



# Lehigh Valley Planning Commission

DR. CHRISTOPHER R. AMATO  
Chair

CHRISTINA V. MORGAN  
Vice Chair

ARMANDO MORITZ-CHAPELLIQUEN  
Treasurer

BECKY A. BRADLEY, AICP  
Executive Director

## TRANSPORTATION PLANNING COMMITTEE MEETING

Thursday, April 24, 2025, at 5:30 pm

### AGENDA

THE MEETING CAN BE ACCESSED AT <http://www.tinyurl.com/LVPC2025> OR VIA PHONE 610-477-5793 Conf ID: 651 626 091#.

#### Roll Call

#### Courtesy of the Floor

1. Staff Introduction
  - a. Chris Embert, Creative Manager

#### Old Business:

1. *INFORMATION ITEM*: Roadway Functional Classification System Update (FU, MG, SK)

#### New Business:

1. *INFORMATION ITEM*: National Electric Vehicle Infrastructure (NEVI) Planning (EG)
  - a. Workshop #1: Wednesday, May 21st at 9:00 AM during LVTS Technical Committee Meeting
  - b. Workshop #2: Thursday, May 22nd at 12:00 PM
  - c. Workshop #3: Thursday, May 22nd at 5:30 PM during LVPC Transportation Committee

#### Status Reports

1. *INFORMATION ITEM*: 1<sup>st</sup> Quarter of 2025 Traffic Monitoring Report (BH)
2. *PACKET ITEM*: PennDOT Multimodal Transportation Fund (MTF) and Transportation Alternative Set-Aside (TASA) Projects Status Report

#### Adjournment

**Next Transportation Committee Meeting:**

May 22, 2025, at 5:30 pm



# Lehigh Valley Planning Commission

DR. CHRISTOPHER R. AMATO  
Chair

CHRISTINA V. MORGAN  
Vice Chair

ARMANDO MORITZ-CHAPELLIQUEN  
Treasurer

BECKY A. BRADLEY, AICP  
Executive Director

## MEMORANDUM

**DATE:** April 24, 2025  
**TO:** Lehigh Valley Planning Commission Transportation Committee  
**FROM:** Lehigh Valley Planning Commission  
**REGARDING:** Roadway Functional Classification System Update

One of the objectives of the Lehigh Valley Planning Commission (LVPC) is to meet requirements within the Unified Planning Work Program (UPWP) to update the region’s roadway functional classification network, and to promote efficient transportation system management and operation. Functional road classification is the process by which roads are grouped into classes according to the character of service they are intended to provide and are designed to categorize segments based on their functional importance within the Transportation Network. Roads serve two primary functions: providing mobility for through-traffic or offering access to local parcels. Mobility is typically achieved by arterial roads and the interstate/freeway system, allowing higher speeds and efficient traffic flow. In contrast, local roads provide access to adjacent land through lower-speed, lower-volume traffic. Between these two are collector roads, which combine mobility and access, linking local roads with arterial routes. The classification is based on whether a road emphasizes mobility, access, or a combination of both. There are 7 functional road classifications within the transportation network. These are Interstate, Other Freeways and Expressways, Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector, and Local. The authority to establish the highway functional classification is set forth in Section 105(b) of 23 CFR 470.

Functional classifications are used in a multitude of manners, ranging from planning to highway design to funding. These classifications of roads are utilized in the prioritization and programming of projects. These classifications also define road roles, design expectations (speed and capacity), funding eligibility, and benchmarks for performance monitoring. Traffic safety programs that identify and mitigate crashes utilize functional classifications. Lastly, updating functional classification ensures that Federal funds are allocated where most needed.

The functional classification of roadways should be reviewed and updated as needed or at least every 10 years. The update should coincide with the release of the decennial census data. The U.S. Census Bureau, every 10 years, reestablishes the urban area boundary based on population density. Classifications should also be updated more regularly based upon changes to growth in population, employment, households, and land use. Fast growing areas, such as the Lehigh Valley, could justify updating classifications every three to four years based upon its historically consistent population growth rates and more recent robust growth in warehousing/logistic centers.

