

SEPTEMBER 2024

# TRANSPORTATION STRATEGIES in Pennsylvania Climate Action Plans





# TABLE OF CONTENTS

Introduction.....	3
Climate Action Planning in Pennsylvania.....	4
Climate Action Plan Strategies.....	5
Categorizing CAP Strategies.....	7
Activity.....	9
Public Transportation.....	9
Micromobility.....	10
Ridesharing (Carpooling).....	10
Carsharing.....	11
Telecommuting.....	11
Walking/Biking.....	12
Shorter Car Trips (Reducing Vehicle Miles Traveled).....	14
Multi-Modal Approaches.....	17
Freight Management.....	19
Technology.....	20
Electric Vehicles.....	20
Alternative and Autonomous Vehicles and Infrastructure.....	22
Fuels.....	24
Idling.....	25
Policies and Regulations.....	25
Parking.....	26
Funding.....	26
Congestion Management.....	26
Ordinances and Code Revisions.....	26
Outreach.....	28
Appendix A - CAPs Under Development.....	30

# 1

# INTRODUCTION

The [Pennsylvania Carbon Reduction Strategy \(CRS\)](#) released November 2023 in support of the Federal Carbon Reduction Program (CRP), identifies statewide strategies to reduce transportation-related greenhouse gas (GHG) emissions. The CRS recognizes that reducing GHG emissions requires effective coordination across all levels of government as well as effective climate action planning. Many local, and regional climate action plans (CAPs) that set the foundation for mitigating climate change impacts, including reduction of GHG emissions, are listed in the CRS.

This technical memorandum summarizes the different approaches found in these CAPs and others, that regional and local governments across Pennsylvania are taking to reduce GHGs from transportation. **The document is not a comprehensive inventory of all efforts by Pennsylvania communities to address GHG emission reduction, but rather a snapshot of strategies.**

Climate action plans (CAPs) are a planning tool to identify the amount of GHGs from all sources (transportation, buildings, etc.) in an area and develop strategies to reduce GHG emissions. Pennsylvania's first statewide CAP was developed in 2008 as required by the Pennsylvania Climate Change Act of 2008. [Pennsylvania Climate Action Plan 2021](#) is the Commonwealth's most recent plan, developed by the Pennsylvania Department of Environmental Protection (DEP).

The number of CAPs developed by Pennsylvania's counties, regions, and local governments has increased over the past few years. Nearly all have been developed or are in development through the support of DEP's Local Climate Action Program (LCAP) funded by the State Energy Program of the U.S. Department of Energy. The program provides no cost technical assistance to local governments that want to reduce GHG emissions and implement strategies to address climate change.



# 2

# CLIMATE ACTION PLANNING IN PENNSYLVANIA

The LCAP is in its fourth year. During the first three years, the program was managed by DEP’s Energy Programs Office and ICLEI USA was contracted to provide technical assistance to local governments on behalf of DEP. Starting in the fourth year of the program (state FY 2022-2023), the Penn State Sustainability Institute began managing the program. According to DEP, *“In its first four years, LCAP has trained 64 cities, townships, boroughs, counties, and regional organizations, representing approximately 440 municipalities across the commonwealth.”*<sup>1</sup>

Since the early 1990s, U.S. cities have developed community-wide and local government operations GHG inventories based on protocols created by ICLEI. Known as the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions and the Local Government Operations Protocol, these standards created a credible and defensible methodology with defined milestones which accelerated the number of inventories created and provides consistency within and across U.S. communities.



**PENNSYLVANIA  
CRS IDENTIFIED:**

**35**  
REGIONAL AND  
LOCAL CAPS

**38**  
CAPS UNDER  
DEVELOPMENT  
IN PA  
(As of Spring 2024)



ICLEI Milestones for Climate Mitigation

The Pennsylvania CRS identified 35 regional and local CAPs. 29 of the CAPs were developed as part of the DEP LCAP. As of Spring 2024, an additional thirty-eight (38) CAPs were under development in Pennsylvania, thirty-three (33) of which were under development as part of the LCAP. The CAPs under development are listed in [Appendix A](#).

Federal funding has also been allocated for regional climate change planning by the U.S. Environmental Protection Agency (EPA). In 2023 EPA awarded the Delaware Valley Regional Planning Commission (DVRPC), Southwestern Pennsylvania Commission (SPC), and Lehigh Valley Planning Commission (LVPC) funds to develop priority climate action plans. Each of the priority plans were finalized in the first quarter 2024.

<sup>1</sup>PA Department of Environmental Protection. Accessed 06/27/24.

# 3

# CLIMATE ACTION PLAN STRATEGIES

This section of the technical memorandum summarizes strategies municipalities are undertaking to reduce GHGs from transportation sources. Thirty-five (35) CAPs were reviewed for this assessment, including those referenced in the CRS. Total transportation-related GHG emissions for the municipalities implementing the CAPs average 25.8% (Table 1).

**Table 1 – Climate Action Plans Reviewed**

MPO/RPO	COUNTY	CAP NAME	YEAR	GHG EMISSIONS*
CCMPO	Centre	<a href="#"><u>Centre Region Climate Action and Adaptation Plan</u></a>	2021	20.0%
CCMPO	Centre	<a href="#"><u>Bellefonte Borough Climate Action Plan</u></a>	2020	2.0%
CCMPO	Centre	<a href="#"><u>Borough of State College Sustainability Plan 2022</u></a>	2022	24.0%
DVRPC MPO	Multiple	<a href="#"><u>DVRPC Priority Climate Action Plan</u></a>	2024	28.1%
DVRPC MPO	Bucks	<a href="#"><u>Middletown Climate Action Plan</u></a>	2021	34.8%
DVRPC MPO	Bucks	<a href="#"><u>Narberth Climate Action Plan</u></a>	2020	28.0%
DVRPC MPO	Bucks	<a href="#"><u>Warrington Township Energy Transition &amp; Efficiency Action Plan</u></a>	2021	35.0%
DVRPC MPO	Chester	<a href="#"><u>Chester County Climate Action Plan</u></a>	2021	27.0%
DVRPC MPO	Chester	<a href="#"><u>Delaware County, Pennsylvania Climate Action Plan</u></a>	2022	38.0%
DVRPC MPO	Delaware	<a href="#"><u>Haverford Township Climate Action Plan</u></a>	2021	28.0%
DVRPC MPO	Montgomery	<a href="#"><u>Greenprint for Montgomery County: Climate Change Action Plan</u></a>	2007	25.0%
DVRPC MPO	Philadelphia	<a href="#"><u>Philadelphia Climate Action Playbook</u></a>	2021	22.0%
HATS	Cumberland	<a href="#"><u>Cumberland County Climate Change Action Plan</u></a>	2022	39.0%
HATS	Cumberland	<a href="#"><u>Camp Hill Climate Action Plan</u></a>	2023	30.0%
HATS	Cumberland	<a href="#"><u>Carlisle Borough Climate Action Plan</u></a>	2022	29.3%
Lancaster MPO	Lancaster	<a href="#"><u>City of Lancaster Municipal Climate Action Plan</u></a>	2019	4.0%
Lancaster MPO	Lancaster	<a href="#"><u>Millersville Borough Climate Action Plan</u></a>	2022	46.0%
Lehigh Valley MPO	Lehigh Northampton	<a href="#"><u>Lehigh Valley Priority Climate Action Plan</u></a>	2024	26.6%

