
DRAFT


# Cambria County 2050

## LONG-RANGE TRANSPORTATION PLAN



Cambria County Metropolitan Planning Organization
Cambria County Planning Commission

401 Candlelight Drive, Suite 213
Ebensburg, PA 15931

Adopted June 11, 2024

ATTENTION: If you speak a language other than English, language assistance services can be made available to you.
Call 1 (570) 825-1589.

ATENCIÓN: Si habla otro idioma que no sea inglés, habrá servicios de asistencia en otros idiomas disponibles.
Llame al 1 (570) 825-1589.

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# Transportation Timeline

## 1800-1849

1804 – Cambria County established
1833 – Staple Bend Tunnel opens to raiil traffic
1836 – Pennsylvania Main Line Canal built

## 1850-1899

1854 – New Portage Tunnel and Allegheny Tunnel completed
1891 – Johnstown Inclined Plane opens

## 1900-1949

1904 – Gallitzin Tunnel completed
1915 – Johnstown train station constructed
1940 – County population peaks at 213,459
1948 – Johnstown Municipal Airport opens

## 1950-1999

1961 – Ebensburg Bypass opens
1965 – Johnstown Expressway/PA 56 opens
1970 – US 219 becomes an expressway-grade highway from Somerset to Ebensburg
1974 – Richland Mall opens
1976 – Cambria County Transit Authority (CCTA) begins operations
1984 – Modernized US 22 opens to traffic from Admiral Peary Highway to PA 764
1989 – Modernized US 219 opens to traffic from Ebensburg to Carrolltown interchange
1999 – Norfolk Southern (and CSX) acquire Conrail
1999 – CCTA becomes CamTran

## 2000-2049

2009 – Total daily vehicle-miles traveled (DVMT) drops below 3 million
2023 – 10,000 enplanements at Johnstown-Cambria County Airport
2026 – Second daily train on Amtrak's *Pennsylvanian* service anticipated

Major milestones in Cambria County's transportation history

# Cambria County Transportation by the Numbers

## LOCAL GOVERNMENTS

| 1 | + | 30 | + | 32 | = | 63 |
|---|---|---|---|---|---|---|
| City | | Townships | | Boroughs | | Municipalities |

## DEMOGRAPHICS

| 134,048 | 54,900 |
|---|---|
| Total Population (2021) | Labor Force |
| **30,111 (22.5%)** | **11%** |
| Senior Population | Households with No Access to a Vehicle |

## PLANNING TOOLS

| 22 |
|---|
| Municipalities with a Comprehensive Plan |
| **21** |
| Municipalities with a Zoning Ordinance |
| **22** |
| Municipalities with a Planning Commission |

## ROADS AND BRIDGES

**87**
Local Bridges (>20 feet long)

**15 (17.2%)**
Poor-Condition Local Bridges by Count

**333**
State Bridges (>8 feet long)

**11 (3.3%)**
Poor-Condition State Bridges by Count

**1,742**
Linear Miles of Roadway

**2,766,599**
Daily Vehicle-Miles Traveled (2022)

## ROADWAY SAFETY

**1,065**
Average Annual Roadway Crashes (2018-2022)

**9**
Average Annual Roadway Fatalities (2018-2022)

## MULTIMODAL

**1**
Transit System

**2**
Public-Use Airports

**150**
Miles of Railroad

**15,009**
Amtrak Ridership at Johnstown (2022)

**185**
Miles of Trails

## EMERGING TECHNOLOGY

**122**
Registered Electric Vehicles (2022)


# Table of Contents

# Geographical Position

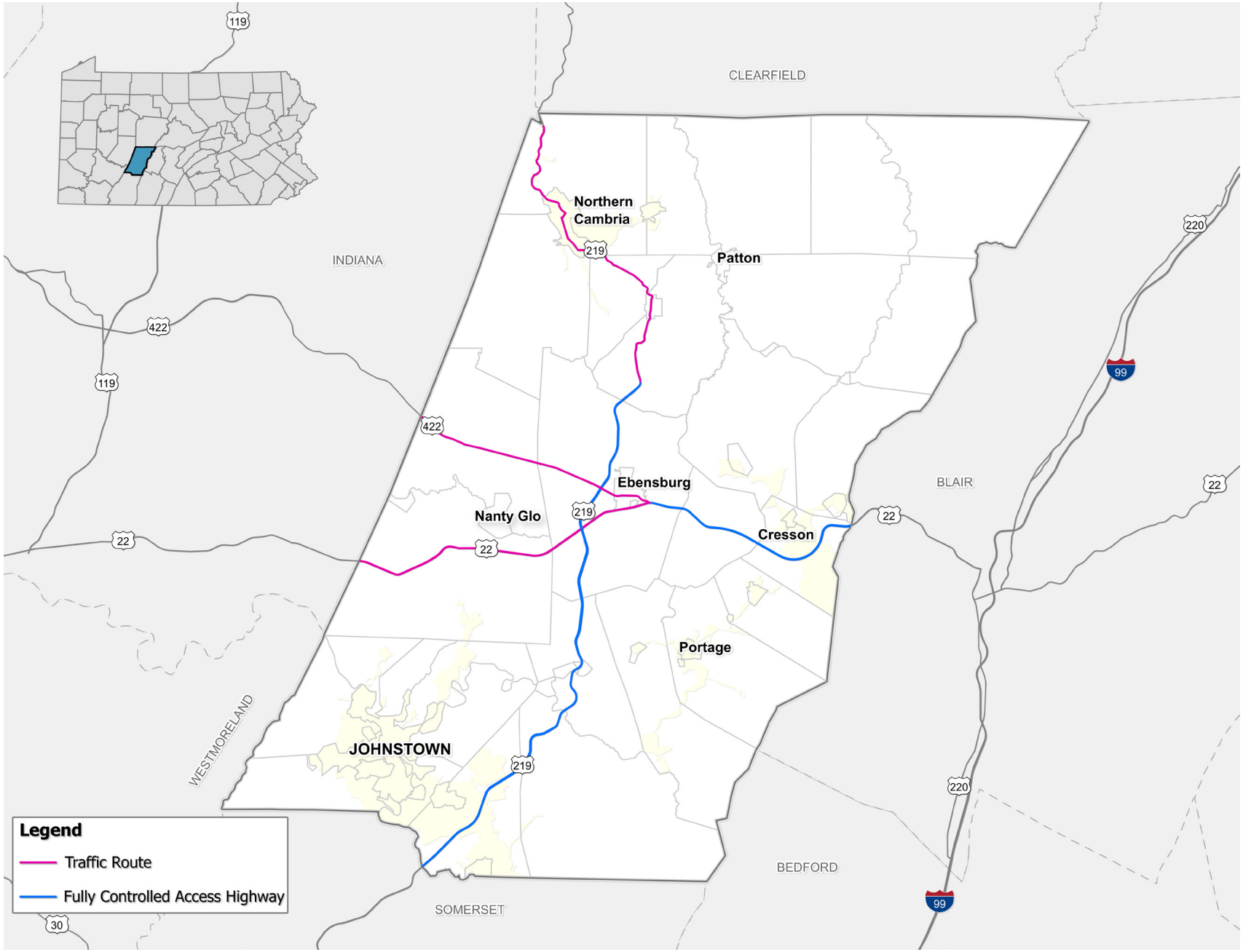
## Overview

- Cambria County is located within Pennsylvania's Laurel Highlands region. It is 688 square miles in size and also within the national Appalachian Region.
- The county is located on the eastern border of the Appalachian Plateau and the Allegheny Front, an abrupt 1,500-foot-high escarpment (cliff) that has historically been an obstacle to east–west movement through the county.
- Historically, the rugged topography of the Appalachian Plateau has not been conducive to road-building. Roads and other development within Cambria County have been concentrated around natural resources such as coal. Other areas of the county are isolated and typically sparsely populated.
- The county encompasses 63 total municipalities: 30 townships, 32 boroughs, and one city.
- Johnstown, the county's principal city, is located 67 miles east of Pittsburgh in Allegheny County, Cambria's major economic trading center. The Cambria County seat of Ebensburg is located near the county's geographic center.
- The Eastern Continental Divide splits the county. Its main drainages include the Conemaugh River and the West Branch of the Susquehanna River, which begins just outside of Carrolltown Borough. The county has two major watershed basins: its northern half drains into the Susquehanna River, while the southern half drains into the Ohio River.

## Planning Implications

- The county's position within the Appalachian Region makes it eligible to receive federal funding from the Appalachian Regional Commission (ARC).
- Transportation plays a vital role in attracting business and investment. The role of rail freight and aviation service becomes heightened in a county that features rugged topography and lacks Interstate highways.
- The county's position at the headwaters of major rivers means that its bridges are generally shorter than in other areas. The average state-owned bridge in Cambria County is 86 feet long, as opposed to the state average of 95 feet.
- Of the 67 counties in Pennsylvania, Cambria County ranks 26th-highest in total population. The average population per municipality in Cambria is 2,119, whereas statewide it is 5,063. Lower population may impact the feasibility of certain transportation modes, making it challenging to justify the investment in more advanced transportation systems.

## Figure 1: Cambria County Geographical Position



# LRTP Purpose

The long-range transportation plan (LRTP) establishes goals and potential projects to improve the transportation system in Cambria County, consistent with the county's overall vision. The LRTP considers a 25-year planning horizon and provides a framework for making transportation decisions that will support the county's desired future.

Specifically, the LRTP inventories and assesses the county's current land use, transportation patterns, and operations of all transportation modes, and identifies needed improvements to the multimodal transportation system—highway/bridge, rail, air, transit, bicycle, and pedestrian facilities—to facilitate a desired long-term outcome.

The LRTP is guided by the Cambria County Metropolitan Planning Organization (MPO) and serves several key functions, including:

- Guiding the MPO's decisions on project prioritization for the Transportation Improvement Program (TIP);
- Advising the county's municipalities on local and regional planning decisions that impact transportation;
- Fulfilling federal and state transportation laws and regulations; and
- Reflecting the needs and priorities of Cambria County's residents, visitors, and businesses.