Since the last review of road classification, both Lehigh and Northampton counties have experienced significant growth. Between 2015 and 2024, the approved residential units and non-residential square footage, have increased by 112% and 33.5% respectively, both leading to higher traffic volumes. In 2015, the total Daily Vehicle Miles Traveled (DVMT) of both counties was almost 13.9 million, whereas in 2023, the DVMT was almost 14.8 million. That means, the DVMT has increased by almost 1 million in both counties since 2015. The opening

of new traffic generators in the region has further increased demand on the road network. However, only one functional classification change took place in recent years. A 2.08-mile segment of the Route 309 corridor extending from State Route 22 to I-78 in South Whitehall Township, Lehigh County, was reclassified from a Principal Arterial to Other Freeway and Expressway in 2019. More recently, the functional classification of collector and arterial roads were assessed through Geographic Information System (GIS) queries based on the Annual Average Daily Traffic (AADT), to determine if they should be upgraded. Initial findings revealed that some roads have exceeded their current AADT threshold. These recent analyses, combined with continued population and economic growth, have made it imperative to update the functional classification in order to effectively manage congestion, maintain system efficiency, and enhance network cohesion and connectivity.

All public roads in Lehigh and Northampton counties must have a functional classification designation. When a functional classification update occurs in an area covered by a Metropolitan Planning Organization (MPO) such as Lehigh Valley Transportation Study (LVTS), coordination with the PennDOT Engineering District is required. A letter of concurrence from LVTS must accompany the request.

### **Functional Classification Update Methodology**

LVPC staff have been working on collecting, analyzing, and mapping data on planning for future developments, population and employment density, land uses, traffic volume, and significant traffic generators to propose changes to the functional classification of road networks within Lehigh Valley region.

The primary objective of functional classification system is to connect traffic generators (population centers, colleges and universities, shopping areas, etc.) with a roadway network that channelizes trips logically and efficiently. LVPC staff have followed the procedures from Section 4 of the Federal Highway Administration's (FHWA), "Highway Functional Classification Concepts, Criteria and Procedures 2023 edition" manual to determine the appropriate functional classification to connect traffic generators.

The LVPC staff have identified 88 key traffic generators, categorized into business districts, air, rail, bus, and truck terminals, regional shopping centers, colleges and universities, consolidated schools, hospital complexes, military bases, industrial and commercial centers, stadiums, fairgrounds, and parks, based on the guidance from FHWA's manual. Additionally, LANTA's Enhanced Bus Routes and layers from *FutureLV: The Regional Plan* (Metropolitan Transportation Plan), including centers and corridors, regional parks, preservation buffers, and development zones, have been incorporated into the map to enhance the identification of traffic generators. These generators are visually represented on the map using graduated symbols, with varying colors corresponding to their respective categories.