MPO/RPO	COUNTY	CAP NAME	YEAR	GHG EMISSIONS*
Lehigh Valley MPO	Lehigh Northampton	<a href="#"><u>City of Bethlehem, PA Climate Action Plan</u></a>	2021	20.0%
Lehigh Valley MPO	Northampton	<a href="#"><u>City of Easton Climate Action Plan</u></a>	2021	24.0%
Northwest RPO	Crawford	<a href="#"><u>Meadville Climate Action Plan</u></a>	2022	16.0%
SEDA-COG MPO	Northumberland	<a href="#"><u>City of Shamokin Environmental Resiliency Plan</u></a>	2021	41.6%
SEDA-COG MPO	Union	<a href="#"><u>Lewisburg Borough Climate Action Strategy</u></a>	2023	58.7%
SPC MPO	Multiple	<a href="#"><u>SPC Priority Climate Action Plan</u></a>	2024	19.0%
SPC MPO	Allegheny	<a href="#"><u>CONNECT Climate Action Plan</u></a>	2022	7.0%
SPC MPO	Allegheny	<a href="#"><u>Ben Avon Borough Climate Action Plan</u></a>	2021	2.5%
SPC MPO	Allegheny	<a href="#"><u>Borough of Carnegie Climate Action Plan</u></a>	2022	12.0%
SPC MPO	Allegheny	<a href="#"><u>Borough of Etna Climate Action Plan</u></a>	2020	37.0%
SPC MPO	Allegheny	<a href="#"><u>Forest Hills Borough Climate Action Plan</u></a>	2020	9.0%
SPC MPO	Allegheny	<a href="#"><u>Millvale Borough Climate Action Plan</u></a>	2020	49.0%
SPC MPO	Allegheny	<a href="#"><u>Munhall Borough Climate Action Plan</u></a>	2020	12.0%
SPC MPO	Allegheny	<a href="#"><u>City of Pittsburgh Climate Action Plan 3.0</u></a>	2018	17.0%
SPC MPO	Allegheny	<a href="#"><u>Mount Lebanon Community GHG Emissions Inventory &amp; Climate Action Plan</u></a>	2013	35.0%
SPC MPO	Allegheny	<a href="#"><u>Borough of Sharpsburg Climate Action Plan</u></a>	2021	42.0%
SPC MPO	Indiana	<a href="#"><u>Borough of Indiana Climate Action Plan</u></a>	2021	4.0%

\*GHG Emissions from Transportation Sources

CCMPO – Centre County MPO

DVRPC MPO – Delaware Valley Regional Planning Commission MPO

HATS – Harrisburg Area Transportation Study

Northwest RPO – Northwest Pennsylvania Regional Planning and Development Commission RPO

SEDA-COG MPO – SEDA-Council of Governments MPO




SPC MPO – Southwestern Pennsylvania Commission MPO

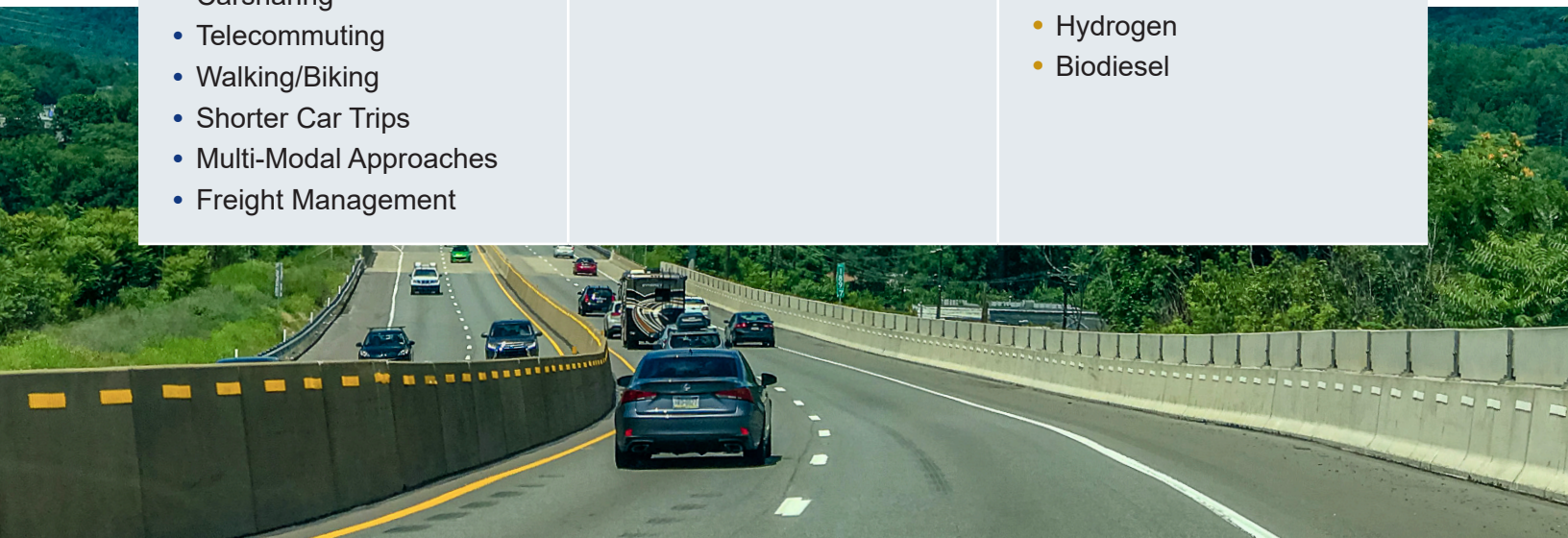
# 4

# CATEGORIZING CAP STRATEGIES

The U.S. Environmental Protection Agency (EPA) identifies three overarching strategies for reducing GHGs from transportation. These include changing the ways in which people and goods are transported (**Activity**), increasing the efficiency of vehicle technology (**Technology**), and using lower carbon fuels (**Fuels**). In Pennsylvania, these strategies (or goals/objectives) are referenced in CAPs as well as specific approaches (or actions). Table 2 lists the different approaches by strategy identified in the CAPs reviewed for this technical memorandum. In addition to Activity, Technology, and Fuels, the CAPs reviewed include strategies focused on land use policies, ordinance revisions, and other planning tools to implement CAPs (**Policy/Regulation**) and strategies to engage citizens (**Outreach**).






Table 2 – CAP Approaches by Strategy to Reduce GHG Emissions from Transportation

 <b>ACTIVITY</b>	 <b>TECHNOLOGY</b>	 <b>FUELS</b>
<ul style="list-style-type: none"> <li>• Public Transportation</li> <li>• Micromobility</li> <li>• Ridesharing</li> <li>• Carsharing</li> <li>• Telecommuting</li> <li>• Walking/Biking</li> <li>• Shorter Car Trips</li> <li>• Multi-Modal Approaches</li> <li>• Freight Management</li> </ul>	<ul style="list-style-type: none"> <li>• Electric Vehicles</li> <li>• Alternative/Autonomous Vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• Alternative Fuels</li> <li>• Low/No Carbon</li> <li>• Zero Emissions</li> <li>• CNG</li> <li>• Hydrogen</li> <li>• Biodiesel</li> </ul>





The remainder of this technical memorandum categorizes numerous goals, objectives, and actions in the 35 reviewed CAPs by:

-  **Activity**
-  **Technology**
-  **Fuels**
-  **Policy/Regulation**
-  **Outreach**

Links to specific CAPs under each category provide several examples of GHG reduction approaches and actions.



