



Pennsylvania
Department of Transportation

2026

ANNUAL REPORT




Transportation Advisory Committee
Pennsylvania Department of
Transportation
1/1/2026

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TABLE OF CONTENTS

A Message From The Chair _____	3
About The Transportation Advisory Committee _____	4
Transportation Advisory Committee Membership _____	5
Completed Studies Highlights _____	8
Transportation and Land Use Implications of E-Commerce _____	8
Pennsylvania in Motion - Transportation Workforce Study _____	12



Planning provides the vision to guide decisions and allocate resources to produce the outcome you desire.

— Jody Holton, AICP, TAC Chair

A Message From The Chair:

It is my honor to present you with the 2025 TAC Annual Report. In this report, you will read about the most recent TAC studies - Transportation and Land Use Implications of E-Commerce, and Pennsylvania in Motion - Transportation Workforce Study. Each study provides research and analysis on two significant trends - the increase in e-commerce and the waning transportation workforce. These studies look at the present and future needs of not just PennDOT, but of the transportation industry as a whole.

This year also saw lawmakers and PennDOT act on the recommendations in 2023's Expanding Truck Parking in Pennsylvania study with the addition of over 1,200 truck parking spots in 133 locations, leveraging existing Commonwealth property.

Maintaining and improving Pennsylvania's vast and diverse transportation can be difficult, but despite challenges my fellow committee members, staff, and I are excited and proud of what we have accomplished. I thank everyone personally for your time, commitment, dedication, and support over the past year.

I am honored to be in my ninth year as Chair of the TAC, and I am thankful for the contributions of each committee member, the Secretary, and PennDOT staff over these past years. As we move into 2026, I look forward to working alongside industry leaders, staff, and fellow committee members to identify and conduct impactful studies and make recommendations for improving transportation throughout Pennsylvania.



About The Transportation Advisory Committee

MISSION

To ensure Pennsylvania has the transportation infrastructure guidance to plan, develop, and maintain programs and technologies that will enhance current and future mobility, by advising and consulting the Pennsylvania State Transportation Commission (STC) and the Pennsylvania Secretary of Transportation on goals and allocation of available resources on behalf of all transportation modes.

VISION

The TAC will operate and collaborate effectively to provide the most valuable, modern guidance to the STC and the Secretary on behalf of all transportation modes. The guidance offered by the TAC will lead to a safe and sustainable transportation system for present and future generations.

RESPONSIBILITIES

The TAC may provide guidance to the STC and the Secretary of Transportation to determine the allocation of available resources between all transportation modes. The TAC may recommend and develop transportation related studies to inform the priorities of the STC with respect to the development of the 12-Year Transportation Program.

Transportation Advisory Committee Membership

Honorable Jody L. Holton, AICP, Chair
Assistant General Manager
SEPTA

Honorable Michael B. Carroll
Secretary
PA Department of Transportation

Honorable Stephen M. DeFrank
Chair
PA Public Utility Commission

Honorable Rick Siger
Secretary
PA Department of Community and
Economic Development

Honorable Akbar Hossain
Director of Planning and Policy
Office of the Governor

Honorable Jessica Shirley
Secretary
PA Department of Environmental
Protection

Honorable Russell Redding
Secretary
PA Department of Agriculture

Honorable Carrie Rowe
Acting Secretary
PA Department of Education

Honorable Wayne Langerholc, Jr.
Senate of Pennsylvania
Majority Chair of Senate Transportation
Comm.
Alt: Nolan R. Ritchie

Honorable Timothy P. Kearney
Senate of Pennsylvania
Transportation Comm.
Alt: Sam Arnold

Honorable Ed Neilson
PA House of Rep.
Majority Chair of House Transportation
Comm.
Alt: Kyle Wagonseller

Honorable Kerry Benninghoff
Pa House of Rep. Minority Chair of
House
Transportation Comm.
Alt: Jake Bausher

