testimony from minority business owners that general contractors who use them in city construction projects refuse to use them on private projects, with the result that Denver had paid tax dollars to support firms that discriminated against other firms because of their race, ethnicity and gender. 545 F.3d at 1049, *quoting Concrete Works*, 321 F.3d at 976-977.

In concluding, the court stated that it stressed its holding was grounded in the particular items of evidence offered by the DOD, and “should not be construed as stating blanket rules, for example about the reliability of disparity studies. As the Fifth Circuit has explained, there is no ‘precise mathematical formula’ to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark.” 545 F.3d at 1049, *quoting W.H. Scott Constr. Co.*, 199 F.3d at 218 n. 11.

Narrowly tailoring. The Federal Circuit only made two observations about narrowly tailoring, because it held that Congress lacked the evidentiary predicate for a compelling interest. First, it noted that the 1207 Program was flexible in application, limited in duration, and that it did not unduly impact on the rights of third parties. 545 F.3d at 1049. Second, the court held that the absence of strongly probative statistical evidence makes it impossible to evaluate at least one of the other narrowly tailoring factors. Without solid benchmarks for the minority groups covered by the Section 1207, the court said it could not determine whether the 5 percent goal is reasonably related to the capacity of firms owned by members of those minority groups — i.e., whether that goal is comparable to the share of contracts minorities would receive in the absence of discrimination.” 545 F.3d at 1049-1050.

3. *Rothe Development, Inc. v. U.S. Dept. of Defense and Small Business Administration*, 107 F. Supp. 3d 183, 2015 WL 3536271 (D.D.C. 2015), affirmed on other grounds, 836 F.3d 57, 2016 WL 4719049 (D.C. Cir. 2016).

Plaintiff Rothe Development, Inc. is a small business that filed this action against the U.S. Department of Defense (“DOD”) and the U.S. Small Business Administration (“SBA”) (collectively, “Defendants”) challenging the constitutionality of the Section 8(a) Program on its face.

The constitutional challenge that Rothe brings in this case is nearly identical to the challenge brought in the case of *DynaLantic Corp. v. United States Department of Defense*, 885 F.Supp.2d 237 (D.D.C. 2012). The plaintiff in *DynaLantic* sued the DOD, the SBA, and the Department of Navy alleging that Section 8(a) was unconstitutional both on its face and as applied to the military simulation and training industry. *See DynaLantic*, 885 F.Supp.2d at 242. *DynaLantic's* court disagreed with the plaintiff's facial attack and held the Section 8(a) Program as facially constitutional. *See DynaLantic*, 885 F.Supp.2d at 248-280, 283-291. (*See also* discussion of *DynaLantic* in this Appendix below.)

The court in *Rothe* states that the plaintiff Rothe relies on substantially the same record evidence and nearly identical legal arguments as in the *DynaLantic* case, and urges the court to strike down the race-conscious provisions of Section 8(a) on their face, and thus to depart from *DynaLantic's* holding in the context of this case. 2015 WL 3536271 at *1. Both the plaintiff Rothe and the Defendants filed cross-motions for summary judgment as well as motions to limit or exclude testimony of each other's expert witnesses. The court concludes that Defendants' experts meet the relevant qualification standards under the Federal Rules, and therefore denies plaintiff Rothe's motion to exclude Defendants' expert testimony. *Id.* By contrast, the court found sufficient reason to doubt the qualifications of one of plaintiff's experts and to question the reliability of the testimony of the other; consequently, the court grants the Defendants' motions to exclude plaintiff's expert testimony.

In addition, the court in *Rothe* agrees with the court's reasoning in *DynaLantic*, and thus the court in *Rothe* also concludes that Section 8(a) is constitutional on its face. Accordingly, the court denies plaintiff's motion for summary judgment and grants Defendants' cross-motion for summary judgment.

DynaLantic Corp. v. Department of Defense. The court in *Rothe* analyzed the *DynaLantic* case, and agreed with the findings, holding and conclusions of the court in *DynaLantic*. *See* 2015 WL 3536271 at *4-5. The court in *Rothe* noted that the court in *DynaLantic* engaged in a detailed examination of Section 8(a) and the extensive record evidence, including disparity studies on racial discrimination in federal contracting across various industries. *Id.* at *5. The court in *DynaLantic* concluded that Congress had a compelling interest in eliminating the roots of racial discrimination in federal contracting, funded by federal money, and also that the government had established a strong basis in evidence to support its conclusion that remedial action was necessary to remedy that discrimination. *Id.* at *5. This conclusion was based on the finding the government provided extensive evidence of discriminatory barriers to minority business formation and minority business development, as well as significant evidence that, even when minority businesses are qualified and eligible to perform contracts in both public and private sectors, they are awarded these contracts far less often than their similarly situated non-minority counterparts. *Id.* at *5, *citing DynaLantic*, 885 F.Supp.2d at 279.

The court in *DynaLantic* also found that *DynaLantic* had failed to present credible, particularized evidence that undermined the government's compelling interest or that demonstrated that the government's evidence did not support an inference of prior discrimination and thus a remedial purpose. 2015 WL 3536271 at *5, *citing DynaLantic*, at 279.

With respect to narrow tailoring, the court in *DynaLantic* concluded that the Section 8(a) Program is narrowly tailored on its face, and that since Section 8(a) race-conscious provisions were narrowly tailored to further a compelling state interest, strict scrutiny was satisfied in the context of the construction industry and in other industries such as architecture and engineering, and professional services as well. *Id.* The court in *Rothe* also noted that the court in *DynaLantic* found that DynaLantic had thus failed to meet its burden to show that the challenge provisions were unconstitutional in all circumstances and held that Section 8(a) was constitutional on its face. *Id.*

Defendants’ expert evidence. One of Defendants’ experts used regression analysis, claiming to have isolated the effect in minority ownership on the likelihood of a small business receiving government contracts, specifically using a “logit model” to examine government contracting data in order to determine whether the data show any difference in the odds of contracts being won by minority-owned small businesses relative to other small businesses. 2015 WL 3536271 at *9. The expert controlled for other variables that could influence the odds of whether or not a given firm wins a contract, such as business size, age, and level of security clearance, and concluded that the odds of minority-owned small firms and non-8(a) SDB firms winning contracts were lower than small non-minority and non-SDB firms. *Id.* In addition, the Defendants’ expert found that non-8(a) minority-owned SDBs are statistically significantly less likely to win a contract in industries accounting for 94.0% of contract actions, 93.0% of dollars awarded, and in which 92.2% of non-8(a) minority-owned SDBs are registered. *Id.* Also, the expert found that there is no industry where non-8(a) minority-owned SDBs have a statistically significant advantage in terms of winning a contract from the federal government. *Id.*

The court rejected Rothe’s contention that the expert opinion is based on insufficient data, and that its analysis of data related to a subset of the relevant industry codes is too narrow to support its scientific conclusions. *Id.* at *10. The court found convincing the expert’s response to Rothe’s critique about his dataset, explaining that, from a mathematical perspective, excluding certain NAICS codes and analyzing data at the three-digit level actually increases the reliability of his results. The expert opted to use codes at the three-digit level as a compromise, balancing the need to have sufficient data in each industry grouping and the recognition that many firms can switch production within the broader three-digit category. *Id.* The expert also excluded certain NAICS industry groups from his regression analyses because of incomplete data, irrelevance, or because data issues in a given NAICS group prevented the regression model from producing reliable estimates. *Id.* The court found that the expert’s reasoning with respect to the exclusions and assumptions he makes in the analysis are fully explained and scientifically sound. *Id.*

In addition, the court found that post-enactment evidence was properly considered by the expert and the court. *Id.* The court found that nearly every circuit to consider the question of the relevance of post-enactment evidence has held that reviewing courts need not limit themselves to the particular evidence that Congress relied upon when it enacted the statute at issue. *Id.*, citing *DynaLantic*, 885 F.Supp.2d at 257.

Thus, the court held that post-enactment evidence is relevant to constitutional review, in particular, following the court in *DynaLantic*, when the statute is over 30 years old and the evidence used to justify Section 8(a) is stale for purposes of determining a compelling interest in

the present. *Id.*, citing *DynaLantic* at 885 F.Supp.2d at 258. The court also points out that the statute itself contemplates that Congress will review the 8(a) Program on a continuing basis, which renders the use of post-enactment evidence proper. *Id.*

The court also found Defendants' additional expert's testimony as admissible in connection with that expert's review of the results of the 107 disparity studies conducted throughout the United States since the year 2000, all but 32 of which were submitted to Congress. *Id.* at *11. This expert testified that the disparity studies submitted to Congress, taken as a whole, provide strong evidence of large, adverse, and often statistically significant disparities between minority participation in business enterprise activity and the availability of those businesses; the disparities are not explained solely by differences in factors other than race and sex that are untainted by discrimination; and the disparities are consistent with the presence of discrimination in the business market. *Id.* at *12.

The court rejects Rothe's contentions to exclude this expert testimony merely based on the argument by Rothe that the factual basis for the expert's opinion is unreliable based on alleged flaws in the disparity studies or that the factual basis for the expert's opinions are weak. *Id.* The court states that even if Rothe's contentions are correct, an attack on the underlying disparity studies does not necessitate the remedy of exclusion. *Id.*

Plaintiff's expert's testimony rejected. The court found that one of plaintiff's experts was not qualified based on his own admissions regarding his lack of training, education, knowledge, skill and experience in any statistical or econometric methodology. *Id.* at *13. Plaintiff's other expert the court determined provided testimony that was unreliable and inadmissible as his preferred methodology for conducting disparity studies "appears to be well outside of the mainstream in this particular field." *Id.* at *14. The expert's methodology included his assertion that the only proper way to determine the availability of minority-owned businesses is to count those contractors and subcontractors that actually perform or bid on contracts, which the court rejected as not reliable. *Id.*

The Section 8(a) Program is constitutional on its face. The court found persuasive the court decision in *DynaLantic*, and held that inasmuch as Rothe seeks to re-litigate the legal issues presented in that case, this court declines Rothe's invitation to depart from the *DynaLantic* court's conclusion that Section 8(a) is constitutional on its face. *Id.* at *15.

The court reiterated its agreement with the *DynaLantic* court that racial classifications are constitutional only if they are narrowly tailored measures that further compelling governmental interest. *Id.* at *17. To demonstrate a compelling interest, the government defendants must make two showings: first the government must articulate a legislative goal that is properly considered a compelling governmental interest, and second the government must demonstrate a strong basis in evidence supporting its conclusion that race-based remedial action was necessary to further that interest. *Id.* at *17. In so doing, the government need not conclusively prove the existence of racial discrimination in the past or present. *Id.* The government may rely on both statistical and anecdotal evidence, although anecdotal evidence alone cannot establish a strong basis in evidence for the purposes of strict scrutiny. *Id.*

If the government makes both showings, the burden shifts to the plaintiff to present credible, particularized evidence to rebut the government's initial showing of a compelling interest. *Id.* Once a compelling interest is established, the government must further show that the means chosen to accomplish the government's asserted purpose are specifically and narrowly framed to accomplish that purpose. *Id.*

The court held that the government articulated and established compelling interest for the Section 8(a) Program, namely, remedying race-based discrimination and its effects. *Id.* The court held the government also established a strong basis in evidence that furthering this interest requires race-based remedial action – specifically, evidence regarding discrimination in government contracting, which consisted of extensive evidence of discriminatory barriers to minority business formation and forceful evidence of discriminatory barriers to minority business development. *Id.* at *17, citing *DynaLantic*, 885 F.Supp.2d at 279.

The government defendants in this case relied upon the same evidence as in the *DynaLantic* case and the court found that the government provided significant evidence that even when minority businesses are qualified and eligible to perform contracts in both the private and public sectors, they are awarded these contracts far less often than their similarly situated non-minority counterparts. *Id.* at *17. The court held that Rothe has failed to rebut the evidence of the government with credible and particularized evidence of its own. *Id.* at *17. Furthermore, the court found that the government defendants established that the Section 8(a) Program is narrowly tailored to achieve the established compelling interest. *Id.* at *18.

The court found, citing agreement with the *DynaLantic* court, that the Section 8(a) Program satisfies all six factors of narrow tailoring. *Id.* First, alternative race-neutral remedies have proved unsuccessful in addressing the discrimination targeted with the Program. *Id.* Second, the Section 8(a) Program is appropriately flexible. *Id.* Third, Section 8(a) is neither over nor under-inclusive. *Id.* Fourth, the Section 8(a) Program imposes temporal limits on every individual's participation that fulfilled the durational aspect of narrow tailoring. *Id.* Fifth, the relevant aspirational goals for SDB contracting participation are numerically proportionate, in part because the evidence presented established that minority firms are ready, willing and able to perform work equal to two to five percent of government contracts in industries including but not limited to construction. *Id.* And six, the fact that the Section 8(a) Program reserves certain contracts for program participants does not, on its face, create an impermissible burden on non-participating firms. *Id.*; citing *DynaLantic*, 885 F.Supp.2d at 283-289.

Accordingly, the court concurred completely with the *DynaLantic* court's conclusion that the strict scrutiny standard has been met, and that the Section 8(a) Program is facially constitutional despite its reliance on race-conscious criteria. *Id.* at *18. The court found that on balance the disparity studies on which the government defendants rely reveal large, statistically significant barriers to business formation among minority groups that cannot be explained by factors other than race, and demonstrate that discrimination by prime contractors, private sector customers, suppliers and bonding companies continues to limit minority business development. *Id.* at *18, citing *DynaLantic*, 885 F.Supp.2d at 261, 263.

Moreover, the court found that the evidence clearly shows that qualified, eligible minority-owned firms are excluded from contracting markets, and accordingly provides powerful

evidence from which an inference of discriminatory exclusion could arise. *Id.* at *18. The court concurred with the *DynaLantic* court's conclusion that based on the evidence before Congress, it had a strong basis in evidence to conclude the use of race-conscious measures was necessary in, at least, some circumstances. *Id.* at *18, citing *DynaLantic*, 885 F.Supp.2d at 274.

In addition, in connection with the narrow tailoring analysis, the court rejected Rothe's argument that Section 8(a) race-conscious provisions cannot be narrowly tailored because they apply across the board in equal measures, for all preferred races, in all markets and sectors. *Id.* at *19. The court stated the presumption that a minority applicant is socially disadvantaged may be rebutted if the SBA is presented with credible evidence to the contrary. *Id.* at *19. The court pointed out that any person may present credible evidence challenging an individual's status as socially or economically disadvantaged. *Id.* The court said that Rothe's argument is incorrect because it is based on the misconception that narrow tailoring necessarily means a remedy that is laser-focused on a single segment of a particular industry or area, rather than the common understanding that the "narrowness" of the narrow-tailoring mandate relates to the relationship between the government's interest and the remedy it prescribes. *Id.*

Conclusion. The court concluded that plaintiff's facial constitutional challenge to the Section 8(a) Program failed, that the government defendants demonstrated a compelling interest for the government's racial classification, the purported need for remedial action is supported by strong and un rebutted evidence, and that the Section 8(a) program is narrowly tailored to further its compelling interest. *Id.* at *20.

4. *DynaLantic Corp. v. United States Dept. of Defense, et al.*, 885 F.Supp.2d 237, 2012 WL 3356813 (D.D.C., 2012), appeals voluntarily dismissed, United States Court of Appeals, District of Columbia, Docket Numbers 12-5329 and 12-5330 (2014)

Plaintiff, the DynaLantic Corporation ("DynaLantic"), is a small business that designs and manufactures aircraft, submarine, ship, and other simulators and training equipment. DynaLantic sued the United States Department of Defense ("DoD"), the Department of the Navy, and the Small Business Administration ("SBA") challenging the constitutionality of Section 8(a) of the Small Business Act (the "Section 8(a) program"), on its face and as applied: namely, the SBA's determination that it is necessary or appropriate to set aside contracts in the military simulation and training industry. 2012 WL 3356813, at *1, *37.

The Section 8(a) program authorizes the federal government to limit the issuance of certain contracts to socially and economically disadvantaged businesses. *Id.* at *1. DynaLantic claimed that the Section 8(a) is unconstitutional on its face because the DoD's use of the program, which is reserved for "socially and economically disadvantaged individuals," constitutes an illegal racial preference in violation of the equal protection in violating its right to equal protection under the Due Process Clause of the Fifth Amendment to the Constitution and other rights. *Id.* at *1. DynaLantic also claimed the Section 8(a) program is unconstitutional as applied by the federal defendants in DynaLantic's specific industry, defined as the military simulation and training industry. *Id.*

As described in *DynaLantic Corp. v. United States Department of Defense*, 503 F.Supp. 2d 262 (D.D.C. 2007) (*see below*), the court previously had denied Motions for Summary Judgment by

the parties and directed them to propose future proceedings in order to supplement the record with additional evidence subsequent to 2007 before Congress. 503 F.Supp. 2d at 267.

The Section 8(a) Program. The Section 8(a) program is a business development program for small businesses owned by individuals who are both socially and economically disadvantaged as defined by the specific criteria set forth in the congressional statute and federal regulations at 15 U.S.C. §§ 632, 636 and 637; *see* 13 CFR § 124. “Socially disadvantaged” individuals are persons who have been “subjected to racial or ethnic prejudice or cultural bias within American society because of their identities as members of groups without regard to their individual qualities.” 13 CFR § 124.103(a); *see also* 15 U.S.C. § 637(a)(5). “Economically disadvantaged” individuals are those socially disadvantaged individuals “whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same or similar line of business who are not socially disadvantaged.” 13 CFR § 124.104(a); *see also* 15 U.S.C. § 637(a)(6)(A). *DynaLantic Corp.*, 2012WL 3356813 at *2.

Individuals who are members of certain racial and ethnic groups are presumptively socially disadvantaged; such groups include, but are not limited to, Black Americans, Hispanic Americans, Native Americans, Indian tribes, Asian Pacific Americans, Native Hawaiian Organizations, and other minorities. *Id.* at *2 *quoting* 15 U.S.C. § 631(f)(1)(B)-(c); *see also* 13 CFR § 124.103(b)(1). All prospective program participants must show that they are economically disadvantaged, which requires an individual to show a net worth of less than \$250,000 upon entering the program, and a showing that the individual’s income for three years prior to the application and the fair market value of all assets do not exceed a certain threshold. 2012 WL 3356813 at *3; *see* 13 CFR § 124.104(c)(2).

Congress has established an “aspirational goal” for procurement from socially and economically disadvantaged individuals, which includes but is not limited to the Section 8(a) program, of five percent of procurements dollars government wide. *See* 15 U.S.C. § 644(g)(1). *DynaLantic*, at *3. Congress has not, however, established a numerical goal for procurement from the Section 8(a) program specifically. *See Id.* Each federal agency establishes its own goal by agreement between the agency head and the SBA. *Id.* DoD has established a goal of awarding approximately two percent of prime contract dollars through the Section 8(a) program. *DynaLantic*, at *3. The Section 8(a) program allows the SBA, “whenever it determines such action is necessary and appropriate,” to enter into contracts with other government agencies and then subcontract with qualified program participants. 15 U.S.C. § 637(a)(1). Section 8(a) contracts can be awarded on a “sole source” basis (i.e., reserved to one firm) or on a “competitive” basis (i.e., between two or more Section 8(a) firms). *DynaLantic*, at *3-4; 13 CFR 124.501(b).

Plaintiff’s business and the simulation and training industry. *DynaLantic* performs contracts and subcontracts in the simulation and training industry. The simulation and training industry is composed of those organizations that develop, manufacture, and acquire equipment used to train personnel in any activity where there is a human-machine interface. *DynaLantic* at *5.

Compelling interest. The Court rules that the government must make two showings to articulate a compelling interest served by the legislative enactment to satisfy the strict scrutiny standard that racial classifications are constitutional only if they are narrowly tailored measures that further compelling governmental interests.” *DynaLantic*, at *9. First, the government must

“articulate a legislative goal that is properly considered a compelling government interest.” *Id.* quoting *Sherbrooke Turf v. Minn. DOT*, 345 F.3d 964, 969 (8th Cir.2003). Second, in addition to identifying a compelling government interest, “the government must demonstrate ‘a strong basis in evidence’ supporting its conclusion that race-based remedial action was necessary to further that interest.” *DynaLantic*, at *9, quoting *Sherbrooke*, 345 F.3d 969.

After the government makes an initial showing, the burden shifts to DynaLantic to present “credible, particularized evidence” to rebut the government’s “initial showing of a compelling interest.” *DynaLantic*, at *10 quoting *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950, 959 (10th Cir. 2003). The court points out that although Congress is entitled to no deference in its ultimate conclusion that race-conscious action is warranted, its fact-finding process is generally entitled to a presumption of regularity and deferential review. *DynaLantic*, at *10, citing *Rothe Dev. Corp. v. U.S. Dep’t of Def.* (“*Rothe III*”), 262 F.3d 1306, 1321 n. 14 (Fed. Cir. 2001).

The court held that the federal Defendants state a compelling purpose in seeking to remediate either public discrimination or private discrimination in which the government has been a “passive participant.” *DynaLantic*, at *11. The Court rejected *DynaLantic’s* argument that the federal Defendants could only seek to remedy discrimination by a governmental entity, or discrimination by private individuals directly using government funds to discriminate. *DynaLantic*, at *11. The Court held that it is well established that the federal government has a compelling interest in ensuring that its funding is not distributed in a manner that perpetuates the effect of either public or private discrimination within an industry in which it provides funding. *DynaLantic*, at *11, citing *Western States Paving v. Washington State DOT*, 407 F.3d 983, 991 (9th Cir. 2005).

The Court noted that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax dollars of all citizens, do not serve to finance the evils of private prejudice, and such private prejudice may take the form of discriminatory barriers to the formation of qualified minority businesses, precluding from the outset competition for public contracts by minority enterprises. *DynaLantic* at *11 quoting *City of Richmond v. J. A. Croson Co.*, 488 U.S. 469, 492 (1995), and *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1167-68 (10th Cir. 2000). In addition, private prejudice may also take the form of “discriminatory barriers” to “fair competition between minority and non-minority enterprises ... precluding existing minority firms from effectively competing for public construction contracts.” *DynaLantic*, at *11, quoting *Adarand VII*, 228 F.3d at 1168.

Thus, the Court concluded that the government may implement race-conscious programs not only for the purpose of correcting its own discrimination, but also to prevent itself from acting as a “passive participant” in private discrimination in the relevant industries or markets. *DynaLantic*, at *11, citing *Concrete Works IV*, 321 F.3d at 958.

Evidence before Congress. The Court analyzed the legislative history of the Section 8(a) program, and then addressed the issue as to whether the Court is limited to the evidence before Congress when it enacted Section 8(a) in 1978 and revised it in 1988, or whether it could consider post-enactment evidence. *DynaLantic*, at *16-17. The Court found that nearly every circuit court to consider the question has held that reviewing courts may consider post-

enactment evidence in addition to evidence that was before Congress when it embarked on the program. *DynaLantic*, at *17. The Court noted that post-enactment evidence is particularly relevant when the statute is over thirty years old, and evidence used to justify Section 8(a) is stale for purposes of determining a compelling interest in the present. *Id.* The Court then followed the 10th Circuit Court of Appeals' approach in *Adarand VII*, and reviewed the post-enactment evidence in three broad categories: (1) evidence of barriers to the formation of qualified minority contractors due to discrimination, (2) evidence of discriminatory barriers to fair competition between minority and non-minority contractors, and (3) evidence of discrimination in state and local disparity studies. *DynaLantic*, at *17.

The Court found that the government presented sufficient evidence of barriers to minority business formation, including evidence on race-based denial of access to capital and credit, lending discrimination, routine exclusion of minorities from critical business relationships, particularly through closed or "old boy" business networks that make it especially difficult for minority-owned businesses to obtain work, and that minorities continue to experience barriers to business networks. *DynaLantic*, at *17-21. The Court considered as part of the evidentiary basis before Congress multiple disparity studies conducted throughout the United States and submitted to Congress, and qualitative and quantitative testimony submitted at Congressional hearings. *Id.*

The Court also found that the government submitted substantial evidence of barriers to minority business development, including evidence of discrimination by prime contractors, private sector customers, suppliers, and bonding companies. *DynaLantic*, at *21-23. The Court again based this finding on recent evidence submitted before Congress in the form of disparity studies, reports and Congressional hearings. *Id.*

State and local disparity studies. Although the Court noted there have been hundreds of disparity studies placed before Congress, the Court considers in particular studies submitted by the federal Defendants of 50 disparity studies, encompassing evidence from 28 states and the District of Columbia, which have been before Congress since 2006. *DynaLantic*, at *25-29. The Court stated it reviewed the studies with a focus on two indicators that other courts have found relevant in analyzing disparity studies. First, the Court considered the disparity indices calculated, which was a disparity index, calculated by dividing the percentage of MBE, WBE, and/or DBE firms *utilized* in the contracting market by the percentage of M/W/DBE firms *available* in the same market. *DynaLantic*, at *26. The Court said that normally, a disparity index of 100 demonstrates full M/W/DBE participation; the closer the index is to zero, the greater the M/W/DBE disparity due to underutilization. *DynaLantic*, at *26.

Second, the Court reviewed the method by which studies calculated the *availability* and *capacity* of minority firms. *DynaLantic*, at *26. The Court noted that some courts have looked closely at these factors to evaluate the reliability of the disparity indices, reasoning that the indices are not probative unless they are restricted to firms of significant size and with significant government contracting experience. *DynaLantic*, at *26. The Court pointed out that although discriminatory barriers to formation and development would impact capacity, the Supreme Court decision in *Croson* and the Court of Appeals decision in *O'Donnell Construction Co. v. District of Columbia, et al.*, 963 F.2d 420 (D.C. Cir. 1992) "require the additional showing that eligible minority firms

experience disparities, notwithstanding their abilities, in order to give rise to an inference of discrimination.” *DynaLantic*, at *26, n. 10.

Analysis: Strong basis in evidence. Based on an analysis of the disparity studies and other evidence, the Court concluded that the government articulated a compelling interest for the Section 8(a) program and satisfied its initial burden establishing that Congress had a strong basis in evidence permitting race-conscious measures to be used under the Section 8(a) program. *DynaLantic*, at *29-37. The Court held that DynaLantic did not meet its burden to establish that the Section 8(a) program is unconstitutional on its face, finding that DynaLantic could not show that Congress did not have a strong basis in evidence for permitting race-conscious measures to be used under any circumstances, in any sector or industry in the economy. *DynaLantic*, at *29.

The Court discussed and analyzed the evidence before Congress, which included extensive statistical analysis, qualitative and quantitative consideration of the unique challenges facing minorities from all businesses, and an examination of their race-neutral measures that have been enacted by previous Congresses, but had failed to reach the minority owned firms. *DynaLantic*, at *31. The Court said Congress had spent decades compiling evidence of race discrimination in a variety of industries, including but not limited to construction. *DynaLantic*, at *31. The Court also found that the federal government produced significant evidence related to professional services, architecture and engineering, and other industries. *DynaLantic*, at *31. The Court stated that the government has therefore “established that there are at least some circumstances where it would be ‘necessary or appropriate’ for the SBA to award contracts to businesses under the Section 8(a) program. *DynaLantic*, at *31, citing 15 U.S.C. § 637(a)(1).

Therefore, the Court concluded that in response to plaintiff’s facial challenge, the government met its initial burden to present a strong basis in evidence sufficient to support its articulated, constitutionally valid, compelling interest. *DynaLantic*, at *31. The Court also found that the evidence from around the country is sufficient for Congress to authorize a nationwide remedy. *DynaLantic*, at *31, n. 13.

Rejection of DynaLantic’s rebuttal arguments. The Court held that since the federal Defendants made the initial showing of a compelling interest, the burden shifted to the plaintiff to show why the evidence relied on by Defendants fails to demonstrate a compelling governmental interest. *DynaLantic*, at *32. The Court rejected each of the challenges by DynaLantic, including holding that: the legislative history is sufficient; the government compiled substantial evidence that identified private racial discrimination which affected minority utilization in specific industries of government contracting, both before and after the enactment of the Section 8(a) program; any flaws in the evidence, including the disparity studies, DynaLantic has identified in the data do not rise to the level of credible, particularized evidence necessary to rebut the government’s initial showing of a compelling interest; DynaLantic cited no authority in support of its claim that fraud in the administration of race-conscious programs is sufficient to invalidate Section 8(a) program on its face; and Congress had strong evidence that the discrimination is sufficiently pervasive across racial lines to justify granting a preference for all five groups included in Section 8(a). *DynaLantic*, at *32-36.

In this connection, the Court stated it agreed with *Croson* and its progeny that the government may properly be deemed a “passive participant” when it fails to adjust its procurement practices to account for the effects of identified private discrimination on the availability and utilization of minority-owned businesses in government contracting. *DynaLantic*, at *34. In terms of flaws in the evidence, the Court pointed out that the proponent of the race-conscious remedial program is not required to unequivocally establish the existence of discrimination, nor is it required to negate all evidence of non-discrimination. *DynaLantic*, at *35, citing *Concrete Work IV*, 321 F.3d at 991. Rather, a strong basis in evidence exists, the Court stated, when there is evidence approaching a *prima facie* case of a constitutional or statutory violation, not irrefutable or definitive proof of discrimination. *Id*, citing *Croson*, 488 U.S. 500. Accordingly, the Court stated that DynaLantic’s claim that the government must independently verify the evidence presented to it is unavailing. *Id. DynaLantic*, at *35.

Also in terms of DynaLantic’s arguments about flaws in the evidence, the Court noted that Defendants placed in the record approximately 50 disparity studies which had been introduced or discussed in Congressional Hearings since 2006, which DynaLantic did not rebut or even discuss any of the studies individually. *DynaLantic*, at *35. DynaLantic asserted generally that the studies did not control for the capacity of the firms at issue, and were therefore unreliable. *Id*. The Court pointed out that Congress need not have evidence of discrimination in all 50 states to demonstrate a compelling interest, and that in this case, the federal Defendants presented recent evidence of discrimination in a significant number of states and localities which, taken together, represents a broad cross-section of the nation. *DynaLantic*, at *35, n. 15. The Court stated that while not all of the disparity studies accounted for the capacity of the firms, many of them did control for capacity and still found significant disparities between minority and non-minority owned firms. *DynaLantic*, at *35. In short, the Court found that DynaLantic’s “general criticism” of the multitude of disparity studies does not constitute particular evidence undermining the reliability of the particular disparity studies and therefore is of little persuasive value. *DynaLantic*, at *35.

In terms of the argument by DynaLantic as to requiring proof of evidence of discrimination against each minority group, the Court stated that Congress has a strong basis in evidence if it finds evidence of discrimination is sufficiently pervasive across racial lines to justify granting a preference to all five disadvantaged groups included in Section 8(a). The Court found Congress had strong evidence that the discrimination is sufficiently pervasive across racial lines to justify a preference to all five groups. *DynaLantic*, at *36. The fact that specific evidence varies, to some extent, within and between minority groups, was not a basis to declare this statute facially invalid. *DynaLantic*, at *36.

Facial challenge: Conclusion. The Court concluded Congress had a compelling interest in eliminating the roots of racial discrimination in federal contracting and had established a strong basis of evidence to support its conclusion that remedial action was necessary to remedy that discrimination by providing significant evidence in three different area. First, it provided extensive evidence of discriminatory barriers to minority business formation. *DynaLantic*, at *37. Second, it provided “forceful” evidence of discriminatory barriers to minority business development. *Id*. Third, it provided significant evidence that, even when minority businesses are qualified and eligible to perform contracts in both the public and private sectors, they are awarded these contracts far less often than their similarly situated non-minority counterparts.

Id. The Court found the evidence was particularly strong, nationwide, in the construction industry, and that there was substantial evidence of widespread disparities in other industries such as architecture and engineering, and professional services. *Id.*

As-applied challenge. *DynaLantic* also challenged the SBA and DoD's use of the Section 8(a) program as applied: namely, the agencies' determination that it is necessary or appropriate to set aside contracts in the military simulation and training industry. *DynaLantic*, at *37. Significantly, the Court points out that the federal Defendants "concede that they do not have evidence of discrimination in this industry." *Id.* Moreover, the Court points out that the federal Defendants admitted that there "is no Congressional report, hearing or finding that references, discusses or mentions the simulation and training industry." *DynaLantic*, at *38. The federal Defendants also admit that they are "unaware of any discrimination in the simulation and training industry." *Id.* In addition, the federal Defendants admit that none of the documents they have submitted as justification for the Section 8(a) program mentions or identifies instances of past or present discrimination in the simulation and training industry. *DynaLantic*, at *38.

The federal Defendants maintain that the government need not tie evidence of discriminatory barriers to minority business formation and development to evidence of discrimination in any particular industry. *DynaLantic*, at *38. The Court concludes that the federal Defendants' position is irreconcilable with binding authority upon the Court, specifically, the United States Supreme Court's decision in *Croson*, as well as the Federal Circuit's decision in *O'Donnell Construction Company*, which adopted *Croson's* reasoning. *DynaLantic*, at *38. The Court holds that *Croson* made clear the government must provide evidence demonstrating there were eligible minorities in the relevant market. *DynaLantic*, at *38. The Court held that absent an evidentiary showing that, in a highly skilled industry such as the military simulation and training industry, there are eligible minorities who are qualified to undertake particular tasks and are nevertheless denied the opportunity to thrive there, the government cannot comply with *Croson's* evidentiary requirement to show an inference of discrimination. *DynaLantic*, at *39, citing *Croson*, 488 U.S. 501. The Court rejects the federal government's position that it does not have to make an industry-based showing in order to show strong evidence of discrimination. *DynaLantic*, at *40.

The Court notes that the Department of Justice has recognized that the federal government must take an industry-based approach to demonstrating compelling interest. *DynaLantic*, at *40, citing *Cortez III Service Corp. v. National Aeronautics & Space Administration*, 950 F.Supp. 357 (D.D.C. 1996). In *Cortez*, the Court found the Section 8(a) program constitutional on its face, but found the program unconstitutional as applied to the NASA contract at issue because the government had provided no evidence of discrimination in the industry in which the NASA contract would be performed. *DynaLantic*, at *40. The Court pointed out that the Department of Justice had advised federal agencies to make industry-specific determinations before offering set-aside contracts and specifically cautioned them that without such particularized evidence, set-aside programs may not survive *Croson* and *Adarand*. *DynaLantic*, at *40.

The Court recognized that legislation considered in *Croson*, *Adarand* and *O'Donnell* were all restricted to one industry, whereas this case presents a different factual scenario, because Section 8(a) is not industry-specific. *DynaLantic*, at *40, n. 17. The Court noted that the government did not propose an alternative framework to *Croson* within which the Court can

analyze the evidence, and that in fact, the evidence the government presented in the case is industry specific. *Id.*

The Court concluded that agencies have a responsibility to decide if there has been a history of discrimination in the particular industry at issue. *DynaLantic*, at *40. According to the Court, it need not take a party's definition of "industry" at face value, and may determine the appropriate industry to consider is broader or narrower than that proposed by the parties. *Id.* However, the Court stated, in this case the government did not argue with plaintiff's industry definition, and more significantly, it provided no evidence whatsoever from which an inference of discrimination in that industry could be made. *DynaLantic*, at *40.

Narrowly tailoring. In addition to showing strong evidence that a race-conscious program serves a compelling interest, the government is required to show that the means chosen to accomplish the government's asserted purpose are specifically and narrowly framed to accomplish that purpose. *DynaLantic*, at *41. The Court considered several factors in the narrowly tailoring analysis: the efficacy of alternative, race-neutral remedies, flexibility, over- or under-inclusiveness of the program, duration, the relationship between numerical goals and the relevant labor market, and the impact of the remedy on third parties. *Id.*

The Court analyzed each of these factors and found that the federal government satisfied all six factors. *DynaLantic*, at *41-48. The Court found that the federal government presented sufficient evidence that Congress attempted to use race-neutral measures to foster and assist minority owned businesses relating to the race-conscious component in Section 8(a), and that these race-neutral measures failed to remedy the effects of discrimination on minority small business owners. *DynaLantic*, at *42. The Court found that the Section 8(a) program is sufficiently flexible in granting race-conscious relief because race is made relevant in the program, but it is not a determinative factor or a rigid racial quota system. *DynaLantic*, at *43. The Court noted that the Section 8(a) program contains a waiver provision and that the SBA will not accept a procurement for award as an 8(a) contract if it determines that acceptance of the procurement would have an adverse impact on small businesses operating outside the Section 8(a) program. *DynaLantic*, at *44.

The Court found that the Section 8(a) program was not over- and under-inclusive because the government had strong evidence of discrimination which is sufficiently pervasive across racial lines to all five disadvantaged groups, and Section 8(a) does not provide that every member of a minority group is disadvantaged. *DynaLantic*, at *44. In addition, the program is narrowly tailored because it is based not only on social disadvantage, but also on an individualized inquiry into economic disadvantage, and that a firm owned by a non-minority may qualify as socially and economically disadvantaged. *DynaLantic*, at *44.

The Court also found that the Section 8(a) program places a number of strict durational limits on a particular firm's participation in the program, places temporal limits on every individual's participation in the program, and that a participant's eligibility is continually reassessed and must be maintained throughout its program term. *DynaLantic*, at *45. Section 8(a)'s inherent time limit and graduation provisions ensure that it is carefully designed to endure only until the discriminatory impact has been eliminated, and thus it is narrowly tailored. *DynaLantic*, at *46.

In light of the government's evidence, the Court concluded that the aspirational goals at issue, all of which were less than five percent of contract dollars, are facially constitutional. *DynaLantic*, at *46-47. The evidence, the Court noted, established that minority firms are ready, willing, and able to perform work equal to two to five percent of government contracts in industries including but not limited to construction. *Id.* The Court found the effects of past discrimination have excluded minorities from forming and growing businesses, and the number of available minority contractors reflects that discrimination. *DynaLantic*, at *47.

Finally, the Court found that the Section 8(a) program takes appropriate steps to minimize the burden on third parties, and that the Section 8(a) program is narrowly tailored on its face. *DynaLantic*, at *48. The Court concluded that the government is not required to eliminate the burden on non-minorities in order to survive strict scrutiny, but a limited and properly tailored remedy to cure the effects of prior discrimination is permissible even when it burdens third parties. *Id.* The Court points to a number of provisions designed to minimize the burden on non-minority firms, including the presumption that a minority applicant is socially disadvantaged may be rebutted, an individual who is not presumptively disadvantaged may qualify for such status, the 8(a) program requires an individualized determination of economic disadvantage, and it is not open to individuals whose net worth exceeds \$250,000 regardless of race. *Id.*

Conclusion. The Court concluded that the Section 8(a) program is constitutional on its face. The Court also held that it is unable to conclude that the federal Defendants have produced evidence of discrimination in the military simulation and training industry sufficient to demonstrate a compelling interest. Therefore, *DynaLantic* prevailed on its as-applied challenge. *DynaLantic*, at *51. Accordingly, the Court granted the federal Defendants' Motion for Summary Judgment in part (holding the Section 8(a) program is valid on its face) and denied it in part, and granted the plaintiff's Motion for Summary Judgment in part (holding the program is invalid as applied to the military simulation and training industry) and denied it in part. The Court held that the SBA and the DoD are enjoined from awarding procurements for military simulators under the Section 8(a) program without first articulating a strong basis in evidence for doing so.

Appeals voluntarily dismissed, and Stipulation and Agreement of Settlement Approved and Ordered by District Court. A Notice of Appeal and Notice of Cross Appeal were filed in this case to the United States Court of Appeals for the District of Columbia by the United States and DynaLantic: Docket Numbers 12-5329 and 12-5330. Subsequently, the appeals were voluntarily dismissed, and the parties entered into a Stipulation and Agreement of Settlement, which was approved by the District Court (Jan. 30, 2014). The parties stipulated and agreed *inter alia*, as follows: (1) the Federal Defendants were enjoined from awarding prime contracts under the Section 8(a) program for the purchase of military simulation and military simulation training contracts without first articulating a strong basis in evidence for doing so; (2) the Federal Defendants agreed to pay plaintiff the sum of \$1,000,000.00; and (3) the Federal Defendants agreed they shall refrain from seeking to vacate the injunction entered by the Court for at least two years.

The District Court on January 30, 2014 approved the Stipulation and Agreement of Settlement, and So Ordered the terms of the original 2012 injunction modified as provided in the Stipulation and Agreement of Settlement.

5. *DynaLantic Corp. v. United States Dept. of Defense, et al.*, 503 F. Supp.2d 262 (D.D.C. 2007)

DynaLantic Corp. involved a challenge to the DOD's utilization of the Small Business Administration's ("SBA") 8(a) Business Development Program ("8(a) Program"). In its Order of August 23, 2007, the district court denied both parties' Motions for Summary Judgment because there was no information in the record regarding the evidence before Congress supporting its 2006 reauthorization of the program in question; the court directed the parties to propose future proceedings to supplement the record. 503 F. Supp.2d 262, 263 (D.D.C. 2007).

The court first explained that the 8(a) Program sets a goal that no less than 5 percent of total prime federal contract and subcontract awards for each fiscal year be awarded to socially and economically disadvantaged individuals. *Id.* Each federal government agency is required to establish its own goal for contracting but the goals are not mandatory and there is no sanction for failing to meet the goal. Upon application and admission into the 8(a) Program, small businesses owned and controlled by disadvantaged individuals are eligible to receive technological, financial, and practical assistance, and support through preferential award of government contracts. For the past few years, the 8(a) Program was the primary preferential treatment program the DOD used to meet its 5 percent goal. *Id.* at 264.

This case arose from a Navy contract that the DOD decided to award exclusively through the 8(a) Program. The plaintiff owned a small company that would have bid on the contract but for the fact it was not a participant in the 8(a) Program. After multiple judicial proceedings the D.C. Circuit dismissed the plaintiff's action for lack of standing but granted the plaintiff's motion to enjoin the contract procurement pending the appeal of the dismissal order. The Navy cancelled the proposed procurement but the D.C. Circuit allowed the plaintiff to circumvent the mootness argument by amending its pleadings to raise a facial challenge to the 8(a) program as administered by the SBA and utilized by the DOD. The D.C. Circuit held the plaintiff had standing because of the plaintiff's inability to compete for DOD contracts reserved to 8(a) firms, the injury was traceable to the race-conscious component of the 8(a) Program, and the plaintiff's injury was imminent due to the likelihood the government would in the future try to procure another contract under the 8(a) Program for which the plaintiff was ready, willing, and able to bid. *Id.* at 264-65.

On remand, the plaintiff amended its complaint to challenge the constitutionality of the 8(a) Program and sought an injunction to prevent the military from awarding any contract for military simulators based upon the race of the contractors. *Id.* at 265. The district court first held that the plaintiff's complaint could be read only as a challenge to the DOD's implementation of the 8(a) Program [pursuant to 10 U.S.C. § 2323] as opposed to a challenge to the program as a whole. *Id.* at 266. The parties agreed that the 8(a) Program uses race-conscious criteria so the district court concluded it must be analyzed under the strict scrutiny constitutional standard. The court found that in order to evaluate the government's proffered "compelling government interest," the court must consider the evidence that Congress considered at the point of authorization or reauthorization to ensure that it had a strong basis in evidence of discrimination requiring remedial action. The court cited to *Western States Paving* in support of this proposition. *Id.* The court concluded that because the DOD program was reauthorized in 2006, the court must consider the evidence before Congress in 2006.

The court cited to the recent *Rothe* decision as demonstrating that Congress considered significant evidentiary materials in its reauthorization of the DOD program in 2006, including six recently published disparity studies. The court held that because the record before it in the present case did not contain information regarding this 2006 evidence before Congress, it could not rule on the parties' Motions for Summary Judgment. The court denied both motions and directed the parties to propose future proceedings in order to supplement the record. *Id.* at 267.

APPENDIX C.

Quantitative Analysis of Marketplace Conditions

APPENDIX C.

Quantitative Analysis of Marketplace Conditions

Figure C-1.
Percentage of workers 25 and older with at least a four-year college degree, Pennsylvania and the United States, 2012-2016

Note:
 **/++ Denotes statistically significant differences from non-Hispanic whites (for minority groups) and from men (for women) at the 95% confidence level for the United States as a whole and Pennsylvania, respectively.

Source:
 BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

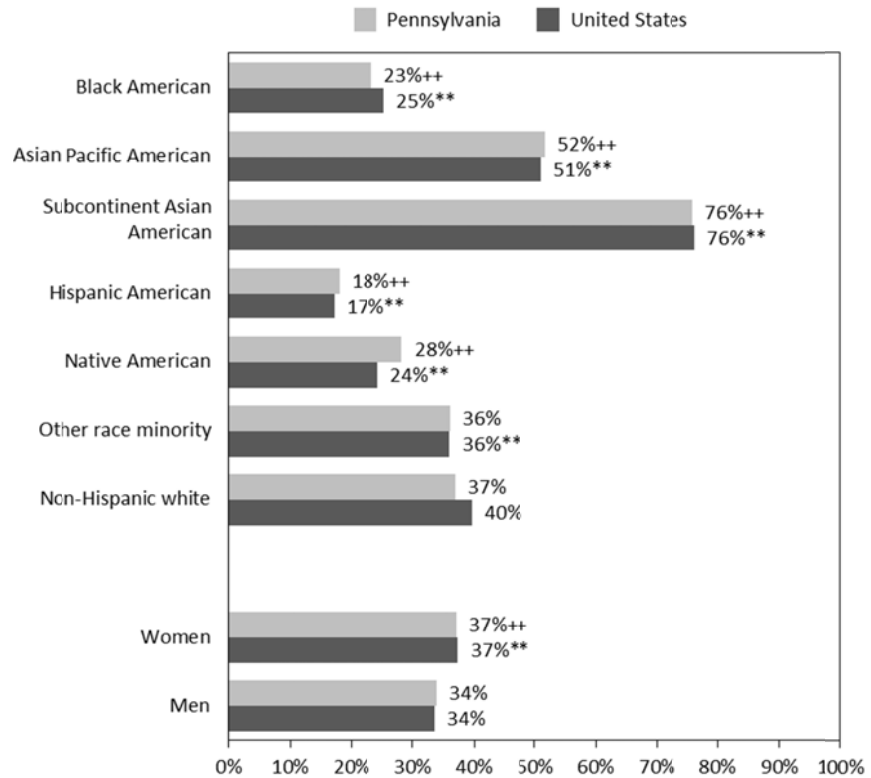
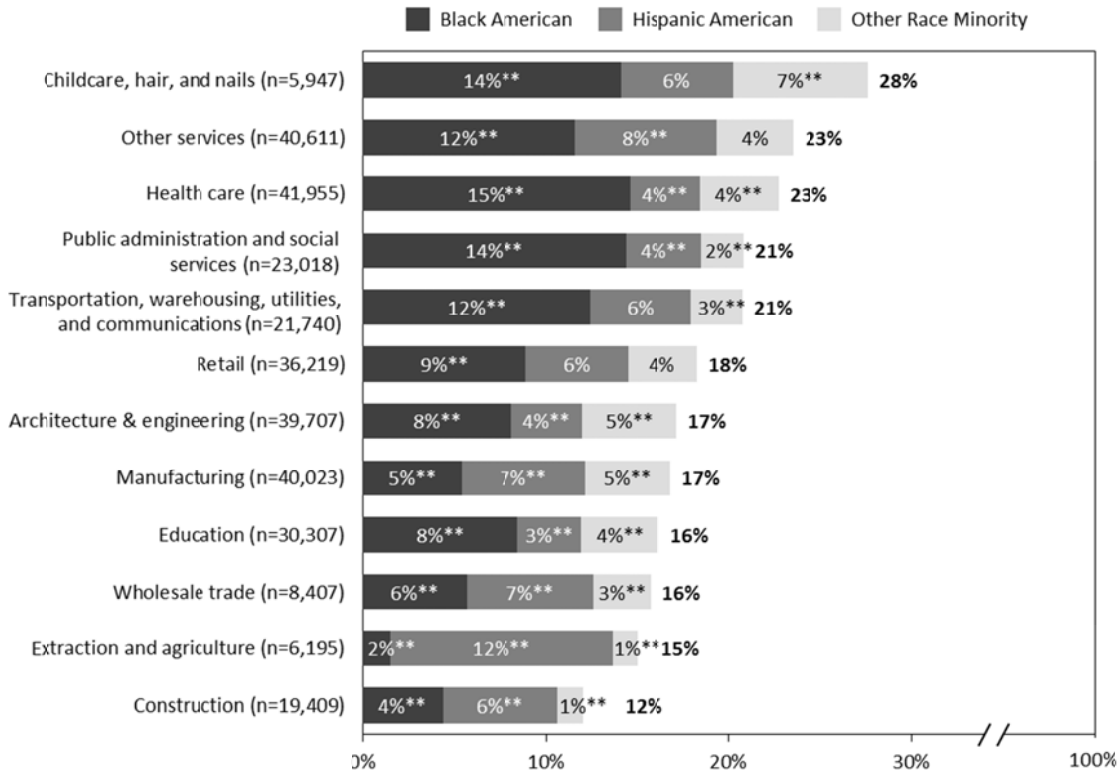


Figure C-1 indicates that, compared to non-Hispanic white Americans working in Pennsylvania, smaller percentages of Black Americans, Hispanic Americans, and Native Americans have four-year college degrees. In contrast, a larger percentage of Subcontinent Asian Americans and Asian Pacific Americans than non-Hispanic white Americans working in Pennsylvania have four-year college degrees, and a larger percentage of women than men working in Pennsylvania have a four-year college degree.

Figure C-2.
Percent representation of minorities in various industries in Pennsylvania, 2012-2016



Note: ** Denotes that the difference in proportions between minority workers in the specified industry and all industries is statistically significant at the 95% confidence level.

The representation of minorities among all Pennsylvania workers is 10 percent for Black Americans, 6 percent for Hispanic Americans, 4 percent for other race minorities, and 20 percent for all minorities considered together.

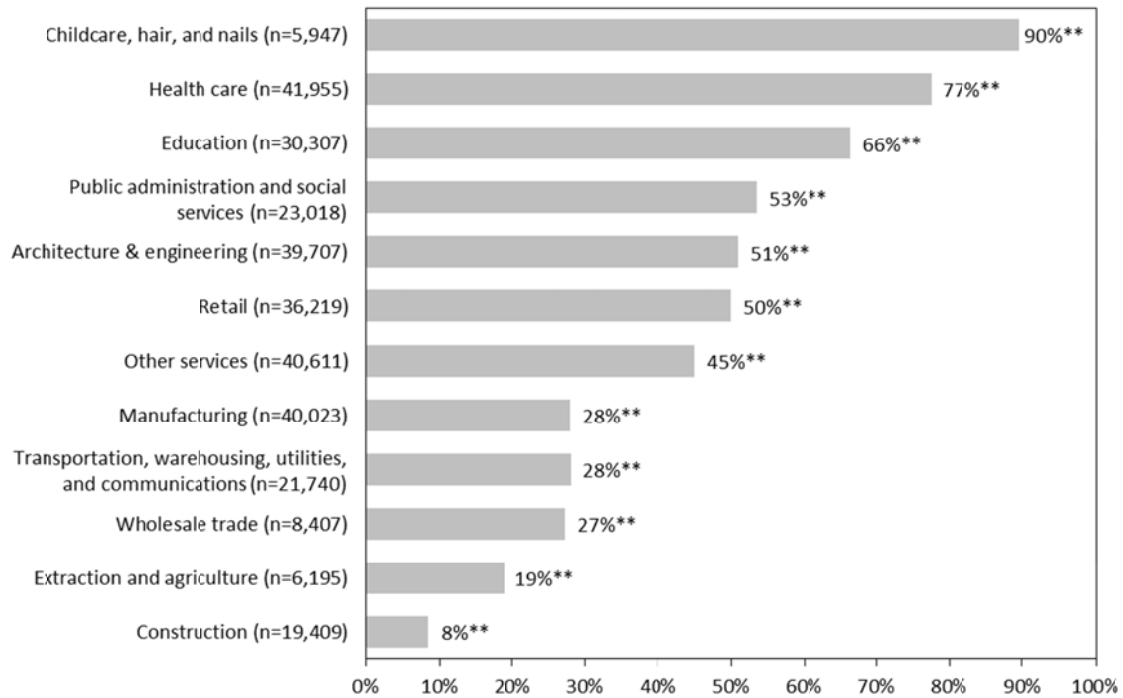
"Other race minority" includes Subcontinent Asian Americans, Asian Pacific Americans, Native Americans, and other races.

Workers in the finance, insurance, real estate, legal services, accounting, advertising, architecture, management, and scientific research industries were combined into one category of Architecture & Engineering. Workers in the rental and leasing; travel; investigation; waste remediation; arts; entertainment; recreation; accommodations; food services; and select other services were combined into one category of other services. Workers in child day care services; barber shops; beauty salons; nail salons; and other personal were combined into one category of childcare, hair, and nails.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-2 indicates that the Pennsylvania industries with the highest representations of minority workers are childcare, hair, and nails; other services; and health care. The Pennsylvania industries with the lowest representations of minority workers are wholesale trade; extraction and agriculture; and construction.

Figure C-3.
Percent representation of women in various industries in Pennsylvania, 2012-2016



Note: ** Denotes that the difference in proportions between women workers in the specified industry and all industries is statistically significant at the 95% confidence level.

The representation of women among all Pennsylvania workers is 48 percent.

Workers in the finance, insurance, real estate, legal services, accounting, advertising, architecture, management, and scientific research industries were combined into one category of Architecture & Engineering. Workers in the rental and leasing; travel; investigation; waste remediation; arts; entertainment; recreation; accommodations; food services; and select other services were combined into one category of other services. Workers in child day care services; barber shops; beauty salons; nail salons; and other personal were combined into one category of childcare, hair, and nails.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-3 indicates that the Pennsylvania industries with the highest representations of women workers are childcare, hair, and nails; health care; and education. The Pennsylvania industries with the lowest representations of women workers are wholesale trade; extraction and agriculture; and construction.

Figure C-4a.
Demographic characteristics of workers in study-related industries and all industries,
Pennsylvania, 2000

Pennsylvania	All Industries (n=299,281)	Construction (n=19,472)	Architecture & Engineering (n=5,268)	Professional Services (n=16,500)	Goods & Services (n=33,269)
Race/ethnicity					
Black American	8.4 %	3.9 % **	4.7 % **	9.9 % **	8.5 %
Asian Pacific American	1.3 %	0.3 % **	2.3 % **	1.4 %	1.1 %
Subcontinent Asian American	0.6 %	0.1 % *	1.8 % **	1.2 % **	0.5 %
Hispanic American	2.5 %	2.0 % **	1.3 % **	2.4 %	2.2 % **
Native American	0.3 %	0.4 %	0.3 %	0.3 %	0.3 %
Other race minority	0.2 %	0.2 %	0.2 %	0.3 %	0.2 %
Total minority	13.3 %	7.0 %	10.6 %	15.6 %	12.8 %
Non-Hispanic white	86.7 %	93.0 % **	89.4 % **	84.4 % **	87.2 %
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender					
Women	47.1 %	8.7 % **	34.2 % **	52.3 % **	39.6 % **
Men	52.9 %	91.3 % **	65.8 % **	47.7 % **	60.4 % **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Note: *, ** Denotes that the difference in proportions between workers in each study-related industry and workers in all industries is statistically significant at the 90% and 95% confidence levels, respectively.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-4a indicates that in 2000, compared to all industries considered together, there were smaller percentages of Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, Hispanic Americans and women working in the Pennsylvania construction industry. Similarly, there were smaller percentages of Black Americans, Hispanic Americans, and women working in the Pennsylvania architecture and engineering industry. There were also smaller percentages of Hispanic Americans and women working in the Pennsylvania goods and services industry. In contrast, compared to all industries considered together, there were larger percentages of Asian Pacific Americans and Subcontinent Asian Americans working in the Pennsylvania architecture and engineering industry; and larger percentages of Black Americans, Subcontinent Asian Americans, and women working in the Pennsylvania professional services industry.

Figure C-4b.
Demographic characteristics of workers in study-related industries and all industries, United States, 2000

United States	All Industries (n=6,832,970)	Construction (n=480,280)	Architecture & Engineering (n=126,584)	Professional Services (n=435,595)	Goods & Services (n=732,134)
Race/ethnicity					
Black American	10.9 %	6.2 % **	5.3 % **	10.5 % **	11.4 % **
Asian Pacific American	3.4 %	1.2 % **	5.0 % **	3.9 % **	3.5 % **
Subcontinent Asian American	0.7 %	0.2 % **	1.8 % **	1.5 % **	0.7 %
Hispanic American	10.7 %	15.0 % **	5.0 % **	9.0 % **	11.5 % **
Native American	1.2 %	1.6 % **	0.7 % **	0.9 % **	1.1 % **
Other race minority	0.4 %	0.4 %	0.4 %	0.5 %	0.5 % *
Total minority	27.3 %	24.5 %	18.2 %	26.3 %	28.7 %
Non-Hispanic white	72.7 %	75.5 % **	81.8 % **	73.7 % **	71.3 % **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender					
Women	46.5 %	9.9 % **	35.2 % **	52.4 % **	39.2 % **
Men	53.5 %	90.1 % **	64.8 % **	47.6 % **	60.8 % **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Note: *, ** Denotes that the difference in proportions between workers in each study-related industry and workers in all industries is statistically significant at the 90% and 95% confidence levels, respectively.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-4b indicates that in 2000, compared to all industries considered together, there were smaller percentages of Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, and women working in the United States construction industry. Similarly, there were smaller percentages of Black Americans, Hispanic Americans, Native Americans, and women working in the United States architecture and engineering industry. In addition, there were smaller percentages of Black Americans, Hispanic Americans, and Native Americans working in the United States professional services industry. There were also smaller percentages of Native Americans and women working in the United States goods and services industry. In contrast, compared to all industries considered together, there were larger percentages of Hispanic Americans and Native Americans working in the United States construction industry; larger percentages of Asian Pacific Americans and Subcontinent Asian Americans working in the United States architecture and engineering industry; larger percentages of Asian Pacific Americans, Subcontinent Asian Americans, and women working in the United States professional services industry; and larger percentages of Black Americans, Asian Pacific Americans, and Hispanic Americans working in the United States goods and services industry.

Figure C-5a.
Demographic characteristics of workers in study-related industries and all industries,
Pennsylvania, 2012-2016

Pennsylvania	All Industries (n=317,097)	Construction (n=19,409)	Architecture & Engineering (n=6,962)	Professional Services (n=21,495)	Goods & Services (n=31,691)
Race/ethnicity					
Black American	10.0 %	4.3 % **	4.3 % **	11.4 % **	10.4 % *
Asian Pacific American	2.3 %	0.7 % **	3.1 % **	2.7 % **	1.9 % **
Subcontinent Asian American	1.1 %	0.1 % **	2.2 % **	2.7 % **	0.9 %
Hispanic American	5.6 %	6.3 % **	3.0 % **	5.7 %	6.0 % *
Native American	0.3 %	0.3 %	0.5 %	0.4 %	0.4 %
Other race minority	0.1 %	0.2 %	0.2 %	0.2 %	0.1 %
Total minority	19.5 %	12.0 %	13.3 %	23.1 %	19.7 %
Non-Hispanic white	80.5 %	88.0 % **	86.7 % **	76.9 % **	80.3 %
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender					
Women	48.0 %	8.4 % **	35.0 % **	52.8 % **	38.3 % **
Men	52.0 %	91.6 % **	65.0 % **	47.2 % **	61.7 % **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Note: *, ** Denotes that the difference in proportions between workers in each study-related industry and workers in all industries is statistically significant at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-5a shows that, compared to all industries considered together, there are smaller percentages of Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, and women working in the Pennsylvania construction industry. Similarly, there are smaller percentages of Black Americans, Hispanic Americans, and women working in the Pennsylvania architecture and engineering industry. There are also smaller percentages of Asian Pacific Americans and women working in the Pennsylvania goods and services industry. In contrast, compared to all industries considered together, there are larger percentages of Hispanic Americans working in the Pennsylvania construction industry; larger percentages of Asian Pacific Americans and Subcontinent Asian Americans working in the Pennsylvania architecture and engineering industry; larger percentages of Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, and women working in the Pennsylvania professional services industry; and larger percentages of Black Americans and Hispanic Americans working in the Pennsylvania goods and services industry.

Figure C-5b.
Demographic characteristics of workers in study-related industries and all industries,
United States, 2012-2016

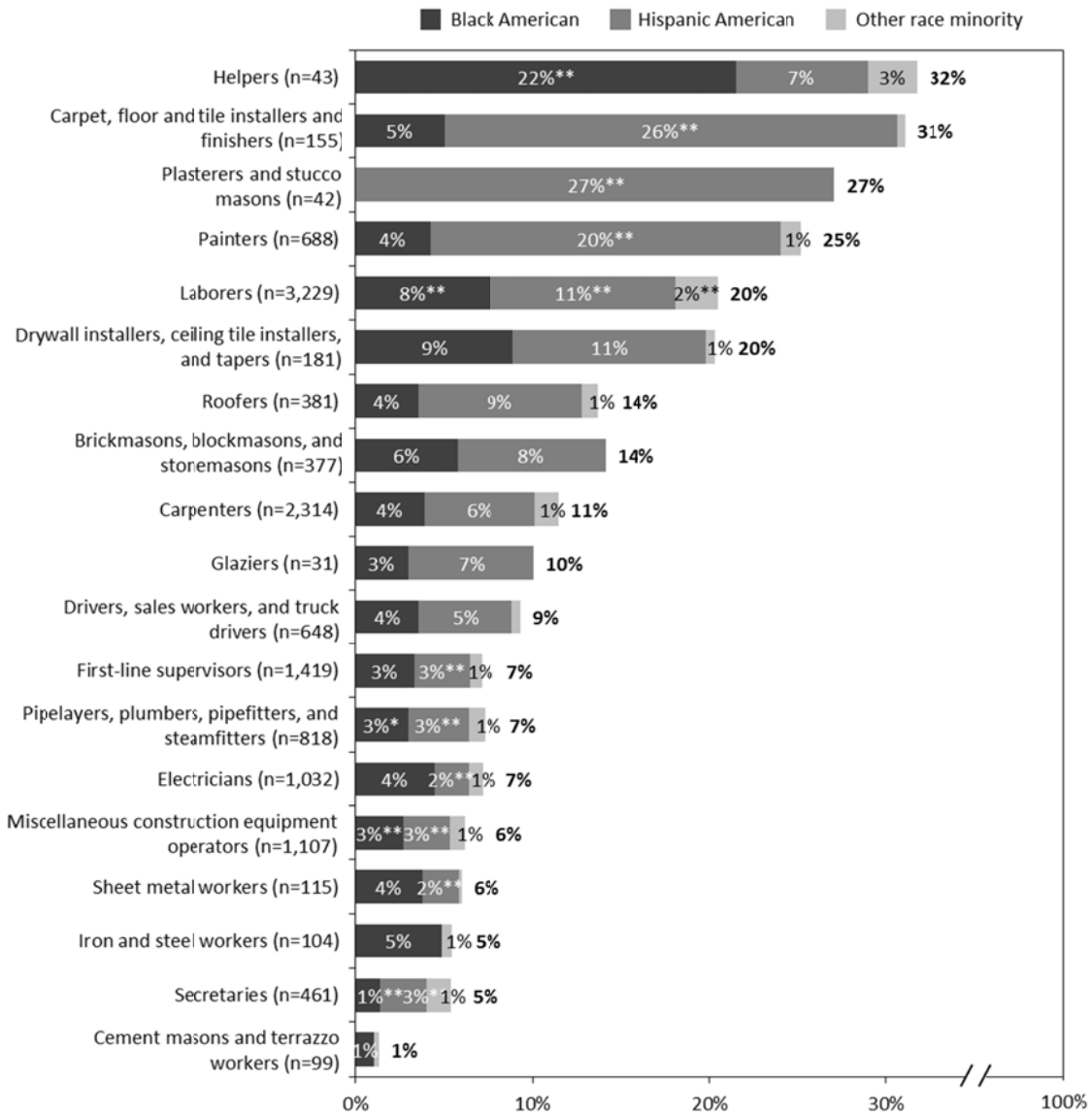
United States	All Industries (n=7,643,801)	Construction (n=461,045)	Architecture & Engineering (n=188,206)	Professional Services (n=608,378)	Goods & Services (n=721,817)
Race/ethnicity					
Black American	12.3 %	5.9 % **	6.5 % **	11.9 % **	13.3 % **
Asian Pacific American	4.7 %	1.7 % **	6.7 % **	5.6 % **	4.7 %
Subcontinent Asian American	1.4 %	0.3 % **	3.0 % **	3.6 % **	1.2 % **
Hispanic American	16.4 %	26.2 % **	8.1 % **	14.1 % **	17.6 % **
Native American	1.2 %	1.3 % **	0.8 % **	0.9 % **	1.2 %
Other race minority	0.2 %	0.2 %	0.2 %	0.3 %	0.2 %
Total minority	36.1 %	35.7 %	25.3 %	36.3 %	38.2 %
Non-Hispanic white	63.9 %	64.3 % **	74.7 % **	63.7 % **	61.8 % **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Gender					
Women	47.2 %	9.1 % **	35.9 % **	51.4 % **	38.4 % **
Men	52.8 %	90.9 % **	64.1 % **	48.6 % **	61.6 % **
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Note: *, ** Denotes that the difference in proportions between workers in each study-related industry and workers in all industries is statistically significant at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-5b shows that, compared to all industries considered together, there are smaller percentages of Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, and women working in the United States construction industry. Similarly, there are smaller percentages of Black Americans, Hispanic Americans, Native Americans, and women working in the United States architecture and engineering industry. There are also smaller percentages of Black Americans, Hispanic Americans, and Native Americans working in the United States professional services industry, and smaller percentages of Subcontinent Asian Americans and women working in the United States goods and services industry. In contrast, compared to all industries considered together, there are larger percentages of Hispanic Americans working in the United States construction industry; larger percentages of Asian Pacific Americans and Subcontinent Asian Americans working in the United States architecture and engineering industry; larger percentages of Asian Pacific Americans, Subcontinent Asian Americans, and women working in the United States professional services industry; and larger percentages of Black Americans and Hispanic Americans working in the United States goods and services industry.

Figure C-6.
Percent representation of minorities in construction occupations in Pennsylvania, 2012-2016



Note: *, ** Denotes that the difference in proportions between minority workers in the specified occupation and all construction occupations considered together is statistically significant at the 90% and 95% confidence level, respectively.

The representation of minorities among all Pennsylvania construction workers is 4 percent for Black Americans, 6 percent for Hispanic Americans, 1 percent for other race minorities, and 12 percent for all minorities considered together.

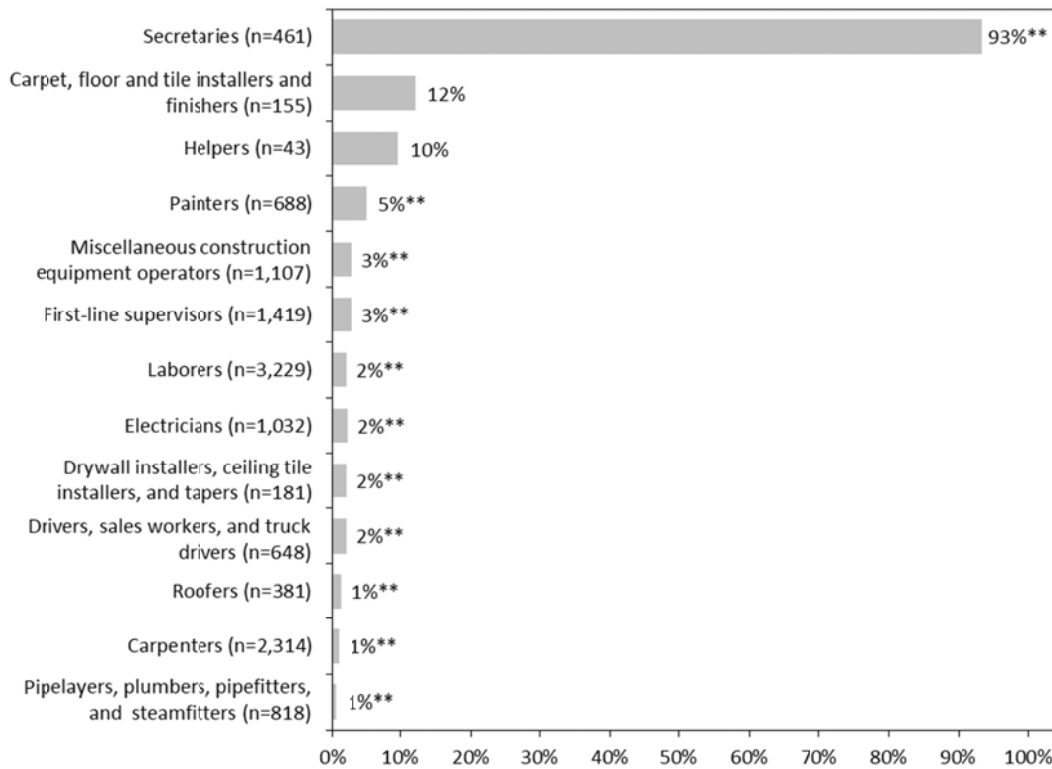
"Other race minority" includes Subcontinent Asian Americans, Asian Pacific Americans, Native Americans, and other races.

Crane and tower operators; dredge, excavating and loading machine and dragline operators; paving, surfacing and tamping equipment operators; and miscellaneous construction equipment operators were combined into the single category of machine operators.

Source: BBC Research & Consulting from 2012-2016 ACS 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-6 indicates that the Pennsylvania construction occupations with the highest representations of minority workers are helpers; carpet, floor and tile installers and finishers; and plasterers and stucco masons. The Pennsylvania construction occupations with the lowest representations of minority workers are iron and steel workers; secretaries; and cement masons and terrazzo workers.

Figure C-7.
Percent representation of women in construction occupations in Pennsylvania, 2012-2016



Note: ** Denotes that the difference in proportions between women workers in the specified occupation and all construction occupations considered together is statistically significant at the 95% confidence level.

The representation of women among all Pennsylvania construction workers is 8 percent.

Crane and tower operators; dredge, excavating and loading machine and dragline operators; paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of machine operators.

The percent representation of Iron and steel workers; glaziers; brickmasons, blockmasons, and stonemasons; sheet metal workers; cement masons and terrazzo workers; and plasterers and stucco masons is 0 percent and therefore not shown.

Source: BBC Research & Consulting from 2012-2016 ACS 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-7 indicates that the Pennsylvania construction occupations with the highest representations of women workers are secretaries; carpet, floor and tile installers and finishers; and helpers. The Pennsylvania construction occupations with the lowest representations of women workers—in which any women actually work—are roofers; carpenters; and pipelayers, plumbers, pipefitters, and steamfitters.

Figure C-8.
Percentage of workers who worked as a manager in each study-related industry,
Pennsylvania and the United States, 2012-2016

Pennsylvania	Construction	Architecture & Engineering	Professional Services	Goods & Services
Race/ethnicity				
Black American	5.0 % **	1.4 % *	1.5 % **	1.9 % **
Asian Pacific American	13.5 %	2.9 %	2.5 % **	3.9 %
Subcontinent Asian American	4.0 % †	3.6 %	9.1 % **	5.3 %
Hispanic American	3.5 % **	2.8 %	2.1 % **	1.9 % **
Native American	4.7 %	2.3 %	1.6 %	3.5 %
Other Race Minority	0.0 % †	0.0 % †	0.0 %	0.0 %
Non-Hispanic white	7.4 %	4.5 %	6.0 %	3.8 %
Gender				
Women	5.5 % **	2.8 % **	4.1 % **	2.8 % **
Men	7.2 %	5.0 %	6.6 %	4.0 %
All individuals	7.1 %	4.2 %	5.3 %	3.5 %
United States	Construction	Architecture & Engineering	Professional Services	Goods & Services
Race/ethnicity				
Black American	4.2 % **	2.3 % **	2.8 % **	1.9 % **
Asian Pacific American	9.1 %	2.6 % **	5.6 % **	4.2 % **
Subcontinent Asian American	12.3 % **	3.0 % **	8.4 % **	7.9 % **
Hispanic American	2.8 % **	3.1 % **	3.0 % **	2.3 % **
Native American	5.2 % **	4.0 %	4.5 % **	3.3 % **
Other Race Minority	6.2 % **	2.8 %	4.9 % **	2.9 % **
Non-Hispanic white	9.3 %	4.3 %	6.9 %	4.8 %
Gender				
Women	6.4 % **	2.6 % **	4.4 % **	3.5 % **
Men	7.3 %	4.6 %	7.3 %	4.3 %
All individuals	7.1 %	3.9 %	5.8 %	4.0 %

Note: *, ** Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between women and men) is statistically significant at the 90% and 95% confidence level, respectively.

† Denotes that significant differences in proportions were not reported due to small sample size.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-8 indicates that, compared to non-Hispanic white Americans, a smaller percentage of Black Americans work as managers across all study-related industries in Pennsylvania; a smaller percentage of Hispanic Americans work as managers in the Pennsylvania construction, professional services, and goods and services industries; and a smaller percentage of Asian Pacific Americans work as managers in the Pennsylvania professional services industry. In addition, a smaller percentage of women than men work as managers in Pennsylvania across all study-related industries. In contrast, a larger percentage of Subcontinent Asian Americans than non-Hispanic white Americans work as managers in the Pennsylvania professional services industry.

Figure C-9.
Mean annual wages,
Pennsylvania and the
United States, 2012-
2016

Note:

The sample universe is all non-institutionalized, employed individuals aged 25-64 that are not in school, the military, or self-employed.

**/++ Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 95% confidence level for the United States as a whole and Pennsylvania, respectively.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

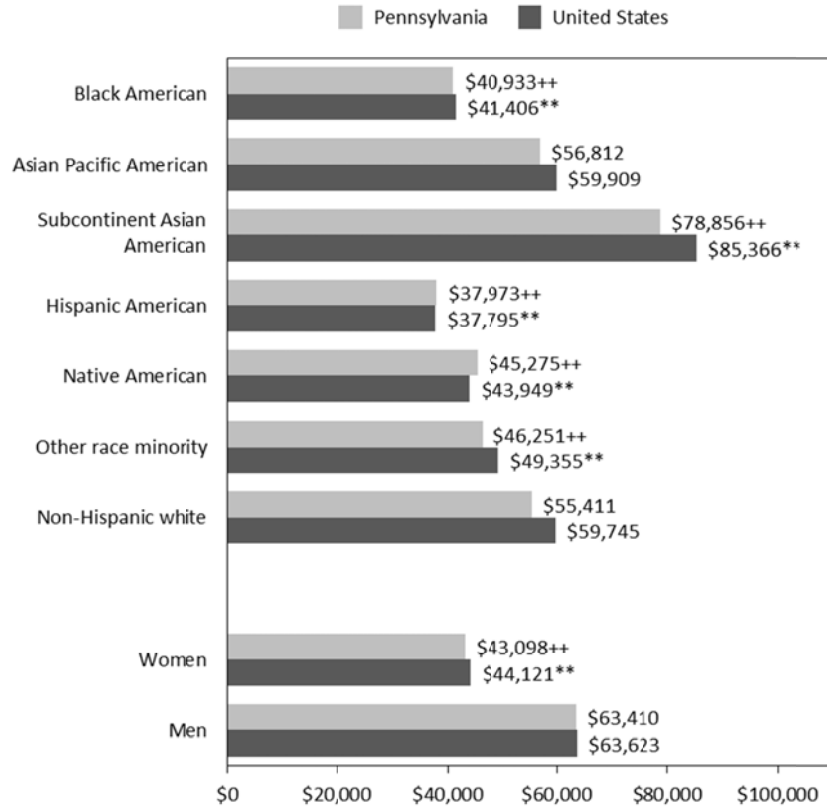


Figure C-9 indicates that, compared to non-Hispanic white Americans, Black Americans, Hispanic Americans, Native Americans, and other race minorities in Pennsylvania exhibit lower mean annual wages. In addition, women in Pennsylvania exhibit lower mean annual wages than men. In contrast, Subcontinent Asian Americans in Pennsylvania exhibit higher mean annual wages than non-Hispanic white Americans.

**Figure C-10.
Predictors of annual wages
(regression), Pennsylvania, 2012-2016**

Note:

The regression model includes 177,136 observations.

The sample universe is all non-institutionalized, employed individuals aged 25-64 that are not in school, the military, or self-employed.

For ease of interpretation, the exponentiated form of the coefficients is displayed in the figure.

** Denotes statistical significance at the 95% confidence level.

The referent for each set of categorical variables is as follows: non-Hispanic whites for the race variables; male for the gender variable; high school diploma for the education variables; and manufacturing for industry variables.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Exponentiated Coefficient
Constant	7305.397 **
Black American	0.898 **
Asian Pacific American	0.939 **
Subcontinent Asian American	0.937 **
Hispanic American	0.906 **
Native American	0.890 **
Other minority group	0.902
Women	0.780 **
Less than high school education	0.842 **
Some college	1.183 **
Four-year degree	1.601 **
Advanced degree	2.268 **
Speaks English well	1.358 **
Age	1.058 **
Age-squared	0.999 **
Married	1.121 **
Children	1.015 **
Number of people over 65 in household	0.915 **
Public sector worker	1.144 **
Manager	1.305 **
Part time worker	0.338 **
Extraction and agriculture	0.968
Construction	0.953 **
Wholesale trade	0.966 **
Retail trade	0.745 **
Transportation, warehouse, & information	1.008
Professional services	1.052 **
Education	0.694 **
Health care	0.993
Other services	0.680 **
Public administration and social services	0.778 **

Figure C-10 indicates that, compared to being a non-Hispanic white American in Pennsylvania, being Black American, Asian Pacific American, Subcontinent Asian American, Hispanic American, or Native American is related to lower annual wages, even after accounting for various other personal characteristics. (For example, the model indicates that being Black American is associated with making approximately \$0.90 for every one dollar that a non-Hispanic white American makes, all else being equal.) In addition, being a woman is related to lower annual wages in Pennsylvania, even after accounting for various other personal characteristics.

**Figure C-11.
Predictors of annual wages
(regression), United States, 2012-2016**

Note:

The regression model includes 3,998,383 observations.

The sample universe is all non-institutionalized, employed individuals aged 25-64 that are not in school, the military, or self-employed.

For ease of interpretation, the exponentiated form of the coefficients is displayed in the figure.

** Denotes statistical significance at the 95% confidence level.

The referent for each set of categorical variables is as follows: non-Hispanic whites for the race variables; male for the gender variable; high school diploma for the education variables; and manufacturing for industry variables.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Exponentiated Coefficient
Constant	7784.638 **
Black American	0.856 **
Asian Pacific American	0.958 **
Subcontinent Asian American	0.976 **
Hispanic American	0.911 **
Native American	0.881 **
Other minority group	0.908 **
Women	0.781 **
Less than high school education	0.854 **
Some college	1.197 **
Four-year degree	1.669 **
Advanced degree	2.307 **
Speaks English well	1.353 **
Age	1.058 **
Age-squared	0.999 **
Married	1.121 **
Children	1.011 **
Number of people over 65 in household	0.905 **
Midwest	0.881 **
South	0.895 **
West	0.986 **
Public sector worker	1.109 **
Manager	1.305 **
Part time worker	0.363 **
Extraction and agriculture	0.958 **
Construction	0.930 **
Wholesale trade	0.967 **
Retail trade	0.751 **
Transportation, warehouse, & information	1.031 **
Professional services	1.062 **
Education	0.657 **
Health care	1.000
Other services	0.710 **
Public administration and social services	0.824 **

Figure C-11 indicates that, compared to being a non-Hispanic white American in the United States, being Black American, Asian Pacific American, Subcontinent Asian American, Hispanic American, Native American, or other race minority is related to lower annual wages, even after accounting for various other personal characteristics. (For example, the model indicates that being Black American is associated with making approximately \$0.86 for every dollar that a non-Hispanic white American makes, all else being equal.) In addition, being a woman is related to lower annual wages compared to being a man, even after accounting for various other personal characteristics.

Figure C-12.
Home Ownership Rates,
Pennsylvania and the
United States, 2012-2016

Note:

The sample universe is all households.

**/++ Denotes statistically significant differences from non-Hispanic whites at the 95% confidence level for the United States as a whole and Pennsylvania, respectively.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

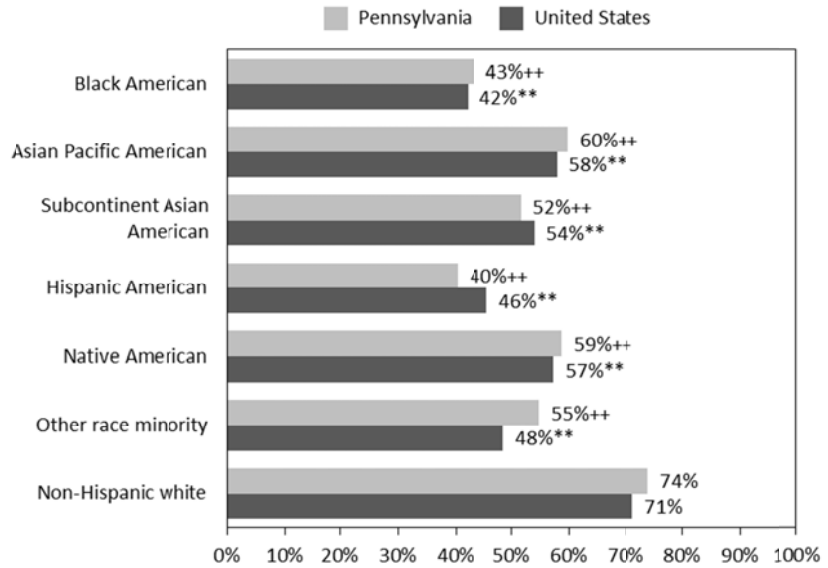


Figure C-12 indicates that, compared to non-Hispanic white Americans, smaller percentages of Black Americans, Asian Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Native Americans, and other race minorities in Pennsylvania own homes.

Figure C-13.
Median home values,
Pennsylvania and the
United States, 2012-
2016

Note:
 The sample universe is all owner-occupied housing units.

Source:
 BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

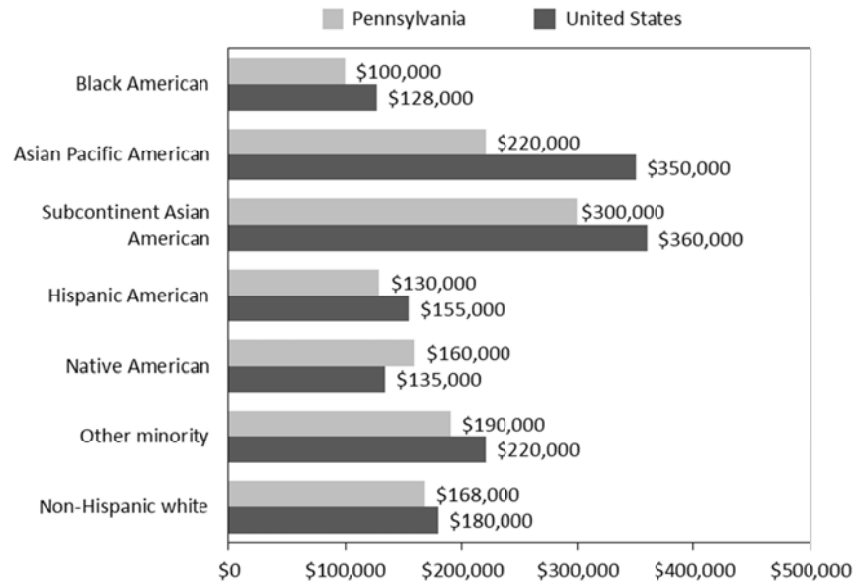


Figure C-13 indicates that Black American, Hispanic American, and Native American homeowners in Pennsylvania own homes of lower median values than non-Hispanic white American homeowners. In contrast, Asian Pacific American, Subcontinent Asian American, and other minority homeowners in Pennsylvania own homes of higher median values than non-Hispanic white American homeowners.

Figure C-14.
Denial rates of conventional
purchase loans for high-
income households,
Pennsylvania and the
United States, 2007 and
2016

Note:

High-income borrowers are those households with 120% or more of the HUD area median family income (MFI).

Source:

FFIEC HMDA data 2007 and 2016. The raw data extract was obtained from the Consumer Financial Protection Bureau HMDA data tool: <http://www.consumerfinance.gov/hmda/explore>.

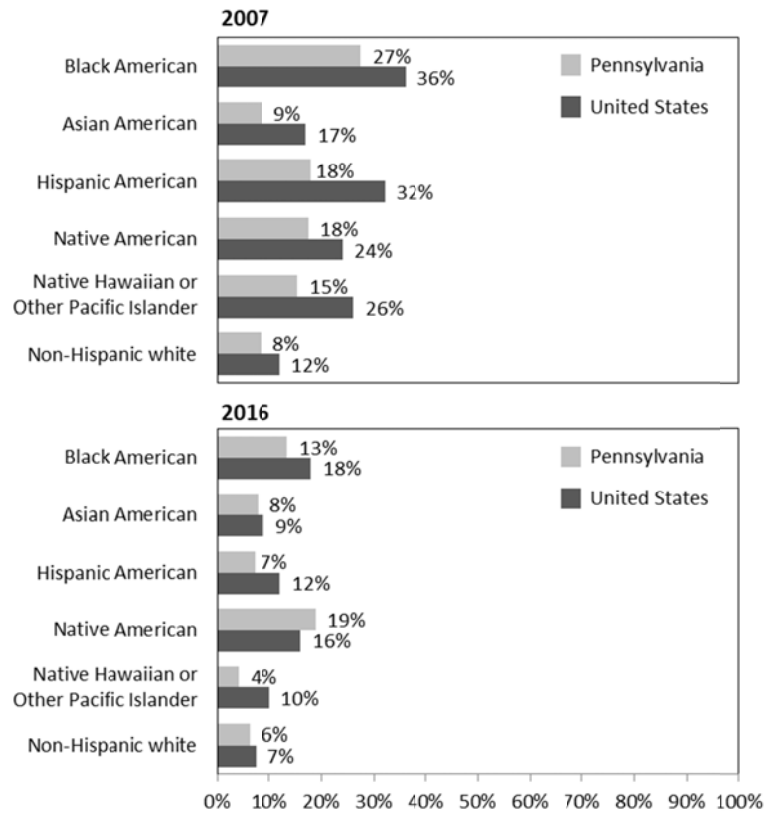


Figure C-14 indicates that in 2016, high-income Black American, Asian American, Hispanic American, and Native American households in Pennsylvania were denied conventional home purchase loans at a greater rate than high-income non-Hispanic white American households.

Figure C-15.
Percent of conventional
home purchase loans that
were subprime,
Pennsylvania and the
United States, 2007 and
2016

Source:
 FFIEC HMDA data 2007 and 2016. The
 raw data extract was obtained from the
 Consumer Financial Protection Bureau
 HMDA data tool:
<http://www.consumerfinance.gov/hmda/explorer>.

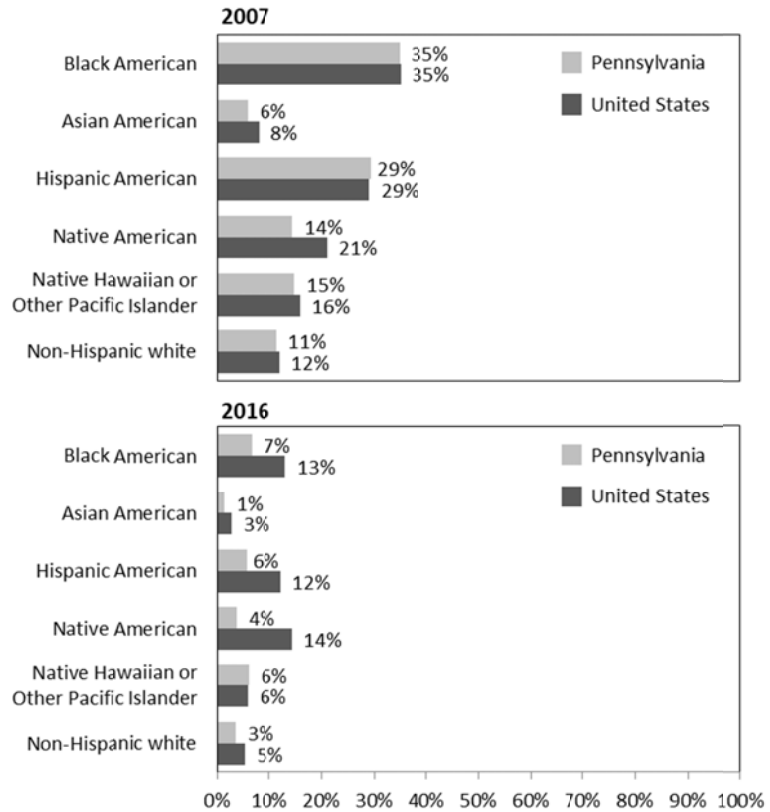


Figure C-15 indicates that in 2016, Black Americans; Hispanic Americans; Native Americans; and Native Hawaiian or Other Pacific Islanders in Pennsylvania were awarded subprime conventional home purchase loans at a greater rate than non-Hispanic white Americans.

Figure C-16.
Business loan denial
rates, Middle Atlantic
Division and the United
States, 2003

Note:

** Denotes that the difference in proportions from businesses owned by non-Hispanic white men is statistically significant at the 95% confidence level.

The Middle Atlantic Census Division consists of New Jersey, New York, and Pennsylvania.

Source:

BBC Research & Consulting from 2003 Survey of Small Business Finance.

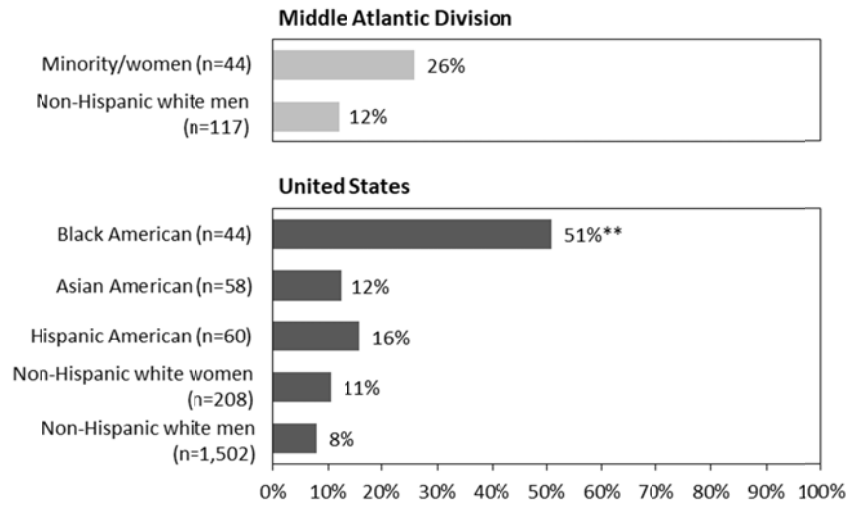


Figure C-16 indicates that in 2003, Black American-owned businesses in the United States were denied business loans at a greater rate than businesses owned by non-Hispanic white men.

Figure C-17.
Businesses that did not
apply for loans due to
fear of denial, Middle
Atlantic Division and
the United States, 2003

Note:

** Denotes that the difference in proportions from businesses owned by non-Hispanic white men is statistically significant at the 95% confidence level.

The Middle Atlantic Census Division consists of New Jersey, New York, and Pennsylvania.

Source:

BBC Research & Consulting from
 2003 Survey of Small Business
 Finance.

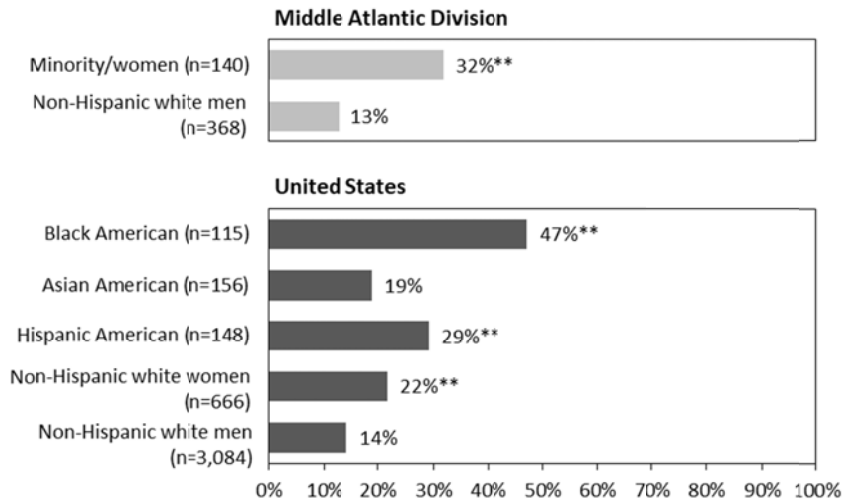


Figure C-17 indicates that in 2003 Black American-, Hispanic American- and non-Hispanic white woman-owned businesses in the United States were more likely than businesses owned by non-Hispanic white men to not apply for business loans due to a fear of denial. In addition, minority- and woman-owned businesses in the Middle Atlantic Division were more likely than businesses owned by non-Hispanic white men to not apply for business loans due to fear of denial.

Figure C-18.
Mean values of
approved business
loans, Middle Atlantic
Division and the United
States, 2003

Note:

**/++ Denotes statistically significant differences from non-Hispanic white men (for minority groups and women) at the 95% confidence level for the United States as a whole and the Middle Atlantic Division, respectively.

The Middle Atlantic Census Division consists of New Jersey, New York, and Pennsylvania.

Source:

BBC Research & Consulting from
 2003 Survey of Small Business
 Finance.

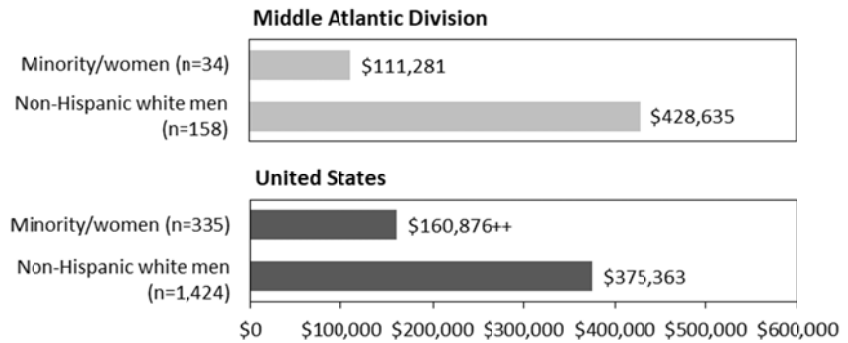


Figure C-18 indicates that, in 2003, minority- and woman-owned businesses in the United States were approved for loans that were worth less than loans approved for businesses owned by non-Hispanic white men.

Figure C-19.
Self-employment rates in study-related industries, Pennsylvania and the United States, 2000

Pennsylvania	Construction	Architecture & Engineering	Professional Services	Goods & Services
Race/ethnicity				
Black American	17.4 % **	9.4 %	7.9 % **	1.6 % **
Asian Pacific American	18.6 %	7.1 % *	9.5 % **	14.0 % **
Subcontinent Asian American	13.7 % †	5.6 % **	3.9 % **	20.0 % **
Hispanic American	17.8 %	5.2 % *	8.5 % **	2.8 % **
Native American	28.9 %	13.6 % †	16.7 %	4.9 %
Other Race Minority	29.9 %	13.9 % †	13.0 %	4.2 %
Non-Hispanic white	23.5 %	14.8 %	18.7 %	5.3 %
Gender				
Women	11.3 % **	11.4 % **	11.9 % **	3.4 % **
Men	24.3 %	15.4 %	22.7 %	6.2 %
All individuals	23.1 %	14.0 %	17.1 %	5.1 %
United States	Construction	Architecture & Engineering	Professional Services	Goods & Services
Race/ethnicity				
Black American	15.2 % **	10.2 % **	8.9 % **	1.6 % **
Asian Pacific American	21.3 % **	9.0 % **	12.3 % **	7.6 % **
Subcontinent Asian American	17.9 % **	7.1 % **	6.2 % **	16.2 % **
Hispanic American	12.2 % **	10.6 % **	10.9 % **	3.5 % **
Native American	19.2 % **	17.3 %	17.5 % **	3.9 % **
Other Race Minority	23.9 %	15.5 %	16.4 % **	8.8 % **
Non-Hispanic white	25.4 %	19.3 %	21.4 %	6.1 %
Gender				
Women	16.8 % **	14.0 % **	14.0 % **	3.8 % **
Men	23.3 %	19.6 %	23.5 %	6.4 %
All individuals	22.6 %	17.6 %	18.5 %	5.4 %

Note: *, ** Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between women and men) is statistically significant at the 90% and 95% confidence levels, respectively.

† Denotes that statistically significant differences in proportions were not reported due to small sample sizes.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-19 indicates that, in 2000, Black Americans working in the Pennsylvania construction industry exhibited lower rates of self-employment (i.e., business ownership) than non-Hispanic white Americans. Black Americans, Asian Pacific Americans, Subcontinent Asian Americans and Hispanic Americans working in the Pennsylvania’s architecture and engineering and professional services industries exhibited lower rates of self-employment than non-Hispanic white Americans. Similarly, Black Americans and Hispanic Americans reported lower rates of self-employment in Pennsylvania’s good and services industry than non-Hispanic white Americans. In addition, women working in all four study-related industries exhibited lower rates of self-employment than men. In contrast, Asian Pacific Americans and Subcontinent Asian Americans exhibited higher rates of self-employment than non-Hispanic white Americans in the goods and services industry.

Figure C-20a.
Self-employment rates in study-related industries, Pennsylvania, 2012-2016

Pennsylvania	Construction	Architecture & Engineering	Professional Services	Goods & Services
Race/ethnicity				
Black American	21.5 %	10.4 % **	7.0 % **	1.5 % **
Asian Pacific American	26.8 %	18.0 %	14.3 %	13.8 % **
Subcontinent Asian American	24.8 % †	5.9 % **	5.0 % **	16.7 % **
Hispanic American	16.2 % **	5.8 % **	9.9 % **	2.7 % **
Native American	20.6 %	31.1 %	23.4 %	2.2 % **
Other Race Minority	15.0 % †	0.0 % †	27.3 %	6.3 %
Non-Hispanic white	24.2 %	15.9 %	17.6 %	4.5 %
Gender				
Women	12.6 % **	12.7 % **	12.3 % **	2.8 % **
Men	24.5 %	16.6 %	19.2 %	5.3 %
All individuals	23.5 %	15.3 %	15.5 %	4.4 %

Note: *, ** Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between women and men) is statistically significant at the 95% confidence level.

† Denotes significant differences in proportions not reported due to small sample size.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-20a indicates that Hispanic Americans exhibited lower rates of self-employment (i.e., business ownership) than non-Hispanic white Americans across all study-related industries in Pennsylvania. There are also lower rates of self-employment in the Pennsylvania architecture and engineering and professional services industries for Black Americans and Subcontinent Asian Americans than non-Hispanic white Americans. Similarly, there are lower rates of self-employment for Black Americans and Native Americans than non-Hispanic white Americans in the Pennsylvania goods and services industry. In addition, women working in all study-related industries in Pennsylvania exhibited lower rates of self-employment than men. In contrast, Asian Pacific Americans and Subcontinent Asian Americans exhibited higher rates of self-employment than non-Hispanic white Americans in the Pennsylvania goods and services industry.

Figure C-20b.
Self-employment rates in study-related industries, United States, 2012-2016

United States	Construction	Architecture & Engineering	Professional Services	Goods & Services
Race/ethnicity				
Black American	17.8 % **	13.6 % **	9.8 % **	1.9 % **
Asian Pacific American	23.2 % **	10.8 % **	12.3 % **	6.8 % **
Subcontinent Asian American	22.9 % **	10.8 % **	7.7 % **	14.8 % **
Hispanic American	17.7 % **	13.3 % **	14.2 % **	3.6 % **
Native American	18.4 % **	18.3 %	17.9 % **	4.0 % **
Other Race Minority	23.1 %	12.3 % **	16.0 % **	5.5 %
Non-Hispanic white	26.1 %	20.2 %	21.4 %	5.6 %
Gender				
Women	16.1 % **	16.2 % **	15.4 % **	3.7 % **
Men	24.0 %	19.4 %	20.7 %	5.7 %
All individuals	23.2 %	18.2 %	18.0 %	4.9 %

Note: *, ** Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between women and men) is statistically significant at the 95% confidence level.

† Denotes significant differences in proportions not reported due to small sample size.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-20b indicates that Black Americans and Hispanic Americans exhibited lower rates of self-employment (i.e., business ownership) than non-Hispanic white Americans across all study-related industries in the United States. There are also lower rates of self-employment in the United States construction; architecture and engineering; and professional services industries for Asian Pacific Americans and Subcontinent Asian Americans than non-Hispanic white Americans. Similarly, there are lower rates of self-employment for Native Americans than non-Hispanic white Americans in the United States construction; professional services; and goods and services industries. In addition, women working in all study-related industries in United States exhibited lower rates of self-employment than men. In contrast, Asian Pacific Americans and Subcontinent Asian Americans exhibited higher rates of self-employment than non-Hispanic white Americans in the United States goods and services industry.

**Figure C-21.
Predictors of business ownership in
construction (probit regression),
Pennsylvania, 2012-2016**

Note:

The regression model includes 17,502 observations.

*, ** Denote statistical significance at the 90% and 95% confidence levels, respectively.

The referent for each set of categorical variables is as follows: non-Hispanic whites for the race variables; male for the gender variable; high school diploma for the education variables; and manufacturing for industry variables.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa>.

Variable	Coefficient
Constant	-2.1589 **
Age	0.0456 **
Age-squared	-0.0003 **
Married	0.0317
Number of children in household	0.0598 **
Number of people over 65 in household	-0.0111
Owns home	-0.0161
Home value (\$000s)	0.0007 **
Monthly mortgage payment (\$000s)	-0.0464 **
Interest and dividend income (\$000s)	0.0049 **
Income of spouse or partner (\$0000s)	0.0006
Speaks English well	-0.1059
Less than high school education	0.1098 **
Some college	0.0259
Four-year degree	0.0659
Advanced degree	-0.1211
Black American	0.0051
Asian Pacific American	0.0923
Subcontinent Asian American	0.1603
Hispanic American	-0.1616 *
Native American	-0.0128
Other minority group	-0.3840
Women	-0.5592 **

Figure C-21 indicates that, compared to being a non-Hispanic white American or a man in Pennsylvania, being Hispanic American or a woman, respectively, decreases the likelihood of owning a construction business, even after accounting for various other personal characteristics.

Figure C-22.
Disparities in business ownership rates for Pennsylvania construction workers, 2012-2016

Group	Self-Employment Rate		Disparity Index (100 = Parity)
	Actual	Benchmark	
Hispanic American	16.4%	22.4%	73
Non-Hispanic white women	12.5%	27.4%	46

Note: The benchmark figure can only be estimated for records with observed (rather than imputed) dependent variable. Thus, the study team made comparisons between actual and benchmark self-employment rates only for the subset of the sample for which the dependent variable was observed.

Analyses are limited to those groups that showed negative coefficients that were statistically significant in the regression model.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-22 indicates that Hispanic Americans own construction businesses in Pennsylvania at a rate that is 73 percent that of similarly-situated non-Hispanic white Americans (i.e., non-Hispanic white Americans who share the same personal characteristics). Non-Hispanic white women own construction businesses in Pennsylvania at a rate that is 46 percent that of similarly-situated non-Hispanic white men.

Figure C-23.
Predictors of business ownership in
architecture & engineering (regression),
Pennsylvania, 2012-2016

Note:

The regression model includes 6,476 observations.

*, ** Denote statistical significance at the 90% and 95% confidence levels, respectively.

Other race minority omitted from the regression due to small sample size.

The referent for each set of categorical variables is as follows: non-Hispanic whites for the race variables; male for the gender variable; high school diploma for the education variables; and manufacturing for industry variables.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

Variable	Coefficient
Constant	-2.9970 **
Age	0.0418 **
Age-squared	-0.0001
Married	-0.1539 **
Number of children in household	-0.0016
Number of people over 65 in household	0.0192
Owns home	-0.1471
Home value (\$000s)	0.0004 **
Monthly mortgage payment (\$000s)	0.0097
Interest and dividend income (\$000s)	0.0028 **
Income of spouse or partner (\$0000s)	0.0014 **
Speaks English well	-0.1480
Less than high school education	0.4875 *
Some college	0.2982 **
Four-year degree	0.3000 **
Advanced degree	0.5237 **
Black American	-0.2060
Asian Pacific American	0.0925
Subcontinent Asian American	-0.5469 **
Hispanic American	-0.4077 **
Native American	0.3110
Women	-0.1134 *

Figure C-23 indicates that, compared to being a non-Hispanic white American in Pennsylvania, being Subcontinent Asian American or Hispanic American is related to a lower likelihood of owning a business in the architecture and engineering industry, even after accounting for various other personal characteristics. In addition, being a woman is related to a lower likelihood of owning a business in the Pennsylvania architecture and engineering industry, even after accounting for other personal characteristics.

Figure C-24.
Disparities in business ownership rates for Pennsylvania architecture & engineering workers, 2012-2016

Group	Self-Employment Rate		Disparity Index (100 = Parity)
	Actual	Benchmark	
Subcontinent Asian American	5.0%	13.1%	39
Hispanic American	5.4%	10.8%	50
Non-Hispanic white women	13.7%	15.5%	88

Note: The benchmark figure can only be estimated for records with observed (rather than imputed) dependent variable. Thus, the study team made comparisons between actual and benchmark self-employment rates only for the subset of the sample for which the dependent variable was observed.

Analyses are limited to those groups that showed negative coefficients that were statistically significant in the regression model.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-24 indicates that Subcontinent Asian Americans own architecture and engineering businesses in Pennsylvania at a rate that is 39 percent that of similarly-situated non-Hispanic white Americans (i.e., non-Hispanic white Americans who share the same personal characteristics). Hispanic Americans own architecture and engineering businesses in Pennsylvania at a rate that is 50 percent that of similarly-situated non-Hispanic white Americans. Non-Hispanic white women own architecture and engineering businesses in Pennsylvania at a rate that is 88 percent that of similarly-situated non-Hispanic white men.

**Figure C-25.
Predictors of business ownership in
professional services (probit regression),
Pennsylvania, 2012-2016**

Note:

The regression model includes 19,517 observations.

*, ** Denote statistical significance at the 90% and 95% confidence levels, respectively.

The referent for each set of categorical variables is as follows: non-Hispanic whites for the race variables male for the gender variable; high school diploma for the education variables; and manufacturing for industry variables.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Coefficient
Constant	-2.1521 **
Age	0.0278 **
Age-squared	0.0000
Married	0.0770 *
Number of children in household	0.0121
Number of people over 65 in household	0.0215
Owns home	0.0749
Home value (\$000s)	0.0002 **
Monthly mortgage payment (\$000s)	-0.0063
Interest and dividend income (\$000s)	0.0021 **
Income of spouse or partner (\$0000s)	0.0011 **
Speaks English well	-0.2886 *
Less than high school education	0.0398
Some college	0.1187 **
Four-year degree	0.1527 **
Advanced degree	0.4181 **
Black American	-0.2535 **
Asian Pacific American	-0.1240
Subcontinent Asian American	-0.6645 **
Hispanic American	-0.0041
Native American	0.2652
Other minority group	0.6392 *
Women	-0.2406 **

Figure C-25 indicates that, compared to being a non-Hispanic white American in Pennsylvania, being Black American or Subcontinent Asian American is related to a lower likelihood of owning a professional services business, even after accounting for various other personal characteristics. In addition, being a non-Hispanic white woman is related to a lower likelihood of business ownership in the Pennsylvania professional services industry, even after accounting for other personal characteristics.

Figure C-26.
Disparities in business ownership rates for Pennsylvania Professional Services workers, 2012-2016

Group	Self-Employment Rate		Disparity Index (100 = Parity)
	Actual	Benchmark	
Black American	6.9%	10.9%	63
Subcontinent Asian American	5.1%	14.8%	35
Non-Hispanic white women	14.3%	20.2%	71

Note: The benchmark figure can only be estimated for records with observed (rather than imputed) dependent variable. Thus, the study team made comparisons between actual and benchmark self-employment rates only for the subset of the sample for which the dependent variable was observed.

Analyses are limited to those groups that showed negative coefficients that were statistically significant in the regression model.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-26 indicates that Black Americans own businesses in the Pennsylvania professional services industry at a rate that is 63 percent that of similarly-situated non-Hispanic white Americans (i.e., non-Hispanic white Americans who share the same personal characteristics). Subcontinent Asian Americans own businesses in the Pennsylvania professional services industry at a rate that is 35 percent that of similarly-situated non-Hispanic white Americans. Non-Hispanic white women own businesses in the Pennsylvania professional at a rate that is 71 percent that of similarly-situated non-Hispanic white men.

Figure C-27.
Predictors of business ownership in
goods and services (regression),
Pennsylvania, 2012-2016

Note:

The regression model includes 28,129 observations.

*, ** Denotes statistical significance at the 90% and 95% confidence levels, respectively.

The referent for each set of categorical variables is as follows: non-Hispanic whites for the race variables male for the gender variable; high school diploma for the education variables; and manufacturing for industry variables.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Coefficient
Constant	-3.0557 **
Age	0.0284 **
Age-squared	-0.0001
Married	0.1642 **
Number of children in household	0.0517 **
Number of people over 65 in household	-0.0528
Owns home	0.0270
Home value (\$000s)	0.0006 **
Monthly mortgage payment (\$000s)	0.0081
Interest and dividend income (\$000s)	0.0061 **
Income of spouse or partner (\$0000s)	0.0003
Speaks English well	-0.0644
Less than high school education	0.0839
Some college	0.0851 *
Four-year degree	0.1828 **
Advanced degree	-0.0595
Black American	-0.2609 **
Asian Pacific American	0.6537 **
Subcontinent Asian American	0.8044 **
Hispanic American	0.0252
Native American	-0.4264
Other minority group	0.2091
Women	-0.2843 **

Figure C-27 indicates that being Black American or a woman is related to a lower likelihood of owning a business in the Pennsylvania goods and services industry, even after accounting for various other personal characteristics.

Figure C-28.
Disparities in business ownership rates for Pennsylvania goods and services workers, 2012-2016

Group	Self-Employment Rate		Disparity Index (100 = Parity)
	Actual	Benchmark	
Black American	1.5%	2.8%	54
Non-Hispanic white women	2.8%	5.5%	51

Note: The benchmark figure can only be estimated for records with observed (rather than imputed) dependent variable. Thus, the study team made comparisons between actual and benchmark self-employment rates only for the subset of the sample for which the dependent variable was observed.

Analyses are limited to those groups that showed negative coefficients that were statistically significant in the regression model.