It is important to highlight that the information presented in this technical memorandum is a sampling of the CRS work being conducted in municipalities throughout Pennsylvania to reduce GHG emissions from transportation sources. Information is based on review of the CAPs listed in [Table 1](#). This technical memorandum is not a comprehensive inventory of climate planning activities in Pennsylvania.



# 5

## ACTIVITY



### Public Transportation

Public transportation is a principal GHG reduction strategy found in nearly every CAP reviewed. For those citizens without a personal automobile, public transportation is a necessity and for those with a personal automobile, switching to public transportation helps reduce GHG emissions. Beyond reducing emissions, several municipalities are seeking to move to **carbon free public transportation** over time, like [Warrington Township](#) in Bucks County. [Narberth Borough's CAP](#) (Bucks County) encourages the use of low-carbon transportation. For example, the CAP recommends prioritizing the **maintenance of pedestrian, cycling, and transit infrastructure before car infrastructure**.

Communities are also exploring the **electrification of public transportation fleet** vehicles. An example is [Forest Hills Borough](#) in Allegheny County. The Borough's CAP includes an action to increase the use of electrified transit vehicles by 2030. By 2050, a long-term action is to **deploy an electrified rail system**, a potential revival of the streetcar.

**Increasing transit ridership by residents living in proximity to transit** is a focus of the [Philadelphia Climate Action Playbook](#) adopted in 2021. Through Philadelphia's strategic transportation plan Connect, the goal is to increase frequent transit ridership by 10% for residents living within 0.25 miles of transit. The City also aims to increase the national transit ridership rate by 10%.

**Improving scheduling** is another way to maximize the effectiveness of public transportation and decrease emissions, as well as single occupancy vehicle (SOV) reduction. [Middletown Township's CAP](#) (Bucks County) includes a recommendation in its CAP to improve the distribution of public transportation schedules for employees of Township businesses.

The [City of Bethlehem’s CAP](#) identified that Lehigh and Northampton Transportation Authority (LANTA) will maximize ridership by **expanding coverage and improving rider experience**. Improving convenience, comfort, and cleanliness; increasing reliability and service frequency; reducing fares and better communication/technology are all ways that LANTA will encourage transit ridership.

[Cumberland County’s CAP](#) identifies expanding public transportation through **government, businesses, and resident actions**. A few actions include:

- **Government** – Regionalizing public transit to create a new five-county transit authority and creating revised transit routes to places where residents live and work.
- **Businesses** – Encourage employee usage of public transit and participate in route planning efforts.
- **Residents** – Use public transit for daily transportation needs and participate in route planning initiatives.

### Micromobility

More densely populated cities and boroughs are increasingly adopting micromobility transportation options such as scooters or bicycles. These small, low-speed, human- or electric-powered devices provide affordable, efficient options for traveling through urban and downtown areas.

[Forest Hills Borough](#) and the [City of Meadville](#) (Crawford County) include the development of **electric scooter and/or bicycle programs** to increase transportation options in their CAPs.

The [DVRPC Priority CAP](#) identifies expanding micromobility access as a regional need. To measure progress, it will track eBike and eScooter purchases supported through the creation or expansion of **e-micromobility incentive programs**.

A policy goal of the [SPC Priority CAP](#) is to introduce a **microtransit platform that uses application technology** to offer flexible routes and scheduling. [Centre County’s CAP](#) examines strategies for shared mobility and shared micro-mobility.



### Ridesharing (Carpooling)

Many employers offer incentives for carpooling. These include incentives such as paying for vanpools or providing a stipend to employees to travel to work in one vehicle. [Warrington Township’s CAP](#) (Bucks County) includes a goal to encourage commuters to choose alternate forms of transportation such as carpooling, biking, or walking. A recommended action to achieve this goal is to work with local employers to incentivize carpooling via local and state tax credits.



## Carsharing

Carsharing is gaining popularity as an affordable option to car ownership. Unlike long term car rental options such as Enterprise or Hertz, carsharing is when private individuals ‘rent’ their car or when communities work with short term rental companies like [Zipcar](#). A few municipalities are including carsharing as part of their CAP strategies and actions.

- By 2030, [Forest Hills Borough](#) aims to **establish locations for shared transportation options** such as Zipcar, or electric supported bicycles or scooters.
- To **downsize its municipal fleet**, the City of Pittsburgh is working with City departments to explore alternatives like Zipcar for on-demand car sharing ([City of Pittsburgh Climate Action Plan 3.0](#)).
- To support the adoption of EVs, the [City of Easton](#) (Northampton County) is considering implementing an **EV car share/short term rental program**.
- The [City of Bethlehem](#) is considering establishing a fee or membership driven carshare program when residents need quick, convenient transportation. This program would particularly benefit low-income residents.



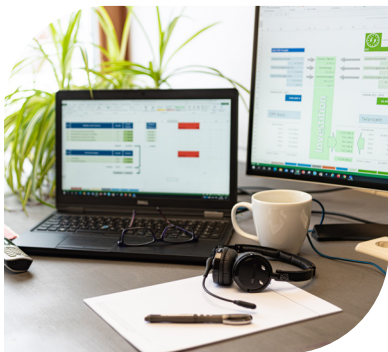
## Telecommuting

Due to the change in transportation patterns experienced during the COVID-19 pandemic and changes in office-based work trends post pandemic, many municipalities are promoting telecommuting to reduce VMT and GHG emissions.

[Indiana Borough's CAP](#) (Indiana County) notes that **pandemic-related transportation changes** have resulted in **increased walking and biking**. Continued remote work will result in decreased emissions.

As part of [Cumberland County's](#) goal to reduce transportation related GHG emissions, its CAP identifies **implementing flexible work policies through government and business actions**.

- **Government** – Offer employees teleworking, flex scheduling, and online meeting applications to conduct work while reducing needs for daily commutes and other business travel.
- **Businesses** – Participate in flexible work arrangements to reduce daily commutes.



## Walking/Biking

Developing new or completing sidewalk, trail, and bicycle infrastructure was included in nearly all municipalities in the CAPs reviewed. Improving walking and biking infrastructure, especially for commuting, reduces dependence on motorized vehicles.

[Warrington Township](#) is completing a Township-wide plan to expand its bikeway, trail, and pedestrian facilities.

As part of its objective to reduce gas and fuel consumption by registered vehicles in the Township by 2035, [Haverford Township's CAP](#) (Delaware County) includes actions to **improve and create 'hard' infrastructure to support alternative, non-fuel intensive transportation options**, particularly for walking and biking.

- **Increase bike lanes 30%** by 2035, by developing a strategic bike plan and engaging with PennDOT for advanced planning required to accommodate bike lanes on streets.
- **Connect existing bike lanes** to fitness and shopping areas.
- **Include bicycle parking** in Township's parking requirements for retail uses.
- Increase the number of **dedicated bike racks** in each district/commercial center.
- With assistance from the Pennsylvania Department of Health's (DOH's) 'Walk Works' program, **organize walking paths throughout the Township.**
- Determine improvement goals for the Township Walk Score and Bike Score to inventory areas without sidewalks and identify needed sidewalk installations to increase walkability.
- Increase cover or install green roofs at the Township's five busiest bus stops increasing an additional 10 by 2035.

An objective in [Munhall Borough's CAP](#) (Allegheny County) is to **expand pedestrian and bicycle infrastructure and incorporate provisions into revised land use codes** to facilitate smart growth and reduce the impact of vehicles on GHG emissions.