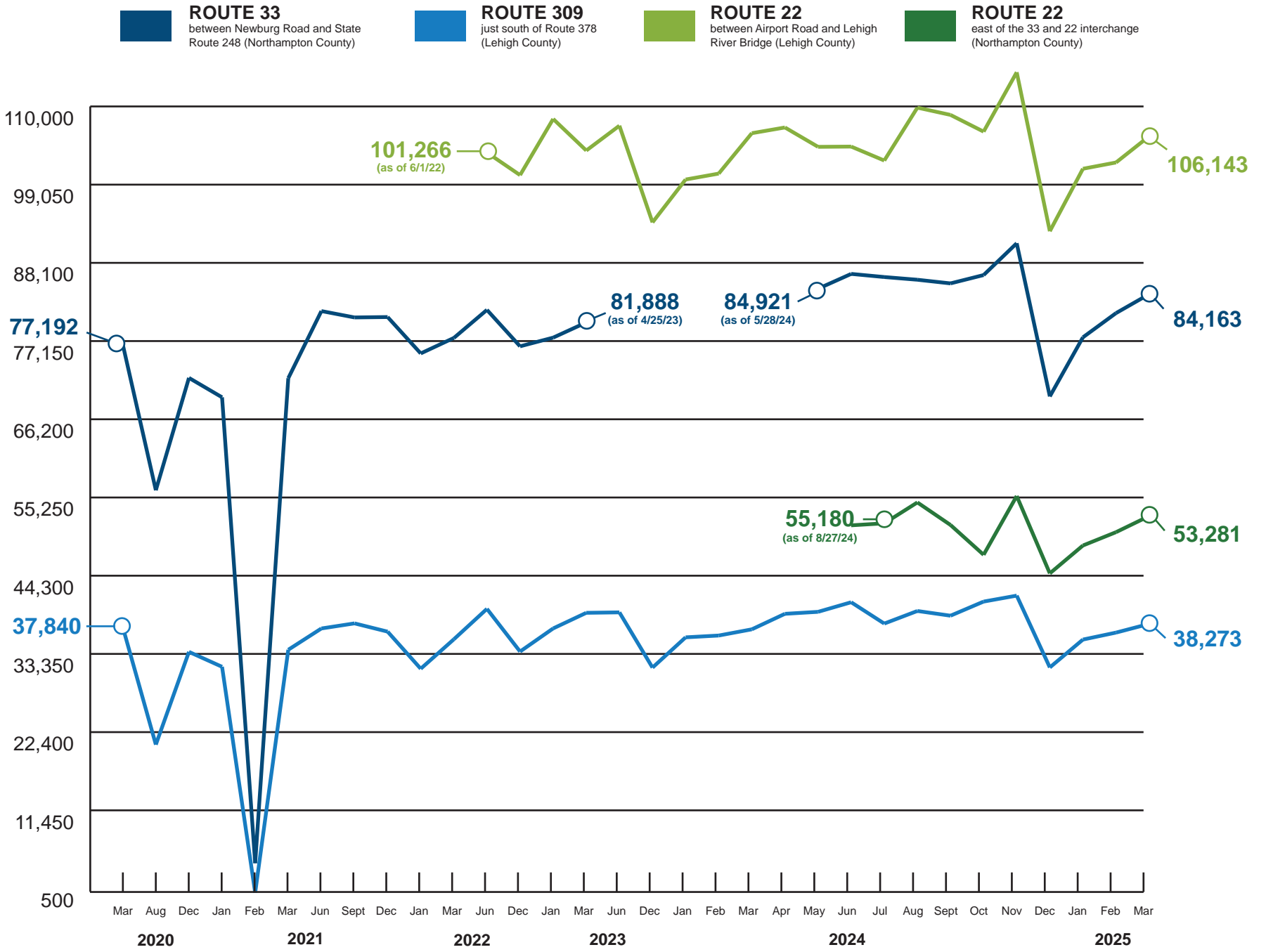
The LVPC Data Team created an internal ArcGIS Online "Muddy Map" or overlay analysis map tool used to view every dataset mentioned above that helped determine traffic generators or significant locations that have the potential to generate trips in the Lehigh Valley. When every GIS dataset is viewable, the darker or "muddy" locations indicate areas that have significant day-to-day activity. These findings were verified by mapping the high population areas and employment centers against the "muddy map".

Additionally, the LVPC Data Team analyzed Average Annual Daily Traffic (AADT) data and first compared the descriptive statistics (mean, median, mode) for traffic data from before and after the pandemic. This analysis helped validate the decision to use 2019 data, as it avoided skewed results from COVID-19-related traffic changes. A recent GIS query across all road corridors, based on AADT, was then conducted to assess the need for upgrades. Some roads were found to have reached the threshold for a higher functional classification. These roads, with increased AADT, have been identified as candidates for functional classification changes, as their current design no longer supports the existing traffic flow effectively and requires updates.