Source: BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata samples. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure C-28 indicates that Black Americans own businesses in the Pennsylvania goods and services industry at a rate that is 54 percent that of similarly-situated non-Hispanic white Americans (i.e., non-Hispanic white Americans who share the same personal characteristics). Non-Hispanic white women own businesses in the Pennsylvania goods and services industry at a rate that is 51 percent that of similarly-situated non-Hispanic white men.

Figure C-29.
Rates of business closure, expansion, and contraction, Pennsylvania and the United States, 2002-2006

Note:

Data include only non-publicly held businesses.

Equal Gender Ownership refers to those businesses for which ownership is split evenly between women and men.

Statistical significance of these results cannot be determined, because sample sizes were not reported.

Source:

Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Lowrey, Ying. 2014. "Gender and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

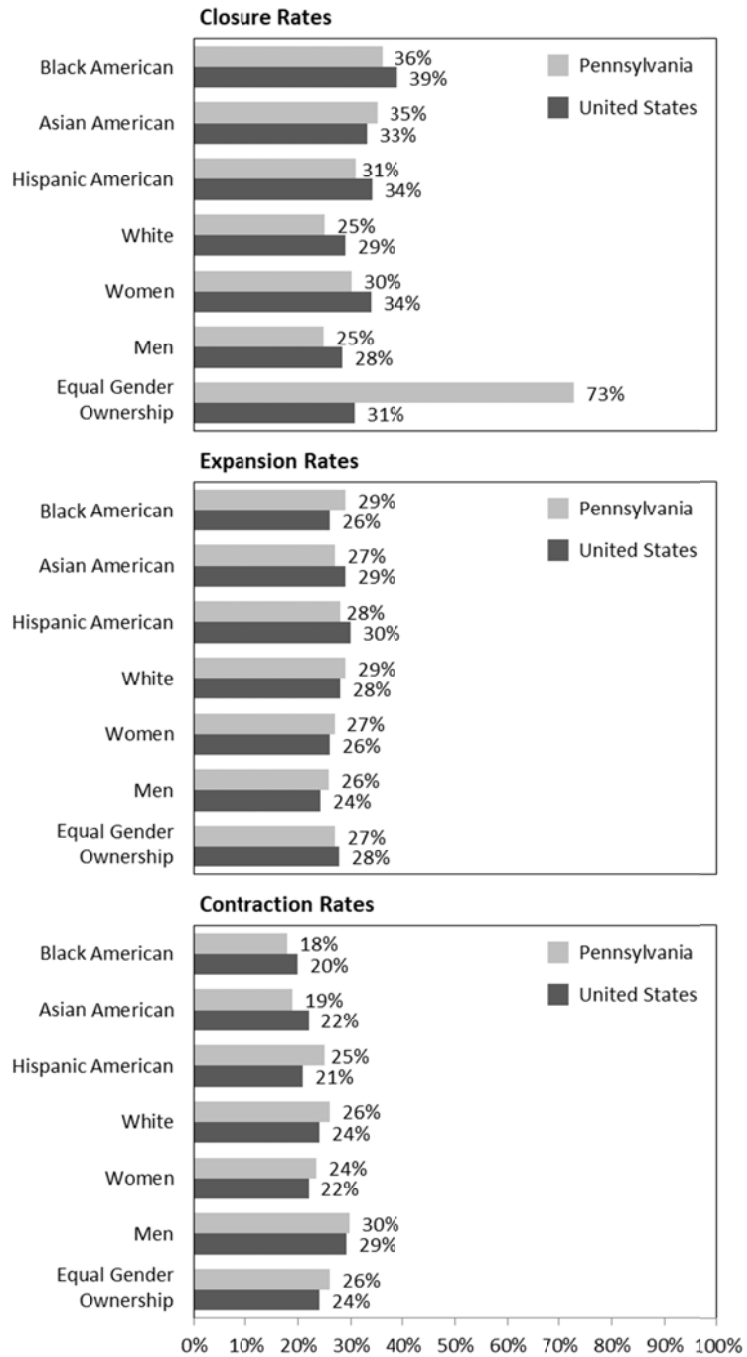


Figure C-29 indicates that Black American-, Asian American-, and Hispanic-American-owned businesses in Pennsylvania show higher rates of closure than non-Hispanic white American-owned businesses. In addition, woman-owned businesses in Pennsylvania show higher closure rates than businesses owned by men. Asian American- and Hispanic American-owned businesses in Pennsylvania show lower expansion rates than non-Hispanic white American-owned businesses.

Figure C-30.
Mean annual business receipts (in thousands), Pennsylvania and the United States, 2012

Note:

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source:

2012 Survey of Business Owners, part of the U.S. Census Bureau's 2012 Economic Census.

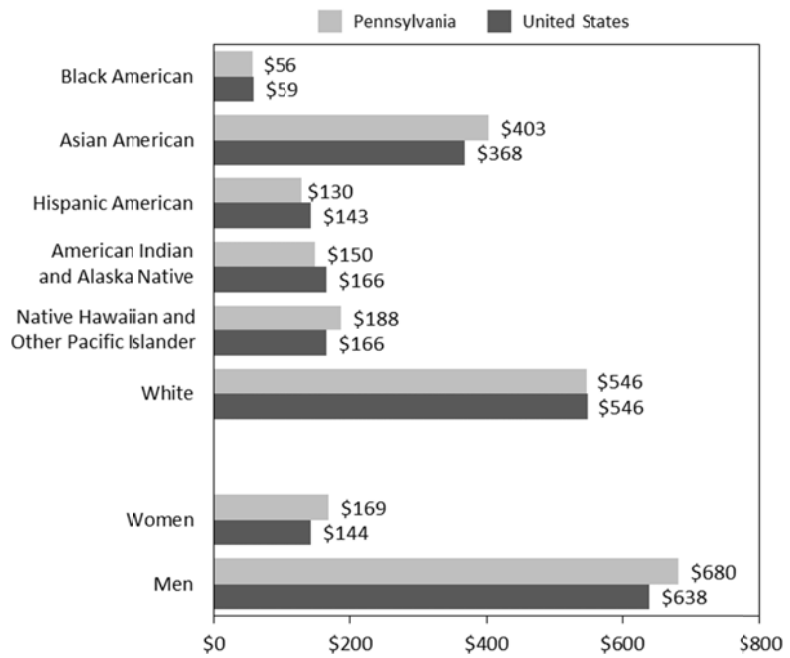


Figure C-30 indicates that in 2012, all racial minorities in Pennsylvania exhibited lower mean annual business receipts than non-Hispanic white American-owned businesses. In addition, woman-owned businesses in Pennsylvania exhibited lower mean annual business receipts than businesses owned by men.

Figure C-31.
Mean annual
business owner
earnings,
Pennsylvania and
the United States,
2012-2016

Note:

The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2016 dollars.

*,**/+,+++ Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level for the United States as a whole and Pennsylvania, respectively.

† Denotes that significant differences in proportions were not reported due to small sample size.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

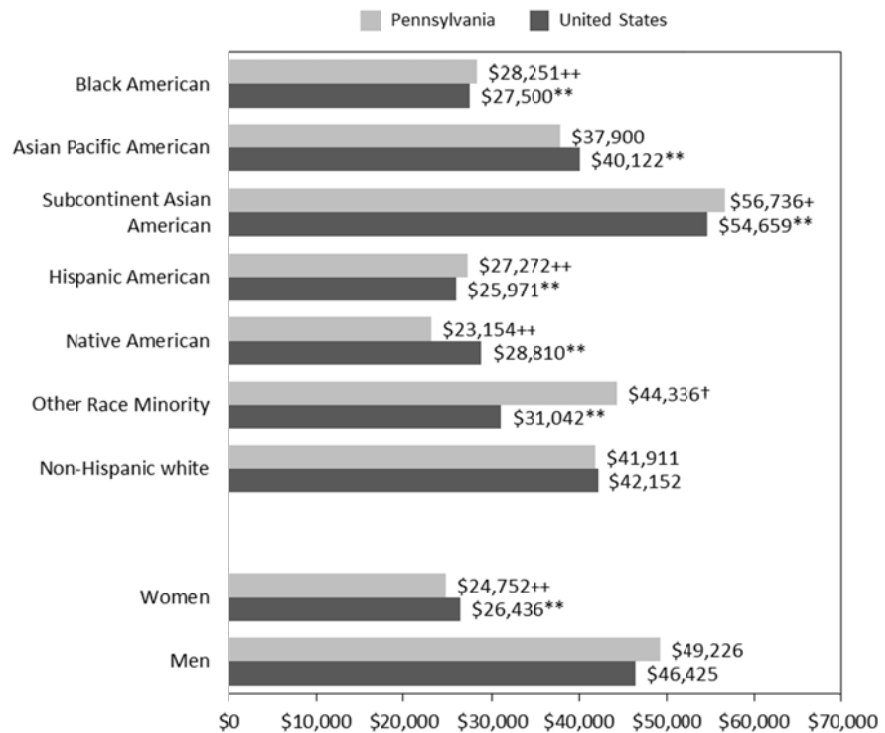


Figure C-31 indicates that the owners of Black American-, Hispanic American-, and Native American-owned businesses in Pennsylvania exhibit lower annual earnings than non-Hispanic white American-owned businesses. In addition, woman-owned businesses in Pennsylvania exhibit lower annual earnings than businesses owned by men. In contrast, Subcontinent Asian American-owned businesses exhibit higher annual earnings than non-Hispanic white American-owned businesses.

**Figure C-32.
Predictors of business owner earnings
(regression), Pennsylvania, 2012-2016**

Note:

The regression model includes 15,826 observations.

For ease of interpretation, the exponentiated form of the coefficients is displayed in the figure.

The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2016 dollars.

** Denotes statistical significance at the 95% confidence level.

The referent for each set of categorical variables is as follows: non-Hispanic whites for the race variables; male for the gender variable; high school diploma for the education variables; and manufacturing for industry variables.

Source:

BBC Research & Consulting from 2012-2016 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Exponentiated Coefficient
Constant	680.039 **
Age	1.144 **
Age-squared	0.999 **
Married	1.251 **
Speaks English well	1.157
Less than high school	0.960
Some college	1.011
Four-year degree	1.186 **
Advanced degree	1.750 **
Black American	0.681 **
Asian Pacific American	1.042
Subcontinent Asian American	0.982
Hispanic American	0.776
Native American	0.755
Other race minority	2.078 **
Women	0.453 **

Figure C-32 indicates that, compared to being an owner of a non-Hispanic white American-owned business in Pennsylvania, being the owner of a Black American-owned business is related to lower business earnings, even after accounting for various other factors. In addition, compared to being the owner of a male-owned business in Pennsylvania, being an owner of a woman-owned business is related to lower business earnings, even after accounting for various other factors.

**Figure C-33.
Predictors of business owner earnings
(regression), United States, 2011-2015**

Note:

The regression model includes 436,401 observations.

For ease of interpretation, the exponentiated form of the coefficients is displayed in the figure.

The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2015 dollars.

*, ** Denotes statistical significance at the 90% and 95% confidence level, respectively.

The referent for each set of categorical variables is as follows: non-Hispanic whites for the race variables; male for the gender variable; high school diploma for the education variables; and manufacturing for industry variables.

Source:

BBC Research & Consulting from 2011-2015 ACS 5% Public Use Microdata sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Exponentiated Coefficient
Constant	550.652 **
Age	1.148 **
Age-squared	0.999 **
Married	1.242 **
Speaks English well	1.143 **
Less than high school	0.746 **
Some college	1.044 **
Four-year degree	1.311 **
Advanced degree	1.894 **
Black American	0.820 **
Asian Pacific American	1.084 **
Subcontinent Asian American	1.154 **
Hispanic American	1.040 **
Native American	0.682 **
Other race minority	1.115 *
Women	0.527 **

Figure C-33 indicates that, compared to being an owner of a non-Hispanic white American-owned business in the United States, being an owner of a Black American- or Native American-owned business is related to lower business earnings, even after accounting for various other factors. In addition, compared to being an owner of a male-owned business in the United States, being the owner of a woman-owned business is related to lower business owner earnings, even after accounting for various other factors.

APPENDIX D.

Qualitative Information about Marketplace Conditions

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Qualitative Information about Marketplace Conditions

Appendix D presents qualitative information that the study team collected and analyzed through the public engagement process for the 2018 Commonwealth of Pennsylvania (the Commonwealth) Disparity Study.¹ BBC collected public testimony from stakeholders using a variety of methods and conducted in-depth interviews with business owners and trade association representatives across the Commonwealth. In total, more than 506 business and trade association representatives provided written or spoken comments to the study team. Appendix D summarizes the key themes and insights that emerged from those comments and is divided into the following 13 sections:

A. Introduction. This section describes the public engagement process for gathering and analyzing the qualitative information summarized in Appendix D.

B. Background on Businesses in Pennsylvania. This section describes the characteristics of the businesses whose owners or representatives provided public testimony or gave an interview for the disparity study. This section presents information on business type, business size, business formation, and current economic conditions in Pennsylvania.

C. Keys to Business Success. This section presents business owners and representatives' perspectives on the keys to business success in the Pennsylvania marketplace.

D. Doing Business as a Prime Contractor or as a Subcontractor. This section describes businesses' mix of prime contract and subcontract work, their experiences in those roles, and how they obtain their work.

E. Potential Barriers to Doing Business in the Pennsylvania Marketplace (Public or Private). This section describes the barriers that businesses face in the Pennsylvania marketplace, and details about whether race- or gender-based discrimination may be contributing to those barriers.

F. Doing Business with the Commonwealth of Pennsylvania, PennDOT, and Other Public Agencies. This section describes business owners' experiences working with or attempting to work with the Department of General Services (DGS), the Pennsylvania Department of Transportation (PennDOT), and other public agencies in the Commonwealth of Pennsylvania.

¹ This disparity study focused on the Pennsylvania Department of Transportation's and the Department of General Services' contract awards during the study period (July 1, 2011 to June 30, 2016), and their contracting policies and processes.

G. Other Allegations of Unfair Treatment. This section documents business owners' and representatives' experiences with unfair treatment by customers, prime contractors, or other parties when bidding on or performing contract work.

H. Additional Information Regarding any Race-, Ethnicity- or Gender-based Discrimination. This section presents information about any experiences business owners or representatives have had with discrimination in the Pennsylvania marketplace and how that behavior affects minority-, woman-, LGBT-, veteran- or disabled-owned businesses.

I. Insights Regarding Business Assistance Programs or Any Other Neutral Measures. This section describes business owners' opinions about business assistance programs and other steps to remove barriers for small business development in the Commonwealth.

J. Insights Regarding Contracting Processes. This section captures business owners and representatives' feedback about the Commonwealth's and PennDOT's contracting processes and procurement policies.

K. Insights Regarding the Federal DBE Program or Any Other Race-/Gender-Conscious Program. This section presents information about businesses' experiences with the federal Disadvantaged Business Enterprise (DBE) Program and its implementation by PennDOT.

L. MBE, WBE, DOB, VOSB, and LGBTBE Certification. This section presents information about businesses' experiences with certification processes and documents whether businesses view certification as advantageous. Business owners and representatives shared their thoughts on PennDOT's Disadvantaged Business Enterprise (DBE) and Diverse Business (DB) certification processes, as well as on DGS' Small Diverse Business (SDB) verification process.

M. Any Other Insights and Recommendations Concerning Pennsylvania Contracting or MBE/WBE/DBE Programs. This section presents additional comments and suggestions for the Commonwealth and PennDOT to consider.

A. Introduction

Throughout the study period, business owners and managers; trade association representatives; and other interested parties had the opportunity to discuss their experiences working in the Pennsylvania marketplace and provide public testimony. Those insights were collected through several different channels:

- Participating in an in-depth interview (90 participants);
- Participating in an availability survey (374 participants);
- Providing oral or written testimony during a public forum (34 participants); and
- Submitting written testimony via email (8 participants).

From June 2017 through June 2018, the study team used a variety of public engagement methods to gather those comments and facilitated several public meetings about the disparity study. The study team's public engagement strategy consisted of the following:

In-depth interviews. The study team conducted 90 in-depth interviews with representatives of 86 businesses and four trade associations in Pennsylvania. The interviews included discussions about interviewees' perceptions of and experiences with local and state contracting; DGS's SDB verification and small business programs; the Federal DBE Program and the state's transportation-focused DB Program as implemented by PennDOT; and businesses' experiences working or attempting to work with public agencies in Pennsylvania. Four project team partners conducted interviews with business owners and representatives in the Commonwealth: Powell Law (Central PA), ABC Consulting (Western PA), Kairos Development Group (Easter PA), and Ritzman Law (Western PA). These firms have extensive experience in the local marketplace. In-depth interview comments are identified in Appendix D by random interview numbers (i.e., #1, #2, #3, etc.).

Availability surveys. The study team conducted availability surveys for the Commonwealth disparity study in late 2017 and early 2018. As a part of the availability surveys, the study team asked business owners and managers whether their companies have experienced barriers or difficulties starting or expanding businesses in their industries or with obtaining work in the Pennsylvania marketplace. A total of 374 businesses provided responses. The study team then analyzed those comments and included illustrative examples of the different comment types and themes in Appendix D. Availability survey comments are indicated throughout Appendix D by the prefix "Avail."

Public forums. The study team solicited written and verbal testimony from business owners and representatives at public forums held throughout Pennsylvania (Pittsburgh, Erie, Harrisburg, King of Prussia, Allentown, and Philadelphia) in fall 2017 and early 2018. The study team reviewed and analyzed all public comments from those meetings. Public forum comments are denoted by the prefix "PT" throughout Appendix D.

Written testimony. Throughout the study, interested parties had the opportunity to submit written testimony directly to the BBC team via email. All written testimony received by email was then analyzed by the study team. Written testimony is indicated by the prefix "WT" throughout Appendix D.

B. Background on Businesses in Pennsylvania

Part B summarizes information related to:

- How businesses became established;
- Challenges in starting, operating and growing a business;
- Types of work that businesses perform;
- Employment size of businesses;
- Capability of businesses to perform different types and sizes of contracts;
- Local effects of the economic downturn;
- Current economic conditions; and
- Business owners' experiences pursuing public and private sector work.

How businesses became established. Most interviewees reported that their companies were started (or purchased) by individuals with connections or experience in their respective industries.

Many interviewees worked in the industry or a related industry before starting their own businesses or have worked for many years in the industry. [e.g., #07, #27, #28, #39a, #39b, #40, #43, #48, #49a, #62, #77, PT#10d, PT#14b, PT#14f, PT#16h] For example:

- The Black American male owner of a DBE-certified construction services firm said that he started the firm because the one MBE mechanical contracting company that he had worked with was going out of business. He commented, “There was a need for a solid, well-run MBE contractor.” [#02]

The same business owner said that he worked in the business for over 30 years prior to starting his own firm. He said that his firm benefits from his previous experience working with most major developers in the region. [#02]

- The Black American male owner of an MBE- and SDB-certified construction services firm reported that he formed his firm approximately ten years ago. He added that prior to starting his business he worked for several firms in the central Pennsylvania region doing the same type of work as his business. He commented that he has worked in the industry for about 30 years. [#67]
- The non-Hispanic white male owner of a construction firm said that he began his career as a civil engineer for large highway contractors. Then he worked for a large firm in Pennsylvania, and noted, “[My worked changed] from public construction [to] more private construction, industrial construction. Then I decided that I had enough experience that I could do it on my own and started [my company].” [#85]
- The non-Hispanic white male owner of a construction services firm stated, “I’ve been in construction my whole life, since I was in high school ... And when things kind of slowed up back in the early 2000s ... I bought a dump truck and tried my hand at doing something else.” [#88]

The same business owner went on to describe the growth of his firm as “slow, but steady.” He continued, “I don’t want to go too overboard. I’m getting a little bit older so I don’t have the energy and drive that I used to when I was 20 years old. And I think it’s [a] very slow and steady paced [company], but I’m happy with the way things are growing right now.” [#88]

- When describing the formation of her firm, the non-Hispanic white female representative of a construction firm stated, “[My husband] had been working previously for another contractor On a daily basis, he was sent out to the job site and he didn’t have any contact with that owner until ... the end of the day [when] he gave him a report of what he did He got to realizing that if he could do it for him, he could do it for himself.” [#45]

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “I worked for other similar companies in IT consulting and just felt that I was not in an ethical company where I felt comfortable selling other people on coming to this business and I decided I can either just shut-up and keep the money or start my own thing. I started in September of 2006 and haven’t looked back.” [#57]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that he worked as an engineer for an engineering consulting firm when “a couple of people approached [him] to go into business [together].” He said that the partners “went their separate ways” before the end of the first year, leaving him alone with the business. He said “it was very difficult getting started” because of this. He went on to say that he has been the company’s president for about 35 years. [#09]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said that he has owned the business for 25 years and worked in the industry even longer. [#06]

The same business owner added, “[I was] a union carpenter [and] was in a training program, and then I left that and I worked in a mill” He said that he went into sales after having union problems, and from there he started his own business. [#06]

- The Black American male owner of an MBE-certified professional services firm reported that he worked in corporate law before starting his own business. He commented, “[I decided to start it] given the relationships I [already] had, and the kind of work I was doing.” [#34]
- The Black American male owner of a DBE- and MBE-certified construction firm said that he worked his way up in the construction industry for nearly 40 years before starting his business. He continued, “I know what hard work is, and a lot of general contractors don’t know that.” He is the president and founder of the company and has been the owner for four years. [#13]
- The Black American male owner of an MBE- and SDB-certified goods and services firm stated that before he started his business he was a corporate salesperson in the same industry. He explained that he saved enough money to purchase several small pieces of real estate that acquired equity, which he then sold or collateralized to obtain a loan to start his firm. [#60]
- The non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm reported that she has been in business for over 10 years. She commented that prior to starting her firm, she had worked in the industry for a business that “the partners there decided to sell.” She said, “I purchased it [and] reorganized ... restructured ... and revamped the whole company Essentially, I started it from scratch.” [#05]
- The non-Hispanic white male owner of a construction firm reported that he worked in the electrical industry for 18 years before starting his own company. [#51]

- The non-Hispanic white female owner of a DBE-certified construction services firm said that she started the company because she "worked for ... companies that provide[d] similar services, then ... worked for a woman-owned business that provide[d] similar services." She added, "I did marketing and procurement for that firm and decided to do that on my own. If I could do that for that firm, I could try to do that on my own. And that's what I did. I took a few months off, did a lot of research on how to physically start a business, and some other research, basically made myself a roadmap, and then just started and followed it." [#12]
- The Black American male owner of a professional services firm reported that he started his company in the early 2000s after retiring from a public sector position. He said interest in supplier diversity throughout Central Pennsylvania prompted him to start the business. [#55]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said that he worked in the financial industry as a project manager for approximately eight years before deciding "to do it for [himself]." [#08]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm stated that she was working for a large advertising firm prior to September 11th, 2001. After the terrorist attacks on the Twin Towers, she said that "traveling and flying was not an option any longer, or at least ... was more difficult." She noted that, at that point, she "had enough experience to go out and try [it] on [her] own." [#19]
- The Black American male owner of a DBE- and SDB-certified construction supply firm reported that he founded his firm in 2013 after gaining experience over 40 years as a small business owner. He commented that he started the firm after a one-year break after retirement from his former business. [#03]
- The non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said that he worked in advertising for about three years before starting his own business. [#29]
- The Asian-Pacific American male co-owner of a professional services firm stated that he is the founder and president of the firm, which provides fuel injection technology services. He explained that he worked in the fuel injection industry prior to starting his own firm. [#42]
- The minority male owner of a contracting firm said that he was a carpenter before starting his business. He added that he started his firm 21 years ago. [WT#08]
- The Black American male owner of an MBE- and SDB-certified construction company said that he works on business development and the overall administration of the firm. He said that he has led the firm since 1998. [#37]
- The non-Hispanic white female owner of a DBE- and SDB- certified professional services firm reported that the firm started in the late 1980s and that she has owned the firm since 2007 after purchasing it from the estate of the original owner, a non-Hispanic white female. [#59]

- The Black American female owner of an MBE- and WBE-certified professional services firm said that she has “over 30 years of HR [experience], and also some non-profit experience at the leadership level.” She added, “[I was] working for a corporation and my job was eliminated, and I saw it as an opportunity to do something I’d always wanted to do. [I’ve always wanted to] have my own HR consulting firm. So, I started it.” [#11]

The same business owner stated that she is the president and founder of the company and has been the owner for 10 years. The company provides human resources consulting services including capacity building, staffing, employee relations, performance management, organizational development, and professional coaching. [#11]

She added, “[I also have] a partnership with another HR person and we have a search firm also. It’s a separate company, and we’ve done a couple of nonprofit searches and have been pleased with the results. But, I focus on [my own firm].” [#11]

- The Asian Pacific American female owner of an MBE- and WBE-certified professional services firm stated that prior to forming her firm, she “was doing some transcription work for a law firm.” When she had children, she decided that she wanted to do work that could be done from home and started her own medical and legal transcription services business. [#69]
- The Black American female owner of an SDB- and WBE-certified professional services firm said that she worked in the industry for many years before starting her business in the early 2000s. She said that she worked for a well-known international consulting firm for two years after graduating from college. Later, she worked for a small nonprofit organization and became finance manager at a local university. [#35]
- The non-Hispanic white male owner of a construction firm said that he started working in the construction industry while in college, and added, “It’s something I really just enjoyed, and so after college I just stuck with it and pursued that and eventually went on my own when I was in my 20s.” He said that his company has been in business for over 11 years. [#75]
- The non-Hispanic white female owner of an SDB-certified construction firm reported that she had experience in accounting and her husband had experience in the construction industry before they started their construction firm in 2002. [#65]
- The non-Hispanic white male representative of a goods and services firm said that he holds a leadership role at the firm and has worked with the firm for over seven years. When asked how he came to work for the company, he stated, “I’ve been in the automotive business for about 27 years. I ran [another auto company’s] organization in [a local town] ... when I left [that company], I went to work for a ... municipal body supply company. We would build dump trucks and things like that. So, I got my municipal connection in and [my current company] was one of my [dealers] that I did business with.” [#72]

The same business representative added, “So, I was with the body company [and] was doing a lot of COSTARS business. The body company was on state contract with COSTARS,

so I needed a dealership to get in because I had business in this area and nobody knew about COSTARS at the time, which was 14 years ago. So, I signed them up on COSTARS [and] helped them evolve into that market. Then once their business started picking up, they were like, 'We really don't have anyone to run this department that you started for us. Thank you, as a vendor.' Then the owner-dealership started pursuing me because he knew my pedigree." [#72]

- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm said that the firm owners decided to start their own business in the late 1990s while working for another firm. [#56]
- The non-Hispanic white male owner of a LGBTBE-certified professional services firm said that he began his career working in IT departments as a software developer for major banks and utility companies. When asked to describe the growth of his firm, he said it "ebbs and flows." [#24]

Business owners and managers described a wide array of reasons for starting their businesses.

For example:

- When asked how his business became established, the Hispanic American male owner of an SDB- and MBE-certified professional services firm described how he worked in one of Pennsylvania's largest cities for five years, "at which point I decided to get a [a graduate degree in my field].... So, I ... graduated and worked with [a public agency]."

The same business owner continued, "I did the master planning for [a government project], [and] that required me to put together very large teams [including] minorities, disadvantaged veterans, [and] women It was very hard to find the right consultant because they were oversubscribed, so it was very challenging. So, I kind of thought that's interesting [and decided] to go on my own."

He added, "I really had a lot of civic involvement, so when I went on my own, which was about two years ago, [I] had a really very good following of clients and core staff that came with me It really has been through relationships that I have been able to have my own firm." [#76]

- The Black American female owner of a DBE- and SDB-certified construction services firm reported having no previous experience in her industry when starting her firm. She commented that she worked, and continues to work, in another unrelated industry.

The same business owner commented that she started her firm after realizing that her industry "needed more minorities, especially women minorities." [#01]

- The Hispanic American male owner of a construction firm said that his passion for building things led to him starting the business. Regarding his custom metal work, he said, "Friends around me ... asked for stuff that ... seemed ... out of reach. And to me, it wasn't. And I kind of ... liked the appreciation I got from, you know, the stuff that I've done People seem to

be more appreciative when you make something for them, as far as, to form a part. And ... I like that [appreciation]. I get a satisfying feeling from getting it done.” [#64]

The same business owner later said, “I am trying different things. [It’s] kind of like a show and tell with especially custom machine building. I’ve built a machine of my own, from scratch. [I did the] mechanical and electrical design.” [#64]

- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that she used to work for a “large construction company that is ... also in other countries.” She added, “I worked for the Pittsburgh regional office, [and] my last role there was ... [proposal] manager.” She said after working 60 to 70-hour weeks she decided she wanted an “enhanced quality of life” so she could be both “a mother and a career woman.” [#25]

The same business owner continued, “I started looking into the construction market to see where there was a void, and where I could essentially start a business to help contractors out At that point there[were] no ... DBE [certified] rebar manufacturing companies.” [#25]

- The Black American female owner of a WBE- and MBE-certified professional services firm stated that she had a long and established career in an unrelated industry before entering the marketplace and later transitioning to her current industry, which entails providing promotional items for firms. She said that she is the founder and sole owner of her firm. [#30]

The same business owner described why she decided to open her own business by saying, “I decided during the course of working for someone for the first time in my life that I hated it and decided that I needed to be my own boss.” She continued to explain that after starting her company in an unrelated industry, she was approached by a large contractor about her ability and willingness to expand to promotional products. She stated, “For the next two years I partnered with this guy ... to do promotional products and we filled several of the contracts for [a firm] until they went to a larger management firm.” [#30]

- The non-Hispanic white female owner of a WBE-certified goods and services firm said that she started out as a salesperson for a medical supply company but grew tired of traveling so much, and thought “What can I do? I can’t be doing this forever.” She said that she and three friends came together to start the business, though over time she became the sole owner. [#23]
- The non-Hispanic white female representative of a professional services firm said the company was founded because the owner “had previously been involved with some vision systems and wanted to develop that further.” [#84]
- The non-Hispanic white male owner of a construction firm said that he moved to Pennsylvania to start his own company after his New Jersey employer retired. He stated, “I left two years ago [and] went to do some other work, [and tried] some different avenues for myself. [However], different things happened along the way ... and it finally dawned on me

that very few guys are going to want to hire a guy who is 50 years old ... and pay me what I'm worth." [#51]

- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm said that she started working in the construction industry while in college. After graduating, she said that she took a full-time job with a construction company and worked a variety of positions for 10 years. When asked why she started her own company, she said that she saw a need in the local market for diversity in general construction, and a need for quality builders in the small and medium-sized project range. [#61]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that her background is in procurement for government agencies. She said that she started her business because she had a lot of interest from people wanting to start businesses. She said, "[People] would come to me, asking me about business plans [and] asking me about completing different forms, and what they should do as it relates to structuring their company" She added, "That's pretty much how it started." [#18]

The same business owner went on to say, "This is actually a second attempt at doing this type of business. Since the first one, the company kind of grew faster than I was prepared for At the time, I didn't realize how many people were really interested in small business and how many people would really call upon me. So, I grew faster than I was prepared for ... so I decided that if I did it again, I was going to go back to school. I was going to have the relationships I needed, and [I was going to] be more knowledgeable." [#18]

She also said that she went back to school and "got a bachelor's and master's degree, [and] started teaching some of the things that [she] consult[s] on." [#18]

- The Black American male owner of a construction-related firm reported attending Penn State as a microbiology student. He said that he changed to a civil engineering major when a large prime firm started a program for civil engineering students at Penn State. Having his degree in civil engineering and experience with large civil projects, he reported that he decided to start his own firm. [#68]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said that she started her business after hearing there were not many DBEs that "had the capacity ... that were doing a good job" in her field. She added, "[I] had a lot of contacts in the industry through my husband, but they had to get to know me as an independent business owner." [#14]
- The Subcontinent Asian American male owner of a goods and services firm stated that he started his career in the metal industry and owned a metal service center, "so [his current firm] was started as a side business." However, he said that he no longer owns his original business. [#15]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that 30 years ago she started her business because she saw the potential for growth in her region. [#07]

- The Black American female owner of a WBE- and SDB-certified goods and services firm reported that she worked in corporate America for 10 years prior to starting her business. She commented that she obtained a contract for cleaning services shortly before starting the firm, which she officially started after being laid off from her corporate position. [#53]
- The Subcontinent Asian American male owner of an MBE-certified professional services firm reported that he worked in the IT industry for 38 years. He said that he started his own company in his home country in the 1980s before moving to the United States in the late 1990s to join a partner's IT firm. He added that he started his current business almost 15 years ago. [#21]
- The Black American male owner of an MBE- and SDB-certified professional services firm said that his company is a "spin-off" of another company that he started in 1993. He added, "I felt the future of our business and growth would, and should, include expanding ownership to the employees. Since my former partner didn't believe in that ... we decided to separate [the] business." He said that his present company started in 2002. [#36]
- The non-Hispanic white female owner of a WBE-certified professional services firm stated that she has been in business for 23 years and had gotten divorced shortly before starting the firm. She noted that she had previous working experience in retail, and said, "[I] decided I would start my business in my basement" She said that her children and mother helped her in the early days of her business. [#04]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that she worked as a geologist in engineering consulting and found the work "fun [and] cool." She said that she then decided "to do [it] for a living." [#10]
- When asked how his business started, the non-Hispanic white male veteran owner of a professional services firm said that he was sole proprietor of a company in California before starting his current business two years ago. He said, "I would like to consider myself an entrepreneur I spent [over 20] years in the military [and] actually had [real-estate related business] when I was stationed in [the South]. That was purely ... by chance that I even got into [this industry]." He added, "I got [a] distant learning course [and] I took it. I passed all the tests and ... became certified." [#74]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that he worked with commercial clients initially. However, he said a lot of the companies had more expenses than revenue, so he decided instead to focus on government contracts. [#28]
- The Black American male owner of a DBE- and MBE-certified construction firm said that winning a small business development competition helped spur him to start his own business. [#13]
- The non-Hispanic white female owner of a WBE-certified construction-related firm worked for a large corporation for over 30 years and knew the plumbing industry because of her husband. She said, "My husband was a plumber and many of our friends were plumbers I

put that out there, if I started a business would it be possible for me to get people to come to work for me.” She said that since the firm is a union shop she needed to talk to the union leaders to ensure that she could get workers for her new business, and they agreed that she would find reliable union employees. [#17a]

- The Black American male owner of a DBE-certified goods and services firm said that he originally ran a clothing company and was interested in supplying. He said, “Basically, I started ... a t-shirt and apparel business. [I] was working to try to sell to PennDOT and [an equipment company]. That's when I got my company DBE-certified and come to find out that 80 percent of the contractors you see working on the highway, they are contractors and prime contractors, they're not employees of PennDOT. PennDOT didn't have any bearing on who they purchased their material from” He went on to say a business mentor suggested that he get into flagging, and commented, “The light bulb just kind of went off. I just pursued it.” [#20]
- The Black American male owner of an MBE- and SDB-certified goods and services firm said that he formed the company in 2005 after being laid-off from a job in corporate America. [#52]
- The Hispanic American male owner of a construction firm reported that he gained experience in the construction industry before starting his own firm. He said that the firm he was previously working at was also minority-owned. After gaining experience at the firm, he said he finally considered starting his own business, and commented, “Even my supervisor told me, 'Okay, you have too much experience here ... time for you to go out and try to do something by yourself.' He gave me the push.” [#49a]
- The non-Hispanic white male owner of a professional services firm stated, “In 2011, I was contracted as an independent representative for [an engineering company], and it opened my eyes to be an independent [representative]. [It was] all the facets of being a 1099, not an employee but a contractor. And I was very successful the first three years and decided to incorporate in 2014.” [#70]

Some business owners reported that they inherited or work for a family-owned business.

[e.g., #32, #69, #84, Avail #101] For example:

- The Black American male owner of an MBE- and SDB-certified construction services firm said that his company started as a family business. He said that his father started the business by purchasing several trucks and “[supplying] the aggregate” for a highway project. He indicated that they’ve been in business for over 40 years. [#27]
- The Black American female owner of a DBE- and SDB-certified professional services firm described her company as a family-owned business. She stated, “I started the company in ‘95 because I had worked in several positions previously, and [in] my last position I was just really unhappy I had already been doing some consulting on the side ... [so I] got incorporated in 1998.” She commented, “I felt like the worst thing that could happen [was] that I would have to get another job ... [and that] wasn't something that I couldn't change.” She said that her first client was a “big health care organization.” [#32]

- The non-Hispanic white female owner of a LGBTBE-certified professional services firm said that the business has been in the family for three generations. She stated, “My father owned it and it was a family business. When he wanted to retire, I just took over.” She added that she has been with the company for 38 years, originally starting out as a salesperson. [#41]
- The non-Hispanic white female owner of a WBE-certified construction firm reported that she took ownership of the 40-year-old company eight years ago, after it became a “troubled asset” near bankruptcy. She said the previous owners, one of whom was [a family member], “didn't know how to run a business.” [#22]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm reported that a family member started the firm in the late 1960s. She said that she joined the company in a clerical position and eventually became vice president. She went on to say that she bought the business after her relative retired in 1996. [#58a]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “I’m the second generation of my family in this business. I came into the business as marketing manager in 1990 and ... learned about the other operational aspects of the business over the years.” [#81]

Others reported no previous experience in their chosen industry. For example, the non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm reported that although she and her business partner had no prior experience in the industry, both “were looking for something creative to do.” She added that “[her partner] was not happy with what she was doing” before starting the firm. [#31b]

Types of work that businesses perform. Interviewees described the types of work that their firms perform. The study team interviewed 31 construction firms, 43 firms providing professional services, and 12 firms supplying goods and services. In addition, four interviews were conducted with representatives of business associations that support disadvantaged firms across different industries. Interviewees also discussed how their firms have changed the kinds of work they perform over time, and in response to evolving market conditions.

Some interviewees indicated that their companies had changed, evolved, or expanded their lines of work over time, or conducted a wide-range of services. [e.g., #12, #49a, #60, #74, PT#16a] For example:

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that the company provides engineering consulting services for infrastructure projects. He added, “[We] started off offering geotechnical engineering ... [but] today we offer quite a range of services.” He said they offer geotechnical, drilling, surveying, environmental, and civil site design services. [#09]
- The Black American male owner of an MBE- and SDB-certified construction company stated, “Our firm has evolved from a combination of self-performing trade contracts and construction management to now totally a construction management firm.” [#37]

When asked to describe the growth of his firm, the same business owner said, “It’s a family-owned construction business, started [in the 1950s]. The firm has grown predominantly through the private sector. My experience has been heavily private sector through six states.” [#37]

- The non-Hispanic white male owner of a construction firm said that his company does residential, commercial, and municipal work as a general contractor. He said they also specialize in the historic renovation of homes and working with large timber. [#75]

When asked to describe the growth of his firm, the same business owner stated, “I’ve grown not first in dollar amounts, but in the number of employees. I have less now, [but] when I started my business 11 years ago I had six employees [It’s because] I actually hire less now [and] use a tremendous number of subcontractors.” [#75]

- The non-Hispanic white male owner of a construction firm reported that he works as a civil/structural contractor. When asked about his firm’s services, he stated, “[We do] anything from foundations to concrete, to ironwork [and] general contracting services, [and] design-build services. That’s what we do.” [#85]
- When asked about the growth of her firm, the Subcontinent Asian American female owner of a WBE-certified professional services firm stated, “I think like any other business, we started in the basement of our house.” She explained that the business began with just herself and her partner, but that it has slowly grown over the past seven years. [#44]
- When asked about the growth of her firm, the Black American female owner of an MBE- and WBE-certified professional services firm said it has been “sporadic.” She explained, “I’ve had from almost a \$7,000 project a month to a \$2,400 [project], so it’s been very sporadic. Part of my challenge also probably has to do with the fact that I’m in school full time.” [#18]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that his company has provided testing and monitoring services, including assessments of environmental sites, since its founding in 2000. He said the firm’s services include designing projects in compliance with existing regulations for the removal of hazardous materials from buildings and worksites. [#43]
- Regarding his company’s growth, the non-Hispanic white male owner of a construction services firm stated, “We used to do a pretty decent amount of work, and then the recession knocked us down pretty good. [However], we’ve seen it tick up in the last couple of years.” [#39a]
- The Black American male owner of an MBE- and SDB-certified construction services firm said that his company offers heavy highway maintenance, draining, mechanical systems, sheet metal insulation, and other construction services. [#27]

- The Black American male owner of an MBE- and DBE-certified construction supply firm said the work his business performs includes “heavy highway with PennDOT,” and “supply [for] bridges [and] new roadways.” [#06]

The same business owner added, “[We also have] a masonry department that sells accessories for masonry and brick work ... to general contractors, which can be anything from a window to a door ... roof trusses ... insulation [and] general building materials.” [#06]

- The non-Hispanic white female owner of a WBE-certified specialty contracting firm said that her firm’s services include “asbestos abatement, lead abatement, mold abatement, PCB removal, mercury floor removal, and interior demolition.” [WT#05]
- The Black American female owner of a DBE- and SDB-certified construction services firm reported that her plans are to expand her firm into other related industries. [#01]
- The Black American male owner of a DBE-certified goods and services firm said that he founded the company three years ago. He said the company offers flagging training and equipment, and heavy highway traffic control. He added that the business is just starting enter the field of line striping. [#20]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said that her company provides electrical construction supplies, such as lighting and gear, to electrical contractors. She said that she considers the company a “full service firm” because they also offer project management, price shopping, returns, and stocking services to their clients. [#14]
- The Black American female owner of a WBE- and MBE-certified professional services firm stated, “We provide logoed items. Anything from pens to the more technical stuff like ear buds, memory sticks, phone wallets We can put your logo on virtually anything that is in ... retail.” She elaborated, “I’m a distributor. Any place where FedEx or UPS goes, that’s where we can service. The items get drop shipped to the customer. I don’t see the items at all.” [#30]
- When asked what products and services his firm offers, the Black American male owner of an MBE- and SDB-certified professional services firm stated, “We offer financial and benefits consulting services. [Our] areas of focus are health and welfare benefits consulting, retirement plan and investment advisory work In 2008, we started to offer actuarial services as another service area.” [#36]
- The non-Hispanic white female owner of a LGBTBE-certified professional services firm services firm said, “Primarily we’re a promotional products business We do have a kind of a small add-on service where we’ll talk to people about their marketing services, writing a business plan, looking at promotional strategy, and some marketing strategy.” She added that 90 percent of the business is doing promotional products and 10 percent is consulting. [#41]

- Regarding services his firm performs, the Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said they do everything in IT from Tier I support to project management, including helpdesk, networking, quality assurance, and business analysis. He added that they provide solutions and staff augmentation to government entities primarily, and secondarily to private firms. [#28]
- The non-Hispanic white female owner of a WBE-certified professional services firm stated that her firm offers marketing and graphic design services to businesses across the country. She added that her firm works primarily in Western Pennsylvania and New York. [#04]

The same business owner said that she plans to expand her business into plastics manufacturing and that she is currently looking at manufacturing space in Pennsylvania. [#04]

- When asked about the type of work his firm performs, the Hispanic American male owner of an SDB- and MBE-certified professional services firm stated, “We do planning ... and physical planning, and architecture. That means that we engage with some clients very early in the process by which they're trying to decide what ... their needs [are] for their projects.” [#76]

The same business owner continued, “For example, we're doing some work now for [a] charter school, so we're helping them understand the program of spaces [and] what kind of spaces they need for the new school. We're helping them evaluate an existing building that they're looking to purchase so they know what they [can] do.” [#76]

- The Black American female owner of an MBE- and WBE-certified professional services firm said that her company offers innovative consulting, speaking, and training services that are focused on diversity for job seekers, entrepreneurs, and organizations. [#18]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm reported, “After September 11th [2001], we saw rapid decline in our business and at the consumer level. So, then we ... switched gears.” [#31b]
- The Hispanic American male owner of a construction firm stated that his business is focused on industrial fabrication, custom machine work, and metal art. He added, “I offer interior and exterior decorative art. It could be a standalone [thing] or something functional. Also, I also offer ... machine improvement[s]. And pretty much anything that can come up to mind.” [#64]

The same business owner continued, “I'm a problem solver. I can say that. That's ultimately what I can do, mostly. That would be art and extra I work to manufacture equipment, as far as ... cardboard machines, corrugators, even metal working equipment. Metal tubing, like forming machines ... [a] cast iron foundry. So, I work with a lot of different types of equipment.” [#64]

- The non-Hispanic white male representative of a goods and services firm stated that his firm has expanded into outfitting vehicles for commercial and government purposes, and that this has made them more competitive locally. [#72]

Many businesses reported stable work types or little or no change in the type of work they do. [e.g., #12, #26, #55, #56] For example:

- The Black American male owner of a DBE-certified construction services firm said that his firm offers mechanical contracting services. He added that they are bonded and insured, and that they work in commercial, heavy residential and light industry mechanical contracting. He said the firm focuses mainly on plumbing and HVAC systems. [#02]
- The non-Hispanic white male owner of a construction services firm reported that his company is a commercial landscaping firm that offers “a dump truck hauling service for commercial landscaping and commercial projects.” He said that he founded the company 11 years ago. [#88]
- The non-Hispanic white female owner of a WBE-certified construction firm said that her company offers “commercial, institutional, and industrial HVAC.” She said that she took over the business eight years ago. [#22]

When asked about the growth of her firm, the same business owner said they have been growing “25 percent to 30 percent per year,” though it still hasn’t rebounded to where it was before she took ownership. She explained, “When I bought the company, we were doing probably about \$18 million in revenue and losing a ton of money. So, the first thing I had to do was ... figure out where we were bleeding, and then I got rid of all of the things that didn't make money and focused on [what] did.” [#22]

- The male representative of an SDB- and VBE-certified consulting services firm indicated that their work type has remained stable. He said the firm is a “staffing and a solutions firm,” and added, “We are especially focused on IT, and I’ve been driving [a] ... pursuit to do business with the Commonwealth for two years [with no success] We’re especially well-practiced with cybersecurity resources and deliverables in that area.” [PT#09]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that her firm provides environmental and geotechnical drilling services. [#10]
- The non-Hispanic white male representative of a professional services firm said the firm has offered “customer support, on-site analysis, and IT services” for over 30 years. He said they focus on “document management,” and added, “We not only write our own software, but we now have started to resell in the last five or six years. We started to resell other people's software, still in the same discipline [of] document management and capture.” [#87]

Regarding the firm’s growth, the same business representative said, “It [was] slow during the 80s, [but] exploded up to 150 employees in the early 90s Then, it gradually went down to about 30 [employees] in the 2000s. Now for the last decade, it’s been around 12

[employees]. It's been a much better environment the last two years, [and] it's much better than it has been for at least a decade." [#87]

- The Subcontinent Asian American female owner of a WBE-certified professional services firm said that her company provides architectural services including interior design, urban design, and procurement-related work. She added that the firm can provide services for all phases of architecture, including schematic design, feasibility analyses, and construction administration. [#44]
- The Black American male owner of an MBE-certified professional services firm said that his company specializes in corporate governance and restructuring, fiduciary services, and dispute analysis. He went on to say that the firm's clients include leading corporations and law firms. [#34]
- Regarding the type of work his firm performs, the Hispanic American male owner of an SDB- and MBE-certified professional services firm stated, "We primarily do engineering design of buildings and structures." He added, "We discovered that [*Housing and Urban Development*] very rarely had their budgets clipped. So ... probably 100 percent of our federal work is HUD-based We [also] represent some of the local municipalities as township engineers, and things like that." [#77]
- The non-Hispanic white male veteran owner of a professional services firm said that his company works in engineering, design, and construction. He explained, "We are a design-build [firm]. We do everything from the ground up. So ... all the designs we do are everything except structural. We don't do structural engineering because there's too much of a liability We've done a lot of architectural layouts, and then we would pass them to an architect to finalize." He added, "Our designs are generally anything electrical, mechanical, HVAC ... plumbing, sprinkler systems and outdoor lighting." [#48]

When asked about the growth of his firm, the same business owner said they had to "cut back" over the past two years. He said, "We have done quite a few projects [since we opened almost 20 years ago], and back in 2014 we took on a project which was a complete design-build and remodeling of a four-story building. We did all the designs and they went through the city with not one red mark [or] comment. It got fully approved. That was a big job that we did, and three-quarters of the way through the job the owner ran out of money and it ended up costing me \$850,000. So, that's [why in] last two years we cut back to just my son and I because we're still trying to make up those differences." [#48]

- The non-Hispanic white female representative of a professional services firm reported that the company distributes specialty products. She added, "Nobody does exactly what we do We try to be a one-stop shop where we actually do some of [the] work for the customers that involves the [products] that we sell." [#84]

When asked to describe the growth of the firm, the same business representative said, "[The firm has] grown slower than expected Everything kind of started slowing down [in 2016] but it has picked up speed last year and this year, so we're going upward [now]." [#84]

- The non-Hispanic white male owner of a construction services firm said that his company offers mainly “heating, ventilation, air conditioning, and plumbing services.” [#39a]
- The Black American female owner of a DBE- and SDB-certified professional services firm said that her company performs marketing and PR services. She added, “We also work with corporations to help them ... get their message out to their targeted communities. We’ve been doing that for the last 18 years.” [#32]
- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm reported that her firm has provided general construction, design-build, and construction management services for about 15 years. [#61]
- The Black American male owner of an MBE- and SDB-certified goods and services firm said that his company provides hauling services, including junk removal, e-waste removal, and post construction haul-offs. [#52]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that her company is “one hundred percent manufacturing.” She added, “[We manufacture] manholes for sanitary sewer systems [and] storm water management systems ... [and] retaining walls.” [#07]
- When asked about the type of work his firm performs, the non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said, “I sell promotional products like embroidered and print shirts and hats, and calendars for corporate recognition.” [#29]
- The non-Hispanic white male owner of a professional services firm reported that his firm functions as a wholesale distributor for oil spill supplies and does work in environmental recovery. He explained, “[I] work with some other products that neutralize oil and oil stains, and stuff like that. And so, our main market at first was the towing industry because they’re the ones who respond to a lot of oil slicks on the roadway. [If] that’s not taken care of properly, where does it go? It runs off the roadway into the streams, which ends up in the rivers, which affect the fish and wildlife. So, all that’s kind of important to me.” [#70]
- The Black American female owner of a WBE- and SDB-certified goods and services firm said that her firm provides cleaning, janitorial, and post-construction clean-up services. [#53]
- The Black American female owner of an SDB- and WBE-certified professional services firm said that her firm offers full accounting services, including audit services. [#35]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that the company offers manufacturing of rebar and paving dowel baskets. [#25]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that her firm offers “the full range of human resources [services] because [her] plan was to always work with other HR experts based on what the client needed.” She said that she also specializes in diversity and inclusion, and added, “I’ve had diversity experience for 25, 30 years.” [#11]

- The Black American male owner of an SDB- and LGBTBE-certified professional services firm said that his company develops software and produces digital products. He stated, “[We specialize in] cloud-based applications, specifically around data collection, data visualization.” [#38]
- The non-Hispanic white female co-owner of a construction firm stated, “Sometimes we work for the same quarry every year ... we do a lot of independent or our own calls, but more so now lately just the same quarries.” [#47b]
- The non-Hispanic white female representative of a trade association said their mission is to improve quality of life in an Eastern Pennsylvania region. She said they have close to 30 councils and chambers under their umbrella. [#71]

Regarding the services the organization provides, the same trade association representative said, “We do a lot of professional development workshops, [and] some personal development workshops. We do a lot of networking mixers [too] The basic gist of it is that we provide a forum where people can connect and network and grow their business A lot of people participate for that reason, they want the visibility. Then there’s folks, like employees of the major companies, that just want to get involved because they want to give back to their business community” [#71]

- The non-Hispanic white male representative of a trade association said they are based in Allegheny County and represent over 20 building trade unions and affiliated contractor associations. He said they have been operating since 1999 with a focus on the building trades, and provide “the forum for positive labor, management, and community relationships, and [foster] a cooperative and productive climate for regional commercial construction development.” He added, “The guild has become more about the recruitment, workforce development, and ... the issues [affecting members].” [#83]
- The non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm said that her firm has provided legal services “geared toward the LGBT community” for about 10 years. She added, “[We’re] a general practice law firm The things that I would not do [are] criminal defense, any sort of traffic violation, DUI, bankruptcy, [things like that].” [#33]

The same business owner continued, “Immigration is a large one, now that people can marry. And the things that we would do in-house would be corporate business law, [residential] real estate ... wills, trusts ... adoptions, and then divorce. Now that we have same sex marriage, we have same sex divorce. So, that’s a big one.” [#33]

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm said that her company provides non-IT personnel staffing and recruiting services. She indicated that their line of business has remained consistent since the company’s founding in 1969. [#81]
- The non-Hispanic white male owner of a LGBTBE-certified professional services firm reported that his company offers “high-level IT consulting [with] a small bracket of

experienced developers.” He said they have performed this type of work since the firm was founded over 20 years ago. [#24]

- The Hispanic American male representative of a trade association reported that he has held a leadership position in the association for over five years. He said the association “is an organization whose mission is to advocate and advance on behalf of Hispanic businesses” in the Allegheny County area. He said the association also acts a conduit for the Hispanic American community in general. [#86]

The same trade organization representative later said, “The key focus of the organization is to connect small businesses with buyers ... primarily our corporate members.” [#86]

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm said that her company provides offset and digital printing, including brochures, catalogs, newsletters, and the mailing of printed goods and promotional products. [#58a]
- The Subcontinent Asian American male owner of an MBE-certified professional services firm reported that his company offers IT consulting services and software services. He added that he founded the company almost 15 years ago. [#21]

Employment size of businesses. The study team asked business owners about the number of people that they employ and if their employment size fluctuates.

The majority of businesses had between one and ten employees.

- The non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said that he is the only employee of his firm. [#29]
- The Hispanic American male owner of a construction firm reported that he is the only employee of his company. [#64]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that she is the only employee of her firm. [#18]
- The Hispanic American male owner of a construction firm stated that he started his firm three years ago and has one employee other than himself. [#49a]
- The non-Hispanic white female owner of a DBE-certified construction services firm said that her company has only two employees. [#12]
- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm stated that has two employees. [#62]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm reported that his company has several remote, part-time workers. He said this gives the firm the opportunity to be responsive to customers in different areas, and added, “I try to spread people around so that they don't have to do too much travel.” [#43]

- The non-Hispanic white male owner of a construction services firm reported that his company is based in Morrisville and has three employees. [#88]
- The non-Hispanic white male owner of a construction services firm reported that his firm currently has four employees including himself. [#40]
- The Black American male owner of a professional services firm stated that the firm currently has three full-time contracted workers and one part-time employee. [#55]
- The non-Hispanic white male owner of a LGBTBE-certified professional services firm said the company is based in Allegheny County and has five employees. [#24]
- The non-Hispanic white female owner of a WBE-certified construction-related firm said that her company has five employees. [#17a]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm reported that his firm has been in business for 30 years and has five employees. [#77]
- The Black American female owner of a WBE- and SDB-certified goods and services firm said that her company has three full-time employees and four part-time employees. [#53]
- The Black American male owner of an MBE- and SDB-certified goods and services firm said that his company was founded in 2005 and currently has four full-time and two part-time employees. [#52]
- The non-Hispanic white female representative of a professional services firm said the company is based in Southeastern Pennsylvania and has six employees. She said that she has been with the firm for about one year. [#84]
- The Black American male owner of an MBE-certified professional services firm said that his firm has grown to eight employees. However, he noted that the firm's size fluctuates depending on the work they can secure. He went on to comment, "We seem to kind of figure out ways to keep the lights on." [#34]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm reported that his company has been in business for two years and has 10 employees. [#76]

Eight interviewees reported that their businesses had between 11 and 25 employees.

- The Black American male owner of an SDB- and LGBTBE-certified professional services firm reported that his company has 12 employees. When asked about the growth of his company, he stated, "We've grown to meet the needs of specific opportunities that we've won. For instance, I took on the first employee in 2007 and then 2008 happened, so we had to really ... rethink our business model, and we hired people who could help us with ... this new path." [#38]

The same business owner continued, “[In] 2011 we won our first major contract with [a federal department], and we again staffed up significantly to meet that opportunity.” He attributes their 8(a) certifications as being a key factor in their growth. [#38]

- The non-Hispanic white male representative of a professional services firm reported that his company has 12 full-time employees. [#87]
- The non-Hispanic white male owner of a construction firm said the firm is based in Allegheny County and has 12 employees. [#85]
- The Subcontinent Asian American male owner of an MBE-certified professional services firm reported that his firm is based in Allegheny County and has 14 employees. [#21]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that her company has 15 employees. [#25]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that her firm consists of 15 employees. [#07]
- The Black American male owner of an MBE- and SDB-certified construction company said that his firm has 15 employees. [#37]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm reported that her company has 18 full-time employees and six part-time employees. [#58a]

Five interviewees reported that their businesses typically had between 26 and 50 employees.

- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm stated that her firm currently has about 30 employees. [#61]
- The Black American male owner of an MBE- and SDB-certified goods and services firm reported that his firm has 47 employees. [#60]
- The non-Hispanic white female owner of a WBE-certified construction firm reported that her company has 48 employees. [#22]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that his company has 50 employees. [#09]
- The non-Hispanic white female owner of a WBE-certified specialty contracting firm said, “Throughout any year we employ between 35 and 80 people.” [WT#05]

A few businesses had more than 50 employees.

- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm stated that her firm currently has 70 employees. [#56]

- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that his firm employs 88 full-time workers. [#28]
- The non-Hispanic white male representative of a goods and services firm indicated that firm has approximately 200 employees. [#72]

A number of companies reported that they expand and contract their employment size depending on work opportunities or market conditions. Some reported using subcontractors, when needed, to increase resources. [e.g., #48] For example:

- The Black American female owner of a DBE- and WBE-certified construction firm stated that her company employs three or more employees, depending on the projects. [#63]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that his company's growth over the years has been "sporadic." He added, "It depends on the work load Looking back at it I could have grown a lot larger, but it's always easy to look back." He said "it was rough" in the beginning, but now he sees "steady growth." [#09]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said that his business started with him as the only employee and grew from there. He added, "We went from a one room ... in Greensburg, [and] graduated from that to a 3,500 square foot facility here on Route 30." He said that he recently bought more property for a large warehouse and office building, and commented, "I'm pretty proud of what we did." [#06]
- When asked about his company's growth since its founding, the Black American male owner of a DBE-certified construction services firm said that his firm had great initial success and growth. He said, "[We] shot out of a cannon We started out with a projection of \$500,000 and did \$1.3 million." [#02]

The same business owner continued, "We started out the second year saying, 'If we could just do what we did last year' And we've met that goal for this year." He said the firm reached its end-of-year goal in October of this year, and commented, "Anything we get from now until December is just icing on top of the cake." [#02]

- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that she founded the company in a small town before building their current site in Western Pennsylvania. She said, "At first it was pretty hard. I was out on the road a lot building up the clientele We have grown as this area has grown. It's been incredible." She added, "We've just exploded." [#07]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm said that her firm has grown a lot over the past 16 years. She explained the firm hired its first employee nine years ago, and said, "That was really a necessity because of the [client] As they grew, the opportunity for me to grow the company was there too Their needs from a communication, marketing, advertising standpoint keep getting bigger

and bigger, so when they do, the natural response is to fulfill that need and then bring on more people. That's really how I've been able to grow." She now employs anywhere from 15 to 20 employees at a given time. [#19]

- The non-Hispanic white female owner of a WBE-certified construction-related firm said that her firm has grown over the years. She stated, "Based on what the banks have told us, we've done an excellent job." [#17a]
- The non-Hispanic white female owner of a WBE-certified professional services firm indicated her firm expands its employment size with new work opportunities. She said, "[My former colleagues] started throwing work at me, so three months into being in business I had to buy another drilling machine. [I also had to] hire two more guys ... within six months. I already had two crews out there." [#10]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that she has been happy with the growth of her business over the past decade. She explained, "I don't know if I would say it has grown every year, but I've been very pleased. I started my firm during the economic downturn, and I really didn't concern myself with that because I believed in my vision" [#11]
- When discussing the growth of their firm, the non-Hispanic white female co-owner of a construction firm stated that the company started out small, with one truck. She added, "Then we actually worked up to six trucks, seven if you include the single axle" She said that around 2007, during the economic downturn, the company downsized to one truck. She mentioned that now the company is back up to three trucks. [#47b]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said that he keeps his firm "lean," and hires staff when he has projects in the pipeline. He said that he looks for long-term projects because "the money would be there" for him to hire more permanent staff. [#08]
- The Asian Pacific American female owner of an MBE and WBE-certified professional services firm said that her firm is currently decreasing the number of employees because they recently lost a state contract that they had serviced for 16 years. [#69]

Some interviewees said that their firm changes in size seasonally. For example:

- The Black American male owner of a DBE-certified goods and services firm said that his company is has anywhere from three to 50 employees, depending on the season. He went on to say that in the beginning, his firm grew too fast. He described it as "out of control," and added, "That was a lesson I've learned That was very high stress, trying to learn it at that level, of 50 employees. That's not my sweet spot. I had to kind of learn through trial and error. [#20]
- The Black American female owner of a closed construction services firm said the number of employees working for her firm changed seasonally, ranging from one to 10 employees. [#26]

- The Black American male owner of an MBE- and SDB-certified construction services firm said that his company has one to 40 employees, depending on the season. [#27]

One interviewee reported that patent theft hindered his firm from growing. The Asian-Pacific American male co-owner of a professional services firm explained that his firm has seen zero growth in the years that they have been in business because the car industry uses his patents without compensating him. He stated that this caused his firm significant financial loss. [#42]

Capability of businesses to perform different types and sizes of contracts.

Interviewees discussed the types, sizes and locations of contracts that their firms perform. Some interviewees experienced barriers regarding bonding, cash flow, and staffing.

- The Black American male owner of a DBE-certified construction services firm said that his firm works on contracts ranging from \$5,000 to \$500,000. He said they were recently contracted to do their “largest job to date,” which is over \$400,000. [#02]

The same business owner said, “It’s a big leap, a big risk, but we’re working with a company ... and we’ve established a relationship with them and we have some terms and conditions that are being met as far being able to maintain our cash flow That is crucial to us small business guys, especially us disadvantaged businesses. Cash flow is king.” [#02]

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “Most of the contracts where we’ve bid as a prime [are] relatively small in scale. If a project’s too broad and has ... a high level of deliverables, other than [recruitment], then we might not be ... bidding on that.” [#81]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm reported that their accounts range from \$10,000 to \$150,000 annually. [#58a]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm stated that the firm performs contracts that gross between \$10,000 and \$7 million. [#56]
- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm reported that her firm generally takes on construction projects ranging from \$100,000 to \$10 million. [#61]
- Regarding the size of contracts her firm performs, the non-Hispanic white female owner of a WBE-certified professional services firm said, “[We do] \$900,000, maybe a little over a million dollars in a good year. In a bad year I do \$700,000 or \$800,000.” [#10]
- The non-Hispanic white female owner of a LGBTBE-certified professional services firm explained that the size of contracts is a barrier for her firm. She said, “[Large companies] see my financials, and they say, ‘[You’re] not big enough to handle our orders ...’ It would be nice if there was a way to give some of the smaller orders ... to diversity people” [#41]

- Regarding her organization’s members, the non-Hispanic white female representative of a trade association said, “We have anywhere from big business ... to microbusinesses I work with our mission-related councils [such as] women’s business [and] small business. We do events in the community and people do hear about us and then decide they want to join” She added that the association has various member councils, including an LGBT business council and an African American business council. [#71]

One business owner reported that his firm avoids “very large projects.” The Subcontinent Asian American male owner of an MBE-certified professional services firm stated, “We do not target very large projects because we don’t want to get involved with something we can’t do justice.” [#21]

Many firms reported working on contracts throughout Commonwealth of Pennsylvania. Some firms worked only in their region while others reported working statewide and out of state.

- The non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said that his firm is headquartered in Pennsylvania with clients statewide and in New York and New Jersey. [#29]
- The non-Hispanic white male owner of a construction firm reported that the firm is licensed to work in Pennsylvania, Ohio, West Virginia, Virginia, Maryland, Texas and California. [#85]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that his company works statewide with offices in Harrisburg and Pittsburgh, and in Orlando, Florida. [#09]
- The Black American male owner of an MBE- and SDB- certified goods and services firm stated that his firm works primarily in the Mid-Atlantic region, providing products for Virginia, Maryland, and Pennsylvania, as well as a couple of other areas in the United States. [#60]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm stated that her firm does most of its private sector work for a few private firms in the Commonwealth and has also completed two large public sector projects out of state. [#31a]
- The female owner of a DBE- and WBE-certified construction supply firm said that her firm works statewide and in neighboring states. She added, “We’re certified in various states ... and we’re serving other areas.” [PT#16i]
- The Asian Pacific American female owner of an MBE and WBE-certified professional services firm stated that her firm services several counties in the Commonwealth, and also the federal government. [#69]
- The Black American female owner of a DBE- and SDB-certified professional services firm indicated that her company performs work statewide. She said that they are headquartered in Philadelphia. [#32]

- The non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm said that her firm has locations in Philadelphia and in New Jersey. She indicated that most clients are in Eastern Pennsylvania. [#33]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm reported that his firm is based in Schuylkill County and performs work statewide. [#77]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm reported that his company is headquartered in Westchester but works predominantly in the Philadelphia area. [#43]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm reported that his firm is headquartered in Philadelphia and does most of its work in Southeastern Pennsylvania. [#76]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “We work in D.C., but [the Southeastern Pennsylvania area] is primarily where we are.” [#38]
- The non-Hispanic white female representative of a professional services firm said the company is based in Southeastern Pennsylvania and serves the entire United States. [#84]
- The non-Hispanic white male owner of a construction services firm reported that the firm does most of its work “within 50 miles of [their only] office ... in West Chester.” [#39a]
- The non-Hispanic white female owner of a WBE-certified specialty contracting firm said that her firm is located in Exton and services parts of Eastern Pennsylvania. [WT#05]
- The non-Hispanic white male representative of a goods and services firm stated that his firm has one location in Eastern Pennsylvania. He indicated that they work exclusively in that region. [#72]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that her firm works in Southwestern Pennsylvania, Ohio and West Virginia. [#07]
- The non-Hispanic white female owner of a WBE-certified professional services firm works primarily in Western Pennsylvania and New York. [#04]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that her company is based in and primarily services Western Pennsylvania. She said that her firm also does business in Ohio, Florida, Michigan, Illinois, and South Carolina, and added, “I just now began ... quoting these other states because they want me to work there, and I can get more work in other state[s] than I can in my home state, because the DBE goals are much higher [elsewhere].” [#25]
- The Black American male owner of an MBE- and SDB-certified construction services firm said that his company mainly serves the Erie area. He added that they’ve also served other areas nationwide during hurricane relief efforts. [#27]

- The female owner of a goods and services firm indicated that her firm’s business is exclusive to City of Erie. [PT#14b]
- The Black American female owner of a closed construction services firm said that her firm worked primarily the Erie area, where the firm was headquartered. [#26]
- The minority male owner of a contracting firm said they work on public and private projects in the Pittsburgh area. [WT#08]
- The non-Hispanic white male owner of a LGBTBE-certified professional services firm reported that his company serves the Pittsburgh area. [#24]
- The Black American male owner of a DBE-certified goods and services firm said that his company works primarily in the Pittsburgh region, though they have had projects statewide. [#20]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that her company is based in Pittsburgh and works primarily in the Pittsburgh region. [#18]
- The Black American male owner of an MBE- and DBE-certified professional services firm said that his company is based in Westmoreland County and has two employees. He indicated that the firm works exclusively in Westmoreland County. [#16]
- The non-Hispanic white female owner of a WBE-certified construction firm said that her company is based in Pittsburgh and operates throughout Western Pennsylvania, Ohio, and West Virginia. [#22]
- The non-Hispanic white female owner of a DBE-certified construction services firm said that her company is based in Pittsburgh and works throughout Southwestern Pennsylvania. [#12]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said that her company works in Western and Central Pennsylvania. [#14]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated that 90 percent of her firm’s business occurs within 90 miles of her headquarters in Central Pennsylvania. [#57]
- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm reported that her company is headquartered in Central Pennsylvania and works primarily within a 90-mile radius of her firm’s headquarters. [#61]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm said that her company works primarily in Central Pennsylvania and for the State of Maryland. [#81]

- The female owner of an SDB- and DBE-certified professional services firm said that her firm does “planning and economic development services” contracts in the Harrisburg area. [WT#06]

A few business owners said that they also work internationally. For example:

- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm stated that his firm primarily performs services in the mid-Atlantic region and a small portion of the Midwest, in addition to two countries in Central America. [#62]
- The Subcontinent Asian American male owner of an MBE-certified professional services firm reported that his firm works nationwide and is based in Allegheny County. [#21]
- When asked about the regions where his firm works, the non-Hispanic white and veteran male owner of a professional services firm said, “We try to stay in Northeastern Pennsylvania. We do not go out of state [for plumbing and electrical work] Engineering-wise we do everywhere. [For example], we’re doing work in Africa right now. I just got a text yesterday about going to Singapore and we have work coming up in Egypt and ... Australia [too].” [#48]
- The non-Hispanic white male owner of a professional services firm reported that the firm is headquartered in Montgomery County. He indicated that they primarily service Southeastern Pennsylvania. [#70]

The same business owner later said that his firm is growing and may soon expand its business internationally. He said, “We’re talking to people in Nigeria, where there’s a huge environmental problem If an oil tanker goes off the roadway and oil spills out, they leave it there And we’ve had some interest in Europe and Canada and stuff like that. So, it’s been growing.” [#70]

- The non-Hispanic white male representative of a professional services firm reported that his company is headquartered in California but has an office in Pittsburgh. He said they have clients worldwide. [#87]

Local effects of the economic downturn. A few interviewees shared comments about their experiences with the barriers and challenges associated with the economic downturn of 2008. For example:

- The Black American male owner of an MBE- and DBE-certified construction supply firm said that his company used to have a location in Pittsburgh. He said that he had to close it in 2008 “when the economy tightened up.” [#06]

The same business owner added that “banks got scared” during the economic downturn. He said at one point he was out of compliance with a loan because he was “overextended” and the bank asked him for a \$150,000 check by the end of the week. He said, “Fortunately, I had the \$150,000 [But], I wonder if I wouldn’t have. I wonder how they were treating small businesses.” [#06]

He said that his firm received a multimillion-dollar state and federal government bailout during that time, and commented, "Nobody ever knocked on this door and said, 'Hey, we know things are tight. We have a low-interest loan [and] a zero-interest loan [for you].' All we did was [tell the government], 'If you guys don't bail us out, we're going to close 30 stores across the country.'" He added, "As a small business you see things like that happen and [know it's] not right." [#06]

- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm reported cash flow and financing difficulties as barriers for the firm's success. He added, "We had very easy access to financing before 2007. After 2008, financing was nearly impossible." [#62]
- The non-Hispanic white male owner of a construction services firm stated, "With the economy the way it was for the past ten years I guess, it's slow" [#40]

Current economic conditions. Interviewees reported a good or improving economy in the marketplace. [e.g., #27, #31a, Avail #78] For example:

- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said current marketplace conditions are "pretty good" and that his industry has experienced "continued growth." He said that his firm has "grown at a substantial pace," though he "would like to grow faster." He added, "The [longer]... [the projects], the more I can grow." [#08]
- When asked about the marketplace conditions in his industry, the non-Hispanic white male owner of a construction services firm said, "[My competitors are] all expanding too. They're all buying a couple new trucks. Over the last year or two, things have picked up [and] it seems as if everyone's steadily growing. I know there's always the big guys in the business who have tons and tons of trucks and equipment, and there's small guys like me who have a couple pieces. I see a few people like [my firm doing] the same thing, and they're expanding their business also." [#88]
- When asked about current marketplace conditions, the Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that his industry is seeing some growth. He explained, "We try to be as broad as possible ... because our business always goes up and down. I think [the marketplace] was plateauing for a while, but I think now it's growing a little. I see that in the amount of business ... we get. I'm sure there's a lot more opportunities to grow." [#43]
- When asked about current marketplace conditions, the Hispanic American male representative of a trade association said, "I think the marketplace depends on what sector you're in We represent businesses of various sizes and types. But the market I don't hear anyone complaining, so the marketplace is good and robust for the most part." [#86]
- When asked about the marketplace conditions in her industry, the non-Hispanic white female owner of a WBE-certified construction supply firm stated that growth in her field "depends on the year." She added, "I have no control over whether someone like [University

of Pittsburgh Medical Center] will have a contract this year.” She said that she does find that companies “are trying to use small businesses, even when they don’t have to.” [#14]

- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm said the current marketplace is “steady in terms of opportunities.” She added, “The economy in our local area is fairly strong. I would also note that while there are a lot of opportunities, it’s still a very competitive market for general contractors, meaning that ... our fees need to be ... low to win work.” [#61]
- When asked about current marketplace conditions, the non-Hispanic white male owner of a construction firm stated, “There’s not many people my size doing the type of work that I do. That’s one of the niche markets we have [2017] was good, [and 2018] and [2019] look fabulous. [2016] was terrible. I think it’s fairly consistent. I don’t know if [my competitors] are seeing growth, but I would say that they probably are. I don’t think they have a choice.” [#85]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm indicated that her industry market is robust. She stated, “There’s always a need for good IT people In the past three years ... we’ve actually grown 200 percent. We had this explosion happen [and] it’s been unbelievable.” [#57]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that she believes the market is currently “very stable” for rebar manufacturers. [#25]
- The Black American female owner of a closed construction services firm reported that the construction industry in Erie is currently strong. She added, “In the last year, there’s \$2 billion worth of new construction planned for the area. Prior to that it was slower, but it’s at a boom now.” [#26]
- The Black American female owner of a DBE- and SDB-certified construction services firm reported that her industry is experiencing a surge now due to increased construction and building in the Pittsburgh and Allegheny County areas. [#01]
- The female representative of a WBE- and DBE-certified engineering firm said, “We have grown to be honest with you We’ve more than doubled [employees], 50 percent every year.” [PT#13b]
- When asked about current marketplace conditions, the non-Hispanic white female owner of a DBE-certified construction services firm said, “[They are] good. I mean, for PennDOT and Turnpike work, it’s good. The opportunities are definitely there.” [#12]
- When surveyed, the owner of a construction business in Eastern Pennsylvania responded, “There’s a lot of industry in Pennsylvania, and it seems to be a favorable atmosphere.” [Avail #12]
- The non-Hispanic white male representative of a trade association reported that the construction industry is “booming” in Western Pennsylvania. [#83]

- The Black American male owner of an SDB- and LGBTBE-certified professional services firm indicated that marketplace conditions are good in his industry. He said, “We’re in kind of this weird space in that most of our work is in D.C., and most of the people who do our type of work are in D.C. as well. So, we’re kind of an anomaly in that we’re located here in [Southeastern Pennsylvania]. There’s some really talented, and some really top-notch firms here that we’re competing [with] for the same work, honestly.” [#38]
- The Black American male owner of an MBE- and DBE-certified professional services firm said that he thinks firms in his industry are experiencing growth. [#16]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said that firms similar to his are also growing because “the economy has continued [to grow] beyond what people thought.” He added, “Our business is very cyclical because it’s related to construction and real estate, [but] this has been a period of a lot of expansion [and] the conditions are really good.” [#76]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said the construction industry is “ramping up” right now, and commented, “It’s been a long time in coming.” [#06]

The same business owner said that he recently hired another salesman and is getting ready to build another warehouse he had been planning on building for over 11 years, before “the bottom fell out of the economy.” He commented, “I feel business is coming back enough to justify this.” [#06]

- The Black American male owner of an MBE-certified professional services firm indicated that the market in his industry provides steady work. He said, “Our work is ... national in scope. Because we’re trying to fix a problem company, it just depends on where that company is located, [which] could be anywhere in the country.” [#34]
- The non-Hispanic white male representative of a small business development organization reported, “There is a huge amount of opportunity at the federal level.” [#46]

One business owner said that projects within their scope of work are limited amidst an otherwise competitive marketplace. When surveyed, the owner of a construction business in Western Pennsylvania responded, “Competition has been abundant, [but] availability of projects within our scope of work has been limited.” [Avail #05]

Some business owners said their industry is competitive, but only because of a large number of unqualified contractors. [e.g., #74] For example:

- The non-Hispanic white and veteran male owner of a professional services firm said, “The engineering is not a problem [for my firm] because we’re not professional engineers and we’re working for engineers we already know ahead of time [and are aware of] their budget] As far as getting work ... we do get a lot of jobs, but what happens is [with] the jobs that we get to bid we’re bidding against people who are working out of the backseat of their car, like moonlighters and things.” [#48]

The same business owner continued, "I probably have \$200,000 worth of equipment in my shop, [and in] the office here alone there's \$10,000 worth of equipment They're not paying that. They're working out of their garage ... When you have people that are doing that, it's very difficult to get projects that are small ones. Sometimes a small job pays more than a big job." He added, "The difficulty of working in Pennsylvania [is that] Pennsylvania does not require you to be licensed to do any work anywhere [and they don't] give you any testing that you have to do They don't require anybody to be competent to do the work, and a lot of them work with no insurance." [#48]

- The non-Hispanic white male owner of a LGBTBE-certified professional services firm said the marketplace in his industry is very competitive due to outsourcing work "offshore." He stated, "There have been so many changes in my industry. With outsourcing ... they decided it doesn't work, then they try it again, [and] it [still] doesn't work. It truly is a very cyclical business. We're going through another change right now, and I'm finding business with people that are tired of having their projects done offshore and ... being returned and not working." [#24]

Some interviewees indicated that current economic and marketplace conditions are poor.

[e.g., Avail #104] For example:

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said marketplace conditions for his industry are "pretty tough right now." He said that his firm has seen its own "backlog diminish" with few new projects on the horizon. [#09]

The same business owner continued, "[I hear] the same thing ... from other consultants, so the market is not that great right now." However, he added, "With the President's new infrastructure bill that he's talking about, I think that could be very much needed and be great for everybody throughout the country." [#09]

- The non-Hispanic white female owner of a WBE-certified professional services firm commented that the marketplace is changing for the worse. She said, "Everybody is going out of business and merging because the big guys are eating up the little guys." [#04]

The same business owner later said it sometimes takes three to five years to get a client. She said, "[This happens] because ... the people [who] are in that position to buy don't want to take a risk with somebody that could jeopardize their position." [#04]

- When asked about marketplace conditions in his industry, the non-Hispanic white male representative of a professional services firm said, "A lot of companies that were similar to us went out of business in the middle 2000s. 2005 through 2010 was a difficult time for people in our discipline and our size Some big companies went under that do what we do. Actually, because we were small and ... had built up a customer base that paid maintenance, we were able to weather the storm." [#87]
- The Black American male owner of an MBE- and SDB-certified construction company stated, "Southeastern Pennsylvania is harder [to work in] than any other place I've ever

worked." He said that he has also worked in Alabama, Idaho, Alaska, Michigan, New Jersey, and Delaware. He went on to say, "The Commonwealth is a very large state. As such, that means the practices of bidding and being involved in work are different in every quadrant ... [from the] Southeast to the Central [and] Western side." [#37]

- The Black American male owner of a DBE- and MBE-certified construction firm described his firm's growth as "slow," and added that he is "trying to do something that's probably never been done before ... [being] one person trying to get into the heavy construction ... in the City of Pittsburgh, in Western Pennsylvania, and Pennsylvania [in general]." He continued, "I'm going into a field where there's not many minority companies." He described his firm as "struggling," and said that he was out of work for six months in 2015. He later noted that other MBE firms have also experienced either slow growth or no growth. [#13]
- The Subcontinent Asian American male owner of a goods and services firm said, "[My firm] has been growing, but [hasn't had] too big of growth." He went on to say that marketplace conditions in the metal services industry are "average to ... below average," and added, "This is the metal industry, and it's been a 10-year metal industry downtrend." However, he did state that the conditions were "getting a little bit better." [#15]
- The non-Hispanic white female owner of a WBE-certified goods and services firm reported that the medical supply field is in flux because of online retailers, and Amazon has just announced that it too will be expanding into that field. [#23]
- The non-Hispanic white female owner of an SDB-certified construction firm stated, "The marketplace is very difficult Well, since [2008] it hasn't been the greatest. This year it looks like there's more opportunities, I would say, in the private sector." [#65]
- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm reported, "The market in this area of Pennsylvania is terrible, frankly [A consultant from my firm] made the observation that this area is just extremely cash poor. And she's absolutely right I think [the community] suffers from being a small city that has not connected itself to the east coast, to the megalopolis of the East Coast. And ... [we talked about] the need to do that for [the community's] survival. Otherwise it's going to shrivel. It does not have a very good long-term economic development option." [#62]

The same firm owner reported, "The marketplace in this area of Pennsylvania is extremely poor [in my industry] [The engineering community] seems to be doing extremely well. But in terms of [my industry], there's little work in the area, and a lot of the work is extremely competitive" [#62]

- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, "Difficulty obtaining work [is] always an issue. [It's a] very competitive professional environment for architects, especially since 2008." [Avail #69]
- The Black American male owner of an SDB- and MBE- certified construction company stated reported that despite the growth of the construction industry in the region,

disadvantaged businesses are not receiving a fair portion of the growth. He went on to say that, “[The Commonwealth] is saying that [disadvantaged firms] achieve at least 20 or 30 percent of the dollars spent that go to this space.” He noted that there has been little growth in the industry so the math does not add up. [#37]

- When asked about current marketplace conditions, the non-Hispanic white female owner of a WBE-certified construction firm said, “The industry is not growing, and the margins are squeezed It's a terrible industry.” [#22]
- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “Obtaining work is a problem. Some companies get 50 jobs per year [while] others get two or three.” [Avail #42]
- When surveyed, the owner of a construction business in Central Pennsylvania responded, “The economy makes it difficult. There's no construction work going on around here.” [Avail #20]
- When surveyed, the owner of a goods and services business in Western Pennsylvania responded, “[We have a] tremendous amount of problem[s] due to the economic decline of the country. It has affected our business.” [Avail #30]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that her company’s growth has slowed because of local competition. She said, “There’s a lot of other companies locally that do what we do, unfortunately.” She went on to say local marketplace conditions are “pretty crappy.” [#10]

The same business owner continued, “The amount of work we do in environmental has completely plummeted because underground storage tank programs are pretty much drying up. The implementation of [Underground Storage Tank Indemnification Fund] was a joke, and [poorly] managed by [former Governor Tom] Corbett.” [#10]

The same business owner said this caused her company to “switch over to” more geotechnical work. She added, “Whenever the gas companies moved in here in the boom a few years ago, it was great. You couldn’t get enough people, enough drilling equipment out in the field. But that’s all dried up now, so we’re all back to scraping along [and] trying to find something to do that isn’t PennDOT work, because PennDOT doesn’t pay.” [#10]

- When asked about marketplace conditions in his industry, the Black American male owner of a professional services firm stated, “It’s not a good marketplace [due to] two things. Number one, there is a total lack of training programs to bring people to the skill level needed Secondly, [regarding] the training programs that we had some years ago, many of those persons have gotten older [and retired]. There was a period when we were training people and we had some companies, but some of those people have gotten older and we’ve lost a number of major MBE, WBE, [and] DBE firms.” [#55]
- Regarding current marketplace conditions in her industry, the non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that she sees “more and

more municipalities [requiring] state-approved products.” She said this frustrates her because the state’s approved products are “not as good” as hers. She went on to comment that the City of Pittsburgh still makes manhole covers “the way they did 60 years ago,” even though “they have all of the sewage going into the rivers.” [#07]

The same business owner later said, “Ten years ago we did more municipalities Maybe three years ago [we sold] less [product for] home building because the market was off.” [#07]

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated that current economic conditions in her industry are poor. She explained, “Printing has been in great decline over the last 10 to 15 years. We noticed that right after 9/11 happened. Our business was almost cut in half, and that was very typical of a lot of printing companies here in the area. I think we’ve lost more than half of the printing companies in the country over the last 10 years because of technology Because of PDF technology, everybody can just print right from their desktop.” [#58a]

Challenges in starting, operating and growing a business. Interviewees’ comments about the challenges in starting, operating, and growing a business varied.

Some interviewees reported difficulty with access to capital, cost of materials, and other challenges when starting, sustaining, or growing their business. [e.g., PT#01e, PT#04, PT#14d, PT#16i, Avail #116] For example:

- The Black American female owner of a DBE- and SDB-certified construction services firm indicated that she faced challenges with securing the financing she needs to make repairs to her equipment. She further commented that the lack of financing has limited her ability to seek work opportunities this year. [#01]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that she took out a small loan when she started the business. She said that she “needed major money” when they built the current facility, and added, “We went into debt over one million dollars.” She said that she had to switch banks because her bank at the time required a spouse’s signature. She commented, “I never wanted my husband to sign on anything that I did.” [#07]
- Regarding access to capital, the Black American male owner of an MBE- and SDB-certified construction services firm said, “It all goes back to ... access to capital. [It’s] because no matter how good you are at what you do, and no matter how long [you’ve] been in business, 34 [or] 35 years, if you don’t have a strong balance sheet or access to capital to grow and create the strong balance sheet, just the ability to do the work doesn’t seem to outweigh the challenges ... to get the capital [necessary] to [even] do the work that you’re capable of doing.” [#27]
- The minority male owner of a construction firm said, “I can remember ... my father, who owned a disposal company [and] had 50 percent of the money to buy a truck. And, I remember him crying like a baby in front of me, saying, ‘All I need is the other half of the

money, and I can go into business and make my business grow.’ All the local banking institutes [in Northwest Pennsylvania] basically denied him. And when they denied him he went to Pittsburgh [and] got an SBA loan, and with that SBA loan he was one of the largest [disposal companies] in [Erie].” [PT#14f]

The same business owner continued, “[My father] serviced ... all of the businesses that he wanted to service, because he was able to access capital There are those that are in a position today to recognize the way that you make sure companies aren’t successful. You cut off their resources [and] you limit their access to capital. You could be the smartest person in a room, you could be the smartest person in a state [or] country, but if you have no resources to utilize that brain power, what good does it do? [PT#14f]

- The executive of a Black American-owned DBE- and SDB-certified goods and services firm commented, “Gaining access to capital, loans, or lines of credit is very difficult, especially at the beginning. Now, because we’ve grown, it has become easier. We know what to do. Being first-generation immigrants, we were also not familiar with the investment process and how to navigate its requirements, such as having a business plan. There are still the challenges of getting capital and applying for insurance, grants, workers’ compensation [etcetera].” [PT#12]
- The non-Hispanic white female representative of a trade association indicated that a previous member, a local small business, is experiencing financial difficulties after opening their first storefront location. [#71]
- The Black American male owner of an MBE- and DBE-certified general contracting firm said, “As far as supply and renting of equipment [and] things like that, I can't get the same rates that [majority-owned firms] get.” He said that some large general contractors expect his firm to have the same access to pricing as they do. [PT#07]

The same business owner later said, “If I could get that [same] equipment, I'd be ... heads and above. Some of the smaller contractors around here wouldn't be able to compete.” [PT#07]

- The Black American male owner of an MBE- and SDB-certified construction services firm described how the lack of constant work impacts the success of his business by impacting his firm’s ability to be competitive. He said, “One thing about HVAC work [is that] it takes ... [a] lot of equipment, [a] lot of tools, [a] lot of machinery So, that keeps me as a subcontractor.” [#67]

The same business owner went on to note that because he does not have constant work, he cannot build a line of credit [and] must pay cash for his equipment purchases and rentals. He said these limit the size of the projects his firm can take on. [#67]

- The non-Hispanic white male veteran with disabilities and owner of a professional services firm said that his company experienced initial growth, but then faced “limiting factors” in Pennsylvania. He said, “The limiting factors for me in Pennsylvania was [that] most home inspectors do radon and they do insect inspections, pest inspections I wasn’t qualified to

do either of those, so I took a course for the insect inspections and then ... several [courses] for radon testing" [#74]

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated that she has never experienced barriers in terms of certification or in obtaining bonding, insurances, equipment, or contracting opportunities. She explained that her biggest barrier was simply starting her business. She stated, "It was hard getting started. That was my biggest barrier." [#57]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, "The only difficulty I had is when I first started the business the state licensing board was very difficult to work [with], and I had to do a lot of paperwork." [Avail #70]
- When surveyed, the owner of a goods and services business in Eastern Pennsylvania responded, "There's a learning curve, and few people know how to start a business out of the box." [Avail #29]

A few interviewees reported facing financial barriers regarding access to credit and other factors when they started their business as well as during the years that followed business initiation. For example:

- The non-Hispanic white female owner of a WBE-certified professional services firm said that when she started her business she had to turn to a family member for financing because banks would not loan money to her. [#10]
- Regarding financial barriers, the Black American male owner of an MBE- and SDB-certified construction services firm stated, "Credit lines ... that's the main obstacle. [It's] your credit and your cash flow If I had the [machinery], it would make me very competitive with the majority companies for smaller duct work projects." [#67]
- Regarding financing, the Hispanic American male owner of an SDB- and MBE-certified professional services firm said that he "found it nearly impossible to find financing" when he started his company. He continued, "I did that all entirely out of my own pocket, and I was lucky to be able to do that [because] there was just very little ability to access financing I completely financed myself and [risked] for myself and for the firm." [#76]

The same business owner said in hindsight that he should have built a line of credit in case he needed it, and commented, "Basically, I've learned from that to be more self-sufficient because people don't [always] lend you money when you need it." [#76]

- The Black American female owner of a DBE- and WBE-certified construction firm indicated that finances are a barrier to the success of her firm by saying, "It's just hard to find the finances." [#63]
- The female owner of a goods and services firm said that access to funding is a barrier for new business owners in Erie, Pennsylvania. [PT#14a]

- The non-Hispanic white female owner of a WBE-certified professional services firm stated that cash flow "was tough" when starting her business. [#04]
- When surveyed, the owner of a goods and services business in Western Pennsylvania responded, "Startup funding is a problem. Being a small business, there's not a lot of help, and you're blocked into massive time at work without much refund." [Avail #28]

Some business owners reported facing tax-related challenges. [e.g., Avail #25, Avail #34, Avail #62, Avail #133, Avail #143] For example:

- The Black American male owner of an MBE- and SDB-certified construction services firm said, "Right now there are outstanding taxes that are due, and PennDOT will not give you your certification approval and clearance unless you're paid up in full or [have] a payment plan that is meeting their requirements. So even right now ... being PennDOT certified, not having a strong balance sheet [limits] getting insurance, as well as PennDOT contracts, because back taxes are owed." [#27]

The same business owner continued, "Even though [you] may be on a payment plan, without having the ability to access capital and pay off those back taxes and outstanding obligations ... it makes it hard for the company to go forward. Because, in order to go forward, they want you to be debt free or [have] a line of credit that [shows] you're able to maintain a monthly payment. And without a strong balance sheet, that's impossible almost to do." [#27]

- When surveyed, the owner of a professional services business in Western Pennsylvania responded, "Taxes are a little bit high. I just think the taxes are unfair to a smaller business as far as unemployment compensation They continue to pay for something that they will never be able to collect after being in." [Avail # 44]
- When surveyed, the owner of a construction business in Central Pennsylvania responded, "Business tax [is a barrier]. It's difficult and high along with other taxes There's [also] tolls in Pennsylvania related specifically to the trucking industry [versus] just your average car." [Avail #18]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, "The tax burdens are ever growing and makes things very difficult to expand. Fuel tax and fuel [are] so expensive [we] cannot afford to work here. Workers comp is very expensive, and health care as well and property tax [too]." [Avail #123]
- When surveyed, the owner of a goods and services business in Western Pennsylvania responded, "Property taxes [are a barrier]. Anytime you try to expand, you get slapped with a higher tax." [Avail #33]
- When surveyed, the owner of a construction business in Eastern Pennsylvania responded, "It is very hard to get over the hump to start hiring employees. To start hiring employees is hard because of tax purposes." [Avail #125]

One business owner detailed challenges with business partners during the initial years of their company. The non-Hispanic white female owner of a WBE-certified construction-related firm said that her company started out co-owned by her and another woman. She said it only lasted five months before she bought her partner out, and added, “[I] put all the money in, [I] did all the work [and I] went after [all the business].” [#17a]

Some interviewees indicated that hiring employees was a challenge when starting or growing their business. For example:

- The non-Hispanic white female owner of a WBE-certified professional services firm said that she had to learn everything about running a business, little by little. She noted that she faced challenges with employee hiring, saying, “[There were] some challenging times with hiring people And that was probably one of the hardest things, getting the right kind of personalities and culture that shared my vision.” [#04]

The same business owner went on to say, “Now my creative director has been there 17 years ... my senior graphic designer just celebrated 10 years, and another employee has been there 13 years.” [#04]

- The non-Hispanic white female owner of a WBE-certified professional services firm stated, “Finding quality people is very difficult Everybody’s got to pass a drug test” She said that her employees are paid well and receive benefits, but said, “I find it really hard to get people who want to actually work, and the bottom line is I want them to make a commitment. I’m committing a very large percentage of my profit and my resources to providing [them] with excellent benefits and a good work atmosphere.” [#10]

The same business owner went on to say that her competitors do not offer benefits but may pay more. She commented, “That’s a tough battle. How do you convince people that you’re trying to provide them with a career? Not just a job, [but] a job that [has] meaning. A job that has long-term potential.” [#10]

- The non-Hispanic white female representative of a trade association reported that for many of their members, finding good employees is a challenge. She said, “That’s always [a] top [complaint from] our members” [#71]
- The non-Hispanic white male representative of a trade association said the biggest barrier to members joining the association is drug use. He stated, “Our big issue, like many industries, is drugs. It’s not discrimination or racism, it’s drugs.” He added, “[It’s] not so much once people are in, it’s before they get in They [have] to be drug free in order to get access to the apprenticeship programs, and we lose a lot of people that would probably be very good because [they can’t pass a drug test].” [#83]
- When surveyed, the owner of a goods and services business in Central Pennsylvania responded, “It is difficult to start a small business and be able to pay and provide benefits to employees.” [Avail #27]

- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “[We have] problems with growth because of lack of suitable applicants for employment.” [Avail #142]

One business owner said that she does not let potential barriers bother her. The Black American female owner of an MBE- and WBE-certified professional services firm stated, “I have not moved forward with my business thinking about barriers. I network, I go after some business, most of my business has come through knowing people from my work in corporate or the two nonprofits I worked with.” She explained, “If I focus on the barriers, I’m always going to be depressed, and that’s not how I choose to live.” [#11]

One interviewee commented that the lack of interoperability of certain technology is a barrier. The female representative of a public entity said that the ECMS [Enterprise Content Management System] system is a “huge barrier” for PennDOT because the system only functions in Internet Explorer and is not compatible with Firefox or Google Chrome. [PT#13c]

Public and private sector work. Interviewees discussed their businesses’ experiences working in the public and private sectors.

Many interviewees reported that their firms conduct both public and private sector work. [e.g., #16, #31a, #33, #40, #75, #88, PT#04, PT#10b, WT#08] For example:

- The Black American male owner of a DBE-certified construction services firm stated that his firm conducts an equal amount of work in both sectors. [#02]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that she works an equal amount in both sectors. She went on to say they did work on some specialty products for the oil and gas industry, though it did not have a major impact on their business. [#07]
- The non-Hispanic white male representative of a WBE- and SDB-certified professional services firm said the firm performs an equal amount in both sectors. He noted, “Over the last 10 [to] 15 years that we’ve been involved with subcontracting to state contracts, the amount of work we do in that regard has greatly caught up to the work we do in the private sector.” [#58b]
- The Black American male owner of an MBE- and DBE-certified professional services firm stated that 50 percent of his business comes from Commonwealth of Pennsylvania, specifically the Pennsylvania Lottery. He said the other 50 percent is private sector business. [#16]
- The Black American female owner of an SDB- and WBE-certified professional services firm reported that her firm performs an equal amount of public and private sector work. She added, “When I don’t do city work, I come alongside as a sub with [another firm], and I do accounting services and ... audits for nonprofits.” [#35]
- The non-Hispanic white female owner of a professional services firm stated that the ratio of her firm’s work is roughly 55 percent public sector work and 45 percent private sector

work. She explained that in the past, her firm performed a much higher proportion of public sector work. She observed, “But now, I have deliberately tried to equalize the places we gain business from, you know, to stay market competitive and to avoid the problems that happen when you get too much of your work from one organization...” [#79]

- The non-Hispanic white female representative of a professional services firm stated that the firm works on both public and private sector projects and that their private sector work is as a supplier. [#84]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that she works on public sector and private sector projects as a supplier. [#25]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said that he works as a subcontractor on both public and private sector contracts. [#06]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm stated that she works on both public and private sector projects. [#19]

The same business owner added that she works in the private sector, primarily for nonprofits, but on publicly funded projects in the healthcare industry. She has one public sector client. [#19]

- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said that his firm works on both public and private sector projects. [#08]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that her firm works on both public and private sector projects. [#10]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm stated that she works as a supplier on both public and private sector projects. [#07]
- The non-Hispanic white female owner of an SDB-certified construction firm estimated that half of her firm's work is in the private sector and half of the work is in the public sector. She added that all of her firm's work in the public sector is as a subcontractor. [#65]
- The non-Hispanic white female owner of a DBE-certified construction services firm stated that she works as a subcontractor on public and private sector projects. She stated that 95 percent of the firm's work is in the public sector and 5 percent is in the private sector, and added, “I target public and stick to that. I get some opportunities in private, and I take them if I can do them.” [#20]
- The Black American male owner of an SDB- and MBE-certified professional services firm reported that about 95 percent of his firm's work is in the public sector. He went on to say that his firm has clients in both Pennsylvania and New York. [#36]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “We're about 90 percent public There are three federal projects that we're

currently working on Three compose 80 percent of our income There's only one private project we're working on right now." [#38]

- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm reported that in the past five years about 90 percent of his work has been from government contracts, with the remaining 10 percent of work coming from the private sector. He added that within the public sector, his firm operates as a prime contractor 70 percent of the time and a subcontractor 30 percent of the time. [#62]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm reported that 90 percent of their work is "in the federal arena." He noted, "The work coming out of the [federal government] is typically [a] pretty even keel When the economy's down, they're up. [But] when the economy's going well, they slow down." He went on to say, "My preference is the public sector." [#77]
- The non-Hispanic white female owner of a WBE-certified goods and services firm reported that her company works in the public sector about 90 percent of the time, with the Commonwealth. [#23]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm stated that 90 percent of their work is in the public sector. [#25]
- When asked what sector the firm works in, the female owner of a professional services firm said, "It's mostly with government. I would say right now, maybe about 15 percent is commercial. Everything else is government, heavily state and federal. [PT#03]
- The Black American male owner of an MBE- and SDB-certified goods and services firm said about 80 percent of the work his firm performs is in the public sector. However, he noted that his firm does not work directly with the Commonwealth of Pennsylvania. [#52]
- The Black American female owner of a WBE- and SDB-certified goods and services firm stated that 80 percent of her firm's work is in the public sector while 20 percent is in the private sector. She said that her firm serves as a subcontractor to a prime on public sector projects. [#53]
- The Black American male owner of an MBE- and DBE-certified construction supply firm stated, "Our work is 75 percent public sector and 25 percent private." He said this ratio has been "pretty status quo" over the past few years. [#06]
- The Subcontinent Asian American male owner of a goods and services firm said the firm works on both public sector- and private sector-funded projects. He said they work "70 percent in public sector" and 30 percent in the private sector. [#15]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm said 70 percent of the firm's work is in the public sector, mainly as a subcontractor. [#81]

- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm reported that 60 to 65 percent of his firm’s work is with government entities. He said that the remainder of their work is in the private sector. [#43]
- The Black American female owner of a DBE- and SDB-certified professional services firm stated, “I would say maybe 60 percent [of our work is] public, and 40 [percent is] private and non-profit.” When asked if that has changed over time, she said, “It’s been pretty consistent, because generally when we get a customer it becomes long-term.” [#32]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said 60 percent of her work is in the public sector and 40 percent is in the private sector. [#14]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said that his firm’s work is “mostly” in the public sector. He added that they are continuing to “trend to the public sector.” [#08]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm stated that he works on both public and private sector projects. He said most of their work is in the public sector and said they are “purposely trying to move more into the private sector” because of the “volatility in the government’s pace, and downturn in the last several years.” [#09]
- The non-Hispanic white male representative of a trade association said members work on both public and private sector projects, though most members’ work is in the public sector. However, he noted that there has been a trend towards more private sector work. [#83]
- The executive of a Black American-owned DBE- and SDB-certified goods and services firm said that the firm is currently working on Commonwealth of Pennsylvania contracts as both a prime and subcontractor. [PT#12]
- The Black American male owner of an MBE- and SDB-certified construction services firm said that his firm has worked on both public and private sector projects, though their largest projects have been in the public sector. [#27]
- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm stated that 70 percent of her firm’s work is in the private sector while 30 percent is through government contracting. [#61]
- The non-Hispanic white female owner of a WBE-certified construction-related firm said that 25 percent of the company’s work comes from the public sector and 75 percent of their business comes from the private sector. [#17a]
- The non-Hispanic white male representative of a professional services firm said they work in the private sector about 75 percent of the time and the public sector about 25 percent of the time. [#87]
- The non-Hispanic white male representative of a goods and services firm stated that 25 percent of their business is from the public sector while the remaining 75 percent is from

the private sector. He added that his firm has recently expanded to more public sector work, saying, “We’re expanding our horizons, so to speak. Where we’ve gone into the government ... there’s a lot less competition because there’s not too many people versed in that end of the business. The next part is ... to expand our commercial sales department.” [#72]

The same business representative continued, “We’re growing, we’re evolving and ... expanding into more specialized fields than what the normal run-of-the-mill dealership is looking to do.” [#72]

- The non-Hispanic white female owner of a WBE-certified professional services firm reported that her firm works in both the public and private sector. She said only 10 to 15 percent of her firm’s work is in the public sector, though they are looking to grow their business in education by working with more public and private universities. [#04]

The same business owner later said, “Whether it’s public or private, people think it happens faster than it does. It took five years for my company to get in the door with one client, so some business owners think it is not worth it.” [#04]

- The non-Hispanic white female owner of a WBE-certified construction firm reported that “75 [to] 80 percent” of their work is in the private sector. She noted that state-funded energy efficiency projects are now requiring SDB firm participation, which is giving her firm more opportunity in the public sector. [#22]
- The Black American male owner of an MBE- and SDB-certified construction company said that his firm works predominantly in the private sector. He went on to say that less than 10 percent of their work is in the public sector. [#37]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that 10 percent of their work is in the public sector, with the rest in private commercial projects. [#10]
- The non-Hispanic white male owner of a professional services firm reported that 95 percent of his work is in the private sector. Regarding his public sector work, he stated, “I have a relationship with [the municipalities and surrounding areas]. We had a booth [at a trade show] and we were doing demonstrations and soaking up oil, and making a mess and cleaning it up. It was a lot of fun, and I got some business from that which we were very thankful for But it’s all those relationships take a lot of time to cultivate.” [#70]
- The non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said that his firm works mainly in the private sector. He added, “They’re basically not contracts I’ve just had customers that call me when they have a need.” He also said, “I don’t have contractors. I mostly work as just a company.” [#29]

When asked about his efforts pursuing public sector work, the same business owner said, “I’ve tried Five years ago I got certified as a DBE, [but] generally [that’s] just [for]

minorities and women So, I've had trouble because I'm not a minority or a woman.”
[#29]

- The Black American male owner of an MBE-certified professional services firm indicated that most of their clients are in the private sector. [#34]
- The non-Hispanic white female co-owner of a construction firm stated that her firm has done mostly private sector work and only a few public sector jobs. She said that their public sector work has been as a subcontractor. [#47b]
- The non-Hispanic white male owner of a construction services firm reported that his firm works mainly in the private sector. He added, “Specifically [it’s] with commercial work [and] commercial property, or industrial property [and] heavy roadway property I don't do any type of commercial work for individuals.” [#88]
- The Black American female owner of an MBE- and WBE-certified professional services firm stated that she works on both public sector- and private sector-funded projects, though most of her firm’s work is in the private sector with nonprofits. [#11]
- The Hispanic American male representative of a trade association reported that members work on both public sector and private sector projects. He went on to say that he believes the majority members’ work comes from the private sector. [#86]

When asked if there has been a trend away from public sector work, the same trade organization representative said, “From my own experience, and being here in Allegheny County, we don’t see the state as an opportunity for business We have a one-member firm that’s actually based in Reading, PA, so they’re closer to the center of the state and I think they take advantage of state contracts. But for the most part ... our members are primarily doing private sector business.” [#86]

Some business owners and managers reported that their firm performs only in the public sector. For example:

- The Black American male owner of a professional services firm reported that his firm works exclusively in the public sector on government projects. [#55]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm stated that the firm works almost entirely within the public sector. [#56]

Some business owners reported that their firm performs only in the private sector.