## What Is a Metropolitan Planning Organization?

An MPO is a transportation policy-making body comprising representatives of local government and transportation agencies that own, operate, and fund transportation infrastructure. Federal law requires the formation of an MPO in any urbanized area with a population greater than 50,000. MPOs ensure that decisions and spending on transportation projects and programs are based on a "continuing, comprehensive, and cooperative" (3C) planning process that reflects the needs and priorities of the county. MPOs administer federal and state funding for transportation projects and programs, consistent with the county's approved LRTP.

## Why Develop an LRTP for Cambria County?

Developing and regularly updating an LRTP is a prerequisite to receiving federal transportation funding. Further, it helps ensure that transportation investment decisions are made strategically and considered in light of their long-term effect on the county.

Transportation decisions profoundly shape the county's direction and growth. An LRTP helps determine what improvements are needed to guide the county in a cohesive, agreed-upon direction for the future. Without this solid direction, growth would occur in an unplanned and incremental manner, likely to the detriment of what makes Cambria County a great place to live, work, or visit.

# Demographics

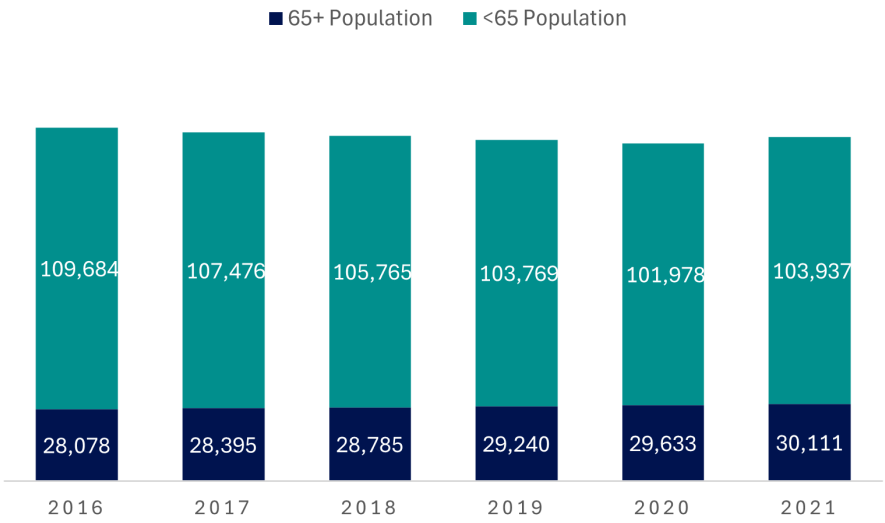
## Overview

- In 2020, Cambria County had a population of 131,611. Over the preceding decade, the county experienced a population decline of more than 10,000 (7.1 percent). Data from the American Community Survey (ACS) in 2021 put the county's population at 134,048 (Figure 2). For the decade ending 2020, the county ranked eighth statewide in the rate of population decline, and second by absolute number, behind neighboring Westmoreland County. The county comprises the Johnstown Metropolitan Statistical Area (MSA).
- The City of Johnstown is the principal city of the Johnstown-Somerset Combined Statistical Area (CSA), which includes both Cambria and Somerset counties. The 2022 population of the CSA was 204,151. As the region's core urban center, Johnstown had a 2020 population of 18,411, while 2022 ACS data estimate the city's population to be 18,091.
- The average population change from 2010 to 2020 for Cambria County municipalities was negative 6 percent. While many communities within the county have experienced population declines, several boroughs recorded gains. These include Carrolltown (23.2 percent increase), Vinco (13.9 percent), and Cassandra (10.2 percent).
- Population projections from the economic and demographic forecasting firm Woods and Poole estimate that Cambria County's population will decline to 103,275 by the LRTP's forecast year of 2050 (Figure 3).
- The county's total population aged 65 and older is expected to remain steady between 2020 and 2050, at approximately 30,500 persons. Coupled with the decline in the overall population, this age demographic's share of the total population is expected to increase from a 2020 share of 24 percent to 29 percent by 2050.
- Median age in Cambria County was 45.5 in 2021, substantially higher than the state median age of 40.9 years. By 2050, the median age within the county is expected to reach 47.8 years.

## Planning Implications

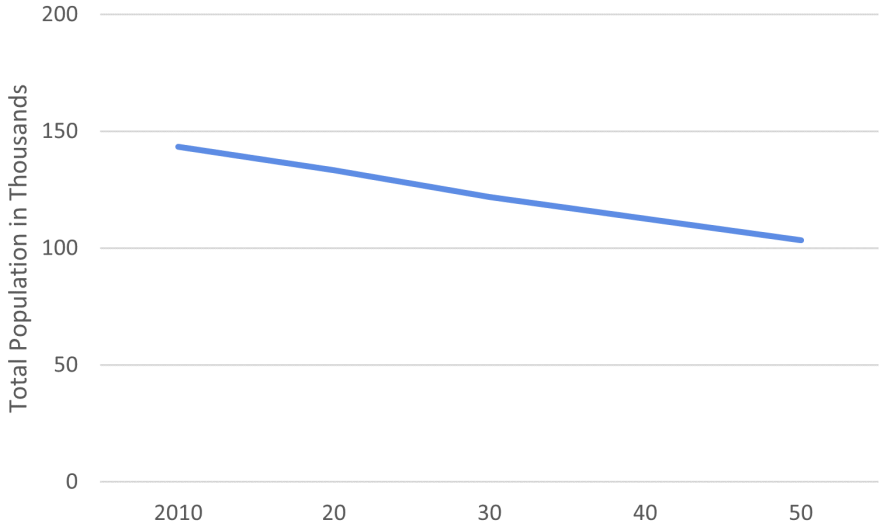
- The decline of the county's total population has ramifications that include reduced demand for transportation. Maintaining existing infrastructure will be a greater focus than expanding capacity. With fewer riders, ensuring financial sustainability for public transportation systems will be an ongoing challenge.
- The MPO will need to adapt its transportation strategies to be responsive to changing demographic trends in serving the remaining population effectively. The LRTP considers the potential shifts in transportation needs and the broader socio-economic impacts of a shrinking population.

### Figure 2: Cambria County ACS 5-Year Population Estimates, 2016–2021



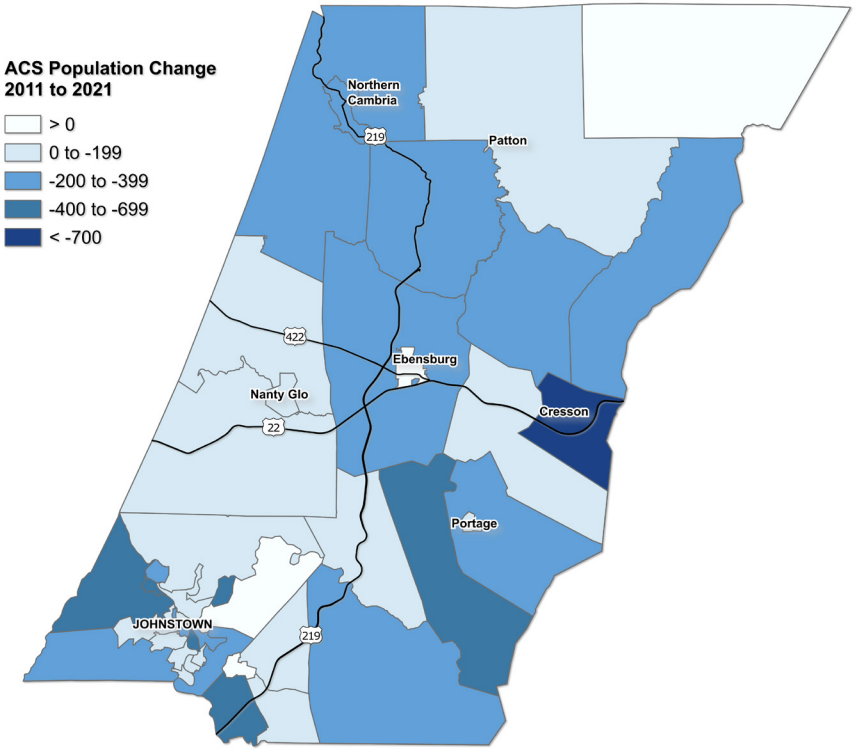

Source: U.S. Census Bureau

### Figure 3: Historical and Forecasted Population




Source: Woods & Poole

### Figure 4: Cambria County ACS 5-Year Estimate Population Change 2011 to 2021




Since peaking at 213,459 in 1940, the county's population has steadily declined. This trend is expected to continue to the plan horizon year of 2050.

Note that Cresson Township experienced a significant population decline between 2011 and 2021, mainly due to the closure of the Cresson State Correctional Institution in 2013.