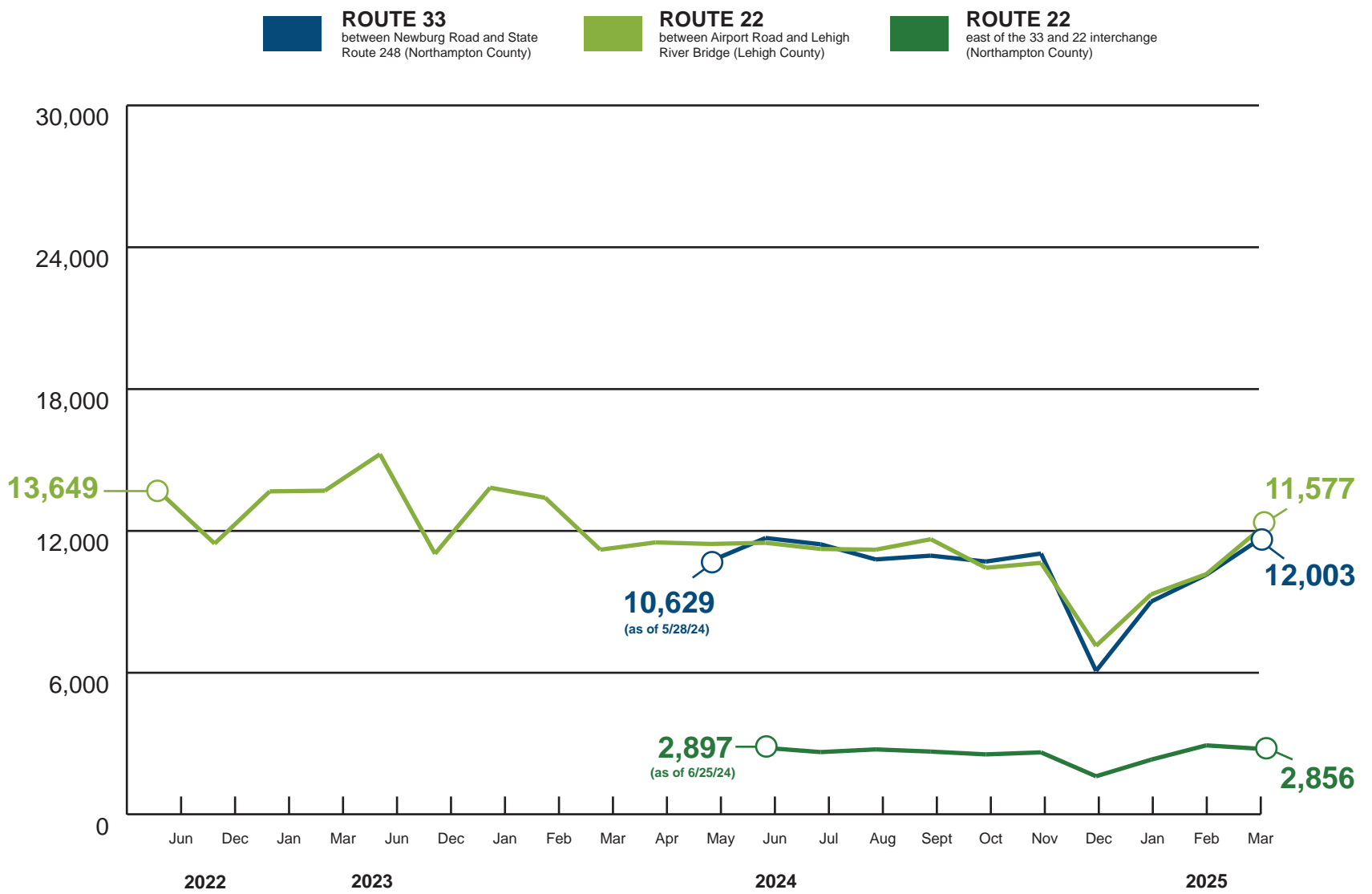
The team will next analyze the correlations between the traffic generators on the muddy map, and the roads that have exceeded their present AADT threshold qualitatively. Lastly, the data team has been working on updating the Transportation Safety Plan. Using PennDOT crash data from the current updates, LVPC staff will also qualitatively verify if locations needing safety improvements correlate with the roads that need functional classification updates. This would be an additional benchmark of important consideration for the potential upgrading or downgrading of functional classification. With this analysis, upon review of the existing Federal Functional Classification of State Routes, National Highway System status, predominant travel distance, and travel shed served, the LVTS will be presented with the initial list of roads that have the potential to be upgraded to the next functional classification.