Mr. Michael A. Carroll, P.E.
Office of Transportation and
Infrastructure Systems
City of Philadelphia

Mr. Jeffrey Letwin
Saul Ewing, LLC
Allegheny County

Ms. Cathy Farrell
Montgomery County

Mr. Richard Barcaskey
Executive Director, Constructors
Association of Western Pennsylvania
Allegheny County

Mr. Mark Murawski, Vice Chair
Transportation Planner, Lycoming
County

Mr. John Pocius, P.E., PLS
LaBella Associates, Lackawanna
County

Mr. L. Ashley Porter, P.E.
Porter Consulting Engineers, P.C.
Crawford County

Mr. David Heath
BBP Solutions, LLC
Cumberland County

Mr. Robert Previdi
Policy Director, Save the Train
Philadelphia County

Mr. Alan Blahovec, CCTM
Executive Director, Westmoreland
County Transit Authority
Westmoreland County

Mr. Jeff Mercadante
Pitt Ohio
Allegheny County

Mr. Ryan Mulvey
PhilaPort (The Port of Philadelphia)
Bucks County

Mr. Larry J. Nulton, Ph.D.
Nulton Aviation Services, Inc.
Cambria County

Ms. Rebecca Oyler
Pennsylvania Motor Truck Association
Cumberland County

Mr. Ron G. Wagenmann
Manager, Upper Merion Township
(retired), Montgomery County

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Completed Studies Highlights

In the year 2023, the TAC completed two studies: *Addressing Municipal Challenges to Participating in Competitive Transportation Grant Programs* and *Expanding Truck Parking in Pennsylvania*.

Transportation and Land Use Implications of E-Commerce

The TAC approved the Transportation and Land Use Implications of E-Commerce study in February 2025.

Study Purpose

Pennsylvania's Transportation Advisory Committee (TAC) conducted the Transportation and Land Use Implications of E-Commerce study to analyze the impacts of increasing trends of E-Commerce on Pennsylvania roadways and provide guidance to local governments who shoulder much of the burden.



This study has been organized to:

- Help PennDOT and its partners, including Pennsylvania's metropolitan planning organizations and rural planning organizations (MPOs/RPOs), understand the trends, issues, and opportunities associated with ecommerce. Establish a framework for evaluating potential locations for truck parking.
- Offer insight as to how PennDOT, its regional planning partners, and policymakers could adapt practices in light of shifts in transportation needs.
- Encourage state, regional, and local governments—along with the private sector—to collaborate to address transportation and land use challenges and opportunities amid ever-changing technology and trends.

This timely study was directed by a Task Force comprising TAC members, PennDOT staff, and other industry stakeholders. The Task Force was chaired by Mr. Sam Arnold, Policy Director for Senator Tim Kearney.

Study Findings

Transportation Demand and Operations

- E-commerce trends, accelerated by the COVID-19 pandemic, have altered transportation demand in ways that need to be better understood.
- E-commerce seems to have a disproportionate impact on the local transportation system, while its overall impact on transportation across a regional scale appears to be minimal.
- E-commerce has implications for street operations and design, including in dense urban centers (e.g., double parking with congestion and safety risks).
- Few of the state's MPOs and RPOs have conducted specific studies or analyses related to e-commerce; however, many have regional freight plans and continue to monitor e-commerce.
- E-commerce facilities will likely require expanded public transportation access for workers.

Employment and Economic Development

- E-commerce generates substantial employment and economic benefits that need to be considered for balanced public policy affecting the industry.
- Warehousing and fulfillment center employment generally yields a greater economic benefit to regions than traditional retail employment.
- Major e-commerce companies pose competitive challenges for traditional small businesses and downtown vitality.

Land Use

- E-commerce has contributed to the decline of traditional retailing, the repurposing of malls and shopping centers, and increased development of fulfillment centers.

- Planning and zoning need to be modernized through a proactive, collaborative approach among public and private stakeholders.
- State government can provide general guidance and direction for local communities to plan for e-commerce facilities.