# Socioeconomics

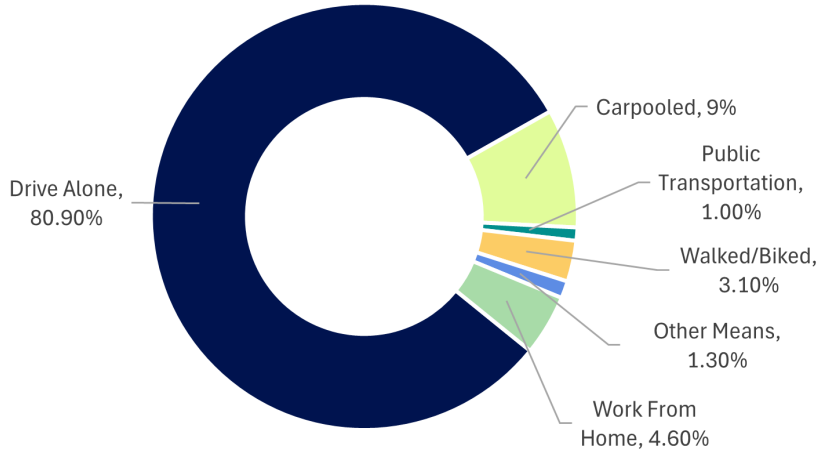
## Overview

- Between 2018 and 2022, Cambria County's total job count declined by 3,725—a 6.4 percent decrease.
- As of November 2023, the county had a labor force of 54,900. Woods and Poole forecasts indicate the county's total employment may reach 67,853 by 2050.
- Cambria County's unemployment rate as of November 2023 was 4.4 percent, which is approximately one percentage point higher (worse) than that of the state as a whole.
- The county's largest industry is Health Care and Social Assistance, which constitutes 23.3 percent of employment. It is followed by Retail Trade (11.8 percent), Manufacturing (8.7 percent), and Educational Services (8.6 percent). These, along with the other NAICS industry sectors, are shown in Figure 9.
- The county's top 10 employers (according to the PA Work Stats) are:
  1. DLP Conemaugh Memorial Medical Center, LLC
  2. State Government
  3. Federal Government
  4. Wal-Mart Associates, Inc.
  5. Cambria County
  6. Saint Francis University
  7. DLP Conemaugh Physician Practices
  8. Sheetz, Inc.
  9. Lockheed Martin AeroParts, Inc.
  10. McAneny Brothers, Inc.
- Location Quotient (LQ) is a metric that compares an industry's share of local employment to its share at the state level. An LQ greater than one indicates that an industry is a driver of local economic growth. In Cambria County, industries such as Utilities, Public Administration, and Retail Trade are key economic drivers based on this metric (Figure 7).
- More than half of the county's resident workers are also employed within the county (Figure 11). Nearly half of the county's resident workers commute less than 10 miles to work while more than one in five commutes more than 50 miles.
- Cambria County imports 16 percent of its workforce from neighboring Somerset County.
- Cambria County exports 10 percent of its workforce to neighboring Blair County.
- Approximately 20 percent of all jobs in the county are located in the City of Johnstown.

## Planning Implications

- The county has a diverse employment base. With Health Care as the county's largest employment sector, the industry may be defined by more regular schedules, while retail employees might have more varied shifts, influencing transportation patterns. Journey-to-work trips represent an ever-decreasing share of all trip-making, yet it is important for the MPO to monitor changes in these travel patterns in support of the county's economy.

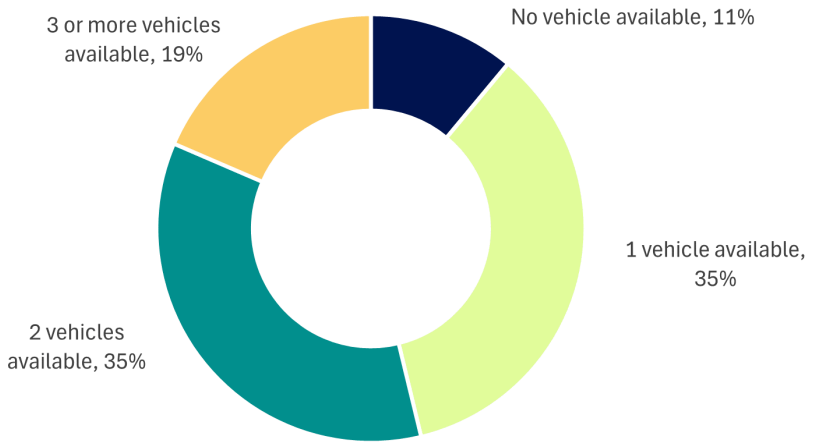
**Figure 5: Journey to Work, 2020**




Source: U.S. Census Bureau

More than four in five of the county's workers drive alone to work, underscoring the county's reliance on the private automobile.

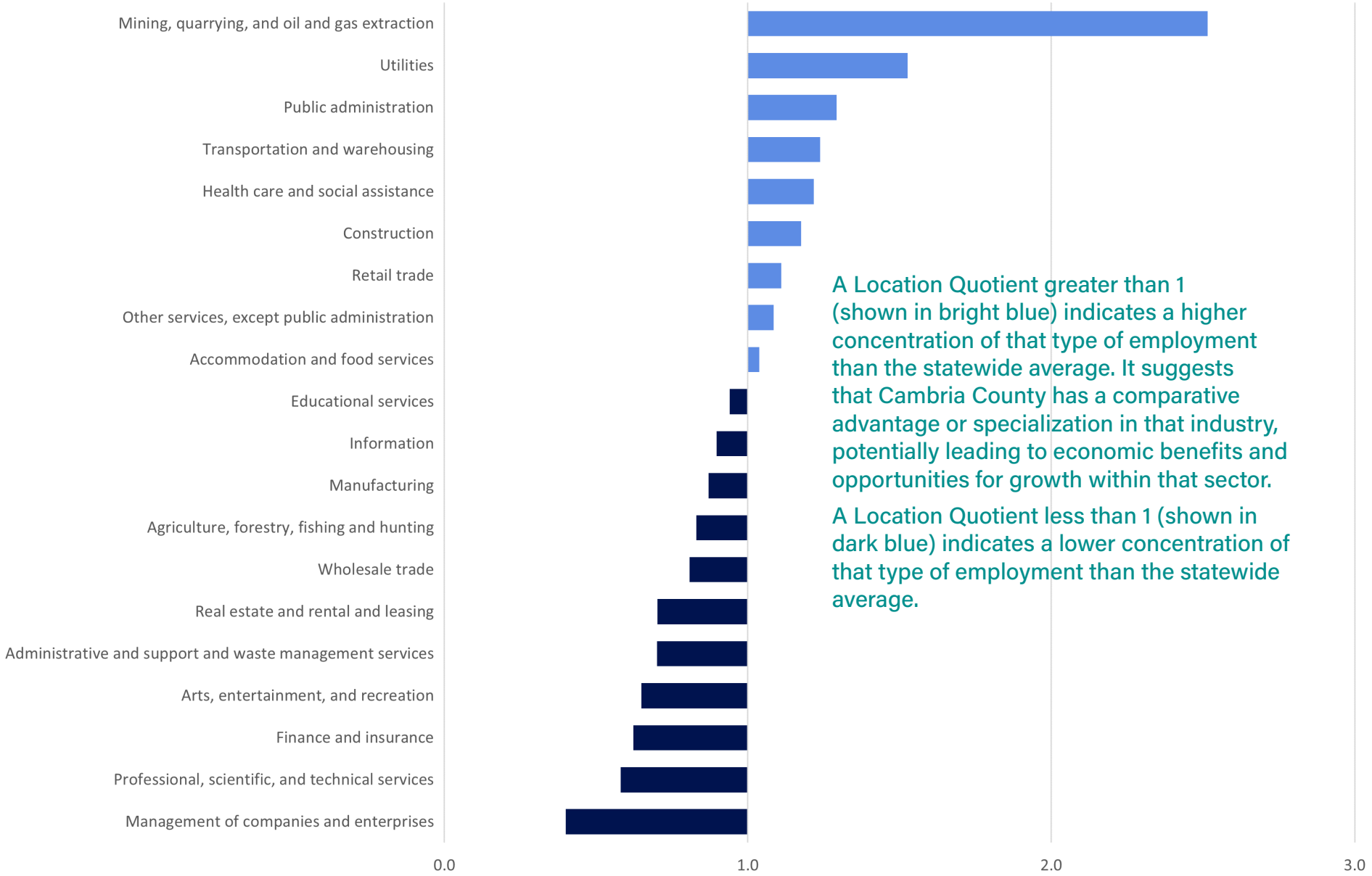
**Figure 6: Household Vehicle Access, Cambria County, 2020**




Source: U.S. Census Bureau

More than 10 percent of the county's households have no access to a vehicle, implying a higher dependency on public transportation, walking, or alternative modes of transportation to access essential services and job opportunities.

## Figure 7: Employment by Location Quotient, 2020

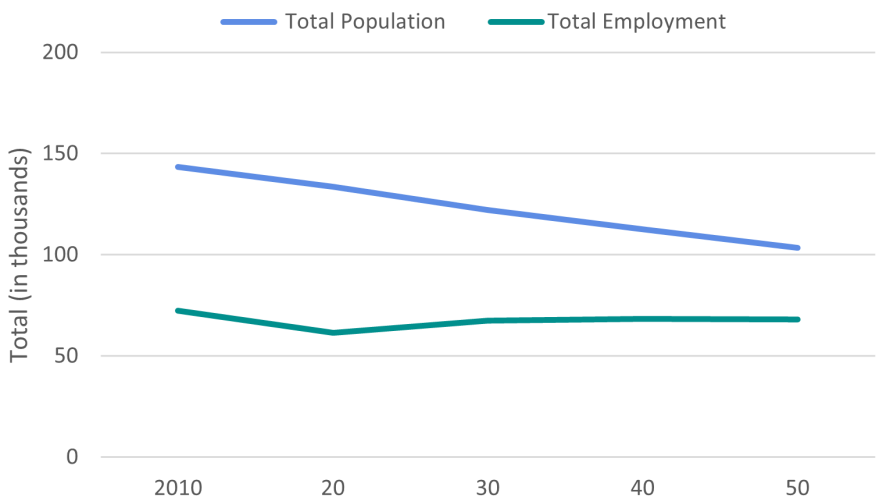



A Location Quotient greater than 1 (shown in bright blue) indicates a higher concentration of that type of employment than the statewide average. It suggests that Cambria County has a comparative advantage or specialization in that industry, potentially leading to economic benefits and opportunities for growth within that sector.

A Location Quotient less than 1 (shown in dark blue) indicates a lower concentration of that type of employment than the statewide average.