For example:

- The non-Hispanic white female owner of a LGBTBE-certified professional services firm said that 100 percent of their work comes from the private sector. [#41]
- The Subcontinent Asian American male owner of an MBE-certified professional services firm reported that his company works only in the private sector. [#21]

- The Black American female owner of a closed construction services firm said that her company worked on private sector projects as both a prime and subcontractor. [#26]
- The Hispanic American male owner of a construction firm reported that he only pursues private sector work. [#64]
- The non-Hispanic white male owner of a construction firm stated that his firm performs “on the residential side, light commercial [work].” [#51]
- The Hispanic American male owner of a construction firm reported that his firm has only ever done work in the private sector and that he has not bid on any Commonwealth contracts. [#49a]
- The non-Hispanic white male owner of a construction firm reported that his firm works as both a prime contractor and subcontractor on private sector projects. He said they work exclusively in the private sector. [#85]
- The non-Hispanic white male owner of a LGBTBE-certified professional services firm said that his company only works in the private sector. [#24]
- The non-Hispanic white and veteran male owner of a professional services firm reported that his firm only works in the private sector. He noted that there has been a trend away from public sector work in his industry since about 2009. [#48]

One trade association representative indicated that their small member firms work mostly in the private sector. The non-Hispanic white female representative of a trade association reported that their small member firms, including DBEs, likely do not work in the public sector. She stated, “I don’t think that they know how to apply [for public contracts].” [#71]

Some interviewees reported that they prefer public sector work to private sector, or that there are benefits to public sector work. [e.g., #14] For example:

- The Hispanic American female owner of a professional services firm stated, “We have been prime contractors, and something that I'm happy about ... is [that] I can use that experience as past performance.” [PT#04]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that she mostly bids on public sector jobs because technical drawings are provided for those jobs. She explained, “The state work [has] detailed drawings ... provided for you. I would [have to] hire someone in-house to do the detailed drawings to compete in the private market, but by adding that salary onto my overhead cost, I would be outpriced.” [#25]

The same business owner continued, “PennDOT provides the drawings ... so, that's why I don't chase the private market I'd have to sub those out and charge an additional fee to my price per pound.” She went on to say, “I believe [private sector] work is there and available, I just don't have the means to actively pursue it.” [#25]

- The Black American male owner of a DBE-certified construction services firm indicated that pursuing public sector work is worth the extra effort when it comes to paperwork and contract processes. He stated, "The big difference is the amount of paperwork you have to manage ... when you're dealing with governments and schools, and things like that. [#02]

The same business owner continued, "They have their systems that you have to adhere to." He said that his company "is not afraid of that" because they have processes in place to handle it. He added, "[We're] gearing up to be a more advantageous company when it comes to public work." [#02]

- The Black American male owner of a DBE- and SDB-certified construction supply firm commented that he prefers public sector work to private sector work because, "In the private sector, they have no incentive to use minorities Zero." [#03]

The same business owner continued, "at least the public [sector] like PennDOT ... federal money ... comes in ... there is an incentive for the prime[s] to at least hit a goal, at least try to do best effort" [#03]

- The Black American male owner of a DBE- and MBE-certified construction firm only works in the public sector. He said that his main goal is to work on bridge projects for the Commonwealth. He added that he does not work in the private sector because "that's their money, and they don't have to use minority participation if they don't want to." [#13]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm indicated that the firm prefers to work in the public sector. She stated, "We seek public work to diversify and public sector work has allowed us to get qualifications that make [us] more attractive [in] the private sector." [#56]
- The non-Hispanic white female owner of a WBE-certified professional services firm indicated that she prefers public sector work. She said that her firm feels valued and trusted by their public sector clients and added that one of her first RFPs was for a public sector client she met at a conference. She said, "[They] called and said [I] didn't get it, but [I] came in second and that that's amazing for [my] first try." She went on to say that she was offered a debriefing and that she won the contract the following year. [#04]
- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm stated that in general, it is "much easier to do work in the public sector because the work is advertised and much simpler." He went on to say that his firm has never won a contract from the Commonwealth despite being highly qualified for many of the projects. [62]
- Regarding the types of public sector work his firm performs, the non-Hispanic white male owner of a construction services firm stated, "We do a lot of work for municipalities, the City of Philadelphia, [local] school district[s] ... DTS, places like that. If they are busy, we are busy, and if they are not busy [neither] are [we]." [#39a]

- The non-Hispanic white male representative of a goods and services firm said the firm's public sector work requires less advertising dollars and more investment in long-term relationships than the retail side of the business. [#72]

Regarding the importance of maintaining relationships with the public sector, the same business representative stated, "[Retail customers] are customers that ... buy a car every five to six years Versus in my market, they're buying cars every year. [If] a car gets in an accident, [like] a police car, they need to replace it right away... in that business, I see them in every single year ... on average five times a year." [#72]

Some interviewees reported that they prefer private sector work to public sector, or that there are benefits to private sector work. Some of the comments indicated that performing private sector contracts was easier, more profitable, and more straightforward than performing public sector contracts. [e.g., #07, #85] For example:

- The non-Hispanic white female owner of a WBE-certified professional services firm said that it is easier to get work in the private sector and that private sector projects depend "on the relationships you have with the engineering company." She added, "A lot of times they're hiring you because they like your work and you do a good job When you get over on the public end, a lot of times it's like everything is going out for like a gazillion bids, and the pay tends to be real slow." [#10]
- The Black American female owner of an MBE- and WBE-certified professional services firm stated that she has "worked with a variety of organizations." However, she indicated that she prefers to work with nonprofits. She said, "Having worked for two nonprofits, I liked that work. I wanted to be in a position to help influence what nonprofits were doing in the wider community, and help the ones, if I liked the mission, [to] be a center of excellence." [#11]
- The female representative of a WBE-certified construction-related firm said it easier to work in the private sector because "it's more [of a] lip show with the government than it is [with the private sector]." She said that they have run into problems with the Commonwealth because the larger prime contractors "don't want to work with" them. She said that the firm has also had trouble getting work with Allegheny County because they do not have a PAUCP certification. [#17b]
- The Black American female owner of a WBE- and MBE-certified professional services firm explained that it is easier for her to work with the private sector. She said, "[In the private sector], most of the time you just need to let folks know that you're there, that you are present and open for business and what you can offer them. She continued, "With the government, you have such a broad layer of contact that it becomes ... a lot more challenging." [#30]
- Commenting on the advantage of private sector work, the non-Hispanic white female owner of a LGBTBE-certified professional services firm said, "There are a lot of companies, bigger companies, that promote diversity, and you know they want to do business with you." [#41]

- The Subcontinent Asian American male owner of an MBE-certified professional services firm reported that his firm does not pursue public sector projects. He explained, “The checklist or perquisites [in the public sector] are too stringent for a smaller company like us.” [#21]
- When asked about seeking private versus public sector work, the Black American female owner of a WBE- and MBE-certified professional services firm stated, “For me, private sector is really more my business I don’t do a lot with the state. I do even less with the city because ... it’s too much paperwork, it’s too much bureaucracy and it just gets too difficult.” [#30]
- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm said, “As it relates to public versus private ... I would certainly say that the private market sector is more profitable for us, which is probably ... a surprise. The way the public procurement works, it invites even more competition than the private sector, which drives our margins down even further.” [#61]
- The Subcontinent Asian American female owner of a WBE-certified professional services firm said that her firm has not pursued public work because the bidding process is “too large,” and her firm cannot afford the required investment. She explained, “The problem or the issue that we face with this is that [for] most ... public projects, they require that when there is an RFP you are required to first send in your response which ... may be a 50-page document, or a 100-page document. Small firms like us do not have those resources and [may not] exactly understand what they [are] looking for to even create the right response for [the RFP].” [#44]
- The Black American male owner of an MBE- and SDB-certified goods and services firm stated, “[Prime contractors] absolutely do not even talk to you. In my opinion, 90 percent of the time they talk to you only when they need you to obtain minority points for the public sector. They put you in a category, and box you in that hold, and won’t let you out.” [#60]

One business owner indicated that her firm is limited to private sector work because opportunities in the public sector fall through. The Black American female owner of an MBE- and WBE-certified professional services firm said that she has only worked in the private sector, though she has pursued some public sector contracting opportunities. [#18]

Interviewees further discussed their experiences with the pursuit of public and private sector work, and the differences between sectors. For example:

- When asked to describe the differences between public and private sector work, the non-Hispanic white male veteran owner of a professional services firm said, “It’s easier to get work in the private sector because you can work with the owner, [and] he’ll work with you. When we do a job, we show them what it costs us. It’s all there You can’t do that with the public sector. They don’t want to see it [and] they don’t care. They want to know how much [you’re] going to charge ... and [if you’re] the low bidder.” [#48]

The same business owner continued, “When we’re [working in] the private sector, it’s not always the lowest bidder that gets the job It [usually comes down to] the lowest responsible bidder” He added, “The other thing is [in] the private sector you’ll bid a job and [you’ll be] the only bidder because you have a relationship with someone who wants [it done].” [#48]

- Regarding public versus private sector work, the Hispanic American male owner of an SDB- and MBE-certified professional services firm stated, “I think maybe 5 percent of the work we do now, if that, is public.” He said there has been a trend towards private sector work because “the economy is doing well,” and added, “There’s a whole lot more private sector work going out ... [but] if the economy were to get very weak, the public sector might still be building public investments like schools [and] some of those things [that] the private sector wouldn’t be building so much.” [#76]
- When asked about his experiences working in both sectors, the Black American male owner of an MBE- and DBE-certified construction supply firm said, “Sometimes the public sector is a little bit more open to MBE business, where it doesn’t mean a hill of beans on a private project. [There], it’s lowball number takes the work.” He added that once the contracts are secured, both public and private sector jobs are “all the same.” [#06]
- The non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm said the private sector is easier to work in than the public sector. She explained, “It’s just ... more about connections. You can pound the pavement [and] get the meeting [easier]. [Regarding] the RFP process with the Commonwealth, firms that have always had the RFP just keep getting the RFP There are certain firms that have been doing work for the government forever, and it’s hard to break that purely based on the fact that the Commonwealth wants to do more business with diverse firms.” [#33]
- When asked about the differences between public and private sector work, the Black American female owner of a DBE- and SDB-certified professional services firm stated, “Private sector clients are easier to work with than government [clients], period. [With the] government, there’s a lot of [extra] accountability But [with] private customers, [they] all ... seem to [just] want [the] bottom line, what you were hired ... to do.” She continued, “[With] the government there’s a lot more paperwork to go with it, a lot more accountability. They kind of want to know everything about who you’re hiring, [and] accounting for all your hours, etcetera. It’s just a lot.” [#32]

When asked about her firm’s work with City of Philadelphia, the same business owner said, “Well, we do a good job with them [and] always meet the goals. I’ve never been fired.” [#32]

- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that the main difference between public and private sector work is the public sector bidding process. He explained, “It’s difficult for me to employ somebody to do marketing for me to pursue public ... opportunities. [But with] private [work], I have somebody who does marketing for me and they can pursue it because they’re not a minority or ... a disadvantaged owner. They don’t have the in-depth knowledge of how to present [themselves] as me [in the public sector]. Time factor is crucial there.” [#43]

- Regarding his firm’s work in the public sector, the Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm reported, “I think that the city has better programs [than the state]. Maybe the state should learn from the city. I think they have better goals that have better means of helping minority companies. I think it's the commitment that people have in helping them There's a big disparity there.” [#43]
- When asked to explain the differences between working in the public sector versus the private sector, Interviewee #79, the non-Hispanic white female owner of a professional services firm, stated, “I would say the biggest difference would be in the reporting expectations. The private sector has exacting roles as to what...they require and when. And, that can be very systematized and in a lot of ways it’s very cumbersome, but once you get the system down and you know it, it’s an automated, you can go with it. In the public sector you have to be far more responsive at all moments to the business karma and the particular procurement people that you’re working with.” She continued, “I think the state government is overall more predictable as the customer.” [#79]
- The Black American male owner of a DBE-certified construction services firm said there is a “huge difference” between public and private work because public sector contracts require minority participation. He said there are fewer minority contractors on private sector jobs because of this. [#02]
- The non-Hispanic white male owner of a professional services firm stated, “I haven't had that much experience working with the public sector. [In] the private sector, decisions are made a lot more quickly. [With] public sector ... I haven't done enough to advise on that, but I know that the communication and understanding, just even from a website perspective, it's a lot easier.” [#70]

The same business owner went on to say, “Municipalities do [communication] really well. Private does not. But then, getting your time with the municipality generally [takes longer]. Sometimes they have contracts and they're good for a year, so I have to cultivate a relationship for a year for a chance to bid.” [#70]

- The non-Hispanic white male representative of a professional services firm said there is “a sense of urgency [in] the private [sector].” He added, “A sense of responsibility, both financially and [with the] customer base, is much stronger in the private.” [#87]
- Regarding his experiences working in the public sector versus the private sector, the Black American male owner of an MBE- and SDB-certified construction services firm said, “Most of the mandates as a sub usually bring some negativity. What little private work that we've done [was] because somebody invited us in and they wanted us there, and we found it to be much friendlier.” [#27]
- When asked about the differences between public and private sector work, the non-Hispanic white male owner of a construction services firm said, “The payments and negotiations [in the public sector] are definitely different than the private sector In the private, you'll get paid, but a lot of it is negotiated. Where [with] public works, you know you're going to get paid, [and] the money’s good.” [#39a]

- Regarding public versus private sector work, the Hispanic American male owner of an SDB- and MBE-certified professional services firm said, “Well, [on] the government side you never have to worry [about payment]. They may be delayed in payment, but you know you’re going to get the payment. On the private [side] we’ve, probably in 30 years, have had ... four or five instances where we had to get legal involved to collect.” He went on to say that he prefers to work in the public sector. [#77]

The same business owner later noted that public sector contracting at the state level is “very political.” He said, “Everything is very political, [and] as you can imagine ... I don’t play that game, so I’m at a disadvantage there.” He indicated that public sector contracting on the federal side does not have this issue due to the low-bid requirement. [#77]

- The non-Hispanic white female owner of a DBE-certified construction services firm said that in the “private [sector], you can just roll with it and they don't have any rules or regulations.” She added, “But the ... risk is guarantee of payment. I mean, it might take a long time, but the state work is guaranteed to be [paid] basically, at some point. Private [sector] is not.” [#12]
- The Subcontinent Asian American male owner of a goods and services firm explained that there are “many” differences between private sector and public sector work. He said in the public sector “it is hard to get to the person who is purchasing the metal,” and in the private sector it is “easier to approach and contact the customers.” He stated that another issue in the public sector is that the government works directly with the contractors. He said, “Most government construction projects are given to contractors and subcontractors, but there is nothing specific for the metal ... where the government will buy metal because they [the government] will give the contract to some construction company There is no direct supply to the government.” He said, “[government] maintenance offices will call me, but there is no major government contract [linked] directly to my company.” [#15]

The same business owner said another challenge in public sector work is that the pricing “isn’t competitive for the bigger or medium to bigger orders.” He added, “Small business cannot sustain that, especially in my industry ... there are so many big companies directly [supplying] the government.” He said that the government will only buy small items from small firms. He went on to note that, “big companies can go directly to the mill, but the mill won’t sell to [his firm].” [#15]

When asked about other differences in private and public sector work, he said that private companies complain more about pricing but are easier to work with. He stated that “the regulations, insurance and bonding requirements” in the public sector make the work more difficult. [#15]

- The non-Hispanic white female representative of a professional services firm said that she thinks it is easier to get work in the private sector. She explained, “The government has been challenging to deal with as I’m starting out, because they want someone to do the entire project not just provide pieces and parts. So, trying to track down companies that are putting together the total package and saying, ‘Hey, we can help you with this one part,’ has been a struggle.” [#84]

- When asked about public versus private sector work, the Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “It’s totally [different]. It depends on which [sector]. I mean, one minute late is [considered] nonresponsive in the public [sector], especially at the federal level. In the commercial level, they [might say], ‘Good to see you, we can see it tomorrow morning that’s fine.’” [#38]

The same business owner went on to say, “The commercial part is really difficult because those are totally [based on] relationships. The public stuff, they have to publish what they’re going to buy [However], each kind of ... municipality, each state, each federal government does things slightly differently, and it takes a while to get ramped up to understand the process.” [#38]

- The Black American male owner of an MBE- and SDB-certified goods and services firm said there are differences in public versus private sector work. He said there is more lead time with public sector customers, though there is swifter pay and “no politics” with private sector customers. He explained, “There is money to be made in the private sector, because I’m coming to your house, hauling your mattress away, you’re happy, you pay me. And, it’s not political. The mattress is not political. Sometimes when you try to go into the public sector, it’s more [so] who do you know [and] what do you know. [A public sector client might ask], ‘Do you have these 15 certificates?’ Yes. But, [I might be] missing the 16th one, so the contract’s not [mine]. So, we kind of pulled back and we bid only once in a while” [#52]
- When asked if she is aware of any differences when pursuing public versus private sector work, the Black American female owner of an MBE- and WBE-certified professional services firm said that she thinks it is more difficult to get work in the public sector because “the public sector has a lot more administrative paperwork processes that you have to go through.” She added, “With corporations, pretty much they have less processes and systems in place. It’s more so if you prepare to write [a] proposal and they agree to the price, then [you get the contract].” [#18]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said in his experience the main difference between the public and private sector is the RFP/RFQ process. He said the “rigorous” RFP/RFQ process isn’t required in the private sector. [#08]
- When asked about members’ experiences pursuing public versus private sector work, the Hispanic American male representative of a trade association said, “[Members have expressed that] it is sometimes cumbersome with the state, or public sector business opportunities. [These opportunities require] very lengthy [RFPs], [and] typically the process is a bit antiquated in terms of ... resources that they utilize to submit those responses to the proposals. So, it’s not often easy.” He added, “The other piece is [that] it’s price driven. Again, we go back to the margin Is it worthwhile? For small businesses, it’s typically [that] the margins are just too low to make it profitable.” [#86]
- When asked about the differences between public and private sector work, the non-Hispanic white female owner of a WBE-certified construction firm said “it’s just ... a cluster”

in the public sector. She continued, “[It’s] because there’s just too many fingers in the pie and there’s no single point of accountability. When there are cost overruns, the contractors blame the engineers and the engineers blame the contractors. And at the end of the day, you know who loses? The public sector loses [and] the taxpayer loses. So, it’s just a mess.” [#22]

The same business owner went on to say, “I would love to be on a governor’s committee to clean up this construction delivery model” She added, “It would be great if [the Commonwealth] could let some of their work be design-build, especially mechanical work, because mechanical work is the work that is the easiest to mess up if you have too many layers to go through.” [#22]

- The male representative of an SDB- and VBE-certified consulting services firm indicated that it is hard to secure new work in the public sector because clients like “familiarity.” He said, “The thing that strikes me is ... we’re able to penetrate the private sector, and in Pennsylvania, unable to penetrate the public sector.” [PT#09]

The same business representative continued, “In Pennsylvania, we do the majority of our business as a company ... in Myerstown and ... in Pittsburgh, and suburbs around there. But when it comes to public sector, it’s just been ... a hard code to crack, and ... I can’t put my finger on anything other than ... familiarity.” [PT#09]

The same business representative added, “[Familiarity with] former and, you know, age-old suppliers that have supplied ... successful services for years [Not] trying something different, I think that’s ... the biggest barrier [to public sector work].” [PT#09]

- The Black American female owner of an MBE- and WBE-certified professional services firm stated that she has had some bad experiences with public sector bids, namely with the City of Pittsburgh Housing Authority. [#11]

The same business owner said that she is a subcontractor on a public sector project for University of Pittsburgh Medical Center (UPMC). She said UPMC’s “purchasing people” reached out to her about the work because of her firm’s expertise and indicated that it has been a positive experience so far. [#11]

- Regarding his preference for private sector work, the Subcontinent Asian American male owner of an MBE-certified professional services firm said, “Writing up a proposal takes me three weeks, then [I have to] answer more questions [It’s] so prolonged I want to be sure my next three weeks’ payroll [is] secure [and] have cash flow coming in, rather than spend[ing] three weeks making a bid.” [#21]
- The male representative of a specialty construction firm said it is difficult to advance on the “totem pole” at his firm. He said that he recently received a “new boss” on a public sector project, and commented, “I got to teach my boss how we do our work” [PT#10a]

The same business representative continued, “You want a qualified person who is experienced and knowledgeable [in those positions]. [You shouldn’t put] somebody in there

because they're related to somebody or you're doing a favor for somebody, and that kind of thing." [PT#10a]

- The non-Hispanic white male representative of a small business development organization stated that he believes it is smart to do projects for the federal government because the entire process is defined in a book. He also noted that the private sector typically pays well. He went on to say that getting work from the federal government requires more knowledge and paperwork, whereas in the private sector it is more about being as quick and efficient as possible. [#46]
- The Black American male owner of an SDB- and MBE-certified professional services firm reported that although working in the public and private sector are very similar, jobs in the public sector typically are done on a set schedule. He added that it can be an advantage if you know that a contract will go out to bid before it happens. [#37]
- The Black American female owner of a WBE- and MBE-certified professional services firm stated, "Business is always who you know and your relationships as far as the private marketplace is concerned If someone wants to use their uncle that has a promotional products company, they're going to use their uncle. It has nothing to do with whether they need a participation quota So in the private sector, it really just is who you know." [#30]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm reported that the main difference between public and private sector work is the bidding process for public work. She said, "You might spend weeks preparing a bid and that's a lot of time We've never put [a dollar amount on] how much it costs us in labor to create the bids, but they may end up not getting anything." [#31a]
- Regarding local work, the Hispanic American male owner of a construction firm said, "I have not [been] given the opportunity locally so much ... so this year I intend to give it more opportunity and get more involved with the local. It's just ... not easy to get in. I've been rejected once already, locally, which is fine." [#64]
- The non-Hispanic white male owner of a construction firm stated, "The barrier to entry to public work is very ominous." However, he added, "I started my company only to chase private work, not ... public work. Consequently, I'm probably not as hungry as somebody who said, 'I'm just going to focus on PennDOT.' They're going to do everything they've got to do." [#85]
- When asked why his firm does not pursue public sector work, the non-Hispanic white male owner of a LGBTBE-certified professional services firm said, "It's kind of scary. It seems so bureaucratic I'll give you an example. I helped the city a few years ago, [and] the amount of time that it takes for them to make a decision is so long that in my industry that person most likely won't be available if they are good [at what they do]." [#24]
- The non-Hispanic white male representative of a WBE- and SDB-certified professional services firm said that prime contractors who use their firm in the public sector do not use them for their private sector work. He stated, "They may not take a second look at us in the

private sector, but ... they need somebody in this regard in ... government contracting. And so, for that very reason I think we find we get into relationships that we wouldn't normally have ... in the private sector." [#58b]

- Regarding private sector work in his region of the Commonwealth, the Black American male owner of a professional services firm stated, "There is a hopeful anticipation by MBEs and DBEs at this particular time that the private sector will step up to the plate. [I] haven't seen it on a large scale, but they are doing more [private sector work] than they used to do." [#55]
- The Black American male owner of an MBE-certified professional services firm reported that his company has worked on two City of Philadelphia projects. He said they won this work after attending two RFP meetings. [#34]

Some interviewees noted that there is less "red tape" in the private sector and that quality of work tends to be better in the private sector. [e.g., #18, #15, #24, #32, #77] For example:

- When asked about the differences between public and private sector work, the Hispanic American male owner of an SDB- and MBE-certified professional services firm said, "It's very obvious. [Firms] in the private sector have to be efficient [and] they have to make decisions We find working for developers much easier [in the private sector] because it's very flat. You talk to one person ... they know if you have the capacity to do it, and they put a lot of trust in you. So, there's a lot less red tape." He added, "It's just very onerous to engage in the public process or to be competitive in the way [things] are [set up]." [#76]
- The non-Hispanic white male owner of a construction firm said the biggest difference between public and private construction contracts is the quality of work. He explained, "Public work is all about the price, [but] has nothing to do with the quality." He continued, "I would say work in the public [sector] is probably easier to get [and] I can be more competitive with my price. I am more competitive, so I can get the jobs." [#75]
- When asked how the public sector and private sector differ, the non-Hispanic white female owner of a WBE-certified construction supply firm said "there are not as many rules" in the private sector. She added that public sector jobs "are bigger, but they drag out because of the bureaucracy and paperwork." She went on to say, "Private sector jobs are simple. They are open and closed in three months." [#14]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm stated that working in the private sector versus the public sector is "very, very different." He said, "In the public sector for example, with PennDOT, things are more formal and you have to comply with a lot more rules and regulations, and ... procedures. For example, PennDOT had design manuals that guide your work. So, it doesn't offer you ... the flexibility you would have in a private setting where you can go out and practice real engineering." [#09]

The same business owner continued, "In the public sector they have the set-asides, so in some respects it makes it easier to get the work. There might be limited competition among

firms who are very qualified for that work.” He added, “A lot of firms get certified, but they are not qualified to do the work because some of these projects are pretty complex, [such as] large bridges or river crossings. So, it makes it a little easier in the government sector than in the private, in general.” He went on to say, “If you have a good service you can get work in the private [sector], it just takes time.” [#09]

- When asked if there are differences when pursuing public versus private sector work, the non-Hispanic white female owner of a DBE-certified construction services firm said, “The public sector has a lot of ... processes and procedures, or rules and regulations that just have to be followed no matter what, and makes projects difficult and cumbersome, and sometimes they're trying to force a square peg into a round hole That bothers a lot of people, [but] it doesn't bother me. I've always done public and state work, so I try to use that as an advantage, to be honest. I can do the paperwork [and] I know the processes of submitting and getting approvals, and all of that kind of stuff that bogs people down.” [#12]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said, “Private [jobs] don't have to go through red tape [and] don't have a lot of regulations, [and you can] leverage relationships a lot more.” He said instead of waiting for approval, he “can go directly to the decision maker on the private side” and it “can happen immediately.” He added that in the private sector there is typically one decision maker versus multiple decision makers in the public sector. [#08]

One business owner noted that she receives payment faster in the private sector. The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “I'm paid faster in the private industry, and that's important when you're small. When you have to carry payroll for a couple of months until you get paid by the Commonwealth, that's hard.” [#57]

One business owner said that they were “shut out” of the public sector and are “hurting” in the private sector. When surveyed, the owner of a construction business in Eastern Pennsylvania responded, “It's been extremely difficult. I got out of the public market. I was ... shut out. If I change[d] my labor rate to a lower rate, I would lose the job. I was not going to cheat on the jobs to get a project, [so] I went private and it's hurting me.” [Avail #124]

C. Keys to Business Success

The study team asked firm owners and managers about barriers to doing business and about keys to business success. Topics that interviewers discussed with business owners and managers included:

- Keys to success in general;
- Relationship-building;
- Employees;
- Equipment, materials or products;
- Competitive pricing (pricing or credit);

- Financing;
- Bonding;
- Insurance; and
- Other keys to business success.

Keys to success in general. Many business owners and representatives expressed the key factors to success as professionalism, communication, experience, value, and reliability. Examples of related and other factors follow:

- When asked about the keys to business success in general, the Black American male owner of a DBE-certified goods and services firm said, “To be strong, you've got to have a strong capital backing.” He added, “Lots of mentors. That's the key. You have to have someone that's either performed or is currently performing to kind of coach you up, because that's really it.” He said that he was lucky, adding, “[I] had one contractor that gave me an opportunity. It wasn't easy and I had to chase him around, year one, two to three hours one way to a job, to get the experience. It just wasn't readily available from other firms. You basically had to have someone willing to bring you to the party.” [#20]
- The Black American owner of a construction management firm explained that the keys to success for MBE construction firms are political will, relationships, and professional mentoring opportunities. [#82]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said the keys to success in her field are “attention to detail and communication.” She added that electrical suppliers “need to offer a good product,” and explained that “good customer service” is an important part of a successful business in her industry. [#14]
- The Black American female owner of an MBE- and WBE-certified professional services firm stated the key to success in her industry is “to be good at it and also committed to [it].” She said, “[I develop] my proposal, or statement of work, for every client [You] need to be committed to delivering what [you] say [you're] going to deliver, and help [the client] set a vision for what they want and guide them if there's some tweaking that has to happen.” [#11]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm said the key to success in her industry is “knowing the fundamentals of the industry itself.” She stated, “To be competitive, you have to have a pretty diverse background. The field itself is diverse, so unless you're willing to work in one vertical, whether it's healthcare, nonprofits, or whatever, you have the ability to know ... a little bit about a lot.” [#19]
- The Black American female owner of an SDB- and WBE- certified professional services firm said that demonstrating her firm's value is an important part to staying competitive. She noted, “I think it's just a matter of your networks and making sure you provide value with all of the work that you do. [These] services are really a commodity. There [are] so many people who do the work, and can do the work, [so] you really have to provide that [added]

value So, I think that's what distinguishes me from other firms." She added, "My niche is really in the minority space, so when they're looking to have a minority- [or] woman-owned [company] they would probably come to me because I can provide that value." [#35]

- The Subcontinent Asian American male owner of an MBE-certified professional services firm said it is difficult to compare his business to others because his firm is very "specialized" compared to the competition's general IT consulting. When asked what it takes to be competitive in his industry, he said, "[It takes] knowledge of new technology and always trying to adapt to new technology Every six months there is a new computer coming, new software coming out, new paradigm being talked about, [and] new algorithms being written. [Things are] changing so fast...unless you are able to adapt to new technology changes, and adopt them, you cannot stay in the business." [#21]
- The non-Hispanic white male veteran with disabilities and owner of a professional services firm said that he stays competitive by keeping his overhead low and not hiring additional employees. He explained, "If I really needed an employee and I [found one] I'd have to bite the bullet and ... have him on payroll. But, I'd prefer not to do that." [#74]
- When asked what it takes to be competitive in her line of work, the Black American female owner of a DBE- and SDB-certified professional services firm stated, "Well ... to be competitive I guess you have to be out there. You have to make sure your financials are in order, that you're up to date on your taxes, [and that] you have ... your insurances. So, all of those things you have to have before you can get into the game As far as [competing], [it's] what ... you have to offer that's different from the competition" [#32]
- Regarding general keys to business success, the Black American male owner of an MBE- and DBE-certified construction supply firm said, "[It takes] good buying power, and good knowledge of manufacturers and competing, just to name a few." [#06]
- The Black American male owner of an MBE- and SDB-certified construction services firm stated that he needs cash flow and a large amount of equipment to succeed in his trade and identified steady work as the key to success. [#67]
- When asked what it takes to be competitive in the Pennsylvania marketplace, the non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm stated, "Just be price competitive and come up with good ideas." [#29]
- Regarding keys to success in her line of business, the Black American female owner of a WBE- and MBE-certified professional services firm stated, "It's ... really pricing, because we're all getting our stuff from China." She added, "With the internet now, a distributor can go direct to China." [#30]
- The Black American male owner of an MBE- and DBE-certified professional services firm said "pricing and location" are what it takes to be competitive in his industry. [#16]

- When asked what it takes to be competitive in the marketplace, the non-Hispanic white female co-owner of a construction firm stated that location and reputation are important. She added, "Really, we based ourselves on integrity more so than anything." [#47b]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, "In my line of business, to be competitive, you have to have been in it for a while. I think you have to put your money where your mouth is ... by guaranteeing our placements, there's really no risk." [#57]
- When asked what it takes to be competitive in his industry, the Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, "How we've been able to be successful [is] networking. It's being in the room at the right place at the right time [and] being known to someone who's making the decision, and it's taken years to make those ... connections in Philadelphia. It's just taken a long time, but it's starting to bear a lot of fruit for us right now." [#38]
- The Black American male owner of a DBE- and MBE-certified construction firm said "estimating and bidding" accurately are what make a firm competitive in his field. [#13]
- The non-Hispanic white female owner of a WBE-certified professional services firm said the key to success in her industry "is to have a really, really good handle on your costs and your expenses, and being able to manage that." She added, "I find that the costing end of things come relatively easy to me because I have a background in it." [#10]
- When asked what it takes to be competitive in his industry, the non-Hispanic white male representative of a professional services firm said a firm must have "knowledge [and] a sense of responsibility" He added, "You have to have the knowledge first, but you have to team that with a sense of responsibility to the customer." [#87]

The same business owner later indicated that "name recognition" is an important factor to success in his industry. He said, "Our problem ... first and foremost would be name recognition. So, a lot of times companies will go with [larger firms] or something that is known nationally. So [being] considered or championed, that has always been a difficulty." [#87]

- The Black American male owner of an MBE- and SDB-certified goods and services firm attributed knowledge of the trade and money management as keys to his firm's success. He explained that he had prior experience in his industry before starting his own firm, which gave him the opportunity to learn the business and understand which niches in the industry were most profitable. He also noted that he manages his money by saving, purchasing real estate, diversifying and maintaining an efficient company, adding that because of these practices he has no problems obtaining insurance, bonding or additional finances. [#60]
- When asked about the keys to success in the building trades, the non-Hispanic white male representative of a trade association said, "The bottom line really becomes the professionalism or productivity that is brought to bear on a project through both the unions and the contractors." [#83]

- When asked what the keys to success are in his industry, the non-Hispanic white male owner of a construction firm said, “Great craftspeople, quick reaction time, [and] not overselling [or] under delivering.” [#85]
- When asked what it takes to be competitive in his industry, the Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said owners have to be competent in the field. He stated, “If you're not good at what you do, no matter what certifications ... you have, you might [only] get one job, then nobody wants you after that if you can't perform. That's my prime objective, to be the best that we can be.” He added that having minority certifications helps his firm compete with larger firms. [#43]

The same business owner went on to say that because his firm has difficulty competing with these large firms, they try to align themselves with them. He said they do this “by providing expert service at a much lower cost,” and by helping the larger firm to “satisfy the set-aside requirements, if there are any.” He continued, “The prime objective has always been to provide the service that would be as good, or a little better, because it doesn't matter how big a firm is. It's the people who do the work [that's important]. If they're not proficient in what they do, it doesn't matter what name you call yourself by.” [#43]

- The non-Hispanic white male representative of a goods and services firm explained that to be competitive in his industry, you have to understand your competition brand's product, the timing of when their new products come out, and the needs of your customer. [#72]

The same business representative also said that in his industry, competition comes from other brands, not from dealerships selling the same brand. He also mentioned the importance of pricing and maintaining personal relationships with customers to be competitive. [#72]

- The Hispanic American male owner of a construction firm indicated that being competitive locally is a challenge. He said, “I'm still trying to figure that out. I'm not giving up ... I have family [and] I have children. [Giving up is] the last thing I'm going to do. They need to see that you just can't give up on things because things are not working out how you want them to. You've got to keep trying to get what you want either here or anywhere else. So, I'm just doing bigger and better things here. [I'm] building stuff so I can get involved with the community I'm pretty much trying to go above and beyond.” [#64]
- The non-Hispanic white male owner of a goods and services firm, stated that there is currently not any competition in his industry. He explained how that causes a problem for his firm because it does not always create enough demand for his product. He stated, “That's another struggle because the truth [...]is if other companies were able to do what we're doing it would probably be easier to get [...] everybody to buy into it.” [#50]

Experience, quality of work, longevity, education and competency. Business owners indicated the importance of experience, quality of work and other key factors. [e.g., #70, #87] For example:

- The Black American male owner of a DBE- and SDB-certified construction supply firm stressed the importance of competency. He said that race relations and economic

uncertainty are changing the country, and noted, “[Therefore], it only counts if you can deliver what you need to because everything’s changing.” [#03]

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said “you’ve got to offer good product” in order to be competitive in his industry. He added, “[In my experience], the most important thing is you’ve got to meet schedules and do good quality work.” [#09]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said, “The [clients] that I’ve known, I’ve known professionally, and they know me and feel comfortable with me They learn that ... my team has a high level of competence, so ... it’s not like we do a hard sell.” He added, “It’s really [about] feeling comfortable with a person and understanding that [the] person has a high level of competence.” [#76]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said “service and quality” are the keys to success in her industry. [#07]
- The Black American female owner of a closed construction services firm said that in order for someone to be successful in the construction industry, they must be “hard working, and better than the next person.” She added, “That’s probably one of my faults because I try to do everything perfect, and [don’t] move on until I ... get it right. I think it’s hard [work] and making] sure you take pride in what you do. [It also helps] to be innovative and to fill a niche that no one else has ... filled. That helps you to set yourself apart from other people.” [#26]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm indicated that finding her company’s unique niche has contributed most to their success. She said, “It’s generally easiest for us to bid on what we do best, which is recruiting people. And ... as opposed to becoming responsible for overall deliverables, so often we’ll partner with another firm that might have all the technology, for example, to operate a call center.” [#81]
- The Subcontinent Asian American female owner of a WBE-certified professional services firm said that she attributes part of her firm’s growth to high quality work and repeat clients. She stated, “I think the industry that we targeted, there was work. [Clients] see the strength of our product and value of our work, so they come back.” [#44]
- The Subcontinent Asian American male owner of an MBE-certified professional services firm indicated that his firm’s success is due to quality work and word of mouth referrals. He said, “Word of mouth [advertising from] people who have heard of us and we have done good work for [helps us].” He added, “[Our] motive has always been to give value for money to the client in a very cost-effective manner.” [#21]
- The non-Hispanic white male owner of a construction services firm stated, “Quality and being responsible [are important]. I pride myself on me and my guys always showing up ... being there ... never being late, [and] getting the job done properly.” He went on to

comment, “I don't go out and seek work. I have, right now, about five clients I've had for several years who are my main clients.” [#88]

- The non-Hispanic white male veteran with disabilities and owner of a professional services firm said that his word-of-mouth referrals are driven by providing high-quality service, especially since his pricing tends to be higher than the competition. He added, “How good or how bad of a job [you do] is actually going to determine what kind of future you have.” [#74]
- When asked what the keys to success are for her industry, the non-Hispanic white female owner of a DBE-certified construction services firm said, “[My industry requires] a lot of experience on the specific items that are of concern to Pennsylvania Turnpike and PennDOT, which basically means experience on specific PennDOT projects or Turnpike projects.” [#12]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm attributed much of her firm's success to high quality of work and communication with her clients. She explained, “We're a very responsible company. We make sure that ... we do good by our clients. So, because of that we can rely on that sort of reputation ... If there's a problem that they see, we will fix it. We're easy to work with.” [#31b]
- The non-Hispanic white female owner of a WBE-certified construction-related firm said that to be competitive in the plumbing industry companies needs to have “quality of work and the name [recognition].” [#17a]

One business owner said that the Commonwealth’s enforcement of contract goals is key to minority- owned and small disadvantaged business success. The Black American male owner of an MBE- and SDB-certified goods and services firm said enforcement of disadvantaged business commitments by prime contractors is key to the success of disadvantaged businesses. [#52]

Relationship-building. Across industries, most business owners and representatives identified relationship building, quality work and repeat business as key components to success.

Whether easy or difficult to achieve, many considered relationship-building a key to business success. [e.g., #10, #18, #22, #32, #33, #37, #43, #61, #74] For example:

- When asked what it takes to be competitive in his line of work, the Hispanic American male owner of an SDB- and MBE-certified professional services firm said a “relationship with the owner [or] whoever you’re going to get [work with]” is most important. He added, “That’s primarily [it]. They [need to] know you [and] what you’re capable of doing.” [#77]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm stated that “relationships are key.” He added, “Small businesses have to have the opportunity to build relationships with primes ... [Without] relationships, it is harder to win larger, longer term contracts.” [#08]
- The Black American male owner of a construction-related firm commented that the key to success is the combination of skills, relationships and MBE participation. [#68]

- When asked what it takes to be successful in his line of work, the Black American male owner of an MBE- and SDB-certified construction services firm stated that “[it’s] relationships,” though a lot of it is based on “good ole’ boy” club relationships. [#27]

The same business owner later said, “If you're not eating at their restaurants or attending maybe church with them and having a relationship with them [that way], it's very challenging to break into the market or [have] sustainability in the market.” He added, “Especially in Erie because of the size of the community, everybody knows everybody As soon as one of the ‘good ole’ boys’ dislike you because you enforced [something] or made him pay you, word gets around [that] maybe they shouldn't use you.” [#27]

- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm acknowledged the value of relationships for her firm. She stated, “As a small business, I’m very lucky. I’ve been in this business now ... for 16 years. I know most of the state CIOs. I know most of the people that are making purchasing decisions in human resources and places that we are playing. A lot of people don’t have that advantage and it’s very tough for them.” [#56]
- The Black American female owner of a DBE- and SDB-certified construction services firm reported that relationship-building is a key to her success. She said that she developed a relationship with another woman business owner who mentored her and helped her grow her firm. [#01]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm indicated that relationship building and networking have been key to his firm’s success. He said, “I haven't picked up the phone to ask anybody for a job since we started the firm in two years, because people know me from my old practice and ... know me as a leader in the community.” [#76]
- Regarding what it takes to be competitive in the industry, the female representative of a construction services firm stated, “It is about relationships Because we use a lot of contractors ... we need to count on them to work with us to get us the best pricing [on] equipment and material. You know, their labor. Like I said, most of the contractors.” [#39b]
- Regarding the importance of networking and relationships, the Hispanic American female owner of a professional services firm said, “Sometimes it's about trust It's saying, ‘Okay, so what would you do that is different from ... other companies?’ And ... sometimes it's just by that, the relationship” She added that when there is a connection, clients will sometimes say, “Hey, I’m going to give you a chance.” [PT#04]
- Regarding the importance of relationships, the Black American female owner of an MBE- and WBE-certified professional services firm said, “I network sometimes to look at partnering with organizations on a project.” She went on to say that she has networked extensively and has gained contracts “through working with [Eastern Supplier Minority Development Council].” [#11]

The same business owner mentioned that "[a] couple of other friends introduced [her] to people," and that she networks through "organizations, individuals, [and her] contacts" She added, "[I] think the key is following up [with others]. I find that, whether it's an event or whatever, if you meet someone you [need to] make sure you have the conversations [and] follow up [with them]. And I find that my clients will refer me to other projects." [#11]

- The Black American male owner of a DBE- and SDB-certified construction supply firm reported that the relationships that he developed over the years are key factors to his success. He said that he can "buy from anybody, but he'll pay more for it if he feels comfortable with the person he is doing business with." He went on to say that minority-owned firms should "get in the game [and] find a way to ... build relationships" [#03]
- When asked what it takes for a firm to succeed in his line of work, the Black American male owner of a DBE-certified construction services firm said "good estimating, good understanding on quick turnaround, quick pay schedules [and] being able to establish good relationships with suppliers" are all keys to business success. [#02]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that she believes relationships are a very important part of business success. She said that her company invites corporations to have lunch. She explained, "We all just sit around, have lunch ... [It's] education. Because if you really look at it in our industry, the return on investment, you're better off doing 50 things people will remember than 500 [things] with a name on it." [#04]

The same business owner went on to say, "We believe products are a great way to communicate your brand, but not just junk stuff." She said firms in her industry have to "keep it fresh," and later said, "It's ... being seen by the buyers that has value." [#04]

- The Black American female owner of a WBE- and SDB-certified goods and services firm said access to prime contractors enables her firm to build relationships with decision-makers. She said this enables the prime contractor to recognize her firm's good work, which creates the likelihood that her firm will have opportunities to perform on future projects managed by the prime contractor. She added, "When we are able to perform, we are able to get more jobs because we do good work." [#53]
- The Black American male owner of an MBE- and SDB-certified goods and services firm stated that his firm was able to diversify because strong relationships made more resources available. He explained, "People don't want just anyone to have their [customer information]. It's based on trust" [#60]
- The non-Hispanic white male representative of a small business development organization reported that out of all of the firms that he works with, the ones that put in "face to face" time meeting the program and procurement processes typically get the most work. [#46]
- The non-Hispanic white male owner of a construction firm said it is challenging to break into the marketplace and build relationships, and added, "I've talked to the guys at the local supply house, [and said], 'Here's my card. If you know of ... a situation where somebody's

kind of stuck and they don't have an answer, I'd be glad to see what I [can] do for them.”
[#51]

The same business owner continued, “They ... seem to know that I'm more knowledgeable than some of the [other] people ... but it doesn't mean that they're going to call me, because they're going to ask their other friends first. So, is it part of the 'good old [boy]' network? You could call it that, [but] maybe it's just part of standard competition and [I'm] unfamiliar with it because I'm so new.” [#51]

He later added, “I talked to one realtor who [was] part of a small group of 11 people, but there was like a \$300 membership fee, plus [a separate monthly fee]. And [I said], 'Okay, well that's kind of good, but there's only like ... 11 of you, how much networking am I going to do?' And then they said, 'Well, there's this other group [with] like 30 or 40 people, but it's like \$600 a year.’” He continued, “So in other words, I can't get ahead unless I know people, [and] I got to pay [on top of that]. So, how do I make it?” [#51]

- The non-Hispanic white female representative of a construction firm explained the importance of maintaining good relationships with inspectors. She stated, “[The owner is] friendly with most of the inspectors he deals with. He keeps on a good basis with them because you have to.” [#45]
- The Black American female owner of a DBE- and SDB-certified construction services firm reported that reputation, relationships, and having “tough skin” are key factors to her firm's success. [#01]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm explained that she learns about many of her subcontracting opportunities because of existing relationships she has with prime contractors. She stated, “I have built those relationships, so I know exactly who I would like to work with, who I know is going to pay me in a timely manner, and who I wouldn't work with no matter if [they] paid me to do it” [#57]
- The non-Hispanic white male veteran owner of a professional services firm explained that the key to the success of his firm is marketing via “word of mouth” referrals from companies he has established relationships with. He stated, “Where [my advertising] is pretty much word of mouth. If someone finds me, if we do one job and people like it, they refer us to the next, and things like that. And, it seems like our phone keeps ringing and we keep busy. I really don't have to hunt for work.” [#91]
- The non-Hispanic white female owner of a WBE-certified construction firm described what it takes to be competitive in her line of business. She stated, “I think, for us as a company, being competitive starts with having strong relationships with your vendors. It also helps us with who we've become, and our reputation plays a big role in that. We're involved in a lot of design assist projects with [a major university], and so that means you're asked to be part of a team. You're asked to be involved up front - so that plays a big role in our work. You know, my dad's done an excellent job. [Our firm] has a good reputation. So as we kind

of go into the third generation, that's been important to us is our reputation and the people that we employ." [#73]

One business owner reported difficulty establishing business relationships due to the “good ole’ boy” network. The non-Hispanic white female owner of a WBE-certified construction firm reported that she has faced “good ole’ boy” networks while doing business in the local marketplace. She explained, “I can't say I'm not invited, because I am invited. But, I would never go because I don't golf All of my fellow [contractors] golf. [They're] all friends with each other, and they socialize and [talk]. [#22]

The same business owner continued, “We just lost a \$4 million project because the general contractor and the head of the mechanical contractor that got the job were really close friends Those relationships are still a challenge, but you keep trying. You just keep your nose to the grindstone and keep trying.” [#22]

One business owner indicated that business relationships aren't important if the Commonwealth doesn't enforce contract goals. When asked about the importance of relationship-building, the Black American male owner of an MBE- and SDB-certified goods and services firm said business relationships do not matter until there is Commonwealth enforcement of diverse business contract commitments. [#52]

A few interviewees reported that building relationships is an important part of public sector contracting. Some indicated challenges developing relationships in the public sector. [e.g., #32, #33, #51, #81] For example:

- The Black American male owner of a DBE-certified construction services firm said he has been around the area's biggest contractors and made money “with them and for them.” He said when these contractors found out he was starting his own company, they approached him and said they “want to be back with [him].” [#02]

The same business owner added that he has “great relationships” with all supply companies and equipment providers. He said that he purchased from “just about all of them.” He went on to say that once they knew he was running his own company, they “rolled the red carpet out and extended a substantial line of credit to [him].” [#02]

- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said pursuing state contracts as a subcontractor means the owner has to develop a relationship with various prime contractors. He explained that this can be time-consuming for firm owners who have to balance these activities with the various other duties associated with running a small business. [#43]
- Regarding the importance of relationships in the public sector, the male representative of an SDB- and VBE-certified consulting services firm said, “We have two sayings ... people buy from people, but more than that, people buy from people they know, like, trust and understand. So, when once you get to know, like, trust and understand someone, it's like [thinking], “I'm not [going to] fix my TV until it breaks.” [PT#09]

- When asked what it takes for a firm to be competitive in his industry, the Black American male owner of an MBE- and SDB-certified construction company stated, “Construction has always been a competitive ... business, but ... I have come to discover that is different in ... Southeastern ... Pennsylvania There is [an important] component [to] relationship[s] [there]. Those relationships sometimes ... can exclude a lot of people. And as leadership changes with those [business] owners who make those decisions about who they procure with, [it] narrows [even] more as ... years pass by.” He went on to say, “That’s the challenge ... especially in the southeastern quadrant” [#37]
- When asked what it takes to be competitive in her industry, the non-Hispanic white female representative of a professional services firm stated, “I think a lot of areas that we work in is based upon how people see your company. It's based upon word of mouth in some of the industries. [This is] especially [true when] we work in ... environments where there's a lot more ... factory type workers, blue-collar workers, people that are a part of unions. All those various people do talk and trying to get our name out there in [the] public, I guess, has been a little bit challenging. But, once you're out there you're good in certain areas.” [#84]

When seeking a relationship with Commonwealth of Pennsylvania and/or PennDOT, building relationships is a positive experience for some and a challenge for others. For example:

- The Asian Pacific American female owner of an MBE and WBE-certified professional services firm stated that she built a relationship with an employee in the Pennsylvania Department of Labor and Industry and that the relationship helped her to obtain work. [#69]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “We’ve not been able to crack into working with the Commonwealth at all, and I’m not sure why that is. There have been several opportunities that made a lot of sense to us. We’ve done the same kind of small business networking things that they have at the city, at the federal level I go to D.C. to do business with them as well, but we have not been able to be successful at the state level.” [#38]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm indicated that it is difficult for his firm to build relationships at the state level. [#77]

Employees. Business owners and managers shared comments about the importance of employees. Some interviewees indicated that high-quality workers are a key to business success and sometimes difficult to find. [e.g., #10, Avail #41, Avail #63, Avail #83, Avail #114, Avail #134, Avail #142] For example:

- The Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “As far as access to talent, partially because of how I present the company, we are getting a lot. We are ... actually [getting] talent [that comes] to seek us because of how we run this company and how we are a diverse business, and [because] we have this kind of culture here that celebrates difference.” [#38]

- When asked about keys to success in his industry, the Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said employee retention and cultivation is important. He added, “We have a good reputation in terms of retention. Most of our employees in the Harrisburg office you will find [have worked for us] between 10 and 15 years.” He noted that he doesn’t want his company to simply hire and fire people. If one of their employees is good but not performing well, he said they seek to find the right position for them. [#28]

The same business owner also said that his firm seeks to pay well. He said even if the firm loses a project, it keeps its employees. He explained, “As long as you’re paying a good salary and they know that there’s stability, [they stay]. There are always ups and downs in the business, so even if you lose a business [or] a project we still keep our people They know that they can basically stay with [us]. They don’t have to worry about anything.” He later said that his firm has no issues attracting talent and hiring good personnel. [#28]

- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that he hires employees with diverse skill sets in order to be more competitive on large public sector contracts. He stated, “The company doesn't do the work, the people of the company do the work. If they're experienced in that facet of the work, then I show their experience and that's how I've been able to obtain some larger contracts.” [#43]
- The non-Hispanic white female co-owner of a construction firm referenced the fact that the personal situations of the people who apply for their driving jobs can make finding employees difficult. She stated that many applicants have issues with DUIs or warrants, which can cause issues with licensing and insurance. [#47b]
- The non-Hispanic white female representative of a majority-owned construction firm stated, “The biggest barrier ... is finding employees, with the restrictions that the State of Pennsylvania has put on CDL drivers It is just almost too much. You're paying for a physical, which you can't get reimbursed for ... through medical coverage That's a base price that starts at \$125.” She continued, “And the biggest thing ... is finding an employee with a valid license Because, you not only have to find one with a valid license, [but] ... your insurance company [has to be] willing to insure them driving your vehicles.” [#45]
- Regarding employee hiring, the Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said, “I’ve been trying to grow [our business] in different directions. The advantage of being in different fields is that you can get work everywhere The disadvantage [is that] you don't have experts in all the fields, so you have to acquire them If those fields go down in contracts, I have people who are idling, [and it's] always a challenge to get consistent work in the environmental field.” [#43]
- The non-Hispanic white female owner of a DBE-and SDB-certified professional services firm said, "You need to be able to have and retain good talent ... you need to have an active marketplace to keep people employed." [#59]

- The Subcontinent Asian American female owner of a WBE-certified professional services firm stated, “It’s not really easy to hire people because you’re unsure of the workflow. [But] at the same time, to get the work done you need talented architects and talented team.” [#44]
- The Black American male owner of an MBE- and SDB-certified construction company indicated that it is challenging to find and retain qualified employees in his area. He stated, “I’m struggling to get the right people in Philadelphia. [And if] I go to Harrisburg, assuming that I bid [and] land [a] job, everything is competitive I [might] go to Harrisburg and ... get a whole new crew that I’ve never met, [and I] have no idea of their ability to produce. So ... anybody with logical ... sense will see that is problematic.” [#37]
- The Black American male owner of an MBE- and SDB-certified construction services firm noted that because he is not able to obtain constant work, even though there are few skilled tradesmen in his industry in his region of Pennsylvania, it is challenging and expensive to hire the best employees when he is awarded a subcontract or contract. [#67]
- The Black American male owner of a DBE-certified construction services firm said that he has trouble finding employees because “the union hall is empty right now.” [#02]
- The non-Hispanic white female owner of a WBE-certified construction-related firm said the plumbing industry is growing so much that it is hard to find qualified, union plumbers to hire. She added, “I can’t find a plumber in the [union] hall anymore. Everybody’s working. So even though I’m planning to grow, I’ve got to go and talk to the union again because there’s no plumbers.” She went on to say, “They have to permit me to go and negotiate with plumbers that are already on jobs.” [#17a]
- When surveyed, the owner of a construction business in Central Pennsylvania responded, “It’s tough to find good employees if anything. It’s due to parents and educators forcing children to go to college first, and also due to an influx in union representation.” [Avail #14]
- The non-Hispanic white female owner of a DBE-certified construction services firm said that she has difficulty finding employees that have previous experience on Commonwealth projects. She said, “I can’t hire someone that has experience with ... PennDOT without putting them on a PennDOT job. They can’t get PennDOT experience without being on a PennDOT job, so it does become a little bit nepotistic It’s legitimate criteria [PennDOT is] allowed to impose. It just has its natural drawbacks for that reason.” [#12]

The same business owner later said that she struggles to find personnel because of payment issues as well. She said, “I can’t hire someone and pay them to sit in that chair without being assigned to a project, without a task to do. If they had part-time work, I could give them more part-time work to fill in, but I can’t.” [#12]

- The Subcontinent Asian American male owner of a goods and services firm said that he has difficulty finding employees who are both knowledgeable and reasonably priced. He said, “It’s getting a little bit tough to get [good employees] because ... this is [a] hard-working industry. [It requires] hard labor with some skill, and most of the time [employees] with

labor and skill will go into the construction industry. That's where they get a lot of money For a small business to hire them it's not justifiable, [it's] too expensive." [#15]

- The Black American female owner of a DBE- and SDB-certified construction services firm reported that barriers exist for her ability to hire and keep qualified employees because they expect good benefits that she cannot afford to offer them. [#01]
- The non-Hispanic white female owner of a WBE-certified professional services firm indicated that she wants to create manufacturing jobs in Pennsylvania, though it may not be feasible. She commented, "I have been studying what Governor Wolf has done for other companies that come in, and usually they're big. Well, in our case I can't say that we're going to bring in 10 employees" [#04]
- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm reported problems finding good employees and attributed it to cash flow problems. He explained, "We have recently had a lot of trouble getting people with expertise in the office because we have very unstable cash flow ... you end up getting a reputation as somebody who can't provide long-term security. It's a huge issue." [#62]
- The Hispanic American male owner of a construction firm reported that finding good employees has been a challenge for his firm. He stated, "Sometimes you hire somebody to do something for you and then they don't have the experience, and it's a lot of mistakes" [#49a]
- When surveyed, the owner of a goods and services business in Western Pennsylvania responded, "It's always hard to find good talent." [Avail #39]

One business owner said a lack of quality workers has prevented his firm from expanding.

When surveyed, the owner of a construction business in Western Pennsylvania responded, "We have had issues expanding because [of a] lack of knowledgeable, skilled workers." [Avail #17]

Some business owners indicated that hiring good employees is not a challenge for their firm.

For example:

- Regarding the importance of good employees, the non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm reported, "I have a very good team and I feel confident we can take on any challenges" [#05]
- When asked if her firm faces challenges when trying to hire qualified personnel, the Black American female owner of a DBE- and SDB-certified professional services firm indicated that they do not. She said, "We know a lot of people that do different things, so when we have a contract we put together a team and [tend to] use consultants a lot. [We use consultants] because everybody doesn't know everything. So ... if you have a subject matter expert, [it's best] to bring that person on board [for] the expertise." [#32]
- The non-Hispanic white female owner of an SDB-certified construction firm reported that hiring good employees is not a challenge for her firm. She stated, "I have a union contract, and that's why I went with [a] union, because of labor." [#65]

Equipment, materials or products. A few business owners and managers discussed equipment and materials needs, and the importance of having the right operational equipment and materials for their businesses at a reasonable cost. [e.g., #55, PT#14f] For example:

- The Black American male owner of an MBE- and DBE-certified general contracting firm said that his firm would be “heads and above” the competition if he had the same access to pricing on equipment as “a majority company.” [PT#07]
- The non-Hispanic white female representative of a construction firm mentioned that the cost of equipment, including maintenance and required registrations, can be a challenge for her firm. She stated, “For a six-wheel dump truck, and that’s a small dump truck, our registration ... is almost \$1,200 every year. Just for one truck. We probably have 13 vehicles.” [#45]
- The non-Hispanic white male owner of a construction services firm said that his firm struggles with the increase in “fuel costs, especially for diesel fuel,” which is all he uses for his equipment. He added, “It’s just at the higher end of the spectrum, and there doesn’t seem to be any relief in sight for that What I can’t estimate is what the price of fuel is going to be next year or over the summer.” [#88]
- The non-Hispanic white male owner of a construction firm said that he has to rent some equipment as opposed to owning it all. He added, “For the scope of work that I do, there isn’t an issue [with that].” He said it “comes down to rental costs,” and noted, “[Those costs] can be built into the job because most electricians on the residential side will rent the equipment. It’s the bigger commercial guys or industrial [contractors] that have the majority of the equipment, [and they] have the bigger jobs.” [#51]
- When asked what it takes to be competitive in his industry, the Hispanic American male owner of an SDB- and MBE-certified professional services firm stated, “You’ve got to know your stuff [and] you have to have the proper technology to keep up We use a lot of computer-assisted documentation and programs ... so you need to have a good technical infrastructure. You have to have the right professional training [too], because it’s a service industry” [#76]
- Regarding her firm’s equipment, the non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said when she calls for a piece of equipment the vendor sends it to her brother, the co-owner. She said, “They still send it to my brother. I’ll be calling them for it [and] asking all this information, but they’ll still send it to my brother.” [#07]

The same business owner later said that customers are often hesitant to try new products in her industry. She said sometimes they can find customers that will “make an exception,” but commented, “At this point after 30 years, you know what? I’m not going to fight with [them about products].” [#07]

One business owner said that special equipment isn’t needed for his firm because of low business volume. The non-Hispanic white male with disabilities and owner of a DBE- and

DOBE-certified professional services firm said obtaining equipment is not a problem for his firm only because they don't have the business volume to make certain equipment necessary. [#29]

Competitive pricing. Business owners and managers discussed the need for competitive pricing and credit when seeking business success. For some, staying competitive is a challenge. [e.g., #43] For example:

- The non-Hispanic white male owner of a construction firm reported that pricing is important to being competitive in his industry. He added that a firm's location and certifications probably affect their pricing the most. He said in New Jersey it's more difficult to obtain certification for electrical work because their codes are more up-to-date, noting, "Jersey is 2017 [and] Pennsylvania is 2014." He added, "But as far as payment, based on my knowledge and what I know [by] going to school and trying to keep my standards up, I [still] can't compete with other people in the area that are just doing it ... as a hobby." [#51]
- When asked what it takes to be competitive in her industry, the non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm stated, "As an LGBT-specific law firm geared toward the LGBT community ... I have very few competitors So, I would say the biggest issue with law firms being competitive would be pricing [and] fees." [#33]

The same business owner continued, "I purposely went the path of keeping my overhead very lean ... and I pay more than I would want to, but ... overall my overhead is very low compared to most law firms that generate as much revenue as I do. And so, that allows me to [give a] 90 percent flat fee. [If] you come to me for something, I can provide a flat fee for you, and clients love that." She later added, "Differentiation I think in the marketplace is important because we have more lawyers per capita in Pennsylvania than any other state. So ... there's just a ton of us." [#33]

- When asked about the keys to success in her industry, the non-Hispanic white female representative of a professional services firm stated, "Cost. Cost of products. It has to be the lowest, but it also has to meet the requirements of what customers need as well." [#84]
- With regard to what it takes to be competitive, the non-Hispanic white female owner of a LGBTBE-certified professional services firm stated, "I think there's two ways. The easy way, which a lot of people do is just price The way I'm trying to do it is through the consulting and through the service. Trying to help people understand how to use the product." She added, "My LGBT certification has helped." [#41]
- When asked how members stay competitive, the Hispanic American male representative of a trade association stated, "[It] depends on the business and the segment of the market that the business is going after If small businesses or diverse businesses are looking to scale and do business with large organizations, I think one of the key factors is price" He added, "Those contracts are always going to be driven by price, so dealing with low margins is certainly an issue for small, diverse businesses." [#86]

- The non-Hispanic white female representative of a construction firm stated that fair pricing and minimizing wasted time are important factors to stay competitive. She stated, “[Our builders] know, because we do buy supplies in bulk ... that they're getting a better price a lot of times” She also said that buying supplies in bulk, ahead of time, eliminates potential wasted time “because it's not like you're on the job site and ... realize [you] need to go get pipe ... or something [else].” [#45]
- When asked what it takes to be competitive in his industry, the non-Hispanic white male owner of a construction services firm said, “I think it comes down to prices, unfortunately. Everything is about a price. They're looking for people who'll work for as little of a price as possible So, price seems to be the biggest factor.” [#88]
- The Black American male owner of an SDB- and MBE- certified construction company reported that keeping costs competitive are difficult because he is a union employer. He noted that finding work in other parts of the state is difficult because of his operating costs, therefore making his prices too high. [#37]
- The non-Hispanic white male owner of a construction services firm stated that determining pricing a job can be a challenge. He explained, “If you price it too low then people get wary about that, but if you price it too high, people can't afford that.” The same firm owner noted that complying with extensive government regulations increases expenses and makes it more difficult for the firm to be competitive. [#40]
- The Black American male owner of an MBE- and DBE-certified specialty consulting firm said that minority-owned firms “can't get the same pricing ... that non-minorities can get.” He added, “In a low bid world, that's all it really comes down to Once [you] find a supplier that's cheaper than [competition], [you're] going to beat everybody.” [PT#05]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said, “I think pricing is always an issue with the exception of [in] the government sector. I know on the federal side they use qualifications-based selection, so price is the secondary option. If you can't negotiate after you've been selected, then they'll go to number two.” He said this evens the playing field as it allows his firm to compete with larger, more established companies. [#77]
- When asked what it takes for a firm to be competitive in his line of business, the Black American male owner of an MBE- and SDB-certified professional services firm stated, “It does take ... knowledge, technology, and then pricing.” [#36]
- Regarding competitive pricing and credit, the Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm indicated that competitive pricing is important, and noted, “[There are] SBA programs that help along those lines.” [#09]
- The female representative of a WBE-certified construction-related firm stated that it is important that a company be “competitively priced.” [#17b]

- The Black American female owner of a DBE- and SDB-certified professional services firm said “your price point [has to be] better” to be competitive in her industry. [#32]
- When asked what it takes to be competitive in his industry, the non-Hispanic white male owner of a construction services firm stated, “You gotta have the best prices.” [#39a]
- The non-Hispanic white male owner of a construction firm said that his price point and effective communication skills make his firm competitive. [#75]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said “lowest price and the ability to hold escalation” are the keys to success in her industry. [#25]

Financing and access to capital. Many firm owners reported that obtaining financing was challenging and important in establishing and growing their businesses. Some indicated that financing was necessary to purchase equipment or survive poor market conditions. [e.g., #20, #48, #59, #76] For example:

- The non-Hispanic white female owner of a WBE-certified professional services firm indicated that having access to financing is a key to her firm's success. However, she noted that she did not always have the financial access she does today. She said graduate students at a Pennsylvania business school did an in-depth study on her business to estimate its borrowing power and found that she should have no issues borrowing \$50,000 from a bank. [#04]

However, the same business owner went on to say that she was denied the loan when she met with the bank representative after they questioned if she might have a problem with her inventory and branding for a large contract. She was told, “This just isn’t the kind of risk that we want to take.” She eventually got the loan at a different bank after meeting a bank representative at a women's networking event. She commented, “Today they are still my bank, she’s still my banker, and we have increased everything to where nothing is a problem anymore.” [#04]

- The Subcontinent Asian American male owner of a goods and services firm said the keys to success in his industry are, “financing ability, particularly maintaining loans, and well-trained employee availability.” He explained that it is difficult to maintain loans and find employees with technical skills at a reasonable price. [#15]
- The Asian Pacific American female owner of an MBE and WBE-certified professional services firm stated that two banks denied her for a line of credit, yet within six months of starting her business she presented her state purchase order [contract] to a third bank and was able to establish a line of credit. [#69]

The same business owner stated that during the initial years of her company, her personal financial resources facilitated the survival of her firm. Since she stated it has always been the case that “all [her] subs are paid whether or not the government pays [her].” [#69]

- The non-Hispanic white male owner of a professional services firm stated, “It takes a lot of working capital Because [of] the internet and Amazon, all the products that you could want to purchase [in] smaller quantities are all available there. And so, [it’s difficult trying] to navigate the shipping industry, such as UPS and FedEx [because] you only get discounts on shipping if you ship a lot ... of weight. It’s very difficult to be competitive [and] have a good profit margin where you feel like it’s worth your time.” [#70]
- The minority male owner of a construction firm said, “It is just appalling that you can have ability, you can have knowledge, but if you do not have access to capital, you’re limited to what you can do. So, I’m thankful that we were able to go forward and build the things that we were able to build. But, there needs to be more at the top making sure that these resources are being able to be passed down to individuals that have desires, that have hunger to go forward and be able to make a difference in their community They have [to have] the resources to make a difference in their community.” [PT#14f]
- The Black American male owner of a DBE-certified construction services firm reported that he has strong relationships with his bank, insurance firms, and accountants. He added, “Because of that team I have ... I know that I can stretch out a little further than a normal person who would just be starting out.” He said, “I can manage that risk a little more with that cushion behind me in case I do get a customer where they don’t pay us as scheduled, and I have to go to my line of credit. Which I have had to do, but that’s what it is there for.” [#02]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said it takes “a good line of credit at the bank” to be successful in his line of work.” [#06]
- The Black American male owner of a DBE- and SDB-certified construction supply firm indicated that financing is challenging but necessary in his industry. He said, “Access to capital is one of the most important challenges now.” [#03]
- The non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm reported that “this is a very cash intensive business, so cash flow is prime We have to front the payroll” [#05]
- The non-Hispanic white male representative of a small business development organization indicated that cash flow is very important. He stated that receiving payment within 14 days of a project’s completion is key. [#46]
- The Hispanic American male owner of a construction firm highlighted the importance of financing and cash flow to stay competitive in his industry. He explained, “To do any construction ... people, [especially] the government people, they want [things] done ... yesterday.... In order to do that, you’re having to be waiting for them to fund you ... you have to have money ... to keep working until they can reimburse you.” [#49a]
- The male representative of a Harrisburg public agency indicated that access to capital is especially important for minority business owners. [PT#09a]

- The Hispanic American male representative of a trade association reported that access to capital is both a key factor to success and a barrier for small and diverse business members in the association. [#86]
- The non-Hispanic white male owner of a goods and services firm, described the challenges his firm has faced with accessing financing. He stated, “Well, we don’t make enough money that we can borrow money. Banks won’t deal with you. We have a loan against this house that we’re struggling to pay because we don’t have the money coming in and we don’t have the money to do the advertising that we really need to do. We have a marketing company that can do a fantastic job, but they can’t do it for \$5 or \$10, they just can’t do it, and I just don’t have any more money to put into it. We can’t refinance this house. We’re already financed to the hilt. We had to buy a new truck to pull these trailers around with. That’s strangling us. Everywhere we go we’re being strangled for money and we can’t borrow any money.” [#50]

Some businesses reported that financing is not a key factor to their success, nor a challenge.

[e.g., #24] For example:

- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said that he has been “fortunate” in that he does not have to request financing. [#08]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm said, “[The] work we do doesn’t really require capital. We have a computer and an internet connection, [so we] can do [our] thing.” [#19]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that financing is not relevant to him because he manages his finances well. He commented, “Today if I lose a 10-[person] project or 20-[person] project, it won’t harm me much. We can manage it.” [#28]

Bonding. Business owners reported on their access to bonding. Some experiences reported are positive, some are negative. For some, bonding is not obtainable.

Many interviewees indicated that bonding requirements are challenging and/or adversely affect small and minority-owned businesses’ opportunities to bid on public contracts. [e.g., #01, #02, #06, #83, Avail #120] For example:

- The male representative of a Harrisburg public agency indicated that bonding requirements are a reason for low capacity in the minority business community. [PT#09a]
- The minority male owner of a general contracting firm indicated that securing bonding is especially difficult for minority-owned firms. He commented, “Even before you start working doing a contract, you’re going to need money in your pocket.” [PT#01c]
- The Black American male owner of a construction-related firm reported that he informed a public entity that their bonding requirements were “ludicrous” because it was written 30 years ago. [#68]

Others reported little or no problems obtaining bonds, or that bonding was not required in their industry. [e.g., #65] For example:

- The Subcontinent Asian American male owner of a goods and services firm said that he had to deal with government insurance and bonding requirements when the firm first started, but now “[he doesn’t] require too much ... insurance or bonding because [it’s] mostly for the construction industry and [he’s] just a supplier.” [#15]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said bonding is not required in his industry. [#28]

Insurance. The study team asked business owners and managers whether insurance requirements and obtaining insurance presented barriers to business success.

A few interviewees could secure insurance, but the challenge of sustaining it, especially for small businesses, is reported to be a barrier. For example:

- The Black American male owner of an MBE- and DBE-certified construction supply firm said years ago he tried to start a sister company to “[do] installs.” He said it “never got up and running” because insurance carriers thought he did not have enough direct experience with installations. He commented, “At some point you [have] to let a company start [and get experience].” [#06]

The same business owner went on to say that certain jobs also require extensive liability coverage. He said companies are “locked out” of these jobs if they can’t get the coverage. [#06]

- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm stated that insurance is a barrier to doing business with state agencies. She added, “I think there are other restrictive things, [such as] the insurance requirement [and the terms and conditions] to read through [so you] understand what you’re agreeing to. They’re especially tough for a small business that doesn’t have a lawyer on their team.” [#56]
- The non-Hispanic white female representative of a majority-owned construction firm discussed her firm’s challenges with changing insurance requirements. She said that “the insurance constantly goes up” because of the need for new certifications. [#45]
- The non-Hispanic white male owner of a construction services firm said that his firm faces barriers due to the “escalating cost of insurance.” He explained, “Basically, [they’re] things I can have no control over It’s just [that] unfortunately, year by year, my insurance costs rise [It’s] because ... with the dump trucks I have, only a few companies are wanting recovery dump trucks anymore. I guess because there’s so much of a liability there they don’t want to cover, so I can’t really go around and shop. [#88]

Some interviewees expressed concern about small businesses’ ability to secure workers’ compensation insurance for employees. For example:

- The Black American male owner of an MBE- and SDB-certified construction services firm noted that it is a burden on his firm that insurances, such as workers' compensation, must be paid even when he does not have work. [#67]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said it is a struggle to obtain workers' compensation insurance for his firm. He stated, "Getting insurance for workers comp has been a major problem. No insurance company wants to give a small environmental consulting company workers' comp The only organization that gave it to me was SWIF, the State Workers Insurance Fund." [#43]

The same business owner continued, "The reason [I hear] is because they view us as a big risk, so they don't want to insure us I've gone several times to insurance agents and they said they can't get it for us. We get it from the state. So, it's only one organization that gives us [it], and we're kind of stuck with that. It's like a monopoly for them. They're not outrageous [price-wise], but I think there's no competition. There's no reason for them to reduce anything. It goes up periodically." [#43]

- The non-Hispanic white male veteran with disabilities and owner of a professional services firm stated, "The workman's compensation is yet another issue Right now, it's not cost effective for me ... [to have] employees. That would really eat into my overhead." [#74]

One business owner reported that insurance requirements or obtaining insurance were not barriers and indicated that insurance is an important business expense. The non-Hispanic white female owner of an SDB-certified construction firm indicated that obtaining insurance or bonding is not barrier for her firm, and commented, "You pay, you'll get it." [#65]

Other keys to success. Several business owners and representatives mentioned keys to success that do not fall into the above categories. Two interviewees reported on the importance of maintaining safety measures. For example:

- The non-Hispanic white male owner of a construction services firm indicated that good safety management is a key to his firm's success. He said, "You've got be very much on top of things in this business. [It's] a lot of supervision ... it means being there every day [and] making sure nothing goes wrong safety-wise." [#39a]
- When describing the growth of her firm, including what has helped to make her firm more successful and competitive, the non-Hispanic white female representative of a construction firm stated, "We have a great clientele base. We've never been stuck for any money, as of today It's just by word of mouth. We don't have to advertise." She continued, "You have to be fair with people, you have to treat people ... the right way and everything." [#45]

Continuing to discuss the keys to her firm's success, the same business representative mentioned the importance of having respect for the client and their space. She explained, "One of the things we impress on our guys, when you pull onto that jobsite, that jobsite is to look exactly the same [when] you leave it It's doing a nice job and ... treating their property like you'd treat your own property" [#45]

She also mentioned the importance of safety and efficiency considerations to stay competitive. She explained that the owner carefully thinks about the job days in advance "so that there isn't any type of an injury or ... incident, or anything like that." [#45]

- Regarding what it takes to be competitive in his line of business, the Asian-Pacific American male co-owner of a professional services firm indicated that protecting intellectual property is a key to his firm's success. [#42]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that her firm is adopting services such as phone apps to be more competitive and to stay successful. She commented, "We work very, very hard to stay ahead." She later said, "We're trying to be automated. We're trying to do things that generate revenue" [#04]
- When asked what it takes to be competitive in her industry, the Subcontinent Asian American female owner of a WBE-certified professional services firm said business owners need to be committed to their work. She stated, "In the beginning, the first two years are an extremely big struggle, [especially] when you're not hiring employees. As a small business you're multitasking [and] you have to be going 100 percent because the original reason you start [this] work is that you want to do the best. [You want to] use your knowledge to your best [ability] and give the client your best [effort]." She went on to say it can be difficult for entrepreneurs to start their own business while maintaining a work/life balance. [#44]
- The non-Hispanic white male veteran with disabilities and owner of a professional services firm indicated that diversification of work types is important to the profitability of a small business. He stated, "This year was the first year that I had to pay Uncle Sam a sizeable amount in taxes, which is good. That means that I made some money last year. But a third of my income last year was from mold remediation, and another third of it was from radon mitigation. I worked my tail off last year, but now I've realized [that] had I not grown my business through those two aspects, I would've been making only that last third as income directly from inspections." [#74]

D. Doing Business as a Prime Contractor or as a Subcontractor

Business owners and managers discussed:

- Mix of prime contract and subcontract work;
- Challenges for small and minority- and women-owned businesses when seeking work as prime contractors/consultants; and
- Challenges for small and minority- and women-owned businesses when seeking work as subcontractors.

Mix of prime contract and subcontract work. Business owners described their experience working as prime contractors and/or subcontractors/subconsultants.

Many firms that the study team interviewed reported that they work as both prime contractors and as subcontractors/subconsultants. [e.g., #05, #06, #08, #22, #24, #26, #32, #34, #37, #47b, #56, #62, #76, #77, #85, #88, PT#01c, PT#04] For example:

- The Black American male owner of a DBE- and SDB-certified construction supply firm reported that he works as a prime and subcontractor. He commented that the difference between prime and subcontracting is “all about money.” He added, “The higher up you are ... the quicker you get paid.” [#03]
- The Black American male owner of a DBE-certified construction services firm said that his firm works as both a prime and subcontractor in the public and private sectors. He added that his firm subcontracts jobs such as “insulation and sheet metal,” but keep almost everything else in-house. [#02]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that his firm works as both a prime contractor and subcontractor in the public sector. He said, “If the project is less than like \$4 million per year, then we go as prime. If it is more [than] \$4 [million] per year then we don’t go as prime.” He said because the firm is a Small Diverse Business they serve as a subcontractor to other companies on most projects they’re awarded. [#28]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that his firm performs work as both a prime contractor and subcontractor. He reported that their work with the Commonwealth has been in a subcontracting role, while their work with City of Philadelphia has been in a prime contracting role. He went on to say that his company has done minimal federal work as a subcontractor. [#43]
- The Black American male owner of an MBE- and DBE-certified professional services firm said that his company works as both a prime contractor and a subcontractor. [#16]
- The non-Hispanic white female owner of a WBE-certified construction-related firm said that her company works half of the time as a prime contractor and the other half as a subcontractor. [#17a]
- The Hispanic American male representative of a trade association reported that members work as both prime contractors and subcontractors. [#86]
- The non-Hispanic white male representative of a professional services firm reported that they work as a prime contractor about 90 percent of the time.” [#87]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm said, “Maybe 85 percent of the time, we’re the prime.” He added, “We of course love being the prime and being a sub. It’s a marriage, it really is. It’s a business marriage, so ... you don’t ever want to be in a situation where you actually have to use your contract and language.” [#38]

- The Hispanic American male owner of a DBE-certified professional services firm stated that the firm provides services sometimes as a subcontractor and increasingly as a prime contractor. He estimated that the firm performs 75 percent of its work as a subcontractor and 25 percent as a prime contractor on its public sector projects.

The same interviewee reflected on the differences working as a prime contractor in comparison to working as a subcontractor. He observed, “[As a prime contractor] you just have a lot more responsibility for delivering that project on time, you know, correctly, and you need to know how to manage that risk. . .” He continued, “It does enhance cashflow. Indeed. . . if we – we submit a bill as a prime, then generally, within 30 days, we get paid. Some quicker than 30 days. But, if we are a sub, we have to submit our invoice to the prime consultant and if we are not and if the invoice is not there by the 10th of the month, let’s say that’s somebody’s billing cutoff, it will sit there another month until they submit their bill again. So, our – our average receivable, when we are a sub, is 92 days. Our average receivable when we’re a prime is 30 days. So, being a prime is a lot shorter pay cycle.” [#89]

- The Asian Pacific American female owner of an MBE- and WBE-certified professional services firm stated that all the work her firm performs is through government contracting. She said they work as a prime contractor 85 percent of the time. [#69]
- The non-Hispanic white male owner of a construction services firm reported that they are “usually prime” on contracts. He added, “We do sub [work]. I would say it’s probably ... 80 percent prime [though].” [#39a]
- The non-Hispanic white female representative of a construction firm said that roughly 75 percent of their work is performed as a prime contractor and the remaining 25 percent of their work is subcontracting. [#45]
- The Subcontinent Asian American male owner of an MBE-certified professional services firm reported that about 70 percent of his firm’s work is as a prime contractor. [#21]
- The Subcontinent Asian American male owner of a goods and services firm said that his company works as a metal supplier to prime contractors and subcontractors. [#15]
- The non-Hispanic white male representative of a trade association reported that members perform as both prime contractors and subcontractors, though most are subcontractors. He stated, “In pure numbers, there are going to be more subcontractors represented [because of the specialty contractors], but typically you’re going to have ... more general contractors as you do [subcontractors] in most of these categories, [such as] electrical, mechanical, masons, etcetera.” [#83]
- The owner of a DBE- and SDB-certified professional services firm, explained that her firm has worked as both a prime and a subcontractor on contracts with the Commonwealth over the years. [#78]

Some firms that the study team interviewed reported that they primarily work as prime contractors/consultants or prefer prime contracting work. [e.g., #18, #21, #31b, #40, #49a, #55, #61, #72] For example:

- The non-Hispanic white male owner of a construction firm reported that his firm works exclusively as a prime contractor. He explained, “Most of the conversations with clients go through me. I deal with architects [and] homeowners, and I have a team of subcontractors that I work with. I don’t bid much stuff out.” [#75]
- The Black American male owner of a DBE-certified construction services firm indicated that his firm works as a prime contractor most of the time. He said one of the challenges of working as a prime contractor is making sure everyone on a project team understands their roles. He added that his firm does not face specific challenges as a prime contractor based on being an MBE. [#02]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm reported that his firm works mostly as a prime contractor. He added, “Even though we’re a smaller firm, we ... are the prime and are hiring firms that are much bigger and more established than us to be our subs.” He said that he prefers to work as a prime because it gives “great[er] control of the product,” and added, “You have great control of the team members that you’re working with [and] have a better ability to get the proper credit for the work you do.” [#76]
- The non-Hispanic white male representative of a professional services firm said that they prefer to work as a prime contractor. He explained, “Because we’re dealing with software, you can have your software ready to go and be deployed, but if the ... prime in the contract has problems with their stuff, you’re at their mercy and you have no leverage If you’re the prime and somebody really messes up, you can [just] swap out another third-party piece of software and move the project forward.” [#87]
- The Asian Pacific American female owner of an MBE and WBE-certified professional services firm indicated that her firm works almost entirely as a prime contractor. She said that being a prime contractor has contributed to the economic stability of her business since she is paid directly by the governmental entity for which she works. [#69]
- The Black American female owner of an MBE- and WBE-certified professional services firm reported that her firm works as a prime contractor. She said they face challenges as a small business because of larger firms. She explained, “There are some firms that ‘the powers that be’ will always go to My contracts come to me, I haven’t had to do a lot of sales, and I do very well. But do I set a goal to be a million-dollar business? [No].” [#11]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm indicated that his firm prefers to work as a prime contractor. When hiring subcontractors, he said the firm looks at companies with certain experience to determine what value they can provide. He stated, “Basically, we look at companies who actually have that experience and what they can provide value in, things like that, and then we hire [them].” [#28]

- The non-Hispanic white male veteran owner of a professional services firm said that his company prefers to work as a prime contractor because as a prime they also act as “construction manager.” He added, “On the design side, one of the reasons we get a lot [of work] is because we can design all three, [mechanical, electrical and plumbing]. Other engineering firms [cover] just [one of those] The primes like us doing the mechanical, electrical and plumbing ... coordinate the whole piece, [and] it makes it easier for [clients].” [#48]
- The female representative of a WBE-certified construction-related firm said, “We prefer to be our own prime,” because it gives them control over the project and money. She stated, “It's easier to win the bid [as an individual prime] because if we send it in with another prime they'll mark our bid up ... [they] probably put 10, 15 percent on top of ours [bid], but when we do our own [bid] there's a good chance that we'll win it on our own.” [#17b]
- The non-Hispanic white male veteran with disabilities and owner of a professional services firm said that he works mainly as a prime contractor. He said, “I have worked as a sub recently to do mold testing ... on a campus, and ... basically did some field work in the mold testing of a couple foreclosed homes. So, I do work as a sub, but [it's] limited in nature.” He added, “If you're going to look at a monetary value, I would say [subcontracting is] probably 10 percent of my income” [#74]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm stated that she primarily works as a prime contractor, and said, “I definitely prefer having direct contact with a client.” She said that she has had offers to work as a subcontractor on large projects but turned them down because prime contractors mark-up her services and make them seem more expensive than they are. She added, “I'd rather gain our business by ourselves [and] go out and fight for the business” [#19]
- The non-Hispanic white male representative of a small business development association stated that because he works with the SBA 8(a) program, all of his clients that get work are contracted as the prime contractor. [#46]
- The non-Hispanic white male owner of a LGBTBE- and SDB-certified professional services firm indicated that he prefers working as a prime contractor. He explained, “Being a prime is easy. If you know you have a certain project, you can hire up to handle that” [#62]
- The non-Hispanic white female owner of a WBE-certified construction firm stated, “I prefer being a prime contractor If it's a mechanical project, we're a design-build contractor as opposed to a design, bid, build contractor. I won't work for general contractors if I can help it, but I do work with energy service companies as a subcontractor to them, and they're fine. They pay their bills... general contractors do not.” [#22]
- The Black American female owner of a closed construction services firm said that her firm worked as both a prime and subcontractor. She indicated that she preferred prime contracting work, saying, “[As the prime], you get better prices [and] you get paid quicker. You're your own boss [and] you set your own schedule. But when you're a sub-contractor, you get paid slower [and] might get a lot of back charges. You have to [operate] by [prime

contractors'] time schedule[s], and your prices are usually lower because they want to make money on your money." [#26]

- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm stated, "[We're] usually a prime. We're very selective about working as a subcontractor. Our approach has been ... to develop relationships with a handful of prime contractors in the local market that we've gotten to know, that we feel ... we can trust And then when there are those larger opportunities that we would not pursue on our own as a prime, we reach out to those firms to try to form a strategic partnership on a particular project." [#61]
- The Subcontinent Asian American female owner of a WBE-certified professional services firm said that she prefers to be a prime contractor rather than a subcontractor. She stated, "[Being a prime contractor] takes you closer to the project. It takes you closer [to] what the client is looking for and helps us deliver the project much better. And there's more leverage when you're talking directly to the end source." She added, "I think working as a prime [and] working with the end source is definitely our choice, and that experience helps our firm grow better. Even our team knows directly who they're designing for" [#44]
- The non-Hispanic white male owner of a LGBTBE-certified professional services firm said that he prefers prime contracting. However, he noted, "It's kind of a double-edged sword. Do I want to be a prime and the one in control? Yeah, but then I never want to let anybody down. As a prime, if they come to me and say, 'I need 20 people right now,' where do you get 20 people?" [#24]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm reported that his firm operates almost entirely as a prime contractor. He said that he prefers to be the prime contractor because it allows "control of the project [and] control of the schedule." [#77]

The same business owner went on to say, "If we're a subcontractor to somebody, it's somebody that found out we are MBE-certified and they need the points They'll team up with us to give us a percentage of the job. [#77]

- The non-Hispanic white male owner of a construction firm reported that his firm operates as a prime contractor. He added, "Most of my work is directly with the owner, but it's usually just small jobs here or there" [#51]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that she works as a prime contractor on both public and private sector projects. [#04]
- The Hispanic American male owner of a construction firm reported that he works only as a prime contractor. He commented, "I deal with the customers entirely." [#64]
- The non-Hispanic white female owner of a LGBTBE-certified professional services firm stated that all of her firm's work is as a prime contractor. [#41]
- The non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm reported that her firm only operates as a prime contractor. [#33]

One business owner reported that she wants to begin subcontracting but doesn't know where to start. The non-Hispanic white female owner of a WBE-certified professional services firm said that she would like to learn more about being a subcontractor. She commented, "I'd love to come in and do what we do really well." However, she said she's not familiar with how payments work, or how to meet prime contractors. [#04]

Some business owners said they make efforts to include MBEs, WBEs and other small businesses in contracts. For example:

- The Black American male owner of a DBE-certified construction services firm said that he hires MBE and WBE companies as subcontractors. He said, "[I'm] always looking to reach out to the [other] disadvantaged businesses ... so we can partner up on jobs and kind of put a footprint out here. Because if you think about it, being a minority company is a very negative perception out here." [#02]

The same business owner continued, "[We] work very, very hard to deliver projects on time [and make sure] our paperwork is pristine. We've been complimented, since we started, on our timely turnaround We work hard at breaking down that perception and I encourage other MBEs to do the same thing. Because like I said, I've been on the other side of the fence where I worked for these larger [firms], and they use minority companies only as needed." [#02]

- The non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm said that she makes efforts to include other women-owned firms on contracts. She added, "It ... matter[s] because [the Commonwealth] want[s] me to check the box for woman-owned [if] they need for me to be the prime. In order to check that box ... I might be working with a 500-person law firm in order to get the job done, but I'm the prime." [#33]
- The Black American owner of a professional services firm said, "I try to hire [Black Americans] whenever I can, no matter [a] lack of education [or] lack of skills, to try to get them to do whatever I can I'd rather them screw up three times than me hire somebody who's already got money in their pockets. We've got housing and we need everything from soup to nuts. Roofing, cement, plumbing, electric [etcetera]. I just say to you that ... Erie needs a lot [more Black Americans in business]." [PT#14c]
- The minority female owner of a professional services firm stated, "Ninety percent of my workforce are woman who reside, work, and pay taxes in Pennsylvania." [PT#01a]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, "When we pursue contract[s] with Commonwealth of Pennsylvania, we [attempt to but] struggle to ... locate companies [that] are minority-owned, veteran-owned, LGBT-owned, and women-owned to include as subconsultants to our team." [Avail #47]

Some other businesses reported preferring subcontracting opportunities, being limited to subcontract-based work or having difficulty breaking into the prime contracting arena.

[e.g., #10, #12, #14, #36, #52] Comments include:

- The non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm said that her preference is to subcontract because of the time commitments needed to develop and submit proposals. She commented, "In truth it all boils down to time and money." [#05]
- The Black American female owner of an SDB- and WBE-certified professional services firm said that she only works as a subcontractor and has no interest in prime contract work. She said that she has two subcontracts with City of Philadelphia and said that she has been very successful at getting subcontracts with them. She added that she would like to pursue subcontracting work with the Commonwealth. [#35]
- The non-Hispanic white male owner of a construction services firm stated, "Ninety-nine percent of the time I'm a subcontractor. [The same five clients] result in probably ... 99 percent of my business. They keep giving me business, which is a good sign, so I just try to keep that small circle of people I work for." [#88]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said that his company works primarily as a subcontractor by supplying materials to primes. [#06]
- The Black American female owner of a DBE- and SDB-certified professional services firm said that her company works mainly as a subcontractor. She went on to say, "We have contracts for ... companies that we work with where we're prime, but I would think two of our largest contracts are subs." [#32]
- The Black American female owner of a WBE- and MBE-certified professional services firm stated, "I always come in as a subcontractor." She explained, "I haven't ... seen a contract where I'm coming in as a prime. Usually promotional products or distributors are coming in as a subcontract and with that in mind, it means finding out who the prime is, working with the procurement person in the prime." [#30]
- The Black American male owner of a DBE- and MBE-certified construction firm said that his company works only as a subcontractor. [#13]
- The Black American male owner of an MBE- and SDB-certified construction company said on public sector contracts his firm only works as a subcontractor. He said, "On a larger project we may have a component ... like we might do [a] floor. We may not do the whole building, but we would do [a] floor" [#37]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that he works primarily as a subcontractor but would prefer to work as a prime "in areas [they] specialize in." He added, "We work as a sub 95 percent of the time ... It's not that we don't want to work as a prime, [we'd like to] a little more ... especially if it's things we really excel at and specialize in." [#09]

- The Black American female owner of a DBE- and WBE-certified construction firm stated that while almost 100 percent of her work is as a subcontractor, she is interested in going after prime contracts. [#63]
- The Black American female owner of a WBE- and SDB-certified goods and services firm said that her firm works primarily as a subcontractor in the public sector. [#53]
- The Black American female owner of a DBE- and SDB-certified construction services firm reported that the firm mainly subcontracts at hourly rates. She commented that she performs as a subcontractor because she lacks the equipment or capital to perform as a prime contractor. [#01]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said that he works as a subcontractor most of the time. He added, “[I] would prefer to be a prime, but business is business. If we have opportunities, we move forward with them.” [#08]
- The Black American male owner of an MBE- and DBE-certified general contracting firm indicated that his firm works primarily as a subcontractor. He said it is sometimes difficult to find subcontracting work as a minority-owned firm because many prime contractors “are only willing to go to a certain select group for [subcontracting].” He commented, “There are some good majority contractors and some bad ones.” [PT#07]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm indicated that she prefers subcontracting work. She stated, “A lot of our business comes from the state and federal business. The reason why we do that is because there are advantages to being a small disadvantaged business and a woman-owned business within those two markets. I would say that, generally speaking, being a prime contractor is much harder ... than [being] a subcontractor. Being a prime contractor is more profitable and better for the long-term growth strategy of your business than being a subcontractor.” [#56]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm stated that her firm supplies materials to prime contractors. [#07]
- The Black American male owner of an MBE- and SDB-certified goods and services firm indicated that he prefers subcontracting work. He reported on the disadvantages of prime contracting in his industry, saying, “The only way you are ever going to win a contract as a prime is if you’re large enough to have the economies of scale and the wherewithal ... [Small businesses] don’t have the knowledge, background or wherewithal [for prime contracts]. So, it’s very hard to become a prime contractor in this industry.” [#60]
- The female owner of an SDB- and DBE-certified professional services firm indicated that her company works mainly as a subcontractor. She said, “My firm has been a subcontractor to several prime contracting firms. [We have completed] professional services projects ... for PennDOT, DGS, PEMA, Local Development Districts, counties, and municipalities.” [WT#06]

- The non-Hispanic white female representative of a trade association reported that most of the association’s start-ups and small firms operate as subcontractors. [#71]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm reported that the firm only performs as a subcontractor. [#58a]

Some business owners said their firms only work as subcontractors to avoid more competition.

For example:

- The non-Hispanic white female owner of a WBE-certified professional services firm said that she works “purely as a subcontractor.” She said this sometimes puts her firm at a disadvantage, though if they worked as a prime it would “require [them] to be an engineering company and ... competitor to [their] clients.” She added, “I have to be really careful about that,” and said that she doesn’t want to lose clients who think she’s trying to compete with them. [#10]
- The Black American male owner of an MBE- and SDB-certified goods and services firm reported that he limits his firm to subcontracting because of large powerful prime contractors in his industry. He explained, “I would never consider myself a prime contractor. The prime contractors in my industry are so large and they have such a large-scale buying that you can't compete with them, and they don't want you to compete with them. They keep pushing you down They don't even want you in the business.” [#60]

Challenges for small, minority- and women-owned businesses when seeking work as prime contractors/consultants. Business owners described the challenges they faced when seeking prime contracting/consulting opportunities. Barriers reported were the size of the firm, name recognition and limited customer base, among other reasons. Comments include:

- Regarding barriers to securing public sector work, the male representative of an SDB- and VBE-certified consulting services firm said, “You can’t get a job without experience, and you can’t get experience without a job The barrier would be ... we can’t ... prove our value and ... our trustworthiness unless given the opportunity.” [PT#09]
- The female representative of a woman-owned DBE-certified professional services firm said, “What happens when we go for a prime contract [is] ... [after] debriefings ... we [don’t] win anything. [PennDOT says], ‘We don’t know who you are.’ That seems to be the problem. I mean, we’re doing hundreds of thousands of dollars of work ... on PennDOT projects. We have PennDOT certified inspectors. We go through the entire process [and] we’re in the [online Engineering and Construction Management System]. We do all of the stuff that others do, but we can’t get a prime [contract], and they say [it’s] because [they] don’t know who [we] are.” [PT#16a]
- When asked about the challenges his company faces when pursuing work opportunities, the Subcontinent Asian American male owner of an MBE-certified professional services firm stated, “Getting entry into a new business is a bigger [challenge]. Often, a lot of companies are not taking new vendors on their list.” He added, “Companies don’t even [look] at what we bring to the table. When we say we’re IT consulting, they say ‘How are you different?’

Breaking into a new client is always a time-consuming process ... which is why most of our clients are [via] word of mouth, existing relationships.” [#21]

The same business owner went on to say that because his business is small, there is a negative perception that they are unable to perform at the level of a larger firm. He stated, “Sometimes being small is also a problem. A lot of clients say, ‘Hey you’re too small to be able to take care of our expectations.’” [#21]

- The non-Hispanic white female owner of a DBE- and SDB-certified supply firm said that she faces competition from larger suppliers because their overhead costs are lower than her “startup” firm’s. She explained, “I’m [not] trying to hurt dealers, but I have a bigger investment. A lot of dealers ... don’t have a lot of overhead. They don’t have a lot of staff. They don’t buy a lot of products. You just need minimal products in there. I have a lot on the line, you know?” [#25]
- The non-Hispanic white female owner of a WBE-certified goods and services firm stated that as a small business she has faced challenges in the marketplace. She explained, “You know, being small business, we can do everything that [...] the big companies can do, because we’ve forged relationships with big vendors. The problem is they’ve got a team” [#23]
- The female owner of a DBE- and WBE-certified construction supply firm said, “One of the major hurdles that I have is obviously ... fighting for contracts with companies that have been in business well beyond 20 years, that don’t have the startup expenses that I incur.” [PT#16i]
- The non-Hispanic white female owner of a DBE-certified construction services firm explained that her firm would like to work as a prime contractor, but the firm is “new, and small, and [doesn’t] have a capacity to be a prime.” She added, “[We] don’t have the experience to ever win as a prime or be competitive. Having experience as a prime is also criteria for being selected as a prime, so it’s very, extremely hard to break into that.” [#12]

The same business owner went on to say she has faced discrimination as a female business owner. She said, “I can talk about any of the other things any other minority could talk about or a woman could talk about, and their challenges of life and business Being a woman in construction is not an easy thing to do, but I’m given this opportunity [via WBE and DBE certifications], so that definitely ... elevates me to a level where it should and is a little bit easier. But ... it’s definitely still difficult.” [#12]

- When surveyed, the owner of a construction business in Western Pennsylvania responded, “PennDOT make[s] things difficult. In order to be a prime contractor, you have to do an audit that costs about \$500,000.” [Avail #01]
- The female representative of a WBE-certified construction-related firm stated that the company is at a disadvantage because it does not “pay to play” with large prime contractors. She said, “You’ve got to give something if you want to be on the contract list to do things ... [General contractors] have their own plumbers and they don’t pay them the same wages

that you're supposed to ... they say, 'Listen, I will guarantee you work all year long, but at this rate, \$40, instead of the \$80.' And that's what a lot of them do, so they have their own [system]." [#17b]

- The minority male owner of a general contracting firm indicated that minority-owned firms are not "given a chance" in the public sector. He said, "Give us a chance We have some chances because some agencies still put their jobs out. I ... remember last year, I did a job for [a] Harrisburg [public entity]. [It was] a small contract They also have something [out for bid] and I'm bidding for it, [another] small contract. But, what I'm trying to show you is given a chance, we can do it." [PT#01c]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that she has faced challenges as a small business. She said, "My gap area is probably more [so] administration, having somebody to do the backend work, which is what a lot of [what] the small business owners have. I can go and get the contract, but then once I get the contract can I handle the contract, because of all of the work that comes with it? I've actually just recently turned down two The guy was willing to give my company 65 percent of the contract, but it [would be] administrative work." [#18]

The same business owner said that she has also struggled to work on proposals because "sometimes [the contracting entity] give you a guidance to what their fee structure looks like, sometimes they don't, so then you've got to figure [it] out I think most of the time they won't pay no more than \$75 an hour for the administrative costs, but for the specialty skills they'll pay ranges. Sometimes it's like, why even go through the process because they still [isn't any] guarantee Other than that, there's just too many unknowns." [#18]

- The Hispanic American male owner of a construction firm said gaining new customers is his biggest challenge as a prime contractor. He explained that it is a challenge to communicate to customers what his business entails, and that some customers make incorrect assumptions about him. He stated, "This is my opinion, [but] from what I've seen ... [some of] the people that walk in and out of here ... might [be] intimidated ... by [all] the work I do. Because I do a lot of different things, I try to be as ... open [and] personal as possible." [#64]

The same business owner continued, "Plus, my appearance is not a 100 percent, with the tattoos and stuff. I'm not what I look like, maybe. I'm a much better person when you get to know me But, once that barrier is broken where people are afraid to approach me ... everything changes. It's different [and] they understand me a lot more. I'm trying to find a way to get rid of that [barrier]. [I want to] find a way to get people more comfortable to approach me that have questions." [#64]

- The non-Hispanic white male veteran with disabilities and owner of a professional services firm said lack of regulation in his industry brings heavy competition. He stated, "I would probably say the first and foremost barrier was barrier to entry in my area, and that's because there's a lot of inspectors Pennsylvania does not have a licensure requirement for home inspectors Now since I'm established, I have competition barriers, and that competition is because a lot of inspectors really undercut the price of the home inspection." [#74]

- The Black American male owner of an SDB- and LGBTBE-certified professional services firm said that they had a very difficult federal contract situation with a subcontractor that demanded payment despite changes in the contract. He stated, “We got into a situation with the first subcontract I signed, it was a horrible one, and they almost put us out of business ... The feds shifted their requirements ... We were the prime and we had a majority of the contract, but we then had a significantly larger portion of the contract which ... we were responsible [for], and [the subcontractor] would not let us out of this agreement that we signed with them.” [#38]

- The non-Hispanic white female owner of a WBE-certified construction supply firm said that she has faced barriers as a WBE-certified business, and commented, “There is a stigma.” She said that she was once invited to meet a new electrical contractor, but once she arrived at his office he “was rude.” She continued, “He just wanted to use the meeting as an excuse to complain ... about how he should be able to hire who he wanted to ... [and] that the state should not tell him who he had to hire.” [#14]

The same business owner went on to say, “I smiled and kept my mouth shut ... but I have not gotten any jobs from him.” She said even if he did call her, “it’s not worth the hassle.” She said, “I will either charge him more or turn down the job. I don’t need the grief.” She added that she has faced more problems in Western Pennsylvania and said “the firms in Harrisburg are more loyal [and] open-minded” [#14]

- When asked about the challenges he faces, the non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said, “I encounter a lot of physical barriers because I’m in a wheelchair and I can’t get in places a lot of times Physical barriers are a problem.” [#29]

The same business owner continued, “It was [very difficult] just trying to get in a car or a van to go [to meetings]. So, I do that. I’m able to travel, [but] it took some time to get [there]. When you’re disabled it means that you have some physical challenges.” [#29]

He also said, “Disabled people need to know that there [are] programs out there There are only, I think, 13 registered [DOBEs] in 32 years because of the difficulties to find [opportunities].” [#29]

- The non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm said that finding RFPs and writing proposals is a barrier to prime contract work in the public sector. She said, “Even if I find an RFP ... with something that I know how to do, now I’m going to be out of work for three days with paying clients expecting deliverables that I don’t have time to get them because I’m working on putting this thing together. I’m a big fan of outsourcing and having people do things that ... you shouldn’t have to learn to do [yourself]. I would need someone who knows how to do this and on a consultant basis.” [#33]

- Regarding pursuing prime contract work for Department of General Services, the owner of a professional services firm said, “For most of the last 20 years, I didn’t go after any DGS work at all because you could see the firms that were getting it.” She added, “And they were like

big firms ... from New Jersey. And we were [wondering], 'Why are they getting work in Pennsylvania?' Obviously, there is a system occurring by itself." [PT#17e]

- The non-Hispanic white male owner of a construction services firm commented that "impossible mandates" make it a challenge to find enough minority- and women-owned subcontractors to hire. He said, "When we bid to the City of Philadelphia, you have to use usually 15 percent minorities and you have to use 10 percent women-owned. And there's just not that many companies out there that are actually legitimate companies that you can go to. There are companies out there that will push bills through or whatever, but there are not too many legitimate companies that, you know, you can use to make your percentages." [#39a]
- Regarding challenges associated with entering his industry, the non-Hispanic white male owner of a construction firm said years ago he tried to offer his services to a potential client, but was told, "Nah, I got my electrician." He said, "So I asked, 'Does he do generators?' [They replied], 'I don't know,' [and I said], 'You don't know if he does generators and I'm telling you that I do ... [so] why aren't you giving me the [opportunity]?'"" He said the potential client told him it was "because [he] didn't know [him]," and noted, "I think that's normal just about anywhere. There are contractors that have people that they trust more than others, regardless of certifications or anything else." [#51]
- The Subcontinent Asian American female owner of a WBE-certified professional services firm said client perception of her firm is affected by their lack of experience in the public sector. She stated, "There's no validation that they see, [therefore] gaining a private developer's trust is really difficult even if you know the subject matter. They don't see us as the authority that can make certain decisions [even] though we know the architectural piece [and] they've hired us as captain of the team." [#44]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said that his firm is sometimes "pigeon-holed" because of its size. He added, "And some of it is just by circumstances. You can't do a five-million-dollar contract if you need to put [five million dollars] worth of product at one time, at one job, and your line of credit is half a million [dollars]." [#06]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm stated that as a small business he has faced many challenges in the marketplace. He said it is hard for smaller firms to get "larger contracts because of the larger firms [taking the business]." [#08]

The same business owner continued, "Being a smaller firm, it is harder to win contracts without the track record of bigger firms." He said that he "[misses] out on so many opportunities because [he doesn't] have the scale." He went on to comment, "Do I have the time to go after [an] opportunity when I only have a 30 percent chance of winning it?" [#08]

- The Black American male owner of an MBE- and DBE-certified professional services firm said that he has trouble finding work as a small business because a lot of entities use larger companies. He said, "I recently got in touch with [University of Pittsburgh] and asked them

[for work]. You know what Pitt told me? [They said], ‘We don’t care how nice your location is We don’t do business with people like you. We do business with [named large agency], and we’re happy with who we’ve been doing business with for all these years. We don’t see [a] point in doing business with people like you.’” [#16]

- The male representative of an SDB- and VBE-certified consulting services firm said, “What I’m heartened by is if you take the availability of a veteran-owned small [business] and other disadvantaged or ... small diverse businesses, our availability to perform some of those technological services is there. And I would say ... 90 some percent of it is being done by the majority-owned businesses There’s capacity [there for us].” [PT#09]
- The Black American male owner of an MBE- and SDB-certified construction company indicated that large construction firms are favored in the Pennsylvania marketplace and Philadelphia specifically. He said, “I see it over and over in Pennsylvania where you have an ability to expand and ... address issues, whether through education or improvements ... or [having] mentor-protégés to grow people out beyond where they have been, [but] again and again they choose bigger and better versus ... small businesses [or] medium-sized businesses” [#37]

The same business owner continued, “To be a \$200 million firm you have to work 15 to 30 states, but you have 20 ... construction firms in the Philadelphia market, all over \$100 million And the top five, the top five are all close to a billion [dollars]. That just sucks the air right out of the marketplace. So again, I don’t begrudge anybody growing. I’m just saying the results of what happens is [that] it sucks the air out of the marketplace. It shifts the costs of construction to a higher dollar. It’s not an efficiency” [#37]

- The female representative of a woman-owned DBE-certified professional services firm said that her company struggles to get prime contracts with PennDOT because PennDOT “[doesn’t] know who they are.” She said, “Rather than have points being taken away because they don’t know you, they should add points in the review process if you’re qualified and they don’t know you. Because otherwise, what we find is it’s the same contractors get the same thing all the time. And if you want to get into it ... they don’t have a mechanism to let you to get into the system.” [PT#16a]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm described a challenge she faced when she served as a co-prime contractor. She stated, “I had been in business at least 6 years prior to priming with another company so I was a co-prime. This project, I had to come up with enough money to payroll like 20 people overnight to work on this project. Until the Commonwealth pays me, I can’t pay my people. Sometimes the Commonwealth takes six months” [#57]

The same business owner continued, “That would be the biggest challenge. You have to have really deep pockets to be a prime. The positive experience is, if you survive being a prime, you get great revenue that would otherwise go to somebody else.” [#57]

- The non-Hispanic white female owner of a WBE-certified construction firm stated, “I understand the need for transparency. I do. And I understand cronyism, and you can’t fall

into that trap. So, I really don't know how you fix it, but what ends up happening at the end of the day [is] they get the lowest common denominator of contractor [to do the job] because everybody else just gives up [on the system due to low bid requirements]. So, it's hard, and I don't know how you fix that." She added, "The only person that really gets hurt in the end of that is the state, [due to] change order[s]" [#22]

- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said the size of his firm can be a barrier when pursuing work in the private sector. He said this isn't an issue when pursuing low-bid federal work in the public sector. [#77]
- The Black American female owner of a WBE- and SDB-certified goods and services firm said "low bid processes" hurt her firm. [#53]

Some interviewees believe being a certified, minority- or woman-owned firm did not contribute to their challenges. [e.g., #38] For example:

- The Black American male veteran owner of an MBE- and VBE-certified professional services firm stated that he "definitely" did not think being a disadvantaged business contributed to his barriers or challenges in the marketplace. [#08]
- The Hispanic American male representative of a trade association said that being a small, diverse business has not contributed to barriers or challenged for his members. He explained, "I think ... that actually if you're certified as such, it's opened up business opportunities for our members...For certified, small disadvantaged businesses, whether through the ... Department of General Services or through the National Minority Supply Development Council, then there are advantages to being a certified minority-owned business." [#86]
- The non-Hispanic white male representative of a trade association said the association meets routinely with groups of minority contractors and does not believe that disadvantaged status has contributed to barriers with getting work. He said, "It's not an issue of them being able to necessarily bid and get business, it's ... other issues." [#83]

The same trade organization representative continued, "There's a lot of things that will then come into play, like the healthcare ... the pensions and the annuity, and of course the reserves and some of the bonding. So ... that's where the issue really come[s] [from] for ... [these] businesses I think some of it just is that ... when you're first starting out, your business financial situation is going to be based on your personal financial situation. So, if you're a company from a background that's already disadvantaged, you don't even have that personal basis by which to be able to ... leverage that against the business." [#83]

- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said that he does "not necessarily" think being a disadvantaged business has contributed to his barriers or challenges. He explained, "Most times when I first started my business I would never let people even know we [were disadvantaged] or certified as one, because ... mostly we wanted to prove ourselves and prove that we [could] get the work [and] do the work. We didn't need any special favors set aside, [or] things of that nature." [#77]

- The Black American male owner of an MBE- and DBE-certified professional services consulting firm reported mixed messaging among public sector entities in Pennsylvania as a challenge when seeking work as a prime. [#12]

Challenges for small, minority- and women-owned businesses when seeking work as subcontractors. Business owners and managers described the challenges they faced when seeking subcontracting opportunities. Some expressed that competition, contract requirements and alienation from the client, among other reasons, causes barriers for them. For example:

- The non-Hispanic white female owner of a DBE- and SDB-certified supply firm said that it is not realistic for general contractors to expect her firm to offer the same pricing as non-DBE subcontractors. She stated, “General contractors ... look at me and they want me to have the same price as the non-DBE fabricators First of all, why would I do that? I'm offering you something that they can't. My price should be a little bit higher than [them], that's my advantage. That's the only thing that gives me leverage for [them] to [get] me the job.” [#25]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, “A lot of the major corporations don't hire smaller companies in design and architecture. They still hire the very large firms, and that is a barrier.” [Avail #48]
- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “Breaking into big companies [is difficult]. As a small company, getting big companies that already have established suppliers to look at us [is a challenge].” [Avail #50]
- When surveyed, the owner of a construction business in Eastern Pennsylvania responded, “We are very well established. What happened to us as subcontractors is ... that general contractors and plumbers slowly went out of business, or sold out to other businesses. [This] made it difficult for us to find work.” [Avail #102]
- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “[We have] issues with prime industries being a little wary of using new firms.” [Avail #109]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that her competitors are one of her biggest obstacles. She said, “[They] don't really have a good understanding of accounting and financing They bid jobs because they think somebody else is going to win it, so they bid lower. Whether or not they make money on that job is irrelevant.” She said not all of her competitors do this, but “most of them at her size level” do. She added that this is because many of them are small, family-run firms without a lot of business experience. [#10]

The same business owner later said that she thinks the biggest barrier is that some contractors “only actively seek out minority [or] diversified businesses” because they're pursuing a public agency contract and “being told they have to satisfy a certain percentage participation.” She said in the past contractors have used her firm when bidding contracts, but “then when they get the contract they just go out” and use a firm they usually work

with. She commented, “It’s always one of [three] things. You weren’t low bid or ... the other company was more technically sound, or [they] had a better understanding of the scope of work. There’s always some vague reason why you don’t get it.” [#10]

She continued, “Or ... they get a statewide contract and they call you, but [for example] the job is in Scranton, PA and I’m in Pittsburgh. They know I’m not going to be low bid. They just called us because now they can say, ‘We called a diverse business and they provided us with a quote, but they weren’t low bid. So, we used the local guy.’ [The local guy] who wasn’t a minority, wasn’t a WBE [and] wasn’t even in the system, but that’s what they do.” [#10]

- The female owner of a small business said, “We’re certified in multiple states. One of the issues that we had with the Commonwealth was ... just trying to figure out who the primes are, how ... you get to the primes, getting to know the primes, [and] getting them to pay any attention to you whatsoever If they don’t already know you, they don’t care who you are. So ... unless you can do something that is specific for a small business, or ... something you do differently than the primes do, [they don’t notice you]. We do some process work that most of the primes don’t do, and they say they do, but they come to us to do it anyway because they actually don’t have that expertise. [PT#17c]

The same business owner continued, “So, it’s difficult if you’re trying to get in ... to figure out who to even talk to, to get names of prime contractors [and] to find them on the websites to figure out ... who the heck ... you talk to there, and to actually get them to talk to you [is difficult].” [PT#17c]

- Regarding the challenges of getting construction contracts in the private sector, the Black American male owner of an MBE- and SDB-certified construction company stated, “Some of those private sector entities have some built-in disadvantages for people of any group to get in. Because let’s say if you’re in the pharmaceutical world ... most are long-term contracts or long-term relationships because everybody understands that there is a learning curve and they don’t want the cost of re-teaching a new person Your effort is [getting] in the door so that [you] can get the learning curve and ... hopefully have a team of people who can maintain their high level of performance over a longer period of time.” [#37]

The same business owner continued, “So sometimes as a diverse firm you’re almost having to invest in ... talent that is more capable so that you can get in the door. But if you don’t sell it in such a way that it becomes a long-term relationship, then it just became a high-dollar expense that you advanced, and ... you cripple the business, especially minority business. And the key part about the minority business is that whole list of prospects. You don’t have that long list of prospects where you can leverage things in multiple ways.” [#37]

- When asked about the challenges he has faced as a subcontractor, the Black American male owner of a DBE-certified goods and services firm said it was a struggle to find a mentor to help him get started. He explained, “I got into this with zero coaching, zero So, I made every mistake possible. It becomes discouraging, because it’s heavy lifting. It’s opportunities that you have to be able to perform. If you don’t have the experience or team

or friends that include you, how do you get that experience to move forward?" He added, "That was a huge barrier for me." [#20]

- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, "Having to start a business when you're working full-time [is a challenge]. [The] formal process to becoming a sub can be difficult and ambiguous. It can seem like the dangling of the carrot. A portion of funds set aside may be what is said, but doesn't seem to [be]." [Avail #154]
- The female owner of a woman-owned professional services firm stated that "flow-down" indemnity clauses are a barrier to pursuing work as a subcontractor because they impose unfair risk onto small businesses. [PT#15b]
- When surveyed, the owner of a goods and services business in Central Pennsylvania responded, "[We] have recently [had] people that we had subcontract[ed] for that went bankrupt. That impacted us in a negative way. We're not protected [for things like] that" [Avail #35]
- The Black American male owner of an MBE- and SDB-certified goods and services firm reported tension between prime contractors and SDB-certified firms because of potential competition. He stated, "Prime contractors don't want you to compete with them. They don't even want you in the business. What they want is for you never to exist ... I can tell you point blank, there are people ... [that] tell me, 'The only reason we're going to use you is if we can get minority points.' They could [not] care less about you. They treat you like nothing. They have no respect for SDBs and ... companies like that." [#60]

The same firm owner highlighted the importance of meeting contract goals for prime contractors. He explained that they "don't look at how qualified you are, they don't care about your price, they don't care about anything if you can't help them win a contract" He went on to say, "You aren't asked to bid on anything if there are not minority points awarded [for hiring you] because a lot of these companies, they have their old relationships ... and don't want you to [be able to] grow." [#60]

- The Black American female owner of a WBE- and MBE-certified professional services firm described difficult experiences working with prime contractors. She stated, "I have been approached and included on contracts and never gotten an order There have been several times when I have been put on the contract as a subcontractor and never heard another word." [#30]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm indicated that subcontracting on a Commonwealth contract often does not give her the sense that she is working with or for the Commonwealth. She commented, "I'm so far removed, I'm just a staffing subcontractor. I don't really see myself as working for the Commonwealth" [#57]
- The non-Hispanic white male owner of a construction services firm stated that his firm no longer works as a subcontractor because of previous issues working for prime contractors.