[Cumberland County's CAP](#) identifies bicycling and walking as modes of transportation for first and last mile transportation. Examples of **government, business, and resident actions** identified to implement this strategy include:

- **Government** – Supporting ongoing implementation of the HATS (the designated regional MPO) bicycle/pedestrian transportation network through planning and financial assistance programs. Working with PennDOT to develop an active transportation plan with priority routes for bicycling and walking.
- **Businesses** – **Providing bicycle parking and locker room facilities** to support non-motorized commutes and **integrating sidewalks and bike paths into site design** to support non-motorized transportation.
- **Residents** – Promoting walking and biking for daily travel and **working with local officials to advocate for non-motorized transportation linkages.**



**Ben Avon Borough's CAP** (Allegheny) includes several actions to improve walking and biking facilities to reduce VMT and GHG emissions. The Borough strives to implement a regional corridor plan for walking and biking. Recommendations include:

- Working with neighboring communities to implement the objectives of a **2017 Joint Comprehensive Plan** to improve pedestrian and bicycle transportation networks.
- **Re-painting the “share the road” arrows** on a local road, which is part of a regional bike route.
- **Considering joining Congress of Neighboring Communities (CONNECT)** to participate in broader regional collaboration on topics such as transportation.
- Conducting a **“Walk Your City” campaign to raise awareness of walkable destinations and routes** within the Borough and neighboring communities.
- Developing a **program to encourage replacement and repairs of deficient sidewalks**. The program could include a shared purchase by which several homeowners can work together to obtain a joint bid for sidewalk improvements.
- **Inventorizing sidewalk deficiencies and issuing deficiency notices** to improve community-wide sidewalk accessibility.

**Sidewalk condition** impacts walkability in many communities and one of the biggest obstacles to improvement is cost. To address this obstacle, the [City of Pittsburgh](#) has recently created a Sidewalk Improvement Program designed to help residents, homeowners, and business owners repair sidewalks at a reduced cost. Through this program, the Department of Public Works crews make sidewalk repairs, providing an affordable alternative to hiring private contractor.

**Narberth Borough's CAP** encourages Borough officials consider working with the Narberth Cycling Club, Climate Action Narbs and Nearbs (CANN), and other community members to develop programs and seek grants to improve bicycle infrastructure in Narberth and provide incentives to purchase and use bicycles for transportation, rather than cars.

The [Borough of State College's CAP](#) (Centre County) includes an action to establish a “bike fleet” for Borough employees to use for work and recreation.

The [City of Philadelphia](#) launched its **bike share program, Indego Bike Network**, in 2015 as the City's **newest form of public transportation**. It started with 60 stations and 600 bikes and has expanded to over 130 stations and 1,400 bikes. The City initiative is sponsored by Independence Blue Cross. Indego is part of the Better Bike Share Partnership (BBSP), which seeks to develop bike share equitably across the country. Philadelphia riders have taken more than 2.6 million trips using the bike

network. Philadelphia’s goal is to increase bike share trips by 100%, and increase bike share trips taken by minority or low-income residents by 120%.

**Pittsburgh’s CAP** will continue to increase bike infrastructure including total miles of protected bike lanes and bike repair stations. It notes, however, that deterrents such as winter weather and unsafe traffic conditions exist and impede bicycling as a primary mode of transit. Actions to **increase bicycling as a primary mode of transit** include **installing bike racks** on all buses, installing **bike share stations** at bus and Regional Transit light rail (T) stops, increasing dedicated bike storage on the T, integrating access to bike sharing with a Pittsburgh Regional Transit ConnectCard, and ensuring secure bike parking at transit hubs. The City’s CAP also notes that increasing the number of commuters **walking to work is challenging without land use changes to create walkable neighborhoods**. Planning and zoning changes are needed to ensure new development and redevelopment focuses on a multi-modal approach.

The **City of Meadville** in Crawford County is developing a Biking Development Program and Walking Development Program to **improve transportation choices, particularly in low-income neighborhoods**. Implementation will include assessing and upgrading pedestrian and bicycling infrastructure.

The **City of Bethlehem** includes a strategy and supporting actions in its CAP to improve bike mobility and safety by **creating safe, low-stress bike routes**, which may include dedicated bike lanes, trails, and bicycle boulevards connecting neighborhoods to destinations throughout the City. It also includes a strategy and supporting actions to provide **safe routes for pedestrians** by expanding and increasing the City’s walkability including a **new pedestrian bridge** to enhance pedestrian and biking infrastructure.

## Shorter Car Trips (Reducing Vehicle Miles Traveled)

Shorter car trips reduce vehicle miles travelled (VMT). Any of the strategies identified above will reduce VMT. **Warrington Township’s CAP** notes that **decreasing VMT is a ‘natural by-product’ of increasing biking, walking, carpooling, and public transportation**.

**SPC’s Priority CAP** suggests **transportation pricing programs to reduce VMT**, especially during peak hours, such as **parking pricing, congestion, and road pricing**.

As part of its CAP implementation strategy **Middletown Township** in Bucks County has developed detailed actions under an objective to reduce VMT by single-occupancy vehicles by 30% by 2050. These include:

- Developing and adopting a **transportation demand management (TDM) policy** to educate residents about alternative means of transportation.
- Partnering with PennDOT to expand local bike lanes and make roads safer for bicyclists.
- **Improving sidewalk connections** between residential and commercial developments.
- **Adding shelter facilities and sidewalk connectivity** for public transportation access points.
- Encouraging SEPTA to monitor and adjust routes to serve Township residents.
- Incorporating designated **carpool parking requirements in development codes**.
- Making SEPTA Key Cards available for purchase at the Township municipal center.

**Montgomery County's CAP** includes a goal to reduce VMT during work commutes. An action includes establishing a telecommuting and flex time program and offering TransitChek options to employees. TransitChek is an employer-offered commuter benefit program administered by DVRPC. Additional actions include:

- Providing financial incentives to reduce emissions such as **low-interest loans to people to live near their office**.
- Managing land use and site design to reduce VMTs.
- **Adopting land use policies** such as mixed-use design, concentrated development, redevelopment, revitalization of older communities, and transit-oriented design.
- Planning for services to follow development patterns and avoid 'leap frog' development.

**Forest Hills Borough's CAP** notes that **future automated transportation for freight delivery and retail commerce** will increase. The local autonomy to be brought about by point of service assembly through 3-D printing of goods will potentially change commercial transportation patterns. This will reduce GHG emissions from diverted long-haul transportation.

The **Borough of Sharpsburg** in Allegheny County is focused on decreasing VMT by converting the number of residents traveling to work by driving to walking, biking, transit, or telecommuting. The Borough's CAP includes actions to implement this objective that range from improving pedestrian and bicycle safety to educating on Complete Streets.

**Etna Borough** in Allegheny County is taking a similar approach. To reduce VMTs and increase walking and biking. An action in its CAP is to use information from the Green Building Alliance to **establish a transportation baseline with survey data** gathered from residents on where they live, work, and how they travel.

**State College Borough** has a goal to reduce single-occupancy vehicles to 30% of all commutes. The regional transportation authority, Centre Area Transportation Authority (CATA's) **vanpool programs** continue to expand, demonstrating a need for the programs.

To reduce VMT in SOVs, the **City of Shamokin** in Northumberland County is improving walkability by repairing and adding to pedestrian infrastructure and working to improve public transportation options to **connect communities and employment centers**. It is also taking an economic development approach by **attracting more employers to the City** to reduce VMT outside the City.