Upon LVTS approval, this document will be sent to PennDOT District 5-0, Central Office and the FHWA for consideration to be upgraded or downgraded according to the initial analysis. The proposed changes are not final until they are approved by PennDOT and the FHWA.

# TOTAL VEHICLE TRAFFIC



# TOTAL TRUCK TRAFFIC





# Lehigh Valley Transportation Study

**RICHARD MOLCHANY**  
Chair, Coordinating Committee

**BRENDAN COTTER**  
Chair, Technical Committee

**BECKY A. BRADLEY, AICP**  
Secretary,  
Coordinating Committee +  
Technical Committee

## MEMORANDUM

**DATE:** April 7, 2025  
**TO:** Lehigh Valley Transportation Study  
**FROM:** Lehigh Valley Planning Commission

**REGARDING:** 1<sup>st</sup> Quarter of 2025, January to March Traffic Monitoring Report

This report covers traffic volumes and types of commercial trucks on roadways with active continuous traffic counters in operation in the Lehigh Valley during the 1<sup>st</sup> quarter of 2025 which comprises the months of January, February and March.

This data is a critical component of the Federal Highway Administration (FHWA) Highway Performance Monitoring System (HPMS) activities conducted by the Lehigh Valley Transportation Study (LVTS) and the Lehigh Valley Planning Commission (LVPC). Traffic data provides the basis for many transportation planning and programming purposes.

These are the continuous counters in operation and the associated data collected during the 1<sup>st</sup> quarter of 2025 with associated last Tuesday of the month data and any unusual variances provided.

- **Route 22 in Hanover Township** between Airport Road and Fullerton Avenue  
Exits:
  - January 101,618 vehicles including 9,254 commercial trucks
  - February 102,493 vehicles including 10,063 commercial trucks
  - March 106,143 vehicles including 11,577 commercial trucks
- **Route 33 in Lower Nazareth Township** between Newburg Road and Route 248  
Exits:
  - January 78,159 vehicles including 8,954 commercial trucks
  - February 81,532 vehicles including 10,087 commercial trucks
  - March 84,163 vehicles including 12,003 commercial trucks
- **Route 22 in Palmer Township** between Route 33 and the 25<sup>th</sup> Street Exits.
  - January 49,185 vehicles including 2,410 commercial trucks
  - February 51,042 vehicles including 3,001 commercial trucks
  - March 53,281 vehicles including 2,856 commercial trucks
- **Route 309 in Upper Saucon Township** between Fairmount Street and Passer Road
  - January 36,093 vehicles
  - February 37,064 vehicles
  - March 38,273 vehicles
    - *Note: the 309-traffic counter is unable to determine types of vehicles such as commercial trucks*

The 1<sup>st</sup> quarter of 2025 saw a return to normal seasonal traffic due primarily to travelling and commutes associated with the reactivation of employers and students coming off holiday time off. This is a normal trend associated with this time of year and is reflected through the steady increase to the end of the first quarter.

### **Comparison of the end of March 2024 to 2025 Traffic Volumes**

During the 1<sup>st</sup> quarter of 2025 the Lehigh Valley had 4 counters in operation whereas in the 1<sup>st</sup> quarter of 2024 there were 2 active continuous traffic counters in operation collecting data.