He explained that other firms that work as prime contractors often have less expertise and have in the past asked his firm to complete work that would not be up to code. [#40]

- The non-Hispanic white male owner of a professional services firm said that it is often not worth the effort to compete with minority- or veteran-owned firms on government contracts. He stated, “If I was a minority or a veteran, I probably would have had a few more doors open for me. Maybe ... because they all have ... a certain percentage of business [that] has to go to [them], regulated by government. And I understand that. [#70]

The same business owner continued, “It probably would have been a little easier if I was a minority or a veteran, or a disabled veteran, [as far as] open[ing] up some doors. Because if I have a product and [a minority or veteran] has a product that's very similar ... I almost can guarantee [they would get the work]. [If that is the case], why would I put all the time [into] bidding on the same project [if] I know it's going to go to them?” [#70]

E. Potential Barriers to Doing Business in the Pennsylvania Marketplace (Public and Private)

Interviewees discussed barriers such as access to capital, bonding and insurance, and others that may limit firms’ ability to work with public entities, and other issues related to working in the public sector. Topics included:

- Learning about public sector opportunities as a prime or a sub;
- Opportunities to market the firm;
- Access to capital and obtaining financing;
- Bonding requirements and obtaining bonds;
- Insurance requirements and obtaining insurance;
- Prequalification requirements;
- Licensing and permits;
- Size and span of contracts;
- Any unnecessarily restrictive contract specifications;
- Prevailing wage, project labor agreements, or any requirements to use union workers;
- Bidding processes; and
- Timely payment by the agency or prime.

Learning about public sector opportunities as a prime or subcontractor. Business owners reported on challenges to learning about available work in the public sector. For example:

- The Black American female owner of a DBE- and SDB-certified construction services firm stated “sometimes it's hard to know” who she is working for since her firm works as a subcontractor to private sector firms who may be working for a public entity. [#01]

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm indicated that finding public sector opportunities is a challenge for his firm. He said, “Getting the work is the biggest obstacle we face.” [#09]
- The Black American female owner of an SDB- and WBE-certified professional services firm stated, “I think one of the major barriers as far as city work and state work is knowing when things go out for bid You have to be on [a list], which I guess I’m not, just really [to know] when services for the state and services for the city go out for bid. I think that’s where it would be really good to know.” [#35]

The same business owner continued, “I think you probably need to invest ... in networking with agencies [too], which I really haven’t been able to do I think those are the significant barriers. Being in the know when [opportunities to bid] come out [is difficult].” She later observed, “I’ve actually received most of my contracts by just either word of mouth or them looking at the registries and just picking my name.” [#35]

- A representative of the Hispanic Chamber of Commerce of Central Pennsylvania stated that he believes that the Commonwealth needs to engage in more outreach to the Hispanic community. He observed, “I think they try to meet the goal, but it’s difficult, I think, at least the -- well, what we hear is that there’s not enough good contractors, sub-contractors out there to meet the goal. . . So, whether they’ve made an effort or whether there’s been a true effort made, I would question that . . . there is a good, you know, program of outreach, being demanded of all the contractors, you know, because one of the things that I see is, okay, we have the courthouse project is coming out to bid. I mean, it already came out to bid, but for us to get a notice the day that the bid is due to quote \$300,000 worth of survey or materials testing - there’s just not enough time for you to do it. What needs to happen is like, if this project is coming out to bid in June, then in March, we’re going to have an open house for all our subs to come review the documents for you to give us your name so we can put you on the addenda list. And, it’s just a -- you have to start that early on if you want -- if you’re serious about involving the minority contracting community in the project. You need to give them advanced notice, and tell them what areas you need, you know. Have an open house. I see that more in Washington D.C. and Baltimore, Maryland than in Pennsylvania. More -- more outreach by the prime contractors that are pursuing \$100 million, \$200 million projects. . . Not so much in Philadelphia, although there’s more in Philadelphia than Harrisburg. . . I’m saying both. We have neighboring states that do a better job than Pennsylvania at community outreach, and timely community outreach. We have a project coming out here; right? Harrisburg University, the biggest building between Philadelphia and Pittsburgh. I thought that’s what I read in the newspaper. I haven’t seen any kind of outreach. It mentioned, I think, [as being worth] \$20 million in the paper . . . Now, maybe it’s under design, maybe it’s too early. But, maybe they could do that for that project?” [#89 TA]
- The Black American male owner of an SDB- and MBE- certified construction company reported that he had not been notified in years about opportunities to bid on jobs in the public sector. He noted that minority-owned businesses typically have fewer resources, resulting in a need for public outreach in order to include SDBs in those projects. [#37]

One business owner reported that out-of-state competition causes barriers for certified firms.

The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm explained that she feels that out-of-state competition is unfair for small businesses. She stated, “Demand for our services does vary because there are times ... there aren’t a whole lot of positions out there for us to work on with the private industry. There are other times where the Commonwealth opens its flood gates and there’s all these positions to work on. But it’s hard because we’re competing with so many other small diverse businesses from other states” [#57]

Opportunities to market the firm. Business owners shared a range of marketing experience. Some reported being constrained by their own marketing efforts or having limited access to good networking opportunities. For example:

- The Hispanic American male owner of a construction firm said that his strategy for marketing his art is different than that of the fabrication and machinery side of his business. He said that he uses both his website and direct marketing to be competitive, and noted, “I know I have both [my art and my fabrication and machine building] on my website. As far as the machining and the machinery stuff, I [have examples] on my website I [also] put the offers and the services that I could do [there too]. I did do a flyer [also], to [go] directly to companies that I know would need the services.” [#64]

The same business owner continued, “Locally, almost every manufacturer or fabricating business that needs a service as far as the zinc coating [has] a flyer. Even bigger companies [do], that do ... manufacturing.” He added, “Last year, I did send out flyers to homes to offer the decorative art as well. I did different parts, different area codes and stuff. [So] yeah ... I try different things.” [#64]

- When asked about marketing, the non-Hispanic white male owner of a construction firm said, “The only advertising I do right now is on Facebook, primarily because of [the] cost of doing advertising. So, I try to put ... posts out there and try to get back to people and point out other work that I have done [I] try to get people ... to [think], ‘Hey ... is there something this guy can do to help me?’” [#51]
- Regarding members’ marketing efforts, the non-Hispanic white female representative of a trade association said, “The ones that come to us, they’ve realized [they need help with marketing]. We direct them where we think would be good, [and] I always try to figure out how much time people have. Sometimes it’s really good to get them involved in a committee. So ... this community is pretty tight.” She added, “Some of the times when people come to us I think they want to do it all. So, helping people realize what their niche is in the community is helpful, and [it allows them to] brand themselves that way.” [#71]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said that marketing his firm’s services to public sector agencies is a challenge. He explained, “Since we started our firm, we got all our work by word of mouth. We started and we never really had a chance to get out there and ask for services because we had a reputation as practitioners People in the private sector can know you, find you, and hire you, even if

they're competitively asking you and a couple of other people If it's in the public sector, people have to put out ads." [#76]

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm indicated that firm marketing is a barrier to private sector work. He added, "We're making some headway in the private [sector], but it [means] changing [our] whole marketing approach." [#09]
- The non-Hispanic white female owner of a WBE-certified professional services firm stated, "[My] firm does not have any salesmen, so a lot of times people say, 'I've never heard of you.' The size thing is a big, big issue. It's a huge issue It makes people afraid of the risk." [#04]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, "The barriers have really been ... business development That whole networking piece [is] so key in an environment that's increasingly hostile to the LGBT community. Partially, [this is] because of our current administration Philadelphia is kind of a little bit of a bubble ... so outside of ... this kind of mecca or Shangri-La of Philadelphia, it's ... becoming more difficult I think." [#38]
- When discussing the challenges of marketing, the female representative of a WBE- and DBE-certified engineering firm stated, "As a small business, our time is limited ... we don't have a full complete [marketing] department We're all doing a lot." [PT#13b]
- The non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said, "The whole process of [marketing] has kind of burned me out, so I haven't been as good [at it]. I don't even know how to do it" [#29]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, "For a small business, it's challenging to get your name and brand out there. Certain things that have helped in the past don't work now due to funding [issues]." [Avail #58]
- The Subcontinent Asian American female owner of a WBE-certified professional services firm said marketing has been a big challenge for the firm, though they hope to get larger contracts in the near future in order to hire additional staff to market. [#44]
- The Black American female owner of a professional services firm, noted the peculiarity of MBE's marketing their firms. She explained, "I think it's important to network, but I also think in a weird way, it's important for companies of color. There's this interesting needle you have to thread around, the need to display competency and enthusiasm for the work that you do, while not being too aggressive because, coming from a person of color, it's not viewed as positive aggression. Maybe from someone else, but from a person of color, it's viewed as intimidating. Even as an African American woman, I find that it's just a weird space to occupy." [#54]

A few businesses reported being disillusioned by the fact that despite some level of marketing there are limited opportunities in the marketplace for work. For example:

- Regarding his firm’s website, The Hispanic American male owner of a construction firm said, “The people who are managing my website ... see a lot of traffic coming in But, I got to get the people to call me. That has been the next step. We’re rearranging the website to maybe attract and get people more comfortable to make the phone call. [I’m] trying to figure out maybe what they came there for, and maybe figure out [why] they’re not taking the last step [and actually calling].” [#64]
- The non-Hispanic white male veteran with disabilities and owner of a professional services firm said that he finds word of mouth to be more effective than traditional advertising. He stated, “When we moved out here I did advertising. I tried newspapers [and] I tried one of the little local TV stations That didn’t work, either one of those. I’ve done mailers [and] direct mail [too], [and] it doesn’t work. It’s all word of mouth where we are So, it really took some time to get my name out there.” [#74]

Some interviewees reported minimal challenges when marketing their firms. For example:

- The Black American female owner of a DBE- and WBE-certified construction firm indicated that she is successful in learning about job opportunities from a variety of sources. She stated, “I bid jobs that come from being a part of a trade association, and PennDOT has a diversity office and they send out job information. That office really helps me with marketing.” [#63]
- The male representative of a Harrisburg public entity said, “Before coming to [the public entity] I worked for an MBE firm, and ... my role was to go out and get contracts I would go to all the meetings [and] do all the presentations. And we were successful.” He continued, “But that was our experience There may be some other firms that ... aren’t having the same type of success. But, we were successful under [Department of General Services’] formal plan.” [PT#09a]
- The non-Hispanic white male representative of a WBE- and SDB-certified professional services firm indicated that the firm does not face issues with marketing. He noted, “I don’t think there are any barriers that are in the marketplace for our company, [aside from] just the competition [in] the marketplace itself.” [#58b]

Access to capital and obtaining financing. Some business owners reported challenges obtaining financing and commented how it impacts their ability to secure work. Challenges faced by interviewees include lack of prior work experience and lack of assets. [e.g., #86, PT#07, Avail #37] For example:

- The Black American female owner of a DBE- and SDB-certified construction services firm stated, “Financing, that is a big issue If you don’t have ... capital ... you have to be able to fund the contract before you get paid.” She added, “It’s not like the jobs aren’t there for me to get, but lots of [the] time they know you don’t have capital so you can’t compete.” [#01]

- The non-Hispanic white female owner of a WBE-certified professional services firm said that she struggled with financing when starting her business. She said, “The financing was [a] huge [barrier] for us.” [#04]

The same business owner went on to say, “I went to the bank and I owned my house and I owned my car, and I thought I would just walk in [and get financing].” She said because the bank did not provide her a line of credit, she “held back” on financing, and commented, “It was a little bit slower [of a] start for the business [because of that].” [#04]

- The non-Hispanic white male owner of a construction services firm reported difficulties obtaining financing. He stated, “We have tried to prepare to get loans and all that but again, we're stonewalled again because the majority of business loans from the bank that are backed by the government are for diversity purposes” [#40]
- When asked about challenges in obtaining financing, the non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm stated, “Obtaining financing [was a challenge]. I just used credit cards.” [#29]
- The Black American male owner of a DBE-certified goods and services firm said that financing has been a challenge “because basically no one wants to lend money when you don't have experience.” He added, “How do you get experience when you don't [have any money]?” [#20]
- The non-Hispanic white female owner of a DBE-certified construction services firm said that she has had challenges getting financing because “the banks don't recognize accounts receivable as an asset.” She said that she could not get financing when she started her business, and said it was frustrating because “these are guaranteed state contracts ... [for] work that [she has] already done and sent invoices for.” She added, “[The banks] don't recognize, and [they] should ... I mean, that's money that is going to come to me, guaranteed by law.” [#12]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said that he “most definitely” faced challenges in obtaining financing. [#06]
- A representative of the Hispanic Chamber of Commerce of Central Pennsylvania discussed how small businesses need access to capital and cashflow. He stated, “...What I'm seeing with smaller businesses is the same kind of barriers I think other businesses face. Which is access to capital. Member businesses of the Hispanic Chamber, however, are generally much smaller businesses: your dry-wall company, your painting company, your landscape company, your photography studio, your restaurant... Their challenges are the same ones that we have experienced, you know, trying to make a key hire or buy a new piece of equipment, survey equipment, trucks, without some sort of an established, you know, credit history or banking relationship. You're kind of limited as to how fast or how far you can move through that ramp-up period. And, that's one of the things that we feel that minority businesses, as a whole, are still being held back by: access to capital.”

The same interviewee continued, "If there was a mechanism where, you know, you are the selected contractor, if there were business loans that could – that would be less stringent than what you would typically encounter with a commercial bank . . . so if there was another avenue that these smaller startup businesses [with little or no equity in their businesses] could tap into for execution of these projects financially, I think you'd see more people coming into the [small business] programs." [#89 TA]

- The Subcontinent Asian American male owner of a goods and services firm said one of his firm's biggest challenges has been obtaining financing. He stated that it is "very tough to get as a small business." [#15]
- The male representative of a supply firm indicated that access to capital is a barrier for his company in pursuing public sector work as a prime contractor. Elaborating on challenges for small businesses to secure work as a prime contractor, he said, "They want you to have three months ... of [liquid] operating capital, which is unfair" [PT#13a]
- The non-Hispanic white male representative of a small business development organization reported that obtaining financing is "absolutely" a barrier for small businesses. He explained that his organization specifically assists with financing because most of the small diverse businesses that they work with do not have the debt to equity ratio needed to grow. [#46]
- The non-Hispanic white female owner of a WBE-certified goods and services firm explained that the time constraints associated with being a small business are a barrier to obtaining grants. She stated, "I wish to God we could get some grants, but I don't even know how to go about it, and I don't have the time to investigate it. Big companies can get grants, you know?" [#23]
- The Black American male owner of an SDB- and MBE-certified professional services firm stated that despite years of business with them, obtaining financing from his bank was a barrier. He reported that he ended up going to a different bank to get a line of credit, adding, "It's interesting that we've been in business 15 years and we've just probably recently got our first loan." [#36]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said, "If I wasn't a single woman making the amount of money and the personal net worth I have, [the] bank absolutely would've given me a bigger line of credit, [especially] if I had more equity and more assets to put up for it. I don't have those kind of assets. I'm a divorced, single mother. I have a home and that's it. That's all I have. My house is already on the line If I wasn't in my disadvantaged status, I wouldn't be faced with these issues." [#25]
- After highlighting the importance of cash flow in his industry, the Hispanic American male owner of a construction firm reported issues obtaining financing. He stated, "We were working with Bank of America, and ... we couldn't get approved because it was like the company was [too] young, like two years [old]. So, what I did is I got back to American Express, and I got like a ... credit line with them" [#49a]

- When asked if obtaining financing is difficult in his industry, the non-Hispanic white male owner of a construction firm stated, “The traditional bank lending scheme doesn't really lend itself to the construction industry. We're a risky business, and if you don't want to acquire a bunch of assets, such as equipment ... then you have nothing to borrow against I'm sure software companies have the same problem because they don't have any assets other than people.” He added, “Unless you're moving mountains ... it's hard to get funding to grow without reaching out to the private equity space or venture capital space and paying exorbitant interest rates.” [#85]
- The non-Hispanic white male representative of a professional services firm said that while funding is an issue for his firm, it is not an insurmountable one. He explained, “We haven't had to go out and ask for a second round of funding for a couple years, so that's okay. Cash flow is always an issue with a small company. I know the CEO, [and] his constant effort is there to monitor [when] payment [is] going to come in.” [#87]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “We could not get financing at the beginning. It's changed over time” He added, “The thing that helped us was a financial education piece [in a business] program. And not all the education I got during the program [was helpful], but the access to capital that [it] actually gave us helped us grow ... over the last few years.” [#38]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that obtaining financing used to be a challenge for her firm. She said, “Back in 1989, 1990 when I was thinking about [financing] and I was looking for sources of capital, I [found] the Small Business Administration [to be] completely useless if you're a woman, a young woman [wanting] to start up this type of business.” [#10]

The same business owner continued, “They wouldn't even talk to me. There is no bank on the planet that will loan you money. There [were] no venture capitals I could even get interested.” She indicated that women today face the same barriers she did. She said now that she has an established business, she is “bombarded with phone calls” from banks offering her funding. [#10]

- The Subcontinent Asian American male owner of a WBE- and SDB-certified professional services firm explained that the firm experienced some issues with financing as it was starting. He explained that this was because the state did not pass its annual budget on time, which had a substantial impact on small businesses under contract with the state. [#90]

Other business owners stated that access to capital has not been a barrier. One business owner reported never seeking financing for her firm. [e.g., #14, #24] For example:

- The Black American female owner of an MBE- and WBE-certified professional services firm said, “I haven't looked for any financing.” [#11]
- When asked if her firm experienced barriers to obtaining financing, the Black American female owner of a DBE- and SDB-certified professional services firm stated, “No, we have

lines of credit and we haven't had any trouble [We] have [our] financials in order, so we haven't had any trouble getting money." [#32]

- The Black American male owner of an MBE- and SDB-certified goods and services firm reported that obtaining financing, bonding, or insurance has never been a problem for him. He explained, "I took my personal equity from homes that I had to use as collateral But I would say that most minorities have not built up their companies to that point So, it's an issue for a lot of minority companies. That's not one for me." [#60]
- Regarding access to capital and obtaining financing, the non-Hispanic white female representative of a professional services firm stated, "Finances are always somewhat of a struggle when you're a smaller company, but it hasn't halted anything at this point in time [for us]." [#84]
- The Black American male owner of a DBE-certified construction services firm stated that smaller companies are often unable to take the risk of working on certain contracts because of financing issues. However, he said that because his bank "rolled the red carpet out to give [them] a line of credit," he is able to risk a little more and has "a cushion" behind him in case clients do not pay on time. [#02]

One former business owner described facing challenges with bankruptcy. The Black American female owner of a construction services firm who is no longer in business said that she would like to start another business as a supplier, though she worries about securing the necessary capital. She stated, "I don't know where I'd get the funding, especially since [I] have that bankruptcy ... on my record. It's not on me personally, but it's on that business That business closed because of it. But, that's what my next goal is, to do something in supply." [#26]

The same interviewee later said that her biggest challenge while in business was "mainly banking, [and] having enough capital to [operate] like everybody else." She added, "[Other companies] can pay off all their bills in 30 days, whether they've been paid or not. [However, I was] always working off of my receivables, and if [the customers didn't] pay me on time, then everything else [became] slow." She said lack of capital also contributed to her firm's bankruptcy, saying, "I didn't have money to pay for an attorney, so I wasn't really represented. I just listened to whoever the trustee was, and they just shut the company right down." [#26]

Bonding requirements and obtaining bonds. Some business owners and managers reported difficulty with securing bonds due to capacity, bond rates, and other factors. Comments include:

- The Black American female owner of a DBE- and SDB-certified construction services firm reported that bonding is a barrier for her. She said that her inability to secure bonding is due to her small capacity and lack of history working on large contracts. [#01]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said "bonding can become an issue," like insurance, where smaller companies have difficulty getting adequate coverage for large-scale bids. [#06]

- The Black American male owner of a DBE-certified goods and services firm stated, “Bonding is a challenge.” He added that he's looking to expand his business, which will require bonding. [#20]
- The female representative of a WBE-certified construction-related firm stated that they have had some difficulties with bonding when attempting to work with public entities. She said, “I'll give you an example, Westmoreland County, their bonding requirements are outrageous They don't want just a bond for the performance, they want a bond for the material, they want a bond for the labor. [They want] so many bonds that by the time we do all that, we just can't [bid the project].” She also stated, “[We] bid on a job for the City of Pittsburgh That bond alone was over a million dollars for us, which we were able to get, but that would have put us at no more public jobs then, for a long time.” [#17b]
- The Black American owner of a construction management firm stated that a real barrier to doing work with the Commonwealth is the lack of processes that afford work opportunities for MBEs across the board. He explained, “When you deal with companies that are under-experienced and you have no process by which to increase their skill level by affording them opportunities, then you perpetuate a system whereby minority contractors, in particular, never can meet the specifications on the pre-qualification standards. And, therefore, there's no opportunity, there's no economic development. Pre-qualification standards, like specifications, can be written to exclude people as well as include them. And, we found that the pre-qualification standards on many of these projects, particularly in the area of bonding, were punitive. [#82]
- The non-Hispanic white male representative of a small business development organization stated that the reason his organization provides bonding guarantees is because many of the firms he works with have problems obtaining bonds and face discrimination with bond rates. [#46]
- The Black American male owner of an SDB- and MBE- certified construction company reported that bonding requirements have been a barrier preventing his firm from winning contracts. He said that in his industry, bonding used to be based on a firm's relationship with a client. He added, “[Now bonding] has become a profit center. It has become a way to get easy money.” [#37]

The same business owner went on to discuss an instance where bonding led to his firm not winning a contract. He explained, “We were on the short list bid list [which was] ideal for us ... because [PHA] had been a long-time customer [and] we end up as [one of] the two low bidders” He went on to note that although his firm beat the other in terms of wages and his firm was more qualified and located closer, they lost because of the bond rate. He stated, “From that point forward, I said it's not anymore about can you get a bond. It has to be an affordable bond [too].” [#37]

Regarding the differences when bonding in the public versus the private sector, he said that the private sector relies more on lines of credit and more trust-based relationships. He added, “If we had to follow the governmental [bonding] guidelines, we'd be at a disadvantage [with] no prospects, no growth” [#37]

He later recalled an instance of being denied bonding. He said, “[With] almost 20 years [of] experience working on projects in excess of \$50 million, working in six different states, [and] having my own credit line, [the] question [was], ‘Will you give me a bond?’ And they said, ‘No.’” [#37]

- The Black American female owner of a closed construction services firm said that her company faced challenges with bonding. She stated, “Although we were able to [obtain] it, it wasn't as easy as it could have been.” [#26]
- The Black American male owner of a professional services firm stated, “The biggest challenge right now is to be able to meet the bonding requirements, and the second one is the ability to estimate the job to the degree that they can have ... profit and an overhead ... substantial enough to keep them in business.” [#55]

Insurance requirements and obtaining insurance. A number of business owners reported on their difficulties securing insurance to operate their firms. Excessive insurance requirements and costly insurance rates were factors commonly expressed. [e.g., Avail #121] For example:

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm said the Commonwealth’s insurance requirements are excessive. She stated, “I may have to make sure that my insurance meets the state’s requirements, and that’s where I feel ... the state’s insurance requirements for a subcontractor can be excessive Sometimes they’re looking for insurance [in case] our employees damage a Commonwealth building, and they want millions of dollars of coverage.” She added, “I might have ... one clerk that’s there for three months... the chances of the Commonwealth suffering substantial damage from my clerk-typist is pretty low.” [#81]
- Regarding her challenges with insurance, the non-Hispanic white female owner of a DBE- and SDB- certified professional services firm commented, “The state, in a particular bid, put in a high amount of insurance, and everybody on the contract had to have a certain level My company was at the same level as IBM or Unisys, [and] that was ridiculous” [#59]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that she faced barriers when trying to obtain insurance. She stated, “The challenge I face in terms of insurance is [that] I have state worker's comp insurance ... [and I have] no track work record, [so] nobody would underwrite me I had to go with the state worker's comp rates. They are higher than traditional companies.” [#25]
- The Black American female owner of a closed construction services firm said that her company had “problems getting insurance, getting [workers’] comp, [and] general liability.” She added, “[They] usually [weren’t] at a competitive rate.” [#26]
- The Black American male owner of an MBE- and SDB-certified construction services firm reported that obtaining insurance has been a challenge for his company. He said, “Even getting quotes [is difficult]. If you're a house builder and you list that, [obtaining] insurance is very difficult. We've had insurance agents tell us [that when doing] affordable housing ... certain agencies don't want to write insurance for that. [The] kind of work you're able to do

warrants the cost and difficulty of getting insurance It's a fact. The bigger you are ... and the more access to capital you have, the easier it is to get insurance agencies ... to work with you." [#27]

- When discussing a specific contract for which the firm needed to increase their liability insurance, the non-Hispanic white male co-owner of a construction firm stated, "We had to double our insurance ... We had to have ... a million [dollar] umbrella on top of our million [dollar policy]." [#47a]
- The non-Hispanic white female co-owner of a construction firm said that it causes problems for the firm when insurance regulations get mixed-up between the federal DOT and local municipalities. She stated, "[Local municipalities will] pull you over and give you a ticket Then you go to court and they'll ... throw it out because [the local municipalities] don't have a full understanding [of the insurance laws]." [#47b]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, "Health insurance is expensive in Pennsylvania. It's expensive to hire employees that require health insurance." [Avail #97]

Prequalification requirements. Public entities, including Pennsylvania state entities, sometimes require construction contractors to prequalify in order to bid or propose on government contracts.

Many interviewees reported that prequalification requirements in the public sector present barriers to obtaining or performing work, including for the Commonwealth of Pennsylvania and/or PennDOT. Some also reported negatively on the Commonwealth's Invitation to Qualify process. [e.g., #70, #77, PT#16e] For example:

- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm reported that the Invitation to Qualify process is a barrier for their firm. She explained that it involves "[a] several weeks [long] process, lots of documents to be submitted in order to even bid on some of those [projects]." She also added, "I think I know why [the Commonwealth is] doing it. They're trying to weed down the [number] of bids that they'll get. So instead of getting a hundred bids, maybe they got seven because only seven had gone through [the bureaucracy] to be able to be qualified to bid." [#31a]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm reported that prequalification requirements can often be a barrier. She stated, "At the Commonwealth, there's ITQ ITQs have different categories. Let's say the category might be [selling specific candies]. I can sell Skittles ... Snickers [and] Milky Way[s]. Great, [but] you have to prove that you sold Milky Ways, Snickers and Skittles ... and you have to have an invoice that proves that. If you're new, totally new wanting to bet into a new business or wanting to get into a new line of business, to be able to prove that, you can't." [#56]
- The non-Hispanic white male owner of a construction firm said that his company had trouble getting prequalified for PennDOT work and that it affected their ability to get other

public sector work. He explained, “If you look up a sidewalk job in Mt. Lebanon [Township], it's going to say you must have [certain] PennDOT codes That gets rid of me even taking a job that I could go and experience. I could do three sidewalk jobs in Mt. Lebanon, and say, ‘PennDOT look, I've done three sidewalk jobs for a public entity,’ and they go, ‘Cool, here's the sidewalk code.’ You can't even start those because they require the codes. It would be different if we could start in the municipal game and build experience from that and present it to PennDOT, but you can't even do that in municipal because they require the codes too.” [#85]

The same business owner later indicated that he faces similar issues when trying to get work with the Commonwealth. He said, “In my experience, I've done about half a billion dollars in highway work, public work, for Pennsylvania Department of Transportation specifically. I have applied for [prequalification] codes under my new company ... and was denied every single code because my company doesn't have any experience.” He went on to comment, “How can you get any experience when you can't get the [prequalification] codes to get it?” [#85]

- On the topic of prequalification, the Black American female owner of an MBE- and WBE-certified professional services firm stated that she has not been able to complete her prequalification paperwork for PennDOT “because it [has too many] questions” and pages. She added, “Why [does the Commonwealth] need to know all of that? If I was going to be working in the actual procurement department, then I could see all of the financial information that they are requiring, but some of the stuff that I'm desiring to do, I could do with or without them.” [#18]
- Regarding barriers associated with prequalification requirements, the Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm stated, “One of the major issues that I have is you have to get prequalified for every [job], as a vendor. So, that's a very time-consuming exercise. I wish there was a common place where you just get prequalified Everybody has got their own vendor list. You've got to be prequalified for every single one. After you get prequalified, you've got to keep going to their sites to find out where the opportunities are. These are very time-consuming exercises.” [#43]
- Regarding how prequalification requirements affect MBE/DBE firms, the Black American male owner of an MBE- and DBE-certified specialty consulting firm said, “We know prequalification always hurts our companies more so than it would hurt a non-disadvantaged [company] A lot of times we don't get the opportunity ... the chance to perform, to get the track record.” [PT#05]

The same business owner continued, “So if we can't ever get prequalified, now PennDOT is saying that we're not in the ready, willing and able universe. [If] we reduced the ready, willing and able universe, [then] we thus reduced the goal.” [PT#05]

- The Black American male owner of a DBE- and MBE-certified construction firm has attempted to work with the Commonwealth but has been unable to get prequalified by PennDOT. He explained, “[The staff at PennDOT] know I've been pushing for [prequalification] for the past four years. I have put in for the PennDOT prequalification and

they have denied ... twice. I even bid on [a project] and I won that job, but then I couldn't do it ... because I'm only a business partner." He said that he needed PennDOT certification, which he was unable to get in part because he needs "three references for PennDOT certification ... and that takes three to five months." [#13]

- A public meeting participant stated that prequalification for bidding is a barrier for small businesses, explaining, "A lot of these firms ... trying to get the references that they need is really hard for them." [PT#13e]
- The male representative of a minority-owned construction firm said the prequalification process "is a barrier to entry" for new firms. He said, "In order to do PennDOT work, [you need] your required investment, the excess non-sensible business investment that you're required to make and sustain for an extended period of time before you are even eligible, before you even have the opportunity to bid on PennDOT contracts. It makes no sense in the real world It really is a system that's a barrier to entry to new firms." He added, "There are other ways to ... validate whether or not a firm has the capacity to do work on contracts for PennDOT." [PT#16g]
- The minority female owner of a DBE- and SBE-certified firm said, "You have the prequalification process of PennDOT, which at the end of that you may only be granted prequalification as a service, which means you still have to go back in here and do it as a subcontractor And [that] takes years." She added, "There needs to be some transparency about getting prequalified in that process." [PT#16j]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, "I think there [are] difficulties obtaining business ... because they tend to look at identical experience too much rather than just general qualification to do the work." [Avail #67]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, "The PennDOT prequalification process is unnecessarily cumbersome and restricts new competition." [Avail #107]
- The Black American male owner of a DBE-certified goods and services firm said that he faced serious hurdles with prequalification. He explained, "I've been denied twice, so that's why I had to find something else. You have to prerequisites. You have to get experience. From who? Who has the experience? The prime contractors. They don't want to include you and bring you in ... if it's not a win for them or there's not a way for you to help them get contracts on the federal side, then they have no use for you. When you're in the position of trying to get prequalified, you've got to own all your equipment. You see what I mean? They make these rules and then make it impossible to. These are the barriers that I face." [#20]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said that it's hard to "find somebody that will partner with you." He said that he has been going to PennDOT meetings, and commented, "The requirements now have tightened up so much that if you don't have X amount of years of experience doing something, and that's understandable, you're not going to go out and build a bridge tomorrow." [#06]

The same business owner continued, “But some of the requirements just to put a piece of pipe in the ground are so rigid and complex. And [with] insurance and bonding needed with that, it’s hard for an entrepreneur” He said that a lot of small excavation companies have gone out of business recently because “they don’t have the back office” deal with licensing, insurance, regulations, and other requirements. [#06]

- Regarding prequalification requirements, the female representative of a business assistance association said, “We assist a lot of our clients and members in their certification process With PennDOT ... you have the DBE certification and [prequalification] As far as the prequalification process, who are the people that oversee that make this decision? Because ... from what I’ve looked into it’s been two white males, just to say it like it is, who oversee this prequalification process.” She went on to say, “I hear a lot of ... input about this prequalification with PennDOT, which can be very time consuming.” [PT#16k]
- Regarding prequalification requirements as a barrier, the Black American male owner of an MBE- and SDB-certified construction services firm stated, “Initially, PennDOT turned me down three times on our initial enrollment into the industry. [It was] because we had to prove and overly approve what we were able to do. So even now when you look at the certification and the process that’s in place, what is the department doing for businesses that have proven their longevity when it comes to qualification and assisting them to exist? They put all of their emphasis on new certifications of businesses, not ... recertification, or ... continuing the existence of certified companies. The emphasis is not on helping those that are in, with a track record. The emphasis is on new certification.” [#27]

However, some interviewees indicated that prequalification requirements are not a barrier or are standard in their industry. For example, the non-Hispanic White owner of a construction firm reported that his firm is prequalified. He remarked, “We are prequalified so that is not an issue. It is more about prequalifying a subcontractor I think.” [#04]

Licensing and permits. Certain licenses, permits, and certifications are required for both public and private sector projects. The study team discussed whether licenses, permits and certifications presented barriers to doing business.

One business owner reported that obtaining licenses and permits is not overly difficult or not required in their industry. The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that he doesn’t have to seek licensing and permitting in the IT industry. [#28]

A number of business owners reported that obtaining licensing or permits could be more of a barrier for small and minority- and women-owned businesses than larger firms. Many business owners and availability survey respondents expressed frustration with government regulations on small businesses. [e.g., #13, Avail #36, Avail #70, Avail #87] For example:

- The Black American male owner of an MBE- and DBE-certified construction supply firm said, “At one point we had a ready-mix plant.” However, he said that he had to shut it down because there are “too many regulations for a small business” like his. [#06]

- When surveyed, the owner of a construction business in Western Pennsylvania responded, “It has been challenging since we are regulated by the [Department of Environmental Protection]. We have to get anything regarding expansion an operating permit. [The DEP] has to sign off on any changes, and that's cumbersome.” [Avail #06]
- When surveyed, the owner of a construction business in Central Pennsylvania responded, “EPA regulations have been hard to comply [with].” [Avail #21]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “[There are] ridiculous regulations by the EPA and the Department of Transportation.” [Avail #110]
- When surveyed, the owner of a construction business in Eastern Pennsylvania responded, “There's a lot of regulation. I have to pay people to handle the government regulations. It's really quite ridiculous. I wasn't able to hire people because of government regulations.” [Avail #118]
- The non-Hispanic white male owner of a construction services firm stated, "It's definitely a struggle dealing with all these government regulations. Here in Pennsylvania, you have to be licensed through the state which is just more paperwork. And [every] township [you work in] you have to be licensed in. You need a license and a permit for every job ... And all these costs for my time ... to handle all this, it gets passed on to the customer." [#40]
- The Hispanic American male owner of a construction firm reported that licensing in the City of Philadelphia has been a barrier in the past. He added, “[The process is] a little bit confusing the way the city does [demolition licensing] They separate the two. Like a construction license, you can demo like anything inside. But like type two, you have to take a test” [#49a]
- The Black American male owner of a professional services firm reported that small businesses are sometimes denied licensing. He said, “There was one instance when the gentleman who was in charge of the state plumbing board sat at a table and said, ‘No, never ... As long as I live, you’ll never get a license in here.’” [#55]

The same business owner continued, “We have very few licensed plumbing companies [and] very few licensed master electricians here. There are very few disadvantaged businesses, and that was contrived. That was contrived by the people who ran it.” [#55]

- When surveyed, the owner of a goods and services business in Eastern Pennsylvania responded, “The labor pool is very minimal. We rely on CDL truck drivers and that is limited. We have hazmat materials, and drivers need special licenses.” [Avail #139]
- When surveyed, the owner of a construction business in Eastern Pennsylvania responded, “It's impossible for a medium-size[d] business [to] get work with the cost of insurance, permits, trucks, and licensing.” [Avail #121]

- When surveyed, the owner of a goods and services business in Central Pennsylvania responded, “Land development barriers [are a problem]. [It] takes a lot of money to get permission to build in Pennsylvania.” [Avail #32]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “I’ve lost a lot of projects due to government regulations being forced onto the projects, which increase[d] the construction cost.” [Avail #54]
- When surveyed, the owner of a construction business in Central Pennsylvania responded, “It has been difficult to expand or maintain [a business] because of permits and ... different sets of regulations.” [Avail #03]
- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “The regulations coming down from Washington are hurting us. Specifically, the financial regulations make it harder for our customers to finance the purchase.” [Avail #147]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, “The Commonwealth has put [out] some pretty strict requirements. The bureaucrats are doing that. They require you to be QP 1- [or] 2-certified. It’s a problem for the industry and they should establish a threshold after which the value of the contracts this applies.” [Avail #04]
- When surveyed, the owner of a construction business in Central Pennsylvania responded, “The regulations are getting too expensive.” [Avail #09]

Size and span of contracts. Interviewees had a range of comments as to whether the size of contracts presented a barrier to bidding.

A representative of a business development organization reported that member firms are sometimes restricted by contract size. The non-Hispanic white male representative of a small business development organization stated that sometimes what is needed for small businesses to scale for a contract is extensive and often prohibitive, adding that the organization he works with assists small businesses in obtaining those contracts. [#46]

Some interviewees reported that the size of their firm impacts their ability to pursue public sector contracts. Comments follow:

- The Black American female owner of a WBE- and MBE-certified professional services firm explained that the greatest barrier she perceives is the size of her firm and availability of resources to dedicate toward pursuing government contracts. She stated, “If there is [a barrier] I think it has more to do with size, and in the case of business, size does matter.” She continued, “If you have someone you can sit at a desk and say, ‘Hey ... work on just state contracts,’ I’m sure that is much more successful than someone like me who is juggling all of it.” [#30]
- The non-Hispanic white female representative of a construction firm explained that due to the small size of their firm, their focus is currently on the private sector. [#45]

The same representative explained that public sector work usually requires more capacity from the firm. She stated, “Right now, we’re a small operation, we don’t have [the manpower for public contracts]. So that completely sets us aside from doing anything that’s big bid commercial work, and we don’t want that many employees.” [#45]

- The owner of a DBE- and SDB-certified professional services firm stated that in order for a firm to be competitive in her line of work, it must be large and have hundreds of employees. She continued, “That’s the only way you can be successful in this business, because that’s how the Commonwealth has set up their procurement.” [#78]

One business owner wondered if some clients do not consider her firm for large contracts because of its small size. The non-Hispanic white female owner of a WBE-certified professional services firm said that she had just been part of a large RFP and did not get a call back. She said perhaps they looked at her size and automatically assumed her firm is “too small” for the contract. [#04]

The same business owner went on to say her firm does have “large clients and can do large jobs,” though sometimes clients see that her firm “only has five people, so they think [they] cannot do the job.” [#04]

Any unnecessarily restrictive contract specifications. The study team asked business owners and managers if contract specifications presented a barrier to bidding, particularly on public sector contracts.

Some owners indicated that some contract specifications are overly restrictive, do not make sense and present barriers. [e.g., #32, PT#04, PT#16f] For example:

- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that his biggest barrier is that he is rejected on technical requirements when bidding government contracts. He said the best way to correct this issue is to hold the public agencies awarding the contracts more accountable. He stated, “If there are two companies only bidding, how can you reject one company and not look at the price?” [#28]

The same business owner said that he has reached out to chief information officers at the Commonwealth and asked for an explanation as to why his firm was “technically rejected” on certain projects. He said he’s only given subjective reasons, and that he doesn’t know how they can say these things if they’ve never seen his company perform. He added that the reviewers don’t even get to the cost proposal because they reject him under technical requirements, and said, “They should not be able to technically reject without having ... solid reasons, and I think the management at the agency should be held accountable or responsible.” [#28]

- The Hispanic American male owner of a consulting firm said that he was disqualified from a Philadelphia Department of Prisons contract because he didn’t attend a “mandatory pre-bid meeting.” He said, “The RFP did not indicate a mandatory meeting, but rather, optional [meeting].” He said this was after his firm already presented, and commented, “They said we were invited because we were the best ... but they disqualified us.” [WT#02]

- The female owner of a goods and services firm said that the legal terms and conditions for some state contracts are “onerous.” She added, “There’s a lot of legal [clauses] that are an issue, I think, that prevents small disadvantaged businesses [from competing].” She went on to say, “Our liability is the aggregate of every single purchase order over time, even though we’re a reseller and have no control over the product we’re selling. So, that for some small businesses would [cause them to say], ‘I’m not bidding.’ So, I think that’s a big concern that is causing part of the disparity that’s happening.” [PT#17a]
- The non-Hispanic white male representative of a trade association said, “There’s more government regulation in respect to the Department of Labor.... But I think as an industry the things we face are ... the consistency of certain politicians and political parties [regarding] right to work and scrapping prevailing wage and things of that nature.” [#83]

Prevailing wage, project labor agreements, or any requirements to use union workers. Contractors discussed prevailing wage requirements that government agencies place on certain public contracts. They also discussed other wage- and union-related topics.

Many business owners and representatives indicated that prevailing wage requirements present a barrier to working on public sector contracts. Barriers faced by business owners were competition and time constraints involved with paying prevailing wages. [e.g., PT#07]
For example:

- The female representative of a WBE-certified construction-related firm said that one of the barriers they face is paying prevailing wage to their union employees when other plumbing companies or contractors do not. She said the Commonwealth can help solve this issue by asking “for certification of all payrolls for every job.” [#17b]
- The non-Hispanic white female representative of a majority-owned construction firm stated that because prevailing wage is a barrier to her firm, they do not bid on work with Commonwealth of Pennsylvania. She explained, “We usually try not to do any prevailing wage, because ... the rates are so increased. When you’re paying your employee \$15 to \$20 ... an hour, and their costs are ... going to [go] up ... to \$30 an hour, that just puts us out of the market completely.” [#45]

The same business owner went on to discuss her firm’s frustration with prevailing wage requirements. She said, “It takes so much time when you’re doing a prevailing wage job because ... they want you to break out everything If I have somebody putting in rebar, that’s a different pay scale than actually doing the flatwork or somebody that’s a laborer A lot of the prevailing wage is labor intensive and that’s the biggest thing.” [#45]

- The non-Hispanic white female owner of a WBE-certified construction-related firm said that they struggle with having to pay the “prevailing wage” to union employees because if the job does not require prevailing wage, then “[they’ll] never be able to compete unless they go at a prevailing wage.” [#17a]

- When surveyed, the owner of a construction business in Eastern Pennsylvania responded, “In my area of PA, it’s a little tough competing against the unions with prevailing wages.” [Avail #23]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, “We have issues with prevailing wage. We have to pay prevailing wage for surveyors’ wages.” [Avail #45]

Many business owners reported on barriers they faced related to project labor agreements and requirements to use union workers. For example:

- The Black American male owner of an MBE- and SDB-certified construction company said, “[Opportunities in] Central [Pennsylvania are] questionable because you have union [and] nonunion environments, which ... makes it difficult for you to attempt [to get work].” [#37]
- The Black American male owner of a DBE-certified goods and services firm said that he is having “huge problems” with unions because he is not being paid on time. He said, “I make a decision as a CEO to pay my men. If I don’t pay my men, we don’t have work. It stops right there, on Friday.” [#20]
- The representative of a Black American female-owned specialty contracting firm said they bid an out-of-state public sector job that had “a harmony clause, [meaning] you had to have harmony with the unions.” They added, “We didn’t get the job because they didn’t like our answer to a paragraph about union harmony.” [PT#02e]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, “We’re an electrical union [firm], and bidding against union shops is ridiculous because of our labor. They used to have balances for this.” [Avail #24]

Some business owners indicated that while union requirements can be useful, the unions themselves lack minority representation. For example:

- The Black American male owner of an MBE- and SDB-certified construction services firm said that he has “most definitely” run into barriers while working with unions. He stated, “Look at the union structure. How many across the country union members are Black? Male or female? Look at your percentage of members, and tell me, how can you have an adverse equality or advantage when the entire structure, from the individual working in the field and hands on, to the presidents and union controllers, don’t look like you?” [#27]
- The Black American female owner of a DBE- and WBE-certified construction firm stated, “I had some experience a while ago with unions, and I don’t care for them. I don’t think the people who facilitate the unions ... really care about the guys. They just care about their money and that they get that benefit package” [#63]

The same business owner continued, “Then there’s a barrier for our people to get in [the unions], because they want you to have a clean criminal record and high school diplomas, and not all of our guys have high school diplomas. And if you don’t have a high school

diploma or a GED, that doesn't mean you shouldn't be able to work. You still should be able to work." [#63]

One interviewee said that there's a shortage of union and nonunion labor in their industry.

The non-Hispanic white male representative of a trade association said it is a struggle to find workers in the construction industry, especially union workers. He explained, "It's an issue that goes far beyond just us here in this region. It's on a national and ... international basis. There is a shortage of construction workers in general, and that's both union and nonunion, experienced or not, good or bad. There's just a shortage, and ... we've held our own here despite [the] massive upturn in construction. I mean, [it's] historic." [#83]

One business owner said unions caused trouble for her firm and made considering joining difficult.

The non-Hispanic white female co-owner of a construction firm said, "We were on a job one time where we did all the grunt work and then the union came in and they booted us out." She continued to talk about another job where they lost to the union, and said "We couldn't get on it because we weren't union. I don't know why, because [we] didn't work on site, [we] just brought stone in. They wouldn't allow us in." [#47b]

Regarding joining a union, the same business co-owner said, "We tried to ... get into the union, [but] they didn't call us back [The union] wanted a lot of money [to join], so it's okay They do their thing, we do ours." [#47b]

Some firms said that prevailing wage requirements are fair and that requirements for union workers are not a barrier when working on public sector projects. [e.g., #22] Examples follow:

- The non-Hispanic white female owner of an SDB-certified construction firm stated that her firm is unionized so that they can "get skilled workers." She explained, "They've been through training and have job experience. Otherwise, it is tough to get somebody that's qualified to do a good job, especially in [this occupation]." She added that because they pay prevailing wage, operating costs can be a barrier to getting contracts. [#65]
- When asked about members that are union subcontractors, the non-Hispanic white male representative of a trade association said, "If you want to work in the nonunion world, [things like bonding and cash reserves] aren't quite as onerous to you because ... by and large you're not going to be required to necessarily have the reserves. The bonding may be absorbed by the developer." [#83]

However, the same trade association representative added that most members' public sector work is on union projects, and commented, "The opportunities aren't necessarily as great in the nonunion side because the nonunion side is not [necessarily] doing ... the scale of projects that the union side is. When you see a stadium go up, that's all union." [#83]

One business owner said that her relationship with unions and union workers has improved over time.

The non-Hispanic white female owner of a WBE-certified construction firm stated, "I had to fight long and hard, but I now have a very good relationship with the union. It's very good, and now I get good people. There was a period of time when it was really bad, but I worked

very, very hard and I now have a terrific relationship with the union I have really good people and I treat them really well, and they stay loyal." [#22]

Bidding processes. Interviewees shared a number of comments about bidding processes.

Many business owners said that procedures for bidding and proposing present a barrier to obtaining work or put larger firms at an advantage. Several interviewees expressed that the processes lack transparency. [e.g., #21, #33, 44, PT#10] For example:

- The Black American male owner of an SDB- and MBE-certified professional services firm reported a lack of transparency and inconsistencies regarding the scoring process for bids, especially around the value placed on disadvantaged business participation. He cited a project that he would have been a subcontractor on, but a less-experienced firm from out of the state won the job instead. [#36]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm stated that the Commonwealth's bidding process lacks transparency. She explained, "There's no feedback whatsoever. You're just throwing things into a vacuum and you have no idea." She went on to add, "As far as the feedback process, they usually just give you a ranking and there's not a whole lot [of explanation]." [#31b]

The same firm co-owner reported that a lack of clarity from the Commonwealth in terms of price and quality of work has been a barrier to her firm winning contracts. She explained that when asked about a project budget, the Commonwealth has responded by saying, "It's a competitive offer. We're not going to tell you." She also noted that the quality of product in her industry varies drastically, so managing both costs and expectations during the bidding process has been a barrier. [#31b]

- The non-Hispanic white female owner of a DBE- and SDB-certified professional services firm remarked that lack of communication in the bidding process results in lack of transparency, which adversely impacts a subcontractor's ability to be treated fairly. [#59]
- The non-Hispanic white female co-owner of a construction firm discussed feeling overwhelmed by the bidding process. She stated, "I don't want to have to bring a lawyer in to explain things to me When you look at any other kind of contract it's like Chinese if you're not familiar with the language." [#47b]
- The non-Hispanic white female owner of an SDB-certified construction firm indicated that bidding with the Commonwealth lacks transparency and communication. She noted, "It would be nice to know where your bid fell. Because I'm not convinced they always check the prevailing wage." She went on to say, "We had a contract for three years. And, I don't know what happened. We did put in another bid for it ... and I never heard anything." [#65]
- Regarding the Commonwealth's bidding process, the Hispanic American male representative of a trade association stated, "A small business with limited manpower and limited resources [that competes] for business on these bids with large organizations that

probably have staff dedicated to doing proposals and responding to these bid opportunities [puts these small, diverse businesses are at a disadvantage]." [#86]

- The female representative of a WBE-certified construction-related firm said that they have faced problems with projects being rebid at the last minute, especially with the Housing Authority of Pittsburgh. She said, "An hour before [the bid] was due, they canceled the bid ... I just think that the person who came in second was the one who was supposed to get [the bid] and they came in high ... So, then they send it out again until they get the result ... that they want." [#17b]
- When asked if her firm has experienced any barriers with the bidding process, the Black American female owner of a DBE- and SDB-certified professional services firm stated, "Sometimes it seems like you only have maybe 10 or seven days to submit a proposal ... and [you have to] try to grade whether or not it's [worth doing]. And then the contract is awarded the next day, after the due [date]." She went on to comment, "I just really don't feel like we have a friend in the Commonwealth. I don't know how other minority businesses feel about it, but [with] the millions of dollars that are spent on contracts ... I would think that they would put a little more effort into that." [#32]
- When surveyed, the owner of a goods and services business in Eastern Pennsylvania responded, "[It's] difficult for a small business to compete in a bid situation against larger businesses because time, personnel, [and] dollar-wise, we tend to have more limited resources." [Avail #138]
- The non-Hispanic white female owner of a DBE- and SDB-certified professional services firm, explained that experience requirements on government contracts can be prohibitive to small businesses. She stated, "If you're looking at the qualifications for anything, you know, it basically says five years experience in the last five years doing, you know, exactly similar kinds of contracts, right? And, if you're a new or small business, you don't have that. And so, unless you can partner with somebody else bigger, you're not likely to get the work, right? [...] People who get the contracts are the people who already have contracts." [#80]
- The Black American male owner of an MBE- and SDB-certified construction company said, "[In] Western [Pennsylvania] the transaction cost is too great, so that [area] is eliminated from possible attempts [at work]." [#37]
- The Black American male owner of a DBE- and MBE-certified construction firm has struggled with the bidding and estimating process. He said, "The barriers for me are the estimating and bidding." He said when he is asked to bid on a project he asks how many pounds or tons of rebar are needed, and added, "Some companies will give that to me and some won't ... I don't have the time and ability to look at every square footage to figure out the pounds and tons. I need the general contractors to give me the numbers." He said general contractors will email him just to meet participation goals, without the intent of ever using his bid. [#13]

The same business owner said that his firm “is trying to do heavy construction,” but has been unsuccessful because he “keep[s] running into these different obstacles, like certifications, references, and estimating and bidding on ... projects.” [#13]

- The Black American female owner of a closed construction services firm said that failure to estimate properly on a large project led to her firm’s bankruptcy. She explained, “What happened was [that my employee] underbid it by \$100,000, and I was wondering, ‘Are you sure we’d be able to do the job for that quote?’” She continued, “We were too low, so that’s when I ran into the difficulty. All the other jobs were fine, except that one and another [we] had bid. So, [the customers] ended up ... forcing the company [into] bankruptcy It wasn’t me that filed for bankruptcy, [the customers’ lawyers] forced me into bankruptcy.” [#26]
- The Black American male owner of an MBE- and SDB-certified goods and services firm said it is difficult for small diverse contractors to break into Commonwealth contracting. He stated, “Right now, the state’s procurement officers buy from the same person every time. If it’s catering, they just buy from the same caterer Open it up.” He added, “If it’s a big company, a big financial management firm, make them partner up with a smaller firm That type of stuff should happen.” [#52]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, “[We have] issues with barriers. Finding the information [on] the protocols to submit a bid [just] so we can exhaust one person’s job for a week, and then finding out we did not even qualify ... makes us not want to submit bids and engage in the future.” [Avail #22]
- The Black American owner of a construction management firm stated that a key to the success of MBE construction firms is clarification “about what constitute[s] an acceptable transaction.” Specifically, he observed, “Our argument was that 100 percent credit should not be given for [a firm that provides] materials only. Because white contractors would use that to source their supplies in order to achieve their [minority participation] goal, and leave minority hard-hat contractors looking at the project through a chain link fence. So, we prevailed [on a City of Harrisburg project] in having a rule that 60 percent credit would be given for minority suppliers, and 100 percent credit would be given for supplies that were installed by minority contractors ... And our goal was 25 percent MBE and 5 percent for female contractors. So, to meet that 25 percent, the white contractors were encouraged to look for minorities that could both furnish and install.” [#82]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, “The bidding process for state contracts needs to be fixed. Rolling over contracts [without] giving the opportunity to bid [is a problem].” [Avail #135]
- When surveyed, the owner of a goods and services business in Western Pennsylvania responded, “They tell you to bid, but they already know who they’re selling it to. It’s hard for a small business to start up. They have no intentions of giving that sort of business to certain companies. Minority- or woman-owned business have it harder.” [Avail #137]
- The female owner of a small business stated, “There’s a huge barrier to entry for people that don’t have, you know, [a] half a million dollars in cash to start their firm They got

[maybe] \$10,000 out of their bank account, and they started a firm. And they built their firm [from that], but they never figured out how to navigate [the bidding process] and therefore, they tried a couple of bids, they fail[ed], [and] they [didn't] get any feedback and they give up There's a lot of businesses that probably aren't coming to these meetings [and] that aren't going to pre-bids because they are not even willing to try anymore." [PT#17c]

- Regarding the bid process, the non-Hispanic white male owner of a construction services firm indicated that there should be better clarity regarding who is responsible for what on contracts where competencies overlap. He said, "[There should be more] clarity between the general construction and ... mechanical construction, [and] plumbing construction, [because whoever is] doing either the excavation, or the cutting and patching ... can get mixed up. And what I've noticed [is that] some engineers will put a stamp right on the drawings, and it'll say this contractor is responsible for all cutting, patching of his work A clear page of scope of work per our section would probably be really nice, because ... if you knew that you were responsible [for] that specification, that would make it so much easier ... as an estimator." [#39a]

The same business owner continued, "So, it's really those kind[s] of things that aren't the main focus of the whole thing, but [in-between]. Because if you're running ductwork through this wall, and there's a hole that [has] to be cut in there. Who's doing that? Is that going to be on you? Is that going to be on the general contractor?" He added, "So, a lot of times that's not clear, and I think that's why you'll see sometimes some big disparity in the bids. That's where you see a million dollars here, and then the next guy's a million [and] three because this guy missed the cutting and patching." [#39a]

- The Black American male owner of a professional services firm stated that small construction labor firms and suppliers are unsuccessful in bidding because they have "cut their profit ratios so short, so small that they can't make money to move ahead very well." He added, "The reason for [this is that] there are other companies, majority firms who are well established and have their estimating crew and their insurance [already secured]." [#55]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, "The proposal process is difficult to understand." [Avail #89]

One business owner reported not having any issues related to bidding. The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated that she has not experienced any problems with the Commonwealth's bidding process. [#57]

Amount of "paperwork" or paying for bidding services presents burdens to small firms. Some interviewees commented on the difficulty of extensive paperwork. [e.g., PT#07] For example:

- The Black American male owner of a DBE-certified construction services firm said state projects are "all document-controlled." He said that he would have to hire an additional staff member to handle the Commonwealth's paperwork requirements. [#02]

- The Black American female owner of an MBE- and WBE-certified professional services firm stated that she has had some bad experiences with public sector bids. Specifically, she mentioned “the hoops you have to jump through to do [public sector] projects.” She said, “You have to send letters to 10 minority businesses, and the letter means nothing It’s a waste of time, and it’s meaningless to have firms like mine send that letter if you’re not really soliciting them” [#11]

The same business owner continued, “If I wanted to spend the time going after these government contracts, I could. But to me there’s so much work, [both] corporate and nonprofit, [so] why would I go through all those pages?” [#11]

- The non-Hispanic white male representative of a small business development organization stated that at the federal level there are many requirements for obtaining contracts, therefore those who have more paperwork “win the game.” He added that firms that want to work for the federal government have to know their stuff and be prepared. [#46]

Cost of/or time for preparing proposals. Some interviewees commented that the amount of time and costs presented a barrier to their firms. For example:

- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm reported that the cost of labor needed to prepare a bid has prevented them from pursuing public contracts. She explained that the firm “got burned by a couple [of public projects] recently,” because they did not win the contracts. She added that the firm has not pursued public projects recently, citing the need for “paid gigs.” [#31a]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm added that bidding on public projects is a gamble. She explained that the firm recently submitted a large bid to a different state and they did not win, adding, “[The public agency] told us that we were second.” She also reported that the firm had its best year in 2015 due to an increase in public contracts and explained that public sector work typically includes “bigger projects.” [#31b]

Short deadlines to submit a bid. Interviewees reported very short bidding deadlines on some projects. For instance:

- The female representative of a WBE-certified construction-related firm said that they have struggled with getting jobs because they are not given a proper amount of time to prepare bids. She said, “[Prime contractors] reach out to us ... the day before the bid's due, just so that they can say they reached out to us.” She added that this is difficult because in some cases they aren’t even given 24 hours to complete the bid. [#17b]
- The Black American male owner of a construction services firm said, “When a lot of ... opportunities come through, they don’t give you a chance to bid. They might send you to bid like a week before something is due. It happens all the time. And they always say, ‘Well, we couldn’t find a minority.’” [PT#10]

- The non-Hispanic white female owner of a DBE- and WBE-certified specialty contracting firm said, “Many times the general contractors send a notice to bid only one or two days before the bid is due.” She went on to say, “Require the subcontractors to attend the pre-bid. For example ... only the subcontractors that were at the pre-bid can be carried in the GC/prime bid. [General contractors should] submit proof with bid of when the minority subcontractor was given the information to bid.” [WT#05]

Timely payment by the agency or prime. Many interviewees mentioned slow payment or non-payment by the customer or prime contractor as a barrier to success in both public and private sector work. [e.g., #22, #56, #58b, #77, PT#14f, PT#17b] For example:

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that slow payments by prime contractors is a struggle for his firm. He added, “They write the check [to] say today, so it shows if anybody audits them [that] the check was made out today. But, they hold onto that check for weeks and then mail them.” He said prime contractors do this “for their cash flow,” and commented, “They use your money in the meantime.” [#09]
- The Black American male owner of a construction services firm said that a prime contractor “called the police on [him]” after he arrived at their office to collect the payment he was due. He said, “I [went] to their office. They called the cops [and told] them I was trespassing.” [PT#10]
- The Black American male owner of a professional services firm stated, “The problem is that even [when a] minority business’s job [has] ended, the prime will hold back 10 percent of the sub’s pay until the [entire] job ends. [In those cases] the prime may still have 30 percent more of the job to do It’s just another one of those things that agitates and causes folks to go out of business, because the 5 percent may be that guy’s entire profit.” [#55]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that some contractors “only want you on there because of the fact that you are a disadvantaged business.” She continued, “So then, most of the time they’re not really willing to pay you what you’re worth. Another part of it is they’ll put your name on the contract, but then they don’t actually pay you for it.” [#18]
- The Hispanic American male representative of a trade association stated, “[Timely payment] is an issue that we have to deal with again depending on the scope of work. If we’re doing business with the larger organizations ... we have clients that have us on 60-day payment terms. These are some of the largest companies in the area, but if you want to do business with those firms [then] those are the issues that you have to accept.” [#86]
- The non-Hispanic white female owner of a DBE-certified construction services firm said that she has problems receiving timely payment by customers. She said, “I can’t hire employees [because of it]. First of all, a lot of the organizations take over a year to pay me, so I physically cannot hire somebody and pay them on a biweekly basis without being reimbursed. Therefore, I can’t show other owners and companies that I have people on the payroll so that they can then be put out on a project. It’s a chicken and an egg scenario.” She

said that she did hire another employee, “but it almost collapsed [her] to pay [them] until [she] got paid.” [#12]

- The non-Hispanic white female owner of a WBE-certified construction supply firm said that untimely payment can be an issue because some companies “don’t pay for 60 days, [though] most vendors require 30 days for payment.” She said that she explained this to vendors and they are usually willing to waive the 30-day requirement. [#14]
- Regarding being paid by the prime contractor on state projects, the Black American female owner of a DBE- and SDB-certified professional services firm said, “With [one contract], we have been working with [a prime] now for three years, and they are really, really tough to work with [They] have not fulfilled their goal as far as paying the percentage or seeing that we get the percentage of what has been designated in the contract for minority businesses.” [#32]

Regarding her experiences with the City of Philadelphia specifically, the same business owner stated, “We always get paid Generally, the city [will] tell you, ‘You might not get paid for 60 or 90 days.’” She continued, “When we send an invoice to our client ... they sign off on it and at the same time we [submit] our invoice ... and [then] we get funded within a week. So, that's helpful.” [#32]

- When surveyed, the owner of a construction business in Western Pennsylvania responded, “Obtaining work is not the problem. The biggest [problem is] when you have [a subcontract] and ... you wait for payments for 30 to 60 days There is a long wait time. [The] biggest barrier is the wait time. [It's a] big financial barrier for a small company.” [Avail #131]
- The Black American male owner of a DBE-certified construction services firm said that “cash flow is king.” He continued, “I even negotiate that before I start to bid the job so that we are in a clear understanding that I don’t mind taking on a [larger job] as long as they at least give me net 30 [days] on paying me That has to be in the contract.” He went on to say he “insists” it be in the contract, saying, “I have worked for some of the bigger companies and I know how that process works.” [#02]
- The non-Hispanic white female co-owner of a construction firm stated that her firm experienced issues with getting paid on time when working as a subcontractor. She went on to explain that, at times, payments to their firm have been delayed up to five months. She stated, “That was a big thing because it was always pass the buck, pass the buck, pass the buck.” [#47b]
- The non-Hispanic white male co-owner of a construction firm described an incident where “[the prime contractors] said, ‘Well, we’re not going to pay you until we get paid. That’s a part of your contract.’” He continued, “The minority company should have the funds to pay me.” He went on to say that having to pay high costs for general operations in a short amount of time presents a challenge when they’re not paid in a timely manner. [#47a]

- The Black American male owner of an MBE- and DBE-certified general contracting firm said that his “absolute worst” public sector experience was on a Harrisburg Housing Authority project. He said, “I had a contract as a sub Everything that I put in the contract was ignored.” He said that he requested to be paid twice a month because he had a low “number of dollars [to] start [the] project with” and could not afford to pay his employees prevailing wage while waiting two months to be paid. [PT#07]

The same business owner continued, “So, that was right at the ... very beginning of the job ... When I submitted my invoice [to the prime], instead of two weeks later it took four or six weeks later. By then, I’m tinkering on bankruptcy [and] haven’t been paid anything yet, except a ... small mobilization check.” He said that he then went to the housing authority and said, ‘Hey, these people are ... running me out of business. I can’t even pay my men.’ [The housing authority representative responded], ‘Oh, you can’t pay your men? Well, we’re going throw you off the job if you can’t pay your men.’” [PT#07]

He further said that he showed the housing authority representative his contract with the prime, which stated that he “should have [been] paid ... three [or] four weeks ago,” but the representative did not help him. He went on to say, “I talked to ... my prime [again] the day before I was supposed to be ... put off the job, [and] then they paid me. So, I paid my men.” He added, “[The] housing authority, the people in charge of that money, are supposed to be ... pretty much protective of the small business.” He said he’s still “going through [payment] issues with [this prime and is seeking help through] the Department of Labor and Industry.” [PT#07]

- The Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “We were a sub to a contractor ... for what we’re doing with [a city] department We were doing most of the work, but ... we had payments out 180 days, [the prime] just said, ‘Oh, it’s [the city department],’ and it felt like [the prime thought] I was stupid. And ... not just you’re small, but you’re stupid, and you’re Black. I get that a lot. So, I called up [the Office of Economic Opportunity] since they brought us in as a DBE ... and they [said], ‘We’ll take care of it. And within two weeks we had most of our money.’” [#38]
- The Black American male owner of a DBE- and MBE-certified construction firm explained that his firm received their first job last year and that he was not paid in full by the prime contractor and is now suing that contractor. He said, “Those [prime contractors] came up and said this is what we’re going to give you.” He then mentioned that he went to the authorities, but said, “They didn’t do a damn thing about it.” [#13]
- The Black American female owner of a DBE- and WBE-certified construction firm indicated that the primary challenge for her firm is the timing of payments from primes because that greatly impacts her cash flow, and thus the survival of her business. [#63]

The same business owner said, “I was a subcontractor and I supplied windows and doors to the prime contractor, but he filed bankruptcy and I didn’t get paid When I reported him to the URA [Urban Redevelopment Authority], there was nothing they could do.” [#63]

- The male representative of a woman-owned construction services firm said that his company does work “mostly [for] PennDOT and Pennsylvania Turnpike.” He added, “We don’t have an issue getting the work. Our two main issues are first off, the pay when paid system. You become at the mercy of not only the client and the owner paying, but also the prime, adequately and confidently invoicing in a timely manner. And then in addition to that, something that poses another problem ... is holding your payment as leverage ... to use for you to sign their subconsultant agreements, which can be egregious with their indemnification clauses [and] their insurance clauses.” [PT#16f]
- The non-Hispanic white male representative of a small business development organization stated that the most common complaint from firms that he works with is the Commonwealth’s untimely pay process. [#46]
- The non-Hispanic white female owner of a SDB-certified construction firm said, “[As a subcontractor] we would be waiting 60 to 90 days to get paid If you get somebody that has difficulty paying, you’re waiting longer. We’ve always gotten paid. It’s just that sometimes, it’s a challenge Ninety days is a long time to be floating a job.” [#65]
- The non-Hispanic white male representative of a professional services firm said untimely payment can be an issue in his industry. However, he noted, “We’ve been pretty fortunate. I don’t remember the last deadbeat we had where we didn’t get paid at all.” He added, “But ... to get things moved through on the financial to get payment [for public sector work] is a nightmare. I don’t know about Pennsylvania’s, how easy or hard it is, [because] it’s been years since we’ve had a direct contract [with them].” [#87]
- The Black American female owner of a WBE- and MBE-certified professional services firm described her frustration with waiting for payments from prime contractors when she has already invested large amounts of money into a contract. She explained, “Let’s say your credit card [interest rate] is at 22 percent. Well, now you’re borrowing money to front the order and you’re floating that for 90 days In order to get paid in 30 days you [have] to give up 15 percent of your profit This makes no sense to me. I’m getting ready to lose business on every order [and] I’m losing money.” [#30]

The same business owner said that she did not think the Commonwealth was at fault for the untimely payments that she faces. She remarked, “I think it’s the supplier management that [the firm] hired, and that was a way for them to make more money. If you wanted to get paid faster, then you gave up part of your profit.” [#30]

- The non-Hispanic white male owner of a construction firm said timely payment is always an issue. He commented, “[There’s] nothing you can do about that. You work for a client [and] you figure out who pays fast and who doesn’t, and you price jobs and you price your risk accordingly. That’s all you can do.” [#85]
- The Hispanic American male owner of a construction firm stated that customers regularly pay his firm after the payment deadline. He added that at times he feels like companies are trying to take advantage of his firm and noted that this may be linked to discrimination. [#49a]

- The non-Hispanic white male representative of a goods and services firm stated that payments to their firm come directly from the customers and not the Commonwealth. He added that payment from municipalities is not typically a problem. [#72]

One business owner said that bidding as a prime contractor helps him bypass late payments from the customer or public entity. The male owner of a DBE-certified construction services firm said, “We bid as prime, which we actually tried to do on several occasions because of all the horror stories we were hearing from some of our colleagues, who were minorities. [They] got subcontracts with primes and could not [get] paid. So, we said ... we [would] try to stay away from that and ... bid prime [ourselves].” [PT#02a]

Many interviewees indicated that slow payment can be damaging to companies.

Interviewees reported that payment issues might have a greater effect on small or poorly capitalized businesses. [e.g., #12, #22, #32, #44, #55, #85, Avail #131] For example:

- The Black American male owner of a DBE-certified construction services firm stated that many small businesses are being taken advantage of on jobs because they are not being paid in a timely manner. [#02]

The same business owner added, “[Small business are] not being paid on their previous job, and not being paid on this job. What do you want that small business to do?” He said firms that don’t pay small business are “basically putting them out of business.” [#02]

- The Black American female representative of a public entity said, “A common practice that can force a small business out of business, when prompt payment contract language is not included and/or enforced, is withholding payment from MWDBE firms for unduly lengthy periods of time after the work has been satisfactorily completed and accepted.” [WT#07]
- The non-Hispanic white male representative of a WBE- and SDB-certified professional services firm stated, “I would say some of these larger companies do try to stretch you out a little bit on payment terms. Our normal terms are 30 days, [but] some of them don’t pay for 45 or 60 days, sometimes [even] 75 days, which hurts. It’s difficult on the cash flow for a small business.” [#58b]
- The Black American male owner of an MBE- and SDB-certified construction services firm said that his firm has reduced their PennDOT work due to slow payments by prime contractors. He explained, “It just [takes] too long, and there [isn’t] enough checks and balances to make sure that the subcontractor [gets paid] without him calling out the guy that he was working for and tarnishing [that] relationship. [There] should be a ... check and balance system to show that the general contractors are paying the subcontractors as expeditiously as needed, [so subcontractors are] able to perform the work.” [#27]
- The female owner of a WBE-certified professional services firm said, “We’ve ... had payment issues from [primes]. They don’t pay us until they get paid from the Commonwealth, and that might be good for them because they’re a big large corporation, but waiting [six months] to, you know ... get our share of the money is very hard for a small business to sustain.” [PT#02b]

- The Black American male owner of a DBE-certified construction firm stated that slow payment is a barrier to small business success and mentioned that in certain cases he waits up to nine months to be paid by the City of Philadelphia. In discussing other payment issues, he said, "I can get a line of credit, but the lines of credit I have, they hold on to 10 percent of your money forever and ever and ever So, you never get your 10 percent." He added that he needs the withheld 10 percent to be "bankable" for projects. [PT#13f]
- The Subcontinent Asian American male owner of a WBE- and SDB-certified professional services firm described his frustrations with getting paid for Commonwealth work. He explained that his firm had to borrow money to pay employee salaries when the State was not paying out on contracts during a legislative budget impasse in 2015, and that they subsequently had to pay interest on that loan. He stated, "When we are working with the primes, sometimes (inaudible) that happens, like many times. In the last three years, it had a lot, many times. So because they're like, we're a sub, right? [...] So they delay or something and 45 days payment term becomes a 70 days payment term or 90 days sometimes. So like, that hurts a lot for the small business SDB. Because SDB do not have like, much line of credit. Now, that happened more than a year. [...] That hit us - that hit our company a lot. We lost a lot of money in that. See, because as an SDB, we do not have - as a small company, we don't have any line of credit. We have like at the time, \$200,000. That was our line of credit. I can't stop the payment to my employees. We - myself and my wife, we pushed all of our personal money and credit cards money, everything pushing to business accounts, and we ran the pay. We never stop our pay. So almost like \$120,000, we brought from our own personal loans and pushed into the business, and we ran the pay. That guy who was a contractor, subcontractor -- prime contractor, he stopped payment for us, ten months. Ten months and we did not get any pay from the prime contractor for the Commonwealth. So 10 months, we ran our pay for all employees on time without missing any single paycheck. That was horrible. Other time, we - personally, we went to like minus \$500K loans. [...] We are safe now. [...] We paid lot of money on the interest. [...] So they see if something got delayed, they will charge fine or something, right? And the same way, they have to pay the interest or something. Yeah, they have to, right? So if we miss any payment, we charged some money. [...] See, we are not like bringing our own money, so we are also borrowing from someone, right? So who is going to pay for that? See, as small businesses, [...] we can't do that. So these are the challenges." [#90]

One interviewee discussed her firm's need to be flexible with varied payment schedules.

The non-Hispanic white female representative of a construction firm said that her firm must pay out their expenses for each job prior to being paid for their work. She stated, "Usually it's 30 days, unless [the owner has] made an agreement with the builder ... beforehand. We had a builder a couple of years ago that ... had three large projects and the bank pulled his money So, we worked with him You have to be willing to work with that person to get that money." [#45]

Some business owners considered the Commonwealth of Pennsylvania to be a prompt payer.

[e.g., #43] For example:

- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that he has no problems receiving payments from Commonwealth of

Pennsylvania. He added that payment usually takes 30 to 45 days, and said, “The state actually pays pretty well, except when they have budget issues.” [#28]

- Regarding timely payment by the Commonwealth, the female owner of a goods and services firm stated, “We have no issues with small businesses getting paid in Pennsylvania.” She added, “We get interest with no problem at all if the public is late.” [PT#17a]

Some interviewees suggested methods to improve and enforce prompt payments.

For example:

- The Black American male owner of an MBE- and SDB-certified construction services firm that said that he can avoid late payment issues when he finds a prime contractor willing to pay weekly. He stated, “We had a general contractor here in Pittsburgh agree to make weekly payments that covered our labor, which allowed us to do over a million-dollar ... contract. Since then, we did another project that was ... paid [weekly], which was [also] over a million dollars We completed that project without any problems as well, because we had access to capital.” [#27]
- Regarding methods he uses to enforce prompt payments, the non-Hispanic white male veteran with disabilities and owner of a professional services firm stated, “I have had stuff in the past where someone writes a check and it bounces, or somebody has an inspection and ends up not paying for whatever reason. It's only happened a couple times, but I try and protect myself from that by [withholding] the [inspection] reports until [they] pay. And the pre-inspection agreement has to be signed too, [which address that].” [#74]
- The non-Hispanic white female owner of a DBE-certified construction services firm said if the Commonwealth paid subcontractors “directly” then they would not be hindered by lack of payments. She said, “It severely inhibits growth, because I can't take the risk of hiring someone to have an issue happen like [lack of timely payment] again. It's no fault of mine and no fault of the state. It's the middleman that could put me out of business at any moment. So, the risk for me to hire someone and put them on a project is just astronomical for that to happen.” [#12]

The same business owner continued, “There are several different ways that can happen. I submit invoices to the prime. The prime bundles the invoices together and submits those to the state. The state cuts a big check to the prime, and then the prime cuts a little check to me. I could submit invoices directly to the state, but if the state doesn't want to review and approve them, I can still submit them to the prime. The prime can be responsible for reviewing and approving all of the hours and the charges. They can either go to the state bundled or not bundled, and then if the state could just cut checks directly to the subcontractors, I mean, it would just be such a world of difference.” [#12]

- The Black American male owner of a DBE-certified goods and services firm said the Commonwealth should make all of the payments electronic to help counteract issues with delay in payment by prime contractors. [#20]

F. Work with Commonwealth of Pennsylvania Agencies

Interviewees discussed the following topics:

- Experiences working with Commonwealth of Pennsylvania agencies including DGS and PennDOT;
- Learning about prime and subcontract opportunities with Commonwealth of Pennsylvania agencies including DGS and PennDOT; and
- Recommendations for improving Commonwealth agencies' bidding, contracts, prompt payment and other processes.

Experiences working with agencies in the Commonwealth of Pennsylvania, including DGS and PennDOT. Interviewees were asked about their experiences working with the Commonwealth of Pennsylvania agencies, including DGS and PennDOT specifically.

Many business owners interviewed reported working with Commonwealth of Pennsylvania agencies. [e.g., #06, #16, #23, #25, #27, #36, #37, #39a, #43, #58b, #61, #81, PT#17g] For example:

- Regarding her experience working with the Commonwealth, the non-Hispanic white female owner of a WBE-certified construction firm stated, "The issue with any government ... is there's so many layers of bureaucracy." However, she noted that "the state's way better" than other public entities. [#22]

The same business owner added, "I'd way rather all the money go to the states and let the states figure out how to spend it. We do work with Allegheny [County], [and] that's probably ... the most 'good ole' boy' [public entity]. We do win some work with [them], but mostly we just have trouble getting paid. But the state, assuming the budget's good we've submitted all of our paperwork properly, they pay their bills." [#22]

- A representative of the Hispanic Chamber of Commerce of Central Pennsylvania noted that three or four Chamber members have participated on Commonwealth contracts, and observed that there are approximately five to eight businesses that provide services that the State would procure, and are "far enough developed" that they could reasonably be involved in State contracting. [#89 TA]
- The Black American female owner of an MBE- and WBE-certified professional services firm stated that she has worked as a subcontractor on projects for the Commonwealth of Pennsylvania. [#11]
- The non-Hispanic white female co-owner of a construction firm said that they do not bid directly on projects with the Commonwealth but have subcontracted with a company that did Commonwealth work. [#47b]
- The non-Hispanic white female owner of a WBE-certified construction supply firm stated that she has worked as a subcontractor on projects for the Commonwealth of Pennsylvania,

specifically the Turnpike. She said she's part of a five-year project as a protégé to a large electrical supplier and added that the project will "double [her] income in 2018." However, she later said it took almost three years to start the project. [#14]

- The Black American male owner of a DBE- and SDB-certified construction supply firm indicated that he has worked with the Commonwealth by saying, "I have a lot of experience with the State of Pennsylvania ... [which] has always been good [to my firm] They can always do better, but [they] have been fine." [#03]
- The non-Hispanic white female owner of a WBE-certified professional services firm stated that she has worked as a subcontractor on projects for the Commonwealth of Pennsylvania. [#10]
- The Hispanic American female owner of a professional services firm said that her firm has worked with the Commonwealth as a subcontractor. She said that her firm tries to do business with the Commonwealth by participating in events where "the agencies [have] their RFPs on the street." [PT#04]
- The Black American male veteran owner of an MBE- and VBE-certified professional services firm stated that he has worked with the Commonwealth of Pennsylvania on "consulting and staffing" contracts. He went on to say he worked as a prime on one state training contract and a subcontractor on several others. [#08]
- The non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm indicated that her firm has worked with the Commonwealth as a subcontractor. She added, "[We] would love to work with the state on workforce development I thought about volunteering to be on a committee." [#05]
- The Black American female owner of a WBE- and SDB-certified goods and services firm indicated that her firm has not performed work directly with the Commonwealth as a prime contractor or subcontractor. However, she later said that her firm performed services for a state university and indicated that it was a positive experience. She said the university had a personable approach to subcontractor bidding because it didn't use the state's software bidding system. [#53]

The same business owner also said, "If [the Commonwealth] held another meeting to say that they were interested in diversity participation outcomes ... I could find out who the general [contractor] is and I could appeal to that person and attend the pre-bid meeting, and know they were concerned with diversifying their workforce. [It's] as simple as that. If there were some controls in place to make sure that it happens, then sure, we'd bid on state jobs." [#53]

- The Black American male owner of an MBE-certified supply firm said, "University of Pittsburgh is a very good client. They've been a client and supported our business for years. We've [also] done business with some of the larger hospitals [and] a lot of different large organizations." [PT#10d]

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm stated that he has worked with the Commonwealth of Pennsylvania many times. He said that his firm has worked “a lot” on state highway and bridge projects in the Allegheny County area, and noted that most of this work was as a subcontractor to “larger consulting firms” so they could “[meet] their set-aside goals.” [#09]

The same business owner later said that he has had a contract with a local public agency for over 10 years. He said, “We [should] be getting these kinds of contracts ... with the state,” and added, “[The agency director] is an awesome person and she fights, and she’s proactive ... She’s on the board and she let her voice be heard. And people listen to her. I think that’s why someone like us was given the opportunity in the first place.” [#09]

- The non-Hispanic white male representative of a small business development association said that he thinks about 50 percent of the firms that he works with are also doing work with the Commonwealth of Pennsylvania. [#46]
- The non-Hispanic white male representative of a goods and services firm said the Commonwealth’s COSTARS program is better than those of neighboring states that use a single auto dealer to service government vehicles. He stated, “The municipality in Ohio, they don’t have anything like COSTARS. They don’t have a similar program. So, they have the one state bidder, and that one bidder provides the vehicles to all the municipalities.” [#72]
- The non-Hispanic white male representative of a trade association reported that most members have worked with the Commonwealth. He explained, “The carpenters have a whole group that’s heavy highway and the laborers have a whole work [group] that’s heavy highway. That’s all they do is work on highways and bridges Iron workers do a lot of bridge work. Then you have the contractors involved in that, [such as] painting contractors, and the unions.” [#83]
- Regarding her work with the Commonwealth, the Asian Pacific American female owner of an MBE- and WBE-certified professional services firm stated that in less than three months of starting her business she had a significant contract with the state. [#69]
- The female owner of a goods and services firm said, “We’ve been doing business with the Commonwealth for about 25 years.” [PT#17a]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said that it has been over 15 years since they last worked with Commonwealth of Pennsylvania as a prime contractor. He added that they last worked as a subconsultant about 10 years ago on a Department of General Services contract. [#77]

The same business owner went on to say, “We haven’t seen anything that really would come out that we would fall under. It’s tough ... on the design side in terms of contacts and who the people are that we know on the Commonwealth side. Like I said, most of our contacts are on the federal side right now.” He added, “I don’t really have the relationships established [at the state level] as I [do] on the federal side of ... things.” [#77]

Many business owners reported working with PennDOT. [e.g., #20, #25] For example:

- The Black American male owner of a construction services firm said that his company has worked “on and off” with Pennsylvania Driver and Vehicle Services since 2009. [PT#10]
- The Black American female owner of a DBE- and WBE-certified construction firm stated that her firm currently has a subcontract with a prime contractor that was awarded a contract by PennDOT. [#63]
- The Black American male owner of an MBE- and DBE-certified construction supply firm reported that his firm has worked as a subcontractor and supplier for Department of General Services and PennDOT. [#06]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm stated that his firm has worked with the Commonwealth of Pennsylvania. He said they have held a recurring contract with the state for over 10 years, and noted that they focus most on project-based work. He later added that his firm does a lot of mobile development work with PennDOT. [#28]
- The male owner of a construction firm said that he has multiple contracts with PennDOT. He added, “To date, I haven’t performed any services Every time I ... [give an estimate] on the work that they need done, they keep changing the scope of work They say, ‘Oh, well, we want this done now [and] we want that done.’ You know? And that never materializes.” [PT#16h]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “PennDOT and affiliations on [Department of Environmental Protection] are slowing down contracts. PennDOT is a very slow organization to work with.” [Avail #156]
- The female representative of a woman-owned DBE-certified professional services firm stated, “We do a lot of work with PennDOT. We do it on the basis of subcontracts and do a lot of work with bridge replacement projects.” She later commented, “Where we have a problem is getting a prime contract.” [PT#16a]
- The non-Hispanic white female owner of a DBE-certified construction services firm said that her company works for both PennDOT and the Turnpike. She said the Commonwealth’s requirement for previous experience is a barrier for her firm because “department or organization experience is typically criteria to be selected for a project.” She added, “It’s very difficult to gain experience, or near impossible without being selected for a project. There are other ways to get experience, but that’s a huge concern.” [#12]
- The Black American female owner of a DBE- and SDB-certified professional services firm said that her firm is just now starting to get more work state entities. She stated, “Recently, [we] just started working more with the ... Department of Transportation [and] Department of Energy. So, we’re just beginning.” [#32]
- When surveyed, the owner of a construction business in Eastern Pennsylvania responded, “[There’s] so much paper work when you do work with PennDOT.” [Avail #10]

- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “[I] tried to work with Penn but was controlled by big companies.” [Avail #51]

One business owner said that he “walked away” from a PennDOT subcontract opportunity.

The Hispanic American male owner of an SDB- and MBE-certified professional services firm said that he had to turn down a PennDOT subcontract after realizing a bookkeeper would be necessary to complete the paperwork. He said, “We had to fill this form that asked us ... what our overhead rate was, and it was ... so complicated [and] was really meant for a very large engineering firm to calculate the rate. And then I [realized] that [I] would [have to consult a] bookkeeper ... and then in a year [I would] have to renew it and do it all over again. So, I walked away from the project. It wasn't worth it.” [#76]

Some business owners reported not working for Commonwealth of Pennsylvania agencies, or that they see state-related work slowing down. Interviewees remarked that lack of opportunities, excessive paperwork and other reasons limited their ability to work in the Pennsylvania marketplace. [e.g., #21, #26, #29, #31b, #38, #45, #49a, #51, #52, #75, #76, #85, #88] For example:

- The Black American male owner of a DBE-certified construction services firm reported that his company has not bid on or worked on jobs for the Commonwealth of Pennsylvania. When asked why, he said that they have not yet had the opportunity. [#02]

The same business owner said there are challenges with bidding and working on state projects because it is “all document-controlled.” He added that with his current work load he could not handle the Commonwealth’s paperwork requirements without hiring an additional staff member to do it. [#02]

- The non-Hispanic white female owner of a WBE-certified professional services firm stated that her firm has not bid on projects or contracted with the Commonwealth. She went on to say she tried to work with the Commonwealth but found the bidding process and required paperwork to be overwhelming. She commented, “It seemed like you would need another person just to do the bids ... the paperwork.” [#04]
- In response to whether she had worked for the Commonwealth, the non-Hispanic white female owner of a LGBTBE-certified professional services firm said, “I've always heard it's ... difficult ... a lot of paperwork, a lot of bidding, a lot of stuff If I had the opportunity I would do it, but at this point I never have and it's probably just because the connections probably weren't there.” [#41]
- The non-Hispanic white male owner of a LGBTBE-certified professional services firm reported that his company has not performed any work for Commonwealth of Pennsylvania. [#24]
- The non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm stated that her company has bid on contracts for the Commonwealth but has not procured any work with them. [#33]

- The Black American female owner of an SDB- and WBE-certified professional services firm said that her company has not worked directly with the Commonwealth, though she would like to pursue subcontract work with them in the future. She said they've worked with Philadelphia Housing Development Corporation for over 10 years. Additionally, she said they've also worked for Philadelphia Redevelopment Authority and Delaware River Port Authority. [#35]
- The Asian-Pacific American male co-owner of a professional services firm stated that he has not bid on or worked on a project with the Commonwealth. He went on to say that he doesn't know where to look for the opportunities, and added that a negative experience with doing work on a research grant discouraged him from pursuing government contracts. [#42]
- The Black American male owner of a DBE- and MBE-certified construction firm stated that he has not worked on projects for the Commonwealth of Pennsylvania but has pursued the work. [#13]
- The non-Hispanic white female owner of a WBE-certified construction-related firm stated that she has not worked on projects for the Commonwealth of Pennsylvania but has pursued them. [#17a]
- The female representative of a WBE-certified construction-related firm said, "I go to [the Commonwealth bid website] every week and try to find something that we can bid on ... but we haven't gotten anything." [#17b]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, "I've stayed away from PennDOT contracts because [only] a handful of companies get them, or minority-owned companies." [Avail #93]
- The Subcontinent Asian American male owner of a goods and services firm stated that he has not worked on projects for the Commonwealth of Pennsylvania. He added, "For my specific industry, there is nothing the [Commonwealth] would buy from me I am not the direct connection with the government." [#15]
- The male representative of an SDB- and VBE-certified consulting services firm said, "We haven't done business yet with the Commonwealth in PA. That shocks me because we're so successful in the commercial, or private sector." He added, "If given the opportunity just to have our candidates interview with the hiring managers [at the Commonwealth], I'm sure that we would do business. So, that's where the blockage is right now. Candidates [are] submitted, [but] no interviews [are] requested It has, I'll say, disheartened my gang of recruiters." [PT#09]

The same business representative continued, "This summer ... I let them stop pursuing. I told them I was coming today and that I was going to say my piece, and then we would commit to having one good qualified candidate per week. [We'll] see if that can get this message [across] with an understanding of the program and our renewed commitment, [and] see if we can get an interview or two and start doing business." [PT#09]

- The non-Hispanic white male representative of a professional services firm reported that they have never worked with the Commonwealth. He said the firm has not bid on state work since the 1990s, and noted, “We aren't aware of the bids that would involve our discipline. I don't know that we would even know where to go to look to see if Pennsylvania has document management requests for quotes out.” [#87]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm stated that she has not worked with Commonwealth of Pennsylvania. When asked why, she said it's because hers isn't a “state-approved” firm. [#07]

The same business owner continued, “Anything that comes in here with PennDOT's name on it, I don't do because I'm not certified I am not interested in getting certified [unless] three or four more of my customers [beg] me. Then maybe.” She went on to say that regulations have prevented her from working with the Commonwealth. She said that she can work public sector jobs only “if they don't need PennDOT.” [#07]

She later said that she knows of only two state-certified competitors, and commented, “[Their manholes] are two to three times more expensive because it has to be state approved.” [#07]

- The Black American female owner of an MBE- and WBE-certified professional services firm stated that she has not worked on projects for the Commonwealth of Pennsylvania. She said that she has attempted to get work with PennDOT for a “training opportunity for small businesses,” and added, “They [also] need assistance with some training the construction people with their administrative stuff.” [#18]
- The Black American male owner of an MBE-certified professional services firm said that his company has not bid or worked on Commonwealth projects, despite being in business for almost 15 years. He added, “I just haven't been following [state work] as efficiently to track it down as to what the opportunities are. I would welcome it. I did start taking a look at what they do, and I would welcome the chance to work with the state.” [#34]
- The non-Hispanic white and veteran male owner of a professional services firm stated that he has not attempted to work with the Commonwealth. He said, “Generally [it's] because I'm doing all the engineering alone, and quite honestly it's a cash flow issue.” He continued, “When you do a public bid, they're looking for performance bonds, bid bonds ... and stuff like that, which costs money. And then after you put out a performance, a bid bond is like three to five percent of the cost of the job.” [#48]
- The non-Hispanic white male veteran with disabilities and owner of a professional services firm said that he has not bid on or done work with the Commonwealth. He added, “It goes back to [the fact that] I haven't really sought out any work in the public sector with the Commonwealth. [My local county] reached out to me, so the majority of my work is private sector.” [#74]

- The non-Hispanic white male owner of a professional services firm reported that he has not worked with the Commonwealth, though he has set up a profile on the Commonwealth’s website. [#70]
- The non-Hispanic white female representative of a professional services firm said they have not worked with Commonwealth of Pennsylvania, though they would like to in the future. She explained, “Right now, I’ve just been starting to figure out the [U.S. General Services Administration website] and how to do bids that go across all the states My hope would be ... that we can do some [contracts] that are local here, because that would be great.” [#84]
- The non-Hispanic white female representative of a trade association reported that some members have done public work though she is not sure if it was on Commonwealth contracts. [#71]
- The non-Hispanic white male representative of a goods and services firm stated that his firm is registered with Commonwealth and currently does business through COSTARS, the Commonwealth of Pennsylvania’s cooperative purchasing program. He said the firm does not bid on competitive contracts with the Commonwealth. [#72]
- The Hispanic American female owner of a professional services firm said that the size of subcontracts they receive for state work “is really small.” She indicated that it’s difficult to get large subcontracts, and commented, “We really just waste our time.” [PT#04]

The same business owner later said, “We are in an industry that ... has a lot of competition So therefore, a lot of companies that exist today already have their own teams formed because of known entities.” [PT#04]

- The Black American female owner of an MBE- and WBE-certified professional services firm stated that she has worked as a subcontractor on a Commonwealth project. However, she said that she has not attempted to work with the state because of her negative experiences bidding for other public sector projects. She explained, “It’s just a whole lot of [paperwork] I see [the paperwork] as a part of that space around government ... city, county, state, [and] federal. A lot of it is the same.” [#11]

Some business owners discussed positive experiences while working with Commonwealth of Pennsylvania agencies, including DGS and/or PennDOT. [e.g., #22] For example:

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said, “It’s great working with the Commonwealth ... and the Turnpike.” He added, “In general, we had no issues working with the Commonwealth.” [#09]
- The Black American male owner of an MBE- and DBE-certified general contracting firm said that he had “one very good experience with” a majority prime contractor on a hospital project in Harrisburg. He said, “They contacted me because there was pressure here in the city of Harrisburg to include minority contractors [on] the ... project.” He went on to comment, “It was profitable and successful.” [PT#07]

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm said, “Being certified as a woman-owned business and working as a subcontractor [on] projects for the Commonwealth have really been wonderful for us.” [#81]

The same business owner later commented, “I have had good relationships and good contracts overall with the Commonwealth, and with the agencies that I’ve done business with.” [#81]

- The Black American male owner of a professional services firm indicated that his work with Department of General Services has been a positive experience. [#55]
- The owner of a professional services firm stated, “I’m a prime, and DGS does follow-up with me to make sure that my subcontractors are being paid. Every quarter ... they send out a survey to me and I must respond to that survey and, in my response, I have to actually show a copy of the check that was sent to my subcontractors. So, I wouldn’t necessarily say that they’re not doing anything right If it doesn’t reach their desk by the date it’s supposed to reach their desk, they let me know.” [PT#17g]
- The female representative of a construction services firm said working with the Commonwealth has been a positive experience. She said, “They’re actually really good. I work[ed] with DGS for like 30 years The companies that I’ve worked for have always worked for DGS.” She continued, “They have a set of rules that are always, you know ... the same. So, you know what you’re getting when you’re working with DGS Their paperwork is all the same, you know everything is always [consistent].” [#39b]
- The Black American male owner of an SDB- and MBE-certified professional services firm stated that the Commonwealth helped to resolve an issue between his firm and the prime contractor. He explained that after a project for the Commonwealth started out well, the prime contractor eventually stopped involving and communicating with his firm. He stated that after speaking to the Commonwealth, who then spoke to the prime contractor, about the lack of involvement, the issue was resolved. [#36]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm indicated that her experiences working with the Commonwealth and PennDOT have been positive. She said that she has had no problems receiving payment on projects for either, saying, “I would say I primarily get paid by my general contractors [in] no more than 45 days.” [#25]
- When asked about members’ experiences working with the Commonwealth, the non-Hispanic white male representative of a trade association said, “I think the working relationship with the state [has], to my perception and knowledge, always been good.” He went on to say, “[Commonwealth projects] can get delayed, or you start and stop, and start and stop. But ... I think from the business side of it ... working with the state has not necessarily been an issue.” [#83]

- Regarding the firm’s experiences working on state contracts, the non-Hispanic white male representative of a WBE- and SDB-certified professional services firm stated, “There’s not really any major problems.” [#58b]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm stated, “The times that we did work with [the Commonwealth], I think it was a favorable experience. I like the fact that projects are laid out and detailed, planned, and put in a schedule that you ... have to meet or adhere to. It's been very clear and easy to work. They know what they want.” [#77]
- Regarding her work with Commonwealth of Pennsylvania, the non-Hispanic white female owner of a WBE-certified goods and services firm stated that after eight years in business her accountant told her, “‘You need to become a minority business, and you need to go to work with the State of Pennsylvania,’ and I thought okay, I'll look into it.” She went on to say, “There was a one-on-one that was so important I fell in love with [the Commonwealth employees]. I mean, they were real people. They weren't a government entity, they were just ... people like me ... that were willing to work hard.” [#23]
- The non-Hispanic white male owner of a goods and services firm, described the Commonwealth as helpful. He stated, “Well, there’s always struggles when you’re dealing with money and the state, and of course some of it’s from the federal government and everything so it gets really entangled. But I will say the people from Pennsylvania ...that they help you walk through it. They’ve been very good at that. [#50]

Some business owners discussed challenges they face when working with or trying to get work with Commonwealth of Pennsylvania agencies including DGS and/or PennDOT. For example, comments on excessive paperwork, red tape, bidding issues and other barriers follow:

- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “[We have] difficulty in securing work with both ... PennDOT [and] General [Services] because the application process is lengthy and detailed. [It] makes it difficult for a small business to devote the amount of time to prepare a proposal for bid requests.” [Avail #53]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, “It's hard to get a contract with the Pennsylvania Department of Transportation due to not knowing the paperwork and contact names of who to reach.” [Avail #117]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, “The Department of Transportation requires audited financials to be able to work with them. [We] had a contract cancelled because [we] don't want to spend \$50,000 to be able to work with them.” [Avail #52]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm stated that working for the Commonwealth is difficult because there is “more red tape and paperwork.” He added that the Commonwealth takes “longer to pay” than other agencies and private sector clients. [#08]

- The non-Hispanic white male owner of a professional services firm said that he perceives government work as difficult to get. He added, “It depends on if the municipality or the state [is] on contract I don’t understand contracts. I almost had to hire somebody that has done this to be able to navigate it for me, because ... I have bills to pay, just like everybody else” [#70]
- The Black American owner of a construction management firm highlighted the need for political will for minority business development on the part of the Commonwealth. He discussed a municipal projects that involved state funding and commented, “When the white contractors found out that the City [of Harrisburg] was not going to be a substantive advocate for MBE participation, the general contractors that work for the City, and also for the State, diminished their -- stopped their embrace of minority firms. At the State level there was never a programmatic initiative for minority business development....The goals were very low, and suppliers, as we understood it, could constitute 100 percent cooperation – 100 percent compliance in terms of meeting MBE goals, and more importantly, the term was DBE, which included both minorities and women. So, minority contractors knew that if white firms had their druthers, they would work with a WBE firm, and pick up their DBE participation credit [that way]. So, the Department of General Services was never -- capital N-E-V-E-R - considered a wholesome, welcoming environment for African-American contractors, from the Harrisburg area.” [#82]
- The female owner of a general contracting firm stated, “I don’t want to do business with the state the way it is right now. I don’t want to do business with General Services as a contractor, or PennDOT. And until you can start giving us direct bids where we can go in as prime contractors, [I won’t bid] [We are] spending weeks and months working on bids and then not getting them.” [PT#17b]

The same business owner went on to say, “One of the last straws for me [was that] I was part of a two-year training by ... Reynolds, and ... one of the last nights, when the CEO from Reynolds was there, he said, “We don’t have to hire any of you. We don’t have to take your bids.” And they started laughing about the way they could get around these things So, it’s a waste of my time to even deal with the state.” [PT#17b]

- The non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm said, “The RFP process for the Commonwealth just makes everything harder. Just being new to the RFP process as a firm [is difficult]. And not being one of the main players [is a challenge too].” [#33]

The same business owner later said, “I don't even know what websites I'm supposed to go on. It's all so confusing” She added, “There aren't many ... RFPs just for legal work. There's a lot of building [contracts], and ... I think this last one ... that I did pursue [was] like a two-year RFP. For the little bit of legal RFPs that go out, [if] you don't get that one [then] it's not up for renewal for a long time.” [#33]

- The owner of a DBE- and SDB-certified professional services firm expressed concern that Commonwealth project managers are insufficiently trained to manage contracts, “so they make up their own rules and treat contractors as they wish, because they can and do get

away with it.” She observed, “...the State is doing a very poor job of educating its project managers who work with contractors and consultants.”