Source: ACS 5-Year Averages

**Figure 8: Employment Projections**



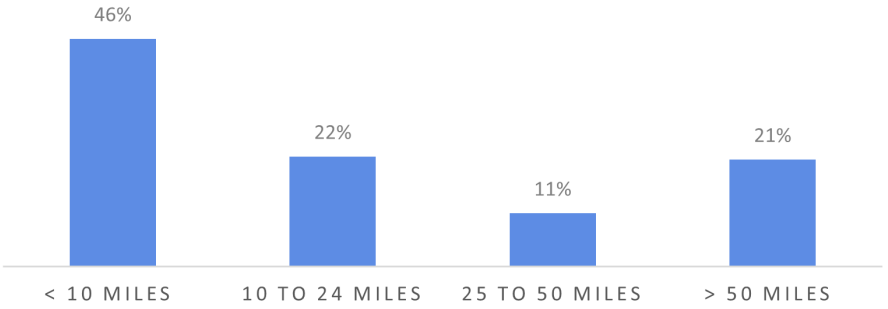

Source: Woods and Poole

**Figure 9: Percent Employment by Industry, 2021**

| NAICS Industry Sector | Count | Share |
|---|---|---|
| Health Care and Social Assistance | 12,170 | 23.2% |
| Retail Trade | 6,205 | 11.8% |
| Manufacturing | 4,541 | 8.7% |
| Educational Services | 4,496 | 8.6% |
| Accommodation and Food Services | 3,489 | 6.6% |
| Public Administration | 2,760 | 5.3% |
| Transportation and Warehousing | 2,536 | 4.8% |
| Construction | 2,477 | 4.7% |
| Administration & Support, Waste Management and Remediation | 2,352 | 4.5% |
| Professional, Scientific, and Technical Services | 2,220 | 4.2% |
| Other Services (excluding Public Administration) | 2,092 | 4.0% |
| Wholesale Trade | 1,885 | 3.6% |
| Finance and Insurance | 1,830 | 3.5% |
| Information | 823 | 1.6% |
| Management of Companies and Enterprises | 644 | 1.2% |
| Utilities | 530 | 1.0% |
| Real Estate and Rental and Leasing | 469 | 0.9% |
| Arts, Entertainment, and Recreation | 410 | 0.8% |
| Mining, Quarrying, and Oil and Gas Extraction | 402 | 0.8% |
| Agriculture, Forestry, Fishing and Hunting | 165 | 0.3% |

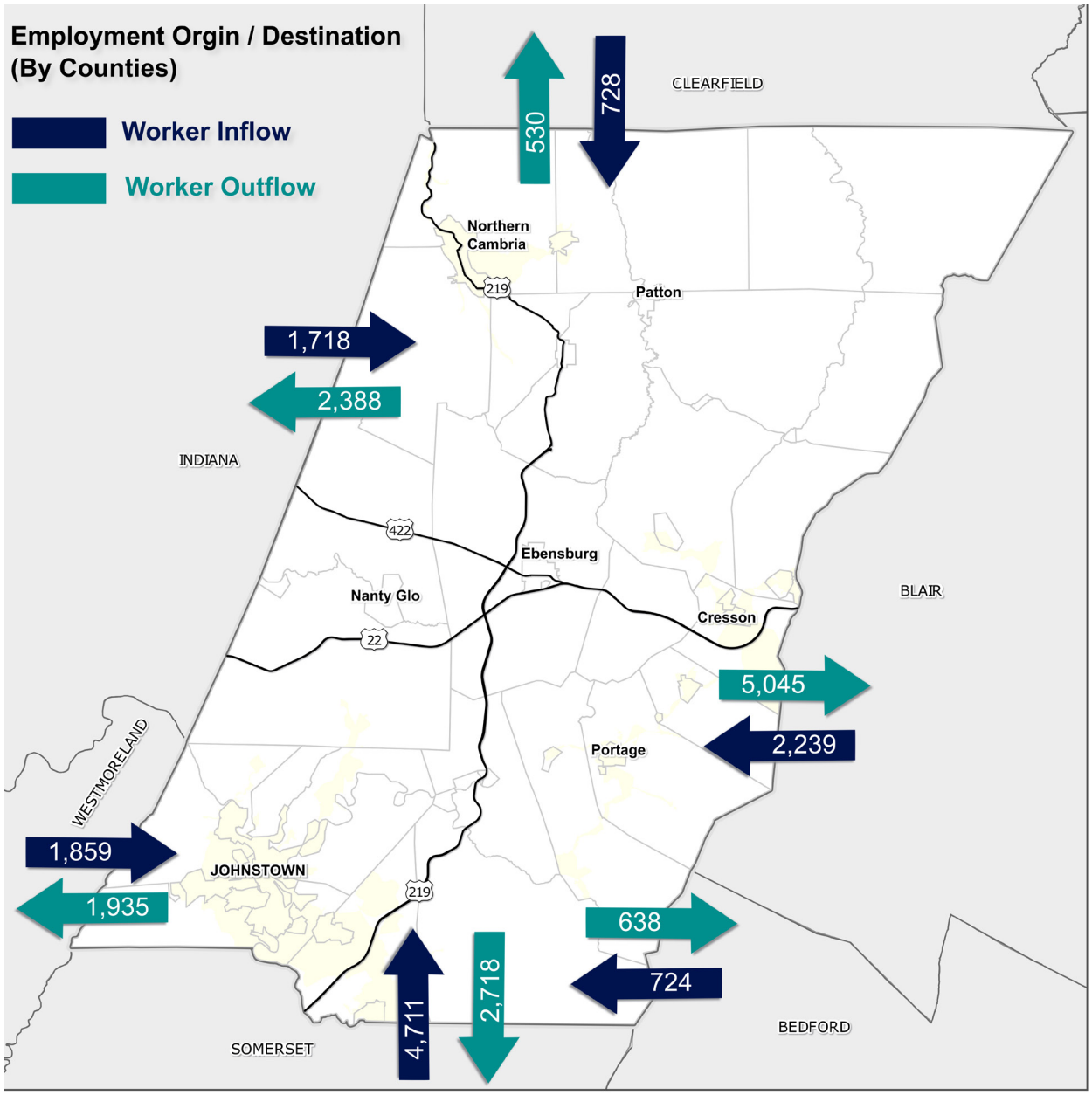
Source: U.S. Census Bureau

**Figure 10: Commuting Distance**




Source: U.S. Census Bureau

Figure 11: Worker Inflow/Outflow, 2020




Source: U.S. Census Bureau


# Roadway Network

## Overview

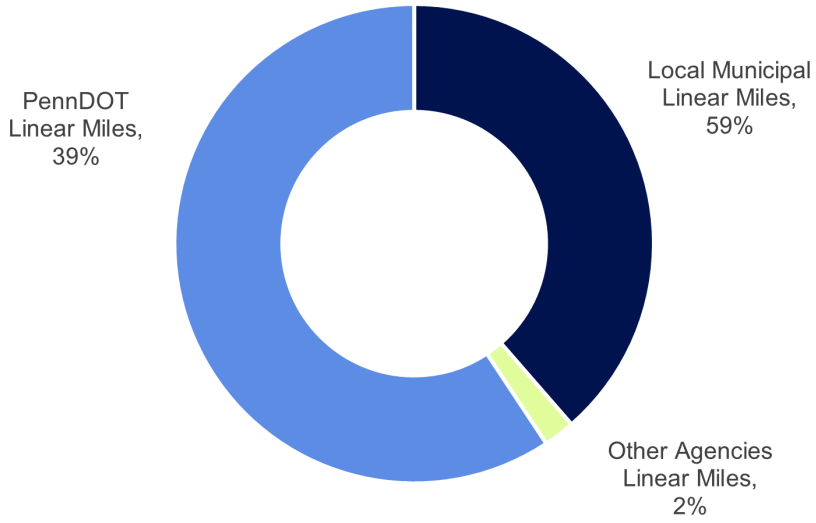
- Cambria County's roadway network comprises nearly 1,742 linear miles of roadway. Of this total, only 472.6 miles are on the Federal-Aid System.
- After a brief decline during 2020 related to COVID-19 closures, the demand for travel on the county's roadways has returned and even surpassed pre-pandemic levels. The county's road network carries an average of 2.7 million vehicle-miles, daily (Figure 14). An overwhelming majority of this travel (83 percent) occurs on the state system.
- Congress established the National Highway System (NHS) in 1995 to designate highways that are a vital priority for the nation's economy, defense, and mobility. Within Cambria County, this network originally included major roadways such as US 22, US 219, US 422, and PA 56. In later years, additional roadways were added, such as PA 403 and PA 271 through the Johnstown Urbanized Area (Figure 15).
- Cambria County is one of 19 counties in Pennsylvania that is not directly served by the national Interstate Highway System (Figure 16). It is by far the most populous county in the state with this distinction. The MPO is exploring Interstate designation for the US 219 corridor.
- Travel in the county (53 percent) occurs heavily on its principal arterials such as US 22, US 219, and US 422.
- The MPO has worked with PennDOT and FHWA to designate and certify corridors as Critical Urban Freight Corridors (CUFCs) and Critical Rural Freight Corridors (CRFCs). These include US 219 from the Somerset County line north to its interchange with Galleria Drive, and PA 56 from its interchange with US 219 west to Coopersdale. These roadways are eligible for federal funding under the National Highway Freight Program (NHFP).
- There are two Cambria County roadways designated as Intermodal Connectors: PA 756 from its interchange with US 219 to the eastern limit of the Johnstown Urbanized Area in Richland Township, and Macridge Avenue from PA 756 to Eisenhower Boulevard.
- There are 25.8 miles of locally owned, federal-aid-eligible roadways in the county (Figure 16). Examples include Ash Street and Southmont Boulevard.
- There are no County-owned roadways or Byways in Cambria County.

## Planning Implications

- Cambria County has a large roadway network that serves as the backbone of its transportation system. Network planning is vital to ensure that the county's roadways are eligible for state and federal funding programs that are targeted toward roadways with designations.
- Despite ongoing population declines, there remains a strong demand for transportation with Cambria County, as evidenced by DVMT data from PennDOT (Figure 14).