The **City of Easton's CAP** includes an objective to reduce SOV trips. Implementing the following actions will help the City achieve this objective:

- Enhance local bus service (LANTA) by supporting an increase in state funding and increasing service and convenience to attract more riders.
- Participate in regional efforts to expand public transportation options, including the **possibility of a light-rail system in the Lehigh Valley**.
- Construct infrastructure improvements to **enhance cyclist and pedestrian safety and ease of movement** (bike lanes, signage, traffic calming measures, sheltered bike racks, places to lock bikes, requirements for bike storage, and parking facilities in new residential development).

- Partner with local businesses on education and incentive programs to encourage biking and walking. Consider a **bike share program for low-income residents, workshops for e-bike conversions, and rentable bikes for downtown visitors.**
- Consider **creating pedestrian zones closed to vehicles** - vehicle free zones.

**Chester County's CAP** includes an objective to reduce the employee commuter VMTs. Actions to address the objective include:

- **Promoting teleconferencing** for County sponsored meetings when possible and encouraging County employees to attend meetings remotely when feasible.
- Establishing policies to reduce GHG emissions created by employee commuting through flex-time work schedules during peak commuting hours and allowing employees to work remotely when feasible.
- Establishing a program to **support employee bike-to-work opportunities.**
- Establishing a ride-share policy and program for County employees, including carpooling and **preferred parking** for alternative fuel, hybrid and electric vehicles (EVs), and car and vanpools.
- **Locating future County facilities and services in proximity to employees and clients,** including in higher density areas or within walking or biking distance of transit facilities.
- Exploring the use of on-site day care facilities for employees to reduce work-day care trips.
- Exploring participation in a car-share program in West Chester and other County facility locations.

An objective in **Centre County's CAP** is to reduce SOV trips through the following actions:

- Implementing recommendations to achieve Gold Level certification as a **Bicycle Friendly Community (BFC).**
- Collaborating Centre Area Transportation Authority (CATA) to increase public transit access and use.
- Establishing employer partnerships to incentivize and support sustainable commuting and telework options.
- Improving walking infrastructure.
- Supporting projects that increase the safety of multiple modes of transportation.



## Multi-Modal Approaches

The **Borough of Camp Hill** in Cumberland County seek to significantly increase multi-modal transportation options (50% by 2050) by implementing recommendations in the Camp Hill’s Bike and Pedestrian Study. Recommendations include:

- Adding bike racks outside commercial locations.
- Clearing signage of pedestrian and cyclist use of space for motor vehicles.
- Creating clearly connected intermunicipal networks.
- Increasing sidewalks and creating highly visible pedestrian crossings.
- Adding sharrows and bike lanes on the existing street network.
- Adding pedestrian “islands” for long street crossings.
- Identifying multiple streets in each direction as primary bicycle boulevards.



The **City of Pittsburgh** is undertaking actions to **increase multi-modal shift** as a way to reduce VMT. Citywide 2030 mode shifts have been identified including a 55% increase in walking, 285% increase in biking, 100% increase in public transit, all corresponding to a 50% decrease in SOV trips. The City recognizes that decreasing SOV trips requires increasing the viability and availability of other choices. Transportation demand management (TDM) strategies and actions that will impact mode shift away from personal vehicles include:

- Employer and landlord offering of universal transit passes,
- Car/bike share subscriptions,
- Telecommuting and flexible work schedules,
- Road and parking pricing, and
- Road allocation to promote bike lanes and transit-only lanes.

Additional policy changes to promote multi-modal shifts are detailed in its CAP and include:

- **Designing and Implementing Transit Streets** – Strategically designing streets to balance transit operations, car volumes, and pedestrians/cyclists.
- **Complete Streets Policy** – Pittsburgh City Council approved a **Complete Streets Policy** in 2016 to create a safe and accessible multi-modal transportation system to promote mobility for all users across all modes. New projects are required to **assess the needs of all users**.
- **Bus Rapid Transit** – The City of Pittsburgh, Allegheny County, the Port Authority of Allegheny

County, and the Urban Redevelopment Authority of Pittsburgh have proposed a **Bus Rapid Transit (BRT)** system that would connect Downtown Pittsburgh and other City neighborhoods. The route would **link more than 30,000 people across 24 neighborhoods**. Benefits of the BRT system include increased frequency, reliability, and comfort **comparable to light rail**, constructed quicker and at a smaller cost compared to light rail.

- **Parking Codes and Reform** – Parking reform can be a disincentive to driving by limiting parking spaces, enforcing metering, and removing requirements for minimum parking. Pittsburgh is **evaluating revised parking codes** from cities like Cleveland, Indianapolis, and Philadelphia which promote alternatives to car transportation.
- **Development Incentives** – Using incentives such as tax abatements or tax increment financing for neighborhood revitalization improves opportunities for multi-modal choices such as walking or biking. This prevents sprawl and decreases GHG emissions.

**SPC's Priority CAP** identifies several policy goals that will **encourage multi-modal shift**.

- **Transportation pricing programs that reduce vehicle miles traveled (VMT)**, especially during peak hours, such as parking, congestion, and road pricing.
- Policies to **support transportation management-incentive programs** to reduce vehicle trips or travel and expand transit use, such as **van-pool programs, ridesharing, transit fare subsidies, and bicycle facilities**.
- New or expanded transportation infrastructure projects to facilitate public transit, micro-mobility, car sharing, bicycle, and pedestrian modes.
- **Encourage mode shift, especially during peak hours**, from private vehicles to walking, biking, and public transportation.

The **Congress of Neighboring Communities (CONNECT) CAP** includes an objective to increase alternate modes of transportation by encouraging and increasing accessibility to modes such as walking, biking, or transit. Implementing this goal includes several focused actions.

- **Planning, Development, and Accessibility** – Working with local planning commissions to prioritize smart growth policies and analyze current code for gaps, prioritizing compact and Complete Streets development strategies in planning documents and land use ordinances, and reducing or eliminating parking minimums within zoning ordinances.
- **Community Mode Shift** – Building trail networks to encourage sustainable land use and promote transportation connectivity; encouraging carpool, vanpool, or bike share options through local government and community programs; updating or creating an active transportation plan for the community or with surrounding municipalities; and implementing new bike infrastructure and walking paths.
- **Regional Advocacy** – Implementing an equitable or free fare program to increase ridership for low-income residents.

**Bellefonte Borough** (Centre County) is focused on **converting major corridors** in the Borough's downtown **into Complete Streets** (i.e., roadways with bike paths and sidewalks) to promote multi-modal transportation options.



## Freight Management

MPO and RPO long range transportation plans provide robust strategies for addressing GHGs from freight. Reducing GHG emissions from freight is a priority in CAPs prepared for some of Pennsylvania’s larger municipalities and regions. The [City of Bethlehem’s CAP](#) notes that strategies to address GHG emissions from the freight, trucking, and logistics sectors; freight trains and train yards; and emissions from residents taking commercial flights are missing. This is due to lack of data and a lack of influence from the City’s perspective.

[Pittsburgh’s CAP](#) includes an objective to reduce freight emissions by 25% by 2030. The CAP notes that conversion to alternative fuels cannot be required, but **existing laws and policies pertaining to freight deliveries, idling laws, truck routes, and loading zones can be enforced.** Incentives can be developed for loading and unloading during off-peak hours and improved signage around loading zones would encourage compliance. Designated loading zones can be designed to use existing transit lanes and plans can be developed for efficient coordination of freight deliveries.



[SPC’s Priority CAP](#) identifies programs to increase efficiency and reduce GHG emissions at ports and freight terminals, such as **vehicle or equipment idle reduction**, vessel-speed reduction, equipment electrification, and shore power.