The same business owner described a situation where her firm submitted a deliverable for review on a deliverable-based project. One month after receiving the deliverable, the Project Manager and two senior managers scheduled a meeting to discuss the deliverable. These individuals questioned her SDB for information not outlined in the deliverable. When she asked for clarification on the dissatisfaction with the deliverable, the Commonwealth staff members were unable to identify the source of their dissatisfaction. She observed, “How can this happen? Who can we go to to voice our complaints?” [#78]

- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said, “Pennsylvania has licensure laws for the engineers and architects. All my experience ever since I got out of college has ... been on the architectural side, even though my degree is in engineering I can work in [other] states using my engineer seal and primarily practice architecture.” He added that the federal marketplace doesn’t require separate architectural licensure. [#77]

The same business owner continued, “I have applied to the [Pennsylvania] licensure board to take my architectural exam, [but] they won’t let me because I never went to an accredited architectural college. I have 30 years of experience [and] the State of New Jersey will let me, [so] I thought, ‘Well, I’ll get my license there and bring it back in to Pennsylvania through reciprocity.’ [But] nope, they won’t accept that either. So ... we do the federal market because there’s less aggravation.” [#77]

- When surveyed, the owner of a construction business in Western Pennsylvania responded, “It is very difficult to get work from PennDOT because the application process is extremely daunting. We find it almost impossible with people we have with our employment. We would need to find a specialist to help us get through the applications.” [Avail #132]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “To register with the Pennsylvania Department of Transportation is a burdensome and complicated process.” [Avail #96]
- The Black American male owner of an MBE- and SDB-certified construction services firm reported that he recently had a negative experience trying to get work with PennDOT. He stated, “We lost a project specifically because we could not get the clearance. So, I guess I would say [our] last experience ... has probably been challenging They would not work with us to get the clearance to allow us to do [the] work [because we owed back taxes].” [#27]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that she was shocked to find a current, large Commonwealth project that has zero percent DBE participation goals. She added, “How is that possible? How are these determined? It just doesn't make sense. There's rebar on this project, a magnitude of rebar, and there's paving. All products that I offer It will probably, because of no DBE [goals], go to all non-DBE companies with the lowest price.” [#25]

- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm stated, “[Our firm has] done three pretty big bids [for the Commonwealth] and did not get any of them.” [#31b]
- The Black American female owner of a WBE- and MBE-certified professional services firm stated that her attempts at working with the Commonwealth have been frustrating and unclear. She said, “I had a [Commonwealth] contract with [a prime contractor] recently that got completely screwed up. They sent me a letter [of intent] from their legal department [that stated], ‘We’re going to do \$100,000 worth of business with you over the next two years.’ Then about six months later I get another letter saying, ‘We need you [to] disregard that first letter. We’re going to do \$30,000 worth of business with you over the next three years’ Somehow, during the course of the contract it got open[ed] to small businesses, which meant that ... they were now able to distribute [the contract] to any small business as opposed to a minority business, which clearly they did.” [#30]

The same business continued to explain how she had made decisions based on the letters of intent, which had negative consequences. She stated, “when you get these letters of intent you’re forecasting business for the next year and then all of a sudden, the rug is pulled from you. Now, you’ve got to figure out, ‘Oh, wait a minute, now how do I pace it all?’” [#30]

She said, “Contrary to a lot of other states, Pennsylvania is just not ... easy to do business in. I would venture to say it’s probably not easy to do business even if you [are] a majority business, but it becomes even more problematic if you are a minority business because The slice of the pie is so much smaller that you are spending the same amount of time as a majority business, but your return on that time investment is even smaller because the slice is smaller.” She described the effort required to obtain a government contract by saying, “It involves an inordinate amount of time with very little or minimal return on your investment.” [#30]

- The male owner of a construction services firm said, “I’ve been practicing in Central Pennsylvania for 25 years and elsewhere. We have never gotten a project from DGS or the state for many years. We didn’t even pursue them because it was very clear, early on, that ... you’re going to be passed over because there was a certain type of sort of large ... marketing firm that was [going to get] the work. We’ve done work for 25 years as a consultant to major architects for out of New York, out of Pittsburgh, out of others, where clearly our expertise is recognized by people within the profession. But, we can’t get hired here independently.” [PT#17d]
- The Black American female owner of an MBE- and WBE-certified professional services firm said while she has not worked with the Commonwealth of Pennsylvania, “there are a lot of opportunities.” She added, “I think that there’s also a lot of administrative responsibilities to get those opportunities, like remembering to reapply for your certifications every year. I have a desire to work for PennDOT, but I have to fill out this prequalification packet and it’s been on my things-to-do list for I don’t know how long, because most of the questions are the same. But it’s not like there’s any standardization to their forms.” [#18]

The same business owner continued, "Even within the different government agencies, their forms are so different. The questions may be similar, but you can't just copy and paste into somebody else's form. Even for what I was doing at one of the government agencies, the opportunities were real opportunities, but it's the process of what you have to go through in order to get the opportunities ... I have all my certifications and all of that, but then you still have to be compatible. I'm in marketing [and] it took me almost two years to get my capability statement to where it finally got ... approved by someone within the government space that felt like it can actually be used." [#18]

She also said, "What I face with the Commonwealth has pretty much been getting past what the procurement is really even asking about. You get the notifications, then you have to open up the notification, then you have to try to figure out what it's talking about, and a lot of it is jargon. Most of it is just common to the Commonwealth. It's not in layman's terms. By the time you figure out what the scope of service is and whether or not you qualify, generally now the deadline's due. After a while, I pretty much stopped opening them." [#18]

- The Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, "We've gone to ... pre-bid meetings for ... three different opportunities last year. And it was another one of those things where it felt like everybody in the room knew all the mentors already, and that's kind of general business practice, but there seemed to be a palpable preference for the known. I felt like all the information wasn't being shared with us at sometimes ... by the commonwealth themselves. It seemed like they knew all the vendors that were going to ... be there already, and they ... [knew them] already, [and expected them] to bid ... it was just kind of weird." [#38]

The same business owner went on to say, "We did not submit a bid for one of [the contracts] because we got enough information to know that it wasn't the right opportunity for us. One of them we bid as a sub, and we actually ... got an interview. We were not selected, and the other one we bid as a prime we did not win. One of the more interesting ones we decided to go for had a requirement that the firm be in Harrisburg, essentially That one specifically had a very short turnaround time. So, we also know that short turnaround times mean that they have somebody in mind." [#38]

- The Hispanic American female owner of a professional services firm indicated that contract specifications for state work present barriers. She said that her firm usually relies on its past working experience to secure contracts but said "it's not enough" for the state. She said, "[This] hasn't been very useful for the state Having past performance, you know? It's not enough. There is always something not enough for ... the opportunities that exist." [PT#04]

The same business owner later said, "Why is it that our experience may not be enough? And one of the things that I start to see when I read RFPs is that the type of ... qualifications that they are requiring start to become ... like so much weight, you know? It's just [too] technical." [PT#04]

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm stated, "There are a lot of people who don't like the set-aside program ... so

automatically if you're a DBE or a person of color it's [an additional] barrier." He added, "We have accomplished so much and have done things that nobody else does, but we don't get recognized for it." [#09]

The same business owner continued by saying he designed the first project of its kind in the United States but did not get any recognition for it. He added, "There's other things that we have done, that I've done, [and] had I been white I would have gotten the recognition. Other people were going and presenting papers on the stuff I developed." He continued, "Now I'm not saying that everybody is like that, but we should have been doing work as a prime We're not getting the opportunity to work as a prime, so we are relegated mostly to a sub role." [#09]

- Regarding his experience trying to get work with PennDOT, the minority male owner of a contracting firm said, "I was awarded three contracts in ... 2017 and have not performed any services with PennDOT to date. One contract was to perform general maintenance at the PennDOT maintenance facility in [Western Pennsylvania]. The second contract was to provide electrical services, and the third was to provide plumbing services at the same maintenance facility None of these services have been rendered" He said the prices he gave to PennDOT upon request were "tabled." [WT#08]

The same business owner continued, "When I was awarded the contracts with PennDOT, I was excited and thought maybe things have changed and [that] the State of Pennsylvania is really trying to open doors for minority contractors. But, I was wrong. This seems like just another program to meet some minority quota that the state must comply with In comparison, I went to an informational meeting with another government agency around the same time I was awarded contracts with the state and their program has been real successful for me. I [performed] several contracts with them and have received several payments for work I have performed. Maybe the state needs to find out what is working at these other government agencies that make it more attractive and lucrative for minorities to do business with them." [WT#08]

He went on to say, "I would like to perform work for the State of Pennsylvania, but the way the current system is designed I don't see how this is going to happen. My one-year contract is about to expire, and my ... fear is that I [will] not have performed any services. This may be why minority contractors don't seek contracts with the state." [WT#08] The Black American male owner of a construction services firm said that his last major contract with DVS was for a public university, and added, "We [bid] to the general contractor, but ... the general contractor didn't want to work with us. We had to be a second-tier sub to another sub They said they didn't know us so they didn't want to work with us." [PT#10]

The same business owner continued, "We had to go through another sub They still subbed us the whole thing, but the dollar amount didn't make sense. At the same time ... we took the job just because we needed to put ourselves out there." [PT#10]

He said it was a "labor-only contract," and added, "They supplied all the materials and equipment They gave us all the work [and] they assumed we couldn't [actually] do it all We did [do it all]. And once we had the project just about complete [and] it was time for

payroll, they didn't want to pay. So, we had to fight to get our money." When asked why the subcontractor refused to pay, he said, "[PT#10]

When asked why the subcontractor refused to pay, he said, "They were basically looking at it as ... a punch list, and they wanted to ... keep trying to find things [wrong with our work]." He said meanwhile the public university was pleased with his firm's work and said they did an "excellent job." He said that his firm was eventually paid after an arbitration hearing. [PT#10]

- The non-Hispanic white female owner of a WBE-certified professional services firm said that she has worked "very little [in] the past few years" for the Commonwealth. She said, "[It's because] the companies that have these [General Technical Assistance Contracts] ... [are] not awarding jobs to the minorities. They're just shopping for low bids." [#10]

The same business owner continued, "These GTAC contracts and stuff that the state puts out [are] a joke. I bid on so much [of] those and I've had [prime contractors] give me contracts guaranteeing me up to a certain percentage of work, like \$150,000 or something like that, and I've seen squat. Zero." She said when she called the Commonwealth to complain about this, the representative told her, "We just make sure that their contract documents and their proposal documents comply with the bid solicitation. We don't monitor or follow up on whether they actually use the minority or WBE contractor." [#10]

The same business owner went on to say, "[If prime contractors] just fill out a paper that says they didn't have any WBE or MBE usage because they couldn't find qualified contractors, [the Commonwealth] just takes them at their word." [#10]

- The Asian Pacific American female owner of an MBE and WBE-certified professional services firm said that since starting her business in 2001 it is much more competitive to get state work since the state is more price conscious, and she is neither the lowest-priced vendor nor the only female vendor bidding the work. She added that in 2009 she had to become a certified DBE and WBE to distinguish herself in the market. [#69]
- In order to get business with the Commonwealth, the non-Hispanic white female owner of a WBE-certified goods and services firm commented, "[We] started to go around the state and introduce ourselves because nobody said we could or couldn't. It was so hard. That's the problem with government. Nobody gave you a schematic as to how to do business." [#23]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm stated that she also has a negative experience attempting to get work from the Commonwealth. She explained that the Commonwealth created an RFP for a statewide campaign that she was responding to, when "[she] found out that they really weren't looking for anybody new." She added, "The contract had been with [another] media company in Philadelphia, and it was pretty much already renewed before That RFP was a joke." She went on to say that work with the Commonwealth is not worth the time or effort because "they're either [going to] pick the lowest bidder or somebody they already have in place." [#19]

- The female representative of a business assistance organization said, “You have to demonstrate that you have done, in the past five years, 10 PennDOT projects or you won’t be qualified to do it. Well, that’s [a] catch-22. [If] you want to break into the system, how can you demonstrate that? What we can demonstrate is that we’ve done 10 identical projects working with the Corps of Engineers, working with the U.S. Navy, working in other states [etcetera]. Can we demonstrate that we do this for PennDOT? No. Can we do the work? We can absolutely do the work That’s ... the biggest catch-22 that we see, trying to get that work with PennDOT.” [PT#16k]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “The criteria for selecting firms is heavily weighted to existing companies. With new companies, it’s difficult to bring in your credentials from prior employment. When you form a custom team for a specific project, it asks if there’s a prior history.” [Avail #112]
- When surveyed, the owner of a construction business in Eastern Pennsylvania responded, “DOT annual qualifications are very difficult to get through every year and take a lot of time and resources. When working with the DOT, not all state agencies talk to each other. [For example], DOT does not know the Commonwealth’s tax procedures” [Avail #160]
- When surveyed, the owner of a goods and services business in Central Pennsylvania responded, “The largest barrier we have is the state not passing a budget [in] a timely manner. And also ... they’re viewing pricing over quality [in] a lot of things we respond to.” [Avail #31]
- The Subcontinent Asian American female owner of a WBE-certified professional services firm said, “Once you’re [DBE] certified, it just sort of ... feels like ... you’re still considered a new applicant, and they’re not looking for new applicants in any of their RFPs. It keeps [asking] about how many projects you’ve had prior, or [how many] similar [projects you’ve done].” [#44]
- Regarding challenges securing work with PennDOT, the Black American male owner of a construction firm said, “On the professional side with PennDOT, what I’ve noticed is that the majority of the time you have the same four companies that are selected. Those same four companies typically have their sub-primes or sub-contractors to which they use.” [PT#15a]
- The Black American male owner of an MBE- and SDB-certified construction services firm stated that his firm has not performed work for the Commonwealth, neither as a prime nor subcontractor because of racial discrimination and no requirements for MBE goals. [#67]
- The non-Hispanic white male representative of a small business development organization reported that about half of the firms that he works with choose to not do business with the Commonwealth, citing untimely payment as the main reason. [#46]
- When asked about his experiences trying to get work with the Commonwealth, the non-Hispanic white male owner of a construction services firm said that attempting to fulfill minority- and women-owned subcontractor quotas is difficult. He said, “If I have to use a

minority, you need to send them a purchase order for whatever, [then] they are just turning around and buying it from somebody else. You know what I mean? And putting a markup on it. So, that is how it works I guess." [#39a]

The same business owner later said, "The other part that's hard, especially on ... plumbing, and probably like electrical contractors, [is] they don't have a lot of subs, you know? It's ... really hard to [meet that quota] if you have 20, 25 percent of your job [in those categories], [because you] have got to send 25 percent of your job through a subcontractor. And [if] you don't need any subs ... what do you do?" [#39a]

- Regarding her experience working with the Commonwealth, the non-Hispanic white female owner of a WBE- and SDB-certified construction firm stated, "The pay is slow and the margins are slim [But], I think they are starting to make some improvements in this area since they've modernized their whole system, to improve the payment turnaround." [#61]
- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm stated that although his firm has been in business for almost 20 years and is highly credentialed, they have never succeeded in obtaining a contract with the Commonwealth. He went on to explain that his firm "didn't go after work with the state for many ... many years," until the Commonwealth recently "transformed the selection process." He added, "Historically, we found that no matter what we went after, whether we were highly qualified or not, we would never even get short-listed." [#62]
- The Black American male owner of an SDB- and MBE- certified construction company reported a negative experience while working with the Commonwealth. He described a project for the Commonwealth that his firm worked on as a subconsultant for a firm who had "a track record of not being the most honest firm." He explained that his firm got into a payment dispute with the other firm and that legal action was threatened. When he went to the Commonwealth for assistance, both DGS and the City of Philadelphia would not get involved in procurement disputes. [#37]
- The Black American male owner of an SDB- and MBE-certified professional services firm indicated that some companies from out of state win state contracts with seemingly no diverse business participation. He reported that because of this there are discrepancies with how contracts including diverse participation are awarded. He also explained, "That's a challenge, having those companies playing in our [state] government space, and getting away with it." He went on to note that different agencies, specifically one in New York, have a strong system of accountability regarding the awarding of contracts. [#36]
- The non-Hispanic white male owner of a construction services firm reported experiences of unqualified minority-owned companies winning contracts and asking their firm to subcontract due to their expertise. He said, "But, they got the job because they're a diversity [firm] and they don't know anything about it and they want to subcontract to us, and we don't do that kind of stuff ... [these firms are] looking at us to ... pull their heads out of their [butts] basically" He added, "[The Commonwealth] needs to make sure that [the contractors] know how to do the job that they're contracting out." [#40]

The same firm owner reported that his firm has bid on projects for the Commonwealth but has never won a contract. He stated, "[We] never really do hear back from [the Commonwealth] I haven't tried in five years because, you know, it's a waste of time ... you have to make a quota based on race or whatever and I'm sitting there and want to work with [them] so I don't try it." [#40]

- The Black American female owner of a DBE- and SDB-certified professional services firm said it has been difficult for her firm to get in the door in regards to obtaining work with the Commonwealth. She stated, "I had gotten the one [short-term] contract ... [and] that was because people knew me because the head of the department was from Philadelphia [They knew we were] out here all the time talking up [our] business, so they thought about us, [and] it wasn't such a large project that they had to get a large contract." [#32]

The same business owner went on to say it's difficult to obtain contracts with the state. She said, "All of the contracts are last minute, so right away you start to think somebody's name is [already] on it. And sure enough, that's what has happened And you feel used because you know it takes time to put together a proposal ... because you've got to actually think it through from the end, the desired outcomes and then work backwards. And so, we've kind of noticed [this] every time that something comes through to us That particular firm gets the contract." [#32]

- The non-Hispanic white male representative of a goods and services firm said that he does not bid on some government contracts because of the hassles he has heard about from other companies. He stated, "That's why I don't even bid the state PennDOT bids, or the state police bids or anything like that. [It's] because I've heard some stories where it was a vendor that really wanted to [bid] ... it wasn't [PennDOT's] chosen dealer that won." [#72]
- The Hispanic American male representative of a trade association reported that members have faced barriers when working with the Commonwealth. He said, "I know that some have [faced barriers], and the responses have been that those incumbents [are] already tied into the contracts A lot of times it's seen as just a mistake [from] going through the motions as a requirement that the incumbent supplier will still maintain the contract at the end of the day. [That's] just the process that you go through. Again, it's a lengthy process [with] a lot of paperwork, and at the end of the day the incumbent retains the business opportunity." [#86]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said there is a perception that small businesses are less capable of performing large contracts successfully. He stated, "The initial reaction would be [we're] too small to be able to do these kind of jobs, [or we] don't have the expertise or the experience How do you get the experience if you don't get the job? And so, that's where I'm trying to break in to get that experience." [#43]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, "They have the area caught up in favorites. It's hard to grow a business. It's impossible to work with the State of Pennsylvania." [Avail #103]

- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “Small businesses are at a disadvantage. [We’re] perceived as not able to do the work.” [Avail #79]
- When surveyed, the owner of a construction business in Central Pennsylvania responded, “The revenue department is hard to work around.” [Avail #98]

One business owner described PennDOT as a “closed box” when trying to procure work in his industry. The minority male owner of a professional services firm said, “Something that comes very clear to me is [that] PennDOT, as far as I’m concerned is a closed box That’s the best way I can describe PennDOT. It’s a closed box, especially when it comes to engineering consulting services. I think that [there’s] a couple of projects here and there to the trades, but when it comes to engineering consulting services, it’s a closed box I think what happen[s] is they go to the same people.” [PT#16m]

Some interviewees discussed challenges specific to small businesses when pursuing work with Commonwealth of Pennsylvania agencies, including DGS, PennDOT, and/or other public agencies. For example:

- When asked what challenges he faces when pursuing work with public agencies, the Black American male owner of an MBE- and SDB-certified goods and services firm said that he becomes frustrated when primes only use his firm to meet diverse business requirements on state contracts. He said, “We get a lot of people that call us because we’re certified on so many different fronts. They send us a lot of emails and faxes to check the box [for diverse businesses] on their submission They would use us to get a contract, win and then not use us [for the actual work]. I see a lot of that happening, a ton of that happening. They get you on their proposal, submit the proposal, [then] can claim they have a diverse ... minority partner. This is their play. But when they are awarded the contract, the work is not yours.” [#52]

The same business owner went on to say the Commonwealth should develop stronger policy and regulatory framework. He said minorities need jobs and MBE firms are most likely to hire minority employees and added that enforcement of supplier diversity makes small MBE firms profitable so that they can afford to hire employees.” [#52]

- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “We're trying win a contract and expand, but it's very hard to do when you have limited resources and you can't compete with others. Competition with bigger companies makes it difficult for smaller business.” [Avail #81]
- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “It is getting harder to get work because we are considered a medium-sized firm. The big national firms come in and do it all, or you have the [half of] firms that do the work and it’s hard for medium firms to get the projects.” [Avail #84]

- When surveyed, the owner of a professional services business in Central Pennsylvania responded, "We're small in size and don't get work with [any] state agency. That is a barrier." [Avail #77]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that he has not experienced any discrimination while working directly with the Commonwealth. However, he said, "When we've submitted as a prime for certain things we specialize in and ... feel extremely qualified [for], it's a little disheartening that we don't get considered. That's all I can tell you." He said this is especially frustrating when some of the contracts go to firms that are "way less qualified," and commented, "I can't tell you why, but that happens." [#09]
- Regarding challenges specific to small businesses, the Black American male owner of a DBE-certified construction services firm stated, "Most of the challenges are those that are unforeseen at bid time." He added, "You run into those issues and you find out you might have missed something and that's the reason you got the job, and you have to recover from it." [#02]

The same business owner went on to say, "As a big company, you have a cushion that will allow you to be able to absorb those mistakes. As a small business, like us, we can't afford those mistakes. Digging out of those holes is monumental for us, and it makes me work extremely hard." [#02]

- The non-Hispanic white female owner of a DBE/SDB-certified professional services firm commented, "I've had some past experiences where, actually, I got dismissed from a contract because [of] the prime saying we weren't big enough to handle their needs." [#59]
- The female representative of a WBE-certified construction-related firm said the company has had difficulty getting work with the Commonwealth because the prime contractors "don't want to work with" them. She said, "You go [to the Job Order Contracting Program] and you meet with [the prime contractors] and they act like they're interested, and then [you] call them and follow-up and you don't hear anything. Nothing. Then you find out you're bidding on the [Keystone Purchasing Network] program and there is [this large prime contractor] again winning every part of the KPN, even as a plumber, and they're not even plumbers. But yet, they got the plumbing [contract] ... the electrical [contract] ... [and] the mechanical [contract] How can that be?" [#17b]

The same business representative continued, "Why [is the Commonwealth] not breaking that out so that real plumbers can bid on [the contract]?" She said at one bid meeting after all the contracts were given to the same large prime contractors, other prime contractors asked, "Why [is the Commonwealth] not separating this [contract]? It's mandatory." She said the Commonwealth representative replied, "Oh, you bring up a good point. We're going to have to do it. We haven't awarded it yet, [so] let's look into this." She added that she never heard back from the Commonwealth after this incident. [#17b]

- The non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm said that her ability to bid on the Commonwealth's projects is limited by the staff time commitment required to prepare and submit proposals. [#05]
- When asked about his experiences trying to get work with the Commonwealth, the non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said, "[I was] certified with Pennsylvania UCP and was not given access to safety vests and stuff for PennDOT because I wasn't the right kind of firm." However, he noted, "I think that's changed." [#29]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said "it's just not worth it" to be a state-approved firm, and added, "I would have to hire another person just to do the paperwork on top of having the state employee here in the plant." She also said, "When I have a state inspector here they have to have their own room, their own fax machine, their own water cooler [and] their own parking space marked for them." [#07]

The same business owner said that she just lost a job because of state regulations related to "galvanized rebar" in a structure. She said this rebar "made the cost ... three times" what it should be, and added, "Why would somebody do that? There is so much waste." [#07]

- The Black American female owner of an MBE- and WBE-certified professional services firm said the current marketplace climate can be difficult when competing with larger firms. She went on to say, "If I am talking to other firms, small businesses, whether female-owned or [owned by] a person of color, the general tone is that there are some businesses in this area [that] may get the call for all of the work." [#11]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said she is "intimidated by the [Commonwealth's] website," adding, "I am afraid to click through it. I wish there was a demo video, a tutorial that helped explain it." She went on to say he may be "self-limiting" herself because she sometimes assumes she is "not big enough to get any state contracts." She added that she wonders if the Commonwealth offers tutorials and is "willing to take fault" for not inquiring about it on her own. [#14]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm said that she is suspicious that the bidding process may be biased. She explained, "[Public agencies] have to interact with someone, some company, and they're helping them create the bid. So naturally they want that company, whoever helped them create it ... [it's as if they are] saying, 'If you weren't the one who helped them create the bid then you've already lost it.'" [#31a]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, "[We have] barriers with DGS and some inspectors provided by DGS. Some areas near me are serviced by DGS and not by our company. There is no one in the Southeast with [as] much electrical experience [as us]. If we are all licensed, we should all have access to all areas." [Avail #65]

- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “It’s hard to break into government work it seems ... if you’re a smaller company.” [Avail #86]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “Typically [we] run into problems because of our size. We’re considered a micro business.” [Avail #83]

Some interviewees indicated that there is not enough local firm participation in the public sector, specifically with Commonwealth of Pennsylvania agencies, including DGS and/or PennDOT. [e.g., #08, #57, #81, PT#01b, PT#01c, PT#07, PT#17e, Avail #16] For example:

- The Hispanic American female owner of a professional services firm indicated that outside companies restrict local firm participation in the marketplace. She said, “Now, I start to see that there are more and more ... companies that are from Virginia and other states having large contracts with the government How is that possible? Why aren’t we doing anything when we can do work ... here.” [PT#04]
- The minority female owner of a professional services firm said, “A company, whose LinkedIn page ... says that they are an outsource and offshore company [was awarded by] the Department of Labor and Industry ... one of the largest contracts [previously] held by a small, minority-owned Pennsylvania business” [PT#01a]
- The female owner of a WBE-certified professional services firm said local SDB participation in her industry is low. She said, “One of the unique things about the legal industry in particular, for the Commonwealth, [is that] law firms who want to do business here don’t have to be located here. So, that means that any law firm across the country can bid on work for the Commonwealth. And so, the list of eligible SDBs for law firms is very small” [PT#02b]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that she and a colleague prepared a proposal for the City of Pittsburgh but didn’t get it. Afterwards, they “sat down and talked about it, and [realized] [the City] chose a firm out of Washington, D.C.” She and her colleague thought it was strange that the City did not choose a local firm. [#11]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said the Commonwealth should “consider providing opportunities to smaller [and] new firms.” He said that he knows of some firms “doing business with the state for 10 years,” and commented, “How about [considering] a different service provider?” [#08]
- A public meeting participant indicated that there is not enough local firm participation in his area. He said, “People from Baltimore can come to Philly in Pennsylvania and get work. That’s not fair.” [PT#02c]
- The female representative of a business assistance organization indicated that local firm participation in the Pennsylvania marketplace is too low. She stated, “Several of our [Black

American] members are doing well in Maryland, Ohio, and West Virginia. But, their office and home are here. They want to do it here.” [PT#16c]

- The non-Hispanic white male representative of a trade association said the state “needs to play a bigger [and] different role.” He explained, “If it’s public state money ... going into a project, there should be ... a Pennsylvania-based company [involved], and all the people working on the sites [should] be residents.” He said City of Pittsburgh is trying to start a program based on this, “whereby it’s a level playing field.” [#83]
- The female representative of a woman-owned professional services firm commented, “We do more work in New York, Illinois, [and] Washington State than we have ever done in Pennsylvania.” [PT#16d]
- The male representative of a minority-owned construction firm said, “[We’ve] really walled off any sense that there will be significant work here, [and are] growing [our] business elsewhere. Most of the work we do, we don’t do it here. [It’s] because there really are not meaningful opportunities in spite of the fact that we have the capacity, and we have proved it over and over and over again, with people who have a much higher standard.” [PT#16g]
- The female owner of a DBE- and WBE-certified construction supply firm indicated that it’s easier for her firm to win out-of-state contracts. She said, “Maryland has ... 18 percent DBE goals and New York’s high [too]. And it’s just Pennsylvania [where] pretty much everything [is] below 5 [percent]. When you ... see a project that’s higher than 5 percent DBE goals, it’s exciting. Doesn’t mean you’ll get it, but your chances might be a little bit greater.” [PT#16i]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm indicated that she is suspicious of “extremely low winning bids.” She stated, “We find that more recently pricing is being undercut to the point that you’re almost wondering Where are they getting their people to work for them? Are they hiring students? Are they outsourcing to other countries? Because that happens sometimes I feel like there needs to be greater investigation into the actual people doing the work” [#31b]
- The non-Hispanic white male owner of a LGBTBE-certified professional services firm said that his company is competing with “national IT service providers and offshore [employees].” He said a large banking firm has their own group of employees in India actually doing the work, and commented, “It’s not good work, it’s not quality work, but they’re cheaper employees.” [#24]

One business owner said that she began quoting other states because there are more opportunities elsewhere. The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said “the DBE goals are much higher in other state[s],” and commented, “I can get more work in other states[s] than I can in [Pennsylvania].” [#25]

The same business owner later said, “I get calls from New York to send rebar there because it’s hard for [those contractors] to meet their goals, and they need a manufacturer to meet their goals. They can get dollar for dollar for their DBE goals. With PennDOT’s goals so low, [the contractors] can go to the dealer, so the dealer’s price often is going to be cheap because again,

they're using the manufacturers who have been set in place for years, and don't have startup costs that I have to endure." [#25]

A number of interviewees reported limited outreach from Commonwealth of Pennsylvania agencies, including DGS and/or PennDOT, and other related challenges regarding outreach efforts. [e.g., #76]

Examples follow:

- Regarding outreach efforts by Department of General Services and PennDOT, the Black American male owner of a professional services firm stated, "They need to do a better job at outreach through the community. Sometimes it's the same [old stuff]. They need to have a little more targeted advertising of bids and things like that And the Commonwealth doesn't spend any money on bid advertising or anything like that. They just put it out in their documents without reason." [#55]
- The Black American male owner of a DBE-certified construction services firm said the Commonwealth should make better efforts to "identify those [DBEs] that are out there" in the marketplace. He went on to say, "I always ask the question, 'Do you even know who is out there?' I never get a solid answer." He added, "You've got to know who is out there that you can bring to the table" [#02]
- The executive of a Black American-owned DBE- and SDB-certified goods and services firm stated, "There are some obstacles with reporting and getting a face-to-face introduction, especially in RFPs with the Department of General Services." [PT#12]

The same business executive continued, "Bidding is not the hardest part, it is just finding the information to bid on. Getting the firm's SAP vendor number and supplier number [was] the hard part. The process is pretty simple, but there is not a lot of teaching or education to help small business owners. It was a learning experience for us." [PT#12]

- The Hispanic American female owner of a professional services firm said, "We have been trying to do business with ... the Commonwealth of Pennsylvania [by] participating in events ... when the agencies [have] their RFPs on the street." [PT#04]

The same business owner went on to say, "You know, they will have events just to present information, and then we would be able at least to stand up and just talk a little bit about the company That was basically it, but we have never been able to be a prime ... just a subcontractor." [PT#04]

- The Black American female owner of a supply firm indicated that public agencies should collaborate in improving their minority outreach efforts. She said, "Get those lists together. Communicate effectively what the ... MBEs and certifications are It can't only be that Black people give other Black people work." [PT#10e]
- The female representative of a business assistance organization stated, "We work with every firm that is registered with PennDOT ... or large organizations. And still, we have people at PennDOT who say, 'Oh, I didn't know you were there.'" [PT#16e]

- The Black American owner of an MBE-certified professional services firm said they struggle to get work with the state even though they have been in the industry “for over 30 years.” They added, “I know who the Broker Consultant is for the Commonwealth of Pennsylvania. And I go back and forth for two companies. I've worked with both of those companies as MBEs. I don't understand why I can't ... get to Harrisburg and connect.” [PT#08]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm reported a lack of outreach and information, particularly around the bidding process. She stated, “We don't know how to connect with [the Commonwealth] on any level except for waiting for the right bid to come out and then throwing ... your hat into the bids.” [#31b]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “There is not enough information or resources to get business aligned with opportunity, like bidding on contracts and who to talk to.” [Avail #149]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “It’s often difficult to find out when [the Commonwealth] award[s] a contract, [and] it’s hard to find out who was awarded the contract and what is involved Sometimes we get letters of intent and sometimes we don’t. Sometimes we know the value of the contract and sometimes we don’t. It’s not always very clear.” [#58a]
- The non-Hispanic white male owner of a construction services firm said that he has not pursued work with the Commonwealth because he “[doesn’t] know where to go.” He added, “I don’t have any resources to see where to fit at or how to contact anybody. I don't know any of those procedures, or where to even look to see how I could push that off or fit.” [#88]
- The non-Hispanic white female representative of a trade association said it would be helpful if the Commonwealth did more outreach to educate small businesses on state contracting processes. [#71]
- When surveyed, the owner of a construction business in Central Pennsylvania responded, “Pennsylvania does not encourage small business owners.” [Avail #119]

Some interviewees commented on how late/untimely payments from Commonwealth agencies or other public entities impacts the success of their firm. For example:

- The non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm indicated that she cannot bid on most Commonwealth projects fearing that she will not receive payment in a timely fashion. She said, “We cannot afford to take those contracts.” [#05]
- The Black American male owner of a DBE-certified goods and services firm said, “Me, as a business owner, I'm going to make the decision to pay my men. You keep the ball rolling ... [But] if prime contractors are paying ... me 60 [or] 90 [days], then it creates a huge issue.” [#20]
- The female owner of an SDB- and DBE-certified professional services firm said, “My biggest concern is getting paid. While this is a concern for any business, large or small, it is

particularly troublesome for a small business. For example, when the state budget was not passed in a timely manner in state FY 2015-16, my firm had over \$130,000 in receivables going into 2016. The majority of that amount was to be paid to several small businesses my firm retained to work on a state contract. While a larger company can absorb that amount, a small business cannot." [WT#06]

The same business owner continued, "Fortunately, when the invoices were paid after the budget impasse, I was able to pay my two subcontractors and myself. At that point I decided my firm needed to diversify to include more private sector work because state payment is not always timely. Currently, my firm is waiting on payments totaling over \$25,000 from state-related work. One of the invoices goes back to June 2017." She added, "Because I carefully monitor what is coming in and going out of my business, I believe my business will be fine until my firm is paid." [WT#06]

- The Black American male owner of an MBE- and SDB-certified goods and services firm reported that some prime contractors try to "stretch payments." He stated, "Depending on the prime, some pay timely and some delay payment. Some are very slow pays, and that can be an issue if you don't have your financing." [#60]

A few business owners said that late payments by public entities negatively affect their firm even when they subcontract. For example:

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that getting paid by the Commonwealth is a "big problem" because his firm often works as a subcontractor. He said, "We have to send our [invoices] to the prime, but the biggest problem we see is the prime gets paid and they just hold our money. And that's a big, big problem." [#09]

The same business owner continued by saying this is "in violation of their contract with the state." He added, "They're supposed to pay you in either 10 or 14 days from when they get paid, and many of them do not. But nothing gets done to them because there's no enforcement and ... no penalty. So, they just do what they want." [#09]

- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm said that when her clients are not paid by the Commonwealth in a timely manner, she does not get paid in a timely manner. She explained, "When the state withholds funds [or] the budget is on hold, or when [my large client] doesn't get paid, I don't get paid. That trickle-down effect does affect people like myself Instead of our contract [being] net 30, we were going 90 to 120 days." [#19]

The same business owner also explained that she has a client whose funding was cut by the Commonwealth, and noted, "As a result, our retainer was cut in half and we still have not rebounded." [#19]

Some interviewees commented on location or time constraints that impact attendance at Commonwealth of Pennsylvania agency-led outreach events, and noted some opportunities for improvement. [e.g., #86] For example, the minority female owner of a DBE- and SBE-

certified firm said, “[For] these particular hearings ... workshops, or events, I would like to say that we can capture [that] stuff on webinars This is your job. [Having a] small business [means] we have to go to work. So, people are missing a whole day and they can’t afford to do that If you’re not holding them on an evening or a Saturday, realistically [it’s difficult to attend].” [PT#16j]

Learning about prime and subcontract opportunities with Commonwealth of Pennsylvania agencies, including DGS and PennDOT. Many companies explained that it was difficult for them to learn about prime or subcontract opportunities. Others reported effective ways of learning about potential subcontracting, or that prime contractors reach out to them. For example:

- The Black American male owner of a professional services firm said learning about work opportunities is a barrier for minority firms because most “don’t have a [marketing] person.” He added, “With most of the minority firms, the owner’s trying to do everything.” [#55]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm said that she disapproves of the way the Commonwealth provides notification of contracting opportunities. She stated, “I get electronic notices of all kinds ... but there are so many [different ones]. It’s really hard to wade through the bids I wish there was a way that ... I could limit the types of things that I got notices [for], because I’m overwhelmed with emails.” She added, “A system that would permit you to say, I want to bid on [this], [or] I’m interested in these departments [and] services ... would be very helpful.” [#81]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said, “PennDOT is always looking for partners ... but the system is so complicated” He said bidding these opportunities is difficult for new companies that lack experience. [#06]

The same business owner added, “The big boys have gotten bigger, and they pick and choose what they want. So, they’re controlling the system now [and] there’s no room at the table for small firms to get their foot in the door.” [#06]

- The Hispanic American female owner of a professional services firm indicated that it’s a challenge to learn about prime contracting opportunities with the state. [PT#04]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “[It’s] hard to find out what contracts are out there, and who to contact.” [Avail #152]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “The barrier is the difficulty in understanding ... what business process automation opportunities exists with Pennsylvania companies. We know what we do well, but finding out who needs us is difficult.” [Avail #158]
- The Asian-Pacific American male co-owner of a professional services firm said that the Commonwealth does not publicize their opportunities well. [#42]

- Regarding prime and subcontract opportunities with the Commonwealth, the Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm stated, “I think my listing in the state is incorrect, or there are not enough opportunities for what I do in the state. I'm not sure because there had been some [prime contractors] who have reached out to me, but for services that I don't perform” [#43]

The same business owner continued, “I don't know if there is a disparity in the way we are listed in the state and the city I get [most] of ... my jobs [and] revenue from the city So, there's something not correct there or there's something that I'm not doing right, or something in the listing that's not correct.” [#43]

- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said, “I have attempted to learn about [Commonwealth work]. I found the process very confusing and found the kind[s] of projects that are listed, that seem to be opportunities accessible to us, [to be] not a fit with us. They tend to be projects that are very much more facilities-oriented, and kind of very low-level projects. And ... the other projects seem to be things that are very high level, which we feel we're qualified [for], but sometimes it feels hard to make a proper showing for them. So, there's a disconnect between ... very high-level [and] low-level contracts.” [#76]

- The female representative of a woman-owned professional services firm stated, “We've seen a bigger improvement [at the] state level [with] them driving on the partnership with minority [and] disadvantaged business. However, in Allegheny County and in the west part of PA, we've had a very difficult time One thing I notice, which is a common denominator, is a lot of times when the bids come out in this location [they're] written that they have to reach out to a certain number of minorities versus really encouraging them that they need to participate and encourage[ing] these bigger companies [to] partner with the minorities.” [PT#16d]

The same business representative continued, “The last pre-bid meeting I went to for Allegheny County stated that they had reached out [to] 10, up to 10, I think it was. And I was like, well, that's [not enough]. So, we do a lot more business in out of state, and then also in [other regions] of PA because of that.” [PT#16d]

- The female representative of a business assistance association indicated that public agency outreach to minority- and women-owned businesses regarding subcontract opportunities should be improved. She said, “I don't find it a problem finding minority and other women partners anywhere in this country, Pennsylvania or anywhere else. The problem I see with the primes is they wait until the day before the bid is due and then they reach out to you. And, I think that's probably true in Pittsburgh as well as it is everywhere else.” [PT#16e]
- When asked why he thinks prime contractors do not reach out to him to bid on projects, the non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm stated, “I don't know why they haven't reached out It's probably because there's no box to check in the contract other than minority and women. So, I don't believe they give credit for doing business with a [disabled] man in the program.”

He went on to say there is also no box to check for a DOBE firm when submitting a project proposal. [#29]

- The Subcontinent Asian American female owner of a WBE-certified professional services firm said that her firm has yet to secure work with the Commonwealth. She stated, “I did go to some of their events where they are instructing on how to certify yourself. We were defined as a small business, and then [moved to] the next step where you could be certified as a disadvantaged business enterprise. [#44]

The same business owner continued, “I did apply for work [and] send out some of those responses for the RFPs, but after talking to a few of the people that are doing work with Department of General Services, they said it is just a matter of luck. You just keep sending as many as you can on a daily basis. Just keep sending them out and one will hit and after that you are in. But, I don't have the bandwidth to keep doing that.” [#44]

- The minority male owner of a general contracting firm said that he struggled to find opportunities with the Commonwealth when he started his firm 10 years ago. He stated, “One barrier I saw is ... you don't know where to go. [If] you don't ... even know where to find these contracts, you can do them, but you don't know where they are. You don't know who has them.” [PT#01c]
- The non-Hispanic white female owner of a WBE-certified goods and services firm reported that she has issues when trying to get work with the Commonwealth. She stated, “This is the problem in the state system. You don't know who you can contact, whose toes you're going to step on, whose ego you're going to bruise, all [while] trying to build business.” [#23]
- The Subcontinent Asian American female owner of a WBE-certified professional services firm said that she does not understand how to pursue available contracting opportunities. She stated, “It's very hard to know where to put all your resources Even right now [we're] trying to get into the public sector [and] trying to dive more into city work. There are so many segments and so many avenues that we [aren't sure who] we should reach Should we reach the engineering service? Should we reach out to ... public agencies?” [#44]

The same business owner added, “I want to say there should be one answer, but I do feel that the agencies that are helping us with providing these certifications ... know to take [a larger] role in seeing how we are doing for the next few years. [They should see whether] we start procuring work. [They're] just helping us [to get] those certifications and then not helping after that.” [#44]

- Regarding bidding opportunities with the Commonwealth, the non-Hispanic white male owner of a LGBTBE-certified professional services firm said, “It doesn't seem like there is that much obvious information available for a small business from the state. Maybe I'm just not looking in the right places. I mean, it is my responsibility to go look for this stuff, but I can't say it [has] hit me in the face.” [#24]
- When asked how the company gets contracts with the Commonwealth as a subcontractor, the non-Hispanic white male representative of a WBE- and SDB-certified professional

services firm said, “Because we are registered with the state, we can get on their marketplace So, we find out what’s coming up, and then we look at those to see if they have pertinence to print and what we do.” [#58b]

- The non-Hispanic white male owner of a construction services firm said that he could work on Commonwealth projects if the Commonwealth had a simple website where he could specify the type of work he is capable of doing. He added, “If there's any type of work that I do that [is needed] ... [I'd like to] find out about [it and] look into it.” [#88]
- Regarding how his firm learns about contract opportunities, the Black American owner of a DBE-certified construction services firm said that he learns about most opportunities via word of mouth. He said people call the firm as it becomes more widely known. [#02]

The same business owner went on to say that his firm is on several bid lists, including those for University of Pittsburgh Medical Center (UPMC), University of Pittsburgh and Carnegie Mellon University. He said the firm “picks and chooses” which contracts it wants depending its capability. [#02]

Challenges are particularly evident for minority- and women-owned firms. According to a Black American female representative of a business assistance organization. She stated, “Small African American women-owned businesses face many challenges. They lack knowledge about available contracting opportunities. They lack back office support needing to respond to RFPs.” [PT#01e]

For some, learning about prime and subcontract opportunities is not a barrier. [e.g., #58b]

For example:

- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that finding work with PennDOT is an easy process. She said, “I find that PennDOT's [website is] the easiest [way] to look for projects and so forth I'd say PennDOT is fairly easy to look at and find projects that are out there and go after them” [#25]
- The Black American female owner of a WBE- and SDB-certified goods and services firm said learning about subcontract opportunities is not a barrier for her firm. She indicated that many opportunities are available to her in her service area. [#53]
- The non-Hispanic white male representative of a trade association stated that members seem to be aware of Commonwealth contracting opportunities. He stated, “[They're] all pretty in tune to what [the opportunities are], [but] whether they decide to bid it or not is another thing. [#83]
- The Black American female owner of a DBE- and WBE-certified construction firm indicated that she is successful in learning about job opportunities from a variety of sources. She said, “I bid jobs that come from being a part of a trade association, and PennDOT has a diversity office and they send out job information. That office really helps me with marketing.” [#63]

Recommendations for improving Commonwealth agencies’ bidding, contracts, prompt payment and other processes. A number of business representatives and business owners commented on or made suggestions for improving other state agency procedures.

Recommendations included improved transparency and outreach, user-friendly website, mandatory contract goals and other suggestions. For example:

- The Black American female owner of a DBE- and WBE-certified construction firm commented on her experience learning about subcontracting opportunities with the Commonwealth. She said, “There should be more transparency so that the subcontractor bidding knows the organization it is working with. Then you have a better idea of who’s paying, who owns the project. Sometimes when I look at a job, I would like to know who the owner is, not just the contractor who send the bid invitation to me” [#63]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “The website for applying for contracts is extremely confusing. It’s not easy to navigate and I couldn’t get confirmation that I’d submitted a bid properly.” [Avail #105]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “The Commonwealth should improve its notification process. The eMarketplace website is terrible.” [#57]
- The Hispanic American male representative of a trade association reported that the Commonwealth could benefit from updating its technology. He stated, “Making it easier for someone to submit a bid online [is necessary]. In fact, I was on the state website recently because I had to recertify as a small, disadvantaged business, and the portal is just cumbersome. It’s not a very user-friendly portal.” [#86]
- When asked how the state the bid process could be improved, the non-Hispanic white female owner of a WBE-certified construction supply firm said the Commonwealth should “stop separating MBE, WBE, [and] veteran-owned businesses.” She said, “It should just be DBE.” She said that she loses money because while the “WBE requirement is seven percent, the MBE requirement is 12 percent ... so the [prime contractor] can’t use [her] for the whole project.” She commented, “I don’t understand why they need to qualify it further. A DBE certification should be enough.” [#14]

The same business owner also said the state should provide “video tutorials for the website.” She added, “It should be part of the certification process. When you finish your application, there can be a video explain how to use the website.” [#14]

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said, “The state needs to be more vigorous about making sure that subs get paid when they’re supposed to be paid.” He added, “There is the Prompt [Pay] Act ... that [says] they are legally required to pay you. But then again, the state has no way that I know of [to discipline prime contractors].” [#09]

The same business owner continued, “[The] state could monitor it. Allegheny County does that now Every month [the Allegheny County MWBE office] send us a thing asking, ‘When was your last payment?’” He said the primes have to report when they pay subcontractors so that Allegheny County can verify it, and commented, “They have a nice program.” [#09]

He also said that he would prefer to work as a prime contractor rather than subcontractor. However, he said the contracts go to large firms “with tons of other contacts,” and added, “We’re [only] looking for one or two to specialize in.” [#09]

- The Black American owner of a construction management firm recommended that the Commonwealth of Pennsylvania invest in a plan for minority participation in contracting that involves mentoring. He stated, “The developers and the contractors, first of all, would have to accept a State plan for minority participation, a mentoring plan in particular. Or, they would have to present one that incorporated mentoring and the matching of small firms and large firms. And, that is so simple that the only thing you would have to be prepared [for] was the resistance of the white business community who have not had to make a sustainable commitment to minority business development. Further explained how his mentoring recommendation would strengthen the minority small businesses community. He noted, “Because you would employ people who would employ minorities in their workforce. The minority business community does a better job of employing minority people than the white business community. But, absent an opportunity to work, they don’t get the experience. So, you would strengthen that fabric by expanding the opportunity to work and the cash flow that comes from participating in State procurement would strengthen the minority companies and the employees in those organizations. It’s a very simple process. You match small companies with large companies. You focus on apprenticeships. You stipulate as part of the contract specifications that this is what you need in order to satisfy the owner’s expectation.” [#82]
- The non-Hispanic white female owner of a DBE- and WBE-certified specialty contracting firm said, “[The] state should pay promptly and make calls to the minority subcontractors to make sure they are getting paid promptly. This ensures good payment without having the minority vendor involved causing negative perceptions.” [WT#05]
- When asked if he has any recommendations for improving state contract administration, the Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said the Commonwealth can address the problem of primes taking advantage of subcontractors by stating contract payment policies up front and enforcing them. [#28]

The same business owner added that the Department of General Services already has the mechanisms in place to enforce committed payments from prime contractors. He said they just need to enforce it and mentioned that primes already have to report to DGS every three months. He stated, “The consequences are already there Primes are legally required to pay and can be debarred from the next contract, but they retaliate, basically, [when subcontractors raise these issues].” [#28]

- The non-Hispanic white female owner of a DBE- and SDB-certified professional services firm, explained the importance of inclusion for disability-owned firms in Commonwealth contracting. She stated, “Don’t forget disability. Because, frankly, the [disabled] population both as employees and as business owners experience [...] the most trouble getting work, getting started, staying started. Particularly given that folks with disabilities occasionally have to take some time to deal with their disabilities, right? ...Disability, crosses every demographic and is often is the one that people forget. So, I would encourage [the

Commonwealth] to really not forget it and start thinking about what they [can] do to [increase participation from that population].” [#80]

- The Black American male owner of an MBE- and DBE-certified professional services firm said the Commonwealth should hire someone to “monitor all the businesses that are self-certified and third-party certified MWDBEs.” He said this would provide oversight and allow to Commonwealth to “find out how much opportunity [MWDBEs are] getting in their field.” He said “checks and balances” are needed. [#16]

The same business owner continued, “You cannot have growth, and you cannot have betterment of [a] society or of a race or of a gender without [this] in place. An Indian can’t do better unless they’re given equal opportunity. A woman can’t do better if [she’s] a general manager and they’re paying her 60 thousand dollars and she’s doing the same work I’m doing, and they’re paying me 80 thousand [dollars]. Where’s the fairness in that? It’s frustrating to see these [double] standards ... [for] people that are second-class citizens” [#16]

- When asked if she has any suggestions for how to improve the Commonwealth’s bid process or administration of contracts, the non-Hispanic white female owner of a WBE-certified professional services firm said, “If [prime contractors] pick you to be on their team and they show the state you are the contractor they selected, [then] they should be required to use you.” [#10]

The same business owner said many prime contractors go on a “fishing expedition for low bids” after they get bids from WBE firms. She added, “When they don’t fulfill their WBE commitment, they [tell the Commonwealth], ‘But we gave you the cheaper price,’ or, ‘We couldn’t find WBEs that we thought could provide the service.’ And most of the time that’s bull [explicative].” She later said that prime contractors on state-funded projects should be required to pay their subcontractors even if the state is late to pay the prime. [#10]

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “Concentrate on getting business to Pennsylvania small businesses over other states Maybe somehow prioritize paying small businesses. If [primes are] going to win the contract, they have to pay the small businesses without having received money from the Commonwealth. That should just be a condition.” [#57]
- The non-Hispanic white female owner of a DBE- and WBE-certified specialty contracting firm said that legislation should be passed that requires minority participation set-aside goals be met on state contracts, and that all contracts with state funding have mandatory minority participation goals. [WT#05]
- When asked about recommendations for improving contract practices, the female representative of a WBE-certified construction-related firm said that the Commonwealth should require companies to give more notice when sending requests to DBEs. For example, she recommended that DBEs be given notice a week or two in advance for bids. She also detailed a conversation that she had with a state representative, and stated, “When we explained to him and we gave him emails and faxes [from prime contractors] that showed

we had one hour ... or one day to respond ... he was outraged. He said, 'If you're getting this, how many other people are getting [this].'" She also suggested that the Commonwealth improve their reporting requirements. [#17b]

- The female representative of a construction services firm said that she thinks technical bids are a way for the Commonwealth to choose who they want due to it being a somewhat complicated system. She said, "Where they do the technical bids, that's just ... so much work. We kind of avoid them. We've done a couple of those, but there's not too many that ask for that. But instead of just a cost proposal, you have to do a technical proposal, which they want things in a certain way, and binders with this [or that], and ... your organization charts and all kinds of [stuff]." [#39b]

The same business representative continued, "We've put one in that [we felt good about], and you just sit there [confident because you] had everything there, but it wasn't good, it wasn't enough information It seemed like they were able to pick and choose who they really wanted, so it was just one more way to say you didn't win. Even though [our] price was better than theirs ... [the state] picked them because their technical proposal was better Everybody should be on the same level playing field. [Technical proposals] just seem to be a lever for [the state] to pick who they [want]. Even though it had to be put out there for bid, that was their way of getting who they wanted." [#39b]

- The female owner of an SDB- and DBE-certified professional services firm said, "My only recommendation ... is that state professional service contractors be paid within three months of submitting an invoice unless there is an issue with a submitted deliverable. This is a suggestion whether a firm is part of the SDB program or not." [WT#06]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm said that the Commonwealth's bidding process is "awful." She stated, "I think that reverse auctioning is horrid It's awful It doesn't allow you to explain your differential, to explain what you bid on, to explain the differences. It's no wonder that people buy A and they think they're buying B." [#56]
- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm suggested that the Commonwealth recognize SDB participation on regular low bid procurement. She said Department of General Services does not recognize her diverse participation if her firm bids prime as a WBE and SDB firm on low bid contracts. [#61]
- The non-Hispanic white male owner of a professional services firm said, "Understanding what the contract means [is difficult] If the state had a course that you would go [to] once a month and ... for new business [they show] how you set up your profile [and] how you log in and look for bids, [it would be helpful]." [#70]
- A public meeting participant stated, "The Commonwealth of Pennsylvania must admit that Blacks are receiving much less prime contract percentage awards than we should be getting. The solution is to create an emergency set of contracts to be set aside for Black firms first and MBE firms second." [PT#01b]

The same public meeting participant continued, “[A recent USDOT report revealed that in] Pennsylvania, for over 15 straight years, white women have received the more numbers of contracts [and] a higher dollar amount of contracts than Black men and women in this Commonwealth. Fifteen straight years now.” [PT#01b]

- Regarding contract specifications, the male representative of a woman-owned construction services firm said, “The Turnpike has language in their prime agreement that the primes are not allowed to pass down clauses in their contract to their sub that are more onerous and more egregious that are in the prime agreement. PennDOT currently doesn’t have that language in there. [It] would be a fantastic addition to their general requirements.” [PT#16f]

- The Black American male owner of an MBE- and DBE-certified supply firm said that changes “have to start at the top,” and “there are some ugly conversations that have to be had” about discrimination. He added, “I worked in the unions. [Racism] is a culture that’s there. It’s a mentality, so I don’t think you’ll ever change that. You’ll have to work with the contract end of it. You have to make it where you get more diversity at the table on day one.” [#06]

The same business owner went on to suggest, “Have the diversity conversations before the contract is written. Have the plan in place before it hits the street. Don’t leave it up to the contractor, because he’s going to do what he always does. [He’ll go] the path of least resistance” [#06]

- The Black American female owner of a WBE- and SDB-certified goods and services firm recommended that state agencies “do training” and make sure “everybody from procurement is trained.” She added, “They [should] know what their ... diversity goals are and [be] held to those goals.” She also suggested that the Commonwealth “utilize bid software that is friendlier to subcontractors.” [#53]
- Regarding PennDOT contracting, the Black American representative of a business assistance association said, “I think PennDOT probably has half a billion dollars’ worth of work in [Erie]. If you can add that to the billion dollars’ worth of work that’s already been articulated, PennDOT itself has about a half of billion dollars’ worth of road work in our region. And a fair distribution or equitable distribution, or equitable access to that would go a long way. I think that one needs to look at their employment goals, of 2.3 percent minority participation in employment. It’s really rather sad, it shouldn’t be the goal. It’s one-and-a-half or two people on the job.” [PT#14e]
- The Black American male owner of a DBE- and MBE-certified construction firm recommended that the Commonwealth “bend a little bit,” when it comes to regulations and requirements that are barriers to small and minority-owned businesses. [#13]
- The Black American female owner of an MBE- and WBE-certified professional services firm stated that she would like to see less paperwork requirements in Commonwealth bids. She also recommended getting rid of “the requirement that [prime contractors] send 10 letters[s] to MBEs.” [#11]

- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “[There is] no cohesive data formation [and] unorganized data sheets. They make it very complicated to fill out paperwork because the paperwork is not all in one place, and the questions are redundant Then, they don't know what to do with the paperwork afterwards.” [Avail #151]
- The Subcontinent Asian American male owner of a goods and services firm recommended that the Commonwealth add a code for metal suppliers. He remarked that the Commonwealth has codes for other projects, such as construction, but none for metal. [#15]
- The non-Hispanic white female owner of a DBE/SDB-certified professional services firm commented that timely feedback is challenging. She added, “The State's Small Business Office ... need[s] more of a business-minded person to lead.” [#59]
- The non-Hispanic white female owner of a SDB-certified construction firm recommended that the Commonwealth better review bids to ensure that winning bids and proposals comply with prevailing wages. She indicated that a level playing field in the construction industry in the context of wages is key to her firm's future. She explained, “I'm not sure if the State always checks to see if the primes and subs are paying a fair wage ... we pay prevailing wages. So, our wages are higher because we're union” [#65]
- The Black American male owner of an SDB- and MBE- certified construction company highlighted the need for increased and more consistent regulation enforcement within the Commonwealth, stating, “Enforcement [in the procurement process] has been an ongoing issue.” He also highlighted the need for increased oversight, recommending that the Commonwealth “Provide oversight on labor and business practices [for Commonwealth contracting], and then have sanctions that go with it.” [#37]

The same firm owner reported that a lack of communication among DGS staff, as well as across departments, was a common problem for his firm. He added, “I think ... they need to be retrained ... [in order to] understand how we communicate with each other ... [Revisiting] the mission. Realigning the mission and the tools to achieve it.” [#37]

- When asked how the Commonwealth can improve its bidding and administration processes, the Black American male owner of an MBE- and SDB-certified construction services firm stated, “If you have a 30-year veteran with the ability to do the work, then the Department of Transportation or ... state government needs to create a bonding access to capital pool where they can bring that together No matter how much ability you have, if you don't have the capacity [or capital] to do the work, [the prime contractors] are [going to] keep you under their thumb. And that's how they're doing it. There's a lot of minority companies that are able to do the work, but they've been limited to access that capital.” [#27]
- The Black American female owner of a DBE- and SDB-certified professional services firm said Department of General Services should provide more opportunities for DBEs to build relationships with the contracting officers. She stated, “[Department of General Services] comes to Philly, or you go to Harrisburg, and they have these days where they will show you

how to do business with the Commonwealth So, you have all these people from DGS, [so] maybe they [can] bring the contracting officers out or something, [from] different departments. [We can] get a chance to meet them and show them what [we] do and all, because I just think they don't know." [#32]

- The non-Hispanic white female owner of a WBE-certified goods and services firm explained that the Commonwealth could help small businesses. She stated, "If somebody could connect the dots and do a schematic and say, 'Here's your suppliers,' and as soon as that contract comes out, if they would just send [that list] to all the state agencies and everybody that has the power to purchase, everybody would have a better opportunity, because you know what happens if they can't reach out to us? They're going outside the State system." [#23]
- Regarding her experience as a COSTAR supplier, the non-Hispanic white female owner of a WBE-certified construction firm stated, "It took us two years to become a COSTARS supplier. The biggest issue with COSTARS is that the members ... don't really know how to use it. They could use it for so much more, but they don't. So, we do a lot of education in that area." She said the Commonwealth should work on "educating COSTARS members." [#22]
- Regarding the prequalification process, the non-Hispanic white male owner of a construction firm stated, "I think the state needs to look at the resume of the owner and not the resume of the person actually running the project. I could apply for conditional codes and then put myself in a field every day, but that doesn't make the company run. In fact, it makes the company less valuable. It flies in the face of smart business decision making." [#85]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, "There have been some instances where we have been written in as subcontractors, but ... have not been informed if the contract was awarded." [Avail #46]
- The owner of a DBE- and SDB-certified professional services firm noted that the Commonwealth does not issue smaller projects on which smaller firms can bid as primes. She explained that she would welcome the opportunity to serve as a prime, and suggested that the Commonwealth "...[break] down larger projects into smaller components, which would allow many small businesses the opportunity to be able to bid, lead [projects] and [present] our talents." [#78]

G. Other Allegations of Unfair Treatment

Interviewees discussed potential areas of unfair treatment, including:

- Denied opportunity to bid;
- Bid shopping and bid manipulation;
- Treatment by prime contractors and customers during performance of the work;
- Unfavorable work environment for minorities or women; and
- Any double standards for minority- or woman-owned firms when performing work.

Denied opportunity to bid. The interview team asked business owners and managers if they experienced denial of the opportunity to bid.

Some interviewees indicated that they did not experience or have knowledge of denial of opportunities to bid. [e.g., #58a, #59] For example, the Asian Pacific American male owner of a DBE- and SDB-certified professional services firm stated that he has never been denied an opportunity to bid by a prime contractor. [#28]

A number of interviewees reported being denied opportunities to bid, or not knowing, but suspecting, denial of opportunity to bid might have occurred. A few business owners said that they suspect discrimination plays part in the bidding process. [e.g., Avail #135, Avail #137, Avail #145] For example:

- The female owner of a professional services firm indicated that she experienced unfair rejection after submitting a proposal through the Commonwealth’s Invitation to Qualify system. She said, “I was never given the opportunity to see the [number] of people that responded. I would suspect I was the only person who responded, and they were not going to give it to me.” [PT#03]

The same business owner continued, “They only closed the ITQ that they put out after I responded and said I wanted specific information. I think it is totally discriminatory And I have proof of that. [PT#03]

- The Black American male owner of an MBE- and DBE-certified professional services firm said, “When I reach out to companies ... it’s organized discrimination and racism. It’s organized.” He continued, “People [in] high-level [positions] believe in racial discrimination, based on their actions. [Their] actions speak louder than ... words.” [#16]
- The Black American male owner of a DBE-certified construction services firm stated that he has his “suspicions” he was not awarded a job because of discrimination. He went on to say that, until recently, many people did not know his firm was an MBE. He said that his decision to not advertise widely as an MBE was something he “did by design” because he was born and raised in Pittsburgh and knows “how it is.” [#02]
- When asked about customers that do not want to work with minorities or women, the Black American male owner of an MBE- and DBE-certified construction supply firm stated, “Some people refuse to do business with a Black-owned company. They just won’t do it.” [#06]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm indicated that denial of bid opportunities do occur. He stated, “[It’s] the whole kind of social network thing [regarding] where we haven’t traditionally been or where we have traditionally been excluded from A lot of business is done [in] places where ... people like me haven’t traditionally had access to.” [#38]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that small businesses are sometimes rejected without reason on projects. He said, “[The agency will say] this was rejected technically so you don’t even know what the reason

is We don't bid for any project that I don't find that I cannot do. We make sure that it is within our limit and within our strength that we can do [it]." [#28]

The same business owner went on to say that his firm has an impeccable track record. He stated, "We have never screwed up a project. So ... how can you reject me technically?" He went on to say, "It's [been] eight years and they don't have a single complaint against [me]." [#28]

The same business owner later said that the Commonwealth rejected him on a contract where his business costs were 50 percent less than the competition. He added, "Then I actually went for the debriefing with them [and] they gave me reasons, and I actually [asked] them, 'If you want to give those reasons, why are you asking me to bid?' I was so pissed at that time [that] I actually wanted to protest ... [but] then somebody told me, 'Don't protest it. Just forget it, because if you protest then they think that you are a bad guy.'" [#28]

- The non-Hispanic white female owner of a WBE-certified professional services firm said when a company is "knocked out of" the bidding process, it's "a size thing." She added, "When you talk to a large company, they say, 'If we would [be] 30 percent of your business, we don't want to take that risk. If it goes south, we put you out of business.'" [#04]
- The owner of a professional services firm stated, "With the state's new system, [I] get ... shortlisted on everything I go after ... because I only go after what I'm qualified for, [but] I never get the final project ... I know people in the room on the selection committee and they've had issues with me 15 [or] 20 years ago, where in certain cases I was their boss." [PT#17e]

The same business owner continued, "And ... there's this ongoing resentment that is ... in the room And ... I've seen the pattern. I used to try to ignore that it was a pattern. But, at this point in my career, it's so abundantly evident." [PT#17e]

Bid shopping and bid manipulation. Business owners and managers often reported being concerned about bid shopping, bid manipulation and the unfair denial of contracts and subcontracts through those practices.

A number of business owners indicated that bid shopping and/or bid manipulation exists or they felt that it might be prevalent. One minority business owner said that he is sometimes contacted by companies to serve as a "pass-through." [e.g., PT#10, WT#05, Avail #136]
Comments include:

- The Black American male owner of a DBE-certified construction services firm stated that while he has not seen bid manipulation, he has seen firms "working the system" to achieve MBE contract requirements. He said companies will "work the bid process so that the contractors can partner up with disadvantaged businesses to achieve the goals that are set." [#02]

The same business owner stated that he is sometimes called after a company is awarded a job and asked to serve as a “pass-through.” He said that he tells these companies “no” because his firm “wants some skin in the game,” and that that way of doing business is illegal. [#02]

- The non-Hispanic white female owner of a WBE-certified professional services firm said that she always “waits until the last minute to send [bids] in.” She said that she does this because she doesn’t “want [her] prices out there,” and added, “I know that if you send stuff early there’s the chance that [prime contractors] could possibly share it with their favorite contractor.” [#10]

The same business owner said that prime contractors often get bids in, then “call their buddies.” She added, “[They] say, ‘This company bid \$10,000 on the job. All you have to do is be lower than that.’ [It] happens all the time.” [#10]

- The Black American female owner of a DBE- and WBE-certified construction firm explained that she has personal experience with bid shopping. She said, “I do jobs in other states, and in comparison, there’s so much collusion here It’s a game. You give your price, they’ll call you back with, ‘So-and-so gave me a lower price,’ which is something that, ethically, you should not do They wait until you put all of this time and effort into your bid And at the end, they’ll say, ‘Well, so-and-so gave me this price,’ even though you have folks ready to go to work and people already slotted out to work.” [#63]
- The non-Hispanic white female owner of a DBE-certified construction services firm said, “We get shopped a lot. I’ve had a lot of opportunities taken away from me because a company will ask if I have any candidates for a position, and I provide them resumes, and then they simply go and hire those people themselves.” [#12]
- The Black American owner of a construction management firm described his firm’s experience with bid shopping. He observed, “That’s just part of the culture. I had a white contractor tell me, ‘...don’t even submit a number, because we’re only going to shop it.’” He noted that the President of this same company had told him they do not want any minorities on their job. He continued, “[This] blocks and denies the minority contractor the opportunity. This is all about opportunity reduction or opportunity denial. And, there’s a good ol’ boy system that facilitates both.” [#82]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm indicated that bid manipulation is a barrier for small businesses. She said, “I’ve ... seen where procurement or contracting individuals will ask for information verbally from firms about what they will charge for certain things, then they will use that to manipulate what they will get from someone else.” She continued, “I also think I have seen bids constructed in a way that only allows for certain firms to bid on them.” [#56]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “I’ve had an experience bid shopping.” He added, “It felt like it was based on a preexisting relationship. I’m not sure that it was ... directly attributed to my ethnicity or my sexuality” [#38]

- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said he is concerned that the competition is low for public sector projects because of bid manipulation. He said that he usually only sees two to three companies bidding on public sector projects through the Commonwealth. He observed, “Why would you bid if you know the project is already going to be awarded to a specific company?” [#28]
- The Hispanic American male owner of a consulting firm said that he reached out to the recipient of a Public Department of Health contract and “sent them [his] RFP response and plan, assembled a team, and took action managing the activities that they should have had in their plan.” He said, “[I asked them], ‘How were you selected? You are not even in Philadelphia.’ Their response to my face was, ‘My boss knows the people at the Department [of Health], and we were selected just because of that reason. Furthermore, the first subcontractor we hired was also because my boss knows them. They are not even a minority-owned company, like yours, but we have to work with them no matter what. We have to pay them.’” He went on to say, “How do you think I felt when I heard these exact quoted words? It is obvious that my RFP response was the best, and never probably even looked over.” [WT#02]

The same business owner also said that he submitted two RFPs to Philadelphia Water Department for contracts that were awarded “to the same, single consultant.” He said that he entered “the lowest rates in the market possible” in his RFPs as “a test, to see if they were really looking at rates.” He added, “There is no way that person’s rates were lower [than ours], since ... I wanted to run a test with incredibly low rates.” [WT#02]

- The Black American male owner of a DBE- and MBE-certified construction firm said, “That’s one of the biggest barriers, I think, is that [prime contractors] keep hiring the same people over and over and over again, and they’re fixing the bids The state and federal government are not looking.” [#13]
- The Black American male owner of an MBE- and SDB-certified construction services firm indicated that bid shopping and bid manipulation occur often on state projects. He said, “They make sure there’s nothing written down to incriminate them, but I’m pretty sure that we’ve been undercut like that before ... because we’ve bid [on a] project and somebody else came in \$10 lower” [#67]

The same business owner continued, “A lot of times when we submit our numbers to the majority contractors, we have to do it in plenty of time so that they can work their numbers in. We have to submit it in a day before, something like that. And there have been times when we submitted numbers into them, and they either don’t include our bid, and they may say our bid is high I’m pretty sure that we’ve been undercut by ... just a few dollars.” [#67]

- The female owner of a WBE-certified professional services firm said, “We had a few instances where we had verbally agreed on a percentage of the contract and when the letter of intent came to us from the prime law firm, it was less than what we had verbally agreed. They had made issue about the fact that their cost proposal ended up not being as profitable for them. Unfortunately for them, I was very staunch and said, ‘I don’t need you.’ If you

don't want to give me the percentage that we agreed upon, then you can find someone else to work with. In both of those instances, the law firms did go back and changed to the agreed upon percentage." [PT#02b]

- The Hispanic American male owner of a construction firm reported an experience of bid manipulation. He explained, "[We] bid on the project and we knew the owner, but the owner ... used our [bidding] information to get more people to do the work cheaper than us." [#49a]
- The non-Hispanic white male representative of a goods and services firm indicated that price shopping is necessary to ensure fair prices. He stated, "I did business with [a borough manager] previously, but she went to another borough and then to [a] smaller borough ... to do business, which I'm totally fine with because that's what COSTARS is about It's open and they wanted to do business locally, but [the borough manager] shopped me around, she shopped around because she was new there." [#72]

The same business representative explained how other dealers will try to undercut competitors by shopping specs to see what another dealers bidding are. He stated that he does not believe this pays off for those firms because COSTARS is an open process. [#72]

- The Black American owner of a construction management firm discussed how his firm experienced bid manipulation. First he highlighted the challenges of any small contractor, and particularly an MBE, in taking on the role of prime contractor. He stated, "Well, a minority firm in Harrisburg is not going to get a prime contract.... there was never any real desire on the part of the white business community to facilitate that level of aspiration for minority firms." Thus, for a key project, his firm decided it would work as a co-construction manager or be a sub-consulting manager. However, after the developer succeeded in getting the City Council's approval for the building project, it changed its attitude toward minority participation. He explained, "And, the truth of the matter is, it prevailed upon the construction manager of record to flip its commitment overnight. The Letter of Support that it had forwarded to the leadership of the organization that was seeking help, changed from a 'we intend to use this firm, and are glad to do so' to 'the earlier letter was a mistake and we rescind our commitment to this MBE firm.' That was psychologically devastating. They wanted us to go from participating as co-construction managers to providing a secretary, who would be a project secretary on the job. In retrospect, I think we should have done that, but at the time it just seemed like another slap in the face from the larger [prime] construction company." [#82]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm indicated that bid manipulation is a barrier for small businesses. She stated, "Large firms don't have the same interest that you do and they try to make all the terms to their advantage. They want to put together terms and conditions that are to their advantage, and if you don't want to play with them, they have 15 other firms that will do that." [#56]

- When asked about bid shopping, the Black American male owner of a professional services firm said, “[It] happens all the time [It’s] a horrific barrier to minority contractors on a daily basis.” [#55]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “Most of the public, local government ... projects that we bid on have already been ear-marked for another company.” [Avail #146]
- The owner of a DBE- and SDB-certified professional services firm observed that subcontracting is very subjective and often manipulated: She described how prime contractors place multiple DBEs and SDBs on their teams and then select the one(s) they like for the actual work. She stated, “They just shop around and ... use one firm against the other. That’s how it works.” [#78]

One business owner discussed ways the Commonwealth could prevent bid shopping. The non-Hispanic white female owner of a DBE- and WBE-certified specialty contracting firm said, “The [general]/prime contractors shop the minority vendors’ numbers after bid submission and use vendors that are not minority vendors, and not the vendors submitted with bids. [I suggest removing] the five-day post-bid timeframe and [reducing] it to zero days. The bid submitted with the vendors named is the one they [should] use.” [WT#05]

The same business owner also said that “bid walks” should be mandatory for everyone named in a bid. She added, “This way all the GCs have access to all the available subcontractors for that bid. The people that take the time to attend, understand the project, ask formal questions, and use resources to put together a proposal/bid will get the true opportunity to win the work.” [WT#05]

A minority business owner indicated that his firm avoids bid shopping by contracting directly with the state. The Black American male owner of an MBE/DBE/SBE/VOSDB-certified specialty contracting firm stated, “[Firstly], we are contracting directly with the state. We do not have to go with the personalities of the general or prime. They cannot shop us, and they are told who they are going to deal with.” [#10]

Treatment by prime contractors and customers during performance of the work.

Business owners described their experiences with unfair treatment by contractors and customers during performance of work. Many reported that racial discrimination either overt or covert may be evident in the marketplace. [e.g., #59, PT#16f] For example:

- The Black American male owner of an MBE- and DBE-certified general contracting firm said, “I did one project where I negotiated with [an] HVAC prime contractor for... months. It was such a long length of time. They actually ... tried their best to get me to do the work for no profit ... basically It came to the point [where] it was only like a \$30,000 contract, but they acted as though it was a \$300,000 contract.” [PT#07]

The same business owner continued, “They tried to [penny] pinch ... me ... from start to finish [And] as far as [supply and renting of equipment ... I can't get the same rates that

they get. So ... a lot of times they'll use that and say, 'Hey ... we can do this for a lower price ... I'm sure you can [too].' [PT#07]

He added that he knows of a minority HVAC contractor who "failed" due to unfair treatment by a prime contractor. He said, "He actually had gotten funded by another contractor, a big contractor. And then the big contractor ran up so many bills on him." He said the prime made the minority contractor "sign over [their] business to [them]" because of the debt owed. He added, "They pretty much scammed him ... and he's out of business now." [PT#07]

- When asked about treatment by public sector customers during the performance of work, the Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, "Come to think of it, in some of these public [agencies] that we're dealing with right now ... they serve mostly the African American community, and they just keep trying to undercut your cost, your price. They always want a discount We're having trouble staying alive and you want to take money from us? This is an agency funded by both federal and city dollars That organization is meant to serve the Black community, and [when] it treats the Black community that way, that's a problem. But you know, we're still able to work with them somehow." [#38]

The same business owner later added, "Actively discriminated against preferred contracts, again [the] Philadelphia [government] is not so bad. It's much more the private market. That's where the big problem is. Yeah, and in Philadelphia I've encountered more homophobia in business than I have racism. I think the people have gotten better at hiding racism, [but] they feel emboldened to be able to express their homophobia recently." [#38]

- The Black American female owner of a DBE- and WBE-certified construction firm indicated that she has experienced discrimination by prime contractors making false representations. She stated, "I have sent workers on projects and the workers told me that different rules apply to Black and non-Black workers My guys said that they were basically used by the prime just to do the dirty work ... my guys were just used So, one of the guys called me up and said, 'The white guys are still working but they laid us off' Now who wants to work for just four weeks? Why can't everybody eat? You eat, why can't I eat? You know? It's sad and it's inhumane." [#63]
- Regarding prime contractors' expectations for their subcontractors, the non-Hispanic white male representative of a WBE- and SDB-certified professional services firm stated, "Prime contractors [look] for a small company, like us ... to be able to do the kind of things that a big company would do." He added, "Security and privacy, and technology things that they ask of us sometimes ... are just a little tough for us, as a smaller company We just don't have those resources, and [the] regulations that the state imposes on the prime trickles down to us sometimes." [#58b]
- The Black American male owner of a DBE-certified goods and services firm said some firms just use him "the bare minimum" because they're required to. He said, "If the contract is a million dollars and they have the 10 percent DBE goal ... that 10 percent that they have to spend, that's all they're willing to spend [They say], 'We're using you just for this.' If it's six months' worth of work, we're going to spread that out It's a challenge. How do you

keep your men working full time if they're only calling you out two to three days out of five?" [#20]

- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm said, "Large firms don't have the same interest that you do and they try to make all the terms to their advantage. They want to put together terms and conditions that are to their advantage, and if you don't want to play with them [then] they have 15 other firms that will do that." [#56]
- The Black American female owner of a WBE- and MBE-certified professional services firm shared an instance where, while performing work as a subcontractor, she felt she was treated unfairly. She explained, "[A firm's] CEO, who was a Black man and had ... run [the firm] for ... the last eight or nine years ... I was doing probably about \$200,000 with them a year. When he retired, a white male stepped into his role ... Immediately, my orders went from \$200,000 to \$0. I [have] done zero business with [the firm] for the last two years. Zero." [#30]
- The female owner of a general contracting firm said, "In construction during the recession, a lot of the primes were having struggles and going under. When they ... would use small businesses, diverse or women or any of them as subcontractors, they did it only to dump the responsibility of purchasing the materials and everything that they couldn't get from the banks But, many of these people never got paid. This is the type of stuff we were dealing with here in Pennsylvania, and nationally, too." [PT#17b]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said he is concerned about his firm's treatment by certain primes that do not pay subcontractors the committed percentages. He said for example a prime might pay three percent to a subcontractor instead of the five percent they're supposed to. He said Department of General Services usually comes to the subcontractor to try and resolve the problem instead of working with the prime directly. He stated, "What happens is they contact the sub ... then the prime [is] going to get upset with the sub, and the sub is out next time. So, I think if the prime is not meeting a commitment, DGS [should] deal directly with the prime rather than getting the sub involved. The sub should not even be involved. [The subcontractor] should just get the commitment level that is [in the contract]." [#28]

The same business owner also said that his firm experiences situations where prime contractors try to hire his staff out from under him. He said that he puts agreements into place stating he will not hire a prime's staff and that a prime will not hire his. However, he said primes will sometimes retaliate by refusing to honor certain pay agreements. He described one instance of a prime engaging in unfair business practices, saying, "We never had any agreement where it said they could hire. [The prime] said, 'Okay, if you won't let me hire, I'm not giving you a rate increase I'm not giving you a rate increase, [and] if you pull out your people I will cut your dollar amount as well.'" He continued, "The [prime] told me, 'We will give you more work if you let us [hire your staff].' But I said no Because ... hiring every person is not easy, and when you hire a good person you want to keep that person." [#28]

He added that they sometimes experience unfair practices by primes. He said some prime contractors don't pass rate increases onto their subcontractors. He stated, "If there's an eight-year contract, sometimes [prime contractors] will not give the rate increase to the [subcontractor]. They will take the rate increase [for themselves]. So, you can have the [subcontractor] keep the same rate for the six [or] seven years" He went on to say that work with prime contractors has improved because the Commonwealth changed the rules from dollar amount-based to percentage-based. He said when prime contractors give subcontractors a portion of a contract, it now has to be a percentage; if the contract increases over time, the prime has to pay the percentage increase to the subcontractor. [#28]

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said if he tries to hire more employees to expand his business, then "primes won't hire [his firm] anymore" because they'll consider him competition. He noted, "It's a catch-22." [#09]
- The Black American female owner of a WBE- and SDB-certified goods and services firm stated that when she is on a job, members of her firm regularly experience discrimination and an unfavorable work environment. She explained, "Experiencing discrimination is almost as easy as looking around, because typically the construction cleaner is the only minority firm that is represented on the jobsite Being on the site, we're under additional scrutiny at times, where ... it's just us. It seems like people automatically think that you're going to steal time or do things unorthodox, just because. So yeah, we've experienced it." [#53]
- Regarding his experiences in the local marketplace, the Black American male owner of an MBE- and DBE-certified professional services firm stated, "I've never seen so much racism and discrimination in my entire life. I'm a top civil rights activist in this whole region [and] I have every degree known to mankind, so I'm very familiar with [the] 1964 Civil Rights Act Western Pennsylvania has a lot of discrimination." He went on to say, "I've broken a lot of barriers out here in that way. There's a cost for everything. [Not giving me business] is a way of them getting back at me All these obstacles are constantly in the way because it's systematic, organized racism and discrimination It's a white man's business." [#16]
- The minority male owner of a professional services firm said Northwest Pennsylvania, specifically the City of Erie, is the worst place in America for Black American business owners. He said, "What are the roadblocks to minority business? Well, the roadblocks are significant in the worst place in America for African Americans. And, I've had very personal and intimate experiences with those roadblocks, because my father was in construction ... and a member of the local laborers' union. They gave my father curb cutouts for years He couldn't build vertically for years. When he would sub with the local contractors he wouldn't be paid for years. It's impossible to sustain a business [that way]. It's impossible to sustain a family in conditions like that." [PT#14a]
- The minority male owner of a construction firm said, "[On a] state contract for a municipality that we're working for in Warren, I asked [the prime] about my payment I said, 'I gave you an invoice [over] a month ago It's been over a month. Where's my

payment?' And the individual on the other end of the phone says, 'You're the only one I know that constantly asks for money' When am I going to get paid? That seems to more the realm of the norm in the construction industry when a minority asks to get paid or have access to money." [PT#14f]

- Regarding unfair treatment by large contractors, the female owner of a goods and services firm said sometimes contractors will try to "make an end-run" around contracts. She said, "We were just awarded a contract for [named product], as an RFP prime. We're so excited about it. But, we're watching large contractors trying to make an end-run around our contract by adding [named product] into other things." [PT#17a]
- The Hispanic American male owner of a construction firm stated that he recently had to freeze a project because after receiving invoices his client paid only half of the stated bill. The client stated the reason for not paying in full was that he had bad experiences with contractors getting paid then not completing work in the past. The firm owner noted a general lack of trust, and added, "All my subcontractors, they are licensed, they have insurance, they have people, they have payroll too. I have to pay them." [#49a]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, "[I face] different treatment on the field due to skin color and not being a natural born American who has gained citizenship." [Avail #127]

One business owner said that he has not experienced challenges as an MBE. The Black American male owner of a DBE-certified construction services firm stated that he has never had a prime contractor refuse to work with him because his firm is an MBE. [#02]

One business owner said that poor contractor-subcontractor relationships prompted her to start a new, separate company. The non-Hispanic white female owner of a WBE-certified construction firm said she is in the process of certifying an engineering company. She explained, "I don't like the way ... that right now everybody's an adversary. The engineers fight with the [general contractors], [they] fight with their subs, and everybody's fighting with everybody ... and pointing fingers, and initiating change orders. It's a disaster." [#22]

The same business owner continued, "[I'm starting] an engineering company to try to come at it from a different angle where I get everybody in the room at the same time, in the beginning, [to] hammer it out. [We'll] all work together so that the owner wins." [#22]

A few business owners reported little or no experiences with unfair treatment by prime contractors and customers during performance of work. [e.g., #84] Examples follow:

- When asked if she has ever been treated unfairly by prime contractors, the non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, "[With] the prime contractors that I have worked with, I have to say that almost all of them have been excellent. So, I would never [say] anything negative about the prime contractors." [#81]

- The Black American female owner of an SDB- and WBE-certified professional services firm indicated that she has had no experience with unfair treatment by prime contractors or customers during performance of work. [#35]
- The non-Hispanic white male veteran with disabilities and owner of a professional services firm reported that he has not experienced any discrimination in the marketplace. He added that advertising as a veteran-owned firm increases his business. He stated, "If they hire me because I'm a veteran, I'd say 90 percent of the time it's another veteran who is hiring me. The other 10 percent ... look at my website [and read] about my background and stuff." [#74]

Unfavorable work environment for minorities or women. A number of interviewees reported examples of unfavorable work environment specifically for minorities or women. Others reported no awareness of any unfavorable work environments.

Some interviewees reported experiences with working in unfavorable work environments for minorities or women. [e.g., #22, Avail #95] For example:

- The Black American male owner of an MBE- and DBE-certified construction supply firm said that he has not experienced any discrimination while working with the Commonwealth. Regarding discrimination on jobsites, he said, "I was a union carpenter. I experienced it firsthand. I had people who told me I would not be successful in life because of the color of my skin. I witnessed it firsthand, and I'm not that old." [#06]

The same business owner said discrimination is "just hidden" better than before, and added, "I go to very few jobsites where I see people of color in the union environment The problem is [that] for the longest time the unions were cousins, brothers, uncles [and] nephews, [and] they took care of their own For them to bring somebody in from the outside, especially a Black person, who they felt was taking their ... piece of the pie, they weren't going to do it." [#06]

- The Hispanic American male owner of a construction firm reported a situation where one of his subcontractors was racially profiled. He stated, "One of the neighbors [called] the police. And then [my subcontractor] explained to them that he was trying to do [an] installation in the property. But even like that, they didn't let him get inside." [#49a]
- The Hispanic American male owner of a construction firm reported experiences of discrimination with inspectors on job sites. He explained, "Some of the inspectors [see that] you look Latino [and think] you don't know anything. Yeah, but I know more than them [and I have] more [licenses] than ... they [do], [but] they are the inspector from the city or state. They think that they know more than me." [#49a]
- Regarding unfavorable work environments for members, the non-Hispanic white female representative of a trade association stated, "Specifically, for the women it's tough. It is tough and it's tough because it's not stuff that's black and white. And of course, now with the political climate it's becoming even more like we're able to talk about it a little bit more. But still, there's barriers there that just are impenetrable sometimes." [#71]

The same trade organization representative continued, “I don’t know what to do about it. I’m very solution-oriented and like get to work, but there’s different strategies that women must take, and it makes it difficult ... especially [for] a woman of color” [#71]

- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm reported on the disadvantages her company has faced as a woman-owned business. She stated, “I think there [have] been some individuals that didn’t want to work with us because we’re a woman-owned business. I know there have been times that I don’t want to do work with [a] company because of their racial discrimination or sexual orientation discrimination.” [#56]

Some interviewees reported little or no experience with unfavorable work environment for minorities or women. [e.g., #24, #58a, #81] For example:

- The Black American male owner of a DBE-certified construction services firm said that his firm has not experienced direct discrimination, though he has his suspicions. He went on to say that his experience is very unique because he started his company after working in the field for 31 years, and added “I’m not going to act like prejudices and racisms don’t exist. They definitely do.” [#02]
- When asked if she has experienced any discrimination as a woman in the industry, the non-Hispanic white female co-owner of a construction firm stated, “Maybe one time in 16 years, but he was just snotty.... Most people are very respectful.” [#47b]
- The female representative of a WBE-certified construction-related firm said that they have not experienced direct discrimination “other than being called ‘babe’ and ‘hon.’” She added, “Or, they’ll look at us strange because we wear pink hard hats If there’s an injustice, trust me, we’re not [going to] let it go.” [#17b]
- When surveyed, the female owner of a professional services business in Central Pennsylvania responded, “I think it can be challenging to be a small woman-owned business. However, I do not feel that I am discriminated against. I think that when you’re a small business, other businesses, particularly financial services, may assume your business is not as important.” [Avail #56]
- The non-Hispanic white female representative of a professional services firm said the company itself has not been discriminated against. However, she added, “Some of the people that we do business with would much rather talk to a guy than a female. So, if there’s something I need to do [where a potential client] work[s] down in Texas on a ranch, on an oilfield, I find it better to have one of the men call. I just think that’s kind of the way it this with some of those people. But no one’s been outright nasty and said, ‘No, we’re not working with you because you’re female.’” [#84]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm stated that he has not had personal experience with discrimination. However, he said, “The system could be better [to] eliminate systematic unfairness.” He added that a lot of MBE/DBE programs have “guidelines or goals of 10 percent or 15 percent,” but that

“prime contractors play the system, and [the] purchasing department or [overseeing] entity does not enforce [those] guidelines.” [#08]

- Regarding any experience with discrimination in the marketplace, the Black American female owner of a DBE- and SDB-certified professional services firm said, “Well, a lot of it’s not in your face. [Instead], it’s just not returning a call or not responding to you, or sometimes in a meeting [someone may try] to discredit or talk over [you]. [It’s] just little innuendos Everybody knows, but I don’t let that stop me.” [#32]
- The non-Hispanic white male representative of a trade association reported that he has not heard experiences related to discrimination from his members. He explained, “First off, you [have] to understand most of the members are white. There’s probably six or seven ... all union members, who are African American. A couple are retired, but they still are very active in some training and recruiting ... for their unions” [#83]

The same trade association representative continued, “Now, they will tell you that they have never faced what they consider to be deep discrimination or racism, or harassment in the trades. [But], everybody will readily admit [that] it’s not a gentle industry. [If] you’re a first-year apprentice and you’re on a job site, you’re going to take a lot of grief It’s just the nature of the business.” He added, “I asked all the women I’ve interviewed and talked to [if they’ve] felt discrimination or sexism, or anything like that, and ... they’ve said no.” [#83]

- The Hispanic American male owner of an SDB- and MBE-certified professional services firm reported that he has not faced any barriers based on the race ownership of his firm. He went on to comment, “They look at me and they don’t know I’m Hispanic. I never had that challenge.” [#77]
- The non-Hispanic white female owner of a WBE-certified construction-related firm stated that she has not experienced blatant discrimination in the marketplace. [#17a]
- The non-Hispanic white female owner of a WBE-certified goods and services firm said that she has never faced discrimination while doing business in the marketplace. [#23]
- The Hispanic American male representative of a trade association stated that he has not heard from members regarding discrimination in the marketplace. [#86]
- The Black American female owner of an SDB- and WBE-certified professional services firm stated that she has not experienced discrimination. [#35]

Any double standards for minority- or woman-owned firms when performing work.

Interviewees discussed whether there were double standards for minority- and woman-owned businesses.

A number of business owners and representatives reported double standards based on race, ethnicity or gender. [e.g., PT#02c] For example:

- The Black American male owner of an MBE- and SDB-certified construction services firm said that he experiences double standards while performing work “all the time.” He said

that his firm was called into question for their work on ADA compliant wheelchairs ramps while other companies doing similar work were not. He explained, "One [company handled] handicapped ramps the same way we did, and he had his [approved while] we had to change ours I've documented [this] with photos, where ... if [a] minority company does the exact same work, there's a different standard and it may or may not be accepted." [#27]

- The male representative of a specialty construction firm said that he also has "a few years" experience working at a professional services firm, and said, "[They give] the better leads ... to other white agents [They're] not wanting to give those good leads to the minorities. And they want ... to give you a crap lead that ... you're not going to make a lot of money on." [PT#10a]
- The Black American male owner of a DBE- and MBE-certified construction firm said general contractors and primes look for MBEs to meet participation goals. However, he remarked that there are only certain jobs that prime and general contractors are willing to give to MBEs, despite their qualifications. [#13]
- The Black American male owner of a DBE-certified construction services firm said there is a lot more "leniency" for majority-owned firms. He said the expectations "aren't as high" for non-DBEs. [#02]

The same business owner stated that because firms know the expectations are higher for DBEs, prime contractors "set their goals higher" regarding insurance and bonding for them, which costs the DBEs more money. He said the amount of insurance he carries for a firm his size is "not normal," but "necessary to work with the larger companies in the marketplace." [#02]

- The Black American male owner of an MBE- and DBE-certified construction supply firm said "it's sad that a woman" has been so "degraded that she" is paid less than a man for the same job. [#06]
- The Black American male owner of an MBE- and SDB-certified goods and services firm reported instances of double standards, specifically the blaming of small or minority-owned firms when something goes wrong. He explained a situation where "something went wrong and the prime immediately assumed that [his firm] was the problem." He added, "There were two other vendors in addition to my company that could have caused things to go wrong." [#60]

The same business owner went on to describe how the two other vendors in the situation were "huge companies, so the prime immediately [went to him] with a threatening email." He said he hired someone to do independent research to prove their innocence in the matter, explaining, "That's the only way that they would let up on me and go against the two vendors that were large like the prime." [#60]

- The Hispanic American male owner of a construction firm reported an experience of discrimination by a financial institution. He said that a client wrote a check to his firm before ensuring sufficient funds were in the account. When the check bounced, he said that

the bank told him that his firm was attempting fraud. Despite the client adding enough money to the account immediately after, as well as writing a letter to the bank, the account at the bank remained closed and his firm was forced to open a new bank account. [#49a]

- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm indicated that double standards exist in both the public and private sector. She stated, “In the private sector you might get fired for hiring a small disadvantaged business that doesn’t perform, but you wouldn’t get fired for hiring a KPMG [firm] that doesn’t perform.” [#56]

For a few business owners, double standards did not exist. [e.g., #21, #77] For example:

- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm stated that he does not know of any situations where a prime contractor unfairly judged his work or held him to a standard different than others. [#28]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “I’m not aware of any situations where we’ve been discriminated against, no.” [#58a]

One business owner said that he was treated unfairly as a union apprentice. The Black American owner of a DBE-certified construction services firm said when he started as a union apprentice he was the only African American in the class, and for three years his instructors were only white men. [#02]

The same business owner went on to say he was not treated the same as everyone else, though it was never bad enough to “raise a flag and protest, because [he] always had a bigger picture in mind.” He added, “[Racism] was a hurdle, but never an obstacle.” [#02]

Some interviewees discussed whether or not there is a fair playing field in the Pennsylvania marketplace. Comments include:

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said, “Here’s the problem ... a lot of people are averse to [certification] programs, so that’s one thing. You’re lumped into this area that’s all [subcontracting] roles. Whereas, if everything was equal and an even playing field, maybe firms like us could have grown like anybody else, on our own merits, to be a larger firm.” [#09]
- The Black American male owner of an MBE- and DBE-certified general contracting firm said that he “thought ... there was going to be a level playing field” after receiving his MBE certification. He continued, “I found that in business, [it’s] is very cutthroat If it can stomp you and leave you behind, it will I know people who have been stomped on, left behind.” [PT#07]

The same business owner continued, “The majority contractors ... don’t have really any interest in subbing out to minority contractors If they don’t have a definite incentive, for the most part ... they just won’t do it.” He added, “They go with other majority subcontractors” [PT#07]

He went on to say, "I had applied for a couple of grants years ago [because] my credit score is not ... very good for a loan Those things just seem to be out of reach sometimes ... for a minority contractor." He said it "would be so much easier" to get funding if he were "a white gentleman [with] 35 years of experience in the trade." He added, "If that playing field could be leveled, that would greatly increase our ability to do work [with the] state, city [and] county. Any work, you know?" [PT#07]

- The Black American female owner of an MBE- and WBE-certified professional services firm said that she sees the same few firms get the Commonwealth's training contracts "over and over again." She added, "Part of it also is I'm well aware of the fact that a lot of the government agencies also don't enforce the use of MBE, WBEs, or DBEs. If they [do] have them, it's the same favored group." [#18]
- The Black American male owner of an MBE- and DBE-certified professional services firm said, "Anybody [who] gets federal money or state money, or taxpayers' money is supposed to create a level playing field." He went on to say a local, tax exempt hospital refuses to give him business because the "lady ... in charge" does not like him. He said that he was threatened with arrest by the hospital police after he continued to ask them for opportunities. He said, "I said, 'Well, come arrest me. They never did [They were] supposed to be promoting diversity.'" He said that he struggles with other healthcare providers too, saying, "I have a lot of emails out to Allegheny Health Network and Highmark because they use a [billboard] company out of New York and Chicago I've contacted all the people and they keep telling me they're going to give me [an] opportunity ... a chance. They've given me RFPs, [but] never [an] opportunity." [#16]

The same business owner continued, "State schools are [also] discriminative. Penn State [has] been pretty fair, but [Indiana University of Pennsylvania] discriminate[s] a lot [IUP] pretty much feel[s] they can do whatever they want as well, and I constantly document everything, and ask, 'Hey, [are] there any opportunities?' Therefore, there's a record of it I have to have a record of it." [#16]

- The Black American male owner of a construction services firm said that he worked with "a lot of other subcontractors ... and the larger companies" before starting his own firm. However, he said since starting his own firm he struggles to get work because public sector clients question his ability and "capacity to do the job." He added, "When I work[ed] for [primes] and we [ran] the job, I was qualified." [PT#10]
- The Black American female owner of a supply firm said that she thinks "less than ... half of one percent" of contracts are awarded to minority-owned firms. She added, "We need to take this seriously and put in place the protocols. And then have ... what I would call the courage to talk about this, and to put in place the ... guidelines [to fix] this." [PT#10e]
- The Black American male owner of a DBE- and MBE-certified construction firm said if someone looked at his resume they would say, "Wow, he knows all that? He's done all that?" because he is a Black American male and "[has] more certifications than anyone in [a local union], and [is] not a foreman on [any] of these projects." He said that those who

discriminate do not want to accept minorities into their groups. He went on to say, "They want to be rich and they want you to be poor." [#13]

- The non-Hispanic white female owner of a DBE- and WBE-certified supply firm indicated that there is not a fair playing field in her industry. She said most of the people she deals with are men, and commented, "Ninety-nine of the people I deal with are [men]." [#07]
- The Black American representative of a business assistance organization said, "I think the percentages on the employment end are out of kilter. And, I think if you look across the board at public employment in our region, whether it's in the school district, whether it's in the city government, whether it's in the state government or the county government, you'll see unacceptable disparity in terms of minority participation." [PT#14e]
- Regarding whether or not there is a level playing field for firms in his industry in the Pennsylvania marketplace, the non-Hispanic white male owner of a construction firm said, "If I tell somebody [my rate is] \$50 an hour, they [say], 'Oh ... the other guy's only charging \$40.' Well, if I get it done in an hour and the other guy [takes] an hour and a half, who's ahead? So ... I can't compete." [#51]

The same business owner continued, "Maybe it [comes down to] educating the consumer ... I'd like to see contractors on the same standard as far as knowledge, or some kind of knowledge requirement, because then at least people have somewhat of a level playing field, or [at least] a more level playing field ... [If] there's a guy driving around [saying], 'We fix all kinds of generators,' I think that's great, but are [they] certified by the generator companies to actually work on it?" [#51]

- When asked what barriers her firm faces in the local marketplace, the Black American female owner of a DBE- and SDB-certified professional services firm stated, "Well, this is a very competitive business, and overall, I would have to say that relationships matter. Sometimes it doesn't matter how good you are ... if somebody has a relationship with someone [else], they could push you right out of the game. And though that's not fair ... that's part of it. That's a big part of it, so it gets to be relationship-driven sometimes, instead of [driven by] talent." [#32]

Regarding the Philadelphia marketplace specifically, the same business owner continued, "Even [when] talking to other entrepreneurs and small businesses, it's just hard to get in." She said she's also working in Chicago and Atlanta, and commented, "It just seems like it's easier [in those places]. [It seems] you're more welcome as a minority getting into business [there] than ... in Philadelphia and the State of Pennsylvania." [#32]

- When surveyed, the owner of a construction business in Central Pennsylvania responded, "A lot of people don't hire women. [There are] a lot of narrow-minded men out there. They tend to go more for the price than the quality." [Avail #129]

H. Additional Information Regarding any Race-, Ethnicity- or Gender-based Discrimination

The study team asked interviewees about whether they experienced or were aware of other potential forms of discrimination affecting minorities or women, or minority- and women-owned businesses. This part of APPENDIX D examines their discussion of:

- Any stereotypical attitudes about minorities or women (or MBE/WBE/DBE);
- Any evidence of a “good ole’ boy” network or other closed networks;
- Any other allegations of discriminatory treatment; and
- Factors that affect opportunities for minorities or women to enter and advance in the industry.

Any stereotypical attitudes about minorities, women or other disadvantaged or diverse business owners (or MBE/WBE/DBEs). A number of interviewees reported stereotypes that negatively affected minority- and women-owned firms. [e.g., #20] For example:

- The Black American male owner of a DBE-certified construction services firm said that he has heard contractors discuss how “[MBEs] don’t respond, their paperwork is always behind [and] they don’t pay their bills.” He said that his company tries to “break down” these MBE stereotypes by working hard to deliver projects on time and by ensuring paperwork is “pristine.” [#02]

The same business owner said that he encourages other MBEs to do the same because he’s “been on the other side of the fence” working with large companies. He added that large companies only use minority firms “as needed.” [#02]

- The non-Hispanic white female owner of a WBE-certified construction firm said that she experienced stereotypical attitudes from vendors, while customers “have been pretty good.” Regarding a bad experience with a vendor, she said, “My office was back in the corner, sort of away from everybody, and this [male vendor] came in and he reamed me out about what a terrible person I was And ... he leans across my desk and he said, ‘You are really pretty,’ and I was like scared to death.” She continued, “So, then I learned a lesson from that. I never [meet] with anybody [if] I [don’t] have somebody else in the office with me And ... I don’t let myself get in situations where it’s just me and another man, because I know that’s asking for trouble. And that’s ridiculous, because two guys go out together all the time [with no problems].” [#22]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said men in her industry “assume women don’t know anything about electrical work.” She added, “Of course most of them are older than me and have been in the industry longer, but I have finance experience too.” [#14]
- The Black American female owner of a DBE- and WBE-certified construction firm stated that she has experienced others not wanting to work with her firm. She said, “They don’t

think we pay our bills But color doesn't mean anything. They don't pay if they get financially messed up. They don't pay their bills, but that seems to be alright." [#63]

- The Black American male owner of an MBE- and SDB-certified construction company said people often view disadvantaged firms as less qualified and assume they receive their work through set-asides rather than skill. He said that he spoke at a local business club about his firm's extensive experience when an audience member asked him, "How much work do they give you?" When he asked them to clarify, they said, "You know. How much do these owners give you as set-asides?" He said that he "had to pull back a little bit" in shock, and said, "He did not even hear [about my many] projects. He just ... evaluated the system of procurement." [#37]
- The non-Hispanic white female owner of a DBE-certified construction services firm said while she has experienced discrimination in the marketplace, she does not think "it had any true impacts on [her] professional life." She said that she has experienced "sexual discrimination [and] age discrimination, mostly in the form of verbal." She added, "I guess [it's] not anything that's actually held me back from getting any contracts or positions or anything like that, and nothing from the state. Although, I will say I am shocked Pennsylvania Turnpike is very, very, very ... low on women." [#12]
- The non-Hispanic white female owner of a WBE-certified professional services firm said, "Even though this is 2017 and we all like to think there's fewer barriers between gender ... race and everything else, it still sucks." She said when she first started her business, the owner of a "huge engineering company" said that she "had no business starting up a drilling company." [#10]

The same business owner said this owner "spent a lot of time bad-mouthing [her] because [she] wasn't part of the boys' club." She said at pre-bid meetings "he would be ignorant to [her]," and that to this day this engineering company "absolutely will not ever use [her firm]." [#10]

- The Black American male owner of a DBE- and MBE-certified construction firm said, "I've had people come up to me [from MWBE offices] and tell me I'm talking ghetto to these primes and contractors [and that] I'm not a businessman, I'm a laborer." He said people from DBE offices and the Pittsburgh Mayor's Office have told him he's "talking ghettoish and [that he] need[s] to be quiet." He added, "The people from the mayor's office said if I don't be quiet, my company's going to get blackballed." [#13]

The same business owner said that he faces similar problems when working with prime contractors, because "they want you to speak the way they speak." He went on to say, "It takes time for me to convert myself into a businessman after being a laborer as long as I've been a laborer.... In the situations I go into, I might not know what to say, and they're expecting me to say certain words to them and I don't know those words, and I probably won't ever know those words. But [they shouldn't] just say, 'Ok, then we're not going to give you the job.'" [#13]

- The non-Hispanic white female owner of a DBE- and WBE-certified specialty contracting firm said general contractors have a “bad perception” of minority vendors. She said, “It is thought that we can’t staff projects ... can’t wait the normal time for our money ... can’t meet schedules, [and] are more expensive than others. I am here to say that is not accurate, but until the GCs/primes have good experiences, nothing will change. We need a chance to build good working relationships with the state and the GCs.” [WT#05]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said, “After 30 years I get people that call here and say, ‘Can I talk to somebody in sales?’ [then say], ‘I’ll call back tomorrow when there is a guy there.’” She said that her company made a name for itself despite her still getting the “do you really know what you’re talking about” attitude from customers. [#07]
- The non-Hispanic white female owner of a professional services firm described a situation in which she was not awarded a state contract due to her disabilities. She explained, “I thought my proposal was strong and I asked for the debrief to find out why we didn’t get the business, you know, the one that you’re allowed to request. And, what I learned in really probing during the debrief was that one of the people, who’s a state government employee who is on the [review] committee actually said, ‘We know the CEO has various disabilities, including fibromyalgia and we, therefore, don’t think she can hold up to the travel schedule that this would require.’ So, that was information that I learned and realized that I was actually discriminated against for having a disability.” [#79]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that she has experienced discrimination while doing business in the marketplace. She said, “Depending on how many Black women you’ve interviewed, I’m sure you’ve probably heard we’ve got the double-barrel. It’s like, first of all, we’re not supposed to be smart This is the first stereotype that because we’re a woman, we’re not supposed to be smart. Then there’s the other part of it, if we’re a Black woman we’re not supposed to be smart [either].” She continued, “Sometimes [prime contractors] just won’t even talk to you You can be in the same room and they can know what you’re there for, and they will rather work with ... a white woman than work with a Black woman, even though the certification is still WBE. I’ve seen it over and over again, where the Hispanic firm or the African American firm will be more qualified, but because of the fact it doesn’t actually meet their standards, they won’t even consider it.” [#18]

When asked about stereotypical attitudes on part of customers, the same business owner said, “There are stereotypes. Just because you’re a diverse business doesn’t mean that you’re not qualified. Sometimes you don’t even have the opportunity to show you’re qualified because of the fact that there’s the automatic [assumption because the business is a DBE].” [#18]

She went on to say that she thinks the Commonwealth’s diversifying workforce has made a positive difference. She explained, “I’ve seen recently has been a shift in leadership. I think the state being more intentional in having more of a diverse leadership is important to strengthen opportunities for non-white organizations and even employees.” [#18]

- Regarding stereotypes by customers or buyers, the Black American male owner of a DBE- and SDB-certified construction supply firm reported, “Absolutely there are stereotypes ... [It’s] worse than ever” He added that he has a non-Hispanic white woman employee in his office to answer the phone for that reason. [#03]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that he has “absolutely” had to deal with stereotypical attitudes from customers. [#09]
- The non-Hispanic white female owner of a LGBTBE-certified professional services firm reported on stereotypical attitudes from customers and buyers, saying, “Last year I got a booth [at the Pennsylvania conference for women] and didn't have a whole lot of traffic through my booth. I don't know if it's because of what my booth was selling, or whether ... it was more [than] that One person did say, 'Oh this is Miss Doubtfire’s booth.’” [#41]
- The Subcontinent Asian American male owner of a goods and services firm said that he has experienced some stereotypical attitudes, though “not many.” He added, “[Customers] might have [negative] perceptions, but as we start communicating they change their perception, at least for me.” [#15]
- The non-Hispanic white male representative of a small business development organization reported that women-owned engineering firms that he works with experience discrimination in a male-dominated field, and that some owners with disabilities that he works with are looked down upon with their ability to get the job done often questioned. [#46]
- The non-Hispanic white female owner of a SDB-certified construction firm stated, “I do have issues at times, such as [clients or other firms not wanting] to speak to me, or ... they'll say, 'Well, we want to talk to the owner’” [#64]
- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm reported experiencing discrimination. He explained, “If you're gay and you're running a company, it's okay if you're in a subservient role, doing something as ... a subconsultant. But, you know, you better not be the leader of the group. That's pretty clear. They don't want people of this designation to be leading anything That's the discrimination I got at my old firm They worked very hard to not let me be president, [so] I broke off and started my own firm.” [#62]
- The non-Hispanic white female representative of a trade association indicated that some of their LGBT-owned members experience stereotypical attitudes from customers and primes. She said one of these members may have lost a private sector bid due to discrimination, and added, “I know discrimination is definitely there, and that’s why we have these groups so people can be in the room with the right people” [#71]
- The non-Hispanic white female owner of a WBE-certified professional services firm said, “When it comes to discrimination, people talk about it all the time, but I just don’t think about it.” However, she said that she spoke to a woman recently who “definitely felt it in her

position." She went on to say that if she was ever discriminated against, she "didn't know it," and added, "I think there is subtle discrimination." [#04]

One minority business owner said that she hired a non-minority to be the “face of the company” in order to avoid stereotypical attitudes. The Black American female owner of a closed construction services firm said that she hired an employee to circumvent stereotypical attitudes by customers. She stated, “[I hired] someone else ... that didn't look like me, so it [wouldn't be] as difficult. He was the face of the company, so he would get things done.” [#26]

Some interviewees reported no experience with stereotypes that negatively affect minority- and women-owned firms. [e.g., #35, #84] For example:

- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that he has not been discriminated against as a Small Diverse Business owner. [#28]
- The Black American female owner of an MBE- and WBE-certified professional services firm stated that she has not experienced any direct discrimination in her capacity as the owner of the firm. She said, “[I haven't] gone home depressed about anything that has happened [to me in my years] in this business, except ... about [a] contract [and not getting it].” [#11]
- The Hispanic American male owner of a construction firm said that he tries to maintain a positive attitude regarding his experiences and does not label negative ones discriminatory. He stated, “I try not to put too much attention to that. That's every day for me, so I can't wake up today and that be the subject of the day. So, I got to put that aside. I don't look at it that way I'm not putting [negative experiences] as far as discrimination. It could be happening, [but] I try not to put any attention into it” [#64]
- The non-Hispanic white female owner of a SDB-certified construction firm reported that although she has experienced negative attitudes and discrimination, she has not experienced anything that directly disadvantages her or her business. She explained, “As far as like getting loans at the bank, or from other contractors that we've worked with ... we have not had any problems [when] working with either public sector or private sector jobs.” [#65]
- The Subcontinent Asian American male owner of an MBE-certified professional services firm reported that he has not experienced discrimination in the marketplace. He explained, “I think people are mature and educated enough to understand from the perspective of what they want to get done and what we bring to the table. So, they'd rather focus on the core expertise than where I come from or what color my skin is.” [#21]
- When asked about discriminatory treatment in the local marketplace, the non-Hispanic white male owner of a construction firm said, “Discrimination is a strong word and it's too often used. There's going to be certain people that don't want to talk to you because you're not who they've been using forever, [but] there's no real discrimination. It's called the sales cycle. If you buy Chevy your whole life, it's going to be a harder sell for a Ford to you. It's no

different [for a] new construction company. It's a hard sell for some people [who are used to another firm]." [#85]

- Regarding discriminatory treatment, the non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm said, "I'm just so out there that if I have experienced discrimination based on being a gay-owned business, I [wouldn't] know They wouldn't say it [directly]." She went on to say that some general council may avoid meetings with her firm because it's LGBT-owned. She explained, "They'll just not take the meeting [if it bothers them], because they know [my status]. It'll say in the subject heading, 'LGBT-owned law firm' So, if you get that, you're just not going to take the meeting. And so ... I don't know that I've experienced any barriers [due to discrimination]." [#33]
- Regarding any stereotypical attitudes when working with public entities, the non-Hispanic white male representative of a small business development organization reported that he is not aware of any governmental resistance to using SDBs or DBEs, because using those firms at the federal level is law. He did note that often times there is a need to educate procurement officers on the requirements. [#46]

Any "good ole' boy" network or other closed networks. Many interviewees reported the existence of a "good ole' boy" network or indicated that other closed networks exist. [e.g., #16, #22, #27, #37, #49a, #57, #61, PT#09, PT#10a, PT#16a, PT#17d, Avail #100] For example:

- When asked about the existence of "good ole' boy" networks, the Black American female owner of a DBE- and SDB-certified construction services firm stated that she has to contend with closed networks. She said, "The hardest thing about this industry isn't racial, it's gender The men don't normally want women in the [industry], they don't think we belong here." [#01]
- The Black American male owner of a DBE- and SDB-certified construction supply firm reported, "[There is] definitely a 'good ole' boy' network." He added, "On bid day we send the bid out to everyone, but personal relationships trump fair play. It's the 'good ole' boy' network all day and night." [#03]
- The Black American female owner of an MBE- and WBE-certified professional services firm said, "Especially in the Pittsburgh area, they're known for the ole' boys' [club], and ... if you're a female, then now you've got to learn to play golf, because the decisions are made on the golf course. Then if you don't play right with one person, then they tell their friend." [#18]
- When asked about closed networks, the Subcontinent Asian American female owner of a WBE-certified professional services firm stated, "I'm sure it's there ... I mean, it is." [#44]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, "There [are] still issues with the 'good ole' boys,' being a woman engineer. There are some places [where] I wouldn't even place a proposal [because it would be] just a waste of my time. I also try to stay apolitical ... out of politics, [but] that doesn't help either." [Avail #57]

- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said, “A lot of contractors want to use who they've known for years. I face that.” She continued, “I would say that the Pennsylvania contracting market is a ‘good old boys’ club. It's very hard to get in with them, and there's only been three or four main manufacturers in this state, and ... they wouldn't give me the time of the day. They would think I'm not really running this company, and yet I'm here, day in and day out. When I had no employees, I was out there bending the bar myself. I feel that people shopped my number and [gave] it to someone else [to] say, beat [her] number.” [#25]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said that she has faced “hostility in Western PA,” and added, “It's an old boys club. They don't like a woman in this business. They don't think women belong in this business.” She said that she has heard many “under the breath comments like, ‘I have to give you this.’” [#14]
- The Hispanic American male owner of a construction firm said the local art scene in Eastern Pennsylvania is a closed network that's hard to break into. He stated, “It seems like any work, or public art that's being done locally is not out for grabs. You [only] know about it after How do the local people [know about it]? I'm sure there's plenty of people asking the same question. How do these [artists] get the opportunity, and nobody knows about it?” [#64]
- On the topic of closed networks, the Black American male owner of a DBE-certified goods and services firm said that he has struggled as a new company to break into the field. He said, “[It's because of] existing relationships that [prime contractors and subcontractors] already have in place You almost have to give up the kitchen sink. You have to give up, throw away all the profit to get the experience.” [#20]
- When asked about the “good ole’ boy” network, the Black American female owner of a DBE- and SDB-certified professional services firm stated, “That's alive and well. That's what it is, mostly ... [a] ‘good ole boy’ network. So, what do you do?” She said that she went through a year-long “CEO program” with networking events and seminars and indicated that the only companies that got business by the end of it were run by white males. [#32]
- When asked about the good ole’ boy network, a representative of the Hispanic Chamber of Commerce of Central Pennsylvania, responded, “Well, I think...in certain cities, it's more prevalent than...in others. I mean, central PA is one of those kinds of places where, you know, there's four of five, or six companies that control 90 percent of the work, the construction work. Public work. And then, there's a middle tier that gets big chunks of that work, and then there's the lower tier business where, you know, we started and many of them, you know, members of the (Hispanic) Chamber, whether they're concrete workers or they own a paver. I'm talking largely here with site development work and/or highway work. They do end up getting some pieces of work because there is a goal, participation goal saying a PennDOT job, I think, right now is 10 percent.” [#89 TA]
- Regarding closed networks, the Black American male owner of an MBE- and SDB-certified construction services firm said, “[The Commonwealth] have continuous work on a lot of these projects [Companies are] there year-round working on other things that [the

Commonwealth] don't put out to bid, things that we never even know they're doing You can go to the pre-bid meeting. You could reach out to them. You could have conversations with them, and ... submit a decent number to them, [but] somehow or other you're still not invited to the table." [#67]

- The non-Hispanic white female owner of a WBE-certified professional services firm said that she has heard other female business owners say the marketplace is a "good ole' boy" network. [#04]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm indicated that closed networks do exist. He said that he believes his firm was not awarded a particular contract because of an existing relationship between the prime and another subcontractor. He stated, "When you have a point system [for awarding contracts], it can be used to the advantage of anybody If you want to give it to anybody, you can do that." [#43]
- Regarding closed networks, the Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, "It's a closed network, but you're going to see me here and eventually this will be my network as well. So I'm not backing down from that challenge, but it's definitely there." [#38]
- The non-Hispanic white female owner of a WBE-certified professional services firm said, "For me personally, the biggest obstacle is that I'm just not a member of that boys club." [#10]
- The Subcontinent Asian American male owner of a goods and services firm said that he has faced closed networks. He elaborated by stating, "I wasn't born here [in the United States] so I don't know anybody ... in a government office, I don't have any communication connections. It's [a] disadvantage because I wasn't born here [in the Pittsburgh region] and didn't go to a school around here, but that would be true of anybody [not from the Pittsburgh region], it's not just me." [#15]
- Regarding closed networks, the Black American male representative of a construction services firm commented, "If one should take the time to ... look and determine what type of fish are swimming [out] there, you'll find that [most] of them [are] fish of [a] particular type It's all the guys who have always been there, the sharks." [PT#10c]
- The Black American and female veteran owner of a VBE-certified contracting firm indicated that closed networks may exist in the Pennsylvania marketplace. She commented, "Just looking at different stuff, I'm [wonder] how ... the same people keep getting the same things. How do the same people get the same contracts all the time?" [PT#11a]
- The Black American male owner of a DBE-certified construction services firm stated that there is "definitely a 'good ole' boy' network." He said when he was an employee of the larger companies, he was "privy to that 'good ole' boy' network because of [his] experience." He added, "I guess you could call it my character I want the best out of every individual that I run across" [#02]

- The Black American male owner of a DBE- and MBE-certified construction firm said that oftentimes the Commonwealth hires “family and friends and relatives.” He noted, “It’s the same thing happening out there in the field. Black people and white people don’t sit together on construction jobs.” He said the unions were the same way, hiring “their family and their friends and everybody else before ... send[ing] out a Black person, unless you’re a[n] ... Uncle Tom.” [#13]

The same business owner continued to discuss the “good ole’ boy” network, saying that prime contractors “want to keep the same certain people, the same certain companies working.” He continued, “If [prime contractors] let women and minority contractors participate on jobs, then that means I can hire my family, I can hire my friends.” [#13]

- The Hispanic American male owner of a consulting firm said based on his experiences, he has “a true feeling that there is absolute bias in selecting vendors [based on] existing relationship[s] [and] who knows who in that entity.” He went on to comment, “[This] has been very clear.” [WT#02]
- The Hispanic American female owner of a professional services firm said the marketplace is a “very, very closed network.” She indicated that it’s difficult for minorities and women to break into the closed network. She later said, “I see ... some ethnicities being represented well, but others are not, like the Hispanics” [PT#04]
- The Subcontinent Asian American male owner of a goods and services firm said that closed networks are a challenge because, “[I don’t] know the connections to get to who can get [projects for the firm].” [#15]
- Regarding closed networks, the Black American male owner of an MBE- and DBE-certified construction supply firm stated, “People do business with people they are comfortable with, that look like them That’s true. That’s why I don’t think you can fight that battle, but what you can do [is look at the contracts].” [#06]

The same business owner later said that the Commonwealth compels companies to be “inclusive, [and] to have some diversity.” However, he added, “The first thing [companies] do is start making excuses. [They say], ‘There are no diverse businesses. There are no women-owned businesses.’” He said these companies “don’t look,” they “push back.” [#06]

- The Black American female owner of a closed construction services firm said that she faced closed networks in the Pennsylvania marketplace. She explained, “We have a builders association in Erie, [but] they never invited me to become a part of it, even though I was a builder. Then when they sent mail, they wouldn’t send it to me as the owner, they sent it to [my employee who] wasn’t the owner” She continued, “It’s like not being invited to the game. Everybody else is going, but they’re not inviting you.” [#26]

The same business owner continued, “The only reason is because I’m minority. They’ll give another one, but if you’re going to give that reason, then you need to give the same reason to everyone else. If it’s because I didn’t pay [someone] on time, then I’m sure somebody else

didn't pay [that person] on time too, but they're [still] being invited to the party. So, why am I not being invited?" [#26]

- The non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm said that she wishes that the Commonwealth would be less “political.” She referred to the “political” nature of the Commonwealth as the “good ole’ boys” network, and added, “I just wish, I just pray that [the Commonwealth] would make it less political ... to work with the state” [#05]
- The Black American female owner of an MBE- and WBE-certified professional services firm stated, “There’s a good ole’ boy network in terms of how firms are chosen sometimes For instance, an organization in the city had a real shake-up about six months ago ... and I said, ‘This is an organization in a Black community, and they’re going to bring in a white knight to turn it around,’ and the powers that be in the City [of Pittsburgh] did.” She continued, “I think we send the wrong message when we don’t look in the community and see [if] there [are] people [there] that could help to really turn around what’s happening [in the Black community].” [#11]

The same business owner went on to say, “The powers that be are not just in the government. They are in the City [of Pittsburgh] in positions of power that can help make decisions like [choosing a leader] Most of the foundations are run by whites, not people of color. It’s not just the good old boy network, it’s that space of power, whether it’s good old boys or good old ladies.” [#11]

- The Black American male owner of an MBE- and SDB-certified goods and services firm reported that he believes there is a “good ole’ boy” network in his industry. He noted, “You do the same thing as somebody else but you’re not in the room unless there’s some advantage that those in the ‘good ole’ boy’ network can’t offer.” [#60]
- The Black American male owner of an MBE-certified professional services firm indicated that closed networks exist in the Pennsylvania marketplace. He said, “Ultimately, I would suspect the decisions of who gets work would be based on relationships. So, to the extent that [the] process is truly objective, I’m sure it’s very difficult [to say that].” [#34]
- The non-Hispanic white female representative of a trade association indicated that closed networks exist in the Pennsylvania marketplace, especially in local municipalities. She said, “If you’re a stranger, no matter what color skin, it takes a long time for you to be accepted So, I feel like there’s a little bit of that going on with business with the municipalities. [If] they’ve used [a] person for years, it’s like you’re a stranger so you are brand new. The trust [is not] there.” She went on to comment that the market is “pay to play.” [#71]

The same trade association representative later said the “good ole’ boy” network affects people based on their “race, ethnicity ... gender, and sexual identity.” [#71]

- The owner of a DBE- and SDB-certified professional services firm observed that a “good ole’ boy network” does exist where prime contractors protect each other’s interests. Moreover, she described how these contractors collude to ensure that small subconsultants do not

receive contract opportunities. She stated, “Yeah, there's a lot of the good old boy network where the primes take care of each other. And then I think that in the activities I've seen they work to make sure that the subconsultants who are small never get hired.” [#78]

- The non-Hispanic white male owner of a LGBTBE-certified professional services firm said large companies often exclude businesses outside of their network. He added, “They only want to work with X, Y, and Z vendors. They don't want to work with anybody else. So, the small businesses are basically snuffed out of having the opportunity.” [#24]

The same business owner continued, “When [large companies] say they're giving opportunities to small business, I'm not sure what kind of small businesses are getting the opportunities.” He later commented that some companies may hire vendors because they're getting kickbacks from them. [#24]

- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said that he has encountered the “good ole’ boy” network while pursuing work in the Pennsylvania marketplace. He stated, “I think the reason we don't get jobs is because of the size of our firm, and not having a relationship established with the individuals ... in charge of making that decision.” [#77]
- The non-Hispanic white male veteran owner of a professional services firm, stated that he has experienced the good ole’ boy network; however, he had no comment about any negative effect on minority or women. He explained that he has no problem with these networks and that he has benefited from them, likening them to a form of marketing. He stated, “In the private sector, and for some of the townships, and some of the local developers, they have somebody that they use all the time. You pat my back, I'll pat yours. You know, you do this survey work for me, or you send, like this, realtor, he will get him to do some surveying, and then the surveyor will get him some properties to sell, and things like that. Which I don't think it's a real big issue, because, I do, personally, like it if someone does business with me, if they buy a Christmas tree from me, or they get me to survey their property, and they have a business or service, I do like to call them first and give them an opportunity to do something for me, whether it be a plumber, or a roof contractor. Well, as an example, last year, something like that, I put a new roof on. And, the guys did a fabulous job. I mean, they showed up, they did the job perfect, they showed up exactly the day they said, the day was finished. Everything went well, and I got to be friends with them, and I gave them my card, and lo and behold, within the year one of them got me to do some survey work for him.” [#91]
- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm said that she thinks there is a “good ole’ boy” network in her industry. She stated, “I do think that the ‘good ole’ boy’ network is ... certainly alive and well. And there are certain projects that we pursue, and have lost, because ... of not having that connectivity. So, that still happens. It doesn't happen all the time, but it does happen. Absolutely.” [#61]

A few interviewees said that closed networks are "the way it is" in the Pennsylvania marketplace. For example:

- The Subcontinent Asian American male owner of an MBE-certified professional services firm stated that his firm struggles with closed networks. He said, “A lot of business is done through networks. [For example], people you went to school with, people you went to college with [or] that you worked with before. That kind of network builds over time To break into those networks, a lot of time it’s difficult. A lot of time if you find someone who knows people in the network then it’s that much easier. It’s always there, but I guess that’s the way general business is done.” [#21]
- When asked about members’ experiences with “good ole’ boy” networks or other closed networks, the non-Hispanic white male representative of a trade association said, “No one’s come right and said [it’s a] ‘good ole’ boy’ network, [but] it’s a big industry [and] a small industry Everybody knows each other. So ... if you’re a new kid on the block, you do sort of have to earn your way in, [though] that’s true of most industries and most businesses.” [#83]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “There is a ‘good ole’ boy’ network. That’s just the way it is. It is hard to break in and I don’t know if it’s just because I’m a woman-owned business or because I’m a newer business. [The ‘good ole’ boys’] would have cigar parties. They had ... beer and cigar nights. What woman wants to go to that?” She added, “And the golf tournaments. I don’t golf.” [#57]
- Regarding closed networks, the Hispanic American male owner of an SDB- and MBE-certified professional services firm said, “Those relationships ... in my experience, are more entrenched in government than in private practice.” [#76]

The same business owner later said, “The ‘good ole’ boy’ network exists, [but] it’s not overt discrimination. [It’s] just the sense of people being able to know each other. I have become very involved in the civic life in the city, and I belong to a number of organizations where people who are part of more established social ... or professional circles are. They have gotten to know me, [and] they have gotten to know me as a person who is Hispanic. So, I was very proud of that and I haven’t experienced any discrimination because of [it]. I feel like I’m treated like any other professional.” [#76]

Some interviewees said that they do not encounter closed networks or think they are a thing of the past. For example:

- When asked about “good ole’ boy” networks, the non-Hispanic white female owner of a WBE- and SDB-certified professional services firm commented, “I feel it probably happened [before], but it’s a little bit difficult to point [out]. It’s hard to put your hands on ... because it’s a relationship.” [#81]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm said, “I would have said maybe 15 [or] 20 years ago [that] printing was kind of a ‘good ole’ boy’ network, [but] I think that’s changed a bit over these last several years.” [#58a]

- The non-Hispanic white male owner of a construction firm indicated that closed networks do not exist in the Pennsylvania marketplace. [#85]

Any other allegations of discriminatory treatment. A number of interviewees had comments related to topics not discussed above. Some allegations include discrimination by public entities, including the Commonwealth. For example:

- The Black American male owner of a DBE- and MBE-certified construction firm reported that he has seen a lot of discrimination in the construction industry. He said, “I got spit on ... I even had a hangman’s noose hung up [where I ate lunch].” He continued, “People say everything is black and white, [but] everything is not black and white, everything is white.” He noted that he has also experienced discrimination from the Commonwealth, and said, “The state hasn’t done anything for me, the City [of Pittsburgh] hasn’t done anything for me.” [#13]
- When asked what can be done to fight against discrimination by the Commonwealth, the Black American male owner of an MBE- and DBE-certified professional services firm said someone could file “a federal lawsuit on them for discrimination.” He added, “Then, they probably would change it. But you have to have everything well-documented, like [with] lots of emails. He said that his firm has “over 84 months of documentation [of] asking for equal opportunity.” [#16]

The same business owner said there is a lot of discrimination at the Commonwealth-level. He said the discrimination is the reason he does not have contracts advertising Commonwealth entities. He said, “That’s not fair They have safety ads for bikes, [and] they have RVing [advertisements] in PA ... telling people to come to park-and-rides They [also] have safety campaigns for motorcycles. The state has all this going on. The state [even] has advertisements for the cyber school I’ve called the people that are in charge of advertising and they never give me an opportunity.” He continued, “When the state discriminates, nonprofits discriminate [too] because they see the state do it.” He said this is because “the state has two [main] advertising companies ... that handle advertising.... [They are] supposed to give me opportunities ... but it’s very hard Over the years ... I’ve maybe had 15 ads from them, if that. There [have] been thousands of ads, though.” [#16]

He added, “[I] can make a lot of money [because of] what I’ve been through. With the right lawyers I probably can make close to a billion dollars just in lawsuits. This is what [public sector agencies] do. They allow an airline company to come in and they’ll rent a space to them, but they won’t put things in the contract saying ... when [they] advertise [they have to] advertise equally. [Public sector agencies] write contracts [and] leases to people that allow them to discriminate, [but] they have a fiduciary duty as the landlord to make sure that the tenants are not circumventing the law.” He said that he sees this kind of behavior from the Allegheny County Airport Authority, the Sports and Exhibition Authority of Pittsburgh and Allegheny County, and other agencies. He said that he asked the mayor’s office, “How can you give somebody a lease for [a] car show and not make them adhere to the law when ... you’re using [public money]?” He went on to say, “Well, that’s discrimination I don’t care how you’re looking at it.” [#16]

- The non-Hispanic white female owner of a DBE- and SDB-certified professional services firm, explained, "...the other thing about any version of disability is that [clients or other contractors] presume that you can't be nearly as competent because you're disabled." She continued, "[Or] they just don't believe it and it's sort of, like, you know, oh, you know, you could do [...] this little tiny piece or you can do that little tiny piece or stuff like that. But, mostly it's people that just don't believe you and, therefore, think you're just being a problem and who wants to hire a problem, right? [...] If it's a not recognized disability, the presumption is that it's either mental health, therefore, you must be crazy [...] [and] they really don't want to work with a crazy person, right? Or it's not real or you're just a pain or we don't know what to do with you." [#80]
- The Black American male owner of an MBE- and DBE-certified construction supply firm stated that he "definitely" feels that discrimination has been a barrier and challenge for him. He said one of his salesmen was told by a business, "We don't do work with [N-word], so you can just take your pamphlet and get out of here now." [#06]

The same business owner said that his salesman told him, "I've heard of this I'm 50 years old and I just witnessed this firsthand. If you'd have told me this morning at breakfast that [racism is] out there, I would have argued with you and said, 'No, people aren't like that.'" He said, "I just laughed at him and said, 'It's going to happen and you're going to have to man up When you hear it, just pick up your literature and go down the road to the next guy.'" [#06]

He added, "I had a girl that used to work for me. She was white [and] worked on the counter, and she was in a biracial relationship with bi-racial children. [One day] she came into my office in tears and ... said there were two or three people she didn't want to wait on because they use[d] the N-word." [#06]

- The non-Hispanic white female owner of a professional services firm explained that she has experienced routine issues with discrimination since she took over sole ownership of her firm. She stated, "I have not had any of these problems until the last few years...I really didn't have these types of routine issues when I was running the company as the spouse of a vocal, attractive, strong white man." She continued, "I think there are coincidences in life but I don't think this is [a] coincidence."
- The Black American female owner of a closed construction services firm said that she believes being a disadvantaged business contributed to the barriers and challenges she experienced as a business owner. She explained, "Being a minority, as soon as someone sees you, [not] everybody, but a lot of people, it's like [they wonder if you] might not be able to do the job just because of the color of [your] skin. [It's like they don't realize] that we are gifted and talented just like everyone else. So, that poses a challenge [for minorities] in the marketplace." [#26]

Regarding discrimination in the Pennsylvania marketplace, the same interviewee later said, "It almost just becomes a way of life because it happens so many times. It's not blatant, [but] everything is almost systematic. Just from fighting to bid a job ... fighting to get paid for the job, [to] people ... setting up rules that they say apply to everyone, but then they're setting

aside agreements for other people.” She went on to comment, “It's not big things, just small things that add up.” [#26]

- When asked if prime contractors ever refuse to work with disadvantaged firms, the Black American male owner of a professional services firm stated, “They don’t really [outright] say it They’ll find excuses, or they’ll say that they had a bad experience with that firm previously They’ve never come right out and said we’re not going to work with that firm because they’re a DBE or MBE ... but [there’s] just other things that they say ... and they get into that whole qualification thing, and that’s just crock.” [#55]
 - When asked if there are some firms his company will not work with, the Black American male owner of a DBE-certified construction services firm said that some companies are “taking advantage of the disadvantaged,” and added, “[My firm’s] not interested in doing business with those companies, and fortunately I know who those companies are Our door is not open to them.” He later said that he experienced racism during his career, though nothing explicit since becoming a business owner. [#02]
 - The Black American male owner of a DBE- and SDB-certified construction supply firm responded regarding his experience with discrimination, “What do you want me to say? I’m a Black male ... every day.” He added that “cultural disparity” exists “in sports ... banking ... corporate America [and] small business,” and commented, “It is the culture that we are dealing with that is across the board.” [#03]
 - The Black American male owner of a DBE-certified goods and services firm said that he has had experience with discrimination in the marketplace, saying, “Name calling, the whole nine [yards] ... [by] the other workers, the other contractors.” [#20]
 - The non-Hispanic white female owner of a WBE-certified professional services firm said that she has felt discrimination, though “not from a gender standpoint.” She added, “I think it’s more of a size thing. [There’s a] preconceived perception of size as a barrier until [clients] get to know you.” [#04]
 - The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm reported that the firm has experienced discrimination in the Pennsylvania marketplace. She said, “Technology is dominated by men. Being a woman in technology has put us at a disadvantage in several situations, because for whatever reason, women are not seen as having the technical expertise and knowledge that men [have].” [#56]
- The same business representative continued, “I say that’s changing, but it’s still a disadvantage I experience discrimination with men ... harassing or [being] inappropriate, and I’ve also experienced it with women. I have one woman who wanted me removed from a project because I sat on a desk. She said I was soliciting. It’s embarrassing You feel responsible for someone else’s poor behavior.” [#56]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm stated, “I never looked at [discrimination] as a barrier, [but] I always looked at it as a

challenge My mom always told me, 'Don't let anything bother you if you're a woman.'" [#07]

The same business owner said that she does not view discrimination as a barrier "because [she has] been stubborn enough and ornery enough [to] just ignore [it]." She added, "[I] have always been able to prove I know what I'm talking about. And if I don't, I find out." She said that she often tells her daughters, "It was hard for me to break into this kind of world because it's definitely a man's world, but it'll be easier for you because someone has gone [through it] before you." [#07]

He added, "It's best to think it's never going to be equal. I feel bad for women who think they're ever going to be looked at the same as a man. In this business, I just don't ever feel like that is going to come to pass." She added, "If you know what you're talking about they will learn to respect you." She went on to say she now has engineers who call her for her opinion on technical matters. [#07]

- The Black American male owner of an SDB- and LGBTBE-certified professional services firm said that he experienced discrimination at a networking event. He stated, "It was just a networking [event], this is how business is done and how you meet people. I was having this great conversation with someone I thought I could do business with, and the word husband came out of my mouth and they ... turned around and walked away from me This was like the second invite I went to with this organization, but I was like crestfallen, [wondering] why [I'm] doing this work if I can't even be accepted within this organization that's meant to be accepting, always meant to find a place for the disenfranchised." [#38]

The same business owner added, "That has happened before with clients in the public sector" So, I'm very specific about wearing a rainbow pin when I go into meetings because I don't want that to be an issue, because it is an issue for people." [#38]

- The non-Hispanic white female owner of a LGBTBE-certified professional services firm said, "I think there's basically two types of businesses out there, those that are accepting diversity and those that are not. I had some smaller agricultural clients out in the middle of the state that didn't understand me ... [and] it was kind of just a mutual agreement that I'd let them buy from somebody else." [#41]

The same business owner continued to describe her experiences with discrimination. She stated, "I went into one of my clients [and] before I came out ... he was listening to a Christian station and he was all hopped up all that they were talking about [regarding] gay marriage, how that was going to bring the second coming of Jesus Christ and how there was going to be fire and damnation here in the whole world And so, I just left and I never called on him after I transitioned because I knew there was no hope." [#41]

She went on to say, "At this point, for a transgendered person, the more suburban or urban the area is, the more likely it's I'm going to be accepted. The more rural it is the probably less likely. Now that's not a hundred percent true, but one of the disadvantages of being transgender is Unless the transgendered person really looks good when she walks down the street, everybody knows." [#41]

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said, “[Way back when], I went to this meeting that was put together by the Small Business Administration and it had these representatives from industries [there]. And someone was there from ALCOA ... ALCOA needs [our] kind of service, so I got a card and I called this fella [who] was head engineering representing ALCOA. He said, ‘Look, I don’t have a lot of time for this, but I admire the guts of you people.’” He said, “That happens a little less today, and in very subtle ways.” [#09]

The same business owner went on to say, “I feel this, although I cannot prove it, that some races have it worse than others. [However], I don’t think [our firm] has been subjected as much.” [#09]

- The Subcontinent Asian American male owner of a goods and services firm said that he has “sometimes” experienced discrimination while doing business. He said, “My pronunciation, people just drop off the phone or say, ‘Are you out of [the] country?’ or something like that.” [#15]
- A public meeting participant stated, “Institutional racism is not about white people messing us up. It’s about a government or a body of policies that mess us up.” He later added, “Institutional racism [has] nothing to do with the race of the person. It’s the institution, and the people ... want to fight and make equality stroke-of-a-pen easy.” [PT#02c]
- The male owner of a DBE-certified construction services firm stated, “I’ve worked border-to-border and coast-to-coast here in the United States I’ve had the opportunity of working in downtown Manhattan and in Los Angeles, so I have a different frame of reference than a lot of folks.” [PT#17f]

The same business owner continued, “There is a cultural issue in this state I quite honestly... can go down the list and say I agree with the disparities. We’ve got a list of items up here as far as discrimination is concerned. But if I look at it purely from my side, my end of the ball field, which is construction, I would say to you that it ends up being a different type of discrimination. I’m discriminated because I sound like I’m from the South. I’ve actually had this said to me [before]. I’ve been in business a long time. I’m thick-skinned and I can take it. The bottom line of this is if there’s a change, we’re working diligently in Philadelphia ... to try to make that change.” [PT#17f]

- The Black American male owner of an MBE- and SDB-certified goods and services firm reported that discrimination has been a barrier in his firm getting work as a subcontractor. He explained that he was once told by a prime contractor employee, “Oh, well, we’re not going to do anymore business with you and we’ll take it to a Caucasian firm.” [#60]
- The Black American male owner of an SDB- and MBE-certified professional services firm stated that he has faced personal discrimination. He gave an example of a specific client who attempted to limit his firm’s involvement. He explained that the client even sent him the wrong address for the preliminary kick-off meeting. [#37]

- The non-Hispanic white female owner of a WBE-certified construction firm said, “This year we’re renegotiating [a] contract, so I’m a part of a collective bargaining unit with the other contractors in our geographic jurisdiction I asked to be on the collective bargaining team to bargain on behalf of the contractors, and [was told], ‘Oh honey, you don’t want to do that.’ Well yeah, I do, but, I’m not [part of the team]. It’s all men There’s not a woman [in the room], maybe [one] lawyer.” She continued, “I have a company to run. I’m not going to battle with my fellow contractors to be on [a] committee. I offered my services [and] they didn’t want my services.” [#22]
- The non-Hispanic white female representative of a trade association reported that members often express frustration in dealing with discrimination. She stated, “What I’ve heard [is] a lot of the folks that I deal with [experience it]. There are some that are solo entrepreneurs [and] some that work for major companies. In this area it’s difficult ... folks don’t feel like they can be their true selves, especially with the race issue in work.” She added, “I’m not so sure how that’s translating into business for those that are solo entrepreneurs, but [I think] they have to wear a mask a lot of the time.” [#71]

The same business representative continued, “This council started [out] just for top level executives ... [and] what I’ve heard [since then] is stuff that just makes my skin crawl.” She went on to say, “And what does that mean to your local plumber or your general contractor? [It means] just not even being able to get their foot in the door, in some cases.” [#71]

- When asked if his firm has been discriminated against, the Hispanic American male owner of an SDB- and MBE-certified professional services firm stated, “No, I don’t feel like we’ve experienced any overt discrimination. And if we had, I’m not interested in working with those people [anyway]. I think that ... if anything, is [an] unfair kind of burden ... that if you’re a smaller firm you’re [perceived to be] less capable or able to meet and deliver on a project So, I know that there is a ... bias [favoring] the larger more established firms. It’s pretty undeniable.” [#76]
- When asked about discriminatory treatment in the local marketplace, the non-Hispanic white male owner of a LGBTBE-certified professional services firm said that he has not personally experienced discrimination while doing business in his area. However, he noted that he lives and works “in a county that’s very progressive.” He explained, “I know a lot of people that don’t live in a progressive county who’ve had plenty of discrimination.” [#24]
- The Black American owner of a construction management firm explained that a real barrier to doing work with the Commonwealth has been the historical “stonewalling” of MBEs. He observed, “In 1999 [our firm] began to solicit work through the traditional process of going to job conferences and pre-bid conferences. [We tried to get some work on a large project run by a majority construction firm] That was the first bitter taste of difficulty and stonewalling that we experienced. And, this -- I say that because in the job conferences we were promised fair consideration. But, in what followed, it was clear that notwithstanding the fact that we had spec products that were considered to be superior grade, and [our] construction manager [had] 30 some odd years of experience working for top companies and top corporations, that didn’t matter. We ultimately learned that the then Deputy

Director at the Department of General Services had let it be known that minority business participation on the job was not a high priority; and, therefore, rather than tell me that, the construction manager just kept stonewalling, or being non-responsive. So, we alerted the deputies and the secretaries of General Services, of the Department of Agriculture, people in the Governor's Office, and there was just simply no response, not an inquiry as to what was going on. Not an effort made to level the playing field. It was a very, very disappointing experience." [#82]

One business owner described “underhanded” gender-related discrimination. The non-Hispanic white female owner of a WBE-certified construction supply firm said that she entered the industry “as a WBE ... because there were no other DBEs in [the] field.” She said that she has not experienced any “harassment, but [noted] is more underhanded,” and added, “[Prime contractors] say to me, ‘We have to use a WBE’” [#14]

One business owner said that she worries about age discrimination. The non-Hispanic white female owner of a WBE-certified professional services firm said, “I worry that people might look at me and think I’m old and not on trend, but I talk about it to my team and my team says [to] get over it.” She continued, “[It’s] because an old man is cute, but an old woman is not so cute. You know how that is [Somebody] said to me, ‘You’re too old to go into sales, nobody wants to work with an old saleswoman.’ And I can remember that haunting me.” [#04]

Factors that affect opportunities for minorities and women to enter and advance in the industry. Some interviewees discussed factors that affect the ability of minorities and women to enter and advance in the industry. For example:

- The Subcontinent Asian American female owner of a WBE-certified professional services firm stated, “Since we come from a different country, different background and citizenship, we do not have a base in this country. Meaning that we don't have ... relatives, friends, and have not studied here. Our network of people is very small.” [#44]

The same business owner continued, “The [biggest] challenge is the network of people you know. If on the other hand if I was born over here [and did] my schooling here, I would have known more people through all the years that I was here.” She added, “I don't personally see this as a ... minority-owned business. I see it more as a coming from a different background altogether [business].” [#44]

- Regarding other factors that affect women from entering and advancing in her industry, the non-Hispanic white female owner of a WBE-certified professional services firm said, “You have two paths to take You can take that path where you’re going to feel like you’re defeated before you get there, or you can take that path where you know you’re bringing fresh, great ideas.” She added, “And I’m not saying I’m like Little Miss Sunshine all the time, but I keep plugging [away]” [#04]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “When I go to those meetings, the pre-bid meeting for example, I’m in a room with 90 percent men who golf with the other guy or go out to lunch with the other guy. As a woman, it’s hard to break into I know going in there, there are those same guys and

they're all hanging out and they're all going to go out after this meeting to have lunch and a drink together. How do I ever break into that? That's hard but I don't think of it myself as disadvantaged because of that. I just think of myself as I got to figure out a way to get around it." [#57]

- The Black American male owner of an MBE- and DBE-certified construction supply firm stated, "It's not all bad, but there is a lot of bad out there [in the marketplace]." He said that he thinks discrimination "has prevented [his firm] from growing," but added that "some of that's the economy." [#06]
- The non-Hispanic white female owner of a WBE-certified construction firm said that she feels disadvantaged as the only woman in her field, in the region. She stated, "I've had to claw and fight for everything [the company] got." [#22]
- The male owner of a construction services firm said, "I am a resident of my multi-generational family ... so I know the history pretty well. My father was the head of a very large international engineering firm based here, so, I know that community very well and I ought to be part of the elite of that and, for some strange reason, I'm just not The discrimination is abundantly clear, at this point. There's an evident abundantly clear pattern of it, and it certainly extends ... into the state. [It's] the reason why we can't get work with PennDOT, even though we've tried." [PT#17d]
- The Black American male owner of an MBE- and SDB-certified construction services firm stated that he faced barriers in the marketplace due to discrimination. He explained, "It's like if I told you you're great at what you do and I'm [going to] pay you once a year, and I'm [going to] pay you 40 percent less than what you should be getting. Now, you're still as qualified and capable of doing what you're doing, but ... you have to survive somehow for a year without [as much] capital You work for less than the [rest of the] industry." [#27]

The same business owner continued, "And that's why there's so few minorities in the ... construction [industry]. It's very much similar to what we're seeing today with the women [being] paid less, and [the assumption that they're] less qualified. Now, take that same mentality and put it on a Black male, and say, 'Now I'm discriminating against you because of how you look, which means I think you should ... just as the women, work for less. And, I think you're also less qualified because of how you look.'" [#27]

- The non-Hispanic white female representative of a trade association said the association is trying to unite diverse business councils to address the challenges of discrimination and other local barriers. She stated, "I like to try to get [the local diverse business councils] to unite sometimes ... because I feel like there's a stronger impact [then]. I feel like that's the only place that people are getting access to this kind of stuff sometimes. [#71]
- The non-Hispanic white male representative of a trade association said the association makes "efforts to recruit [minorities and women]," and added, "With women, it's [sometimes difficult to convince them] that yeah you can be a steam fitter, [but] I think we're getting it through to [them] more because we have more women just over the past

couple of years” He said successful female members have “been very willing and open to work with [him] to help promote women in the [industry].” [#83]

Regarding minorities, the same business representative said, “A lot of the barrier on the minority side for African Americans is lack of a drivers’ license ... because you have to have a drivers’ license. This is not a career you can build [relying] on public transit in this region Another thing honestly is not so much having the high school diploma or the GED but having the mathematical aptitude for these professions Virtually every union gives a math and aptitude test to gain entry into the apprenticeship program. It’s really no different than applying to a college or something.” He later commented that nonunion employers that appear to help minority contractors and laborers don’t offer very competitive wages. [#83]

- The Black American male owner of a professional services firm said noncompliance with “good faith efforts” can “[handicap] minority and women businesses from getting opportunities.” He added, “And you may not have the equipment, you may have to pay more to rent the equipment The inequalities of trying to win and work [on] contracts goes back further than just getting the bid. The inequalities go back to having the infrastructure that is geared toward getting in at a lower price, and that’s what the measure is for minority businesses in the marketplace today. And if you look at it deeply, it’s still unfair and unequal.” [#55]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “It’s been difficult to find government jobs for a minority.” [Avail #40]

I. Insights Regarding Business Assistance Programs or Any Other Neutral Measures

The study team asked business owners and managers about their views of potential race- and gender-neutral measures that might help small businesses and minority- and women-owned businesses, obtain work in the Pennsylvania contracting industry. Interviewees discussed various types of potential measures and, in many cases, made recommendations for specific programs and program topics. The following pages of this Appendix review comments pertaining to:

- Knowledge of programs in general;
- Technical assistance and support services;
- On-the-job training;
- Mentor-protégé relationships;
- Joint venture relationships;
- Financing assistance; and
- Bonding assistance.

Knowledge of programs in general. The study team reported on their awareness of and experiences with business assistance programs.

Some interviewees reported having knowledge of or participation in business assistance programs. Some interviewees found programs helpful while others indicated they were unimpressed by the programs' helpfulness. For example:

- Regarding business assistance programs she finds helpful, the non-Hispanic white female owner of a WBE-certified professional services firm said that she spends a lot of time networking and attending events sponsored by large firms. She commented, "It was so overwhelming in the beginning. If I can walk away meeting one person or two people then that's good." She said that she also attends Highmark and UPMC diversity events, and "goes to everything she can." [#04]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that he recently attended a small disadvantaged business program that focused on how to write RFPs, as well as a PennDOT event showing vendors how to register on their vendor list. He stated, "I thought that was good. I need to put that into practice." [#43]

The same business owner later said the Goldman Sacs 10,000 Small Businesses program was helpful. He stated, "The 10,000 Small Businesses [program] tells you how to run a business. I think programs of that nature ... help a small business owner. There is time commitment, but I think it's worth the time." [#43]

- The Subcontinent Asian American female owner of a WBE-certified professional services firm said that she found the Asian Chamber of Commerce helpful to her firm. [#44]
- When asked what business assistance programs were helpful to her, the Black American female owner of a DBE- and SDB-certified professional services firm stated, "The Enterprise Center [was helpful]. Let's see ... the Temple Program [too]. [It] was [in partnership with] the Commonwealth. The Enterprise Center was more [helpful]. They got a grant from the federal government, [and] had some workshops and counseling on federal contracts." [#32]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said, "At least once a year there'll be a seminar through [Northeastern Pennsylvania Contractors Association] or somebody [on] doing business with the Commonwealth. We'll attend one of them to see if there's anything different. I think it might be brought in by the [local] Chamber of Commerce They'll do things [like that] to educate small businesses." [#77]

Regarding assistance programs that would be helpful, the same business owner said, "What we have been looking for [something on] arbitration If we got pulled into a lawsuit or something ... very rarely does the judge, the attorney, or the jury understand the construction business. [They don't] understand the roles of the architect engineer [or] the roles of the contractor and all that. They're just hearing, 'I haven't got paid,' or, 'I didn't do this or that'" [#77]

- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said that he has found several programs to be very helpful, including the

Pennsylvania Unified Certification Program (PAUCP). He also said the African American Chamber of Commerce helped him with “training, networking and business opportunities.” He said these are important programs because it all “comes down to relationships.” [#08]

The same business owner later said that he receives phone calls due to his registration with PAUCP. He said PAUCP registration acts as “marketing and advertising,” and said that his chances of being found would be “very small” without PAUCP registration. [#08]

- When asked about his experience with business assistance programs, the Black American male owner of a DBE-certified goods and services firm said that he got a lot of help with his DBE certification from the Allegheny County MWDBE office. He said, “I had a very great contact there They have slotted times and I would sit down with [named contact] for an hour and [go] through the application, item by item. [They were] patient with me, through email, phone conversation, and I got it done.” [#20]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said because his firm is “a little mature now,” they don’t need a lot of help from business assistance programs. He went on to say, “I think they are good for people who are just starting out.” He later commented that he “loves working with” the Allegheny County MWBE Office. [#09]
- The Subcontinent Asian American male owner of a goods and services firm said that he has taken advantage of several business assistance programs and found them to be helpful. He stated that he took some classes at the Riverside Center for Innovation on loans, bonds and insurance. He added that he also participates in the annual Allegheny County MWDBE seminar/summit. He said that he has found the programs to be helpful in “connecting people.” He said this counteracts some of the trouble he has making connections because of his disadvantaged status and added that these meetings “are a solution for that.” [#15]
- The non-Hispanic white female owner of a DBE-certified construction services firm said that she finds business assistance programs to be helpful. She said the Allegheny County MWDBE Office “help[s] with getting you set up and getting your business partner ID number.” She continued, “They do those meet-and-greet, network prime [and] sub things. Those can be valuable in the beginning. Those can be valuable to land, a freak project here or there. You’re still really not going to get many opportunities from them without relationships, but that’s not the state’s fault. They still facilitate those things, and that’s good. But then they can’t actually help with you to do a bid or something.” [#12]
- The non-Hispanic white female owner of a WBE-certified goods and services firm commented that when she first started her business she did attend more networking events, for example the Commonwealth’s purchasing agent sessions, but has not attended them for many years. [#23]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that she is a member of the Constructors Association of Western Pennsylvania, which has “networking events [and] keeps [her] up-to-date with changes in the industry.” She added, “I’m a member also of the Associated Pennsylvania [Constructors] Association

Again, that's the same type of organization, but statewide. That organization helps [pass] legislation and things of that nature, as well as talking about changes within PennDOT and spec changes. They have networking events. They hold ... events to talk about ways that Penn DOT can change and help things, and then they'll go and meet with Penn DOT and make some suggestions." [#25]

- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that she used to be a member of the Pennsylvania Utility Contractors Association (PUCA). She commented that she didn't feel comfortable being one of the few women in the association. However, she said that she still goes to industry conferences. [#07]

The same business owner continued, "For the first 13 years I worked all the time I went to every meeting [and] everything I could network through." She said that she also participated in Women Contractors Association events and meetings, though she stopped attending those events after having her daughters. [#07]

- The non-Hispanic white female owner of a WBE-certified professional services firm said that she used the Government Agency Coordination Office (GACO) and attended seminars. However, she said because her company is so specialized, it is not as helpful. She commented, "There is no commodity code for my service." [#10]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that she has used GACO (Government Assistance Contracting Organization), and added, "They are very easy to work with They do webinars [and] workshops." [#11]
- The Asian Pacific American female owner of an MBE and WBE-certified professional services firm stated that she attended a four-hour workshop sponsored by DGS entitled "Doing Business with the Commonwealth," and carried out the steps recommended by the DGS representatives. [#69]
- The non-Hispanic white female owner of a WBE-certified construction-related firm said when she was starting her business she went to Pittsburgh SCORE for help creating a business plan and found them very helpful. She said, "They were really impressed and ... said, 'Absolutely, start the business.' In fact, one of the gentlemen that was there [at Pittsburgh SCORE], he told me that if I had any problem getting a credit line to let him know because he dealt with [my current bank]." She added that she has stayed in touch with the organization and they have featured her business in their marketing materials. [#17a]

The same business owner said that they also attend DBE events hosted by a state representative, which are less helpful to their firm. She stated, "We feel like it's a lot of show but no action to support it." [#17a]

- The Subcontinent Asian American male owner of an MBE-certified professional services firm stated that he regularly attends networking events and meetings hosted by Western Pennsylvania Minority Supplier Development Council. He said that he also attends events hosted by the Pittsburgh Technology Council and noted that these networking events and meetings are helpful for meeting new people. He added, "People in the industry who are

[knowledgeable] about the technology that is going to be used, and what their focus will be in the coming year ... are more informative than anything else.” [#21]

- When asked about members’ experience with small business assistance programs, the non-Hispanic white female representative of a trade association said, “We [have] the Small Business Development Center [at the local university]. When people are starting their business, I refer them [there]. And there’s another organization called SCORE [that includes] retired executives, I think There’s some incubator spaces in the area.” [#71]
- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “I appreciate the help from the [Pennsylvania] Small Business Development Center. They’re very helpful.” [Avail #71]
- The non-Hispanic white male representative of a small business development organization reported the helpfulness of several federal programs, including Procurement Technical Assistance Centers (PTAC), HUBZone, the SBA 8(a) Business Development Program, and women-owned and service-disabled veteran-owned business programs. [#46]
- The non-Hispanic white male veteran with disabilities and owner of a professional services firm said that he finds the Small Business Administration helpful. He stated, “The SBA, their local chapter [is helpful]. When I taught entrepreneurship, I had them come in to my class. So yeah, as a byproduct of course I get to sit there and listen to them. I consider myself a lifelong learner, so ... I’m kind of like a sponge. When it comes to businesses like the SBA and their presentation, I just sucked it all in.” [#74]
- The Black American male owner of an SDB- and MBE-certified professional services firm reported that after becoming certified both firm owners had a consultation during a small business clinic. He explained, “We went to them to have [an] outside perspective on our business plan. We were talking about how we grow from here. They did tell us to expand our territory, so we became certified ... in Maryland [and] New York, because we heard that those states actively had policies and followed through with making sure there’s meaningful participation in contracts.” [#36]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “White guys are at a disadvantage. I went to a Small Business [Administration] meeting, and because I was white they had no interest in helping me. It was disappointing.” [Avail #150]
- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm stated, “[I] found the vendor fairs to be next to useless ... It was just basically standing in line at tables to shake the hands of [the] directors of these things” [#62]
- The non-Hispanic white female representative of a construction firm explained that her firm does not find business association programs in the area helpful. She stated, “All it is is a pat on the back, basically.” [#45]

The same business representative stated that her experience with the Better Business Bureau "was a complete joke." She continued, "It costs me \$300 and some ... to belong ... and they did nothing for me, really." [#45]

- The Black American male owner of an MBE- and SDB-certified construction services firm said that he was involved in several programs over the years but does not remember them being particularly helpful. [#27]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm stated that she is aware of job fairs but noted that they are usually geared toward the construction industry or other similar industries. She added, "I feel like I've never seen anything where they're even remotely looking at our kind of services that we would come to a fair like that." [#31a]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm reported that the owners have listened to webinars put on by the Women's Business Enterprise National Council. She added, "To be honest with you, what they're telling you is not even helpful half the time. They give you like one or two hints, but they're not even actionable." [#31b]
- The non-Hispanic white male representative of a goods and services firm said Commonwealth-hosted trade shows are beneficial when municipalities are required to attend. He stated, "The Department of General Services will do some of these reverse trade shows where the municipalities are behind a desk, and then you walk around with all the other vendors. They've done it a couple of times. The turnout [for] the first couple were okay." He said "not too many people" attended a recent Harrisburg Farm Expo event, and added, "The vendors were in the booths Previously, [the municipalities] were in the booth, [and] they had to register [and] be there." [#72]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said that he utilizes networking events through organizations like the Hispanic Chamber of Commerce. Regarding the Hispanic Chamber, he said, "I was a member for social and for reasons before I had my own firm as an MBE. I was a member ... just to be part of the community." He went on to say, "I continued to be a member, but I really haven't found that any of the programs ... suited my needs or interests." [#76]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, "The minority events are usually a waste of time. They do not lead to productive relationships or contracts." [Avail #90]

Some business owners said they attended small business assistance programs through local universities. [e.g., #14, #32] For example:

- The non-Hispanic white female owner of a WBE-certified professional services firm said that she has participated in small business assistance programs by both University of Pittsburgh and Duquesne University. She said that she used these programs to "start [her]

business,” and noted, “The people that helped me there continued to be resources. I can’t imagine starting a business without using [such programs].” [#04]

The same business owner later said that she attended an entrepreneurial class at a Pennsylvania business school. She noted, “One of the things I saw was that I didn’t know a lot of the acronyms, and things like that.” She said that while there she met a classmate with multiple graduate degrees who said to her, “Stop worrying You do it every day, you just don’t know what it’s called.” She said the in-depth program was helpful. [#04]

- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that she used Chatham University’s Center for Women’s Entrepreneurship extensively when she was starting her business and found the program to be very helpful. [#25]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm reported that he took advantage of Temple University’s Small Business Development Center, and added, “[They] have a great RFP list of services that I tapped, that I don’t have access to otherwise.” [#38]
- The Black American female owner of an MBE- and WBE-certified professional services firm said that she has used assistance programs through GACO, PennDOT, the SBA, and PAUCP. She said that she has found “some of them” to be helpful and said that she used both of the SBDCs at the University of Pittsburgh and Duquesne University. She said the University of Pittsburgh SBDC “is kind of known for just being interested in numbers, and [don’t] necessarily ... spend a lot of time with the startup firms.” She added, “They’ll sign you up [and] they might meet once or twice, but it’s really about them being able to demonstrate success.” She said the SBDC at Duquesne University “is way better.” [#18]
- The non-Hispanic white male owner of a LGBTBE-certified professional services firm said that he has been very involved in technical assistance programs at Katz Graduate School of Business at University of Pittsburgh. He stated, “They’re going to work with me on helping me with my branding [for] my business. They do have that as a free service.” He said he’s also aware of assistance programs at Clarion University. [#24]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm said after visiting the Duquesne University Small Business Development Center to help create her business plan she “was more serious about how I could go about getting business and how I could establish myself as a business, not just a person doing freelance work.” [#19]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said that she was very satisfied with the Duquesne University Small Business Development Center. She said, “They helped me write a business plan, and I couldn’t get certified without a business plan.” She said that she participated in seminars and regularly attends the annual Allegheny County MWBE Office event.” [#14]
- The Hispanic American male representative of a trade association reported that he and his association have found the Duquesne University and University of Pittsburgh Small

Business Development Center and City of Pittsburgh's Diversity Business Resource Center to be helpful. [#86]

- The Black American male owner of a DBE- and MBE-certified construction firm participated in small business development programs from three local universities. He said that he has not found the programs to be helpful because "[the staff running the programs] have no experience in business." [#13]
- The non-Hispanic white male representative of a small business development organization noted that Kutztown University's Small Business Development Center is helpful and supportive to small businesses in the region [#46]

Other business owners reported having little or no knowledge of assistance programs in general and/or are not participating in any programs. [e.g., #47b] For example:

- The non-Hispanic white male owner of a construction firm reported that he is not aware of any small business assistance programs. He went on to say that he would welcome a mentor-protégé program that his firm could participate in. [#75]
- The Black American male owner of a DBE-certified construction services firm said while he has not used many business assistance programs, he has heard of them and has been encouraged to use them. He said not taking advantage of business assistance programs may be his firm's biggest weakness. [#02]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm said that she is interested in technical assistance programs but does not take advantage of them because they are often located too far away. She said "I probably would be interested in learning more about them. I've seen that they have classes for QuickBooks or something, but they're in Clarion I'm not driving two hours to Clarion. That's great that they have it for rural businesses." [#19]
- The non-Hispanic white male owner of a construction services firm reported that his firm participates in various trainings through private companies that he works with. He also stated, "I asked for help from the state [with business training]. They won't help me on that. I try to get assistance to help train my employees and myself on updating things and training and all that and was denied that." [#40]
- The Hispanic American male owner of a construction firm stated that he is not aware of any business assistance programs. [#64]
- The Hispanic American male owner of a construction firm reported that he is aware of some business assistance programs at local universities, and that he even attended one last year about bidding on government projects. The firm owner also added that he has not had the time to take advantage of any other business assistance programs. [#49a]

Technical assistance and support services. The study team discussed different types of technical assistance and other business support programs. Some interviewees reported whether technical assistance and support services are helpful.

A number of business owners reported that technical assistance and support services are helpful. [e.g., #24, #43, Avail #02] For example:

- The Black American male owner of a DBE-certified construction services firm said that he has participated in seminars and webinars offered by Allegheny County's MWDBE Department at the Rivers Casino. He indicated that these services were helpful. [#02]
- The Black American male owner of a DBE- and MBE-certified construction firm mentioned that he took some bonding classes at the Riverside Center for Innovation. He said they were helpful, but he was disappointed that the company who encouraged him to go retracted their offer for work when he was done. [#13]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm explained that her local Chamber of Commerce was helpful to her when she started her business. She stated, "When I first started in business, I went to some things sponsored by the Commonwealth. Just as important though ... was the Harrisburg Chamber. They did as much for me as the Commonwealth" [#57]
- Regarding technical assistance programs, the Black American male owner of a DBE-certified goods and services firm said that he appreciates the variety of classes offered to him locally, especially by the Diversity Business Resource Center (DBRC). [#20]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm stated that the SBA 7(j) program is a "good" program that offers specialized technical assistance. [#09]
- A representative of the Hispanic Chamber of Commerce of Central Pennsylvania pointed out the lack of technical support available to minority businesses. He noted that a lack of support services such as bookkeeping, estimating, bidding, on-the-job training, and mentorship programs are a barrier. He observed, "I feel to get, you know, firms moved along that learning curve, we must look at where does that support come from. Well, if you go to the Chamber, they say, well, go to SCORE, they'll help you. I don't know of too many of our firms that have gone to SCORE to help them develop the business plan, maybe a pro forma of first year, second year, third year, that they can take to the bank. I think some folks have - a small number. But the accounting, I think, there's programs that have been held, I know that a [regional] bank had an eight-week series of training for startup businesses, with bookkeeping and payroll, and other operational stuff. But, it's been a long time since that happened. . . probably, five years ago."

The same interviewee continued, "Well, project accounting tends to be, you know, to — to submit a bill, and you have, okay, I need a certified payroll for more often than not, the projects have prevailing wage requirements. So....You know, there's just a fair amount of documentation that when they're working for Joe Smith over here, to put an addition on a house, the [small business contractors] don't have to deal with it. . . So, because they're adverse to having to deal with a lot of this paperwork. They'll rather to go work for Joe Smith one time... Yeah, it can work late into the evenings trying to get -- especially for somebody that to do -- run the business and do the accounting themselves. . . I've helped

some of the landscape contractors, some demolition contractors get all their paperwork that the prime contractor, the general contractor was requiring of them. And, they need a lot of hand holding.” [#89A TA]

- The non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said that a program to teach business owners with disabilities basic business skills would be helpful. He added, “I think that the state would benefit from that ... although ... once you receive Social Security disability [benefits], it’s a big step to try to become independent because you’re jeopardizing the loss of your [benefits].” [#29]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that she attended an entrepreneur course and “took a six-week class on how to run [a] business [and] create a business plan.” [#25]
- The executive of a Black American-owned DBE- and SDB-certified goods and services firm said, “It can be overwhelming for someone starting a business. When we started, it was based on who you knew [and] word of mouth. Now there [are] more resources online, and it is easier to find organizations focused on business development, as well as information about the bidding process.” [PT#12]
- The Black American female owner of a WBE- and SDB-certified goods and services firm indicated that technical assistance and support services would be helpful. She said the Commonwealth should instruct compliance officers to assist small firms in the bidding process. [#53]
- The non-Hispanic white male representative of a WBE- and SDB-certified professional services firm said technical assistance from the state would be helpful, and added, “One situation we have right now is one of our primes is asking us to get a certification for security and HIPAA ... [but] the time and the effort and the expense to do that is prohibitive.” [#58b]

The same business representative continued, “If the state had a program by which they could help us, maybe with consulting or with financial help, [that would be great] Some of these rules and regulations that are making our prime come back to us for these things, is coming from the federal and state government.” [#58b]

Some business owners do not find technical assistance programs useful or are unaware of such programs. [e.g., #85] For example:

- The Black American male owner of a DBE-certified construction services firm said that he attended events hosted by the Pittsburgh International Airport and Allegheny County Airport. However, he noted that he is “not a fan” of these events because he does not see any outcomes from them. [#02]
- The non-Hispanic white female owner of a WBE-certified construction firm said that she tried to take advantage of technical assistance programs, “but ... didn't get anything out of them.” She said, “The SBA Pittsburgh chapter wasn't terribly strong, and they're not very

encouraging. To be perfectly frank, they're not very encouraging of white women." She went on to indicate that this has changed and said the new director of the SBA in Pittsburgh is "awesome." She added, "Prior to that, when I was first starting out and stuff, it wasn't very helpful." [#22]

- The Black American male owner of an MBE- and DBE-certified professional services firm said that he partakes in the technical assistance programs at the Diversity Business Resource Center. He said, "I went to every class. I go to everything that's ever offered I go to everything." However, he said the classes only help the Commonwealth show they are trying to do something, saying, "The state might sponsor something and [have] 25 people come, [only] so ... it shows that they're trying to make an effort. But, it's a fake effort. It's like ... a game There's no benefit, so therefore it's fake." [#16]
- The female representative of a WBE-certified construction-related firm said, "We've gone to numerous WEBANC events, SBA events ... what a waste that was." She added that the Commonwealth can work to make its workshops and networking events more "useful," and said, "We take out time ... we don't need lip service. We don't have time for it." [#17b]
- The non-Hispanic white male owner of a construction firm said that website assistance would be helpful, though he finds it too expensive. He stated, "I've talked to people about web design. It's \$700 [or] \$800 for a web design. And I think, 'You're doing a couple [links] and a couple of backdrops. Why can GoDaddy do it for \$50 and you guys want \$700 or \$800?' I don't get it Again, the technical side I'm confused on, as far as putting [those] things together." [#51]
- The non-Hispanic white male owner of a construction services firm indicated that he is not aware of any technical assistance programs. He said that he relies on "informal networks," saying, "What I do is I just talk to some of the people who are bigger than me who I become friends with in business, and just pick up some ideas [that way] So, I use other peoples' ... experience to help me out." [#88]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, "There are not many resources. You have to dig to find resources. Pennsylvania is not very resourceful. It's not easy finding resources. It's a lot to go through to get the help that you need." [Avail #144]
- The non-Hispanic white male representative of a professional services firm reported that they have not participated in any technical assistance programs. [#87]
- The non-Hispanic white female representative of a professional services firm indicated that the company is not aware of any technical assistance programs. [#84]

On-the-job training programs. Some interviewees discussed their perceptions of and experiences with on-the-job training programs. [e.g., #44] For example, the non-Hispanic white female representative of a trade association said many members are interested in opportunities to fund on-the-job training for their firms. [#71]

Mentor-protégé relationships. Business owners and representatives reported on their experiences with mentor-protégé programs. Many viewed the programs as helpful. [e.g., #20, #36, #43, #44, #75, PT#01e] For example:

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that he participated in the Small Business Administration’s mentoring program. He said, “They had retired people from [the] industry ... come and work with you one-on-one. There was a wonderful man [who] just was a super help. We met every week and he was a good mentor. So, that program is good.” [#09]
- The Black American female owner of an MBE- and WBE-certified professional services firm indicated that mentor-protégé relationships can be helpful. She said the DBE program “just started a mentoring program not that long ago,” and added, “I haven't actually utilized it yet ... but they have a leadership component now where there's a weekly conference call. You have access to different readings and other supportive type stuff. They do small cohort-type stuff.” [#18]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm said that he participated in a mentor-protégé program by the Philadelphia Chamber of Commerce. Regarding the program, he said, “I only got to see [my mentor for] 45 minutes ... once a quarter ... [but] in those four sessions she solved a lot of business problems I was having.” [#38]
- The Black American female owner of a DBE- and SDB-certified construction services firm stated that she is not familiar with mentor-protégé programs offered by any public entity; however, she has established her own mentoring relationship with another woman business owner with experience in her industry. [#01]
- The Black American male owner of a DBE-certified construction services firm said that he participated in some classes and networking events on mentoring, bookkeeping and other topics run by the African American Chamber of Commerce. He added, “[I’ve] sat in on some of these seminars and they are very informational to me. I always learn something from them.” [#02]
- The Black American male owner of a DBE- and SDB-certified construction supply firm reported that he has experience with a mentoring program offered by Cheyney University. He added, “The assistance program for PennDOT ... I think is good.” He also reported having experience with a mentoring program in Atlanta, and commented, “They cultivate, teach and learn, and take you to the next level [in that program].” [#03]
- The Black American male owner of a DBE- and MBE-certified construction firm has a mentor who is in the same line of work that he met through the DBE program at Cheyney University. He said that his mentor is helping him because he has experienced similar struggles. [#13]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said she is part of a mentor-protégé program with a large electrical supplier that she met at a trade

event. She said, “We meet on a regular basis and they have given me so many referrals They seem like sincere people, even if they are doing it to meet participation goals.” [#14]

- The non-Hispanic white male representative of a small business development organization reported that his organization provides support in three different types of programs: teaming, joint ventures and mentor/protégé agreements. He noted that the mentor/protégé agreements are the most desired, and that they can be long-term, deeply vested relationships that can be very fruitful for both firms involved. [#46]
- The non-Hispanic white female owner of a SDB-certified construction firm reported mixed feelings about joining mentor-protégé programs. She explained, “That gets difficult. Because why do I want to train someone to do the job that I'm also going to be bidding on?” [#65]
- The Black American female owner of a closed construction services firm indicated that a mentor-protégé program could be helpful. She reiterated that she would like to start a new firm as a supplier, but said, “I don't even know where to call [or] where to go. I've been researching online, but it would be nice if I could just follow someone at the scene, and say, ‘Hey, I really want to do this,’ and then they could walk me through [it] and tell me what things I would need, and even help me set up the business plan.” She commented, “I don't know if the state does or not.” [#26]
- The non-Hispanic white female owner of a professional services firm, explained that although she has participated in various business assistance program seminars in the past, she no longer views the programs as helpful at her current stage in her business. She stated, “I don't feel that at this point in my career that it would be something [helpful] – if I were being mentored by someone on how to win contracts from different agencies in the federal government, perhaps. Well, let me say this, I think it's a great service to offer...[but] I think the programs that the government offers are probably weighted toward the less mature business owner; and, there are probably a lot of more experienced business owners, like myself, who would love some guidance on getting more government contracts, not on, you know, ‘now that you're a new business, here's what you can do.’ Maybe the trainings and the things that are out there, I found them more alluring when I didn't know that much about running a company.” [#79]

Joint venture relationships. One interviewee showed interest in joint venture relationships. Others faced challenges with joint venture relationships, have not participated in them, or find no value in them. For example:

- The Subcontinent Asian American female owner of a WBE-certified professional services firm said that she believes that joint venture relationships will help firms connect. She stated, “A mentor-protégé joint venture [would be helpful], and not just in terms of discussing and brainstorming, but in true [the] reality of venturing on projects. Meaningful projects are what we need.” [#44]
- The Black American male owner of a professional services firm indicated that his perception of joint venture opportunities is negative. He said the joint venture opportunities presented to him have been from non-minorities intent on taking advantage

of his skills. He explained, “Sometimes they call you and they [say], ‘We hear good things [and] we’d like for you to come on board,’ and then they want you to joint venture with somebody, one of their cronies We’ve lost a couple of contracts because we didn’t joint venture with some political person who knows zero [about the job].” He went on to comment, “Why would I joint venture with somebody who has no skills whatsoever?” [#55]

- Regarding the neutral measure of forming joint venture relationships, the non-Hispanic white female representative of a WBE- and SDB-certified professional services firm stated, “No one does joint ventures. No one. There’s so much risk involved. I’ve never heard of a joint venture working, ever. And to actually put together the paperwork [is difficult] ... you can’t get it done timely.” [#56]

Financing assistance. The study team asked business owners and managers about financing assistance and related programs. For example:

- When asked if he has experience with business assistance programs, the Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “Sure, [with] PIDC. PIDC is actually a financial partner of ours. They most seriously helped us with [a] chief financial officer who has really helped us get through a bad patch, and now we’re finding growth. We have also partnered with The Enterprise Center, [and] I think they received some city funds They’re giving us some coaching, and other resources as well.” [#38]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm commented on his experience with business assistance programs. He stated, “I’ve gone after some [financial assistance] when I first went into business, and [pursued] loans to help renovate the building and things like that. That was [with] National Rural [Lenders] Association. They helped finance a large portion of this building.” [#77]

The same business owner continued, “Locally, we found some grants but ... couldn’t apply for them [because] we weren’t a government entity. But, the city would apply for them on [our] behalf and then lend it back to us at a reduced rate So, that was all very helpful.” [#77]

- The Black American male owner of an MBE- and SDB-certified goods and services firm indicated that the lack of institutional financial support, coupled with the lack of consistent work, creates cash flow problems for small firms. [#60]
- The non-Hispanic white female representative of a trade association indicated that members find financing assistance programs helpful. She said members with financing issues are referred to the Small Business Administration. [#71]
- When asked if she has ever taken advantage of financial assistance programs, the non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “I would say no. I’m aware of other women-owned businesses that have had those kinds of issues, but we’re [a] self-financed [company].” She added, “We’re a long-standing, well-established company with a good track record.” [#81]

- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm reported that a program that includes "some kind of access to lines of credit ... or loan guarantee would be ideal." [#62]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, "[Getting] funding as far as low interest loans [and] grants [would be helpful]." [Avail #13]
- Regarding financial assistance programs, the Hispanic American male owner of an SDB- and MBE-certified professional services firm said, "I hear there are a lot of programs from banks to ... loan to people who are minorities, and this and that. It sounds great, but when you go to find out about it, they really don't ... exist. They're not functional." [#76]

Bonding assistance. Some business owners reported on bonding assistance as helpful. [e.g., #62] For example, the non-Hispanic white and veteran male owner of a professional services firm indicated that bonding assistance for state projects would benefit small contractors in his industry. [#48]

J. Insights Regarding Contracting Processes

Insights discussed include the following topics:

- Contract compliance and enforcement;
- Solicitations and procurements ;
- Information on public agency contracting procedures and bidding opportunities;
- Perceptions of electronic bidding, registration and online directory of potential subcontractors;
- Pre-bid conferences where subcontractors can meet prime contractors;
- Other agency outreach such as vendor fairs and events;
- Streamlining or simplification of bidding procedures;
- Breaking up large contracts into smaller pieces (unbundling);
- Price or evaluation preferences for small businesses;
- Small business set-asides;
- Mandatory subcontracting minimums;
- Small business subcontracting goals; and
- Formal complaint and grievance procedures.

Contract compliance and enforcement. Some business representatives discussed compliance and enforcement of Commonwealth of Pennsylvania and PennDOT contracts. For example:

- The non-Hispanic white male representative of a WBE- and SDB-certified professional services firm said the Commonwealth has become more diligent in enforcing prime and

subcontractor relationships. He explained, “In the last year or so, [I’ve] noticed that ... they are being more diligent in seeing that the work promised to the subs from the primes is honored. Prior to that, sometimes it wasn’t quite as looked” He added, “We’re hearing from our [prime contractors] that the state is talking to them, [and] saying, ‘You know, you’re not meeting your SDB commitments.’” [#58b]

- The non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm indicated that to oversight to ensure that prime contractors are hiring certified firms. She said, “There’s no accountability.” [#05]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that she would like to know “who is actually using [her certification] numbers for purchasing to meet the requirements.” She commented, “How is that checked?” [#07]

The same business owner went on to say her biggest issue is whether there is sufficient oversight. She said, “The system is really great [But] the hoops they make me jump through to keep my WBE and DBE [certification], I think it stops there. [The Commonwealth] doesn’t follow through on the other end. How are those contractors really proving that they have used a WBE/DBE firm?” [#07]

The same business owner added, “It seems like the checks and balances aren’t in place that need to be I never know if [the contractors] just tell the people [at the Commonwealth] that they used me, but ... actually didn’t. So, where is the proof that [our company] actually did supply the material for this project that [the Commonwealth] required participation in?” She added, “We’ve had WBE [certification] for 30 years and that’s always been a question in my head.” [#07]

- The non-Hispanic white female owner of a DBE-certified construction services firm suggested that the Commonwealth hold itself to the same MBE/WBE participation goals as the federal government. She said MBE/WBE participation is “a requirement of any projects that have federal funds ... [but] it’s not necessarily a state-funded requirement.” She added, “I do think a huge way [the Commonwealth] could help [small, diverse businesses] is to push those requirements down to also state-funded projects.” [#12]
- The Black American male owner of a construction-related firm commented that enforcement is a key for assessing the validity of the WBE program. He said, “There was no enforcement because the state conducted no investigation of these companies to determine how long that they have been WBEs or ... there was no one there to police what rules were at jobsites.” [#68]
- The female owner of a WBE-certified professional services firm indicated that contract compliance is important. She said, “They are doing audits, which has been reassuring for us. In fact, ... we get calls constantly from the prime saying we need to give you all of this work, because we just got a call and we’re at risk of losing our contract, so please do all of this work in this short amount of time, and make sure you get us our bill, because the Commonwealth gauges how much they pay us is their commitment to fulfilling their

percentage obligation. And, so then they rush to make sure that they're not penalized.” [PT#02b]

- The Black American male owner of an MBE- and SDB-certified goods and services firm stated that his firm no longer bids on Commonwealth projects because they suffered substantial financial loss when the Commonwealth failed to enforce an e-waste contract won by his firm as a subcontractor. He said, “A month into that contract they said my services were no longer needed They told me they had no authority [and] they couldn’t help enforce the contract. So, I had to eat that loss” [#52]

The same business owner later said, “[There needs to be] enforcement You got to take the prime and rip their contract from their hands if they can’t comply ... because that’s what they do. They’re big. These bigger contractors that win contracts in the million dollars [range] ... they can almost like lead you. Promise you something, and then you can’t really fight it” He added, “That’s the unfair truth If you’re going to get in that arena, you better know what you’re doing. So, it’s education of the prime ... and letting them know, if you do this, we’re taking your contract.” [#52]

- The male representative of a DBE-certified construction services firm indicated that minority participation should be required on state projects. He said, “[In] Maryland, the minorities there seem to have been doing ... a lot of [projects]. [They] have projects. I’m [thinking], ‘What happened to Pennsylvania? Why can’t we get projects?’ But then ... I found out ... they actually have [a] law that minority participation is [required] in Maryland. It’s not [like that] here in Pennsylvania. So anyway ... we are not able to get a government project for 17 years.” [PT#02a]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm described her frustration with large prime contractors repeatedly choosing the same subcontractors. She recommended, “Maybe if somehow you can only be subcontractor every two years or somehow just to spread it out so the Deloitte’s, the IBM’s, the Unisys’s aren’t picking the same people time after time” [#57]
- The Black American male owner of a professional services firm stated that Department of General Services “doesn’t adequately track payments.” He added, “The Commonwealth dissolves itself of subcontracting. They’re saying, ‘We deal with the primes,’ so the Commonwealth doesn’t really do compliance and enforcement. The Commonwealth has got to be involved with the administration of subcontracting, all subcontracting That’s number one. Number two, DGS went to self-certification, which is a crock. We got more folks out there now who are phonier than ever before.” [#55]
- The Black American female owner of a professional services firm, explained her perception that there is a lack of enforcement of Commonwealth small business subcontractor contracts. She stated, “Once some primes are awarded government contracts, some primes don’t communicate the award to the subs and others, other primes, try to not fully honor the letters of intent, especially since they know that DGS has only ‘paper enforcement’ and no enforcement officers in the field.” [#54]

Solicitations and procurements. Some interviewees reported on their experiences with the solicitations and procurement processes.

Comments related to solicitations and procurements are broad. For example:

- The Hispanic American male owner of a consulting firm said that he submitted three RFPs to Commonwealth of Pennsylvania but was “not qualified” because he had to “register as a certain company in their SAP system.” He commented, “[SAP] does not even work We are unable to enter our data in their system, [so we’re] never able to be qualified.” [WT#02]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said that he sometimes gets requests for “[unrelated] services, like temporary secretarial services” He said, “So I think the state can do a better job qualifying and quantifying what they are looking for.” [#06]

The same business owner said that he hears from contractors that the Commonwealth gives them directories that inaccurately list the capabilities of firms. He said, “There is a disconnect between directories and what people do, and then the contractor gets frustrated because he starts calling numbers and they’re disconnected. And he goes through 20 companies [without finding the right fit].” [#06]

- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “The government procurement process is such a cumbersome thing [that] I would not spend energy on it. It is not able to respond to the ebb and flow [of the] business industry. It is a function of the budgeting process they have to go through.” [Avail #61]
- Regarding the Commonwealth’s procurement process, the non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said, “I got really frustrated with the process because until Governor Wolf created ... Executive Order [2015-11] two years ago to begin recognizing disabled-owned businesses, there was no incentive for that, just minorities and women.” [#29]
- The Black American female owner of a WBE- and SDB-certified goods and services firm indicated that her business would be more successful if she had direct access to prime contractors rather than having to submit electronic bids for services on Commonwealth of Pennsylvania projects. She stated, “Our major challenge is access.” She said direct access to general contractors is needed so the subcontractor can “build relationships with the general contractor,” and added, “At times price isn’t always the reason why they decide to use you.” [#53]

Suggestions for improvement of solicitation and procurement processes. Some interviewees discussed ways to improve solicitation and procurement practices. Many said the online Invitation to Qualify system should be accessible by Macs instead of only PCs. [e.g., PT#14a] For example:

- The Black American male owner of a consulting firm said, “There’s some ... areas for streamlining [the Invitation to Qualify] system. And I don’t know of a business ... in [an]

earlier stage than me with less resources than I have, that could get through the ITQ process. It literally requires me to hire someone just to go through the process.” [PT#11]

The same business owner continued, “Businesses don’t have those resources if they’re a company of one or two staff members. You’ve got to service the clients you have. You’ve got to do the work that’s in front of you. And you can’t even pretend to be going after this big pot of money because you can’t get in the system.” [PT#11]

He also said the ITQ process should be accessible from Macs rather than only PCs. He said, “I’m a Mac ... supported company, so I had to buy a PC so that I could hire a kid out of college so that every day he could sit on ITQ and make sure these references are coming in ... Because every day that ... I’m not in the system, I’m missing out on opportunities ... I had to hire someone whose only job is to sit on this damn system. I think that’s something ... that government could change quickly [and] easily without even analyzing the disparities.” [PT#11]

- The Black American female owner of a WBE-certified professional services firm indicated that the Invitation to Qualify system should be natively compatible with Macs. She said, “When we started out initially, we called the tech line because our computers were not communicating They said for us to go to the library because [ITQ] only [worked with] Internet Explorer.” She said that her firm only uses Macs. [PT#11b]

The same business owner continued, “We ... bought a new laptop just to communicate [through ITQ]. It’s ridiculous.” She added, “We’ve missed five RFP opportunities because of it. [We’ve missed] five RFP opportunities that our firm was ... capable of winning or subcontracting for, because we were not in the system.” [PT#11b]

- The non-Hispanic white female owner of a WBE-certified goods and services firm reported that the key is for the Commonwealth to improve “communication” between various agencies and facilities. She stated, “I think we can have regional meetings, regional procurement things.” [#23]
- Regarding the Invitation to Qualify system, the female representative of a WBE-certified professional services firm indicated that it is difficult to identify subcategories of ITQs. She said, “The way that it’s laid out it just leaves too much to chance. It should be much more intuitive [in that] if you go to log [into the] portal ... [you] should just click a link and it take [you] to that subcategory.” [PT#11c]

The same business representative went on to say the ITQ process should be streamlined, especially when acquiring references. She commented, “You’re already trying to keep ... your [good] reputation or your relationship ... with [new] clients. Do [clients] really want to be getting 40 emails from you asking you for a reference?” She later said, “Can you imagine a firm ... that’s not in marketing, PR or [something] like [that having] the capability ... to do this? I can’t even imagine.” [PT#11c]

- The representative of a small business organization said, “When applications are made for anyone that is applying for any type of federal or state contract, [there] should [be]

someone there advocating for them around that table When you have been around the table and you have seen things come up because you don't have [anybody] there representing you, then you begin to see it's not your application It's individuals that [are] making decisions on your application." [PT#02d]

- The non-Hispanic white female owner of a DBE- and WBE-certified specialty contracting firm said, "[I have] no confidence in the state procurement system that the minority vendors will be given fair treatment. Many of the qualified vendors don't even bother to bid anymore. The vendors that remain are probably new companies." [WT#05]

The same business owner added, "[The] state misses out on [the] experience that the vendors had who have gotten frustrated and do not bid anymore." She continued, "Change the procedures. If a [general contractor] or prime lists a minority vendor, the state [should] not award [the] contract until the GC or prime have the subcontractors named in the proposal under contract." She also said there should be better communication with minority subcontractors regarding policy changes and the goals the state wants to achieve. [WT#05]

- The Black American female owner of a WBE- and SDB-certified goods and services firm said the Commonwealth's electronic notification and bid submission portals need to be more user friendly. She said they should have the same level of accessibility as private sector portals. [#53]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said that he would like to see procurement for contracts with requirements of 20 percent diverse business inclusion. He added, "[It doesn't matter if] it's for payroll [or] a staffing agency.... Make [the contractor] bring smaller people to the table." [#06]
- The Black American owner of an MBE-certified professional services firm said the state should make an effort to include more professional services firms in contracts. They commented, "The [professional services] community [needs] to push on ... making sure that we get a higher percentage of all those contract opportunities." [PT#08]
- The female owner of a goods and services firm stated, "We find it's very difficult and expensive to respond to an RFP. Our last response was 900 pages. So, just the cost of producing 900 hard copies in color was significant ... never mind the time at a 25-person small business. We did it and we were successful, but my background was writing RFPs for [named company] before I started the business, so I'm comfortable in that environment. Someone who's starting up from scratch could waste a lot of time and money and make a single mistake that would keep them from being successful or not." [PT#17a]

Information on public agency contracting procedures and bidding opportunities.

Some interviewees reported on how well information is disseminated regarding public agency contracting procedures and bidding opportunities. For example:

- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that he believes that the Department of General Services, the Bureau of Diversity,

Inclusion & Small Business Opportunities (BDISBO), and the Commonwealth are doing a good job at providing contracting opportunities as well as contracting and certification information. He said that he has personally benefited by gaining work. [#28]

The same business owner went on to say that as a Small Diverse Business, you have to participate in the opportunities that are provided. He added, "If you go to the pre-proposal you just have the same four or five vendors [who] will come. You will never find some of the [SDBs] ever there. So, if you're not there, how are you going to get the work? You have to come." [#28]

- The Black American male owner of an MBE- and SDB-certified construction company said, "[In] Southeastern [Pennsylvania] I think that the Commonwealth, in my industry, [often] chooses to utilize a developer space which ultimately nullifies the Commonwealth's procurement opportunities." [#37]

The same business owner continued, "The Commonwealth basically says I'm a renter, not a part of the economic structure that can regenerate dollars back into the communities And when you seek to get a space, you say, 'Can you build to suit?' And all of a sudden, the build to suit becomes a relationship between the developer and [the client], which eliminates all the diversity guidelines that there have been departments created in the Commonwealth to address." [#37]

- The non-Hispanic white female representative of a construction firm explained that bids are not always accurate predictors of the required work. She stated, "They need to look at these projects beforehand and know what's involved in them there's a lot of times where somebody's put it on paper and it doesn't add up. [#45]

The same business representative acknowledged that some prime contracts need to be granted to larger contractors but expressed her belief that the Commonwealth's contracting process can be wasteful at times. She explained that oftentimes a smaller business could go in and do a job cheaper than a large prime. She remarked, "I think that [the Commonwealth] need[s] to open their eyes up because [They are] paying three times the rates ... for the same thing a smaller guy could come in and do" [#45]

- The non-Hispanic white male representative of a WBE- and SDB-certified professional services firm said government contracts are not always worth their posted amounts. He stated, "[For example], if they say they're going to give us \$10 a year in work ... six of those dollars [may be] shipping and postage. If we mailed something or if we shipped product around, that counts in them spend, [but] in reality [that's] a pass through for us that's not really a benefit to us. So, when we see a contract worth \$10, it may not [really] be worth \$10." [#58b]

Some interviewees see room for improvement in public agencies' dissemination of information regarding contracting procedures and bidding opportunities. [e.g., #24, #47b, #55, #58a] For example:

- The Black American female owner of a DBE- and SDB-certified construction services firm recommended that public entities “advertise [job opportunities] more.” [#01]
- The non-Hispanic white male representative of a small business development organization reported that a lack of education about the rules and regulations surrounding the procurement processes act as a barrier for many businesses. He stated that about 15 to 20 percent of firms he works with gets about 80 percent of the opportunities because the owners take the time to learn the process and network themselves. [#46]
- The non-Hispanic white female owner of a professional services firm explained that she feels as though communication regarding government bid opportunities can be improved. She stated, “I don’t think the spreading of the word is being done very well [...]. But, I think the word is going out to the group of people that are already minority contractors trying to bid more. I don’t think the message is getting to the group of people like me that don’t opt and look for bids, but we should, or we could, particularly if Pennsylvania’s going to meet the goal as having minority contractors. I think a broader, like, you know, like a broad social media to all, you know, calling all business owners in Pennsylvania. I find that’s where we are if we’re not already - we’re routinely competing for government bids.” She continued to suggest that the Commonwealth try to build partnerships so that they can advertise to communities that don’t already contract with the State. She suggested that the Commonwealth work with the Chamber of Commerce, and various other groups for small businesses. She stated, “Get it into the newsletters and the journal announcements and the e-blasts of small business owners. [...] Let’s broaden the base.” [#79]
- When asked what the Commonwealth could do to make bidding on their contracts more accessible, the non-Hispanic white male co-owner of a construction firm recommended that the Commonwealth hold "seminars and stuff that you could attend in the area." He suggested that the Commonwealth provide "somebody that could come to your place, that would explain things to you or bring the paperwork [for certification]" [#47a]

Perceptions of electronic bidding, registration and online directory of potential subcontractors. Many business owners and managers had positive perceptions of online bidding services and directories. Some said that online services are helpful, or “okay.”

For example:

- The non-Hispanic white male representative of a WBE- and SDB-certified professional services said that his company uses the Commonwealth’s eMarketplace bidding portal to find most of their public sector work. He indicated that their perception of the bidding portal is positive. [#58b]
- The non-Hispanic white male representative of a small business development organization reported that because most bid processes are electronic, he believes that they are not any more or less difficult than other processes. [#46]
- The Black American male owner of an MBE- and SDB- certified goods and services firm reported that he feels very positive about the Commonwealth’s database of SDBs that do work as subcontractors, and their vendor business fair. [#60]

- The non-Hispanic white female owner of a SDB-certified construction firm reported that the electronic bid process has been a barrier for her firm. She said, "We have tried eMarketplace, but I'm not happy [with it]," and added that it cannot be accessed via Windows 10. [#65]
- The non-Hispanic white male representative of a professional services firm indicated that expanding online directories of subcontractors would be helpful. He said these directories should be tied to firms' "request for quote groups," and commented, "That would certainly help everybody in Pennsylvania because you can chase a lead if you're aware of it You can't chase [a] lead if you're not aware of it." [#87]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm indicated that electronic bidding and other online bidding services are very helpful. She suggested that the Commonwealth move away from paper bids completely, saying, "I think that paper bidding is really antiquated Having electronic bidding will be very helpful [as] our society is becoming a society [where] you have to be able to do things on your phone [or] any handheld." [#56]

Some interviewees had negative experiences with online bidding, registration and online directories. For example:

- The female representative of a business assistance organization indicated that the Commonwealth's online directories are hard to navigate. She said, "We talk about all the different data bases and places that you have to go find opportunities, and so forth. [It's] a whole animal itself. [PT#16k]
- The Black American female owner of a WBE- and SDB-certified goods and services firm said requirements to submit bids electronically hurt her firm. She added that the Commonwealth's eMarketplace bidding portal is more difficult to use than bidding software frequently used in the private sector. She said that she brought it to the attention of the Department of General Services that the eMarketplace bidding portal "is not equal to the private sector system." [#53]

The same business owner continued, "There is certain bidding or RFP software that as a [vendor], we're all used to looking at. If we decide to go into the [eMarketplace] portal, we are going to look at something that looks totally different. [It's] not user friendly, [it's] time consuming, [and] it's ... almost [like] we need to spend all of our time watching their jobs come out. It's just ... a mess. The interface is a mess and I don't have the time." [#53]

She went on to say that the Commonwealth's bidding process does not facilitate relationship-building between prime contractors and subcontractors. She noted, "We're being pushed into a funnel with many other contractors bidding, and potentially not all being qualified but just giving the best price." [#53]

- The Black American male owner of a DBE-certified construction firm mentioned difficulties in using the Engineering and Construction Management System (ECMS). He said, "Their

online systems [like ECMS] ... is like Russian to me Those systems have to be more direct. They have to be user friendly." [PT#13f]

- The Black American male owner of a consulting firm said, "Right now, the challenge is [Invitation to Qualify]. The process to become a registered business with the state to do business with the state is so cumbersome. And it's so redundant." [PT#11]

The same business owner continued, "For every category I want to opt in[to], I need three references In this ITQ process there are probably 50 categories that my company qualifies for. So, that's 150 people that I have to harass [and] get ... into a cumbersome system [to] say good things about me, [even though] I've been certified through any number of different certification companies [and] organizations that have already said I do the work I do." [PT#11]

He later said this process is "the biggest barrier" for small businesses, and a reason "why [Commonwealth of Pennsylvania] can say, 'We looked but we couldn't find any companies.'" He added, "Why can't you find them? [It's] because nobody is going to go through that Nobody who is ... an early-stage company has the resources to go through that." [PT#11]

- The Black American female owner of a WBE-certified professional services firm said the Invitation to Qualify system has been "problematic" for her firm. She said they've been trying for over a year "to get in the system," and added, "When they disseminate an RFQ or an RFP, they do not [clearly] list the subcategory that you need to be approved for [in] the ITQ process." She noted another barrier as being the ITQ website's incompatibility with Macs. [PT#11b]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, "We have had issues getting on the state's internal bidding site. We are not getting return calls or any help. There have been two RFP[s] we were precluded from bidding on though we are well qualified." [Avail #145]

Pre-bid conferences where subcontractors can meet prime contractors. Some business owners and managers supported holding pre-bid conferences.

Some business owners saw the advantages of pre-bids but reported on room for improvement. [e.g., #43, #58b, PT#17a] For example:

- The non-Hispanic white male representative of a WBE- and SDB-certified professional services firm indicated that they rely on pre-bid meetings to meet primes and get subcontracts with the state. He said, "Hopefully [the state has] a pre-bid meeting [so] I can go up ... and meet the primes to tell [them] what I do as a minority business That's the way we sort of rub shoulders with the primes and get some information into their hands." [#58b]

The same business representative went on to say, "Hopefully that sort of mushrooms into [the primes] looking at us as a subcontractor Another way that they reach us is through

the state website. So, I think when they need a WBE or a small diverse business, the first place they go to is the state website and [then] start making phone calls.” [#58b]

- The non-Hispanic white female owner of a DBE- and WBE-certified specialty contracting firm suggested there be pre- and post-bid meetings involving the state, general contractor, and all subcontractors. She said, “[The state can] get feedback from all so as to constantly make adjustments to the new procedures put in place Incentivize the [general contractor]/prime to participate in this program. As the minority vendors and the GC/prime [contractors and] state work together, perceptions can change.” [WT#05]
- Regarding pre-bid meetings, the non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “I have enjoyed ... when the Commonwealth has a ... pre-bid meeting If I’m able to figure out which ones have the pre-bid meeting, I ... go to those pre-bid meetings and make valuable business contacts.” She added, “I think that it’s appreciated that the Commonwealth has a section of those pre-bid meetings devoted to the minority and women requirements [It] enables those of us who attend to, you know, to introduce ourselves.” [#81]
- When asked about pre-bid conferences, the Black American male owner of an MBE- and DBE-certified construction supply firm said, “Everybody needs to be rated on capacity.” He continued, “My experience is they have these big outreach events [for big projects], [but] there might be ... five people out of the 100 they’ve invited that have the capacity [and expertise] to perform on that job. [#06]
- The same business owner went on to say, “The dog and pony show is great, but there is not enough connection to the company that has the capacity to do [the job]. It looks good publicity-wise. Somebody takes pictures [of] a room full of women and they’ve got this networking thing. [But] 80 percent of the people don’t have the wherewithal for that size a project.” [#06]

He said the Commonwealth should “vet out [the] MBEs [and] make a plan,” because “the contractor is going to come back and say, ‘Yeah, you guys gave me this directory and I found two guys, [but] I don’t even know if they can cut it.’” He said this is an excuse that contractors “throwback” on the Commonwealth, and added, “The Commonwealth should try harder to connect firms with projects that fit their capacity.” [#06]

- The Black American female owner of a WBE- and SDB-certified goods and services firm said pre-bid meetings should be mandatory because they provide subcontractors with access to prime contractors. She commented, “You bid on some of the jobs [but] you don’t get them, [so] you continue trying to get them through the portal. Not face to face.” She added, “As a result of attending a meeting ... they know that you are what you represent, and they send you private solicitations I personally think that people should attend the pre-bid meetings just like with any other construction projects.” [#53]

The same business owner later said the Commonwealth should have “aggressive participation goals” for disadvantaged businesses. She stated, “I think the pre-bid meeting should be mandatory, and I think that there should be a commitment top-down throughout

all agencies to meet the participation goals. I would love to know that DGS and PennDOT have aggressive participation goals ... with the particular prime contractors that they select.” [#53]

- A public meeting participant said, “They're putting contracts out in a short amount of time ... You see stuff on the street, 15 days, no pre-bid meetings. If there's a pre-bid meeting, you got to call that agency and say, ‘When you going to put out the bidder's list of the attendees?’” [PT#02c]
- The owner of a professional services firm stated, “In my experiences with the Commonwealth, I already have my subcontractor, my small diverse business chosen way before the pre-bid meetings. So ... I don't know that that's necessarily a great place to connect. It would be very, very nice if some of the Chambers of Commerce ... would maybe have a list of small diverse businesses that are willing to do work, and what kind of work that they were willing to do. I've ... worked with some really, really good subcontractors, and then there's been sometimes where I've, you know, I've struggled to find the right person with the right company.” [PT#17g]
- The Black American female owner of a DBE- and SDB-certified professional services firm said pre-bid conferences are not available in her industry but indicated they would be helpful if they were. She said, “They're generally not put out like that. They're the ones that if you're in a category, then you get invited. So, it's not an open forum where you can meet people that perhaps you might want to partner with. You would literally just do that on your own. So, you really don't know who the players are.” [#32]

Some interviewees indicated that pre-bid conferences are not helpful, not available, or they choose not to attend them. For example:

- Regarding pre-bid meetings, the female owner of a small business said, “Even when you attend the pre-bid meeting and you meet somebody, shake their hand, [and] exchange cards, getting them to answer your call ... afterwards [is difficult].” She added, “[It's] because unless they truly have an interest in you and they want to bid on something quickly and ... they need you, because you're a WBE [or] you're an SDB, [they won't talk to you]. You know they have a handful of people they use all the time. So, if you're new to them, they're not paying a whole lot of attention.” [PT#17c]
- The Black American female owner of a WBE- and SDB-certified goods and services firm said that she has attended pre-bid meetings and submitted bids to work as a subcontractor on Department of General Services projects. However, she said the process hasn't resulted in opportunities. [#53]
- The non-Hispanic white female owner of a WBE-certified construction-related firm said that her firm attended a JOC [Job Order Contracting] Program networking event in Wilkensburg. She stated that the event was “a waste of a whole day.” [#17a]
- The female representative of a WBE-certified construction-related firm said that the Job Order Contracting Program events are “fruitless.” She stated, “We go and we sit there and

wait [The Commonwealth] do a presentation ... and we're supposed to be able to meet with them and they're going to help us, and work with us." However, she said that after the events their calls to prime contractors are never returned. [#17b]

- The non-Hispanic white female owner of a WBE-certified construction firm described her frustration surrounding pre-bid meetings. She explained, "I go to these bid openings [...] where they invite everyone to come in and they want the WBEs and the MBEs to be there and everything. And I hear people that stand up and they'll complain about this and that, and I just think, we don't have that. [...] We've been in town a long time. We're not new to the area. We're not anybody new that's just coming in because we're now a WBE and an MBE. We've been here. And so I'm a little bit, maybe different than some of the others would be that have the problems getting in. It goes back to reputation and it goes back to who you are, and maybe it is harder to get in the door, but I wasn't part of when it was hard to get in the door. I've seen the frustration that they have. Probably more in the public sector when I've been to the bid openings and things like that. People have stood up and said, you know, where they're having trouble getting in. [...] Me, personally? No. I don't feel that it's a barrier. [...] I understand it and I'm a part of it and I am proud of what we are, but sometimes I think it's a little too much. Like, I understand the percentages of participation that they're going after, and I understand the programs and I completely -- and like I said, proud to be part of it. But sometimes I think it's just - like, don't just give somebody the chance because they're a woman or they're a minority - [...] it doesn't mean that you're going to do a good job. [...] Don't put them in this position where they're not ready to be. You know what I mean? Just because you're that - just because I'm a female doesn't mean that I'm any different [...]. That's the only thing that I kind of get, sitting back looking at different contractors that I know can't perform the work or don't have the skillset to perform the work, but they're there and they're looking at the job and think that, well, I'm entitled to that because I am this. Don't do a bad job [...] just because you're that. If you're out of your league, stay within your league and do what you need to do [...]. That's the only thing that I have a little bit of a problem with that, yes, it is a great opportunity. It is a great thing. But it doesn't necessarily mean that they're the right person for that particular contract. And there's times that I want to pull them aside, the WBEs or the MBEs, and say, you know, maybe you guys want to come in and talk sometime, or I'd be willing to share with you some different ways of going about [public sector work] or different ways of going about that's worked for us. Because you know the questions they're asking, I worry about them that they've got it covered. [...] I worry about them as far as don't just throw your hat in the ring because of your designation. Wait until you're ready for it." [#73]

Distribution of lists of plan holders or other lists of possible prime bidders to potential subcontractors. Some of the business owners and managers interviewed supported the distribution of plan holders' lists or indicated that they are helpful. [e.g., #06, #60, PT#10e, PT#17g] For example, the Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that he recently attended a PennDOT event showing vendors how to register on their vendor list. [#43]

Other agency outreach such as vendor fairs and events. Some business representatives reported that they could not attend outreach events for many reasons including time constraints,

limited staff size and location. Some attended but had recommendations for improvements. [e.g., PT#16j] For example:

- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that his firm attended a few vendor fairs where larger companies attend. However, he said because the fairs have not benefited his firm or resulted in new contracts, he stopped attending. He explained, “I sometimes feel that they come out there and participate [just] to say they participated.” [#43]
- The non-Hispanic white male representative of a professional services firm suggested that the Commonwealth implement regional “meet and greet” events with industry IT leaders. He said, “People ... especially small companies, aren't going to have the budget to send four or five people, or even two people, down to Harrisburg. And they don't have the time [either] ... I think you have to have it regional, like ... Western Pennsylvania, Valley Forge, [and] Central Pennsylvania [events].” [#87]

The same business representative went on to say the firm “probably would have [gotten] some very strong relationships” over the years if regional networking events were implemented for his industry, and commented, “I think that would have fostered a communication.” [#87]

A number of business owners indicated that they faced challenges in attending outreach events, do not support their usefulness, or are unaware of their existence. [e.g., #36]

For example, the female representative of a WBE-certified construction-related firm said, “We've gone to the UPMC [University of Pittsburgh Medical Center] events. We've [also] gone to Highmark, where you spend a day and you hear how to do business with [them], but you never hear back from them.” [#17b]

A few interviewees supported agency outreach such as training seminars, conferences, networking events and vendor fairs and attend them. [e.g., #43, #76, #87] For example:

- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said the Bureau of Diversity, Inclusion & Small Business Opportunities (BDISBO) has been doing a good job of engaging small diverse businesses through their outreach program. He noted that the programs where BDISBO invites big primes to networking events are very helpful, and commented, “That actually helps the SDBs to talk to the big primes and everything.” He said these events won't be helpful unless the small diverse businesses take the initiative to follow-up and build relationships over time. He added, “None of the primes will take you in one meeting. You have to constantly follow, show the value, and then you'll get selected.” [#28]
- The non-Hispanic white female owner of a WBE-certified construction-related firm said that she will be attending the town hall organized by BBC for the Pennsylvania Disparity Study project. [#17a]

Streamlining or simplification of bidding procedures. Some interviewees indicated that streamlining or simplification of bidding procedures would be helpful. Others suggested that

shortening the time it takes to bid would be an improvement for small businesses trying to manage their time efficiently. [e.g., #53, PT#16k] For example:

- The Hispanic American male owner of an SDB- and MBE-certified professional services firm indicated that state contracting processes should be streamlined. He said, “You just need a lot of patience and a lot of time. It’s very time-consuming If somebody asked me for advice, I would just say [to not] waste your time [in the public sector] and work for the private sector [instead]. The amount of time that you put in filling every certification, every insurance, [and] every form [is not worth it]. And ... sometimes you have to redo them again [each] year” [#76]
- The non-Hispanic white male owner of a professional services firm said, “Their website is a barrier. Just trying to understand how to find it [and] submit to a bid [is difficult]. So is [making] sure that what I’m submitting is what they want, because I don’t want to win a bid where I can’t fulfill it. That’s the last thing I want to do. So again, just trying to understand the bidding process and what needs to happen on my end [is a barrier].” He added that his firm doesn’t fit neatly into one of the Commonwealth’s categories, saying, “If you go underneath maintenance, there’s nothing there for spill response or emergency management.” [#70]
- When asked to describe his experiences trying to get work with Commonwealth of Pennsylvania, the Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that he has not had any problems with the bid submission process. However, he did say that bid submission is a time-consuming and costly process. He went on to say, “They require ... either seven copies or 13 copies of a thousand pages. And then if you get technically rejected it’s a bummer because you have spent so much money.” He said sometimes this process makes him question whether his company should bid or not. [#28]
- When asked how the state bid process could be improved, the Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “Increase the timeline If you know what you’re going to be buying in a year, post an intended procurement schedule if you know it, [then] update it regularly.” [#38]

The same business owner compared his experiences with federal contracts to those with Commonwealth of Pennsylvania. He stated, “I think the federal agencies do a simpler job of proposing the procurement schedules We can sit down and look at what they’re actually going to buy for the entire year, and then ... naturally make those kind[s] of connections and phone calls before it goes out to bid I think it’s about not having enough time in advance to understand the opportunity properly.” He continued, “I feel like at the state level it’s much more [short notice]. It’s coming out in a month ... or the pre-bid meeting is [only] in a week and a half or two weeks It just seems a lot more compressed.” [#38]

Breaking up large contracts into smaller pieces (unbundling). The size of contracts and unbundling of contracts were topics of interest to many interviewees.

Most business owners and managers interviewed indicated that breaking up large contracts into smaller components would be helpful. [e.g., #27, #43, #44, PT#17a, PT#17c] For example:

- The female representative of a WBE-certified construction-related firm said that one thing the Commonwealth can do to help small diverse businesses is “break up the contracts.” She added, “They can't give the [general contractors] everything. If they're not a plumber, they should not be doing the plumbing bid[s]. That should be put out to plumbing primes who have licensed and completely operated plumbers Just don't give it to [general contractors]. And give some accountability [by making] it so they can't use the same [contractors] every single time.” [#17b]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said small businesses may not be able to handle \$5 million contracts. He said if the state split the contracts into smaller amounts, he “could get a million-dollar bond.” He added, “You gain capacity [and] you gain experience [this way]. You understand the paperwork procedure [and] your back office starts to understand what's expected And then maybe next time you do a \$1.25 million [job]. You increase your capacity by \$250,000 But there's nothing letting the contractors grow like that.” [#06]

The same business owner went on to say that a lot of times “[bid] packages are [so] big” that small businesses “can't bid on them.” He commented, “Why not break the contracts down? It's taxpayer money. Break it down and let more people at the table. It might ... create more work for certain agencies that monitor the contracts, but it puts money into the hands of the people [who] are going to spend it.” [#06]

- The owner of a DBE- and SDB-certified professional services firm explained that she is often a subcontractor on Commonwealth projects because the Commonwealth does not issue smaller projects on which smaller firms can bid as primes. She noted that the limited opportunities to serve as a prime on Commonwealth contracts negatively affect her firm.

She observed, “Our talent is never visible to the [Commonwealth] client because we never get face time with [them]. We turn in our work, our deliverable, in great shape to the prime who just gets all the face time.” She went on to explain that another result of this situation is that the Commonwealth project managers become comfortable with the prime consultants' project managers, but never become familiar with the talents of the subcontractors. She elaborated, “the project managers continue to pick firms they are familiar with in future contracts and it becomes a vicious circle for the SDBs.” She suggested that smaller contracts could “allow many of us small businesses the opportunity to [to showcase] our talents.” [#78]

- The non-Hispanic white female owner of a DBE- and WBE-certified specialty contracting firm said, “Pennsylvania bundles services in their procurements. Typically, they break down the larger contracts into categories such as general, electrical, HVAC [etcetera]. Asbestos is always bundled with general. At one time there was talk of breaking out the asbestos contracts. The rationale was that the asbestos/environmental work is done first and the contracts can be large enough to warrant a separate contract. I have never seen this done as of yet. We have to bid to someone else, a [general contractor] or prime of some sort. The

GCs are not required to hire minority vendors, only ‘try’ to meet the minority participation goals.” [WT#05]

The same business owner continued, “Have the state employ a construction manager and designate some of the [multidisciplinary] construction projects entirely for minority contractors. No need for a separate GC Procure some of the services typically bundled together as separate contracts and have those bid directly to the state. [WT#05]

- The non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm reported that unbundling of projects would be helpful to her firm. She said, “I would like to see that [contracts] go to not one prime, but a prime and several subcontractors” [#05]
- The male owner of a DBE-certified construction services firm stated, “It seems somehow that the projects just [get] bigger and bigger, and more robust And, as a small company, there is no way we can deal with, you know, a \$500 million [dollar] project I always said to people, ‘Why can’t we just split these projects up?’ Especially engineering and construction. There [are] so many different facets. Why can’t these projects be broken up in a way that smaller businesses can get in?” [PT#02a]
- On the topic of unbundling contracts, the owner of a professional services firm said, “PennDOT will have these giant, open-ended contracts that six large civil engineering firms have, and that’s where they throw all their small stuff. So, all the work in this region that I ought to be doing as an urban design firm ... is getting thrown to civil design firms. In fact, they have been botching it. But, they’re getting the fees and there’s absolutely no opportunity for us.” [PT#17e]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm said that the Commonwealth doesn’t conduct sufficient project planning. She said that a lack of sufficient planning is reflected in various aspects of the bidding and implementation process, and added, “Project planning is tough. I would say it’s a tough process. I think the Commonwealth also put[s] out bids for multi-year [projects so they don’t have to rebid them].” [#56]

The same business owner continued, “For example, [if] you put out a 10-year bid ... you put out a bid that’s going to be work for 10 years. How do you expect any firm ... large firm [or] small firm, to be able to give you an accurate pricing for 10 years’ worth of work? The Commonwealth does that because they don’t want to keep rebidding again. They also should break [it] up. They package everything together in huge bundles and then smaller firms cannot bid the part that they could be on and be prime on ... because it’s bundled.” [#56]

- The Black American female owner of an SDB- and WBE-certified professional services firm indicated that breaking up large state contracts into smaller components would be helpful to firms in her industry. [#35]
- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm identified the size of contracts as a barrier to doing work with the state. He explained,

"[groups like PennDOT] have large open-ended contracts, and they bring large, basically, national engineering firms in a tremendous amount of [work now] has to do with weaving [roads] into cities and communities. And that's where we ought to be front and center on, and we can't even begin to break into that [Those firms] don't understand how to do this work very well" [#62]

The same firm owner noted that smaller and more frequent contracts, "would be helpful," adding that a prequalification element would make it much easier to avoid "jumping through hoops." [#62]

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated that breaking up large contracts into smaller pieces would help her company. [#58a]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, "When they put out a request for information, they shotgun it and make no differentiation between smaller firms and larger firms. There should be a division based on size or dollar amounts." [Avail #72]

Price or evaluation preferences for small businesses. Some interviewees had comments on price or evaluation preferences. For example:

- The non-Hispanic white female owner of a WBE-certified professional services firm said, "In my industry, people are working out of their homes. And I'm not saying there's anything wrong with that because I worked out of my home, but they cut the pricing so low because they're not covering the insurance and all of that. That was one of the things [Governor] Tom Wolf said. [He said], 'Maybe we need to start looking at value along with price, and not be so totally price driven' We see that all the time." [#04]
- When surveyed, the owner of a goods and services business in Central Pennsylvania responded, "There's a lot more bidding going [on] now [and it's] more about low cost than value. We don't sell cheap products. If the government wants to buy \$300 couches and not \$1000 couches, we're going to lose business." [Avail #140]
- When surveyed, the owner of a construction business in Central Pennsylvania responded, "As far as obtaining work, I believe they need to eliminate the process of ... expecting the lowest responsible bid. That would help small business." [Avail #126]
- The Black American male owner of an MBE- and SDB-certified construction services firm stated that that the low bid process hurts small MBE firms in several ways. He said, "We're hurting from beginning to end in the bidding process. Number one, when we price our materials, we're not going to get it at the same price as the majority contractor, or the contractor that's been in business 25 [to] 30 years" [#67]

The same business owner continued, "On a lot of the projects that we perform on, we have to rent equipment, and a lot of the majority contractors already have that equipment And, the matter of labor also ... they have workers that are working year-round and they

may be making \$15 an hour, but the minority contractor ... may pay a little more to those workers It overall makes everything a little more expensive.” [#67]

- The Black American male owner of an MBE- and SDB-certified construction services firm said it is easier to get work in the public sector if you are bondable, “because then it’s low bid.” He continued, “But the problem with low bid is [that] it’s usually [whoever] makes the biggest mistake [that] gets the job, versus negotiated contracts [in the private sector]. So [when] you’re private, negotiated contracts are always better than your public low bid contracts, unless you’re working for a program like 8(a), where there [are] set-asides and you negotiate.” [#27]
- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “I am not any of the listed ownership designations, so I don’t get first crack at contracts. Bidding should be based on ability to do the job, and price.” [Avail #43]
- The non-Hispanic white male owner of a construction firm said, “I can understand how [price or evaluation preferences] would be beneficial. That has not been a barrier problem that I’ve encountered though.” [#75]

Small business set-asides. The study team discussed the concept of small business set-asides, a program that limits the bidding of certain contracts to firms qualifying as small businesses, with business owners and managers.

Many business owners and managers supported small business set-asides. [e.g., #03, #08, #09, #32, #37, #43, #44, #56, #58b, #61, #63, PT#63, WT#05] For example:

- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said small business set-asides “[make] it easier to get the work” in the public sector. He added that this generally “makes it a little easier in the government sector than in the private.” [#09]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that small business set-asides are helpful, and added, “It gives the small business an opportunity to get the experience, provided they meet the requirements of the contract. So, if there are several firms that meet the requirements of the contract it will give us the ability to compete on the same plane ... because we have limited funds and resources.” [#43]
- When asked if small business set-asides are helpful, the non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, “I think it’s valuable that the Commonwealth has targets. It’s very helpful.” She added that the designation of Small Diverse Business is “absolutely” helpful to small businesses seeking work with the Commonwealth. [#81]
- A public meeting participant said small business set-asides are helpful, especially for Black American-owned professional services firms. He went on to say that “PennDOT could use set-asides.” [PT#01b]

- The male representative of a minority-owned business stated that he supports small business set-asides though the connotation of the term "set-aside" can be damaging. [PT#15c]

Some business owners discussed room for improvement in the program. For example:

- Regarding small business set-asides, the Subcontinent Asian American female owner of a WBE-certified professional services firm stated, "There should be bids for smaller businesses where we can compete with other new applicants, just not small applicants Maybe small, minority women-owned or just minority smaller businesses. There has to be set-aside projects for small businesses where the RFP is also smaller." [#44]
- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm stated, "I think the federal government does something that is designed to help bridge the really small business and really large business by having size thresholds." [#56]

She went on to say, "So for example, they might do a small business set-aside for a specific code, only to firms having gross sales less than a million. And it's a set-aside for them only And they might have set asides for the firms that are less than \$40 million or ... \$50 million, to do work that nobody above \$50 million can bid In terms of the Commonwealth, there's no in between. And so, this is kind of a tier It's not so much benefit; it's the way the bids are released." [#56]

- The non-Hispanic white female owner of a DBE- and SDB-certified professional services firm described a previous Commonwealth program that required current contractors to have set asides for small businesses and subsequently engage in business development activities with the small business. She explained, "I think what they found is that a lot of these organizations needed a lot of help on just how to run a business kind of thing, right? Which wasn't the job of the prime, and so the prime kind of gave up. So, ideally, if they were to try to be serious about bringing new small businesses, not a lot of experience businesses that do have the qualifications to do the work, they, you know, the best thing they can do is encourage these kind of partnerships, one. And two, have some sort of unit in, at the state level, probably out of this, whatever office has – is doing this, I think, it's their version of M-DOT, DOT, that can provide technical assistance to these small businesses and new businesses on, signing contracts with the state and doing the paperwork correctly and whatever other help they might need."
- The non-Hispanic white male veteran owner of a professional services firm explained that while he is satisfied with his private sector work, he also feels that there should be set asides for small businesses such as his. He stated, "In my opinion I've been thinking, well, those things would be way over my head. And, maybe it's structured to be that way right now. But, I think it should be structured - there should be something for some smaller jobs, so to speak. As a very small business, I feel that there should be some very small jobs that may need to be done. The way I think it's done is, they hire a large firm that has somebody that specifically fills out the contracts and all that stuff. And, they fill that out, and then as they have a job come up, they pick this person to go into and do those jobs, depending what

they are. There should be some way that a small firm could be contacted --maybe three firms, or however many, on an as-needed basis, and maybe give their estimate to them, and let them do the job for you. So, that is a limiting issue, because the State, usually, sometimes, they have a lot of large jobs. And, that's why I was saying-- they need to break them down into some smaller jobs that our very small outfit could just work and do, instead of using the big firms. The big companies, they can do those little jobs, but a smaller guy it would help him, plus also he could probably save the State some money, because he could probably do it a little bit cheaper than the bigger guy, and then save the big jobs for the bigger companies. And, so, you know, I think that is more than anything the reason why we don't get too many, is because I think that they lump them together, I think. But, I'd like to see, you know, some - well, just say they were buying a small property to condemn to change the location of a road, and they just needed a survey on it. Something like that I could handle." [#91]

- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm indicated that small business set-asides are helpful, but said "more set-asides are needed." He added that there's "an overwhelming lack of set-asides at the state level." [#08]
- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm said there should be more set-asides for certified firms. She added, "I like the idea of doing the set-asides, but in my experience the set aside projects that the Commonwealth ... have done are too small ... for a firm of our size. I feel like they say, 'All right ... we're only going to set aside the really small projects and ... not going to set aside any of the medium-sized or slightly larger projects' [I] think that they ... don't get a lot of participation on those ... set-asides because they've created projects that aren't really desirable." [#61]
- The Black American female owner of a DBE- and WBE-certified construction firm said, "It would be good if the state did like the federal government and had set-asides The federal government has set-asides for women and they have set-asides for veterans. If the state had set-asides for different small businesses, that would be a better way to get us more work." [#63]

Mandatory subcontracting minimums. Some interviewees supported a minimum level of subcontracting on projects, indicating it would be helpful to their firm. For example, the non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated that mandatory small business subcontracting minimums would help her company. [#58a]

Small business subcontracting goals. Interviewees discussed the concept of setting contract goals for small business participation in public contracts.

Several business owners and managers voiced approval for small business subcontracting goals and some expressed that goals be set or expanded. [e.g., #12, PT#02a] For example:

- The Black American male owner of an MBE- and DBE-certified specialty consulting firm said there should be "separate goals [in] the programs" for the different disadvantaged

groups. He continued, "You can't have a [combined] MBE/WBE goal and say [how] you get there. That's not responsible at all." [PT#05]

The same business owner continued, "This is a remedial program Each person needs their own prescription, just like [at] the doctor I think what happens is people forget that [this] program is remedial in nature. They look at it like it's a public facility And they say, "Well, we should all have access to the water fountain. We should all have access to the restroom." [PT#05]

He continued, "And that's not what this is. This is ... a program that in and of itself is a remedial action. The reason why there ... needs to be inequity in this program is to create equality that does not exist." [PT#05]

- The female owner of a DBE- and WBE-certified construction supply firm said, "Even though there are DBE goals on the project, the DBE goals are so low that the contractor can easily ... meet the requirements by going through a dealer. And I can't compete against what the dealer charges ... and I'm bringing jobs to the State of Pennsylvania." [PT#16i]

The same business owner continued, "With low DBE goals ... it's very hard to get these contracts until the goals are larger. When the goals are five percent and higher, I have a greater success rate. Not a strong one, but it's better than when it's under five percent." [PT#16i]

- The male representative of a business assistance organization stated, "We testify today in the spirit of partnership with the city and state to help convey the importance of adding certified LGBT businesses and individuals to all of Pennsylvania's and Philadelphia's supplier diversity standards." He went on to say, "LGBT people have the same American dream to grow a business and create jobs as everyone else. As Congressman Barney Frank is renowned for saying, 'If you're not at the table, you're on the menu.'" [PT#01d]

The same business representative continued, "Without [supplier diversity] programs, new businesses, many of them owned by LGBT citizens, would never be noticed against the legacy businesses that have historically won these contracts. We believe that adding LGBTBE-certified business enterprises and their individuals is the next step in full equality for our community [LGBT businesses are] in every sector, applying goods and services across supply chains of every size By teaming collaboratively with other diverse communities [such as] women, people of color, the disability community, and veterans, we're paying it forward across the entire diverse spectrum of American business. We need recognition from government municipalities to join this trend and then enforce the results." [PT#01d]

- The Black American female representative of a business assistance organization stated, "We work closely with African American women-owned businesses [and] put on events for certification processes to assist those businesses and gain access to state contracts. We hear from our African American women-owned businesses that there are not many advantages to those certifications if there [are] no diversity goals set in place or mandated at the state procurement level. So, in order to support greater participation by the minority community,

we ask for your commitment today to setting a standard for minority participation goals regardless of the outcome of this study.” [PT#01e]

- The Black American male owner of an SDB- and MBE-certified professional services firm reported that he believes “minimum [subcontracting goals] need to be increased ... They probably want to think about raising that to somewhere, say 10 or even 15 percent. Put the upper goal. But at least maybe increase the minimum.” [#37]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm stated, “If you really want to make manufacturers thrive, and you want to create a marketplace for disadvantaged business to grow and to prosper, [then you need] larger goals. Those people are going to thrive [then]. But when you have the small ones, the people who do less work are getting all the work because they have smaller overhead costs, and I can't compete against that.” [#25]

The same business owner added that she faces stiff competition from DBE-certified rebar installers who get 100 percent DBE credit for not only their installation, but also their purchases. She explained, “So I have this big investment, and then an installer is going to come in and ... go ahead and offer the same 100 percent that I do, but they don't have any of this material and overhead to compete with. How you can offer that when you're not doing the same thing as I am unfair. I don't mean to cry wolf and whine, but the rules are the rules.” [#25]

- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said having goals for disadvantaged business participation is very important. He stated, “I know that [City of Philadelphia] sets very aggressive goals, [and] I think it has really helped small businesses. I don't think there's any compromise in the quality of work. I think that small businesses have equally good people who are good at the work, so an aggressive goal [is fine].” [#43]
- Regarding small business subcontracting goals, the non-Hispanic white female owner of a WBE- and SDB-certified construction firm said there should be participation requirements rather than goals. She explained, “There's a difference between saying [there's a] good faith goal and [a] requirement The way it is now, you just have to demonstrate that you attempted ... but unless somebody ... tells [you] it's a requirement, [you're] not going to put the same amount of effort into it.” [#61]

A number of business owners and managers expressed disapproval of small business subcontracting goals, or said goals negatively affect their business. Some indicated that the goals are difficult to meet; one business owner said that DBE/WBE requirements on state contracts are “detrimental” to their business. [e.g., #39a] For example:

- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “Since our inception the greatest challenge we have faced is that we are not a DBE or WBE. The DBE/WBE requirement for state contracts has been very detrimental to our small business.” [Avail #161]

- When surveyed, the co-owner of a professional services business in Eastern Pennsylvania responded, “We’re two white guys running this company, and we have a hard time because we are white and not minority-owned, or LGBT. It’s hard to get government work.” [Avail #159]
- When surveyed, the owner of a construction business in Eastern Pennsylvania responded, “Most of the work is going to minority owners, so it makes it hard to get work, regardless of the experience.” [Avail #113]
- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “DBEs and MBEs have first priority getting state contracts.” [Avail #88]
- When surveyed, the owner of a professional services business in Central Pennsylvania responded, “In the past five years I have not received work on 37 different occasions because in [that] history I was not certified as a minority-owned business. Because I was not minority certified-owned, they gave the work to another business.” [Avail #141]
- Regarding hiring minority- and women-owned subcontractors for Commonwealth contracts, the female representative of a construction services firm said, “We have to do what we can because we have to meet [that]. So, it’s not easy to find. We have to come up with something, and it is like the 10, 15 percent, and we’re just asking people ... [and saying], ‘Okay, we’re going to contract with you,’ but they don’t do that work. So, we run bills through that company in order to meet [the quota], which is goofy” [#39b]

The same business representative went on to say that minority- and women-owned subcontractors sometimes hire other contractors to do parts of the work. She said, “You’re a demo contractor, and then you’re going to sign off for us, and ... mark it up, and they pay the insulating contractor that is not a MWBE. And it happens all the time Instead of paying them directly, we run it through them and they pay them. And they take their percentage of it It’s typically 5 percent, is what the markup is It’s so ... goofy to be doing it this way.” [#39b]

She continued, “If there was a valid [MWBE] insulating contractor, it would be great. We would go right to them. I have called and tried [When I ask], ‘Are there more subcontractors out there?’ [All Philadelphia] will say [is], ‘Oh, there’s a whole list. Go on [our] website.’ I have contacted ... so many of these people, and they have different kinds of categories and [I ask if they’ll] put in insulation for us, and [they say], ‘No, we do not do that. We’re a general contractor and we only do concrete.’” She said, however, that the MWBE firms are listed as doing the work on the website. She added, “We don’t have enough valid people that ... can do [the work] It just gets hard to try to meet [the quota]. The people aren’t out there. The contractors aren’t out there like they say they are.” [#39b]

- When surveyed, the owner of a construction business in Central Pennsylvania responded, “Obtaining work [can be a challenge]. Sometimes minority [and WBE] requirements are hard to meet” [Avail #15]

- When surveyed, the owner of a professional services business in Western Pennsylvania responded, “[Getting] minority getting engineering firms to work on your projects, in particular structural firms, [is] difficult. [It’s a challenge] to find minority firms to reach your requirements.” [Avail #75]

Formal complaint and grievance procedures. One business owner did not find complaint and grievance procedures helpful. The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that his firm filed a grievance in the past. He stated, “I have done it once where I felt I was not given the opportunity that I should have I thought my numbers [were] lower, [and] I had done the work previously. I didn't think that competence was a question. Price was not a question. I was the lowest bidder and I didn't get it.” [#43]

The same business owner continued, “I was given an opportunity to go [before] a panel that did the selection [and] I was not satisfied with what the answers I was given. I think people are [always] going to try and justify why they did certain things. Maybe they're right, but it left me with a feeling that it was a waste of my time. If I don't win something ... I go on to the next one and pursue something that's more constructive or productive. Trying to find out why you didn't win [is] a waste of time as far as I'm concerned.” [#43]

K. Insights Regarding the Federal DBE Program or any other Race-/Gender-Conscious Program

Interviewees, participants in public hearings, and other individuals made a number of comments about race- and gender-based measures that public agencies use, including MBE/WBE and DBE contract goals and comments regarding:

- Federal DBE Program at Commonwealth of Pennsylvania, and other race- and gender-based programs; and
- Any issues regarding Commonwealth of Pennsylvania or other public agency monitoring and enforcement of its programs.

Federal DBE Program in Commonwealth of Pennsylvania, and other race- and gender-based programs. Interviewees provided insights on Commonwealth of Pennsylvania’s implementation of the Federal DBE Program. For example:

- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that he did not benefit from the federal SBA 8(a) program. He said that he did not focus on bidding those projects because he did not know the federal market and competitors. Instead, he said that he chose to focus on the Commonwealth of Pennsylvania because he knows the market well. He added, “See, [in the] Harrisburg area I know everything. [I know] who is going to compete, who is going to bid, who are the players and everything.” [#28]
- Regarding SBA 8(a) certification, the female representative of a woman-owned DBE-certified professional services firm said, “We ... started as an 8(a) firm, which, you know, you go through 10 years as an 8(a) [then] you lose that. A lot of 8(a) [firms] disappear after that So, we’ve made a tremendous effort to diversify our business, particularly here in

the Pittsburgh area, to make sure that we were a sustainable company in the long term without having that 8(a).” [PT#16a]

- The Black American male owner of a construction-related firm reported that in the absence of MBE goals, discrimination is a barrier to contract awards and results in disparaging jobsite treatment. [#68]
- The minority female owner of a DBE- and SBE-certified firm said the Commonwealth should adopt standards used in the Federal DBE program. She said, “We’re looking at this great faith effort, [and] that needs to go away. We need move along the federal standards for that, because I have a lot of prime contractors contact me from the other side of the State.” [PT#16j]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm indicated that DBE certifications are helpful. He said that his DBE status allowed him to self-certify as an SDB. [#43]

Regarding the SBA 8(a) program, the Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said that his firm tried to pursue the certification but was disqualified. He said that his retirement account was included in his net worth, making the firm ineligible for the program. [#43]

- The Black American female owner of a DBE- and SDB-certified professional services firm said that her SBA 8(a) certification hasn’t led to any new work. She stated, “We’ve bid on some, [but] we haven’t gotten any ... I think that the 8(a) certifications have helped us to get projects that were funded by the government, because that looks good if they hired an 8(a) firm, but we haven’t gotten any [through the certification]. I gave up on getting [that work]. I’m not making any excuses.” [#32]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said, “The [SBA] 8(a) program, of course, has been tremendously helpful.” He said that he knew the people at the Small Business Administration “very well,” and that they would “fight hard” to help him get contracting opportunities. [#09]

The same business owner went on to say there was a contract that “some engineers” thought was “too complex for a minority or 8(a) firm,” but the SBA liaison helped his firm get the opportunity to do a winning presentation for the contract. He said, “You know, we got an ... excellent rating after we completed that job ... These programs are just great, great programs.” [#09]

- The Subcontinent Asian American female owner of a WBE-certified professional services firm said that she attended a seminar regarding the SBA 8(a) program, and added, “What I had heard was that if you are a small business ... if you apply ... and you become 8(a) certified, since you’re a small business, they help you with procuring work for the first few years. A certain amount [of work]. And I thought that maybe that’s the kind of help I’m looking for ... But once I’m in there ... at the end of the seminar, after the entire day ... I told them that I’m an architect, [and] they said, ‘This was more geared towards general

contractors. You probably would not stand a chance as an architect to be a prime for these contracts.' And that's what threw me off. Maybe I didn't get exactly what they were looking for." [#44]

- The Black American male owner of a DBE-certified goods and services firm said that he is currently seeking SBA 8(a) certification. [#20]
- Regarding the SBA 8(a) program, the Hispanic American male representative of a trade association stated, "I've referred folks to the SBA, [but] I don't know of any who have taken advantage of certification through the SBA. That's [the] 8(a) program, particularly." [#86]
- The non-Hispanic white female representative of a trade association said there is a lot of confusion and the frustration regarding the concept and terminology of the DBE program. She stated, "What we're finding [is] it's really hard for folks to put their head around what [DBE certification] is For whatever reason, they haven't heard of it before." [#71]

The same trade organization representative continued, "I think ... the terminology is kind of offensive. I was actually in [a] room [and] one of the members [said], 'Okay guys, you have to detach emotion. Yeah, that name sucks, but the fact of the matter is there's contracts [and] things going on that are helpful for us.'" [#71]

Any issues regarding Commonwealth of Pennsylvania, PennDOT, or other public agency monitoring and enforcement of its programs. Some interviewees had comments regarding the implementation of the DBE Program or other race- and gender-based programs, including reporting by prime contractors or abuse of "good faith efforts" processes, "fronts" and "pass-throughs."