PennDOT owns 39 percent of all linear miles of roadway within the county. Statewide, the rate of PennDOT ownership is 33 percent.

**Figure 12: Roadway Linear Miles by Ownership, 2022**




Source: Pennsylvania Highway Statistics

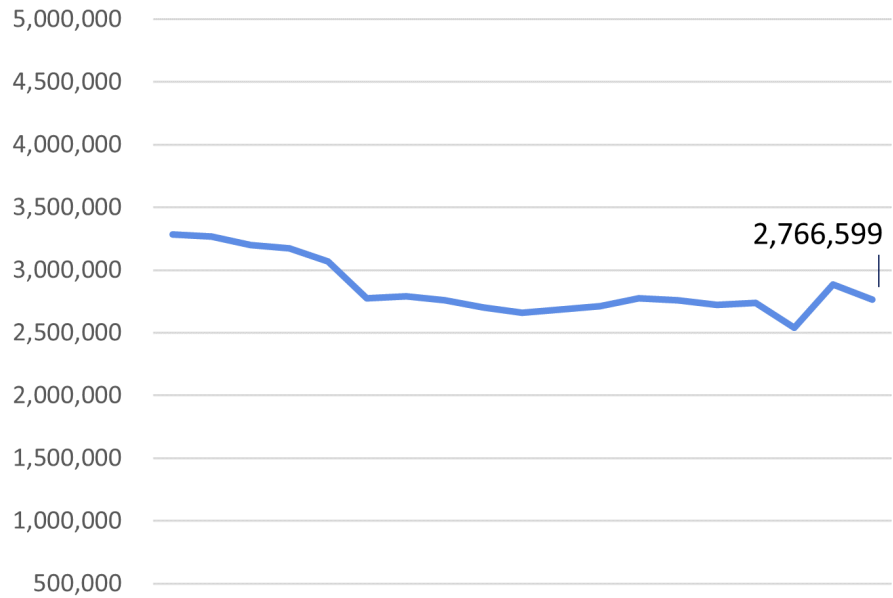
**Figure 13: Linear Miles by Ownership, 2022**

| Entity | Miles of Roadway Owned |
|---|---|
| PennDOT | 672.45 |
| Other Agencies* | 36.65 |
| Local Municipal | 1,032.81 |

*Includes state and federal miles owned
Source: Pennsylvania Highway Statistics

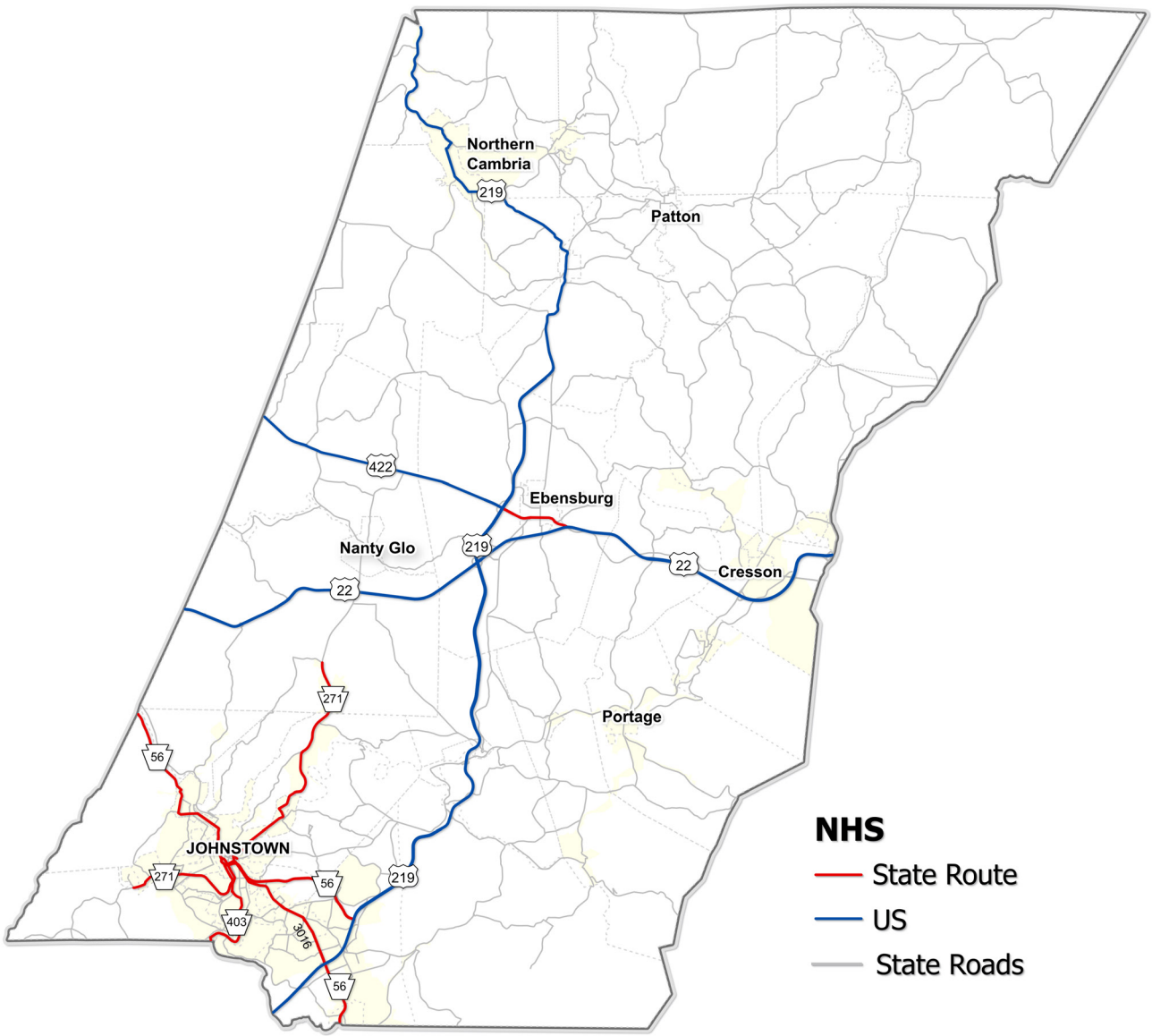
The demand for travel on the county's roadways has continued to decline over the longer term. This is a function of a declining population, and a growing elderly population that tends to drive less. Since 2004, annual DVMT has dropped by more than 15 percent.

**Figure 14: Daily Vehicle-Miles Traveled (DVMT), 2004-2022**



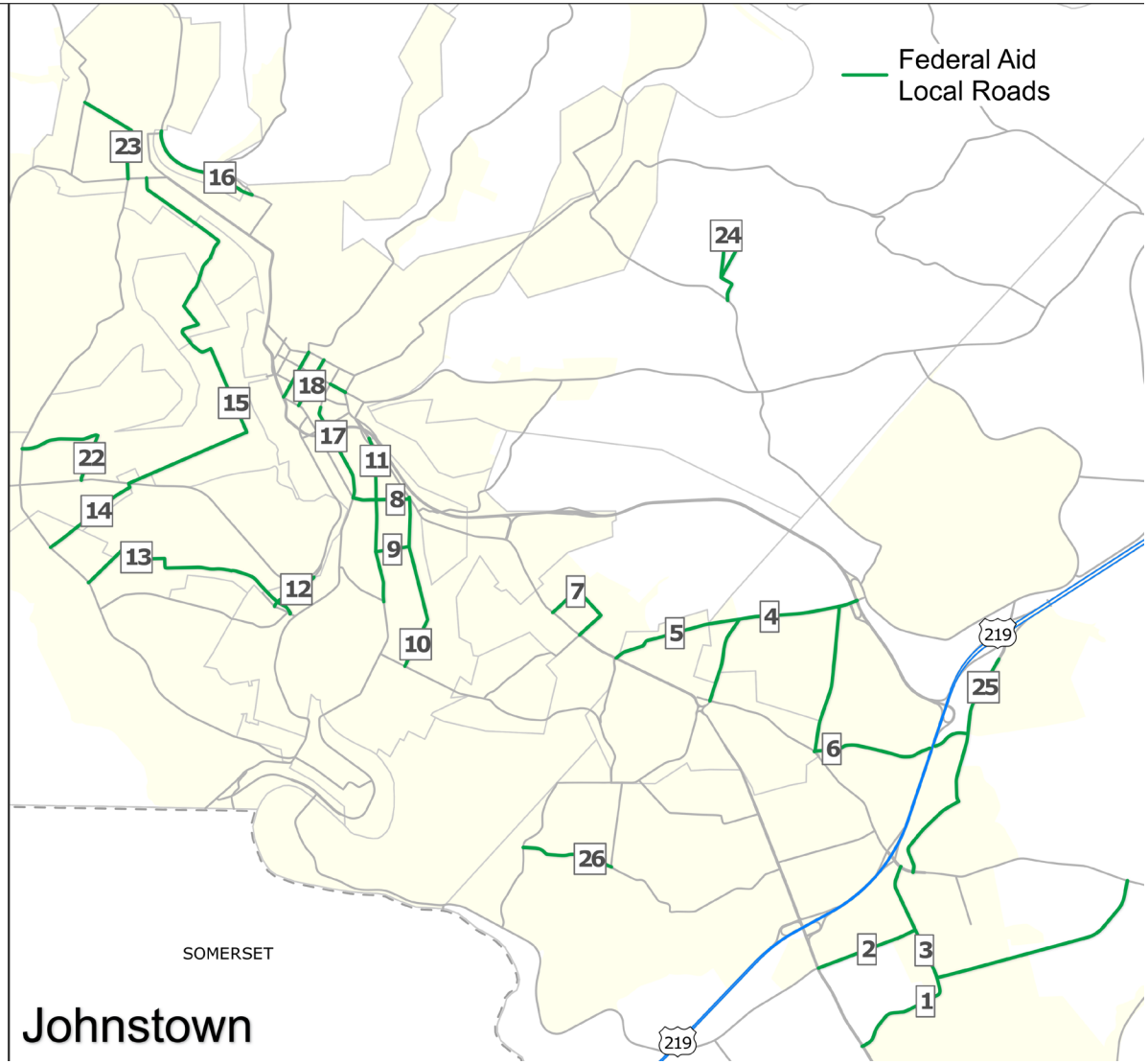

Source: Pennsylvania Highway Statistics; PUB 600

Figure 15: National Highway System Roadways, Cambria County



## Figure 16: Local Roads on the Federal-Aid System, Johnstown Area

1. Schoolhouse Rd
2. Eisenhower Blvd
3. Theatre Dr
4. Ness Ave
5. Walters Ave
6. Leventry Rd
7. Greenich St / Florida Ave / Penrod St
8. Hickory St
9. Messenger St
10. Ash St
11. Horner St
12. Barnett St
13. Southmont Blvd
14. Luzerne St Ext
15. Luzerne St / Bucknell Ave / Wyoming St / Crystal St / Habicht St / Gilbert St / Wall St / Virginia Ave
16. Iron St
17. Franklin St
18. Market St
19. Main St
20. Walnut St
21. Woodmont Rd
22. Emmett Dr
23. Laurel Ave
24. Lexington Ave / Shiloh St / Hornet Ave
25. Donald Ln / Industrial Park Rd / Galleria Dr
26. Parker Rd