# 6

## TECHNOLOGY



### Electric Vehicles

With availability of state and federal funds for municipal fleet conversion, many municipalities have been actively switching fleet vehicles from carbon to electric or hybrid. Municipalities have also been developing strategies to support the adoption of EVs throughout their communities.

The [CONNECT CAP](#) includes an objective to increase EV use in municipal fleets and in the broader community. Implementing this goal includes several focused actions.

- **Community Education and Partnerships** – Working with a partner to create a local or CONNECT member **EV information sheet to help communities navigate EV issues**; conducting public education surrounding federal, state, and Duquesne Light Company (DLC) EV and charging grants/rebates, or hold a ride and drive event, to increase community EV use; encouraging energy efficiency and 100% renewable energy technologies in transit vehicles or school district buses.
- **Collaborative Purchasing – Participating in EV maintenance or cost sharing arrangements** with neighboring municipalities; joining the voluntary Climate Mayors EV Purchasing Collaborative, to enable municipalities to procure electric vehicles and chargers at a discounted price without bidding.
- **Charger Friendly Policies** – Reviewing and amending municipal code to **remove barriers to EV charging infrastructure**; adopting policies, parking rules, and zoning ordinances that promote electric vehicle growth and adoption; **requiring EV accommodations in new public buildings** or all development; and considering municipal incentives such as codes or rebates for commercial business or multi-unit dwelling EV charging infrastructure.
- **Assisting Community Charging** – Participating in DLC's Community Charging Pilot Program for financial assistance to install public, workplace, and multi-unit dwelling chargers.

A long-term policy recommendation of [Forest Hills Borough](#) is to establish infrastructure to support electric vehicles, including solar photovoltaic canopies and EV charging stations in public parking lots.

[Middletown Township's CAP](#) includes an objective to not only electrify all municipal fleet vehicles but also make EVs attainable through specific actions. These include:

- Adding EV charging stations at all Township-owned facilities and properties.
- Adding Level 3 (fast-charging) **EV charging stations along key transportation corridors**, reducing emissions created by non-residents.
- Partnering with shopping centers and retailers to add EV charging stations for patrons.
- Partnering with multi-family residential and townhome/condominium developments to expand access to EV charging stations.
- **Amending the Township zoning ordinance** to require EV charging stations in new commercial land developments.
- Requiring new residential developments be **built to accommodate EV charging** in garage and driveway areas.

The [Borough of Carlisle](#) in Cumberland County has identified a unique objective to position Carlisle as a '**Hub for Vehicle Electrification**'. Carlisle hosts some of the largest car show venues in the eastern U.S., with many annual events highlighting new transportation technologies and trends. The Borough is home to significant logistics infrastructure for long-distance trucking. Partnership opportunities are available to **showcase the features of emerging alternative fueled vehicles for consumers and the commercial industry**.

[Camp Hill Borough](#) in Cumberland County includes several actions in its CAP to convert VMT to EVs, with a goal of achieving 90% by 2050. The Borough will **optimize the availability of EV tax incentives** such as the Plug-In Electric Drive Motor Vehicle Federal Tax Credit, the Alternative Fuel Vehicle Rebate Program, and the qualified new and used vehicle tax credit under the Inflation Reduction Act by **creating EV specific workshops for homeowners and businesses**.

[Etna Borough's CAP](#) includes an action to incentivize large parking lot owners to **install solar arrays with EV charging stations and EV car rentals**.

To offset GHG emissions from school buses, [Delaware County](#) is working on an **electric school bus initiative**. The county is working with local governments to conduct surveys and establish a reduction goal to switch from carbon fueled to EV fueled school buses.

The [School District of Philadelphia](#) has been **converting to EV school buses** over the past several years. In January 2024, the district received a nearly \$8 million grant from the U.S. Environmental Protection Agency (EPA) to double its electric bus fleet. By 2027, the District will have 40 electric buses.



An objective in [Carnegie Borough's CAP](#) (Allegheny County) is to increase EV use in municipal fleets and by the public. Partnering with DLC, the borough intends to organize local commercial businesses to be a DLC charging partner. A **charging partner** is an entity or organization collaborating with DLC to install EV charging stations in southwestern Pennsylvania. The Borough is also participating in DLC's Electric Fleet Advisory Service. Free to municipalities, DLC provides professional services to assist municipalities in creating a strategic EV plan for converting municipal vehicles to EVs.

[Ben Avon Borough's CAP](#) includes several objectives focused on promoting EVs by the municipality, local transit, and the local school district, and residents. By 2050, the Borough is targeting that 100% of residents will drive EVs. The Borough intends to replace internal combustion with EVs by 2040 and it is **advocating for electric bus adoption** for Allegheny Port Authority transit buses and local school district buses.

[Bellefonte Borough's CAP](#) includes an objective to electrify municipal fleet and public transportation by 2050. The Borough will also **encourage the transition to residential EVs** by providing EV charging at 25% of public parking spaces and holding workshops and providing educational material on EV financing on local government websites and social media.

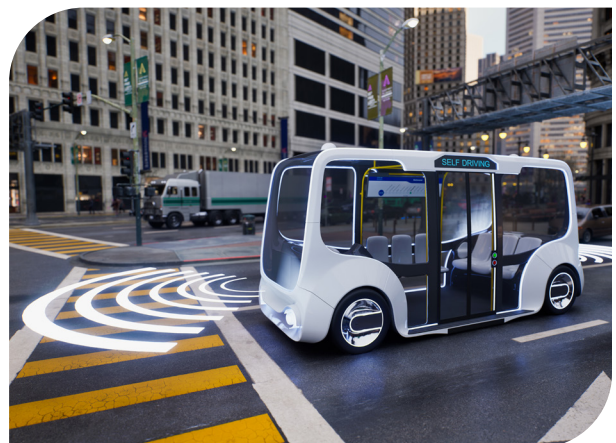
Increasing vehicle electrification is a key objective in the [City of Pittsburgh's Climate Action Plan 3.0](#). Due to the projected demand for electric vehicle charging and current electric grid capacity, the City is considering **installation of portable, solar powered EV charging stations**. This will allow EVs to be charged without tapping into the electric grid. An added benefit is that the stations can be deployed throughout Pittsburgh in emergency situations when electricity is interrupted, improving resiliency citywide. The initial EV charging stations will charge City vehicles at night and be open to the public during the day. Increasing EV charging infrastructure in City parking lots and garages and installing solar powered EV charging stations in City neighborhoods typically lacking driveways and garages will encourage EV ownership by City residents.

[The City of Easton's CAP](#) (Northampton County) includes an objective supporting the adoption of EVs. Actions to support this objective include:

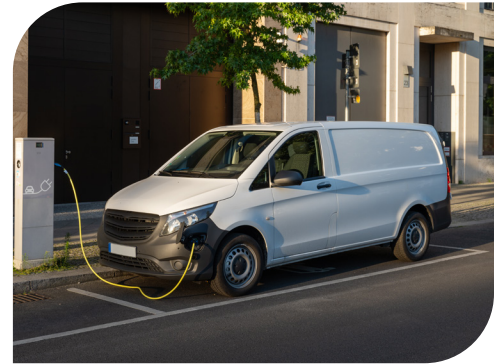
- Continuing to add EV charging infrastructure throughout Easton and researching state and federal rebate programs for municipalities and businesses.
- Researching and pursuing opportunities to convert bus, truck, and other vehicle fleets to EVs.
- Incentivizing resident EV deployment through tax benefits, free parking, or other options. As EVs are less accessible to low-income residents, incorporating equity in this action by rewarding/incentivizing people who don't own cars, to car share or take public transportation, etc.