Businesses reported their insights, both positive and negative, regarding monitoring and enforcement of race- and gender-based programs. For example:

- The non-Hispanic white female owner of a WBE-certified professional services firm said the Commonwealth's certification program could be improved with better enforcement. She said "what's lacking is enforcement," and said the "whole participation and monitoring of the solicitation of MBEs [and] WBEs kind of stops" after contractors complete proposals that include MBEs and WBEs. [#10]
- The Black American female owner of a WBE- and MBE-certified professional services firm said, "I think enforcement is a huge issue I think that is the biggest thing because you can make the numbers look great depending on how you present them, how you display them, but when you ... get to a true breakdown of the categories I think it reveals a whole different story and, unfortunately, it's just huge." [#30]
- The Black American male owner of an MBE- and DBE-certified specialty consulting firm said that he previously worked at PennDOT's DBE Supportive Services Center and said a "big issue" is the general "lack of actual compliance at the agency level." Regarding PennDOT and Department of General Services, he said, "The main challenge is ... a lack of effective policy and program to remedy the historical ... lack of inclusion." He said PennDOT

and DGS have “been doing the same things over and over that have not been working.” He added, “It's time for a paradigm shift.” [PT#05]

The same business owner continued, “Basically what ... they've been doing is they have been ... basing a goal on an available market, which in and of itself ... sounds pretty logical. But, the kind of the problem with their approach is [that] it's rewarding racism and disparity, and discrimination. And I say that because as MBEs disappear, as they go out of business due to racism ... the reward for that is a lower goal. Because the universe is then decreased, thus, the goal is dropped.” He added, “With PennDOT, you see the goal get lower and lower.” [PT#05]

- The male representative of a Harrisburg public agency said, “There are challenges that we face at the local level when it comes to implementing and enforcing MBE/WBE/DBE participation plans. [One] that jump[s] out to me are the public bidding laws which [hold] us to awarding contracts to the lowest, responsible, qualified bidder This limits us in our evaluation of bids where we can't evaluate on the overall best value of the bid and consider MBE/WBE/DBE participation.” [WT#04]

The same business owner continued, “The other challenge is the Commonwealth of PA [Department] of Environmental Protection/PennVEST funding.” He said, “[Their] DBE plan ... only calls for solicitation of DBEs, with very little language geared towards actual participation The challenge is adhering to this program while trying to work within our own, more stringent program, to get actual MBE/WBE/DBE participation.” [WT#04]

- The Black American female representative of an Allegheny County public agency said compliance and enforcement “is a very critical area.” She said, “As a [public] agency and recipient of state and federal funds, we are required to administer a federal DBE Program, as well as a state DB program. Standardized practices would enable us to combine our resources, increase efficiencies, and reduce the administrative burden on our MWDBE companies and ourselves. Ultimately, this will assist us to become more effective in contract administration and management by closing some of the gaps in policies and practices.” [WT#07]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said that he has had his firm's information included as part of a bid, but “once the bid is awarded, the agreement is not honored by the prime.” He commented, “It's not fair,” and said that his firm's MBE status is “used to get the contract and then not used or low-balled.” [#08]
- The Black American male owner of a DBE- and SDB-certified construction supply firm indicated that the Commonwealth should improve its monitoring efforts. He commented that some prime contractors offer “incentives to bid” to any minority firm, regardless of their expertise, in order to comply with “good faith efforts” requirements. [#03]
- The Black American male owner of an MBE- and SDB-certified goods and services firm indicated that contract enforcement is vital to the success of his firm. He reported past problems with contract compliance, explaining, “There are actually companies out there

that have received the MBE points because they said they were going to use you, actually won a contract, accepted it, and then went back and used the firm that they've always used" [#60]

- The Black American male owner of an SDB- and MBE-certified professional services firm reported a general lack of accountability and engagement from public entities on their projects. He stated, "[Clients] do not have skin in the game [They're] just doing the technical or the cost evaluation, but it seems like they would have to have some responsibility to make sure there's diversity." [#37]

Many business owners commented on false reporting of MBE/WBE/DBE participation, "fronts," negative issues with or falsifying "good faith efforts." Some also reported negative perceptions or knowledge of "good faith efforts." For example:

- Regarding issues with fraud, the Black American female owner of a DBE- and WBE-certified construction firm stated, "There are 'pass-through' WBE companies and [they] make it hard for legitimate companies." [#63]
- Regarding "fronts," the non-Hispanic white female owner of a WBE-certified professional services firm stated, "I know that there is a lot of fraudulent things going on, a ton of things, and it ticks me off ... like men running their business and putting it in their wife's name for 51 percent." [#04]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, "PennDOT puts all their time and money and resources into requesting that the small business produce documentation, but if I could tell you how many businesses are doing business as small minority businesses with the wife owning 51 percent and the husband owns 49 percent, and the wife is there for administrative duties only and they still get away with it. That's the worst problem they have. I just wish I could rat on all of them. It's so unfair." [#57]

The same business owner continued, "PennDOT does clearly say that if you're only doing administrative duties, you are not at 51 percent, you are not an owner. You have to be involved in major decision making. Well, what they need to do is take every person and do a one-on-one interview without the other person there. I challenge them to do that with others because those women would crash and burn and there'd be a lot fewer women in business. I know for sure that there are companies getting contracts with the Commonwealth because they have the designation. They're acting as 'fronts.'" [#57]

- The Black American male owner of a DBE- and MBE-certified construction firm said that oftentimes companies are put in the wife's name, but the husband is running the company. [#13]
- Regarding WBE "fronts," the Black American male owner of a professional services firm said, "In [one] instance we lost a contract because of one of the commissioners of [a] municipality wanted us to work on certifying as WBE a certain firm by saying that his

daughter was the president The daughter [actually] worked full-time at another job [and] had no skillset in that particular trade.” [#55]

- The non-Hispanic white male owner of a construction firm said that he has a colleague who registered his business under his wife’s name so that they could access certain contracts as a woman-owned business. He commented, “The husband ... was smart enough to put the [business] name in the woman’s name, and he got state and city jobs all the time because of it So, he was smart in how he played the game. So, where do I stand?” [#51]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm said, “There are two [companies in my field] who are considered in the special category like myself, who are taking advantage of their certification. Where there’s a white, Caucasian male who offers a service, who that business is in his wife’s name and she is not involved with that business at all He is getting the same preferential treatment as I am Obviously, they did not do the vetting that should’ve been done.” [#19]
- When asked if WBE “fronts” exist in the Pennsylvania marketplace, the non-Hispanic white female representative of a WBE- and SDB-certified professional services firm stated, “Oh yes, [there’s] many. And it’s extremely frustrating. I’m very proud of the fact that we offer a real firm.” Regarding good faith efforts, she said, “Good faith efforts I think are falsified at times.” [#56]
- The Black American female owner of a WBE- and MBE-certified professional services firm described one firm’s fraudulent behavior related to DBE certification by saying, “It’s very clear that in order to get business, [the white male owner] put the business in his wife’s name so that ... his business is considered a ‘minority business,’ when 20 years ago it was not.” [#30]
- The minority male owner of a professional services firm said that WBE “pass-throughs” should be a “real consideration.” He added that “woman-owned shell businesses become the largest of [the] small business or minority business pool.” He said, “I don’t know ... what research or what navigation has to go into [determining if some] woman [are] legitimately the proprietor of the business I’m going to think that scrutiny is helpful when you have businesses like mine who are competing against businesses that [have] that advantage.” [PT#14a]
- The Black American male owner of an MBE- and DBE-certified construction supply firm stated, “I deal with a lot of contractors that’ll say they’re a woman-owned business. Well, the husband runs the business.” He said that he has seen women-owned businesses “[get] business” even though they aren’t “a real woman-owned business.” He commented, “That’s not right [But] there’s nothing you can do at that point; the horse left the barn.” [#06]
- The non-Hispanic white female owner of a DBE-certified construction services firm said that she feels there is fraud related to certification income thresholds in the Commonwealth. She said there are “extremely wealthy people that [can] no way ... meet the thresholds.” She continued, “Personal net worth if you’re a married woman includes your husband’s assets and money ... even if the wife’s name is on the business and the husband

runs it But, if they're also multimillionaires, or he owns a separate company, and she still does run her own company ... they still are just much wealthier than disadvantaged was defined to be." [#12]

- The Black American male owner of a DBE-certified goods and services firm said that he sees major WBE fraud in his field. He said, "[It's] every day, all day. That's the way around that, having women ... with husbands that run construction companies. Once it's in [the wife's] name, my DBE status is eliminated, so it doesn't help on the table." [#20]
- The female representative of a WBE-certified construction-related firm said that Allegheny County "certified another company who is a woman who is not a plumber [The company] website said that her husband put in the money from his veteran fund to start the business. After we complained ... their website changed and went from women-owned to veteran-owned, but she's still certified as a [WBE]. How does that happen?" [#17b]
- Regarding WBE "fronts," the Black American male representative of a construction services firm said, "I believe that one of the loopholes that [is] allowed [is] that for the majority contractors who [are] white-male owned ... you could ... certify your wife as a WB[E]." He said this is a "major problem." [PT#10c]

The same business representative continued, "The same old companies [are] still ... headlining the jobs, taking the profits wherever ... and excluding smaller companies and particularly companies of color. Now they're WBEs." [PT#10c]

- When asked about "fronts," the non-Hispanic white female owner of a WBE-certified professional services firm stated, "There are companies out there that I do know for a fact are certified that shouldn't be It's really easy if you're a guy to put all the stock in your wife's name and say she's a secretary." She added, "There's a lot of contracting businesses that actually do that." [#10]

Regarding "good faith efforts" the same business owner said that she just "lost a huge contract with the federal government" because "the local engineering company that was putting together the solicitation" did not use her, even though she had done "over 80 hours' worth of work for them." She said prior to this the prime contractor told her, "We love your company [and] we want to use you guys as our WBE contractor" [#10]

She said that her firm worked with the prime before, so she thought "all along [her firm was] part of the team [and] they won the contract using [their work]." She added, "It's a \$100,000 job. That makes or breaks my year for me as a small business." She said after the prime contractor won the contract they asked her to submit a spreadsheet with her prices. They wrote back, saying, "Thank you for providing this quote. However, you have not been selected for services on this contract." She went on to comment, "The same thing happens with the State of Pennsylvania." [#10]

- The non-Hispanic white female representative of a trade association indicated that some WBE-certified firms may actually be operated by men. [#71]

- Regarding another WBE-owned contractor, the non-Hispanic white female owner of a WBE-certified construction firm said, “She really doesn't run her company. Her husband runs her company.” [#22]
- The Black American male owner of an MBE- and SDB-certified construction services firm indicated that “fronts” and fraud exist in the construction trade. He added, “There was one MBE and he was forced out by the very majority company that got him started in the business. Somebody gave him \$1 million to prop him up as an MBE and start his business to use him as a minority business.” [#67]
- Regarding false reporting of “good faith efforts,” the non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said, “I had people call me and say, ‘Oh ... I just want your [certification] number.’” She said when she asks about the order, the callers “admit they were not going to buy ... from her.” [#07]
- Regarding monitoring of prime contractor compliance, the Black American female owner of a DBE- and SDB-certified construction services firm commented on her perception of the Commonwealth of Pennsylvania’s monitoring and enforcing of its programs. She said regarding prime contractors who contact her, “They were using my information to say that they have a minority on the job” but had no intention of hiring her firm. [#01]
- The Black American male owner of an MBE- and DBE-certified specialty consulting firm said that he spoke with MBE/DBE firms that were “placed down on the paperwork with the commitments and the percentage,” but “never end[ed] up getting the percentage.” He said this happens most often when “an agency does not have a thorough process to monitor or to track compliance [and] participation.” [PT#05]
- Regarding “good faith efforts,” the Black American male owner of an MBE- and DBE-certified specialty consulting firm said a colleague at a recent organization meeting “brought with him a memo ... that was given to him ... by his mentor or someone [similar].” He continued, “But the memo was literally a manifesto, if you will. [It was] like an instructional manual on how to avoid participation for majority firms. [It covered] how they could skirt, you know, having to use either ... women or minorities on their projects. And from my understanding, this has been floating around ... for a few decades at least.” [PT#10b]

The same business owner added, “The tactics that are used by the majority ... community to maintain their control and the exclusionary process [means] you have to be holistic and comprehensive ... with your [disparity study] approach.” [PT#10b]

- Regarding “good faith efforts” processes, the Black American male owner of an MBE- and DBE-certified general contracting firm said, “There's so many holes in it That ‘good faith effort,’ that doesn't work. People would ... rather have \$10 in [their] pocket [than] a good faith effort and be broke They look at it like that.” He indicated that most primes don’t take “good faith efforts” seriously. [PT#07]

The same business owner continued, "If you don't put a good program out there, it's not going to work. If you leave those ... loopholes, they will find them and they will use them." [PT#07]

- Regarding "good faith efforts," the Black American male owner of a professional services firm stated, "In many cases, some of the [public] agencies are still saying you don't have to contract with MBE, WBE, [or] DBE firms if in fact you can show that you have made a 'good faith effort.' And a 'good faith effort' is tantamount to saying if you can show that non-minorities can do that job for less money, then you don't have to award it to [an] MBE The problem with that is [that] in many cases minority firms can't bid at a lower price because the things that they need to have to bid at a lower price are not a part of their organizational format. So, although competitive bidding is the normal kind of thing, there are too many ways to opt out and there are too many programs that still talk about 'good faith efforts.'" [#55]
- The Black American male owner of an MBE- and SDB-certified goods and services firm reported, "Probably one of the biggest problems I see is a lot of fraud going on where you have large companies posing as SDBs because they are large companies. They break their company down to where [a relative or close friend] becomes an SDB and is the large company's subcontractor. They own this big company and instead of the new company being a subsidiary, the new company is owned by [someone else] They're really big conglomerates that dominate the industry by giving subcontracts to individuals that they're related to and/or very, very close with What I would like to see is that that whole company is treated as a single group because they are simply a large, prime type contractor who's figured out a way to legally turn a bunch of its subcontractors into SDB companies." [#60]
- The non-Hispanic white male owner of a LGBT- and SDB-certified professional services firm reported the existence of "fronts" used to get WBE certification. He stated, "I know a lot of engineers who have put their wives in charge of the company to get a WBE certification. That's actually fairly common to see. I can think of at least three examples off the cuff. So, you know, people definitely do use the WBE program creatively." [#62]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm reported knowledge of WBE fraud. She stated that her firm lost a bid to a "spin-off" firm, and that the firm claimed work that was done by their parent company as their own. She went on to explain that challenging a receipt of a bid is an option, but added, "It would have cost us \$10,000 to challenge this case and then [the client] might hate us" [#31b]
- The non-Hispanic white male owner of a construction services firm stated general knowledge of fraud within the program. He said, "The people are using that system, the diversity system, and there's lots of fraud in there. People are getting contracts that don't know what they're doing. Just [because] they have to have a certain number of people of different types." [#40]
- The Black American female owner of a DBE- and SDB-certified professional services firm said a prime contractor once attempted to change the agreed-upon set-aside percentage.

She stated, “The set-aside was for, I think, 15 percent, and when the contract came up for the second time they changed it to 10 percent and didn’t say anything to us. We found out, and we immediately approached him and they were very upset ... because we went to the city Office of Equal Opportunity [and] didn’t come to them first.” She continued, “They changed it [back]. They changed it right away It was straightened out, and we still have that client.” [#32]

L. DBE, MBE, WBE, SDB, VOSB, and LGBTBE Certification

Business owners and representatives discussed the processes for DBE, MBE, WBE, SDB, VOSB, and LGBTBE certification, SDB verification, and other certifications, including comments related to:

- Knowledge of certification or verification opportunities;
- Ease or difficulty of becoming certified or SDB-verified;
- Advantages and disadvantages of certification; and
- Experience regarding the certification and verification processes and any recommendations for improvement.

Pursuit of certification and verification opportunities. Many interviewees discussed their certification status. A number of their comments follow:

- The Black American male owner of a DBE- and SDB-certified construction supply firm reported that his firm is SDB-certified with the Commonwealth. He commented that with the certification, “you can be small, diverse, [a] white man ... and [there] are set-asides for small, diverse businesses” He added, “It’s a wide range of change from when it was mandatory [to hire MBEs]” [#03]
- Regarding other certifications, the Black American male owner of an MBE- and DBE-certified construction supply firm said that his firm is not certified with the Commonwealth of Pennsylvania as an SDB. He went on to comment that his firm has never gotten a job solely “because [it’s] a small business.” [#06]
- The Black American male owner of an MBE- and SDB-certified goods and services firm said the firm is certified as an MBE through the Minority Supplier Development Council (MSDC) and verified as a Small Diverse Business (SDB) through the Commonwealth. He said that his company has held these certifications since 2008. [#52]
- The Subcontinent Asian American male owner of an MBE-certified professional services firm reported that he has been certified with the National Minority Supplier Development Council for almost 10 years. [#21]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that his firm has been DBE-certified with the State of Pennsylvania since 2000 and have had SBA 8(a) certification since 2002. [#28]

- The Black American male owner of an MBE-certified professional services firm said they're certified as a minority-owned business through the National Minority Supplier Development Council, as well as City of Philadelphia and the State of Delaware. [#34]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said that he pursued certification through the National Minority Supplier Development Council because its process was easiest. He commented, "I can't imagine going through somebody else because ... it just makes your eyes cross. It's so confusing." [#76]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm said that his company recently graduated from the SBA 8(a) program. [#38]
- The Black American female owner of an MBE- and WBE-certified professional services firm stated that her firm is a certified MBE and has held that certification for seven years. The firm is also certified as a WBE but has only held that for one year because the owner let the certification lapse. [#11]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm reported that her company is currently WBE-, WOSB-, DBE- and SDB-certified. [#58a]
- The Subcontinent Asian American male owner of a goods and services firm said that he was certified with the Commonwealth of Pennsylvania as a DBE and SDB but let those certifications lapse. [#15]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that she has held her certifications for 30 years. [#07]
- The Black American male owner of an MBE- and SDB-certified construction services firm said that his company held its MBE certification for 34 years. [#27]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said that her company has held DBE certification for three years. [#25]
- The non-Hispanic white female owner of a DBE- and WBE-certified specialty contracting firm said that her firm is certified as a DBE through the PA Unified Certification Program and as a WBE through City of Philadelphia. [WT#05]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that his company has held its certifications for almost 35 years. [#09]
- The Black American male owner of an MBE- and SDB-certified goods and services firm reported that his firm has been certified since its inception almost 28 years ago. [#60]
- The non-Hispanic white female owner of a WBE-certified construction-related firm said that she is certified with the Commonwealth of Pennsylvania as an SDB. [#17a]

The same business owner added that the firm is also certified as a WBE and WOSB. She added that the firm has had their WBE certification for two years and the WOSB certification for one year. [#17a]

- The non-Hispanic white female owner of a WBE-certified professional services firm stated that her firm is in the process of applying for DBE certification. She said that her firm has held the WBE and WOSB certifications for many years. [#04]
- The non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm reported that he has held his DBE certification for five years and his DOBE certification for three years. [#29]
- When asked about her knowledge of certification opportunities, the Black American female owner of a WBE- and SDB-certified goods and services firm said they've been certified through WBENC as a WBE since 2009 and is verified as an SDB through the Pennsylvania Department of General Services. She added that from 2008 to 2011 her firm was certified through the Minority Supplier Diversity Council (MSDC). [#53]
- The Black American male owner of an MBE- and DBE-certified professional services firm said that his firm has held its certifications for five years. [#16]
- When asked about her knowledge of certification opportunities, the Black American female owner of an SDB- and WBE-certified professional services firm reported that her firm also holds a federal women-owned business certification (WOSB). [#35]
- The non-Hispanic white male representative of a small business development organization reported that his firms have experience with a number of certifiers including the National Hispanic Chamber, the Women's Business Enterprise National Council and the SBA 8(a). He added that he thinks that they provide great support and are helpful with getting small businesses certified. [#46]
- The Black American male owner of an MBE- and SDB-certified construction services firm said that he is in the process of starting a new company so that he can go through the SBA 8(a) program. [#27]
- The Black American male owner of an SDB- and MBE-certified professional services firm reported that the firm is "50 percent woman-owned," and added, "So, we didn't get certified [as a WBE] because I think we had to pick minority [instead], because even though she's female, she's a minority as well." [#36]
- The Hispanic American male owner of a construction firm said that he was unaware that he could certify his business as a minority-owned firm. He stated, "I didn't even know that there was a certification for that You have to know what you're digging for as well, too. I didn't know about it, so I [wasn't] looking for it. But now that I do know, I will be looking for it and I will get whatever certifications I need to get, if it helps to get me an opportunity." [#64]

- The non-Hispanic white male owner of a LGBTBE-certified professional services firm reported that his company is certified through the National LBGT Chamber of Commerce. He said that he is not certified with Commonwealth of Pennsylvania as an SDB and commented that he is unsure if an LGBT company is eligible for certification in that program. [#24]

Some interviewees reported not knowing about or not pursuing certification. For example:

- When asked if her firm ever considered obtaining a woman-owned business entity certification, the non-Hispanic white female co-owner of a construction firm explained that while her firm has considered the possibility, she lacks the necessary knowledge on the process. She said, “[I don’t have] enough knowledge or information about how to go about [the certification process]” [#47b]
- The non-Hispanic white male owner of a construction firm reported that he was not aware of small business registration with the Commonwealth. [#75]
- When asked about members’ knowledge of certification opportunities, the non-Hispanic white male representative of a trade association reported that most of the association’s members are large companies with no small business certifications. [#83]
- The non-Hispanic white female representative of a professional services firm indicated that the company is not aware of certification with Commonwealth of Pennsylvania as an SDB. [#84]
- The non-Hispanic white and veteran male owner of a professional services firm reported that he has not pursued certification as a veteran-owned business. He explained, “I never even thought about it because I don’t go after the public work. It wouldn’t make sense to invest all that time, energy [and] money, probably.” [#48]
- The non-Hispanic white male owner of a construction services firm indicated no knowledge of small business certification opportunities. [#88]

One business owner said that her business went bankrupt before obtaining WBE certification.

The Black American female owner of a closed construction services firm said that her company went bankrupt just prior to being certified as a WBE. She said they were in business for 14 years and intended to bid on contracts with the Commonwealth once WBE status was obtained. [#26]

Many business owners reported being SDB-verified and discussed their experiences with the SDB verification program. [e.g., #12, #14, #25, #27, #33, #76] For example:

- The executive of a Black American-owned DBE- and SDB-certified goods and services firm said, “The [SDB] program is very helpful and it has helped us get recognized.” When asked about making improvements to the SDB program, he said, “I wonder if they would start targeting different sections similar to the federal government, where participation goals are set for business types such as Black-owned, veteran-owned, or Asian-owned companies. It seems that women-owned businesses benefit most from these programs so far. The other groups are still at minimum. They are not participating at their full potential.” [PT#12]

The same business executive later said, “When contractors are looking for SDBs they look for suppliers. [They look for] firms that can provide office supplies or janitorial services. But there is an opportunity for more specialized businesses like those in construction and engineering to participate, too. There are other businesses with expertise that is not being focused on. When a contractor looks to make an SDB commitment, suppliers are there, but there are other specialized services they can use too. But, they choose not to.” [PT#12]

- When asked if her firm had any issues with the SDB certification process, the Black American female owner of a DBE- and SDB-certified professional services firm said, “Not to my knowledge. [We don’t] have any issues with it.” [#32]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said that he has benefited from the Commonwealth’s Small Diverse Business program. He stated, “I think it helps because then the big players get you in, and then you’re able to grow with that and [it informs] how you bid on contracts. See, if you didn’t have an SDB program, how could you bid?” [#28]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that he is certified with the Commonwealth of Pennsylvania as a Small Diverse Business. He said that he got the certification because he thought it was a “requirement” of a transportation bill, and added, “[The Commonwealth] have to have a certain percentage [of SDBs] if they receive federal funds.” [#09]
- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm said one of the main reasons his firm acquires work is because they are certified as “a diverse and minority owned business.” He explained that when prime contractors are bidding for a job that requires minority participation, these certifications lists are their main resource. [#43]

The same business owner later said that he was able to self-certify based on his firm’s disadvantaged status. Regarding the certification process he stated, “I think it’s fair. I think the process is correct. It makes sure that we meet all the requirements.” He added that because only 5 percent of his firm’s revenue comes from the Commonwealth, he hasn’t utilized his certifications fully. [#43]

- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm reported that they obtained SDB in 2005. She indicated that the certification has benefited her firm, but noted, “As a Small Disadvantaged Business, one of the frustrations is that on a regular low bid procurement that DGS [puts] out, if we bid as the prime as a WBE or Small Diverse Business, they don’t recognize that as diverse participation. So, that is a definite frustration of mine Now, when DGS does a best value and we bid as a prime and we’re a Small Diverse Business, then we get the ... benefit, we get a lot of points.” [#61]
- The non-Hispanic white female representative of a trade association said many members fail to see the advantages of SDB certification. She said, “From the education that we continuously have to do, they don’t see the advantages of [certification].” She added, “I think

[the diverse firms] don't understand what ... opportunity [is] out there Yeah, you could be offended with the [name] disadvantaged business, but those are dollars for you" [#71]

- The non-Hispanic white female owner of a WBE-certified construction firm reported that she is certified with Commonwealth of Pennsylvania as an SDB. Regarding the program, she said, "It's just recently that this has changed, but for a long time, various sub segments of diversity were not equally balanced. There was [very little] recognition given to ... the difficulties of being a white woman. But, I do think it's much better [now]. I think [as] a diverse contractor ... I should still be held to quality standards, and I shouldn't just be handed work because I'm a woman." [#22]

Regarding her experience with the SDB certification process, the same business owner said, "The fact that the state took race and sexual orientation and all that stuff out of it, and [consolidated it to just being] a small diverse business [where] everybody's equal, that is awesome. That was so forward thinking of them [and] I applaud them for that." [#22]

One business owner reported being interested in becoming SDB-verified. The non-Hispanic white male veteran with disabilities and owner of a professional services firm said that his company is not certified with the Commonwealth of Pennsylvania as a Small Diverse Business, though he is interested in becoming certified in the future. [#74]

Some business owners reported limited advantages to SDB verification. A few reported that the application process involves too much paperwork and resources. For example:

- The Black American female owner of an MBE- and WBE-certified professional services firm said the SDB certificate is "self-serving," and added, "They'll look at you and say, 'Well, the state hasn't really certified you.'" She went on to say, "In 10 years, I've needed [the SDB certification] twice." [#11]
- The Black American female owner of an MBE- and WBE-certified professional services firm said, "I've only had the SDB certification now for a little over a year I can't really say it's benefited me as of yet." [#18]
- The Black American male owner of an MBE- and DBE-certified professional services firm said, "I don't get [any] benefit [from SDB certification]. Nobody does. It's all a scam." [#16]
- The minority male owner of a contracting firm said, "If I knew that self-certifying as a small business with the State of Pennsylvania would have led to just [having] a piece of paper, I would have never signed up and would not have wasted my time and resources." [WT#08]
- The Black American male owner of a DBE- and MBE-certified construction firm said that he is certified with the Commonwealth of Pennsylvania as a Small Diverse Business (SDB) but described frustrations with the SDB certification by saying there was a lot of paperwork. [#13]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said there was "lots of paperwork" involved with SDB certification and described it as "voluminous." [#14]

- The Hispanic American male owner of an SDB- and MBE-certified professional services firm stated that he has not seen any advantages to SDB certification. [#77]
- The Black American male owner of an MBE- and SDB-certified goods and services firm stressed the importance of his SDB certification for his firm. He said, “The only way I’ve been able to penetrate markets is if there’s some financial gain to [prime contractors]. With what the Commonwealth has done to award minority participation points to help companies win contracts ... the companies are willing to ... be involved with an SDB.” He added that even after a prime contractor has worked with an SDB, if “for whatever reason you no longer can provide those [diversity] points, they will get rid of you” [#60]

Some business owners reported experience with the various third-party certifications that DGS’ Bureau of Diversity, Inclusion and Small Business Opportunities accepts to confirm the small diverse status of a business. For example:

- Regarding Woman’s Business Enterprise National Council, the non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm said, “Just to get certified, I have to provide all of my personal tax information. It shouldn’t be relevant to [WBENC] whether I have stock or not It shouldn’t be relevant what year my car is.” [#05]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that she participated in a women’s networking program through Women’s Business Enterprise National Council. She added, “When we have conferences or meetings, [WBENC] brings in people with the government.” [#04]

The same business owner continued, “It’s a wonderful resource for women-owned businesses. They definitely encourage you It is through networking events that I have learned a lot.” [#04]

- The non-Hispanic white female owner of a WBE-certified construction firm said they’re certified by the Woman’s Business Enterprise National Council, but added, “I don’t get much from WBENC [or] the whole ... WOSB [program]. I’m sure there’s a way [to better take advantage of them], [but] I just don’t know what it is.” [#22]
- The non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm said that his firm is also a certified disabled-owned business through the USBLN (US Business Leadership Network). He said this certification was recently recognized by the Commonwealth. [#29]
- The Black American male owner of an SDB- and MBE-certified professional services firm reported a negative experience working with the Unified Certification Program. He stated that the Program “[was] blocking our NAICS codes ... we sent them a letter and they said well prove you’re on these codes, what work are you doing in these areas, show us proof. It took almost two years to add these other codes.” [#36]
- When asked if she had any issues with certification through the National Minority Development Council, the Black American female owner of a DBE- and SDB-certified

professional services firm stated, “They charge a lot of money.... I think it costs like \$1,000 a year for us for that [certification]. It used to be free.” [#32]

- When asked about third-party certifications, the Hispanic American male representative of a trade association said that he has also worked with the National Minority Supplier Development Council and the local chapter of that organization. He commented, “I think they did do a great job of putting minority companies in contact with corporate, large corporate buyers.” [#86]
- When asked about third-part certification opportunities for members, the non-Hispanic white female representative of a trade association said they are aware of certification through the Women’s Business Enterprise National Council (WBENC) and the National Gay & Lesbian Chamber of Commerce LGBTBE program. [#71]

Ease or difficulty of becoming certified. A number of interviewees commented on how easy or difficult it was to become certified.

Many interviewees reported difficulties with the SDB verification, DBE, and MBE/WBE certification and/or renewal processes. Some interviewees indicated that the certification process was difficult, time consuming, or problematic. [e.g., #81, Avail #157] For example:

- The non-Hispanic white female owner of a WBE-certified professional services firm commented, “I have been in and out of [the WBE] program before and I have zero faith in it. I find myself being used, and my time wasted by participating in it. But, I continue to participate in it only because inevitability I will have a very good customer who benefits from it.” [#10]
- The Black American female owner of an MBE- and WBE-certified professional services firm said PAUCP offers DBE certification. She added, “[It] seems more complicated than the last one, and it's supposed to be easier. The good thing [is] they offer technical assistance in completing it and they're local.” However, she said, “The renewal is much easier because you really just are reporting changes.” [#18]
- The Black American and female veteran owner of a VBE-certified contracting firm said, “I think it should be easier for people to basically get certified In order to get most of the contracts, you need to be certified to fall into the categories as minority, women I would be a minority woman business owner.” [PT#11a]

The same business owner continued, “Going through [certification] and then just the cost when you’re starting up a new business ... by the time you’re done paying for certifications, you’re out of capital. So, I think that’s [a] huge [problem]. Just the cost is ridiculous, you know?” She added, “You find that unless [you] can actually check a box, you’re not going to be hired for that [job]. And you ... can’t check a box if you’re not certified.” [PT#11a]

She went on to say, “I’m currently trying to get through certifications, but like I said, it’s costly.” She added, “I also think that ... when you have more veterans who have businesses ... a lot more costs should be waived.” [PT#11a]

- The non-Hispanic white female owner of a DBE- and SDB-certified professional services firm, described her experience becoming SDB-certified. She stated, “Getting the paperwork through would have been easy if I didn’t have the vision problems. So, it’s not a bad process, it’s just not set up for someone with vision problems.” [#80]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that she experienced some difficulty trying to reach Commonwealth staff members online and by phone during the certification process. However, she said when she made an appointment the DBE staff went through her information and let her know what she was missing. [#04]
- The Black American male representative of a construction services firm said the certification process was much easier during and “prior to the [Governor Bob] Casey administration.” He added, “The processes, the applications were ... extremely user friendly. I had engaged in several state projects as a result of that.” [PT#10c]

The same business representative said certification processes through Department of General Services and PennDOT have become “extremely difficult” since then. He went on to say, “PennDOT’s ... application is truly alienating to companies of color or small companies coming in trying to get on board.” [PT#10c]

- When asked how to improve certification processes, the Hispanic American male owner of an SDB- and MBE-certified professional services firm said, “[It could be] a more streamlined process or something [like that], to make it faster It was extremely time-consuming.” Regarding the renewal process, he described it as “difficult and antiquated.” [#77]

The same business owner went on to say that the certification process used to be simpler. He said, “I’m going to say maybe 25 years ago I was certified as a minority business through the Department of General Services in Pennsylvania. We went through the entire process [and] put all the required information together, [and] we [were consistent] every year. We were a Minority Business Enterprise. Then, several years ago ... we were told anybody certified by DGS would lose their certification and ... must now apply through one of those certifying agencies, [like] City of Philadelphia [or] City of Pittsburgh. We had to go through the entire process again.” [#77]

- The male representative of an SDB- and VBE-certified consulting services firm said VBE certification through the Department of Veteran Affairs was a “very arduous ... process.” [PT#09]
- The Subcontinent Asian American male owner of a goods and services firm said that his firm let its DBE certification expire because he sent some of the paperwork in late and had to restart the certification from scratch once it expired. He said that he found the process difficult, but that he would “apply for that [DBE certification] again.” [#15]
- The Black American female owner of a WBE- and SDB-certified goods and services firm indicated that some certifications are too expensive. She said that she paid a third-party certifier “hundreds of dollars” for her firm’s certification. [#53]

- The non-Hispanic white female owner of a SDB-certified construction firm reported that she owns 51 percent of the business and her husband owns 49 percent of the business, but the Commonwealth did not grant her WBE certification. She went on to state how she felt the certification rejection was due to discrimination. She explained, "I went through the process to get certified as a woman-owned business, and in the whole process, I thought I was being discriminated against. I had another gentleman here ... [who] was our estimator, and the State certifier always told me that it felt like he was part of the business. Well, he was an employee" [#65]
- The Black American male owner of an SDB- and MBE-certified professional services firm reported that recertification for their firm was a lengthy process. He added, "There could be more resources to help with the certification or recertification process." [#36]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm stated, "[When] I [initially] submitted my application for my DBE status, [I] got denied. I then appealed it and it got overturned." She added, "There's a gentleman at the Allegheny County [MWBE] department who was notorious for denying white women So, I appealed it and took my case to ... the Pennsylvania Turnpike Commission [with] my lawyer ... [There], one lady pulled me aside, and said, 'I have no idea why you were [denied]. It just doesn't make sense.'" She went on to comment, "It really hurt my company, to a point where we almost went bankrupt because of the length of time it took to become DBE certified." [#25]
- Regarding the recertification process, the Subcontinent Asian American female owner of a WBE-certified professional services firm said certification renewals are difficult. She stated, "Making sure everything is in place every year [is a hassle]. All the renewals have to be done. It's just so many and it's ... a tedious process. I wish this was all under one database. Where they would share information from one to the other one. Or there should be a support structure that could help us It is ... a convoluted process." [#44]

The same business owner also said that she had difficulty accessing resources when applying for certification. She stated, "They had these phone numbers listed, [but when] you call them up they don't answer your calls and they don't help you out." [#44]

- The Hispanic American male owner of a construction firm reported that his firm is in the process of becoming a certified minority-owned firm but has had difficulties obtaining the certification. He explained, "It's too many requirement[s] to get into ... and when I get [certified] ... I [still] have to try to force myself to try to get some project. And it's hard to do it." [#49a]
- When asked if members find certification easy or difficult to achieve, the non-Hispanic white female representative of a trade association said members describe it as difficult. She said, "I know when people talk about becoming certified they say that an obstacle ... is that there's so much paperwork, and it's so tedious. I ... went on the website a couple of times [and] it's not the most user-friendly [website]." [#71]

Some interviewees indicated that a major issue with the certification process is that it is labor intensive and time-consuming; for some, the paperwork was also a barrier. A number reported lengthy information gathering and paperwork. [e.g., #14, #29, #76, PT#16f] For example:

- The Black American male owner of a DBE-certified construction services firm reported that his firm is certified with the Pennsylvania Unified Certification Program (PAUCP). He said that he is not currently pursuing any more certifications because of the “ton of paperwork” required. He added, “[We do] not have the resources to do all that paperwork.” [#02]

The same business owner later said that in the future he would like to get more certifications to be a part of successful state contracting programs. [#02]

- The Black American female owner of a WBE- and MBE-certified professional services firm described the certification process as a burden. She stated, “I’ve gone to the FDA, I’ve gone to the TAC [Technical Assistance Center] and there’s just no streamlining of the process ... [I watched] a colleague of mine very successfully manage all the paperwork, got her 8(a), did business for a while and was getting some contracts and then ... two years later she was bankrupt.” [#30]
- The minority female owner of a DBE- and SBE-certified firm commented, “To apply to all those [certification] applications was just a tremendous burden And it’s an annual process.” [PT#16j]
- The Black American and female veteran owner of a VBE-certified contracting firm said, “I understand why there are so little certified minority business enterprises. The paperwork is horrendous.” [PT#11a]

The same business owner later noted that the paperwork requirements for LGBTBE certification is less intensive than the others. She added, “It cost less than the rest of them [too].” [PT#11a]

- The Subcontinent Asian American male owner of a goods and services firm stated that his firm was certified as an SDB, but he let the certification lapse because he was, “quite busy and didn’t respond back with certain things.” He said that he found the process to be “tedious and difficult.” He also added that certain certification forms were hard to understand, and noted, “It is hard to renew it and follow through.” [#15]
- The non-Hispanic white female owner of a WBE-certified goods and services firm stated that the certification process “got harder.” He said, “It required more and more and more paperwork, and I had to get the accountant involved. When we first started off, it was really easy. Pennsylvania had their own certification program, and then whatever they did, even if you were a minority, that was fine, then they went with this national WBENC, so it got [more complicated].” [#23]
- Regarding his experience certifying through EMSDC (Eastern Minority Supplier Development Council), a small business owner said, “I spent countless hours completing the application for minority business[es] [at the EMSDC website] to register our business as a

minority business. Now PennDOT wants me to do the same work, plus send all our taxes [from the past] three years. Each year has 37 pages. So, now I have to send 111 pages of taxes." He said the state referred him to EMSDC for certification and said that he wonders why he has to do the same work twice. [WT#03]

- The Black American female owner of an MBE- and WBE-certified professional services firm also commented on EMSDC [Eastern Supplier Minority Development Council], saying "it's \$500 a year ... I don't think it's worth \$500" because she has not gotten any direct business from that organization. [#11]
- The non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm said the process of becoming certified as an SDB, DBE, WBE, and LGBTBE is difficult. She explained, "[It's] just annoying. WBENC started in November and I finally just finalized that in March. [What's difficult is] all the information that they need that I don't necessarily have, but they assume that I would ... I didn't supply certain documentation because [it didn't] apply to me, [and I got] feedback saying, 'You're missing ... X, Y, and Z. Please submit [those].' Then [I had] to call and [tell them] I don't have payroll [and that] there is nothing to send ... about payroll It's like a mortgage application." [#33]
- The female representative of a WBE-certified construction-related firm said that the paperwork for the WBE certification is a bit overwhelming. [#17b]
- The Black American male owner of a DBE-certified goods and services firm said the certification process "wasn't easy, but it was manageable." He added, "Nobody likes paperwork It was just one of them things, you've just got to go piece by piece, line item by line item, and get it done." [#20]
- Regarding the certification process, the non-Hispanic white female owner of a WBE- and SDB-certified professional services firm stated, "I think it's ... hard. I would say we did the process ... all ourselves For a very novice, a new company that didn't have a lot of resources to do the application, I think it might almost be too much. For a company our size ... it was a lot of things to get together." She added, "If someone was a small ... three to five-person business ... it would really be hard to do all that." [#81]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm stated that her firm was certified by the Women's Business Enterprise National Council and that their experience getting certified was lengthy and time consuming. She described, "There was tons of paperwork to fill out. We had to pay a substantial fee and then they have to do an interview. The longest part was, once getting accepted, then there's always more papers they need to look at." She added that it took around three months to get the interview because the WBENC doesn't have interviewers in her area. [#31b]

A few business owners said certification has become easier over time. For example:

- The non-Hispanic white female owner of a WBE-certified professional services firm said certification is "a lot easier" than in the 1990s. She said this is "because it's centralized," and commented, "I spend a lot less time doing the certifications There was no unified

certification [back then].” She added that the Commonwealth only requires certification renewals “every other year now,” so “it’s not as bad.” [#10]

- The Black American male owner of an MBE- and DBE-certified construction supply firm stated, “[The process] back 25 years ago was difficult.” He added, “[There was] jealousy within the MBE community, [and] politics.” He said this was because older members of the MBE community wanted to protect their friends’ businesses. [#06]

The same business owner said that he calls it “in-house friction.” He continued, “[I] had to hire a lawyer to go after the certification And within 48 hours I had my certification letter ... after being stonewalled for a year.” He said that his firm has held its certifications for about 24 years. [#06]

- When asked if the certification process is easy or difficult, the non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said, “They make it very convenient now [because] it’s online.” She added, “There is a lot of paperwork, but you just do the paperwork. When I first started it was a lot more paperwork [than now].” She said recertifying is easier than the initial certification. [#07]

Some interviewees said that the certification process was easy, or they reported that they received assistance with the process. [e.g., #07, #21, #35, #38] For example:

- The Black American female owner of a DBE- and SDB-certified construction services firm reported that at first the certification process seemed daunting; however, once she started the process, it was “very easy” and staff who helped her were “very helpful.” [#01]

The same business owner commented that once she had completed one certification application, the others were easier with the exception of SBE 8(a) certification which included an overwhelming amount of work. [#01]

- The Black American female owner of an MBE- and WBE-certified professional services firm said the SDB certification was fairly easy. She said, “You just go online I’ve had [SDB certification] for ages.” [#11]
- The Asian Pacific American male owner of a DBE- and SDB-certified professional services firm said the DBE certification process was easy. He said, “As long as you follow the paperwork and submit all the proper documents, I think they are pretty good at [Department of General Services].” He indicated that recertification is not difficult, saying, “Recertification is only tax returns [and] some notary [requirements], and things like that” [#28]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that she went to the Allegheny County MWBE office for help with her DBE certification paperwork. She said the woman who helped her “was fabulous,” and commented, “I can’t imagine just sending the packet in without working with someone.” [#04]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said, “The process takes a long time, but that’s what you have to do so I don’t

have any real issues.” He added, “[I like] that the PAUCP ... [unifies] thing[s] It’s accepted in other places, which is good, so that was a big improvement.” [#09]

- The non-Hispanic white female owner of a DBE-certified construction services firm stated that DBE and WBE certification processes are “involved.” She added, “It’s not difficult ... and it’s not quick, and it’s not simple, but it’s not lengthy or unnecessary. I wouldn’t say it’s any of those things. It’s appropriate.” However, because of potential abuse, she said, “It could be more involved if you ask me. It could be even more difficult to prove in some of these things, it probably should be.” [#12]
- The non-Hispanic white female owner of a WBE-certified construction supply firm said the WBE certification process was “thorough,” and noted, “But, I am an organized person so it wasn’t so bad.” She said that she was selected for a random audit last year and had to “do the paperwork all over again.” She added, “It takes time, especially as a single business owner.” [#14]
- The non-Hispanic white female owner of a LGBTBE-certified professional services firm described the certification process as “fairly easy” because she used to be on the certification committee of the NGLCC [National LGBT Chamber of Commerce]. She said, “I’m accustomed [to] looking at the questions and knowing what they want and knowing the information they need Because I’ve done it in the past” [#41]

The same business owner stated that certification is difficult for the average person who does not have the same background and experience as her. She remarked, “the average person does not get through the first time they apply, mainly because they’re missing some information, or they haven’t explained their situation right” [#41]

- The Hispanic American female owner of a professional services firm reported hearing that getting a firm certified as a woman- or minority-owned business is relatively easier in Pennsylvania than it is in other nearby states. [#49b]

Advantages and disadvantages of certification. Interviews included broad discussion of whether and how SDB verification, DBE or other certification programs helped subcontractors obtain work from prime contractors.

Many of the owners and managers of certified firms indicated that certification is advantageous. [e.g., #04, #18, #43, Avail #76] For example:

- The Black American male owner of a DBE-certified goods and services firm said there are major advantages to certification, because “without that, there’s no business.” He added, “There’s no anything [without it]. Without having that inclusion package, you don’t even have an opportunity to play in the game. I’m thankful for it.” [#20]
- The Black American male owner of an MBE- and SDB-certified construction services firm stated, “The requirements of the [MBE and DBE] programs and those certifications [are] who made me who I am Strong mandates for DBEs, SDBs etcetera ... is a good way to get your foot in the door So, even though the programs and things are challenging, it’s very

beneficial to have that certification and mandate that government use those certifications as requirements for projects. Because without them, there'd be half of the minority companies in business that we have today." [#27]

- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm said the state's small business certification program and bidding process have benefited her company. She stated, "It has helped us tremendously We're very, very appreciative. I really think that if we did not have this work from the state, we would not be here. I really, truly believe that." [#58a]

The same business owner continued, "I can't think of any disadvantages. Again, like I said, I am very grateful to the state that we've been able to do work with these primes. We are able to work with very large companies that wouldn't even give us the time of day if it [wasn't] for these state contracts." [#58a]

- The Black American female owner of a DBE- and SDB-certified construction services firm remarked that the advantage to certification is knowing "what jobs are out there and when they are coming up." She said it gives her opportunities to "meet different people ... and give[s] [her] a fair chance to actually be able to bid on contracts." [#01]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said once she obtained DBE certification, her business "picked up." She added, "The firm has been growing exponentially, over 100 percent growth from year to year, and our sales have been steadily increasing Today I still believe if I didn't have my DBE status, I wouldn't be in business." [#25]
- The non-Hispanic white female owner of a LGBTBE-certified professional services firm stated that doors have been opened by certification. She said, "You still have to be price-conscious and you still have to provide the service and everything, but at least [the certification] gets your toe in the door, so you can make the pitch ... that has helped drastically ... when you're talking about bigger companies" She went on to say that her certification has allowed her to create meaningful business relationships. [#41]

The same business owner continued to discuss advantages of certification by saying, "With the NGLCC [a federal certification], once you become certified you can get into the mentorship program ... [my mentors] really helped me out and they introduced me to a lot of people and expanded my network [With certification], there's side opportunities that you can get that are probably worth more than the bidding part." [#41]

- The non-Hispanic white male owner of a LGBTBE-certified professional services firm said that he has seen some advantages to the LGBTBE certification. However, he noted, "When you go to their conferences, they have large companies like Kellogg's and large drug companies looking for large businesses to do business with. When you're a small business, you're at a disadvantage in that situation." [#24]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said that he thinks SDB certification is "a great advantage." He added, "If these

programs did not exist I don't think you would see a lot of people like myself in business, or doing as well as we are, because we just wouldn't be given the opportunities." He later said there are also "minuses" to certification because certified firms are usually relegated to subcontracting jobs. [#09]

- The non-Hispanic white female owner of a DBE-certified construction services firm said DBE and WBE certifications help her connect with new prime contractors, because for them, it is often "a pain to meet someone new and trust someone new on a project." She added, "That's what the program offers for us. And that's one of the really good things about that certification and sub classification. It just simply forces the primes to look around for new options ... from time to time." [#12]
- The Black American female owner of an SDB- and WBE-certified professional services firm said being a minority certified company has benefited her business when pursuing government contracting specifically. She stated, "[Being a minority certified company] has only been helpful on a governmental level. They feel like it's important to have that diversity. So, I think the distinctions are good. Certifications are good ... if it's valued by the government that you're looking to get business with." [#35]
- The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm reported that certification has greatly benefited her firm, especially their WBE certification. She added, "[Around] the year 2004, I lost a major, major client The opportunity to be a women-owned business and a subcontractor in the ensuing years really made all the difference for [us]. And so, I really was able to use the marketing and the connections [we gained] as a women-owned business ... subcontractor. It really has helped [us]." [#81]
- The Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, "Once we get to the point of identifying as a DBE [or LGBT], the businesses who see that are actively looking for those kinds of businesses to diversify their procurement pipeline. So, it has opened up a few doors." [#38]

The same business owner later said, "I think the whole certification process kind of balances out inequity, so I ... certainly felt that. I consider it another marketing tool." [#38]

- The executive of a Black American-owned DBE- and SDB-certified goods and services firm said, "Certifications have benefited us, helped us grow, and helped us employ people in our community. Having certifications ... there are days when it is very beneficial and there are days when you [think], 'I have this but I don't see any progress.' For the first three or four years, we didn't see much difference with certifications, but then people in public office changed and pushed more for Small Diverse Business participation." [PT#12]

The same business executive said people used to only make a commitment and provide a letter of intent without any follow-through. He added, "Now, on RFPs for the Commonwealth, primes or subs are incentivized to use small diverse businesses. This is more of an incentive and creates accountability. It's not just a commitment on paper [because] a compliance group actually follows [through]. Previously with 'good faith

efforts,' it was just your word [as a contractor and] you were not held accountable. Now, it's a great process for a small business like us. [We're] backed and supported by different agencies." [PT#12]

- The Black American male owner of an MBE- and DBE-certified construction supply firm said that certifications do benefit businesses. He said, "I feel a lot of [the] time we wouldn't even be at the table if it wasn't for [the DBE] program." He added that he's been awarded jobs because of his MBE/DBE certifications, though he "wouldn't want to depend on them to earn a living." [#06]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm said that she feels that [being WBE and DBE certified] helps her get work from clients who want to support small, diverse businesses as part of their mission. She explained, "It's part of the conversation that I have when I'm talking to a current or a new client ... they feel good about supporting the little guy That's a good advantage, I think. It's an honest one." [#19]
- The non-Hispanic white female owner of a WBE-certified goods and services firm explained that she feels as though her WBE certification has helped her firm. She stated, "It helped me. Without that, I don't think I would be as good." [#23]

The same business owner continued, "I'm able to take advantage of it, but it isn't fair to everybody. I think it should be a merit-based program, how good is your service, but that's okay. I'll take it, but I've got to sell myself. I absolutely have to make sure that I can deliver, because they're only going to do it with you one time and [if you are not good] you're not going to get it the second time." [#23]

- The Subcontinent Asian American male owner of a goods and services firm said that he did think there were advantages to DBE certification because when he "bid[s] on government supply [projects], the federal government has a website ... [that] asks [him] whether [he is] DBE certified." [#15]

The same business owner added that he does not know of any disadvantages to DBE certification, "unless someone says, 'Oh DBE, I'm not going to them.' And [he doesn't] think that's the case." [#15]

- The female owner of an SDB- and DBE-certified professional services firm said, "Overall, I have found participation in the SDB program beneficial to my business. I am frequently asked to participate in projects based on my firm's participation in the program. It has allowed my firm to work with larger engineering and planning firms who would typically complete all work in-house." [WT#06]
- Indicating that there are no disadvantages to certifications, the non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm reported that certifications permit her firm to "better serve our clients." [#05]

- When asked if certification is advantageous, the non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said, “As a matter of fact, [the] one thing that has really helped me is my WBE [certification] because some of the municipalities ... are required to have certain [percentages].” She added, “That has helped me.” She said Pennsylvania Infrastructure Investment Authority requires this and said that she will keep her certifications because contractors “have to have minority participation.” [#07]
- The Black American female owner of an MBE- and WBE-certified professional services firm said the SDB certifications help her “get other certifications” because she uses it for WBENC. She added that there are no disadvantages to certification because it is free and the only requirement is keeping it up-to-date. [#11]
- The male representative of a business assistance organization stated, “Having a business certified as an LGBT business enterprise means the owners never have to hide who they are to do business in the State of Pennsylvania or the City of Philadelphia. The inclusion and opportunity to compete for LGBT business ... is an incentive to identify and to self-identify and provides a mechanism for accounting. None of this can happen without an equal seat at the table.” [PT#01d]
- The non-Hispanic white male representative of a small business development organization reported that because the federal government is required by law to use 8(a) firms on contracts, he feels DBE certification gives these firms an advantage. [#46]
- The Black American male owner of an SDB- and MBE- certified construction company stated that he found that there are advantages to certification, also noting that, “some part of this is helping my business. But it doesn’t help you get on the radar screen.” [#37]
- The Black American male owner of an SDB- and MBE-certified professional services firm reported that because of his certification his firm has been able to access contracts both with the City of Philadelphia and the Commonwealth. [#36]
- The Hispanic American male representative of a trade association said members have found benefits to the SDB program. He stated, “I think [it’s] based on contractual requirements by prime[s], as the larger companies They’ve had a requirement under the contract with the state government to diversify them spend with minority companies. And so, in those instances ... the state certifications came in handy.” [#86]
- The non-Hispanic white female owner of a WBE-certified construction firm said the SDB program has recently benefited her firm. She said, “It’s only within the last six to nine months that [being an SDB has benefited me]. I’m not kidding you. Up until the last year, my certifications meant nothing. So, somebody’s turning things around.” She said some prime contractors she works with now “get credit” for working with her, and noted, “There’s an added benefit for them to work with me. It gives the people who I partner with an advantage to getting the work, and then I get the work because they got the work.” [#22]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said that DBE and MBE certification have benefited his firm when pursuing subcontracts. He

noted, “When I first started in business, I was very adamant [about not using] any favors or anything. We [wanted] to prove ourselves and do what we do, and ... never advertised the DBE or MBE or anything.” He went on to say, “We promote it now, but for the most part most of our work is already [stable], [and] we know what we’re successful at Where we [do] use it is if we’re a subcontractor, because [then] somebody’s coming after us to get that.” [#77]

- The Subcontinent Asian American male owner of a WBE- and SDB-certified professional services firm identified clear advantages of certification. He stated, “For the primes. If they have a very good, like a strategy selecting a contractor for the - whatever the need. In an RFP, like 50 percent, most of the RFP is like 50 percent scoring goes to technical, your actual capability of the work. And then 30 percent goes to like, cost and 20 percent goes to the SDB. [...] If your company SDB and competing as a prime, you will get 200 out of 200 score. So for example in this case, like you’re competing with Deloitte, Deloitte might not get 200 in their section. You get 200 in this section. So that helps us. That is a good advantage. Because big companies have a very good chance of getting the 50 - top 50 percent, a very high score. You can’t compete in all the projects. So that is a challenge.” [#90]

Some interviews expressed mixed feelings and indicated that there are limited advantages, or even disadvantages, to certification. Some reported on stereotyping of certified businesses or the “stigma” associated with certification. For example:

- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said, “Certification itself is a benefit, but not an advantage. [It is] beneficial because it allows you to establish relationships.” He reiterated that relationships are a key to success in his industry, and said, “[You can] get in the door with the MBE certification ... [though the owner has to] leverage that opportunity into a larger opportunity.” [#08]
- The Subcontinent Asian American female owner of a WBE-certified professional services firm stated that her firm has not yet seen any benefit to WBE certification. She explained, “I think I’m spending more time trying to prove [that I am qualified now] that I have the certification It’s ... frustrating.” [#44]
- The owner of a DBE- and SDB-certified professional services firm has experienced some disadvantages with SDB certification. For instance, she explained that some companies think that an SDB can only be used if there is a minority business requirement, or believe the SDB percentage is a maximum rather than minimum requirement. She believes that, at times, she might receive additional work if she were not SDB-certified. [#78]
- Regarding Pennsylvania Unified Certification Program, the non-Hispanic white female owner of a WBE-certified construction firm stated, “PAUCP’s a disaster. Forget it. [In] Allegheny County, the criteria they have for their projects is [that] 13 percent of the content of the project has to be minority and [only] 2 percent has to be women, for a total of 15 percent.” [#22]
- The Black American male owner of an MBE-certified supply firm said, “We do very good business. And so ... we say, ‘Hey, we’re [also] certified’ That doesn’t give us access, [but]

we don't expect ... access [just] because we're a certified company." He continued, "We are experienced, and again we do good business. [And] I think some of ... our customers [are] very big customers." [PT#10d]

- The non-Hispanic white female owner of a WBE-certified construction supply firm stated, "For every time these certifications help me, they hurt me." She said the Commonwealth's requirement that both MBEs and WBEs be used, rather than just DBEs, means that she gets less business. She added, "[This is] because I give [prime contractors] quotes, and they tell me, 'I wish I could order the whole thing through you, but I can't because I have to include MBEs.'" She continued, "Any DBE should qualify for the business ... no one is more disadvantaged than anyone else I don't understand why [the Commonwealth] needs to qualify it further." [#14]
- The Black American female owner of a WBE- and MBE-certified professional services firm explained that she feels as though the large number of available minority certifications provides a disadvantage at times and can lead to overreporting. [#30]

The same business owner stated, "The reporting issue ... is huge because there are so many more subsets now of what's considered a minority business Black females get lumped in with veterans, with LGBTQ, with white women, and so when these are reported the reporting looks great on paper." She continued, "The reality of who's actually getting the business might be very interesting to see when those categories are broken down."

[#30]The non-Hispanic white female owner of a professional services firm described her frustration with the certification process. She stated, "Certifications, in general, seem to put a small business owner through a lot of unnecessary, cumbersome, time consuming, and financial burdens when you're looking for things that are pretty basic." She continued, "The entire process seems to be skewed toward not letting the guy running the construction company put his wife's name as his owner....But, in my opinion that is keeping myself, and other small businesses across the Commonwealth [from] being able to participate in the minority sense that this administration and our government are really trying to promote."

The same business owner then described her view of WBENC certifications. She stated, "Most women-owned businesses, I know [...] they don't bother getting WBENC certified, because it feels intrusive, cumbersome, and costly." She continued, "Just about the time you've gone through all the work of showing that you own the business and you're a female, like, you got to do it all over again and spend more money. And the, you know, the cost benefit for doing that is very, very low. But, part of the reason my former [business] partner let our WDMC certification lapse, well, it took a lot of time and money to keep filling out the paperwork. I would never have permitted that; but, [...] it didn't come to my desk. But, he was absolutely right that it took a lot of money and time to do it for no direct benefit, most years." She explained that she did not feel as though the certification brought more business to her firm. She noted, "It made corporations I already worked with happy." [#79]

- The Black American male owner of a DBE- and MBE-certified construction firm said certification has not helped him get jobs. He remarked, "I don't really want to be a DBE or minority company. I've been doing this for 40 years. I'm qualified to do whatever they

[prime contractors] are out there doing.” He reiterated that there are no advantages to DBE or MBE certifications. [#13]

When asked about advantages or disadvantages to SDB certification, the same business owner said that he does not see any advantages to the SDB certification and is frustrated that he has never received any bids from the certification, despite renewing it annually. [#13]

- The non-Hispanic white female owner of a WBE- and SDB-certified construction firm said that while her firm sometimes benefits on public sector projects because of their WBE and SDB certifications, the certifications are sometimes a disadvantage. She stated, “I think discrimination is ... probably not the right word. It feels too strong for me in this particular case, but because we have the [certifications], people think of us as small.” [#61]
- The male representative of a Harrisburg public agency said, “There’s minority-owned companies that ... don’t bother to get certified because they know that the opportunities don’t necessarily come with it.” [PT#09a]
- When surveyed, the owner of a construction business in Western Pennsylvania responded, “We were woman-owned, but it didn’t do us any good.” [Avail #01]
- The female representative of a WBE- and DBE-certified engineering firm said, “Finally getting that DBE [certification] literally does not mean any work at all.” [PT#13b]
- The Subcontinent Asian American male owner of a goods and services firm expressed mixed views on advantages to SDB certification because he did not know if companies paid attention to the certification. He added, “Sometimes I saw a contract that needed small businesses so I’m sure that it’s useful.” [#15]
- When asked if there are any disadvantages to certification, the Black American male owner of an MBE- and DBE-certified construction supply firm commented that certification is “a two-edged sword.” He said there are disadvantages to certification because “as soon as someone hears MBE, they get a [negative] connotation in their mind. He said, “I’ve had two or three situations ... where I’ve called a manufacturer to buy material, and the first thing [they] asked me [was], ‘Who are you selling it to?’ [and then], ‘We’ll require a joint check because you are an MBE business.’” [#06]

The same business owner continued, “I almost sued a company over it ... for discrimination, because they never asked me for a credit application. [They] never asked me for the size of our company. All they heard was that we were an MBE company.” He added, “I was told verbally, on the phone, ‘Well that’s how we do business with MBEs.’” He said this has happened “more than three times in the last 10 years.” [#06]

He added, “They label you, and as soon as they hear ... MBE, a red flag goes up in their mind ... If you look at our advertising ... I went as far as [taking it] out of my literature ... because it was turning people off.” He said it “turned people off so bad” his salespeople “were getting doors closed on them.” [#06]

- The Black American male owner of a DBE-certified construction firm stated that the DBE certification can be a disadvantage. He said, "In some circles in Philadelphia and in South Jersey ... you say you're a DBE and then you automatically get put in a box." [PT#13f]
- When asked if there are any disadvantages to certification, the Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, "Sometimes I think that we're only thought of as a DBE and not as a specifically good company I've seen ... a lot of colored contractors do this, they lead with the fact that they're a DBE, and ... I think it devalues the company to a certain extent where that's the only thing you can think of them as." [#38]
- The Black American female owner of an MBE- and WBE-certified professional services firm said certification has its disadvantages. She explained, "Some people actually put it on their website, some people don't. I've seen it work both ways, where it can actually close a door on you You really have to know what to do with it." [#18]
- When asked about the advantages of certification, the non-Hispanic white female owner of a WBE-certified professional services firm said that she "wants to be certified" for her customers' sake. However, she indicated that certification does not directly benefit her firm, saying, "It really doesn't have huge advantages, not in what I'm providing Clients get more benefit from it The only reason I did get certified [is] so I can say to my clients, 'Look, we're certified as a WBE. If it gives you some advantage, [good].'" [#10]

The same business owner later said a disadvantage of certification is "all of the time [she] spend[s] trying to comply with everything." She said when she spends time at the beginning of the year "filling out [her] WBE applications," she knows "what [she] receive[s] in return does not cover [the] cost of actually doing the work." She said that she wastes time giving "free ... consulting advice [and] free cost estimates" to companies that never hire her." [#10]

- The non-Hispanic white female owner of a DBE- and WBE-certified specialty contracting firm said, "I contacted the state agencies for advice on how to succeed as a woman-owned business in Pennsylvania, and [asked] how [I] could ... get a chance to compete for government contracts. I registered on the PA supplier portal [and] attended the outreach programs that some of the general contracting companies had for bigger contracts to introduce and market ecoservices. I [also] attended the state trade shows and meetings for small businesses in Harrisburg I submitted bids to the general contractors only to be told they selected another contractor [that] was not a minority-owned company." [WT#05]

The same business owner continued, "I called the state and spoke to [named representative] regarding the issues and barriers [for] minority-owned companies. His response was that until there was actual legislation ... mandating minority goals for contracts with government funding, it had no teeth and was unenforceable. I became extremely frustrated and no longer spent time or ecoservices resources chasing down and bidding the state work." [WT#05]

- The Black American male owner of a DBE-certified construction services firm stated that so far, he "has not heard of any" advantages of MBE or DBE certification. [#02]

The same business owner later stated that in Western Pennsylvania one disadvantage of certification is that a firm “get[s] pigeon-holed very quickly” to only “be used in a time of need.” He said for this reason he does not market his firm as an MBE, and rarely targets MBE work. [#02]

- The non-Hispanic white female owner of a WBE-certified construction-related firm stated that she has not seen advantages to SDB certification. [#17a]

The same business owner said the SDB, and other certifications, take “so much time and effort and you provide all this stuff, but the end result is always the same we get this nice packet back and we get the certification back and I can hang it on my wall, but it won't help me.” [#17a]

- When describing disadvantages to certification, the female representative of a WBE-certified construction-related firm said, “We get bids now more [than before] because we're a [WBE]. But ... for the state, I don't think it's helped us at all being a [WBE]. I just feel like I do a lot of paperwork for nothing.” [#17b]
- Regarding VBE certification, the Black American and veteran male owner of an MBE- and VBE-certified professional services firm said that he has not seen any benefit to it because he “can't leverage it with the state.” He added, “There are no set-asides for veteran-owned companies. If it is there, it's not showing up when I'm looking for jobs.” [#08]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said one minor disadvantage to DBE certification is that she cannot bring in any partners to increase her capital and credit. She explained, “I'm sure I could go and get partners with a plethora of income, but then they're going to want to maintain more percent because I'm not putting in the same amount of money. [With my company] being a DBE, I have to be limited in the amount of money I have ... trying to get loans and so forth, because ... they have to underwrite me as the owner. It kind of hurts you in that way. You can't bring in people with lots of money, because then they are going to want more ownership.” [#25]
- The Subcontinent Asian American male owner of an MBE-certified professional services firm stated that his MBE certification is sometimes a barrier for his firm. He stated, “More often than not, the bigger type of clients says, ‘Hey, we're already working with a bunch of MBEs so we're not willing to take on new people.’” [#21]

The same business owner later said, “Clients do ask, ‘Are you certified or not?’ But, I don't know whether that is a part of their decision-making process I don't have any numbers to prove that.” He added, “Your name is out there as an MBE, thereby you're not closing your door to that kind of business, which can happen.” [#21]

- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said that his MBE certification has not helped his firm. He explained, “I thought it would be more useful [in allowing us] to access opportunities that we felt we were as qualified as anyone [for]. As you see from my background, my achievements, and our schooling ... we're extremely well qualified. But, it's just very hard to understand the process [and] enter into a

process. You could [be bidding] with firms that are much more established.” He added, “The minority certification for us has not helped us. In two years, it has not been a benefit to us in any way.” [#76]

One business owner said certification is less beneficial at the state level. While she found certification to be helpful at the city-level, the Black American female owner of an SDB- and WBE-certified professional services firm said certification “isn’t valuable” at the state level. She said, “Right now, the Commonwealth [certification] isn’t valuable, let’s be clear [about that]. [It’s] because you don’t get any business from the Commonwealth by having it. But I just always do [have it], because I think it’s something good to have.” She elaborated, “I don’t know other people’s experiences, [but the state’s certification] really hasn’t provided me any value. [Meanwhile], the Office of Economic Opportunity ... registry has [provided value]. I’ve gotten a lot of business through them.” [#35]

Some business owners said they owe their firms’ success to talent and hard work rather than certification. For example:

- The Black American male owner of a DBE-certified construction services firm said that he is not seeking MBE certifications in other states because he “doesn’t really push the MBE [certification] because of the talent” in his company. [#02]

The same business owner added, “We are a contractor first. We just happen to be minority owned. Of course, we will take advantage of those certifications that are there for us, but 85 percent of our work is awarded to us as being either low bidder or being the contractor of choice.” [#02]

- The non-Hispanic white female owner of a WBE-certified professional services firm said, “[My customers] are not calling me because I’m a WBE [and] they are not calling me because I’m the lowest price around. They’re calling us because we’re a good contractor that does good work with qualified people, and ... provide it at a very reasonable price.” [#10]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said, “We provide a good service. Even without the MBE, [a company] would still want to use us because of the service we provide.” He added that his firm is looking for “long-term relationships, not just a one-off.” [#08]
- The Hispanic American male owner of an SDB- and MBE-certified professional services firm said, “[What] I personally see ... are people who use the designation of MBE and create a whole practice out of that [without] giving back as much to the community as they should ... Even though [I’m a] minority myself, [I’m] a little disappointed that some people take advantage of that [certification] and don’t render the quality of services they should be rendering.” [#76]

Experience regarding the certification process and any recommendations for improvement. Interviewees made recommendations for a number of improvements to certification processes. For example:

- The non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm asked her office manager to comment on the certification process. The office manager stated, “The WOSB and the WBENC certifications go through the WBENC platform, and those are straightforward.” [#05]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said Allegheny County has “some very intuitive people in their [MWBE] office.” He added, “It’s not unusual for my phone to ring when a contractor starts a job, [with the MWBE office] asking me, ‘Did they talk to [you about] what [you] quoted?’ They are on the ball. They run a tight ship.” [#06]

The same business owner went on to say this type of monitoring “is needed.” He said there was a contractor out of State College that got a job in City of Pittsburgh and wanted to purchase materials from his firm. He said Allegheny County called to confirm this because they hadn’t seen any paperwork yet, and added, “[The Allegheny County MWBE office] understand[s] [some] contactors [are] looking for loopholes and trying to get out of things. They hold their feet to the fire, and they do it before the contract is awarded. There is a day spent on diversity spend, and the contractor has to spell out what they’re doing [and] how they’re doing [it], [and] who they’re doing it with” [#06]

- The non-Hispanic white female owner of a professional services firm shared her thoughts about becoming a certified Disabled Owned Business Enterprise through the USBLN. She expressed frustration that there is no alternative certification, especially because USBLN is in direct competition with the services her firm provides. She stated, “I hesitated to apply to be certified with them, and I did so, basically, because customers [perceive] that if I’m really disability owned that I would have their certification. That’s now put me in an awkward spot, because the USBLN is a private entity that is a direct competitor...their certification process is asking for customer list and business plans, and financial information....I’ve given them summaries, and I have not agreed to give them all of my financial records, tax records, for the past three years, because I hold that information, as the private business owner, as something that’s not necessary to be shared with the direct service competitor... So, I gave them other documentation to [the firm’s good standing status], and asked for an exception to the privacy of the financial records. And, they came back and said, we still want that, and we’re now disputing your documentation that you’re disabled...” She stated, “I’ve asked the Commonwealth to consider doing a disability-owned certification of their own, [rather] than recognizing the USBLN as the only way to be certified for that.” She further described the USBLN as “very pay to play...” [#79]
- The minority male owner of a professional services firm commented, “When you generalize the small business moniker it really does a supreme disadvantage to African American and Latino businesses, particularly.” [PT#14a]
- The Black American female owner of an SDB- and WBE-certified professional services firm stated, “All the certifying agencies are very helpful, and they’re needed. I haven’t encountered anything that was not helpful.” She went on to say that the process for all certifications, including small business certification, is “relatively easy.” [#35]

- The female representative of a business assistance organization said, “My job is to [guide] them through the [prequalification] process [and] the different certifications, which are a lot We like to see a business be organized with all the documentation before they go through the certification process so that they can have a smoother, you know, experience with it.” [PT#16k]
- The non-Hispanic white female owner of a DBE- and SDB-certified professional services firm described her experience attempting to obtain a reciprocal disability certification in Pennsylvania. She explained, “Essentially, what they told me is they only certify disabled-owned businesses that have gone through the certification by [USBLN]. Two executive directors ago, they marched themselves into a money-making entity by offering this certification. And so, I called them up [...] and said, ‘You know, I’m a brand new startup [and you’re] wanting \$1,000 to do certifications that I already have. Can you – do you have any sort of unofficial thing or, you know, reciprocal thing or, you know, let me do some work for you for free, or whatever, so you can give me this certification?’ And USBLN, basically said, no, you pay \$1,000 or go away and I didn’t have \$1,000. And so, I said to Pennsylvania, ‘You know, I got this reciprocal certification, can’t you accept it?’ And they said, ‘Oh, no. [...] The only way we will accept a disabled firm is if you go through USBLN.’ So, this is a huge problem because nobody pays attention to disabled-owned businesses....But the point is any small business is not going to have \$1,000 for certification, unless they’ve been in business for a very long time. ...particularly, one owned by someone with a disability that has to put a lot of energy and time and money into dealing with their disability...this is the most discriminatory thing the Commonwealth can do.” [#80]
- The Black American and male veteran owner of a consulting firm said, “[A] barrier is PA information systems’ incomparability with Windows 10, Google Chrome, and other contemporary operating systems. Self-service activities such as recertification as a small business are restricted if the business utilizes [these] operating systems. No other business entity or organization that relies on electronic connectivity to conduct business [has] these prohibitions. PA needs to allow for use of all contemporary operating systems, including those ... on mobile devices.” [WT#01]
- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said that because recertification is done via email, she is nervous about something “falling through the cracks.” She said, “I am very leery of losing that certification.” [#07]
- The Black American female owner of a DBE- and WBE-certified construction firm said that, “There’s got to be a system to help small businesses manage [certification paperwork] because Anytime you purchase anything, I don’t care if it’s a filter bag, you got to have certification of where it came from, and I don’t blame them. You have to make sure you have the right products on these roads. It’s life and death.” [#63]
- The Black American male owner of a DBE-certified construction services firm commented that he’s a bit “radical” when it comes to the MBE/DBE certifications. He said, “[This is because] there is a major component we fail to acknowledge, and it’s [that] if a contractor doesn’t comply, what [are the] repercussions?” [#02]

The same business owner continued, “[Agencies] have this ‘good faith effort’ out there that everybody signs off on, and they don’t even research to see if there is a company out there like me.” He went on to say the City of Pittsburgh has caught contractors “blatantly lying” about MBE/DBE outreach efforts. He said this ultimately “gets pushed through” and they get to proceed with the job, “with the assumption that they did reach out to these [MBE/DBE] contractors.” [#02]

- The non-Hispanic white female owner of a WBE-certified professional services firm described the DBE certification process as “daunting,” and indicated that it should require less paperwork and questions. She said that her accountant told her, “I’ve never seen such questions.” [#04]

Regarding these questions, the same business owner later said, “How can someone be certified DBE and they ask you to list all of your real estate, all of your boats, all your cars How can you have all of that and still be DBE?” [#04]

- The non-Hispanic white female owner of a WBE-certified professional services firm said that she dropped out of the WBE program in the mid-1990s due to frustration over it. She said “it didn’t have any effect” on her business when she dropped out, and commented, “Being in the program doesn’t add to my bottom line.” [#10]

The same business owner continued, “The government doesn’t buy my service directly, and that’s the unfortunate part of why this program doesn’t work really well for us.” She said the government’s “not buying the subcontracting services, [they’re] buying the engineering services,” and then the engineers hire her firm. [#10]

She later added that WBENC “is \$350 a year” and “[does] nothing in [her] part of the state.” She continued, “They have a couple meeting[s]. That’s it. It’s been one of the complaints and they said they were going to address it Last year I didn’t get a contract because I didn’t have WBENC, and so I got it.” [#10]

- The female veteran owner of a professional services firm said, “One of my concerns today is that the tiered processes for recognizing women veterans and certification is flawed with powers connected to federal, in terms of the SBA and overlapping state and local governments for identifying and certifying veteran-owned businesses. And unlike every other distinction, the women veteran’s entrepreneur classification in and of its distinctions for classifying for procurement and contracting opportunities are somewhat overlapping with women and the veterans [It] kind of gets buried somewhere underneath, and kind of overlooked.” [PT#01f]

M. Any Other Insights and Recommendations Concerning Pennsylvania Contracting or MBE/WBE/DBE Programs

Interviewees provided other suggestions for Commonwealth of Pennsylvania agencies, PennDOT, DGS, and other public agencies to improve their small business, SDB, DBE and MBE/WBE programs. Others discussed additional insights or recommendations relevant to the study. For example:

- When asked how Pennsylvania’s certification programs compare to those of other states she has worked with, the female owner of a professional services firm stated, “Pennsylvania is probably the worst.” She said that counties in other states typically have their own “diversity programs ... and certifications in place.” [PT#03]

The same business owner continued, “They don’t have that [in Pennsylvania]. They have so many certifications, I don’t know if they’re going or coming. I mean they have so many it’s kind of ridiculous.” She said that she considered “putting in an unsolicited proposal” to encourage “[consolidating] some of what’s out there.” [PT#03]

- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “It’s very hard to get a contract. The definition of a small business is too large, it’s not helpful. You have my small business, and then you have small businesses with 99 employees and a \$20 million revenue. It’s not fair, and it’s hard to start.” [Avail #155]
- When surveyed, the owner of a professional services business in Western Pennsylvania responded, “With a veteran-owned minority staff, it’s been kind of difficult with the state. I think nobody really looks at veteran-owned as a minority-owned business.” [Avail #106]
- The non-Hispanic white female owner of a WBE-certified professional services firm said that she often gets calls for services she does not provide due to the “vagueness” of the Commonwealth’s listings. She added, “I think they need to have listings that are more specific [and that] narrow it down to categories We get a lot of calls from people for construction and we don’t really do construction We’re part of what the engineers do, but we’re not really an engineering company either. We’re [almost] like a specialty contractor, so sometimes I think there is some confusion there.” [#10]
- The Subcontinent Asian American male owner of an MBE- and DBE-certified professional services firm said, “[Government agencies] need to have set-aside contracts for people who are certified as diverse businesses, whether it’s a woman-owned business or a veteran’s, or whatever, rather than ... a lot of the times [relegating them] to [subcontracting] roles.” He said government entities should have “set-aside contracts” that are tailored to the existing minority firms in the marketplace, and added, “I think that would help a lot, and ... develop subs as a prime.” [#09]
- When asked if he has any final comments or insights, the Black American male owner of an SDB- and LGBTBE-certified professional services firm stated, “As far as Commonwealth goes ... I think they should [realize that] ... a lot of the disadvantages people have been ones that people can’t see. So, I think that ... it’s a good idea to consider LGBTBE as a qualifying classification.” He added, “I’m not sure where the veteran [certification] is right now, [but] those are the kind of ones that should be considered.” [#38]
- The Black American female owner of a DBE- and SDB-certified professional services firm said many state contracts that have mandatory minimums ask minorities to compete with other diverse populations, such as white women. She said she’s concerned about how much business minorities actually receive out of the total pool of available work, and stated, “Now ... it’s [either] woman-owned or a minority. I think they should both stand alone, and I think

if that was the case then it would be [fairer] Don't group the two together, that's just not fair." [#32]

- The Black American male owner of a DBE-certified goods and services firm said the Commonwealth should make a greater effort to include DBEs and to “break up” existing closed networks of prime contractors. He explained, “PennDOT, it starts with them. It starts with them and the people that they're doing business with. They've got to make sure [prime contractors] are following the rules. Trust me, they're not. They're doing what they had to, to keep the ball rolling and hope it never changes, but it needs to change if there's going to be a shift in the market, or you won't see any DBE companies growing, because you don't get past year one, year two, year three without the game changing.” [#20]

The same business owner later said mentoring is a critical component of success for small diverse businesses. He said, “[They] need to have a big brother, big sister, whoever it is, to walk beside [them]. You have to have a mentor to perform.” [#20]

- The Black American female owner of an SDB- and WBE-certified professional services firm suggested that Pennsylvania have a subcontractor requirement on all state contracting opportunities. She said, “I have been told by different state agencies, ‘There is not a [subcontractor] requirement, so we don't have to do this.’ Since there [are] no requirements, they don't require that a sub come in alongside a prime, which I would suggest.” [#35]
- The Black American female owner of a DBE- and WBE-certified construction firm stated that a PennDOT-sponsored mentor-protégé program would be helpful to small businesses. She said, “It wasn't easy for me to get my prequalification I think that PennDOT should have more mentor-protégé [programs] ... [and] the state should give [established companies] some kind of incentive. That would give them a reason to want to work with us.” [#63]
- The male representative of a minority-owned business stated that PennDOT should expand on their mentoring program. He said, “It has to be a mentor program that is a pool of primes put together by PennDOT ... approved by PennDOT [and] willing to do the work with the prime ... as a way of partnering firms together in order to allow the smaller firms to grow.” [PT#15c]
- The female representative of a WBE-certified construction-related firm said that she is concerned about the contract requirements between different certifications because “they only need five percent for women but 25 percent for minority.” She said, “Why [do] women [owned companies get] less spend? [Contractors] need 5 [percent] for women, 15 [percent] for veteran and 25 [percent] for minority We can do 100 percent of our own, [so] why isn't that good enough?” [#17b]
- The Black American female owner of an MBE- and WBE-certified professional services firm said the Commonwealth could help her firm get more business by making their bid process “contingent upon the industry or the realm of services that the MBE or WBE is trying to actually offer.” She added, “Most of the time, the stuff that they would call me in for, or call

my organization in for, they pay, I think, \$2,500 for workshop at times For most government agencies that's part of the non-bidding process. Why do I have to go through this whole 10-page packet, tell you all of my work history [and] all of my financial information? Why do I then have to turn around and repeat it on a prequalification form? And why do you need to know if I make \$2 million in order for me to do a workshop that might be \$2,500?" She also said the Commonwealth can help small diverse businesses by "breaking some of the projects down into smaller [contracts]." [#18]

The same business owner went on to say that PennDOT could help encourage Small Diverse Business participation by offering to "do smaller group type preparation technical assistance versus the one time of year procurement information sessions." She added, "They literally show you how to go onto the website, how to complete the process." [#18]

- The Black American male owner of a DBE- and MBE-certified construction firm said, "Every one of these general contractors and primes has a department called a diversity business enterprise. Those people are getting paid ... [but] they don't make sure there's a DBE or minority contractor on one of these jobs. They smile in your face [and] say they're going to send you a bid." However, he said that he never hears from them. [#13]

The same business owner said "if it's [a contract goal of] 25 percent participation and the job is \$250,000, and if the general contractor goes to the union hall and hires one Black [American] person," then they don't have to hire his firm to meet participation. [#13]

He went on to say, "[People] try to find out why minority companies are not getting a job, and the only reason why minority contractors are not getting the job is because the general contractors and the primes don't want minority contractors on their jobs. [It's] because they still get their [participation credit] from the federal, state, and city by just sending me out an email If [prime contractors] send me an email, then the state says, 'Okay, that's your minority participation.'" He explained that prime contractors should not be paid for minority participation because they sent an email, if in fact they do not have any minorities or women working the job. He concluded that the Commonwealth should provide more oversight. [#13]

When asked for recommendations to improve contracting in the Commonwealth, he said they should "stop giving those general contractors and prime contractors the money" unless there is minority participation. He said, "I go on jobs [and] ask, 'Where is the minority participation?' The minority participation is consulting companies They use consultant[s] because they get paid six figures and they don't give anyone else a job." [#13]

- The minority male owner of a contracting firm said, "The suggestion I have is once an agency [says] they have services that need performed, they need to identify the scope of work, make sure the funding is allocated for the project, and provide an estimated start and completion date for the project. This all should be in place prior to contractors being awarded a contract. As a minority contractor, I cannot afford to hold time for contracts that may never materialize." [WT#08]

- The Black American female owner of a DBE- and SDB-certified construction services firm recommended that she “would like to see more programs that offer mentorship ... and how to set up a business.” [#01]
- The Black American and veteran male owner of an MBE- and VBE-certified professional services firm said that he would like to see more “geographic, state-based programs” to encourage more local firm participation. He said ideally these programs would require the Commonwealth to have a Pennsylvania firm on every bid. He said the Commonwealth “should require 15 percent Pennsylvania ... small businesses.” [#08]
- The Black American male owner of an MBE- and DBE-certified construction supply firm said history of discriminatory hiring practices and “not affording a place at the table [and] equal opportunities” has created a negative environment in minority communities. [#06]

The same business owner continued, “The majority of people incarcerated are minorities, and it all stems back from [lack of job opportunities].” He added, “If you keep pushing a community out, and you don’t give them access to a job so they can buy shoes for their kid [or] have a roof over their head ... what are you creating?” [#06]

- The Black American male owner of an MBE- and DBE-certified specialty consulting firm said, “What the agencies are failing to do with their methodology is go deep enough into ... looking at the discrimination and the racism that is actually creating their available market And that’s one thing a dispersity study does ... [it looks] at the [current] availability What can we do to take into account the firms that are not available and that don’t exist, or that went out of business because of [these] issues?” [PT#05]
- The Black American male owner of a consulting firm said, “Every department [in the Commonwealth] has a Deloitte representative to kind of coach them through how they should be operating efficiently They’re paying that bill, [but] what are we getting from it?” [PT#11]

The same business owner continued, “I’ve sat with these Deloitte folks where they kind of pick your brain and [see if] they can incorporate [anything] into the governor’s platform or agenda, or policy points And I was happy to do that, but that was a whole day where you had ... folks who are making a hundred thousand-plus a year ... to do that We have money that pays consultants on how to become more efficient, and [the Commonwealth doesn’t] even listen to their advice. I’m not saying [the consultants] don’t belong there. I’m saying if they belong there, if they deserve what you’re paying them ... you deserve to listen to what they have to say” [PT#11]

He went on to say, “Bureaucracy is so cumbersome, and to change anything takes so much sign off and layers. But ... the governor passionately believes in your work [and] passionately believes in this study, right? So, I think it’s just a matter of folks that work for him to kind of take on the same passion that he has about these issues, and kind of put their [own] energies there.” He added, “If you don’t have the personnel to implement something this bold, then it gets caught in bureaucracy.” [PT#11]

- The Black American male owner of an MBE- and DBE-certified general contracting firm reiterated, “If [majority prime contractors] are not required to share that work, they won't do it. And here in Harrisburg ... I was born and raised here, and ... as far as disparity studies are concerned I've been doing my own ... disparity study for the last 50 years.” [PT#07]

The same business owner added, “Since I was about 12 years old, I've been seeing ... the work crews here I could go to school and get A's, but when I go out and see the work crews out there, I don't see anybody like me. So ... it's [always been] just a ... huge disparity between the amount of people ... even here on the projects.” [PT#07]

He later said that he was at Hall Manor recently and saw a work crew of “about eight or nine people ... all white.” He commented, “The contracts there ... it's a project. And the project is 70 percent minority There's [supposedly] not many white people in ... that project.” [PT#07]

- When asked for any final comments or insights, the Subcontinent Asian American female owner of a WBE-certified professional services firm stated, “It's hard to be a woman-owned entrepreneur [and] even have the courage of actually starting [a business]. [Especially] as a young woman [and] having kids. It's overwhelming. So, the process to give [preference through] certification is a great privilege.” She went on to say her firm needs assistance with understanding how to use certifications to grow and support her business. [#44]

- The Black American male owner of an MBE- and DBE-certified specialty consulting firm said, “There seems to be ... an acceptance of viewing inclusion and diversity as ... one size fits all [and] everyone should be included. But ... really there are two different needs and approaches for diversity in general.” [PT#10b]

The same business owner continued, “There's one which is ... historical [and] remedial in nature There have been wrongs that have been done historically that need to be corrected. And then there's the second which is much more of a benign race- [and] gender-neutral approach. [As in], it's all public money, [so] we all need to have a fair and equitable share of that.” [PT#10b]

He added, “Typically ... those ideologies tend to conflict. They shouldn't, but I think that they do because it's a very one-dimensional approach to a program. It's either one or the other, [but] it shouldn't be.” [PT#10b]

- The non-Hispanic white female owner of a DBE- and WBE-certified construction supply firm said, “Here I am a manufacturer ... actually here in Pennsylvania employing humans that are going to buy and sell things out in their community, [and the contractors buy from brokers instead].” [#07]

The same business owner reiterated that the Commonwealth should implement more “checks” on contractors. She said, “I have never, ever in [the] 30 years I've had WBE [certification] been contacted by the certifying entity.” She added, “If you are in the PennVEST program and you're requiring information, would it not be worthy of you to check with the person [the contractor] said they bought it from to see if they did? In 30

years that has never happened.” She went on to say this system has the potential to be very corrupt. [#07]

- The Black American female owner of an MBE- and WBE-certified professional services firm stated that the Commonwealth should look to hire “those that have a reputation for getting the work done,” not just firms “that have a name in the City [of Pittsburgh].” [#11]
- The Black American male owner of an MBE- and DBE-certified professional services firm said that he purchased some land over 15 years ago but experienced some zoning troubles. He said that he has over \$1 million tied up in the project, and added, “It’s supposed to pay for itself, but there’s been so much corruption.” He said that he hasn’t seen as much profit as he would otherwise, because of the “corruption.” He went on to say, “There hasn’t been much growth. I’m just holding on because I have a serious mortgage.” [#16]
- The female representative of a WBE-certified construction-related firm said that the Commonwealth’s website is “challenging.” She stated, “We’ve asked for our name to be changed numerous times Our certificates are still on the wrong name ... [the Commonwealth] haven’t changed it to this day, and ... we’re still struggling. She added that they renewed their certifications with the firm’s new name and the website still would not change. [#17b]
- The non-Hispanic white female owner of a DBE- and SDB-certified construction supply firm said, “If [the Commonwealth] really wants to make manufacturers thrive, and you want to create a marketplace for disadvantaged business to grow and ... prosper. When you have larger goals, those people are going to thrive. But when you have the small ones, the people who do ... less work are getting all the work because they have smaller overhead costs and I can’t compete against that.” [#25]
- The non-Hispanic white female owner of a WBE- and DBE-certified professional services firm said that she would like to see the Commonwealth take more care when reissuing RFPs multiple times. She said, “Legally [the Commonwealth has] the right to reissue that RFP for the third time, but are they taking into consideration? [They’re not] telling the companies like [my large client], ‘Hey, you can change a lot of things, but you need to stick with the same [DBEs], or you need to make sure that the people that you locked in for the past year [are] still on your RFP.’ You can’t now say, ‘I want to work with somebody else.’” [#19]
- The minority male owner of a professional services firm said, “Depending on who the governor is, the way they look at small, diverse, minority businesses has changed.” He added, “It’s hard to be a sustainable business and know that you’re aligned with the direction and priorities of the Governor’s Office.” [PT#14a]

The same business owner later said leadership in the City of Erie “are unaffected by the 30 percent unemployment that African Americans face in [the] town.” He added, “They’re unaffected by it. And, I don’t know what it’s going to take, and I applaud the Governor’s executive order. I applaud the Governor’s Advisory Commission on this issue and am very excited.” [PT#14a]

- The female owner of a goods and services firm said, “I don’t know if PennDOT has anything to do with [it], but right now we have a situation here in Erie that we’re facing [where] they want to tear down access for people in the city to get around and do the things they need to do. We have a real concern about them demolishing the [McBride Viaduct].” [PT#14a]
- A public meeting participant recommended that the MBE and WBE participants be delineated on government and private projects to remind the public that “it just [isn’t] white people in this game.” [PT#15d]
- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “I think there’s a certain group of people controlling major funding. I think it may be somewhat biased.” [Avail #94]
- The male representative of a business assistance organization stated, “LGBT business is growing Our list of certified-LGBT businesses grows every year, and it will continue to grow as more business entities embrace supplier diversity. LGBT business owners span every race, ethnicity, gender ... and sexual orientation. They are business owners, innovators, job creators, taxpayers, and providers of essential benefits for our entire region. [They] will remain an important part of the business engine that makes our state and local economy run” [PT#01d]
- The male owner of a construction services firm stated, “The building contractor community in this part of the world is extremely conservative. They’re frightened of change. They’re frightened of intelligence. They want the construction industry to continue to stumble forward in the awkward and inefficient way that it has for decades, because it benefits them. Central Pennsylvania ... Pennsylvania, as a whole, is famous for transactional operation, non-strategic operation.” [PT#17d]
- The non-Hispanic white male representative of a small business development organization recommended that the Commonwealth pay their contractors within 14 days of the approval of invoices and provide incentives for finishing early. He stated the belief that these changes could save money and benefit small businesses. [#46]

One business owner commended the Commonwealth’s focus on small and disadvantaged businesses. The non-Hispanic white female owner of a WBE- and SDB-certified professional services firm said, “I think ... the Commonwealth has a lot that they’re doing right, in having a focus on small, local, minority- and women-owned businesses.” She added, “I think it helps Pennsylvania [to] have strong communities with ... local businesses, as opposed to ... those companies headquartered in other places, where the profits go out of state.” [#81]

Some business owners shared comments related to financing and access to funding. For example:

- The Subcontinent Asian American male owner of a goods and services firm recommended that the Commonwealth offer “financing for small businesses,” because it is difficult to grow his firm. He continued, “for example, I need a warehouse, but it’s too expensive to get those kinds of space and ... expensive to get the loan.” He said that he went to a few banks, but

"[his] business was not [big] enough to purchase that kind of property. They [the banks] said, 'You can't buy it because it's not a sustainable business model,' but at the same time if I get [these loans] I have a lot of big expansion planned." [#15]

- When asked for other insights or recommendations, the non-Hispanic white female owner of a WBE-certified professional services firm said, "I wish there was a place you could get a low-interest loan for manufacturing." [#04]

The same business owner said now that she's getting her DBE certification she wishes there were "quarterly classes or something" that she could go to, to understand how she can use the certification. She commented, "You can go on the website, but it's not the same as talking to someone." [#04]

- When asked for any other insights or recommendations, the non-Hispanic white female owner of an SDB- and DBE-certified goods and services firm said that she would like to see "better borrowing rates for small businesses, and immediate payments." She said, "We would like to expand and open up a location in another state, and I don't know whether Pennsylvania would loan us money to do that because we are headquartered here and our taxes are paid here." [#05]
- The non-Hispanic white male representative of a trade association said the Commonwealth should make a better effort to help diverse businesses with financing. He stated, "It's [important] how ... the state [can] help them from a financial side, whether it's guaranteeing bonds [or something else]. You [need] working capital and so forth, [and] need to have reserves for payroll and all those kinds of things." [#83]
- The Black American male owner of an MBE- and SDB-certified construction services firm suggested that the Commonwealth start "a special minority fund." He said it "would be at maybe less than market rate, [and businesses could] graduate out of it" similarly to the SBA 8(a) program. He continued, "[It] would be a great asset to the industry If they did something similar to [SBA 8(a)] on a smaller scale at a state level that says you're [going to] be a state certified contractor [and] have preferential bidding procedures until you graduate ... then [that] would give you the quickest growth in the minority contractor sector." [#27]

The same business owner later suggested that the Commonwealth "incentivize the primes to use minorities [by giving primes] a credit ... or bonus, or access to capital that they can then pass on to the minority subcontractor." He went on to say, "Reward the general contractors for minority participation Under ... federal projects like your prisons, they do have a program similar to that. [Primes are] rated on a point basis and depending on [their] points for minority inclusion [they may or may not] be awarded a project. [It's not] because of price, [it's] because [they do] what they're supposed to do." [#27]

- The male representative of a business assistance organization said, "It would really be great if we put together a real working ... financing program to help DBE firms. There's nothing in place right now, everything's geared towards manufacturing companies, and different things, and for professional services. Let's put a true working capital program together If

they can't get ... traditional bank financing, let's see what the Commonwealth can do to help these companies get lines of credit. [PT#16]

A few interviewees shared comments related to outreach efforts and procurement notifications from the Commonwealth. For example:

- When asked if he has any final comments or insights, the Hispanic American male representative of a trade association said that he thinks the Commonwealth could improve its presence in Western Pennsylvania. He explained, "One of the things is [that] we don't see a lot of opportunity. We don't see or hear [it]. I mean, obviously the ... council's in Harrisburg, so when I think of state opportunities I think if I'm not in Harrisburg or Central PA, I'm not going to get ... an opportunity to do business If there is, we don't know about it So, are there ... business opportunities in Southwestern PA at the state level? We don't know. We don't see them." [#86]
- When asked if he has any recommendations for the Commonwealth, the Hispanic American male owner of an SDB- and MBE-certified professional services firm said it would be helpful if "[you could] sign up with [the] agencies and give them criteria to look [at] ... and then every day you get email leads [for upcoming projects]." [#77]
- Regarding how the Commonwealth can improve solicitation and procurement practices, the non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm said, "Filters ... that would be huge. We live in a world of push notifications. The news comes to us. Everything just gets pushed out ... like with Groupon Every time [a legal-related RFP] comes up, I [should] get an email ... in my inbox." She commented, "That would be huge." [#33]

The same business owner later said, "From the legal services perspective, [the Commonwealth should] be open to unique ways in which law firms can work together similar to other industries that are already existing. [If] they want LGBT law firms to win RFPs, then it can't be the traditional method of without there being a sub. But there are legal liabilities, [and] there are things that need to be figured out ... so I don't know ... how that works on their end." [#33]

- The Black American female owner of an SDB- and WBE-certified professional services firm said, "I think the Commonwealth could do more with technology to alert participants, especially ... minority businesses, based on the service that they're looking to procure for. They can actually notify us, and then ... make it a requirement that if they award a contract, a percentage of that contract goes to a minority. [This way] the minority firm [can get] a little piece of the action. That is something I would definitely suggest, that [contract goal setting] becomes mandatory." [#35]

The same business owner later said, "I think what the Commonwealth needs to do is just make it mandatory. It's really the only way you're going to get more inclusive." She said that setting contract goals is especially important for smaller businesses to access public contracting opportunities, and explained, "It would give the minority, especially the smaller

firms, the opportunity to get into the door. Then they can, years later, become the prime because they've been working with the client [and] they know the work." [#35]

Many public meeting participants shared comments regarding the disparity study. For example:

- The male representative of an SDB- and VBE-certified consulting services firm said, "The thing I know about [the] Commonwealth and everybody working with them [is that] everybody's heart ... seems to be in the right place." He said that he thinks "there will be strides made" after the disparity study. [PT#09]
- Regarding the disparity study, the male representative of a Harrisburg public agency said, "I definitely think the results are needed here in Pennsylvania. And ... the hope is that the results come out and ... allow us, you know, more firm ground to operate within the Commonwealth." [PT#09a]

The same public agency representative continued, "But ... hopefully there's some pieces in there that help me as I'm growing our program on a local level." He added that "it's tough" for a small public agency to "cough up" the funds to have its own disparity study. [PT#09a]

The same public agency representative went on to say he's "hopeful" that the disparity study will "kick-start" interest in diversity from public agencies at the local level. [PT#09a]

- Regarding the disparity study, A public meeting representative commented, "Don't make it so complicated. These figures in all these studies I've seen, looks like you built a rocket off of [them]. But, you don't get ... prime contracts from [that]. So, there's something wrong in the disparity study configurations of mathematics, because ... again, [it] doesn't add up to you being a prime. It just adds up We've got to make it simple There's room [in the marketplace]." [PT#02c]
- Regarding the disparity study, the Black American female representative of a business assistance organization said, "One of the things that is of particular concern is the barriers that contractors and individuals that would be thinking about creating a business have accessing business contracts. Which then limits the creation of businesses or businesses staying here pursuing the work here. So, the barrier creates lack of availability, [and] the lack of availability justifies low utilization. So, it's a vicious circle, and ... I don't want that lack of availability to ... limit the goal when it is the barrier to opportunity that's creating the lower availability." [PT#16b]
- The male owner of a DBE-certified construction services firm said, "I'm hoping something comes out of this [disparity study]. [We're] doing very well in private sector. But, you know, we live in neighborhoods where we pay our fair share of taxes to school districts, to the municipalities And I believe we should share in the work ... because ... those dollars [then] ... come back as our dollars We should be able to participate in the work, and that's what we [are] after. We have families ... just as everybody else." [PT#02a]

- A public meeting participant stated, “I’m so tired of us being reflected as though we have not been trying to create our own boot, create our own strap, and pull ourselves on up. All I’m asking in this disparity study [is] that you give us what we put into the pot We’re not asking you give us something just because we’re Black, we pay taxes. We buy products, services, and goods. It’s not fair that you take the whole pie. It’s not fair that you take all of the jobs, all the developmental dollars, all of the capacity building dollars, or all of the resources that any community would need in order to sustain themselves. So, it is very difficult for me as an educated person to come in and see the disparity, when there’s so much opportunity.” [PT#14c]
- The minority male owner of a professional services firm said, “I would just ... in closing, say that you have no shortage of data points to make a very strong case for changes in the process when it comes to Erie, Pennsylvania. And as you kind of peel back the legacy of inequity that this city has come to represent, I think you’ll have all of the material you need to make a very strong case to the Commonwealth for systemic changes for the better.” [PT#14a]
- A public meeting participant stated, “Hopefully the disparity study will look at the paid memberships of government of Pennsylvania agencies.” He added that there should be a law against workers going to “[private] workshops and conventions.” [PT#15d]
- The Black American male owner of an MBE- and SDB-certified goods and services firm stressed the importance that results and conclusions from the disparity study are addressed within one year of the completion of the study. [#60]
- Regarding the lack of available minority- and women-owned subcontractors, the female representative of a construction services firm said, “Me and one of the ... owners went to a meeting in Philadelphia ... like a meet-and-greet. There was no one there. We thought we would run into people and we would meet other minorities that we could now use, [and learn] that they’re contracting this, they do that [etcetera]. There was nothing like that We don’t know how to find these people. You know, if they are out there and they’re actually valid companies that do the work, we can’t find them.” [#39b]
- The non-Hispanic white male owner of a construction services firm said the Commonwealth should better list available minority- and women-owned firms. He stated, “[The Commonwealth] know[s] who their architect is going to be. They know [who their] engineer is going to be. They should know who their minority subs are going to be, or [who they’re] potentially going to be. They should be listed. So, [in] two months when they’re advertising for architectural engineering, and they’re advertising for mechanical engineers and electrical engineers, and all of that, they should be advertising for minority subcontractors.” [#39a]

Some interviewees discussed what should be done to enhance the availability or participation of small and disadvantaged businesses in the Commonwealth of Pennsylvania’s and PennDOT’s contracting. For example:

- The Subcontinent Asian American male owner of an MBE- and SDB-certified professional services firm suggested that the Commonwealth implement a comprehensive training program for small disadvantaged businesses. He said, “If the state can have a program where we can see the whole picture from start to finish, [it would be helpful]. How do we do the RFPs? How do we partner with General Contractors? How do we present ourselves? How [do] we get paid? I'm sure, as a small business owner, [others] would say they have time to learn [those things].” [#43]
- When asked what the Commonwealth can do to enhance the availability and participation of small and disadvantaged businesses, the Hispanic American male owner of an SDB- and MBE-certified professional services firm said they should provide larger, more substantial contracting opportunities to those groups. He added, “In the end, the Commonwealth is huge and there's so many arms of the Commonwealth The only thing that really works, in my experience, is [if a public entity] is really serious about equal opportunity they shouldn't create a whole series of drags for minority people to be thrown at.” He continued, “They should be serious in having an industry seminar or some opportunity [for small and disadvantaged businesses] to get to know people who are high-performance individuals in the ... industry.” [#76]
- When asked what should be done to enhance the availability and participation of small and disadvantaged businesses in the Commonwealth, the non-Hispanic white and veteran male owner of a professional services firm stated, “Well, if the Commonwealth was interested in having small contractors work for them, even if it was prevailing wage ... [assisting with] financing of the job more readily ... would be more beneficial for a small contractor to be able to get in to do the work.” [#48]

The same business owner continued, “The biggest problem that all small contractors including myself has is financing If I have to go get the money, I have to buy money in order to do a job. That's the biggest problem. [It would be helpful] if ... the state had [better financing assistance].” [#48]

- The Black American female owner of a DBE- and SDB-certified professional services firm said the Commonwealth should focus more on recruiting Small Diverse Businesses into the program and said they don't provide much support when it comes to obtaining contracts. She went on to say, “What can [the Commonwealth] do for you if a department is not fulfilling their goals? Can they reinforce it? Can they make that department do what they're supposed to do?” [#32]

The same business owner continued, “That has not been what I've seen with them, and ... it's been a long time [since] we've worked with the state Having something where you get to meet the people who actually [make the decisions would be helpful]. Maybe ... once a year [have] a meeting with vendors, just to hear their experience so they 'll know what issues people are having.” [#32]

- When surveyed, the owner of a professional services business in Eastern Pennsylvania responded, “We provided services to municipal governments [and] we were at one point providing services to them in Southern and Eastern PA. [The] Commonwealth changed

policies of reimbursement, [so now] we can no longer compete without those governments' support." [Avail #60]

- The Black American male owner of an MBE- and DBE-certified construction supply firm said the MBE programs should be better funded. He added, "They all want MBE spend, but I've sat in board rooms and I've told them, 'You guys have the ability to make a millionaire every year.'" He said corporate leaders could ask small woman-owned businesses what they need to grow but said "they never do that." [#06]

The same business owner continued, "[Corporations are] getting billion-dollar contracts with the state, [and] they're getting taxpayer money [and] tax credits for things. [However], they're not pushing it back into the community, into small diverse businesses. That's one of my pet peeves, honestly. And it's an uphill battle. [Corporations] all have a diversity officer [and] do their dog and pony show. But when it comes down to the end of the day, you're still competing for a contract and you're still getting squeezed." [#06]

He later said the Commonwealth can try to replicate what the federal government did in the 8(a) Business Development Program. He said, "They took several contracts and they kept it a competitive bid, but they had different sized contractors competing [and] created work out of an existing work outflow for small businesses. They took a \$5 million contract [and labeled it] small diverse businesses." He added, "The state can adopt something like that ... [They can] have smaller jobs that they vet out" [#06]

- When asked how the Commonwealth can better assist business owners with disabilities, the non-Hispanic white male with disabilities and owner of a DBE- and DOBE-certified professional services firm stated, "We've discussed things like [better] advertising [and] low-cost mailing when you mail out corporate stuff or tax returns to business[es], so they are aware that the program exists and that the state is looking for disabled people." [#29]

The same business owner continued, "Try and help them because disabled are twice as impacted [as] any of the minorities [such as] the Black and Hispanic [population], and the women When you look at employment and disability statistics ... they're 20 percent more likely to be hurting." [#29]

He went on to say, "I see a lot of things from the state that help disabled [people]. Many, many expensive things like train platforms [and] ramp programs. There's a lot of money being spent in education for people with disabilities. Some have helpers that go along with them, but the [process] has been to give people with disabilities stuff instead of allowing them to help themselves to get off disability." [#29]

- When asked what should be done to enhance the availability and participation of small and disadvantaged businesses in the Pennsylvania marketplace, the non-Hispanic white male owner of a professional services firm stated, "It would be neat [if] when you register ... for your state tax ID number ... they [also send] you a packet of information [about] starting your business [including] a list of services that [they] can help you with It would be really neat, but probably expensive." [#70]

The same business owner also said it would be helpful if each county had an assigned small business specialist to help with outreach and the bidding process for state contracts. He added, "If you could do a step-by-step process, or a training program, I think you would get a lot smaller business involved ... because a lot of times, to ask a question you have to make a phone call and ... wait on hold It's all [just] time consuming, and time is extremely valuable because you have bills to pay." [#70]

- When asked if he has any other insights or recommendations for Commonwealth of Pennsylvania, the non-Hispanic white male veteran with disabilities and owner of a professional services firm said, "I do have a request of the Commonwealth, for my industry specifically I would recommend that home inspectors, property inspectors, are licensed in Pennsylvania That would really, I think, change the industry in Pennsylvania." [#74]

The same business owner continued, "Now, a lot of inspectors wouldn't want to hear me say this. Especially the new ones who are fly-by-night [operations]. If we got a licensure requirement in Pennsylvania, [then] I think we're going to weed out some of the fly-by-nights. And pay-wise ... then people can actually command what they deserve to be getting doing jobs in our industry. And it would require them to be on top of their game versus, you know, an hour inspection and write a two-page report, collect the \$300 and move on." [#74]

- The non-Hispanic white male owner of a construction firm said that the Commonwealth could better assist those interested in starting a small business by providing a checklist of business registration requirements. He went on to say that a list of localized business resources would be helpful, and commented, "[Are] there ways that a small business can start out or become part of small town business meetings? I don't know if there [are] business meetings around here to be honest with you. I can ask around, but if the state had record of ... [a] business meeting [in] town ... [then] I got somewhere to go to." [#51]
- The Black American male owner of an MBE- and SDB-certified goods and services firm recommended increasing financial support for SDBs. He explained, "The Commonwealth should work on having bonding, insurance and loan programs for SDBs that don't have the resources to collateralize a loan [but do] have a good business idea and a good business plan I think that would be helpful to some firms. A panel could review applications that include business plans and make the decision based on merit." [#60]

The same business owner recommended "stricter enforcement of payment of subcontractor invoices within 30 days, and some kind of enforcement of the commitments that primes make to subcontractors." He highlighted the importance of enforcement of the contract, stating that after getting the contract, a prime will say, 'Well, we have to reduce the price to this' or 'You're not going to get this much work.' He noted, "In order for the system to have teeth, there must be required, enforced and monitored SDB [use] ... The contracts must be adhered to ... [and not changed] after the contracts are awarded because sometimes a prime will try to take advantage of a subcontractor." [#60]

He added that relatively low revenue and employment caps for businesses that are in more competitive industries jeopardize his firm's future, noting that his industry is too competitive and his firm cannot survive without his SDB certification. He stated that large

companies in his industry will only use his firm if they get SDB participation points, adding, “That’s why I always stay under the [revenue] ceiling.” [#60]

- When asked how to increase participation of small and disadvantaged businesses in the Commonwealth, the female owner of a goods and services firm said “a lot of contracts ... should be restricted to small disadvantaged [firms] first.” She added, “They’re perfectly capable of doing it I see that in our other states, you know, these small disadvantages only [contracts]. And so, they’re a smaller contract that lets them build a relationship, get their foot in the door.” [PT#17a]
- The Black American male veteran- owner of a consulting firm said, “The process of using third-party entities to verify and confirm SDBs is a huge barrier to participation. The process can take up to two years to complete, especially for businesses that utilize [Southeastern Pennsylvania Transportation Authority] in Philadelphia. This time frame leads to missed business opportunities.” [WT#01]

The same business owner continued, “The State of New Jersey ... requires similar information to verify [an] SDB [and] takes 60 days at a cost of \$100. The City of Philadelphia, which has an SDB program, [accepts] the State of New Jersey’s verification. However, Pennsylvania will not accept NJ SDB certification. PA should accept NJ SDB [certification] and/or require third-party entities to complete verification within 60 [to] 90 days, and/or allow for a provisional SDB self-certification.” [WT#01]

- The non-Hispanic white female representative of a WBE- and SDB-certified professional services firm indicated that a form of technical assistance provided by the State of Maryland would be useful if implemented by the Commonwealth. She stated, “The State of Maryland actually did something where they would let you come in and look at project documentation before you bid on something, to give people all an equal footing. You can actually go in there, they had a room set aside, [and] you [can] look at the paperwork. You can understand the project [and] you can understand what’s going on.” She went on to comment, “[It’s] very different [in the Commonwealth].” [#56]
- The non-Hispanic white female owner of a DBE/SDB-certified professional services firm recommended, “The Small Business Office needs to be an advocate and a liaison for the small business” [#59]
- The Black American male owner of an MBE- and VBE-certified professional services firm said that “more set-asides are needed.” He added, “From my experience, there is an overwhelming lack of set-asides at the state level A lot of people don’t understand set-asides, but I think they are vital to small businesses.” He said set-asides can be used “as a launch pad to really grow your business,” because “for any small business the challenge is scalability.” [#08]

The same business owner also suggested there be a “mentor-type program” to place “retired professionals” with new small businesses to help with business development or operations. He said business development is especially important for growing firms. [#08]

- A public meeting participant stated, “The Commonwealth should create a proviso that if [a] city or state [has] a restriction against Pennsylvania firms who do not have a zip code in [their] state or city, then those [out-of-state] MBEs shouldn't be ... allowed to come [to Pennsylvania to work].” [PT#01b]
- The Black American male owner of an MBE- and SDB-certified goods and services firm said Commonwealth contracting policies make it difficult for minority-owned businesses to get contracts from local agencies. He suggested better monitoring of contract goals compliance, and commented, “The state sets the tempo for everything else in the State. It’s like a ripple effect ...” [#52]
- Regarding ways to improve the availability of small and disadvantaged businesses, the Black American male owner of an MBE- and DBE-certified specialty consulting firm said, “What I believe really needs to happen is [there should be] some type of ... aspirational goal. [It] needs to be set based on the participation that you want to see.” [PT#05]

The same business owner continued, “And then what you do to support that is you put very stringent policies [in place] that would require a responsible bidder to do these things in order to meet this requirement.” He said public agencies would have to “go out and do the compliance” and improve their enforcement. [PT#05]

- The non-Hispanic white female owner of a DBE-certified construction services firm said, “There used to be a program within PennDOT ... that brought new and young [people], typically young, because it was a low pay grade, but brought new people into the industry The only requirement was a high school diploma Since they were such low-paying positions, they were typically given to the subs, and it was a fantastic way to build staff, get opportunities, build experience, and build people, employees, and give them a career.” However, she went on to say, “That's been largely removed from a lot of the projects. It still happens from time to time, and some areas in the state are better at it than others. So not having those opportunities [anymore] to bring new people on projects I guess is a big drawback.” [#12]
- The Black American male owner of an MBE- and SDB-certified construction services firm stated that there is a need for MBE participation goals and that until MBE participation goals are established, any other efforts are a waste. He added that after specific MBE goals are set, outreach will be more effective. [#67]
- The Black American male owner of a DBE-certified construction services firm remarked that the Commonwealth should better identify local MBE/DBEs via more outreach efforts. [#02]
- The Black American male owner of an MBE-certified supply firm said, “I would hope that ... the folks that are in a position to really make a difference [are] deliberate and direct in changing the dynamics of how we do business in the State of Pennsylvania And that way whenever I get business, be it ... state or local, I can hire more [people]. It just allows me to grow the business and then be able to provide opportunities for everyone.” [PT#10d]

- The Asian Pacific American female owner of an MBE and WBE-certified professional services firm recommended that bidders on best value contracts be able to have a debriefing. She advised that the state provide a vendor working on a contract with more than one day's notice that a contract is ending. [#69]
- The female representative of a public entity mentioned that the majority of DBE business is going to a concentrated number of high-revenue firms, which make it difficult for other DBEs to obtain work. To alleviate this problem, she said, "I think we could set a limit [on] the number of times you could use the same firm or provide incentives when you use a firm you've not used before." [PT#13c]
- A public meeting participant stated that the Commonwealth should provide incentives to companies to "pull in" new minority and women-owned businesses on their proposals to help firms break into the market. They recommended that the Commonwealth award "bonus points" towards proposals that use firms that they have never contracted with before to allow MBE and WBE firms to build relationships. [PT#15e]
- A public meeting participant suggested that City of Erie public schools adopt programs that inform minority and low-income students of entrepreneurship opportunities. He said, "There's not really any funding for an African American kind of development, economically. The school system has got 800 teachers, 19 minorities, nine Black teachers. There were a lot of Black professionals during the reconfiguration of the school district that were laid off, which was a great disappointment since ... numbers are already low. So, young African Americans or minorities, or poor people, won't find out about entrepreneurship because there's no programs in school to teach them about Junior Achievement, or the kind of things that I had when I was going to school." [PT#14c]

The same public meeting participant continued, "Most high school students in Erie don't realize that this is a capitalistic country, and [with] capitalism, owning a business is one of the most independent things that you can do. But, how do you learn this information if it's never taught to you? So, we have generation after generation of African Americans who never knew that there were set-aside programs. Never knew that a certain percentage of the national gross budget, state budget, city budget, county budget was set aside for their reparations or for their inclusion." [PT#14c]

- A public meeting participant stated that different districts in Pennsylvania should have appropriately correlated diverse business requirements. They said, "You can't have the same stipulations that you have for Philadelphia and Pittsburgh that you have for a tiny town of 20,000 [people]." [PT#13d]
- The non-Hispanic white male representative of a small business development organization recommended that it would be helpful if the Commonwealth would provide more education to majority firms about how best to use DBEs. [#46]

The same business representative also noted that he does not understand why the Commonwealth's payment process is so poor, adding that the timeliness of those payments needs to improve. [#46]

- Regarding what can be done to enhance participation, the non-Hispanic white female owner of a LGBTBE-certified professional services firm said, “One, make it easier to find out what business is available Step two, if you want to work with smaller businesses ... make it easier to get through the financial hurdles.” [#41]

The same business owner further explained that people looking to work with small businesses need to “make the expectations ... the availability and the paperwork reasonable.” [#41]

- The Black American male owner of an SDB- and MBE- certified construction company provided recommendations from improving the Commonwealth’s program. He stated that the Commonwealth should “Create sole source procurement standards and opportunities for minority business entities.” He went on to add that the obtaining bonds is often a barrier for his firm, adding that the Commonwealth should create “standardized guidelines and oversight on corporate bonding agencies.” [#37]

The same firm owner recommended increasing the use of disadvantaged businesses on projects, as well as creating a more formal process for firm accountability within the DBE program. He explained that the Commonwealth should “Require procurement agencies to outline work which can be packaged to meet known MBE databases and sources” He also noted that creating a system that can more formally track firm reputations would be helpful. He explained that the Commonwealth could “create a Better Business Bureau for all PA procurement with sanctions for unresolved complaints ... [or create] online past performance summaries for all certified minority businesses to overcome negative perceptions.” [#37]

- The Black American male owner of an SDB- and MBE-certified professional services noted that he is also certified in the states of New York and Maryland, and often finds it easier to find work in other states compare to the Commonwealth. He explained that in the Commonwealth it is relatively easier to get a waiver to be exempt from the DBE participation requirements. For this reason, he stated, he finds other states friendlier towards DBEs. [#36]

The same firm owner relayed concern that Pennsylvania State University system does not seem to be implementing minority participation requirements, labelling it as “a lot of lost opportunity.” He added, “And I look at [The State University of New York] and I look at Virginia They’re actively going and getting involved with minority participation [But] it’s not happening here in Pennsylvania.” [#36]

- The Black American female owner of a professional services firm, made several recommendations, which included looking to the private sector for ways to increase minority participation. She stated, “There is no magic, you know, there is no unicorn, no magic bullet, no panacea. But there is the idea of really looking at best -- some of those ‘best practices’. Let’s look at practices that have worked in the private sector -- since the wall between the public and private sectors here in Harrisburg is so porous. While I know the distinctions between the sectors, I also know that incentives generally work well in the private sector. Also, in the private sector, I think that they have energy and time, typically,

for innovation. And they have an accountability structure in place that, you know, there are some things that -- and I'm not suggesting that government is like -- should be like private industry. But I am saying there are lessons in the private sector that are transferrable in a positive way, and this is a Commonwealth problem that is worthy of considering private sector solutions. Find out what works." [#54]

- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm reported that it would be helpful if the Commonwealth delineated between small businesses and microbusinesses, or "cottage businesses." She explained, "We have the capacity to do these larger projects, but when I'm competing against [a firm] who's in the millions of dollars range it's not the same." She went on to note that the state of Maryland sets aside a portion of their contracts for cottage businesses or microbusinesses and explained that in her experience the Commonwealth is much less supportive than neighboring states. [#31b]
- The non-Hispanic white female co-owner of a WBE- and SDB-certified professional services firm stated that in her experience public entities are often uninformed about pricing contracts in different industries. She explained that some public entities first put out a request for information (RFI) before collecting bids. She also noted, "The government pricing might be 20 years old because they haven't done an RFI or no one's responded to an RFI to know [the] current pricing rates for that type of work." [#31a]
- The Hispanic American male owner of a construction firm reported that increased communication and outreach in order to make disadvantaged businesses more aware of the resources available to them would be helpful. [#49a]
- When asked what the Commonwealth can do to enhance the availability and participation of small and disadvantaged businesses in their contracting, the non-Hispanic white male representative of a trade association stated, "The state could certainly get more involved [by issuing] a lot of grants and spend[ing] a lot [more] money on training and retraining" [#83]

The same trade association representative went on to say that displaced workers, such as ex-coal miners, need to be put into occupations similar to their previous work type. He added, "You know, a lot of coal miners do electrical work [and] know how to work machines, [and] do carpentry work. They may not be trained in it, but they understand it So, [the state should] provide funding, whether it's directly to the trade or to organizations like ours." [#83]

- When asked how the Commonwealth can enhance the availability and participation of small and disadvantaged businesses, the non-Hispanic white male owner of a construction firm said they should reconsider their policies on workers' compensation. He explained, "Other states are cheaper, [and] other states are monopolistic. Workman's comp is a very expensive burden on a construction company, specifically a union construction company. I'd like them to review [those policies]." [#85]

The same business owner continued, "I think the comp is done poorly [in Pennsylvania]. Ohio does a great job. [In] West Virginia the ... the comp rates are lower. [They're lower] in every other state than Pennsylvania. Pennsylvania's the most expensive state outside of California [regarding] workman's comp." [#85]

- When asked how the Commonwealth can improve minority participation in her industry, the non-Hispanic white female owner of a WBE- and LGBTBE-certified professional services firm said, "[They should] just keep doing what they're doing, which is including them" [#33]
- When asked what should be done to enhance the availability and participation of small and disadvantaged businesses in the Pennsylvania marketplace, the Hispanic American male owner of an SDB- and MBE-certified professional services firm said two firms with the same ownership should share any certification status. He said, "I guess I have a problem with why ... I have to go through [certification again] just to [certify my other] firm. [It has] the same ownership." He continued, "Everything is the same, and it's only that little bit of line on the computer that's making me [certify it separately]. It just doesn't seem right." [#77]

The same business owner continued, "[Does the Commonwealth] realize how much time and effort it takes to do all this? Number one, being a small company [is difficult as it is]. [I'm] trying to run the company and all that." He went on to say, "As a result of my recertification, I only have one firm certified because I just don't have enough time in the day [to certify the other]. The business is still viable [and] I still do the business, [it's] just not certified as a minority business If I have any grievance, it's that. They don't make it accommodating." [#77]

APPENDIX E.