# Roadway – Functional Classification

## Overview

- The functional classification of roadways defines the role that each element of the roadway network fulfills in serving various travel needs, from high-speed highways that provide mobility over longer distances, to local residential streets that provide door-to-door access.
- The MPO, together with PennDOT, has been functionally classifying roadways since the 1960s. The county's functional classification scheme was last updated in October 2022.
- Functionally classifying roadways helps the MPO to establish appropriate speed limits, signage, and safety measures. It also aids the MPO in determining where to invest in roadway improvements based on the roadway's intended function.
- Figure 17 provides information on the functional classification of the county's roadways.
  - » Other Freeway – Roadways within this classification function very similarly to Interstates. They may have directional travel lanes separated by a physical barrier, and their access and egress points are limited to on- and off-ramp locations or a very limited number of at-grade intersections. Examples of "Other Freeway" roadways are US 22 and US 219.
  - » Other Principal Arterial – These roadways serve major centers of metropolitan areas and provide a high degree of mobility. Unlike their access-controlled counterparts, abutting land uses can be served directly with driveways. Examples include US 422, Scalp Avenue/ SR 3016, and SR 3044/Washington Street in Johnstown between PA 56 and PA 271.
  - » Minor Arterials – These roadways are designed to carry intermediate levels of traffic. They carry more than local streets or collectors but do not have the capacity of major arterials. Examples include PA 36 and PA 53.
  - » Major Collectors – This network is both the largest in size eligible for federal aid and the lowest classification eligible for federal funding. An example of a major collector is PA 271 between US 219 and US 22.
  - » Minor Collectors – Many of the county's four-digit state routes (SRs) are a part of this classification. They generally offer greater levels of access than major collectors, although differences between the two are often subtle.
  - » Local – Roadways functionally classified as "Local" (not to be confused with locally owned roadways) are the lowest-order state-owned roadways within the functional classification

hierarchy. Roadways with this classification are eligible to be "turned back" to the host municipality through PennDOT's Turnback Program. After a road is turned back to the municipality, PennDOT provides annual financial support toward the costs associated with maintaining the roadway, at a rate of $4,000 per mile. PennDOT releases annual maintenance payments on March 1, beginning two years after the year of transfer.

## Planning Implications

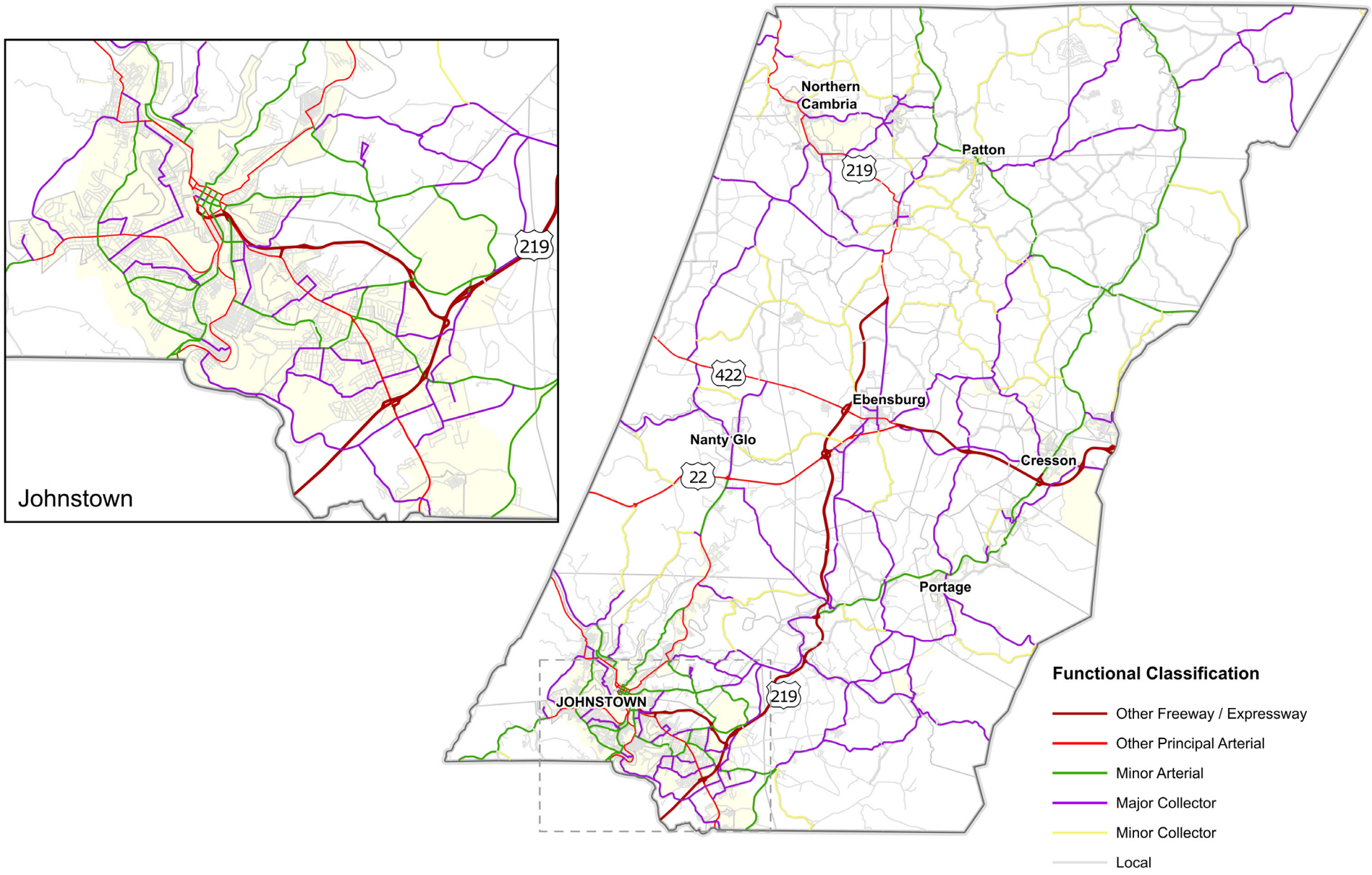
- Functional classification determines a roadway's eligibility for various federal funding sources. The significance of maintaining functional class is further underscored by increased federal emphasis on National Highway Performance Program (NHPP) roadways. Cambria's attention to functional classification is of utmost importance to secure federal funding and support the county's long-term transportation goals.
- Functional classification carries with it expectations about roadway design, including its speed, capacity, and relationship to existing and future land use development.
- The U.S. Census Bureau released maps of urban area boundaries after the 2020 census. The MPO will review these census boundaries and either accept them as-is or adjust them for transportation planning purposes. Nearby roads and rural areas will be considered during the evaluation, which can impact transportation planning and functional classification needs.

**Figure 17: Functional Classification**

| | Functional Class | Linear Miles |
|---|---|---|
| Federal-Aid | Interstate | 0 |
| | Other Freeway/Expressway | 40.4 |
| | Other Principal Arterial | 71.5 |
| | Minor Arterial | 107.4 |
| | Major Collector | 253.3 |
| Non-Federal-Aid | Minor Collector | 130.0 |
| | Local | 1,139.3 |
| | **Total** | **1,741.9** |

Source: Pennsylvania Highway Statistics

Figure 18: Roadways by Functional Classification, Cambria County




# Roadway Conditions

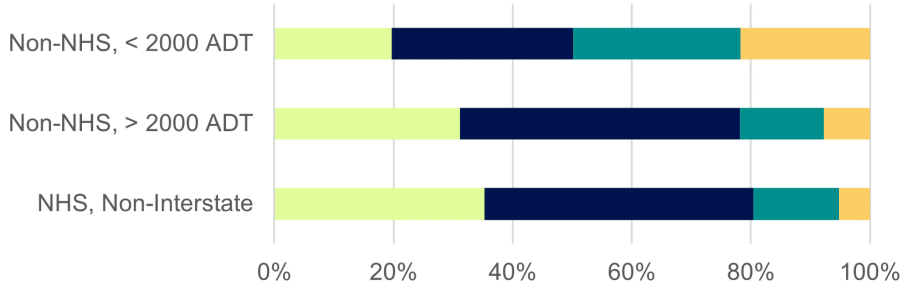
## Overview

- PennDOT has organized the state's roadways into four Business Plan Networks (BPN) for planning purposes:
  1) Interstates
  2) NHS, Non-Interstate
  3) Non-NHS, > 2,000 average daily traffic (ADT)
  4) Non-NHS, < 2,000 ADT
- The Overall Pavement Index (OPI) is a measure of a roadway's pavement condition, while the International Roughness Index (IRI) is a measure of the roughness of the pavement surface. These measurements indicate conditions of the roadway throughout the network.
- Approximately 64 percent of Cambria's pavements have "Good" or "Excellent" IRI ratings, about 8 percentage points over (better than) the statewide total of 56 percent.
- The majority of poorly rated IRI roadways are on the Non-NHS, < 2,000 ADT network, as shown in Figure 19.
- The county has 70.4 percent of pavements rated "Good" or "Excellent" by OPI, exceeding the 62 percent statewide total.
- OPI and IRI pavements in "Excellent" and "Good" condition have decreased overall from 2021 to 2022.
- "Poor" OPI for the county's roadways is 3.7 percent, about one-third of (better than) the statewide rate of 12.0 percent.