The counters active during 2024 and 2025 were on US Route 22 near the Lehigh River Bridge in Hanover Township and Route 309 in Upper Saucon Township. The other continuous traffic counters on US Route 22 in Palmer Township and PA Route 33 were not in operation during the 1<sup>st</sup> quarter of 2024 due to installation or maintenance of the counters.

- **Route 22 in Hanover Township** saw a slight decrease from 106,568 vehicles in 2024 to 106,143 vehicles recorded in 2025. Commercial trucks were at 11,101 in 2024 as compared to 11,557 trucks in 2025. There is a difference of 425 less vehicles overall and 476 more commercial vehicles (trucks).
- **Route 309 in Upper Saucon Township** reported an increase from 2024 of 37,518 vehicles to 38,273 in 2025. An increase of 756 overall vehicles.

Slight variances year to year are normal, these pattern changes can be because of deviations of normal commutes or congestion allowing people to navigate different routes from normal commutes. The quarterly report does highlight the anticipated volumes and types of trucks are consistent during this seasonal change of traffic. Another factor that may result in changes in traffic volumes is land development, employment centers changing operations due to outside factors such as supply chain interruptions, consumer demand and available resources. Overall, the numbers are consistent with patterns we expect to see from quarter to quarter and analysis of year to year.

Lehigh Valley Transportation Study  
Transportation Alternatives Set-Aside & Multimodal Transportation Funded Projects  
Meeting April 16, 2025

**Transportation Alternatives Set-Aside Projects**

**Two Rivers Trail Gap 9A South Section, Northampton County (C-C. Barry)**

**MPMS 119824 – est. let February 12, 2026**

- Project scope extension was approved to include south section
- Designer working on plan development and activities to obtain required clearances

**Bogert’s Bridge Rehabilitation, City of Allentown (C-C. Barry)**

**MPMS 118404 – est. let May 8, 2025**

- Letter of Amendment for additional TASA funds executed February 14, 2025
- Project advertised for bid March 25, 2025

**100 Steps Restoration Project, Borough of Slatington (C-C. Barry)**

**MPMS 118439 – est. let July 10, 2025**

- Sponsor evaluating if they want to continue with project

**Easton Pedestrian Safety Project Phase 3, City of Easton (C-C. Barry)**

**MPMS 118435 – est. let May 8, 2025**

- Lighting plans approved February 12, 2025
- Proprietary item request approved March 17, 2025
- Constructability review complete January 15, 2025
- PS&E in Contract Management review

**Community Bike Works, Community Bike Works (C-A. Wolfe)**

**MPMS 121551 –let October 24, 2024 (bike education project, no physical construction)**

- Coordinating with OCC for required custom reimbursement agreement draft

**Coopersburg Streetscape Phase 9, Borough of Coopersburg (C-C. Barry)**

**MPMS 121552 – est. let TBD**

- Plan development underway along with activities to obtain required clearances

**Allentown School Zone Traffic Safety Upgrades, City of Allentown (C-A. Wolfe)**

**MPMS 121550 – est. let TBD**

- Sponsor working on obtaining designer

**Lehigh Canal Abbott Street Bridge, City of Easton (C-A. Wolfe)**

**MPMS 121553 – est. let TBD**

- Sponsor obtained CDR Maguire for design
- Plan development underway along with activities to obtain required clearances



Lehigh Valley Transportation Study  
Transportation Alternatives Set-Aside & Multimodal Transportation Funded Projects  
Meeting April 16, 2025

**Multimodal Transportation Fund Projects**

**Main Street/SR 873 & Walnut Street Improvements, Slatington Borough (C-L. Montgomery)**  
**MPMS 113099 – est. let April 10, 2025**

- Project combined with the District’s Walnut Street Bridge project (MPMS 94680)
- ROW clearance received March 5, 2025
- TCP and temporary signal plans approved February 20, 2025
- Final structure plans approved March 18, 2025
- PS&E complete and project advertised March 19, 2025