## Alternative and Autonomous Vehicles and Infrastructure

The [City of Bethlehem's CAP](#) includes a goal to increase the adoption of electric, alternative fuel, and zero-emitting vehicles. The following actions were developed to achieve the goal:



- **Increase EV infrastructure in the city** – Work with neighboring communities and local utilities to add EV charging infrastructure throughout the city and region.
- **Adjust city codes and zoning to expedite EV infrastructure** – Establish an expedited process for approving and installing public EV chargers and related infrastructure.
- **Encourage public and private vehicle fleets to convert to all-electric or ZEVs** – Partner with public and private fleet operators to work toward a goal of 100% EVs/ZEVs, including school buses, transit buses, locally based trucking/freight and logistics fleets, policy and fire-safety vehicles. Provide information and resources on federal grant opportunities to fund fleet conversion efforts.
- **Incentivize residential use of EVs and ZEVs** – Provide tax or other incentives (such as free parking) for residents who purchase or own an EV or ZEV.



As part of [Cumberland County's](#) goal to reduce transportation related GHG emissions, its CAP includes a strategy to support **deployment of alternative fuel and autonomous vehicles.**

Examples of government, business, and resident actions identified to implement this strategy include:

- **Government** – Considering the purchase alternative fuel fleet vehicles for local government and public transportation, identifying a regional EV charging station network, discussing EV infrastructure needs with utility providers to identify necessary upgrades to support EV charging stations, **identifying a network of CNG fueling stations** with transit providers and other users such as school districts and waste haulers, and investigate the impacts of autonomous vehicles potential to reduce GHG emissions.
- **Businesses** – Purchasing electric, flex fuel, hybrid, or CNG fleet vehicles, providing EV charging stations and parking spaces, **considering onsite solar to power EV charging stations**, and exploring the use of autonomous vehicles, especially for trucking intensive industries.
- **Residents** – Purchasing electric, flex fuel, hybrid, or CNG vehicles and **purchasing vehicles with varying levels of automation as technology becomes available.**

Several actions are identified in the [DVRPC Priority CAP](#) to plan for, develop, procure, and maintain alternative fueling networks, such as along Alternative Fuel Highway Corridors. Examples of **alternative fueling networks include hydrogen and biodiesel fueling stations** and EV chargers.

[SPC's Priority CAP](#) identifies several goals to advance alternative fuel infrastructure. These goals include:

- Programs to increase the share of electric light-, medium-, and heavy-duty vehicles, and to expand electric vehicle charging infrastructure.
- Electrification requirements for state, municipal, territorial, and tribal vehicle, transit, or equipment fleets.
- **Incentive programs to purchase ZEVs** and equipment to replace older heavy-duty diesel vehicles and equipment.

# 7

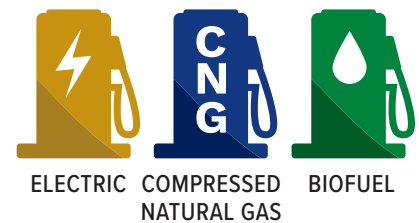
## FUELS

Through its Municipal Climate Action Plan, the [City of Lancaster](#) is holistically looking at ways to reduce GHG emissions generated by fleet vehicles and City workers commuting. Actions include the following:

- **Conducting a Fleet Analysis** – The analysis provides a baseline for understanding how and when City vehicles are needed and used. This will **identify opportunities to reduce the overall emissions**.
- **Increasing the Number of Lower Carbon Vehicles** – The City will determine which alternative fuel-type vehicles best suit the needs of City bureaus and departments. The CAP recognizes that technology for alternative fuel-type vehicles is changing rapidly and therefore the use of electric, CNG, biofuels, or hybrid vehicles will be evaluated.
- **Employee Transportation Demand Management** – Switching from in-person to online meetings, as appropriate, will reduce GHG emissions generated by City government operations. The City is considering ways to reward employees for low-carbon transportation options such as an incentive for replacing an in-person meeting with an online meeting, preferred parking for carpoolers and EVs, or a **parking cash-out program that rewards employees who do not use City parking spaces**.



[Lehigh Valley's Priority CAP](#) identifies the transition to clean (low-carbon) or zero-emissions fuels as one of its four themes. Addressing this theme includes the goal of **supporting the deployment of alternative fuel vehicles of all types** and increasing alternative fueling infrastructure and stations.



[Chester County's CAP](#) includes an objective to encourage low or no carbon travel. Actions to accomplish this objective include installing EV charging stations at County facilities and incorporating alternative fuel requirements into trash hauling and other transportation contracts.

In an effort to reduce fuel consumption and GHG emissions, the [Borough of State College](#) **increased on street parking rates** while maintaining parking garage rates. This encourages the use of municipal garages and reduces the need for drivers to look for parking spaces.



# 8

## POLICIES AND REGULATIONS

The CAPs reviewed included many strategies and actions to adopt new or revise existing transportation policies and adopt or update ordinances. Doing so will modify the way in which land is developed, increasing opportunities to reduce GHG emissions.



### Integrating Transportation and Land Use

Many Climate Action Plans (CAPs) focus on the connection between transportation and land use, emphasizing the importance of policies to manage this relationship effectively.

- [Lehigh Valley's Priority CAP](#) includes four themes. The first is the integration of transportation and land use. To do so it will implement the Lehigh Valley's Active Transportation Plan – Walk/RollLV and increase transit ridership.
- [Centre County's CAP](#) includes a goal to align land use and housing with transportation infrastructure to increase access to walking, biking, and public transit.
- [Lewisburg Borough's CAP](#) (Mifflin County) identifies the need to align land use and housing policy with transportation infrastructure to increase access to walking, biking, and public transit.
- [Sharpsburg Borough's CAP](#) (Allegheny County) includes an action to work with surrounding communities to advocate for compact development.
- [Cumberland County's CAP](#) notes that land use policies must be designed with consideration of associated transportation needs and the desire to decrease VMT.
- The [Centre Region CAP](#) recognizes the need to increase compact and contiguous development, prioritize multi-modal development through investment incentives and regulation, and align parking options and infrastructure for bikes and EVs with climate goals.



### Idling

To decrease the use of GHG emissions from vehicles, the [City of Bethlehem's CAP](#) includes an action to **pass and enforce a no-idling law**. Once a law is passed, the City will educate fleet operators and residents about the law and provide consistent enforcement and create steeper fines for diesel vehicles, such as buses, construction vehicles, and equipment. Leading by example, the City should educate its vehicle fleet and train operators to not idle.

[Montgomery County's CAP](#) promotes alternative fuels and improve fuel economy by using **adopting anti-idling policy in loading and delivery areas**.



### Parking

The **City of Bethlehem** proposes to decrease parking for non-EVs, provide parking discounts, and eliminate minimum parking requirements. Revised parking requirements will enable more services and encourage less vehicle travel for new development projects.

**Chester County’s CAP** encourages municipalities to **coordinate and maintain signal timing to reduce idling** time at intersections and to install closed-loop signal systems where feasible. Adopt a no-idling policy at municipal buildings and businesses.