## Planning Implications

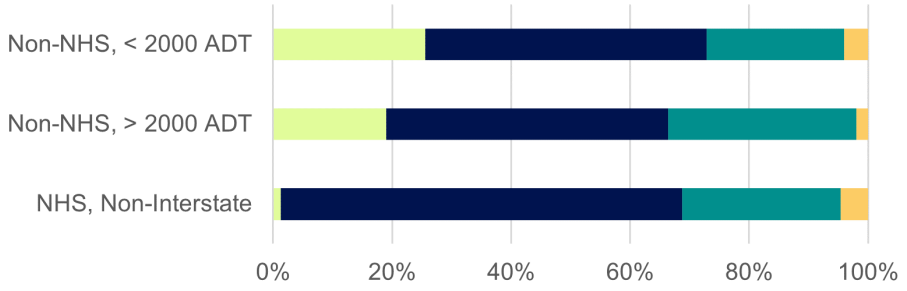
- The MPO will need to continue working with PennDOT and local municipalities to effectively manage and prioritize the maintenance requirements of the roads in need of resurfacing, reconstruction, or preservation.
- Cambria County does not have any Interstates, but it has proportionally more roads on the NHS than does the state as a whole. Cambria has 23 percent non-Interstate NHS segment miles compared to 16 percent statewide.
- Compared to Pennsylvania as a whole, pavement conditions in Cambria County on average are good.

### Figure 19: IRI by Business Plan Network, 2022



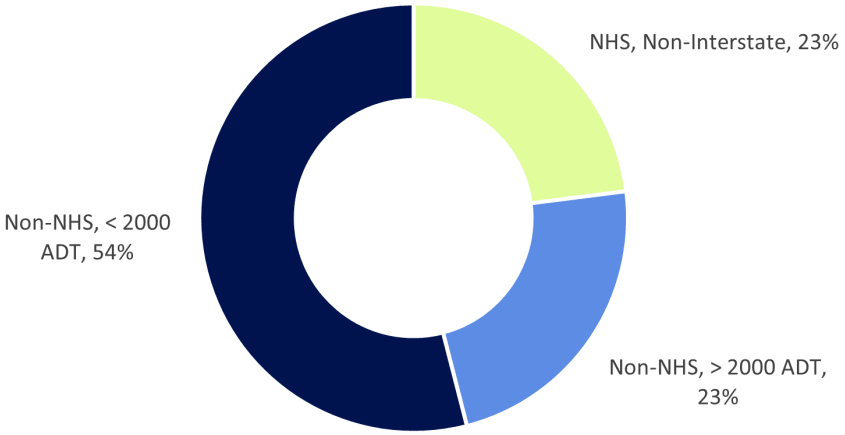

| | NHS, Non-Interstate | Non-NHS, > 2000 ADT | Non-NHS, < 2000 ADT |
|---|---|---|---|
| Excellent | 35.28% | 31.18% | 19.70% |
| Good | 45.12% | 46.96% | 30.45% |
| Fair | 14.41% | 14.15% | 28.06% |
| Poor | 5.19% | 7.71% | 21.80% |

### Figure 20: OPI by Business Plan Network, 2022

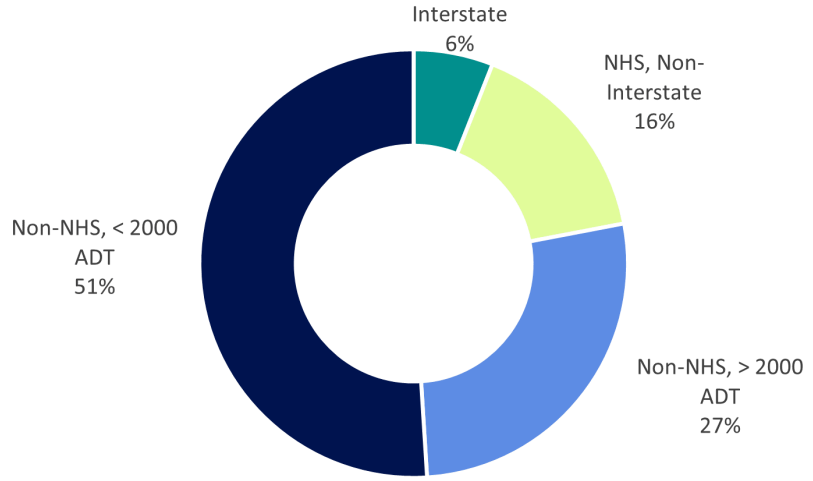



| | NHS, Non-Interstate | Non-NHS, > 2000 ADT | Non-NHS, < 2000 ADT |
|---|---|---|---|
| Excellent | 1.28% | 19.05% | 25.52% |
| Good | 67.44% | 47.37% | 47.38% |
| Fair | 26.66% | 31.64% | 23.04% |
| Poor | 4.61% | 1.94% | 4.06% |

### Figure 21: Cambria – Percentage Total PennDOT Segment-Miles by BPN, 2021




### Figure 22: Statewide – Percentage Total PennDOT Segment-Miles by BPN, 2021




Source: Performance Measures Annual Report


# Roadway Safety

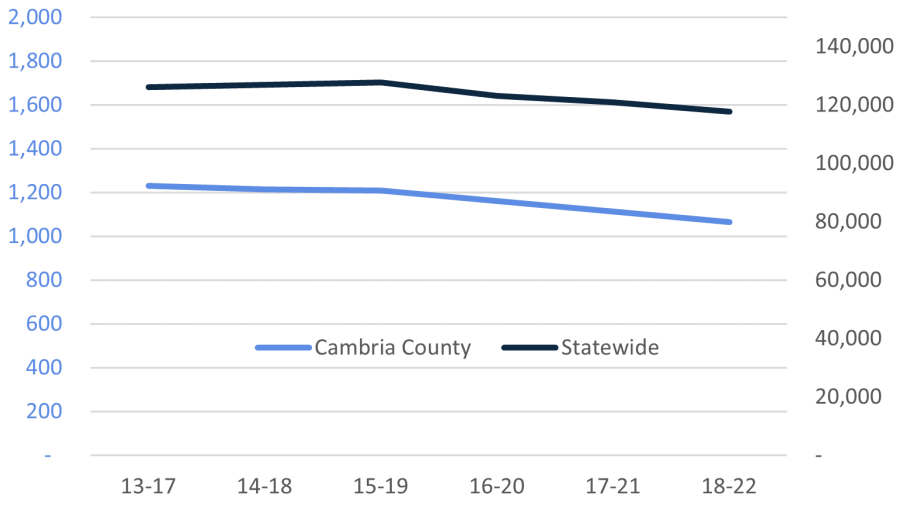
## Overview

- Safety continues to be the MPO's top priority for its transportation system. The MPO works closely with PennDOT in improving roadway safety through upgrading and maintaining roadways, bridges, and traffic signals to meet safety standards. The MPO supports PennDOT's efforts toward improving safety through plans such as the Strategic Highway Safety Plan, and programs such as red-light cameras, distracted-driving initiatives, and seatbelt promotion.
- For the five-year period ending in 2022, the county averaged 1,065 roadway crashes per year (Figure 23). This compares favorably to the five-year period ending 2012 when 1,352 crashes were recorded.
- For the five-year period ending in 2022, the county averaged four bicycle crashes and 18 pedestrian crashes per year (Figures 27 and 28).
- In 2022, distracted driving was a factor in roughly 12 percent of all crashes (compared to 11 percent, statewide). Crashes involving a driver aged 65 or older comprised 18.2 percent of crashes, which is slightly higher (worse) than the state rate.
- Roadway fatalities have steadily declined since the county recorded a high of 24 in 2006. For the five-year period ending in 2022, the county averaged nine fatalities per year (Figure 24).

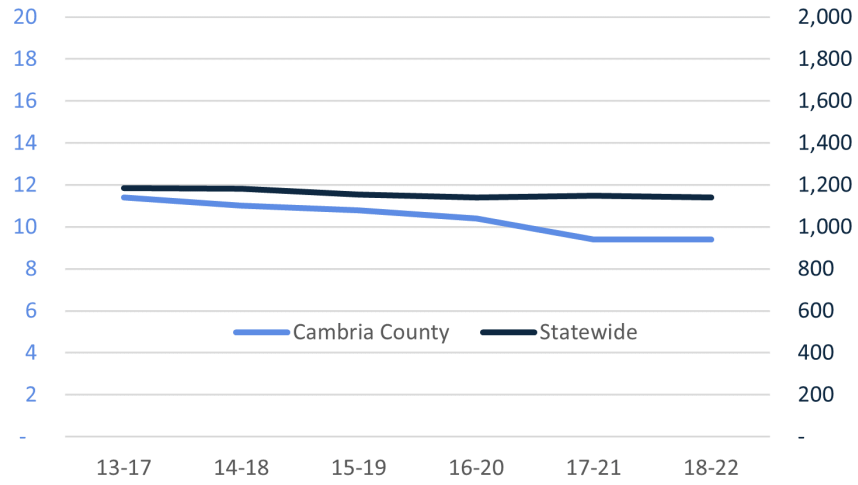
## Planning Implications

- Recognizing that even one roadway fatality is too many, the MPO will continue to collaborate with PennDOT in advancing roadway safety. The positive trends Cambria County is experiencing demonstrate the effectiveness of improved safety measures, technology, and driver awareness.
- To help further reduce the number of crashes and roadway fatalities, the MPO will need to continue to improve road infrastructure, including better signage, lighting, and roadway design. The public must also embrace roadway safety and take individual responsibility for safe behaviors, while the MPO will continue to engage the public in road safety initiatives.
- The MPO is required to invest a share of its Highway Safety Improvement Program (HSIP) funding toward improving roadway safety.