Technology

- Lack of reliable broadband Internet access limits participation in e-commerce by small businesses and potential consumers in many rural areas.
- E-commerce is driving technological innovations.
- It is unknown how autonomous vehicles, personal delivery devices, and other vehicle technologies will impact the transportation system in terms of goods movement as technology advances and e-commerce grows.

Data Needs

- The distinctions between traditional retail commerce and e-commerce are difficult to identify and measure, yet important to differentiate.
- Quantifying the various impacts and benefits of e-commerce would be a useful future assessment to help decision-makers and transportation professionals.

Revenue

- The package delivery fee proposed by the 2021 Pennsylvania Transportation Revenue Options Commission (TROC) is a potential revenue source, yet is not a comprehensive solution to the pressing transportation funding problem.

Recommendations:

Transportation Planning, Infrastructure, and Services

1. Policymakers should consider a package delivery fee to fund needed transportation infrastructure improvements.
2. Work with MPO/RPO regions to develop regional freight plans that include intermodal strategies for goods movement and emerging e-commerce considerations at a local level.
3. Address the public transportation needs for e-commerce workforce access.

4. Develop a needs assessment for e-commerce related to transportation infrastructure (particularly for the local network)

Land Use and Local Government Support

5. Develop and promote the use of an e-commerce planning and development guidance handbook.
6. Municipalities should amend zoning regulations, including incorporating loading.

Public-Private Sector Collaboration

7. Pursue ongoing relationships with e-commerce providers, including engagement in appropriate forums.
8. Incorporate e-commerce as part of the statewide emphasis on truck parking accommodation and staging areas, including related public-private coordination.
9. Work with e-commerce retailers and industrial developers to identify opportunities for new e-commerce development in town centers to support existing and new business establishments.
10. Explore locating e-commerce fulfillment centers on airport properties (which typically have available land, road access, and revenue challenges)

Data Collection and Analysis

11. Implement post-development traffic data collection programs for industrial sites to quantify the changing characteristics of site operations and deliveries as e-commerce continues to evolve.
12. Analyze the impact of brick-and-mortar losses on various tax revenue streams in relation to e-commerce tax revenue gains.
13. Develop capabilities and tools for economic analysis for transportation planning.
14. Produce a quantitative analysis of the various impacts and benefits of e-commerce.

Pennsylvania in Motion – Transportation Workforce Study

The TAC approved the Pennsylvania in Motion - Transportation Workforce Study in September 2025.

Study Purpose

There was a time when transportation employers had a large pool of qualified applicants to fill job openings. Now, many positions such as bus drivers and truck drivers remain unfilled, impacting the movement of both people and goods in



Pennsylvania. Turnover is also high in many occupations, and a significant proportion of the dedicated workforce has reached or is approaching retirement age. At the same time, trends such as an increasing senior population and sustained growth in e-commerce increase the need for transportation workers to ensure that infrastructure and services can meet demand.

Study Findings

The study findings confirm that the workforce challenges currently facing the transportation sector are serious and concerning. Stakeholders agree that if not addressed, the situation will worsen over the next five years. Many entities—public, private, and non-profit, including the Pennsylvania Department of Transportation (PennDOT)—have undertaken a range of successful initiatives to address aspects of the transportation workforce gap. Those efforts should continue. Achieving broader, more comprehensive results at the scale needed to address Pennsylvania’s transportation workforce challenges will require a Commonwealth-wide effort to foster further collaboration across transportation modes, state and local government, the private

sector, and other agencies, particularly those responsible for economic development and workforce.

Recommendation

Form a Transportation Workforce Collaboration Team comprised of public and private sector transportation employers to identify ways to maximize existing workforce programs to meet needs; and strategies to strengthen collaboration among workforce developmental partners. The team should build upon existing PennDOT initiatives but consider workforce development Commonwealth-wide.