Availability Analysis Approach

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Availability Analysis Approach

BBC Research & Consulting (BBC) used a *custom census* approach to analyze the availability of minority- and woman-owned businesses for horizontal construction, and construction-related engineering and professional services prime contracts and subcontracts that the Pennsylvania Department of Transportation (PennDOT) awarded during the study period. Appendix E expands on the information presented in Chapter 5 to describe:

- A. Availability data;
- B. Representative businesses;
- C. Availability survey instrument;
- D. Survey execution; and
- E. Additional considerations.

A. Availability Data

BBC contracted with Customer Research International (CRI) to conduct telephone surveys with thousands of business establishments throughout the entire state of Pennsylvania, which BBC identified as the *relevant geographic market area* for PennDOT contracting. Business establishments that CRI surveyed were businesses with locations in Pennsylvania that the study team identified as doing work in fields closely related to the types of transportation-related contracts and procurements that PennDOT awarded between July 1, 2011 and June 30, 2016 (i.e., the study period). The study team began the survey process by determining the work specializations, or *subindustries*, for each relevant PennDOT prime contract and subcontract and identifying 8-digit Dun & Bradstreet (D&B) work specialization codes that best corresponded to those subindustries. The study team then collected information about Pennsylvania business establishments that D&B listed as having their primary lines of business within those work specializations.¹

As part of the telephone survey effort, the study team attempted to contact 28,507 Pennsylvania business establishments that perform work that is relevant to PennDOT contracting. That total included 11,206 construction establishments; 12,482 professional services establishments; 4,819 goods establishments and general services establishments. Two hundred and sixty-five of these establishments had a primary line of work that turned out to be outside of the contracting areas relevant to the disparity study. Those 265 business establishments were not considered further as part of the availability analysis. The study team was able to successfully contact 9,686 of those business establishments, or 39 percent of the 25,001 establishments with valid phone listings (3,506 business establishments did not have valid phone listings). Of business

¹ Because D&B organizes its database by *business establishment* and not by “business” or “firm,” in many cases BBC purchased information about multiple locations of a single business and called all of those locations. BBC’s method for consolidating information for different establishments that were associated with the same business is described later in Appendix E.

establishments that the study team contacted successfully, 3,428 establishments completed availability surveys.

B. Representative Businesses

The objective of BBC's availability approach was not to collect information about each and every business that is operating in the relevant geographic market area. Instead, it was to collect information from a large, unbiased subset of local businesses that appropriately represents the entire relevant business population. That approach allowed BBC to estimate the availability of minority- and woman-owned businesses in an accurate, statistically-valid manner. In addition, BBC did not design the research effort so that the study team would contact every local business possibly performing horizontal construction or construction-related engineering and professional services work. Instead, BBC determined the types of work that were most relevant to PennDOT contracting by reviewing prime contract and subcontract dollars that went to different types of businesses during the study period.

Figure E-1 lists the 8-digit work specialization codes within horizontal construction; and construction-related engineering and professional services that were most related to the contract and procurement dollars that PennDOT awarded during the study period and that BBC included as part of the availability analysis.² The study team grouped those specializations into distinct *subindustries*, which are presented as headings in Figure E-1.

C. Availability Survey Instrument

BBC created an availability survey instrument to collect information from relevant business establishments located in Pennsylvania. As an example, the survey instrument that the study team used with construction establishments is presented at the end of Appendix E. The study team modified the construction survey instrument slightly for use with establishments working in other industries in order to reflect terms more commonly used in those industries (e.g., the study team substituted the words "prime contractor" and "subcontractor" with "prime consultant" and "subconsultant" when surveying professional services establishments).³

Survey structure. The availability survey included 15 sections, and CRI attempted to cover all sections with each firm that the study team successfully contacted and was willing to complete a survey.

1. Identification of purpose. The surveys began by identifying PennDOT as the survey sponsor and describing the purpose of the study (e.g., "PennDOT is conducting a survey to develop a list of companies interested in providing construction-related services to Commonwealth of Pennsylvania agencies.").

² Availability surveys for the 2017-2018 PennDOT and DGS disparity studies were conducted together. Thus, some firms in Goods and Services subindustries not directly relevant to PennDOT contracting were surveyed, and are represented in the subindustries shown in Figure E-1. PennDOT availability surveys were focused on horizontal construction and construction-related engineering and professional services subindustries and firms. DGS availability surveys included goods and support services subindustries and firms.

³ BBC also developed a fax and e-mail version of the survey instrument for firms that preferred to complete the survey in those formats.

Figure E-1.
Subindustries included in the availability analysis

Industry Code	Industry Description	Industry Code	Industry Description
Construction		Electrical equipment and supplies	
Automobiles		Electrical work	
55119903	Trucks, tractors, and trailers: new and used	36690200	Transportation signaling devices
Concrete and related products		36799908	Liquid crystal displays (LCD)
50329904	Cement	36990000	Electrical equipment and supplies, nec
52110506	Sand and gravel	Electrical work	
50329908	Stone, crushed or broken	17319903	General electrical contractor
50329905	Gravel	Fencing, guardrails and signs	
50329901	Aggregate	34449905	Guard rails, highway: sheet metal
50320504	Concrete mixtures	50399914	Metal guardrails
50320503	Concrete building products	16110102	Highway and street sign installation
50320502	Concrete and cinder block	16110100	Highway signs and guardrails
50320500	Concrete and cinder building products	73599912	Work zone traffic equipment (flags, cones, barrels)
50320102	Paving mixtures	Flagging services	
50320100	Paving materials	73899921	Flagging service (traffic control)
32729904	Prestressed concrete products	Heavy construction	
14420201	Gravel mining	16229902	Highway construction, elevated
14299913	Slate, crushed and broken-quarrying	17710301	Blacktop (asphalt) work
14420000	Construction sand and gravel	17719902	Concrete repair
50329907	Sand, construction	16290000	Heavy construction, nec
32720303	Concrete products, precast, nec	16229903	Tunnel construction
14230000	Crushed and broken granite	16119902	Highway and street maintenance
29110501	Asphalt or asphaltic materials, made in refineries	16110207	Gravel or dirt road construction
29510000	Asphalt paving mixtures and blocks	16110205	Resurfacing contractor
29510200	Paving mixtures	16110000	Highway and street construction
29510206	Road materials, bituminous (not from refineries)	16110200	Surfacing and paving
32720000	Concrete products, nec	17990702	Parking lot maintenance
32720300	Precast terrazzo or concrete products	16220000	Bridge, tunnel, and elevated highway construction
14420102	Construction sand mining	Heavy construction equipment	
Concrete work		17999922	Hydraulic equipment, installation and service
17710200	Curb and sidewalk contractors	73539902	Earth moving equipment, rental or leasing
Dam and marine construction		50820300	General construction machinery and equipment
16290110	Marine construction	35310812	Snow plow attachments
16290113	Waterway construction	39910102	Street sweeping brooms, hand or machine
16290100	Dams, waterways, docks, and other marine construction		

Figure E-1. (Cont.)
Subindustries included in the availability analysis

Industry Code	Industry Description	Industry Code	Industry Description
Construction (cont.)			
Industrial equipment and machinery		Roofing	
35820000	Commercial laundry equipment	17610100	Roofing and gutter work
76990500	Industrial equipment services	17610103	Roofing contractor
Landscape services		Structural metals	
07820208	Spraying services, lawn	33550200	Aluminum rod and bar
07829903	Landscape contractors	34490101	Bars, concrete reinforcing: fabricated steel
07829902	Highway lawn and garden maintenance services	50510200	Iron and steel (ferrous) products
07820206	Seeding services, lawn	50519906	Plates, metal
07820100	Garden services	Structural steel and building construction	
07820205	Mulching services, lawn	15429901	Custom builders, non-residential
Masonry, drywall and stonework		15429902	Design and erection, combined: non-residential
17419907	Stone masonry	15410000	Industrial buildings and warehouses
Other construction materials		17910000	Structural steel erection
32819903	Stone, quarrying and processing of own stone produ	Trucking, hauling and storage	
50729901	Builders' hardware, nec	42120000	Local trucking, without storage
Other construction services		42139902	Building materials transport
17990207	Glazing of concrete surfaces	44910200	Docks, piers and terminals
17990500	Exterior cleaning, including sandblasting	Water, sewer, and utility lines	
17999935	Petroleum storage tank installation, underground	16230000	Water, sewer, and utility lines
Painting		16230204	Transmitting tower (telecommunication) construction
17210300	Industrial painting	16230300	Water and sewer line construction
17210302	Bridge painting	16239904	Pipeline construction, nsk
17210200	Commercial painting	16239906	Underground utilities contractor
Plumbing and HVAC		17999906	Core drilling and cutting
17110101	Boiler maintenance contractor	Wrecking and demolition work	
49619903	Steam heating systems (suppliers of heat)	17950000	Wrecking and demolition work
73829902	Fire alarm maintenance and monitoring	17959902	Demolition, buildings and other structures
Railroad construction			
16290200	Railroad and subway construction		
16290202	Railroad and railway roadbed construction		

Figure E-1. (Cont.)
Subindustries included in the availability analysis

Industry Code	Industry Description	Industry Code	Industry Description
Goods and Support Services			
Automobiles		Industrial chemicals	
75150000	Passenger car leasing	51691106	Salts, industrial
55110000	New and used car dealers		
Business services and consulting		Office equipment	
87489909	Safety training service	57129904	Office furniture
		50210106	Office furniture, nec
		50440000	Office equipment
Communications equipment		Office Supplies	
36639914	Global positioning systems (GPS) equipment	51110000	Printing and writing paper
50650200	Communication equipment	51119902	Printing paper
59990601	Audio-visual equipment and supplies	51120000	Stationery and office supplies
		51130000	Industrial and personal service paper
Farm and garden equipment and supplies		59630101	Bottled water delivery
35230502	Grounds mowing equipment		
50830200	Lawn and garden machinery and equipment	Other goods	
Food products, wholesale and retail		50460300	Commercial cooking and food service equipment
51419901	Food brokers	51490200	Pet foods
54110100	Supermarkets	51999923	Variety store merchandise
54119904	Grocery stores, chain		
54119905	Grocery stores, independent	Other services	
54510000	Dairy products stores	07529901	Grooming services, pet and animal specialties
Petroleum and petroleum products		Security guard services	
59840000	Liquefied petroleum gas dealers	73810105	Security guard service
42120202	Petroleum haulage, local		
42139908	Liquid petroleum transport, non-local	Security services	
59830000	Fuel oil dealers	73820000	Security systems services
Printing, copying, and mailing		Transit services	
27590000	Commercial printing	41199906	Vanpool operation
73319904	Mailing service		
Safety equipment		Uniforms and apparel	
50499903	Law enforcement equipment and supplies	23319903	T-shirts and tops, women's: made from purchased ma
50870500	Firefighting equipment	56990103	Work clothing
50910400	Hunting equipment and supplies	56990100	Uniforms and work clothing
59990103	Safety supplies and equipment	56990102	Uniforms

Figure E-1. (Cont.)
Subindustries included in the availability analysis

Industry Code	Industry Description	Industry Code	Industry Description
Professional Services			
Advertising, marketing and public relations		Environmental services and transportation planning	
39939903	Displays and cutouts, window and lobby	87110100	Sanitary engineers
39991300	Advertising display products	89990702	Geophysical consultant
73360103	Graphic arts and related design	89990701	Geological consultant
87420300	Marketing consulting services	89990700	Earth science services
87439903	Public relations and publicity	87489904	Energy conservation consultant
Architectural and design services		87480204	Traffic consultant
87120000	Architectural services	87480201	City planning
Business services and consulting		87449904	Environmental remediation
87429904	General management consultant	87480200	Urban planning and consulting services
87489902	Educational consultant	Finance and accounting	
87429905	Management information systems consultant	87420401	Banking and finance consultant
73380000	Secretarial and court reporting	87210100	Auditing services
87420505	Planning consultant	Human resources and job training services	
73899953	Translation services	87489903	Employee programs administration
87429902	Business management consultant	87420200	Human resource consulting services
87420000	Management consulting services	73610100	Placement agencies
Construction management		73630103	Temporary help service
87420402	Construction project management consultant	IT and data services	
Engineering		73710300	Computer software development and applications
87110404	Structural engineering	73730000	Computer integrated systems design
87120101	Architectural engineering	73730100	Systems software development services
87120100	Architectural engineering	73730200	Systems integration services
87119907	Fire protection engineering	73730201	Local area network (LAN) systems integrator
87110402	Civil engineering	73749902	Data processing service
87110400	Construction and civil engineering	Legal services	
87119908	Marine engineering	81110200	Specialized law offices, attorneys

**Figure E-1. (Cont.)
Subindustries included in the availability analysis**

Industry Code	Industry Description	Industry Code	Industry Description
Professional Services (cont.)			
Medical consulting		Scientific and market research	
89991003	Psychological consultant	87310302	Environmental research
87420404	Hospital and health services consultant	87320100	Market analysis, business, and economic research
		89990900	Scientific consulting
Medical providers		Surveying and mapmaking	
80829902	Visiting nurse service	87130000	Surveying services
28999952	Drug testing kits, blood and urine		
80110400	Psychiatrists and psychoanalysts	Testing services	
Real estate management		73890208	Petroleum refinery inspection service
65310200	Real estate managers	47850200	Transportation inspection services
		73890200	Inspection and testing services

2. Verification of correct business name. The surveyor verified that he or she had reached the correct business. If the business name was not correct, surveyors asked if the respondent knew how to contact the correct business. CRI then followed up with the correct business based on the new contact information (see areas “X” and “Y” of the availability survey instrument at the end of Appendix E).

3. Verification of work related to relevant projects. The surveyor asked construction businesses whether the organization does work or provides materials related to construction, maintenance, or design (Question A1). Surveyors continued the survey with businesses that responded “yes” to that question.

4. Verification of for-profit business status. The surveyor asked whether the organization was a for-profit business as opposed to a government or nonprofit organization (Question A2). Surveyors continued the survey with businesses that responded “yes” to that question.

5. Confirmation of main lines of business. Businesses confirmed their main lines of business according to D&B (Question A3a). If D&B’s work specialization codes were incorrect, businesses described their main lines of business (Questions A3b). Businesses were also asked to identify the other types of work that they perform beyond their main lines of business (Question A3c). BBC coded information on main lines of business and additional types of work into appropriate 8-digit D&B work specialization codes.

6. Locations and affiliations. The surveyor asked business owners or managers if their businesses had other locations (Question A4). The study team also asked business owners or managers if their businesses were subsidiaries or affiliates of other businesses (Questions A5 and A6).

7. Past bids or work with government agencies and private sector organizations. The surveyor asked about bids and work on past government and private sector contracts. CRI asked those questions in connection with prime contracts and subcontracts (Questions B1 and B2).⁴

8. Interest in future work. The surveyor asked about businesses’ interest in future work with local government agencies. CRI asked those questions in connection with both prime contracts and subcontracts (Questions B3 through B8).⁵

9. Geographic area. The surveyor asked whether businesses perform work or serve customers in various geographic areas throughout Pennsylvania (Questions C1 through C1k).

10. Year established. The surveyor asked businesses to identify the approximate year in which they were established (Question D1).

11. Largest contracts. The study team asked businesses to identify the value of the largest contracts on which they had bid or had been awarded during the past five years. (Question D2).

⁴ Neither goods suppliers nor general services providers were asked questions about subcontract work.

⁵ Neither goods suppliers nor general services providers were asked questions about subcontract work.

12. Ownership. The surveyor asked whether businesses were at least 51 percent owned and controlled by minorities, women, veterans, individuals with disabilities, or lesbian, gay, bisexual or transgender (LGBT) individuals (Questions E1 through E6).⁶ If businesses indicated that they were minority-owned, they were also asked about the race/ethnicity of the business's ownership (Question E3). The study team confirmed that information through several other data sources, including:

- PennDOT's directory of certified Disadvantaged Business Enterprises (DBEs);
- PennDOT vendor data;
- PennDOT review; and
- Information from D&B and other sources.

13. Business revenue. The surveyor asked several questions about businesses' size in terms of their revenues. For businesses with multiple locations, the business revenue section of the survey also asked about their revenues and number of employees across all locations (Questions F1 through F3).

14. Potential barriers in the marketplace. The surveyor asked an open-ended question concerning general insights about conditions in the local marketplace (Question G1). In addition, the survey included a question asking whether respondents would be willing to participate in a follow-up interview about conditions in the local marketplace (Question G2).

15. Contact information. The survey concluded with questions about the participant's name and position with the organization (Questions H1 and H2).

D. Survey Execution

CRI conducted all surveys in 2017 and 2018. To minimize non-response, CRI made up to five attempts during different times of the day and on different days of the week to successfully reach each business establishment. CRI attempted to survey an available company representative such as the owner, manager, or other officer who could provide accurate and detailed responses to survey questions.

Establishments that the study team successfully contacted. Figure E-2 presents the disposition of the 28,507 business establishments that the study team attempted to contact for availability surveys and how that number resulted in the 9,686 establishments that the study team was able to successfully contact.

Non-working or wrong phone numbers. Some of the business listings that the study team purchased from D&B and that CRI attempted to contact were:

⁶ Questions about disabilities or LGBT status were not relevant to PennDOT's disparity study.

- Duplicate phone numbers (163 listings);
- Non-working phone numbers (2,794 listings); or
- Wrong numbers for the desired businesses (549 listings).

Some non-working phone numbers and wrong numbers resulted from businesses going out of business or changing their names and phone numbers between the time that D&B listed them and the time that the study team attempted to contact them.

Figure E-2.
Disposition of attempts to survey business establishments

Note:
Availability analysis results are based on a representative, unbiased, and statistically-valid subset of the relevant business population.

Source:
2017-18 availability surveys.

	Number of listings
Beginning list	28,507
Less duplicate phone numbers	163
Less non-working phone numbers	2,794
Less wrong number/business	549
Unique business listings with working phone numbers	25,001
Less no answer	13,109
Less could not reach responsible staff member	2,147
Less language barrier	59
Establishments successfully contacted	9,686

Working phone numbers. As shown in Figure E-2, there were 25,001 business establishments with working phone numbers that CRI attempted to contact. CRI was unsuccessful in contacting many of those businesses for various reasons:

- CRI could not reach anyone after five attempts at different times of the day and on different days of the week for 13,109 establishments.
- CRI could not reach a responsible staff member after five attempts at different times of the day on different days of the week for 2,147 establishments.
- CRI could not conduct the availability survey due to language barriers for 59 establishments.

After taking those unsuccessful attempts into account, CRI was able to successfully contact 9,686 business establishments.

Establishments included in the availability database. Figure E-3 presents the disposition of the 9,686 business establishments that CRI successfully contacted and how that number resulted in the 1,872 businesses that the study team included in the availability database and that the study team considered potentially available for PennDOT work.

Establishments not interested in discussing availability for PennDOT work. Of the 9,686 business establishments that the study team successfully contacted, 5,761 establishments were not interested in discussing their availability for PennDOT work. The study team sent hardcopy fax or e-mail availability surveys upon request but did not receive completed surveys from 497 establishments. In total, 3,428 successfully-contacted business establishments completed availability surveys.

**Figure E-3.
Disposition of
successfully
contacted business
establishments**

Note:

Availability analysis results are based on a representative, unbiased, and statistically-valid subset of the relevant business population.

Source:

2017-18 availability surveys.

	Number of establishments
Establishments successfully contacted	9,686
Less establishments not interested in discussing availability	5,761
Less unreturned fax/email surveys	497
Establishments that completed surveys	3,428
Less no relevant work	158
Less not a for-profit business	141
Less line of work outside scope	265
Less no interest in future work	811
Less established after study period	55
Less multiple establishments	126
Establishments potentially available for entity work	1,872

Establishments available for PennDOT work. The study team only deemed a portion of the business establishments that completed availability surveys as available for the prime contracts and subcontracts that PennDOT awarded during the study period. The study team excluded many of the business establishments that completed surveys from the availability database for various reasons:

- BBC excluded 158 establishments that indicated that their businesses were not involved in relevant contracting work.
- BBC excluded 141 establishments that indicated that their organizations were not for-profit businesses.
- BBC excluded 265 establishments that indicated that their businesses were involved in relevant work but reported that their main lines of business were outside of the study scope.
- BBC excluded 811 establishments that reported not having bid on or been awarded contracts within the past five years.
- BBC excluded 55 business establishment that reported being established in 2017 or later. That business establishment would not have been available for contract elements that PennDOT awarded during the study period.
- BBC excluded 126 duplicate survey responses, which represented different locations of the same 94 businesses. Prior to analyzing results, BBC combined responses from multiple locations of the same business into a single data record.

After those exclusions, BBC compiled a database of 1,872 businesses that were considered potentially available for PennDOT work.

Coding responses from multi-location businesses. Responses from different locations of the same business were combined into a single summary data record according to several rules:

- If any of the establishments reported bidding or working on a contract within a particular subindustry, the study team considered the business to have bid or worked on a contract in that subindustry.
- The study team combined the different roles of work that establishments of the same business reported (i.e., prime contractor or subcontractor) into a single response corresponding to the appropriate subindustry. For example, if one establishment reported that it works as a prime contractor and another establishment reported that it works as a subcontractor, then the study team considered the business as available for both prime contracts and subcontracts within the relevant subindustry.⁷
- Except when there were large discrepancies among individual responses regarding establishment dates, BBC used the earliest founding date that establishments of the same business provided. In cases of large discrepancies, BBC followed up with the business establishments to obtain accurate establishment date information.
- BBC considered the largest contract that any establishments of the same business reported having bid or worked on as the business' relative capacity (i.e., the largest contract for which the business could be considered available).
- BBC considered the largest revenue total that any establishments of the same business reported as the business' revenue cap (for purposes of determining status as a potential DBE).
- BBC determined the number of employees for businesses by calculating the mode or mean of responses from its establishments.
- BBC coded businesses as minority-owned or woman-owned if the majority of its establishments reported such status.

E. Additional Considerations

BBC made several additional considerations related to its approach to measuring availability to ensure that estimates of the availability of disadvantaged businesses for PennDOT work were as accurate as possible.

Not providing a count of all businesses available for PennDot work. The purpose of the availability analysis was to provide precise and representative estimates of the percentage of PennDOT contracting dollars for which disadvantaged businesses are ready, willing, and able to perform. The availability analysis did not provide a comprehensive listing of every business that could be available for PennDOT work and should not be used in that way. Federal courts have approved BBC's approach to measuring availability. In addition, federal regulations around minority- and woman-owned business programs recommend similar approaches to measuring availability for agencies implementing business assistance programs.

Not basing the availability analysis on certification directories, prequalification lists, or bidders lists. Federal guidance around measuring the availability of minority- and woman-owned businesses recommends dividing the number of minority- and woman-owned

⁷ Neither goods suppliers nor support services providers were asked questions about subcontract work.

businesses in an agency's certification directory by the total number of businesses in the marketplace (for example, as reported in United States Census data). As another option, organizations could use a list of prequalified businesses or a bidders list to estimate the availability of minority- and woman-owned businesses for its prime contracts and subcontracts. The primary reason why BBC rejected such approaches when measuring the availability of disadvantaged businesses for PennDOT work is that dividing a simple headcount of certified businesses by the total number of businesses does not account for business characteristics that are crucial to estimating availability accurately. The methodology that BBC used in this study takes a custom census approach to measuring availability and adds several layers of refinement to a simple headcount approach. For example, the availability surveys that the study team conducted provided data on qualifications, relative capacity, and interest in PennDOT work for each business, which allowed BBC to take a more detailed approach to measuring availability. Court cases involving implementations of minority- and woman-owned business programs have approved the use of such approaches to measuring availability.

Selection of specific subindustries. Defining subindustries based on specific work specialization codes (e.g., D&B industry codes) is a standard step in analyzing businesses in an economic sector. Government and private sector economic data are typically organized according to such codes. As with any such research, there are limitations when choosing specific D&B work specialization codes to define sets of establishments to be surveyed. For example, it was not possible for BBC to include all businesses possibly doing work in relevant industries without conducting surveys with nearly every business located in the relevant geographic market area. In addition, some industry codes are imprecise and overlap with other business specialties. Some businesses span several types of work, even at a very detailed level of specificity. That overlap can make classifying businesses into single main lines of business difficult and imprecise. When the study team asked business owners and managers to identify their main lines of business, they often gave broad answers. For those and other reasons, BBC collapsed work specialization codes into broader subindustries to more accurately classify businesses in the availability database.

Non-response. An analysis of non-response considers whether businesses that were not successfully surveyed are systematically different from those that were successfully surveyed and included in the final data set. There are opportunities for non-response bias in any survey effort. The study team considered the potential for non-response due to:

- Research sponsorship;
- Work specializations; and
- Language barriers.

Research sponsorship. Surveyors introduced themselves by identifying PennDOT as the survey sponsor, because businesses may be less likely to answer somewhat sensitive business questions if the surveyor was unable to identify the sponsor. In past survey efforts—particularly those related to availability analyses—BBC has found that identifying the sponsor substantially increases response rates.

Work specializations. Businesses in highly mobile fields, such as trucking, may be more difficult to reach for availability surveys than businesses more likely to work out of fixed offices (e.g., engineering businesses). That assertion suggests that response rates may differ by work specialization. Simply counting all surveyed businesses across work specializations to estimate the availability of disadvantaged businesses would lead to estimates that were biased in favor of businesses that could be easily contacted by telephone. However, work specialization as a potential source of non-response bias in the BBC availability analysis is minimized, because the availability analysis examines businesses within particular work fields before calculating overall availability estimates. Thus, the potential for businesses in highly mobile fields to be less likely to complete a survey is less important, because the study team calculated availability estimates within those fields before combining them in a dollar-weighted manner with availability estimates from other fields. Work specialization would be a greater source of non-response bias if particular subsets of businesses within a particular field were less likely than other subsets to be easily contacted by telephone.

Language barriers. PennDOT contracting documents are in English and are not in other languages. For that reason, the study team made the decision to only include businesses able to complete the availability survey in English in the availability analysis. Businesses unable to complete the survey due to language barriers represented less than one percent of contacted businesses.

Response reliability. Business owners and managers were asked questions that may be difficult to answer including questions about their revenues. For that reason, the study team collected corresponding D&B information for their establishments and asked respondents to confirm that information or provide more accurate estimates. Further, respondents were not typically asked to give absolute figures for difficult questions such as revenue and capacity. Rather, they were given ranges of dollar figures. BBC explored the reliability of survey responses in a number of ways.

Certification lists. BBC reviewed data from the availability surveys in light of information from other sources such as vendor information that the study team collected from PennDOT. For example, certification databases include data on the race/ethnicity and gender of business owners. The study team compared survey responses concerning business ownership with that information.

Contract data. BBC examined PennDOT contract data to further explore the largest contracts and subcontracts awarded to businesses that participated in the availability surveys for the purposes of assessing capacity. BBC compared survey responses about the largest contracts that businesses won during the past five years with actual PennDOT contract data.

PennDOT review. PennDOT reviewed contract and vendor data that the study team collected and compiled as part of the availability analysis and provided feedback regarding its accuracy.

Availability Survey Instrument [Construction]

Hello. My name is [interviewer name] from Customer Research International. We are calling on behalf of the Pennsylvania Department of Transportation (PennDOT) and the Pennsylvania Department of General Services (DGS). This is not a sales call. PennDOT and DGS are conducting a survey to develop a list of companies interested in providing construction-related services to Commonwealth of Pennsylvania agencies. The survey should take between 5 and 15 minutes to complete. Who can I speak with to get the information that we need from your firm?

[AFTER REACHING AN APPROPRIATELY SENIOR STAFF MEMBER, THE INTERVIEWER SHOULD RE-INTRODUCE THE PURPOSE OF THE SURVEY AND BEGIN WITH QUESTIONS]

[IF ASKED, THE INFORMATION DEVELOPED IN THESE INTERVIEWS WILL ADD TO EXISTING DATA ON COMPANIES INTERESTED IN WORKING WITH THE AGENCY]

X1. I have a few basic questions about your company and the type of work you do. Can you confirm that this is [firm name]?

1=RIGHT COMPANY – **SKIP TO A1**

2=NOT RIGHT COMPANY

99=REFUSE TO GIVE INFORMATION – **TERMINATE**

Y1. What is the name of this firm?

1=VERBATIM

Y2. Can you give me any information about [new firm name]?

1=Yes, same owner doing business under a different name – **SKIP TO Y4**

2=Yes, can give information about named company

3=Company bought/sold/changed ownership – **SKIP TO Y4**

98=No, does not have information – **TERMINATE**

99=Refused to give information – **TERMINATE**

Y3. Can you give me the complete address or city for [new firm name]?

[NOTE TO INTERVIEWER - RECORD IN THE FOLLOWING FORMAT]:

. STREET ADDRESS

. CITY

. STATE

. ZIP

1=VERBATIM

Y4. Can you give me the name of the owner or manager of [new firm name]?

[ENTER UPDATED NAME]

1=VERBATIM

Y5. Can I have a telephone number for him/her?

[ENTER UPDATED PHONE]

1=VERBATIM

Y6. Do you work for this new company?

1=YES

2=NO – TERMINATE

A1. First, I want to confirm that your firm does work or provides materials related to construction, maintenance, or design. Is that correct?

[NOTE TO INTERVIEWER – INCLUDES ANY WORK RELATED TO CONSTRUCTION, MAINTENANCE OR DESIGN SUCH AS BUILDING FACILITIES, PAVING AND CONCRETE, TUNNELS, BRIDGES AND ROADS AND OTHER CONSTRUCTION-RELATED PROJECTS. IT ALSO INCLUDES TRUCKING AND HAULING]

[NOTE TO INTERVIEWER – INCLUDES HAVING DONE WORK, TRYING TO SELL THIS WORK, OR PROVIDING MATERIALS]

1=Yes

2=No – TERMINATE

A2. Let me confirm that [firm name/new firm name] is a for-profit business, as opposed to a non-profit organization, a foundation, or a government office. Is that correct?

1=Yes, a business

2=No, other – **TERMINATE**

A3a. Let me also confirm what kind of business this is. The information we have from Dun & Bradstreet indicates that your main line of business is [SIC Code description]. Is that correct?

[NOTE TO INTERVIEWER – IF ASKED, DUN & BRADSTREET OR D&B, IS A COMPANY THAT COMPILES INFORMATION ON BUSINESSES THROUGHOUT THE COUNTRY]

1=Yes – **SKIP TO A3c**

2=No

98=(DON'T KNOW)

99=(REFUSED)

A3b. What would you say is the main line of business at [firm name/new firm name]?

[NOTE TO INTERVIEWER – IF RESPONDENT INDICATES THAT FIRM'S MAIN LINE OF BUSINESS IS "GENERAL CONSTRUCTION" OR GENERAL CONTRACTOR," PROBE TO FIND OUT IF MAIN LINE OF BUSINESS IS CLOSER TO BUILDING CONSTRUCTION OR HIGHWAY AND ROAD CONSTRUCTION.]

1=VERBATIM

A3c. What other types of work, if any, does your business perform?

(ENTER VERBATIM RESPONSE)

1=VERBATIM

A4. Is this the sole location for your business, or do you have offices in other locations?

1=Sole location

2=Have other locations

98=(DON'T KNOW)

99=(REFUSED)

A5. Is your company a subsidiary or affiliate of another firm?

1=Independent – **SKIP TO B1**

2=Subsidiary or affiliate of another firm

98=(DON'T KNOW) – **SKIP TO B1**

99=(REFUSED) – **SKIP TO B1**

A6. What is the name of your parent company?

1=VERBATIM

98=(DON'T KNOW)

99=(REFUSED)

B1. Next, I have a few questions about your company's role in doing work or providing materials related to construction, maintenance, or design. During the past five years, has your company submitted a bid or received an award for any part of a contract for a government agency in Pennsylvania or for a private sector organization?

1=Yes

2=No – **SKIP TO B3**

98=(DON'T KNOW) – **SKIP TO B3**

99=(REFUSED) – **SKIP TO B3**

B2. Were those bids or awards to work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier?

[MULTIPUNCH]

1=Prime contractor

2=Subcontractor

3=Trucker/hauler

4=Supplier (or manufacturer)

98=(DON'T KNOW)

99=(REFUSED)

B3. Please think about future construction, maintenance, or design-related work as you answer the following few questions. Is your company *interested* in working with the Pennsylvania Department of Transportation as a prime contractor?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

B4. Is your company *interested* in working with the Pennsylvania Department of Transportation as a subcontractor, trucker/hauler, or supplier?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

B5. Please think about future construction, maintenance, or design-related work as you answer the following few questions. Is your company *interested* in working with the Commonwealth of Pennsylvania as a prime contractor?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

B6. Is your company *interested* in working with the Commonwealth of Pennsylvania as a subcontractor, trucker/hauler, or supplier?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

B7. Please think about future construction, maintenance, or design-related work as you answer the following few questions. Is your company *interested* in working with local and state governments in the Commonwealth of Pennsylvania as a prime contractor?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

B8. Is your company *interested* in working with local and state governments in the Commonwealth of Pennsylvania as a subcontractor, trucker/hauler, or supplier?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1. Now I want to ask you about the geographic areas that your company could serve within Pennsylvania. As you answer, think about whether your company could be involved in potential construction-related projects throughout the entire state or only within specific regions. Is your company able to serve all regions of Pennsylvania or only certain regions of the commonwealth?

1=All of the commonwealth– **SKIP TO D1**

2=Only parts of the commonwealth

98=(DON'T KNOW)

99=(REFUSED)

C1a. Is your company able to do work or serve customers in any part of Erie, Crawford, Mercer, Venango, Warren, and Forest counties, which comprise PennDOT District 1?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA INCLUDES THE NORTHEAST CORNER OF THE STATE INCLUDING THE CITY OF ERIE.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1b. Is your company able to do work or serve customers in any part of McKean, Potter, Elk, Cameron, Clinton, Clearfield, Centre, Mifflin, and Juniata counties, which comprises PENNDOT District 2?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA EXTENDS ALONG THE BORDER WITH NEW YORK SOUTH TO THE EAST CENTRAL PORTION OF THE COMMONWEALTH AND INCLUDES THE CITIES OF SMETHPORT, COUDERSPORT, EMPORIUM, RIDGWAY, CLEARFIELD, LOCK HAVEN, STATE COLLEGE, BELLEFONTE, LEWISTON, AND MIFFLINTOWN.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1c. Is your company able to do work or serve customers in any part of Tioga, Bradford, Lycoming, Sullivan, Montour, Columbia, Northumberland, Snyder, and Union counties, which comprises PENNDOT District 3?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA EXTENDS SOUTH FROM THE NEW YORK BORDER TO THE WEST CENTRAL PORTION OF THE COMMONWEALTH AND INCLUDES THE CITIES OF TOWANDA, WELLSBORO, LAPORTE, DANVILLE, LEWISBURG, SUNBURY, MIDDLEBURG, AND BLOOMSBURG.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1d. Is your company able to do work or serve customers in any part of Susquehanna, Wayne, Wyoming, Luzerne, Lackawanna, and Pike counties, which comprises PENNDOT District 4?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA INCLUDES THE CITIES OF WILKES-BARRE AND SCRANTON AND STRETCHES EAST TO THE BORDER OF NEW YORK AND NEW JERSEY.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1e. Is your company able to do work or serve customers in any part of Monroe, Carbon, Schuylkill, Berks, Lehigh, and North Hampton counties, which comprises PennDOT District 5?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA INCLUDES THE CITIES OF ALLENTOWN AND READING, AND STRECHES EAST THROUGH THE TO THE BORDER OF NEW JERSEY.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1f. Is your company able to do work or serve customers in any part of Bucks, Montgomery, Philadelphia, Delaware, and Chester counties, which comprises PennDOT District 6?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA INCLUDES THE PHILADELPHIA METROPOLITAN AREA AND STRECHES EAST TO THE BORDER OF NEW JERSEY AND SOUTH TO THE BORDERS OF DELAWARE AND MARYLAND.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1g. Is your company able to do work or serve customers in any part of Dauphin, Perry, Cumberland, Lebanon, Lancaster, York, Adams, and Franklin counties, which comprises PennDOT District 8?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA INCLUDES THE CITY OF HARRISBURG AND STRECHES SOUTHEAST THROUGH YORK TO THE BORDER OF MARYLAND.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1h. Is your company able to do work or serve customers in any part of Cambria, Blair, Huntingdon, Somerset, Bedford, and Fulton counties, which comprises PennDOT District 9?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA INCLUDES THE CITY OF HOLLIDAYSBURG AND STRECHES SOUTH THROUGH BEDFORD TO THE BORDER OF MARYLAND.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1i. Is your company able to do work or serve customers in any part of Butler, Clarion, Jefferson, Armstrong, and Indiana counties, which comprises PennDOT District 10?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA INCLUDES THE CITIES OF CLARION, BROOKVILLE, BUTLER, KITTANNING, AND INDIANA.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1j. Is your company able to do work or serve customers in any part of Lawrence, Beaver, and Allegheny counties, which comprises PennDOT District 11?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA INCLUDES THE PITTSBURGH METROPOLITAN AREA AND NORTHEAST THROUGH BEAVER AND NEW CASTLE TO THE BORDER OF OHIO.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1k. Is your company able to do work or serve customers in any part of Washington, Westmoreland, Greene, and Fayette counties, which comprises PennDOT District 12?

[NOTE TO INTERVIEWER: IF RESPONDENT ASKS, THIS AREA INCLUDES THE CITY OF GREENSBURG AND STRECHES SOUTH TO THE BORDER OF WEST VIRGINIA AND EAST TO THE BORDER OF OHIO.]

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

D1. About what year was your firm established?

1=NUMERIC (1600-2015)

9998 = (DON'T KNOW)

9999 = (REFUSED)

D2. What was the largest contract or subcontract that your company bid on or was awarded during the past five years in either the private or public sector? This includes contracts not yet complete.

[NOTE TO INTERVIEWER - READ CATEGORIES IF NECESSARY]

1=\$100,000 or less

2=More than \$100,000 to \$250,000

3=More than \$250,000 to \$500,000

4=More than \$500,000 to \$1 million

5=More than \$1 million to \$2 million

6=More than \$2 million to \$5 million

7=More than \$5 million to \$10 million

8=More than \$10 million to \$20 million

9=More than \$20 million to \$50 million

10=More than \$50 million to \$100 million

11= More than \$100 million to \$200 million

12=\$200 million or greater

97=(NONE)

98=(DON'T KNOW)

99=(REFUSED)

E1. My next questions are about the ownership of the business. A business is defined as woman-owned if more than half—that is, 51 percent or more—of the ownership and control is by women. By this definition, is [*firm name / new firm name*] a woman-owned business?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

E2. A business is defined as minority-owned if more than half—that is, 51 percent or more—of the ownership and control is by Black American, Asian American, Hispanic American, or Native American. By this definition, is [*firm name || new firm name*] a minority-owned business?

1=Yes

2=No – **SKIP TO E4**

98=(DON'T KNOW) – **SKIP TO E4**

99=(REFUSED) – **SKIP TO E4**

E3. Would you say that the minority group ownership of your company is mostly Black American, Asian-Pacific American, Subcontinent Asian American, Hispanic American, or Native American?

1=Black American

2=Asian Pacific American (persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong)

3=Hispanic American (persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race)

4=Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians)

5=Subcontinent Asian American (persons whose Origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka)

6=(OTHER - SPECIFY) _____

98=(DON'T KNOW)

99=(REFUSED)

E4. A business is defined as veteran-owned if more than half—that is, 51 percent or more—of the ownership and control is by veterans. By this definition, is [firm name || new firm name] a veteran-owned business?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

E5. A business is defined as disability-owned if more than half—that is, 51 percent or more—of the ownership and control is by a person with physical and or mental impairment that substantially limits one or more major life activities. By this definition, is [firm name || new firm name] a disability-owned business?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

E6. A business is defined as LGBT-owned if more than half—that is, 51 percent or more—of the ownership and control of the business are people that identify as Lesbian, Gay, Bisexual, or Transgender. By this definition, is [firm name || new firm name] a LGBT-owned business?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

F1. Dun & Bradstreet lists the average annual gross revenue of your company, just considering your location, to be [dollar amount]. Is that an accurate estimate for your company's average annual gross revenue over the last three years?

1=Yes – **SKIP TO F3**

2=No

98=(DON'T KNOW) – **SKIP TO F3**

99=(REFUSED) – **SKIP TO F3**

F2. Roughly, what was the average annual gross revenue of your company, just considering your location, over the last three years? Would you say . . .

[READ LIST]

- | | |
|---------------------------------|-----------------------------------|
| 1=Less than \$750,000 | 6=\$15.1 Million - \$18 Million |
| 2=\$750,000 - \$5.5 Million | 7=\$18.1 Million - \$20.5 Million |
| 3=\$5.6 Million - \$7.4 Million | 8=\$20.5 Million - \$24 Million |
| 4=\$7.6 Million - \$11 Million | 9=\$24.1 Million or more |
| 5=\$11.1 Million - \$15 Million | 98= (DON'T KNOW) |
| | 99= (REFUSED) |

F3. [ONLY IF A4 = 2] Roughly, what was the average annual gross revenue of your company, for all of your locations over the last three years? Would you say . . .

[READ LIST]

- | | |
|---------------------------------|-----------------------------------|
| 1=Less than \$750,000 | 6=\$15.1 Million - \$18 Million |
| 2=\$750,000 - \$5.5 Million | 7=\$18.1 Million - \$20.5 Million |
| 3=\$5.6 Million - \$7.4 Million | 8=\$20.5 Million - \$24 Million |
| 4=\$7.6 Million - \$11 Million | 9=\$24.1 Million or more |
| 5=\$11.1 Million - \$15 Million | 98= (DON'T KNOW) |
| | 99= (REFUSED) |

G1. We're interested in whether your company has experienced barriers or difficulties in Pennsylvania associated with starting or expanding a business in your industry or with obtaining work. Do you have any thoughts to share on these topics?

- 1=VERBATIM (PROBE FOR COMPLETE THOUGHTS)
97=(NOTHING/NONE/NO COMMENTS)
98=(DON'T KNOW)
99=(REFUSED)

G2. Would you be willing to participate in a follow-up interview about any of those issues?

- 1=Yes
2=No
98=(DON'T KNOW)
99=(REFUSED)

H1. Just a few last questions. What is your name?

1=VERBATIM

H2. What is your position at [*firm name / new firm name*]?

1=Receptionist

2=Owner

3=Manager

4=CFO

5=CEO

6=Assistant to Owner/CEO

7=Sales manager

8=Office manager

9=President

9=(OTHER - SPECIFY) _____

99=(REFUSED)

Thank you very much for your participation. If you have any questions or concerns, please contact DeShawn Lewis at the Pennsylvania Department of General Services, The Bureau of Diversity, Inclusion and Small Business Opportunity at telephone:717-705-5865.

APPENDIX F.

Disparity Tables

Figure F-1

Table	Time period	Type	Role	Characteristics						Potential DBEs
				Prime contract	Agency	Region	Funding source	Program		
F-2	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal and state	DBE, DB, and None	No	
F-3	07/01/2011 - 12/30/2013	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal and state	DBE, DB, and None	No	
F-4	01/01/2014 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal and state	DBE, DB, and None	No	
F-5	07/01/2011 - 06/30/2016	Construction	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal and state	DBE, DB, and None	No	
F-6	07/01/2011 - 06/30/2016	Professional services	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal and state	DBE, DB, and None	No	
F-7	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts	N/A	PennDOT and Local	All	Federal and state	DBE, DB, and None	No	
F-8	07/01/2011 - 06/30/2016	All relevant industries	Subcontracts	N/A	PennDOT and Local	All	Federal and state	DBE, DB, and None	No	
F-9	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	1	Federal and state	DBE, DB, and None	No	
F-10	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	2	Federal and state	DBE, DB, and None	No	
F-11	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	3	Federal and state	DBE, DB, and None	No	
F-12	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	4	Federal and state	DBE, DB, and None	No	
F-13	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	5	Federal and state	DBE, DB, and None	No	
F-14	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	6	Federal and state	DBE, DB, and None	No	
F-15	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	8	Federal and state	DBE, DB, and None	No	
F-16	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	9	Federal and state	DBE, DB, and None	No	
F-17	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	10	Federal and state	DBE, DB, and None	No	
F-18	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	11	Federal and state	DBE, DB, and None	No	
F-19	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	12	Federal and state	DBE, DB, and None	No	
F-20	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts	Large	PennDOT and Local	All	Federal and state	DBE, DB, and None	No	
F-21	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts	Small	PennDOT and Local	All	Federal and state	DBE, DB, and None	No	
F-22	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal	DBE	No	
F-23	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	State	DB and None	No	
F-24	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal and state	DBE and DB	No	
F-25	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal and state	DBE, DB, and None	No	
F-26	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT	All	Federal and state	DBE, DB, and None	No	
F-27	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	Local	All	Federal and state	DBE, DB, and None	No	
F-28	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	State	DB	No	
F-29	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal	DBE	No	
F-30	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	State	None	No	
F-31	07/01/2011 - 06/30/2016	All relevant industries	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal	DBE	Yes	
F-32	07/01/2011 - 06/30/2016	Construction	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal	DBE	Yes	
F-33	07/01/2011 - 06/30/2016	Professional services	Prime contracts and subcontracts	N/A	PennDOT and Local	All	Federal	DBE	Yes	

Figure F-2.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	38,961	\$12,544,517	\$12,544,517				
(2) Minority and woman-owned businesses	12,840	\$1,438,081	\$1,438,081	11.5	10.4	1.1	110.7
(3) Non-Hispanic white woman-owned	9,978	\$1,071,806	\$1,071,806	8.5	8.2	0.4	104.6
(4) Minority-owned	2,862	\$366,275	\$366,275	2.9	2.2	0.7	133.6
(5) Asian Pacific American-owned	571	\$77,220	\$78,417	0.6	0.3	0.3	181.8
(6) Black American-owned	679	\$83,343	\$84,635	0.7	0.8	-0.1	87.6
(7) Hispanic American-owned	646	\$114,454	\$116,228	0.9	0.7	0.2	129.2
(8) Native American-owned	302	\$30,012	\$30,478	0.2	0.1	0.1	200+
(9) Subcontinent Asian American-owned	518	\$55,654	\$56,517	0.5	0.2	0.2	187.9
(10) Unknown minority-owned	146	\$5,593					
(11) DBE-certified	10,015	\$890,234	\$890,234	7.1			
(12) Non-Hispanic white woman-owned	7,642	\$569,372	\$573,610	4.6			
(13) Minority-owned DBE	2,301	\$314,286	\$316,625	2.5			
(14) Asian Pacific American-owned DBE	427	\$55,958	\$56,375	0.4			
(15) Black American-owned DBE	539	\$74,369	\$74,922	0.6			
(16) Hispanic American-owned DBE	596	\$111,263	\$112,091	0.9			
(17) Native American-owned DBE	299	\$29,847	\$30,069	0.2			
(18) Subcontinent Asian American-owned DBE	440	\$42,849	\$43,168	0.3			

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-3.

Time period: 07/01/2011 - 12/30/2013

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	18,614	\$5,725,133	\$5,725,133				
(2) Minority and woman-owned businesses	6,236	\$656,270	\$656,270	11.5	10.6	0.8	107.8
(3) Non-Hispanic white woman-owned	4,754	\$483,591	\$483,591	8.4	8.2	0.3	103.2
(4) Minority-owned	1,482	\$172,679	\$172,679	3.0	2.4	0.6	123.1
(5) Asian Pacific American-owned	347	\$37,109	\$37,655	0.7	0.4	0.3	178.8
(6) Black American-owned	321	\$38,987	\$39,561	0.7	0.9	-0.2	78.4
(7) Hispanic American-owned	315	\$48,678	\$49,394	0.9	0.8	0.1	112.2
(8) Native American-owned	142	\$13,482	\$13,681	0.2	0.1	0.1	169.8
(9) Subcontinent Asian American-owned	279	\$31,919	\$32,388	0.6	0.3	0.3	195.1
(10) Unknown minority-owned	78	\$2,505					
(11) DBE-certified	4,762	\$435,349	\$435,349	7.6			
(12) Non-Hispanic white woman-owned	3,595	\$293,495	\$295,431	5.2			
(13) Minority-owned DBE	1,136	\$139,001	\$139,918	2.4			
(14) Asian Pacific American-owned DBE	252	\$22,037	\$22,182	0.4			
(15) Black American-owned DBE	244	\$33,826	\$34,049	0.6			
(16) Hispanic American-owned DBE	276	\$45,992	\$46,295	0.8			
(17) Native American-owned DBE	140	\$13,362	\$13,450	0.2			
(18) Subcontinent Asian American-owned DBE	224	\$23,785	\$23,942	0.4			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-4.

Time period: 01/01/2014 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	20,347	\$6,819,384	\$6,819,384				
(2) Minority and woman-owned businesses	6,604	\$781,811	\$781,811	11.5	10.1	1.3	113.3
(3) Non-Hispanic white woman-owned	5,224	\$588,215	\$588,215	8.6	8.2	0.5	105.7
(4) Minority-owned	1,380	\$193,596	\$193,596	2.8	2.0	0.9	144.6
(5) Asian Pacific American-owned	224	\$40,111	\$40,761	0.6	0.3	0.3	184.6
(6) Black American-owned	358	\$44,356	\$45,075	0.7	0.7	0.0	97.8
(7) Hispanic American-owned	331	\$65,776	\$66,842	1.0	0.7	0.3	145.5
(8) Native American-owned	160	\$16,530	\$16,798	0.2	0.1	0.2	200+
(9) Subcontinent Asian American-owned	239	\$23,735	\$24,120	0.4	0.2	0.2	178.9
(10) Unknown minority-owned	68	\$3,087					
(11) DBE-certified	5,253	\$454,885	\$454,885	6.7			
(12) Non-Hispanic white woman-owned	4,047	\$275,877	\$278,154	4.1			
(13) Minority-owned DBE	1,165	\$175,284	\$176,731	2.6			
(14) Asian Pacific American-owned DBE	175	\$33,921	\$34,201	0.5			
(15) Black American-owned DBE	295	\$40,543	\$40,878	0.6			
(16) Hispanic American-owned DBE	320	\$65,271	\$65,810	1.0			
(17) Native American-owned DBE	159	\$16,485	\$16,621	0.2			
(18) Subcontinent Asian American-owned DBE	216	\$19,064	\$19,221	0.3			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-5.

Time period: 07/01/2011 - 06/30/2016

Contract type: Construction

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	32,149	\$10,341,898	\$10,341,898				
(2) Minority and woman-owned businesses	9,668	\$1,104,100	\$1,104,100	10.7	9.3	1.3	114.4
(3) Non-Hispanic white woman-owned	7,807	\$841,994	\$841,994	8.1	8.1	0.1	100.8
(4) Minority-owned	1,861	\$262,107	\$262,107	2.5	1.3	1.3	200+
(5) Asian Pacific American-owned	448	\$60,010	\$61,313	0.6	0.1	0.5	200+
(6) Black American-owned	632	\$77,915	\$79,607	0.8	0.5	0.3	150.7
(7) Hispanic American-owned	301	\$86,004	\$87,871	0.8	0.7	0.2	128.7
(8) Native American-owned	296	\$27,248	\$27,839	0.3	0.0	0.3	200+
(9) Subcontinent Asian American-owned	39	\$5,361	\$5,478	0.1	0.0	0.1	200+
(10) Unknown minority-owned	145	\$5,570					
(11) DBE-certified	7,242	\$625,964	\$625,964	6.1			
(12) Non-Hispanic white woman-owned	5,712	\$385,817	\$389,750	3.8			
(13) Minority-owned DBE	1,465	\$233,830	\$236,214	2.3			
(14) Asian Pacific American-owned DBE	413	\$54,361	\$54,915	0.5			
(15) Black American-owned DBE	495	\$69,072	\$69,776	0.7			
(16) Hispanic American-owned DBE	257	\$82,995	\$83,841	0.8			
(17) Native American-owned DBE	293	\$27,083	\$27,359	0.3			
(18) Subcontinent Asian American-owned DBE	7	\$320	\$323	0.0			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-6.

Time period: 07/01/2011 - 06/30/2016

Contract type: Professional services

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	6,812	\$2,202,619	\$2,202,619				
(2) Minority and woman-owned businesses	3,172	\$333,981	\$333,981	15.2	15.1	0.0	100.2
(3) Non-Hispanic white woman-owned	2,171	\$229,812	\$229,812	10.4	8.6	1.8	121.4
(4) Minority-owned	1,001	\$104,169	\$104,169	4.7	6.5	-1.8	72.2
(5) Asian Pacific American-owned	123	\$17,210	\$17,214	0.8	1.6	-0.8	48.8
(6) Black American-owned	47	\$5,428	\$5,429	0.2	2.0	-1.7	12.4
(7) Hispanic American-owned	345	\$28,450	\$28,456	1.3	1.0	0.3	131.1
(8) Native American-owned	6	\$2,765	\$2,765	0.1	0.6	-0.5	20.4
(9) Subcontinent Asian American-owned	479	\$50,293	\$50,304	2.3	1.4	0.9	168.1
(10) Unknown minority-owned	1	\$23					
(11) DBE-certified	2,773	\$264,271	\$264,271	12.0			
(12) Non-Hispanic white woman-owned	1,930	\$183,555	\$183,736	8.3			
(13) Minority-owned DBE	836	\$80,455	\$80,535	3.7			
(14) Asian Pacific American-owned DBE	14	\$1,597	\$1,599	0.1			
(15) Black American-owned DBE	44	\$5,297	\$5,302	0.2			
(16) Hispanic American-owned DBE	339	\$28,268	\$28,295	1.3			
(17) Native American-owned DBE	6	\$2,765	\$2,767	0.1			
(18) Subcontinent Asian American-owned DBE	433	\$42,529	\$42,571	1.9			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-7.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	5,023	\$8,991,279	\$8,991,279				
(2) Minority and woman-owned businesses	306	\$404,138	\$404,138	4.5	6.0	-1.5	74.7
(3) Non-Hispanic white woman-owned	255	\$372,637	\$372,637	4.1	4.8	-0.7	85.9
(4) Minority-owned	51	\$31,501	\$31,501	0.4	1.2	-0.8	29.4
(5) Asian Pacific American-owned	9	\$4,523	\$4,644	0.1	0.3	-0.3	14.9
(6) Black American-owned	15	\$9,162	\$9,408	0.1	0.1	0.0	74.3
(7) Hispanic American-owned	8	\$9,903	\$10,169	0.1	0.4	-0.3	29.0
(8) Native American-owned	4	\$2,302	\$2,364	0.0	0.1	-0.1	23.9
(9) Subcontinent Asian American-owned	13	\$4,788	\$4,917	0.1	0.2	-0.1	26.9
(10) Unknown minority-owned	2	\$822					
(11) DBE-certified	87	\$58,254	\$58,254	0.6			
(12) Non-Hispanic white woman-owned	50	\$32,972	\$32,972	0.4			
(13) Minority-owned DBE	37	\$25,283	\$25,283	0.3			
(14) Asian Pacific American-owned DBE	3	\$1,821	\$1,821	0.0			
(15) Black American-owned DBE	14	\$9,038	\$9,038	0.1			
(16) Hispanic American-owned DBE	8	\$9,903	\$9,903	0.1			
(17) Native American-owned DBE	4	\$2,302	\$2,302	0.0			
(18) Subcontinent Asian American-owned DBE	8	\$2,219	\$2,219	0.0			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-8.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	33,938	\$3,553,238	\$3,553,238				
(2) Minority and woman-owned businesses	12,534	\$1,033,943	\$1,033,943	29.1	21.3	7.8	136.4
(3) Non-Hispanic white woman-owned	9,723	\$699,169	\$699,169	19.7	16.6	3.0	118.3
(4) Minority-owned	2,811	\$334,774	\$334,774	9.4	4.7	4.7	200+
(5) Asian Pacific American-owned	562	\$72,697	\$73,748	2.1	0.3	1.7	200+
(6) Black American-owned	664	\$74,181	\$75,253	2.1	2.4	-0.2	89.7
(7) Hispanic American-owned	638	\$104,551	\$106,062	3.0	1.5	1.4	193.0
(8) Native American-owned	298	\$27,710	\$28,110	0.8	0.1	0.7	200+
(9) Subcontinent Asian American-owned	505	\$50,866	\$51,601	1.5	0.3	1.1	200+
(10) Unknown minority-owned	144	\$4,770					
(11) DBE-certified	9,928	\$831,980	\$831,980	23.4			
(12) Non-Hispanic white woman-owned	7,592	\$536,400	\$540,674	15.2			
(13) Minority-owned DBE	2,264	\$289,003	\$291,306	8.2			
(14) Asian Pacific American-owned DBE	424	\$54,137	\$54,569	1.5			
(15) Black American-owned DBE	525	\$65,331	\$65,852	1.9			
(16) Hispanic American-owned DBE	588	\$101,360	\$102,167	2.9			
(17) Native American-owned DBE	295	\$27,545	\$27,764	0.8			
(18) Subcontinent Asian American-owned DBE	432	\$40,630	\$40,954	1.2			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-9.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 1

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	2,604	\$524,823	\$524,823				
(2) Minority and woman-owned businesses	851	\$74,770	\$74,770	14.2	7.3	7.0	195.8
(3) Non-Hispanic white woman-owned	640	\$52,140	\$52,140	9.9	5.0	5.0	200.0
(4) Minority-owned	211	\$22,631	\$22,631	4.3	2.3	2.0	186.8
(5) Asian Pacific American-owned	49	\$4,030	\$4,135	0.8	0.2	0.6	200+
(6) Black American-owned	59	\$15,693	\$16,102	3.1	0.9	2.2	200+
(7) Hispanic American-owned	22	\$1,691	\$1,735	0.3	1.0	-0.7	32.4
(8) Native American-owned	1	\$14	\$15	0.0	0.1	-0.1	3.3
(9) Subcontinent Asian American-owned	14	\$628	\$644	0.1	0.1	0.0	113.4
(10) Unknown minority-owned	66	\$575					
(11) DBE-certified	622	\$38,126	\$38,126	7.3			
(12) Non-Hispanic white woman-owned	461	\$16,080	\$16,206	3.1			
(13) Minority-owned DBE	139	\$21,749	\$21,920	4.2			
(14) Asian Pacific American-owned DBE	44	\$3,754	\$3,784	0.7			
(15) Black American-owned DBE	58	\$15,662	\$15,785	3.0			
(16) Hispanic American-owned DBE	22	\$1,691	\$1,704	0.3			
(17) Native American-owned DBE	1	\$14	\$15	0.0			
(18) Subcontinent Asian American-owned DBE	14	\$628	\$633	0.1			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-10.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 2

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	2,811	\$653,847	\$653,847				
(2) Minority and woman-owned businesses	841	\$46,410	\$46,410	7.1	7.6	-0.5	93.3
(3) Non-Hispanic white woman-owned	696	\$34,931	\$34,931	5.3	5.7	-0.3	93.9
(4) Minority-owned	145	\$11,478	\$11,478	1.8	1.9	-0.2	91.7
(5) Asian Pacific American-owned	40	\$3,011	\$3,034	0.5	0.2	0.3	200+
(6) Black American-owned	21	\$1,643	\$1,655	0.3	0.6	-0.4	39.4
(7) Hispanic American-owned	27	\$1,891	\$1,905	0.3	0.8	-0.5	37.9
(8) Native American-owned	15	\$987	\$995	0.2	0.1	0.0	143.3
(9) Subcontinent Asian American-owned	35	\$3,860	\$3,889	0.6	0.2	0.4	200+
(10) Unknown minority-owned	7	\$86					
(11) DBE-certified	712	\$33,415	\$33,415	5.1			
(12) Non-Hispanic white woman-owned	576	\$23,868	\$24,193	3.7			
(13) Minority-owned DBE	124	\$9,098	\$9,222	1.4			
(14) Asian Pacific American-owned DBE	29	\$1,909	\$1,935	0.3			
(15) Black American-owned DBE	20	\$1,466	\$1,486	0.2			
(16) Hispanic American-owned DBE	27	\$1,891	\$1,917	0.3			
(17) Native American-owned DBE	15	\$987	\$1,001	0.2			
(18) Subcontinent Asian American-owned DBE	33	\$2,845	\$2,884	0.4			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-11.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 3

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	3,437	\$699,120	\$699,120				
(2) Minority and woman-owned businesses	923	\$49,053	\$49,053	7.0	5.1	1.9	137.0
(3) Non-Hispanic white woman-owned	769	\$35,033	\$35,033	5.0	4.1	0.9	121.7
(4) Minority-owned	154	\$14,020	\$14,020	2.0	1.0	1.0	199.7
(5) Asian Pacific American-owned	87	\$10,182	\$10,182	1.5	0.2	1.3	200+
(6) Black American-owned	26	\$2,517	\$2,517	0.4	0.4	-0.1	82.4
(7) Hispanic American-owned	33	\$1,041	\$1,041	0.1	0.2	0.0	80.1
(8) Native American-owned	2	\$166	\$166	0.0	0.1	-0.1	29.5
(9) Subcontinent Asian American-owned	6	\$115	\$115	0.0	0.1	-0.1	13.3
(10) Unknown minority-owned	0	\$0					
(11) DBE-certified	795	\$28,945	\$28,945	4.1			
(12) Non-Hispanic white woman-owned	664	\$17,834	\$17,920	2.6			
(13) Minority-owned DBE	126	\$10,972	\$11,025	1.6			
(14) Asian Pacific American-owned DBE	72	\$7,263	\$7,298	1.0			
(15) Black American-owned DBE	14	\$2,409	\$2,420	0.3			
(16) Hispanic American-owned DBE	33	\$1,041	\$1,046	0.1			
(17) Native American-owned DBE	2	\$166	\$166	0.0			
(18) Subcontinent Asian American-owned DBE	5	\$94	\$94	0.0			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-12.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 4

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	3,104	\$1,165,089	\$1,165,089				
(2) Minority and woman-owned businesses	1,001	\$322,199	\$322,199	27.7	6.6	21.1	200+
(3) Non-Hispanic white woman-owned	788	\$301,539	\$301,539	25.9	4.9	21.0	200+
(4) Minority-owned	213	\$20,660	\$20,660	1.8	1.7	0.1	107.1
(5) Asian Pacific American-owned	53	\$7,373	\$7,373	0.6	0.3	0.4	200+
(6) Black American-owned	57	\$1,299	\$1,299	0.1	0.6	-0.5	19.4
(7) Hispanic American-owned	52	\$6,717	\$6,717	0.6	0.6	0.0	98.7
(8) Native American-owned	6	\$1,495	\$1,495	0.1	0.1	0.0	140.3
(9) Subcontinent Asian American-owned	45	\$3,775	\$3,775	0.3	0.2	0.2	200+
(10) Unknown minority-owned	0	\$0					
(11) DBE-certified	666	\$52,793	\$52,793	4.5			
(12) Non-Hispanic white woman-owned	509	\$36,425	\$36,937	3.2			
(13) Minority-owned DBE	153	\$15,636	\$15,856	1.4			
(14) Asian Pacific American-owned DBE	39	\$4,446	\$4,508	0.4			
(15) Black American-owned DBE	27	\$682	\$692	0.1			
(16) Hispanic American-owned DBE	51	\$6,710	\$6,805	0.6			
(17) Native American-owned DBE	4	\$1,405	\$1,425	0.1			
(18) Subcontinent Asian American-owned DBE	32	\$2,392	\$2,426	0.2			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-13.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 5

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	3,537	\$1,325,544	\$1,325,544				
(2) Minority and woman-owned businesses	1,313	\$119,583	\$119,583	9.0	8.5	0.5	106.4
(3) Non-Hispanic white woman-owned	978	\$78,769	\$78,769	5.9	5.7	0.2	104.0
(4) Minority-owned	335	\$40,814	\$40,814	3.1	2.8	0.3	111.2
(5) Asian Pacific American-owned	58	\$6,976	\$7,418	0.6	0.5	0.1	122.2
(6) Black American-owned	82	\$3,965	\$4,216	0.3	0.7	-0.4	44.3
(7) Hispanic American-owned	63	\$6,989	\$7,432	0.6	1.0	-0.5	54.1
(8) Native American-owned	15	\$6,678	\$7,101	0.5	0.1	0.4	200+
(9) Subcontinent Asian American-owned	92	\$13,773	\$14,646	1.1	0.4	0.7	200+
(10) Unknown minority-owned	25	\$2,432					
(11) DBE-certified	958	\$88,172	\$88,172	6.7			
(12) Non-Hispanic white woman-owned	735	\$55,165	\$55,263	4.2			
(13) Minority-owned DBE	220	\$32,851	\$32,910	2.5			
(14) Asian Pacific American-owned DBE	37	\$5,036	\$5,045	0.4			
(15) Black American-owned DBE	36	\$3,044	\$3,050	0.2			
(16) Hispanic American-owned DBE	51	\$6,554	\$6,566	0.5			
(17) Native American-owned DBE	15	\$6,678	\$6,690	0.5			
(18) Subcontinent Asian American-owned DBE	81	\$11,539	\$11,559	0.9			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-14.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 6

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	3,552	\$2,589,528	\$2,589,528				
(2) Minority and woman-owned businesses	1,282	\$321,246	\$321,246	12.4	8.9	3.5	140.0
(3) Non-Hispanic white woman-owned	942	\$223,501	\$223,501	8.6	6.9	1.7	125.2
(4) Minority-owned	340	\$97,745	\$97,745	3.8	2.0	1.8	192.2
(5) Asian Pacific American-owned	71	\$18,745	\$18,745	0.7	0.4	0.3	191.6
(6) Black American-owned	90	\$23,993	\$23,993	0.9	1.0	0.0	96.8
(7) Hispanic American-owned	67	\$37,718	\$37,718	1.5	0.4	1.1	200+
(8) Native American-owned	4	\$1,300	\$1,300	0.1	0.1	0.0	74.0
(9) Subcontinent Asian American-owned	108	\$15,990	\$15,990	0.6	0.2	0.4	200+
(10) Unknown minority-owned	0	\$0					
(11) DBE-certified	1,029	\$224,352	\$224,352	8.7			
(12) Non-Hispanic white woman-owned	752	\$141,165	\$142,425	5.5			
(13) Minority-owned DBE	270	\$81,201	\$81,926	3.2			
(14) Asian Pacific American-owned DBE	40	\$10,589	\$10,684	0.4			
(15) Black American-owned DBE	73	\$20,350	\$20,531	0.8			
(16) Hispanic American-owned DBE	66	\$37,706	\$38,042	1.5			
(17) Native American-owned DBE	4	\$1,300	\$1,312	0.1			
(18) Subcontinent Asian American-owned DBE	87	\$11,256	\$11,357	0.4			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-15.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 8

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	5,770	\$1,124,517	\$1,124,517				
(2) Minority and woman-owned businesses	2,038	\$92,156	\$92,156	8.2	8.2	0.0	99.6
(3) Non-Hispanic white woman-owned	1,630	\$59,671	\$59,671	5.3	5.2	0.1	101.1
(4) Minority-owned	408	\$32,486	\$32,486	2.9	3.0	-0.1	96.9
(5) Asian Pacific American-owned	59	\$10,890	\$11,496	1.0	0.3	0.7	200+
(6) Black American-owned	124	\$5,189	\$5,478	0.5	0.8	-0.3	63.4
(7) Hispanic American-owned	63	\$4,461	\$4,710	0.4	1.5	-1.0	28.6
(8) Native American-owned	121	\$8,399	\$8,867	0.8	0.2	0.6	200+
(9) Subcontinent Asian American-owned	37	\$1,833	\$1,935	0.2	0.3	-0.1	62.3
(10) Unknown minority-owned	4	\$1,713					
(11) DBE-certified	1,624	\$75,872	\$75,872	6.7			
(12) Non-Hispanic white woman-owned	1,249	\$45,399	\$46,347	4.1			
(13) Minority-owned DBE	370	\$28,922	\$29,525	2.6			
(14) Asian Pacific American-owned DBE	45	\$9,815	\$10,020	0.9			
(15) Black American-owned DBE	123	\$5,125	\$5,232	0.5			
(16) Hispanic American-owned DBE	58	\$4,420	\$4,512	0.4			
(17) Native American-owned DBE	120	\$8,323	\$8,497	0.8			
(18) Subcontinent Asian American-owned DBE	24	\$1,238	\$1,264	0.1			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-16.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 9

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	3,610	\$792,323	\$792,323				
(2) Minority and woman-owned businesses	1,096	\$77,108	\$77,108	9.7	12.6	-2.9	77.1
(3) Non-Hispanic white woman-owned	839	\$55,432	\$55,432	7.0	10.9	-3.9	64.0
(4) Minority-owned	257	\$21,676	\$21,676	2.7	1.7	1.0	162.1
(5) Asian Pacific American-owned	35	\$2,038	\$2,041	0.3	0.2	0.0	104.2
(6) Black American-owned	26	\$2,112	\$2,115	0.3	0.5	-0.3	50.0
(7) Hispanic American-owned	52	\$8,377	\$8,390	1.1	0.7	0.4	151.7
(8) Native American-owned	117	\$7,089	\$7,100	0.9	0.1	0.8	200+
(9) Subcontinent Asian American-owned	25	\$2,026	\$2,029	0.3	0.1	0.1	200+
(10) Unknown minority-owned	2	\$34					
(11) DBE-certified	944	\$71,779	\$71,779	9.1			
(12) Non-Hispanic white woman-owned	688	\$50,536	\$50,666	6.4			
(13) Minority-owned DBE	252	\$21,059	\$21,113	2.7			
(14) Asian Pacific American-owned DBE	33	\$1,920	\$1,925	0.2			
(15) Black American-owned DBE	26	\$2,112	\$2,117	0.3			
(16) Hispanic American-owned DBE	52	\$8,377	\$8,399	1.1			
(17) Native American-owned DBE	117	\$7,089	\$7,107	0.9			
(18) Subcontinent Asian American-owned DBE	24	\$1,561	\$1,565	0.2			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-17.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 10

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	2,947	\$671,906	\$671,906				
(2) Minority and woman-owned businesses	986	\$58,541	\$58,541	8.7	13.4	-4.7	64.8
(3) Non-Hispanic white woman-owned	762	\$37,556	\$37,556	5.6	11.4	-5.8	49.0
(4) Minority-owned	224	\$20,985	\$20,985	3.1	2.0	1.1	152.5
(5) Asian Pacific American-owned	41	\$3,700	\$3,769	0.6	0.2	0.3	200+
(6) Black American-owned	48	\$9,389	\$9,562	1.4	0.8	0.7	189.5
(7) Hispanic American-owned	58	\$4,555	\$4,640	0.7	0.6	0.0	106.7
(8) Native American-owned	10	\$1,248	\$1,271	0.2	0.2	0.0	118.1
(9) Subcontinent Asian American-owned	29	\$1,711	\$1,743	0.3	0.2	0.0	105.8
(10) Unknown minority-owned	38	\$381					
(11) DBE-certified	817	\$53,431	\$53,431	8.0			
(12) Non-Hispanic white woman-owned	636	\$33,126	\$33,133	4.9			
(13) Minority-owned DBE	179	\$20,294	\$20,298	3.0			
(14) Asian Pacific American-owned DBE	36	\$3,426	\$3,427	0.5			
(15) Black American-owned DBE	48	\$9,389	\$9,390	1.4			
(16) Hispanic American-owned DBE	58	\$4,555	\$4,556	0.7			
(17) Native American-owned DBE	10	\$1,248	\$1,249	0.2			
(18) Subcontinent Asian American-owned DBE	27	\$1,675	\$1,676	0.2			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-18.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 11

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	4,076	\$1,684,596	\$1,684,596				
(2) Minority and woman-owned businesses	1,320	\$146,938	\$146,938	8.7	17.9	-9.1	48.8
(3) Non-Hispanic white woman-owned	1,055	\$99,598	\$99,598	5.9	15.8	-9.8	37.5
(4) Minority-owned	265	\$47,340	\$47,340	2.8	2.1	0.7	133.5
(5) Asian Pacific American-owned	34	\$5,309	\$5,310	0.3	0.3	0.0	111.2
(6) Black American-owned	71	\$11,818	\$11,821	0.7	0.9	-0.2	78.4
(7) Hispanic American-owned	100	\$24,707	\$24,714	1.5	0.7	0.8	200+
(8) Native American-owned	4	\$558	\$558	0.0	0.1	-0.1	37.4
(9) Subcontinent Asian American-owned	54	\$4,935	\$4,937	0.3	0.2	0.1	187.0
(10) Unknown minority-owned	2	\$12					
(11) DBE-certified	952	\$114,560	\$114,560	6.8			
(12) Non-Hispanic white woman-owned	714	\$69,868	\$69,925	4.2			
(13) Minority-owned DBE	235	\$44,597	\$44,634	2.6			
(14) Asian Pacific American-owned DBE	29	\$5,020	\$5,024	0.3			
(15) Black American-owned DBE	57	\$10,501	\$10,510	0.6			
(16) Hispanic American-owned DBE	94	\$24,456	\$24,476	1.5			
(17) Native American-owned DBE	4	\$558	\$559	0.0			
(18) Subcontinent Asian American-owned DBE	51	\$4,061	\$4,065	0.2			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-19.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: 12

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	2,882	\$1,019,396	\$1,019,396				
(2) Minority and woman-owned businesses	962	\$87,149	\$87,149	8.5	11.8	-3.2	72.7
(3) Non-Hispanic white woman-owned	744	\$65,132	\$65,132	6.4	9.8	-3.4	65.4
(4) Minority-owned	218	\$22,017	\$22,017	2.2	2.0	0.2	108.1
(5) Asian Pacific American-owned	21	\$1,114	\$1,132	0.1	0.3	-0.2	32.4
(6) Black American-owned	63	\$4,296	\$4,367	0.4	0.7	-0.2	64.3
(7) Hispanic American-owned	88	\$12,265	\$12,467	1.2	0.7	0.6	187.6
(8) Native American-owned	3	\$283	\$288	0.0	0.1	-0.1	25.7
(9) Subcontinent Asian American-owned	41	\$3,702	\$3,763	0.4	0.2	0.1	162.5
(10) Unknown minority-owned	2	\$358					
(11) DBE-certified	707	\$71,752	\$71,752	7.0			
(12) Non-Hispanic white woman-owned	534	\$54,215	\$54,963	5.4			
(13) Minority-owned DBE	168	\$16,560	\$16,789	1.6			
(14) Asian Pacific American-owned DBE	18	\$900	\$912	0.1			
(15) Black American-owned DBE	48	\$2,331	\$2,363	0.2			
(16) Hispanic American-owned DBE	63	\$9,820	\$9,956	1.0			
(17) Native American-owned DBE	3	\$283	\$287	0.0			
(18) Subcontinent Asian American-owned DBE	36	\$3,227	\$3,271	0.3			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-20.

Time period: 07/01/2011 - 06/30/2016

Large prime contracts

Contract type: All relevant industries

Contract role: Prime contracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	3,591	\$8,703,968	\$8,703,968				
(2) Minority and woman-owned businesses	200	\$383,403	\$383,403	4.4	5.8	-1.4	75.5
(3) Non-Hispanic white woman-owned	172	\$355,953	\$355,953	4.1	4.7	-0.6	86.7
(4) Minority-owned	28	\$27,450	\$27,450	0.3	1.1	-0.8	28.2
(5) Asian Pacific American-owned	4	\$3,642	\$3,747	0.0	0.3	-0.3	13.2
(6) Black American-owned	10	\$8,466	\$8,712	0.1	0.1	0.0	83.2
(7) Hispanic American-owned	6	\$9,218	\$9,485	0.1	0.4	-0.3	28.7
(8) Native American-owned	2	\$2,206	\$2,270	0.0	0.1	-0.1	24.7
(9) Subcontinent Asian American-owned	5	\$3,145	\$3,236	0.0	0.2	-0.2	19.9
(10) Unknown minority-owned	1	\$773					
(11) DBE-certified	46	\$51,039	\$51,039	0.6			
(12) Non-Hispanic white woman-owned	25	\$28,725	\$28,725	0.3			
(13) Minority-owned DBE	21	\$22,314	\$22,314	0.3			
(14) Asian Pacific American-owned DBE	1	\$1,227	\$1,227	0.0			
(15) Black American-owned DBE	10	\$8,466	\$8,466	0.1			
(16) Hispanic American-owned DBE	6	\$9,218	\$9,218	0.1			
(17) Native American-owned DBE	2	\$2,206	\$2,206	0.0			
(18) Subcontinent Asian American-owned DBE	2	\$1,197	\$1,197	0.0			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4), then 25 percent of column b, row 4) would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-21.

Time period: 07/01/2011 - 06/30/2016

Small prime contracts

Contract type: All relevant industries

Contract role: Prime contracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	1,432	\$287,311	\$287,311				
(2) Minority and woman-owned businesses	106	\$20,735	\$20,735	7.2	11.5	-4.3	62.7
(3) Non-Hispanic white woman-owned	83	\$16,684	\$16,684	5.8	8.2	-2.4	71.1
(4) Minority-owned	23	\$4,051	\$4,051	1.4	3.3	-1.9	42.1
(5) Asian Pacific American-owned	5	\$881	\$892	0.3	1.0	-0.7	31.4
(6) Black American-owned	5	\$696	\$705	0.2	0.8	-0.5	32.1
(7) Hispanic American-owned	2	\$685	\$693	0.2	0.7	-0.4	36.1
(8) Native American-owned	2	\$96	\$97	0.0	0.2	-0.2	13.8
(9) Subcontinent Asian American-owned	8	\$1,643	\$1,663	0.6	0.7	-0.1	85.3
(10) Unknown minority-owned	1	\$49					
(11) DBE-certified	41	\$7,215	\$7,215	2.5			
(12) Non-Hispanic white woman-owned	25	\$4,247	\$4,247	1.5			
(13) Minority-owned DBE	16	\$2,968	\$2,968	1.0			
(14) Asian Pacific American-owned DBE	2	\$593	\$593	0.2			
(15) Black American-owned DBE	4	\$571	\$571	0.2			
(16) Hispanic American-owned DBE	2	\$685	\$685	0.2			
(17) Native American-owned DBE	2	\$96	\$96	0.0			
(18) Subcontinent Asian American-owned DBE	6	\$1,022	\$1,022	0.4			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-22.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: DBE

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	22,535	\$8,692,029	\$8,692,029				
(2) Minority and woman-owned businesses	7,781	\$1,075,401	\$1,075,401	12.4	10.6	1.7	116.4
(3) Non-Hispanic white woman-owned	6,170	\$814,172	\$814,172	9.4	8.4	1.0	111.7
(4) Minority-owned	1,611	\$261,230	\$261,230	3.0	2.2	0.8	133.7
(5) Asian Pacific American-owned	338	\$58,307	\$59,277	0.7	0.3	0.3	200+
(6) Black American-owned	333	\$60,165	\$61,166	0.7	0.8	-0.1	85.6
(7) Hispanic American-owned	365	\$79,608	\$80,933	0.9	0.7	0.2	127.4
(8) Native American-owned	174	\$21,727	\$22,089	0.3	0.1	0.1	200+
(9) Subcontinent Asian American-owned	322	\$37,146	\$37,765	0.4	0.2	0.2	182.3
(10) Unknown minority-owned	79	\$4,277					
(11) DBE-certified	6,164	\$692,900	\$692,900	8.0			
(12) Non-Hispanic white woman-owned	4,806	\$460,077	\$464,242	5.3			
(13) Minority-owned DBE	1,310	\$226,606	\$228,658	2.6			
(14) Asian Pacific American-owned DBE	236	\$43,546	\$43,940	0.5			
(15) Black American-owned DBE	275	\$55,038	\$55,537	0.6			
(16) Hispanic American-owned DBE	348	\$78,114	\$78,821	0.9			
(17) Native American-owned DBE	172	\$21,638	\$21,834	0.3			
(18) Subcontinent Asian American-owned DBE	279	\$28,270	\$28,526	0.3			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-23.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: State

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: DB and None

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	14,937	\$3,574,437	\$3,574,437				
(2) Minority and woman-owned businesses	4,683	\$328,906	\$328,906	9.2	9.6	-0.4	95.8
(3) Non-Hispanic white woman-owned	3,499	\$229,235	\$229,235	6.4	7.7	-1.3	83.7
(4) Minority-owned	1,184	\$99,671	\$99,671	2.8	1.9	0.8	143.7
(5) Asian Pacific American-owned	218	\$18,215	\$18,307	0.5	0.3	0.2	151.9
(6) Black American-owned	333	\$22,356	\$22,469	0.6	0.6	0.0	99.3
(7) Hispanic American-owned	266	\$33,267	\$33,435	0.9	0.7	0.3	142.0
(8) Native American-owned	125	\$8,213	\$8,254	0.2	0.1	0.1	200+
(9) Subcontinent Asian American-owned	181	\$17,118	\$17,205	0.5	0.2	0.3	200+
(10) Unknown minority-owned	61	\$501					
(11) DBE-certified	3,742	\$183,184	\$183,184	0.0	0.0	0.0	0.0
(12) Non-Hispanic white woman-owned	2,618	\$87,085	\$89,453	2.5			
(13) Minority-owned DBE	1,093	\$91,249	\$93,730	2.6			
(14) Asian Pacific American-owned DBE	323	\$21,504	\$22,187	0.6			
(15) Black American-owned DBE	214	\$17,917	\$18,485	0.5			
(16) Hispanic American-owned DBE	238	\$31,709	\$32,716	0.9			
(17) Native American-owned DBE	123	\$8,078	\$8,335	0.2			
(18) Subcontinent Asian American-owned DBE	147	\$11,638	\$12,008	0.3			
(19) Unknown minority-owned DBE	48	\$403					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-24.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: DBE and DB

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	34,188	\$11,285,656	\$11,285,656				
(2) Minority and woman-owned businesses	11,695	\$1,337,350	\$1,337,350	11.8	10.5	1.3	112.4
(3) Non-Hispanic white woman-owned	9,039	\$985,280	\$985,280	8.7	8.3	0.4	105.3
(4) Minority-owned	2,656	\$352,070	\$352,070	3.1	2.2	0.9	138.8
(5) Asian Pacific American-owned	541	\$75,845	\$76,859	0.7	0.4	0.3	187.4
(6) Black American-owned	627	\$79,548	\$80,611	0.7	0.8	-0.1	90.5
(7) Hispanic American-owned	590	\$108,934	\$110,390	1.0	0.7	0.3	135.2
(8) Native American-owned	278	\$28,927	\$29,314	0.3	0.1	0.1	200+
(9) Subcontinent Asian American-owned	500	\$54,171	\$54,895	0.5	0.3	0.2	194.0
(10) Unknown minority-owned	120	\$4,645					
(11) DBE-certified	9,202	\$855,089	\$855,089	7.6			
(12) Non-Hispanic white woman-owned	6,977	\$546,326	\$550,520	4.9			
(13) Minority-owned DBE	2,155	\$302,249	\$304,569	2.7			
(14) Asian Pacific American-owned DBE	402	\$54,718	\$55,138	0.5			
(15) Black American-owned DBE	508	\$71,084	\$71,630	0.6			
(16) Hispanic American-owned DBE	545	\$105,966	\$106,779	0.9			
(17) Native American-owned DBE	275	\$28,762	\$28,983	0.3			
(18) Subcontinent Asian American-owned DBE	425	\$41,718	\$42,039	0.4			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-25.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	4,773	\$1,258,861	\$1,258,861				
(2) Minority and woman-owned businesses	1,145	\$100,731	\$100,731	8.0	8.7	-0.7	92.0
(3) Non-Hispanic white woman-owned	939	\$86,526	\$86,526	6.9	7.1	-0.2	97.2
(4) Minority-owned	206	\$14,205	\$14,205	1.1	1.6	-0.5	69.3
(5) Asian Pacific American-owned	30	\$1,375	\$1,473	0.1	0.2	-0.1	69.4
(6) Black American-owned	52	\$3,795	\$4,067	0.3	0.6	-0.3	54.0
(7) Hispanic American-owned	56	\$5,520	\$5,914	0.5	0.7	-0.2	71.3
(8) Native American-owned	24	\$1,085	\$1,162	0.1	0.1	0.0	153.6
(9) Subcontinent Asian American-owned	18	\$1,483	\$1,589	0.1	0.1	0.0	89.1
(10) Unknown minority-owned	26	\$947					
(11) DBE-certified	813	\$35,146	\$35,146	2.8			
(12) Non-Hispanic white woman-owned	665	\$23,046	\$23,087	1.8			
(13) Minority-owned DBE	146	\$12,037	\$12,058	1.0			
(14) Asian Pacific American-owned DBE	25	\$1,240	\$1,242	0.1			
(15) Black American-owned DBE	31	\$3,285	\$3,290	0.3			
(16) Hispanic American-owned DBE	51	\$5,297	\$5,307	0.4			
(17) Native American-owned DBE	24	\$1,085	\$1,087	0.1			
(18) Subcontinent Asian American-owned DBE	15	\$1,130	\$1,132	0.1			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-26.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: PennDOT

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	34,641	\$11,589,851	\$11,589,851				
(2) Minority and woman-owned businesses	11,312	\$1,301,459	\$1,301,459	11.2	10.3	0.9	109.0
(3) Non-Hispanic white woman-owned	8,777	\$982,168	\$982,168	8.5	8.1	0.3	104.2
(4) Minority-owned	2,535	\$319,290	\$319,290	2.8	2.2	0.6	127.3
(5) Asian Pacific American-owned	498	\$65,480	\$66,363	0.6	0.3	0.3	184.1
(6) Black American-owned	592	\$75,220	\$76,234	0.7	0.8	-0.1	85.7
(7) Hispanic American-owned	573	\$94,418	\$95,691	0.8	0.7	0.1	115.1
(8) Native American-owned	276	\$28,254	\$28,634	0.2	0.1	0.1	200+
(9) Subcontinent Asian American-owned	474	\$51,671	\$52,368	0.5	0.2	0.2	180.8
(10) Unknown minority-owned	122	\$4,247					
(11) DBE-certified	8,814	\$798,304	\$798,304	6.9			
(12) Non-Hispanic white woman-owned	6,703	\$517,170	\$520,776	4.5			
(13) Minority-owned DBE	2,054	\$275,606	\$277,528	2.4			
(14) Asian Pacific American-owned DBE	371	\$46,929	\$47,256	0.4			
(15) Black American-owned DBE	467	\$68,053	\$68,527	0.6			
(16) Hispanic American-owned DBE	538	\$91,981	\$92,622	0.8			
(17) Native American-owned DBE	273	\$28,088	\$28,284	0.2			
(18) Subcontinent Asian American-owned DBE	405	\$40,555	\$40,838	0.4			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-27.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal and state

Contract agency: Local

Contract region: Statewide

Program: All

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	4,320	\$954,666	\$954,666				
(2) Minority and woman-owned businesses	1,528	\$136,622	\$136,622	14.3	11.0	3.3	129.8
(3) Non-Hispanic white woman-owned	1,201	\$89,637	\$89,637	9.4	8.6	0.8	109.2
(4) Minority-owned	327	\$46,985	\$46,985	4.9	2.4	2.5	200+
(5) Asian Pacific American-owned	73	\$11,740	\$12,086	1.3	0.7	0.5	170.5
(6) Black American-owned	87	\$8,123	\$8,362	0.9	0.8	0.1	110.3
(7) Hispanic American-owned	73	\$20,035	\$20,626	2.2	0.7	1.4	200+
(8) Native American-owned	26	\$1,759	\$1,810	0.2	0.1	0.1	200+
(9) Subcontinent Asian American-owned	44	\$3,983	\$4,100	0.4	0.1	0.3	200+
(10) Unknown minority-owned	24	\$1,346					
(11) DBE-certified	1,201	\$91,930	\$91,930	9.6			
(12) Non-Hispanic white woman-owned	939	\$52,202	\$52,804	5.5			
(13) Minority-owned DBE	247	\$38,679	\$39,126	4.1			
(14) Asian Pacific American-owned DBE	56	\$9,029	\$9,133	1.0			
(15) Black American-owned DBE	72	\$6,316	\$6,389	0.7			
(16) Hispanic American-owned DBE	58	\$19,282	\$19,504	2.0			
(17) Native American-owned DBE	26	\$1,759	\$1,779	0.2			
(18) Subcontinent Asian American-owned DBE	35	\$2,294	\$2,320	0.2			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-28.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: State

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: DB

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	10,962	\$2,318,203	\$2,318,203				
(2) Minority and woman-owned businesses	3,570	\$216,897	\$216,897	9.4	9.3	0.1	100.8
(3) Non-Hispanic white woman-owned	2,677	\$149,165	\$149,165	6.4	7.6	-1.2	84.7
(4) Minority-owned	893	\$67,732	\$67,732	2.9	1.7	1.2	173.8
(5) Asian Pacific American-owned	172	\$11,432	\$11,495	0.5	0.2	0.3	200+
(6) Black American-owned	288	\$18,435	\$18,536	0.8	0.6	0.2	133.4
(7) Hispanic American-owned	192	\$24,728	\$24,864	1.1	0.6	0.4	169.1
(8) Native American-owned	103	\$7,141	\$7,180	0.3	0.1	0.2	200+
(9) Subcontinent Asian American-owned	97	\$5,626	\$5,657	0.2	0.2	0.1	161.3
(10) Unknown minority-owned	41	\$369					
(11) DBE-certified	2,937	\$130,565	\$130,565	0.0	0.0	0.0	0.0
(12) Non-Hispanic white woman-owned	2,071	\$62,669	\$64,365	2.8			
(13) Minority-owned DBE	839	\$64,456	\$66,200	2.9			
(14) Asian Pacific American-owned DBE	280	\$17,975	\$18,544	0.8			
(15) Black American-owned DBE	172	\$11,432	\$11,795	0.5			
(16) Hispanic American-owned DBE	169	\$23,344	\$24,084	1.0			
(17) Native American-owned DBE	102	\$7,066	\$7,289	0.3			
(18) Subcontinent Asian American-owned DBE	83	\$4,351	\$4,488	0.2			
(19) Unknown minority-owned DBE	33	\$289					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 10 would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-29.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: DBE

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	22,535	\$8,692,029	\$8,692,029				
(2) Minority and woman-owned businesses	7,781	\$1,075,401	\$1,075,401	12.4	10.6	1.7	116.4
(3) Non-Hispanic white woman-owned	6,170	\$814,172	\$814,172	9.4	8.4	1.0	111.7
(4) Minority-owned	1,611	\$261,230	\$261,230	3.0	2.2	0.8	133.7
(5) Asian Pacific American-owned	338	\$58,307	\$59,277	0.7	0.3	0.3	200+
(6) Black American-owned	333	\$60,165	\$61,166	0.7	0.8	-0.1	85.6
(7) Hispanic American-owned	365	\$79,608	\$80,933	0.9	0.7	0.2	127.4
(8) Native American-owned	174	\$21,727	\$22,089	0.3	0.1	0.1	200+
(9) Subcontinent Asian American-owned	322	\$37,146	\$37,765	0.4	0.2	0.2	182.3
(10) Unknown minority-owned	79	\$4,277					
(11) DBE-certified	6,164	\$692,900	\$692,900	8.0			
(12) Non-Hispanic white woman-owned	4,806	\$460,077	\$464,242	5.3			
(13) Minority-owned DBE	1,310	\$226,606	\$228,658	2.6			
(14) Asian Pacific American-owned DBE	236	\$43,546	\$43,940	0.5			
(15) Black American-owned DBE	275	\$55,038	\$55,537	0.6			
(16) Hispanic American-owned DBE	348	\$78,114	\$78,821	0.9			
(17) Native American-owned DBE	172	\$21,638	\$21,834	0.3			
(18) Subcontinent Asian American-owned DBE	279	\$28,270	\$28,526	0.3			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-30.

Time period: 07/01/2011 - 06/30/2016

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: State

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: None

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	3,284	\$980,811	\$980,811				
(2) Minority and woman-owned businesses	769	\$66,957	\$66,957	6.8	8.0	-1.1	85.6
(3) Non-Hispanic white woman-owned	630	\$58,127	\$58,127	5.9	6.8	-0.9	86.8
(4) Minority-owned	139	\$8,830	\$8,830	0.9	1.1	-0.2	79.0
(5) Asian Pacific American-owned	15	\$676	\$687	0.1	0.1	0.0	139.4
(6) Black American-owned	39	\$2,974	\$3,019	0.3	0.5	-0.2	60.3
(7) Hispanic American-owned	41	\$3,942	\$4,002	0.4	0.6	-0.1	73.8
(8) Native American-owned	21	\$1,012	\$1,028	0.1	0.0	0.1	200+
(9) Subcontinent Asian American-owned	3	\$94	\$95	0.0	0.0	0.0	55.2
(10) Unknown minority-owned	20	\$132					
(11) DBE-certified	545	\$21,935	\$21,935	2.2			
(12) Non-Hispanic white woman-owned	451	\$13,939	\$13,939	1.4			
(13) Minority-owned DBE	94	\$7,997	\$7,997	0.8			
(14) Asian Pacific American-owned DBE	13	\$626	\$626	0.1			
(15) Black American-owned DBE	21	\$2,486	\$2,486	0.3			
(16) Hispanic American-owned DBE	37	\$3,805	\$3,805	0.4			
(17) Native American-owned DBE	21	\$1,012	\$1,012	0.1			
(18) Subcontinent Asian American-owned DBE	2	\$68	\$68	0.0			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4), then 25 percent of column b, row 4) would be added to column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-31.

Time period: 07/01/2011 - 06/30/2016

Analysis of potential DBEs

Contract type: All relevant industries

Contract role: Prime contracts and subcontracts

Funding source: Federal

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: DBE

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	22,535	\$8,692,029	\$8,692,029				
(2) Minority and woman-owned businesses	7,781	\$1,075,401	\$1,075,401	12.4	9.7	2.7	127.9
(3) Non-Hispanic white woman-owned	6,170	\$814,172	\$814,172	9.4	7.6	1.8	124.1
(4) Minority-owned	1,611	\$261,230	\$261,230	3.0	2.1	0.9	141.6
(5) Asian Pacific American-owned	338	\$58,307	\$59,277	0.7	0.3	0.3	200+
(6) Black American-owned	333	\$60,165	\$61,166	0.7	0.7	0.0	97.8
(7) Hispanic American-owned	365	\$79,608	\$80,933	0.9	0.7	0.2	127.4
(8) Native American-owned	174	\$21,727	\$22,089	0.3	0.1	0.1	200+
(9) Subcontinent Asian American-owned	322	\$37,146	\$37,765	0.4	0.2	0.2	200+
(10) Unknown minority-owned	79	\$4,277					
(11) DBE-certified	6,164	\$692,900	\$692,900	8.0			
(12) Non-Hispanic white woman-owned	4,806	\$460,077	\$464,242	5.3			
(13) Minority-owned DBE	1,310	\$226,606	\$228,658	2.6			
(14) Asian Pacific American-owned DBE	236	\$43,546	\$43,940	0.5			
(15) Black American-owned DBE	275	\$55,038	\$55,537	0.6			
(16) Hispanic American-owned DBE	348	\$78,114	\$78,821	0.9			
(17) Native American-owned DBE	172	\$21,638	\$21,834	0.3			
(18) Subcontinent Asian American-owned DBE	279	\$28,270	\$28,526	0.3			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-32.

Time period: 07/01/2011 - 06/30/2016

Analysis of potential DBEs

Contract type: Construction

Contract role: Prime contracts and subcontracts

Funding source: Federal

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: DBE

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	18,024	\$7,053,251	\$7,053,251				
(2) Minority and woman-owned businesses	5,649	\$836,301	\$836,301	11.9	9.3	2.6	127.6
(3) Non-Hispanic white woman-owned	4,643	\$641,971	\$641,971	9.1	8.0	1.1	113.9
(4) Minority-owned	1,006	\$194,330	\$194,330	2.8	1.3	1.5	200+
(5) Asian Pacific American-owned	259	\$47,829	\$48,900	0.7	0.1	0.6	200+
(6) Black American-owned	303	\$57,356	\$58,639	0.8	0.5	0.3	155.1
(7) Hispanic American-owned	180	\$61,822	\$63,206	0.9	0.7	0.2	131.1
(8) Native American-owned	169	\$19,021	\$19,447	0.3	0.0	0.3	200+
(9) Subcontinent Asian American-owned	17	\$4,048	\$4,139	0.1	0.0	0.1	200+
(10) Unknown minority-owned	78	\$4,254					
(11) DBE-certified	4,308	\$507,818	\$507,818	7.2			
(12) Non-Hispanic white woman-owned	3,456	\$327,747	\$331,678	4.7			
(13) Minority-owned DBE	809	\$174,052	\$176,140	2.5			
(14) Asian Pacific American-owned DBE	226	\$42,248	\$42,754	0.6			
(15) Black American-owned DBE	248	\$52,360	\$52,988	0.8			
(16) Hispanic American-owned DBE	166	\$60,488	\$61,214	0.9			
(17) Native American-owned DBE	167	\$18,932	\$19,159	0.3			
(18) Subcontinent Asian American-owned DBE	2	\$25	\$25	0.0			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.

Figure F-33.

Time period: 07/01/2011 - 06/30/2016

Analysis of potential DBEs

Contract type: Professional services

Contract role: Prime contracts and subcontracts

Funding source: Federal

Contract agency: PennDOT and local agencies

Contract region: Statewide

Program: DBE

Business Group	(a) Number of contract elements	(b) Total dollars (thousands)	(c) Estimated total dollars (thousands)*	(d) Utilization percentage	(e) Availability percentage	(f) Utilization - Availability	(g) Disparity index
(1) All businesses	4,511	\$1,638,778	\$1,638,778				
(2) Minority and woman-owned businesses	2,132	\$239,100	\$239,100	14.6	11.3	3.3	128.9
(3) Non-Hispanic white woman-owned	1,527	\$172,201	\$172,201	10.5	5.7	4.9	186.0
(4) Minority-owned	605	\$66,899	\$66,899	4.1	5.7	-1.6	72.0
(5) Asian Pacific American-owned	79	\$10,477	\$10,481	0.6	1.5	-0.9	42.9
(6) Black American-owned	30	\$2,809	\$2,810	0.2	1.5	-1.3	11.4
(7) Hispanic American-owned	185	\$17,786	\$17,792	1.1	0.9	0.1	115.9
(8) Native American-owned	5	\$2,706	\$2,707	0.2	0.6	-0.4	27.8
(9) Subcontinent Asian American-owned	305	\$33,098	\$33,110	2.0	1.1	0.9	178.3
(10) Unknown minority-owned	1	\$23					
(11) DBE-certified	1,856	\$185,081	\$185,081	11.3			
(12) Non-Hispanic white woman-owned	1,350	\$132,330	\$132,471	8.1			
(13) Minority-owned DBE	501	\$52,554	\$52,610	3.2			
(14) Asian Pacific American-owned DBE	10	\$1,299	\$1,300	0.1			
(15) Black American-owned DBE	27	\$2,678	\$2,681	0.2			
(16) Hispanic American-owned DBE	182	\$17,626	\$17,645	1.1			
(17) Native American-owned DBE	5	\$2,706	\$2,709	0.2			
(18) Subcontinent Asian American-owned DBE	277	\$28,245	\$28,275	1.7			
(19) Unknown minority-owned DBE	0	\$0					

Note: Numbers are rounded to the nearest thousand dollars or tenth of 1 percent. "Woman-owned" refers to non-Hispanic white woman-owned businesses.

*Unknown minority-owned businesses and unknown minority-owned DBEs were allocated to minority and DBE subgroups proportional to the known total dollars of those groups. For example, if total dollars of Black American-owned businesses (column b, row 6) accounted for 25 percent of total minority-owned business dollars (column b, row 4), then 25 percent of column b, row 4, then 25 percent of column b, row 6 and the sum would be shown in column c, row 6. In addition, column c was adjusted for the sampling weights for the contract elements that local agencies awarded.

Source: BBC Research & Consulting Disparity Analysis.