**Iron Works Catasauqua Streetscape, Catasauqua Borough (C-C. Barry)**  
**MPMS 115798 – est. let TBD (paper let)**

- Sponsor has found development partner and hopes to begin advancing design efforts soon

**Wilson Borough Improvements, Wilson Borough (C-C. Barry)**  
**MPMS 115769 – est. let December 11, 2025 (paper let)**

- Sponsor continues working on ROW acquisition, condemnation will be needed

**Allentown 15<sup>th</sup> Street Traffic Signal Improvements, City of Allentown (C-C. Barry)**  
**MPMS 116846 – est. let TBD (paper let)**

- Plan development ongoing along with activities to obtain required ROW clearance

**S. Church and Hickory Street Connections, Borough of Macungie (C-C. Barry)**  
**MPMS 119779 – est. let December 11, 2025 (paper let)**

- Plan development ongoing along with activities to obtain required clearances

**Bethlehem Township Emergency Traffic Signal (C-C. Barry)**  
**MPMS TBD – est. let April 1, 2027 (paper let)**

- Environmental clearance received December 20, 2024
- Reimbursement agreement executed March 21, 2025
- Plan development ongoing along with activities to obtain required clearances

**Coplay Multimodal Street Improvements (C-C. Barry)**  
**MPMS TBD – est. let TBD (paper let)**

- Plan development underway along with activities to obtain required clearances

**Pearl Street Safety Improvements (C-C. Barry)**  
**MPMS TBD – est. let TBD (paper let)**

- Sponsor working to obtain designer

**King’s Route 309 Business Park Roundabout (C-C. Barry)**  
**MPMS TBD – est. let TBD**

- Environmental clearance received January 14, 2025
- Plan development underway along with activities to obtain required clearances
- Reimbursement agreement being drafted, awaiting evergreen note from sponsor

Lehigh Valley Transportation Study  
 Transportation Alternatives Set-Aside & Multimodal Transportation Funded Projects  
 Meeting April 16, 2025

<b><u>ACRONYM REFERENCE</u></b>	
ADA	AMERICAN WITH DISABILITIES ACT
CE	CATEGORICAL EXCLUSION
CEE	CATEGORICAL EXCLUSION EVALUATION
CO	CENTRAL OFFICE
CRP	CULTURAL RESOURCES PROFESSIONAL
DCNR	DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DEP	DEPARTMENT OF ENVIRONMENTAL PROTECTION
DO	DISTRICT OFFICE
E&S	EROSION AND SEDIMENTATION
FD	FINAL DESIGN
FHWA	FEDERAL HIGHWAY ADMINISTRATION
GP	GENERAL PERMIT
H&H	HYDROLOGIC AND HYDRAULIC
HOP	HIGHWAY OCCUPANCY PERMIT
HRSF	HISTORIC RESOURCE SURVEY FORM
MPMS	MULTIMODAL PROJECT MANAGEMENT SYSTEM
MPT	MAINTENANCE AND PROTECTION OF TRAFFIC
NOITE	NOTICE OF INTENT TO ENTER
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NTP	NOTICE TO PROCEED
PHMC	PA HISTORICAL AND MUSEUM COMMISSION
POA	POINT OF ACCESS
PS&E	PLANS, SPECIFICATIONS AND ESTIMATE
ROW	RIGHT OF WAY
RRFB	RECTANGULAR RAPID FLASHING BEACON
SHPO	STATE HISTORIC PRESERVATION OFFICE
SOI	STATEMENT OF INTEREST
SPMP	SIGNING AND PAVEMENT MARKING PLAN
SUE	SUBSURFACE UTILITY ENGINEERING
T&E	THREATENED AND ENDANGERED SPECIES COORDINATION
TBD	TO BE DETERMINED
TCP	TRAFFIC CONTROL PLAN
TIF	TECHNICALLY INFEASIBILITY FORM
TS&L	TYPE, SIZE AND LOCATION
USFWS	UNITED STATES FISH AND WILDLIFE SERVICE