### Funding

**Cumberland County’s CAP** identifies several policy considerations to advance the reduction of GHG emissions. One consideration is funding and **ensuring that sustainable transportation funding sources not tied to fossil fuel consumption** are developed. As drivers continue to switch to non-fossil fuel transportation modes, less revenue is available to invest in transportation system infrastructure. Similarly, the Cumberland County CAP recognizes that **transportation investments impact mode choice**. With SOV, the primary mode for resident transportation, investing in public transportation and non-motorized modes are required to switch from SOV to other modes.



### Congestion Management

**Chester County’s CAP** includes an action to participate in multi-municipal traffic control plans and congestion management programs on a corridor-wide basis.

**Mount Lebanon’s CAP** includes a traffic signal synchronization (TSS) action to coordinate traffic signal timing along a series of intersections to improve traffic flow and reduce congestion, fuel consumption, and emissions on arterial streets.



### Ordinances and Code Revisions

Table 3 summarizes some of the GHG emission reducing ordinance and code revisions found in the CAPs.

**Table 3 – Ordinance & Code Revisions to Reduce Transportation-Related GHG Emissions**

CAP	LAND USE POLICY/REGULATIONS
<a href="#"><u>Bellefonte Borough Climate Action Plan</u></a> (Bellefonte Borough, Centre County)	Incorporate designated carpool parking requirements into the development code.
<a href="#"><u>SPC Priority Climate Action Plan</u></a>	Update building and zoning codes to encourage walkable, bikeable, and transit-oriented development.
<a href="#"><u>Munhall Borough Climate Action Plan</u></a> (Munhall Borough, Allegheny County)	Expand pedestrian and bicycle infrastructure and incorporate provisions into revised land use codes to facilitate smart growth.

CAP	LAND USE POLICY/REGULATIONS
<p><b><u>DVRPC Priority Climate Action Plan</u></b></p>	<p>Encourage clean fueling infrastructure through permitting and zoning by streamlining the permit process for installing charging and fueling stations, reducing the associated fees, and providing expedited services. By changing zoning, parking, or other regulations, local governments can designate specific zones for charging and clean fueling stations in residential and commercial areas. Policies can also be implemented to require new construction and major renovations to be EV-ready, future-proofing the infrastructure.</p>
<p><b><u>Middletown Climate Action Plan</u></b> (Middletown Township, Bucks County)</p>	<p>Revise the Township’s zoning ordinance to require EV charging stations in new commercial development and modify land development regulations to require new residential development be built to accommodate EV charging in garage and driveway areas. Include bicycle parking in Township’s parking requirements for retail establishments.</p>
<p><b><u>CONNECT Climate Action Plan</u></b> (Allegheny County municipalities)</p>	<p>Work with local planning commissions to prioritize smart growth policies and analyze current code for gaps, prioritize compact and Complete Streets development strategies in planning documents and land use ordinances, and reduce or eliminate parking minimums within zoning ordinances.</p>
<p><b><u>Camp Hill Climate Action Plan</u></b> (Camp Hill Borough, Cumberland County)</p>	<p>Develop building codes requiring 220V wiring be installed in any garage or other parking-specific property in new construction and renovations to facilitate EV charging station installation.</p>
<p><b><u>Borough of Indiana Climate Action Plan</u></b> (Indiana Borough, Indiana County)</p>	<p>Incorporate EV infrastructure requirements into development regulations to facilitate EV adoption and EV charging station installation.</p>
<p><b><u>City of Bethlehem, PA Climate Action Plan</u></b> (City of Bethlehem, Northampton County)</p>	<p>Review existing permitting and approval processes for new developments and determine how the processes can be altered to encourage walkability, bicycle parking, and transit accessibility. Revise building codes and zoning accordingly. Adjust city codes and zoning to expedite EV infrastructure.</p>
<p><b><u>City of Pittsburgh Climate Action Plan 3.0</u></b> (City of Pittsburgh, Allegheny County)</p>	<p>Prioritize pedestrian, cyclist, public transit, and carpool trips over SOV trips through zoning changes.</p>

# 9

## OUTREACH

Public education and outreach are a cornerstone in each of the CAPs reviewed. Municipalities are using their successes in switching to carbon reducing strategies to educate the public on what can be achieved and how to do so.

**Warrington Township** will use its experience in switching its light-duty vehicles to carbon-free fuels as a best practices. Successful implementation of the Township fleet transition to carbon-free fuels can show the public the value of switching to carbon-free vehicles.

**Narberth Borough** is effectively identifying practical solutions for citizens to switch to reduce GHG emissions and move to low-carbon transportation options. The **CANN** website, maintained by a Narberth residents, promotes the transition to 100% renewable energy by 2040. It provides practical solutions for Narberth residents to increase transit usage and walking and biking.

As part of its objective to decrease gasoline and diesel consumption by vehicles registered in the Township, **Haverford Township** (Delaware County) has developed a set of actions to encourage 'soft' infrastructure to support decreased time on road through communications and outreach. These actions require working with local employers and employees on creative ways to reduce VMT and include:

- Encouraging employers to consider **reducing mid-day break periods**, reducing multiple trips during the workday.
- Encouraging employees to continue limited **'Work at Home'** rotations.
- Developing a **public service announcement** for residents to plan just one trip to the grocery store per week to reduce trips.
- Encouraging employers to **promote a 'Walk to Work' day each week** to emphasize how walking not only reduces GHG emissions but improves health.
- Working with shopping center business owners to **determine spaces for transit or carpool parking** to be designated as reserved space in parking lots.





As part of its strategy to reduce GHG emissions, the [City of Meadville](#) in Crawford County proposes to implement a **City Commuter Education Program** to reduce commuting costs, improve health, and reduce parking. The program will research company commuting incentives and educate business owners about commuter choices. Meadville is also considering 'City Mobility Awards' to recognize outstanding efforts to develop cleaner alternative transportation.

The [City of Bethlehem](#) has a strategy and actions in its CAP to provide education to create a **culture of patience and respect among road users**. This includes educating adult bicyclists about best-practices for riding most effectively on City streets, educating motor vehicle drivers to expect people on bicycles to be riding on City streets, and educating children on bicycles to have a basic understanding of traffic rules and to practice with their parents.



# APPENDIX A - CAPS UNDER DEVELOPMENT



COUNTY	MUNICIPALITY
Allegheny	Elizabeth Township
Allegheny	O'Hara Township
Allegheny	Swissvale Borough
Allegheny	West Homestead Borough
Allegheny	Wilkins Township
Beaver	Aliquippa City
Beaver	Beaver Falls City
Beaver	Monaca Borough
Berks	Doylestown Borough
Berks	Doylestown Township
Berks	Reading City
Bucks	Warwick Township
Bucks	Warrington Township
Chester	Caln Township
Chester	East Fallowfield Township
Chester	Uwchlan Township
Chester	West Bradford Township
Cumberland	Wormleysburg Borough
Dauphin	Derry Township
Dauphin	Harrisburg
Dauphin	Susquehanna Township
Delaware	Chadds Ford Township
Delaware	Chester
Delaware	Rutledge Borough
Delaware	Upper Darby Township
Erie	Erie County
Erie	Erie City
Indiana	Armstrong Township
Lackawanna	Jermyn Borough
Lackawanna	Scranton City
Lehigh	Allentown
Lehigh	Lower Macungie Township
Luzerne	Luzerne County
Montgomery	Lower Merion Township
Northampton	Northampton Borough
Westmoreland	Monessen City
Pike County	Milford Borough
York	York City



SEPTEMBER 2024

# TRANSPORTATION STRATEGIES in Pennsylvania Climate Action Plans



**pennsylvania**  
DEPARTMENT OF TRANSPORTATION