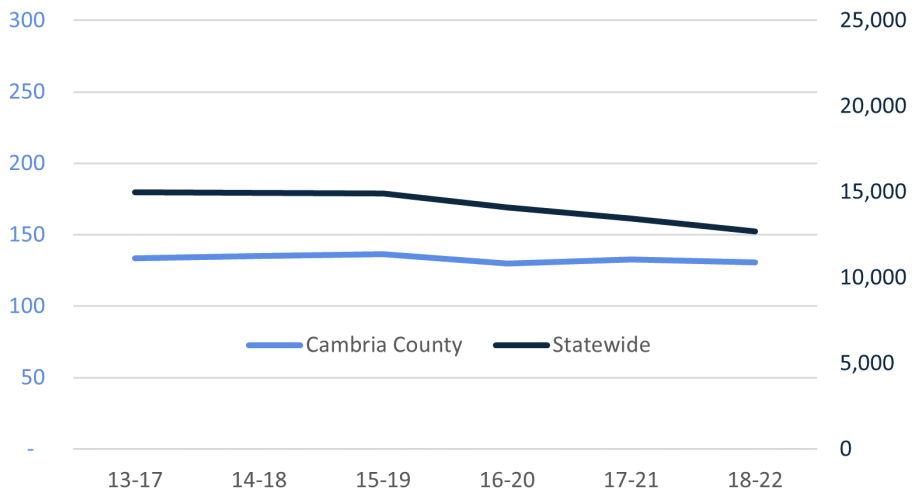
### Figure 23: Total Roadway Crashes by 5-Year Average



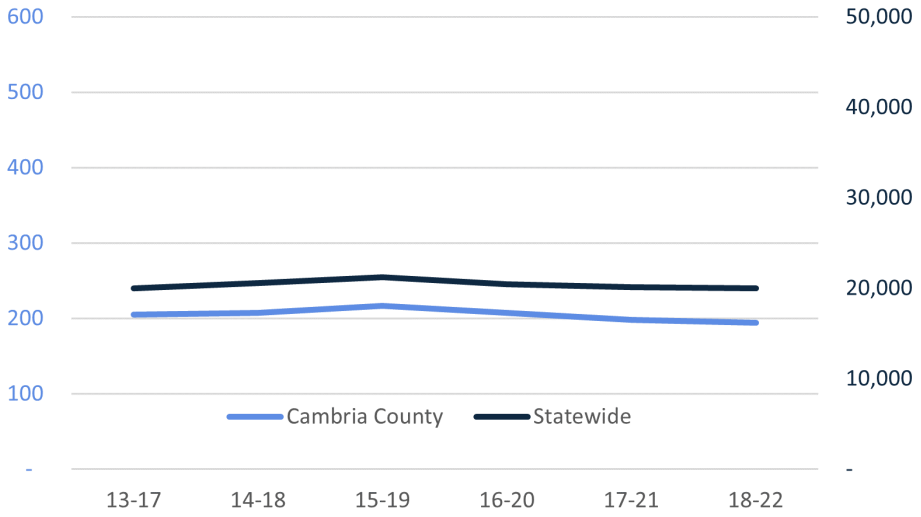

### Figure 24: Roadway Fatalities by 5-Year Average




### Figure 25: Distracted Driver Crashes by 5-Year Average




### Figure 26: Senior Driver (65+) Crashes by 5-Year Average




Source: Pennsylvania Crash Information Tool (PCIT)

**Figure 27: Pedestrian Crashes by 5-Year Average**

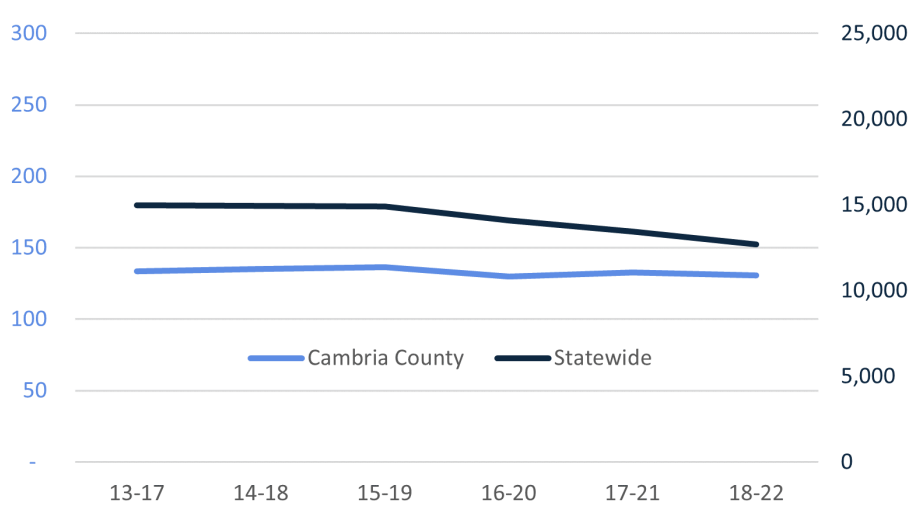
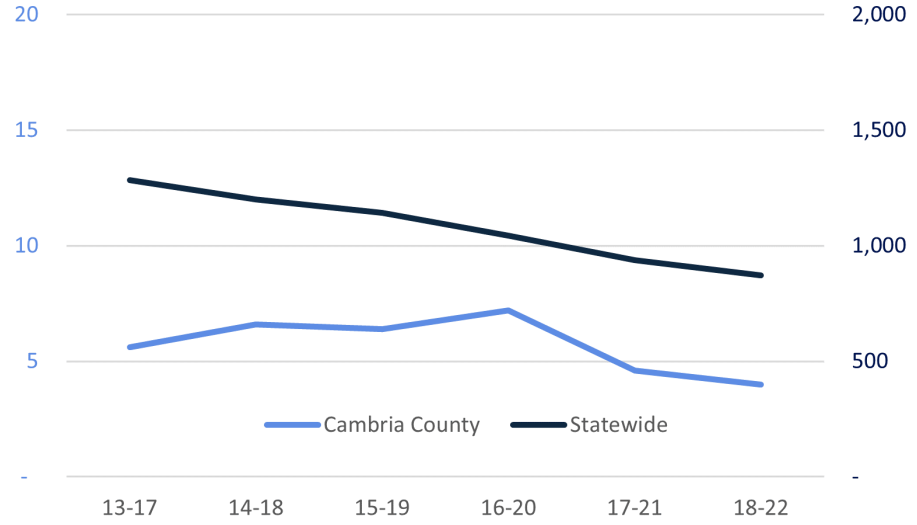



**Figure 28: Bicycle Crashes by 5-Year Average**




Source: Pennsylvania Crash Information Tool (PCIT)

# Bridge Conditions

## Overview

- Proper maintenance of the county's bridge inventory is aimed at sustaining a state of good repair, extending each structure's useful life, and supporting mobility and connectivity.
- There are 331 state-owned bridges in the county greater than eight feet in length, with a total deck area of 1.4 million square feet. Of this total, three bridges have been posted; none are closed. The three posted bridges are:
  - » PA 160 over the Little Conemaugh in Wilmore Township;
  - » SR 1009 over Chest Creek in Allegheny Township; and
  - » SR 3022 (Incline Plane Road) over the Stonycreek River in Johnstown. This bridge is more than 130 years old and has a historic designation. Therefore, alterations and repairs are restricted despite its "Poor" condition rating. In addition, its average annual daily traffic (AADT) is very low, which translates to slower deterioration of the bridge.
- The average age of state-owned bridges in the county is 52 years, with the oldest built in 1832.
- The county's number of state bridges rated as "Good" has declined in recent years, from a total of 170 in 2019 to a present-day total of 157 (Figure 29). PennDOT and the MPO continue to address the county's inventory of "Poor" bridges. The percentage of "Poor" bridges on the state system is 2.1 percent, lower (better) than it was five years ago (Figure 31). If measured by deck area, the percentage of "Poor" bridges is also at 2.1 percent, down from 38,400 square feet to 29,044 square feet.
- The County and its municipalities own a total of 87 structures that are greater than 20 feet in length. Of this total, nine are currently posted, while one (Cottonwood Street over Walnut Run in Northern Cambria Borough) is closed. The number of posted bridges on the local network has been trending downward from a high of 16 in 2019 to a present-day total of nine. Financial guidance for the MPO for the 2025 12-Year Program includes an estimated $307.5 million for addressing off-system bridges over the next 12 years.

## Planning Implications

- Additional investment in bridge infrastructure has allowed PennDOT and the MPO to address the county's aging bridge stock.
- PennDOT continues to address bridge infrastructure using a Lowest Life-Cycle Cost (LLCC) based asset management approach to project selection and prioritization to keep "Good" bridges from becoming "Poor" and yield additional years of service from existing structures.

Figure 29: Cambria County Bridge Conditions by Count, January 2024

| BPN | Total | Deck Area (msf) | Closed | Posted | Good | Fair | Poor |
|---|---|---|---|---|---|---|---|
| Local >20 ft | 87 | 0.18 | 2 | 12 | 24 | 47 | 16 |
| State >8 ft | 333 | 1.4 | 0 | 3 | 157 | 169 | 7 |

Figure 30: Cambria County Bridges on the State System, Length 8 Feet and Longer, by Year Built

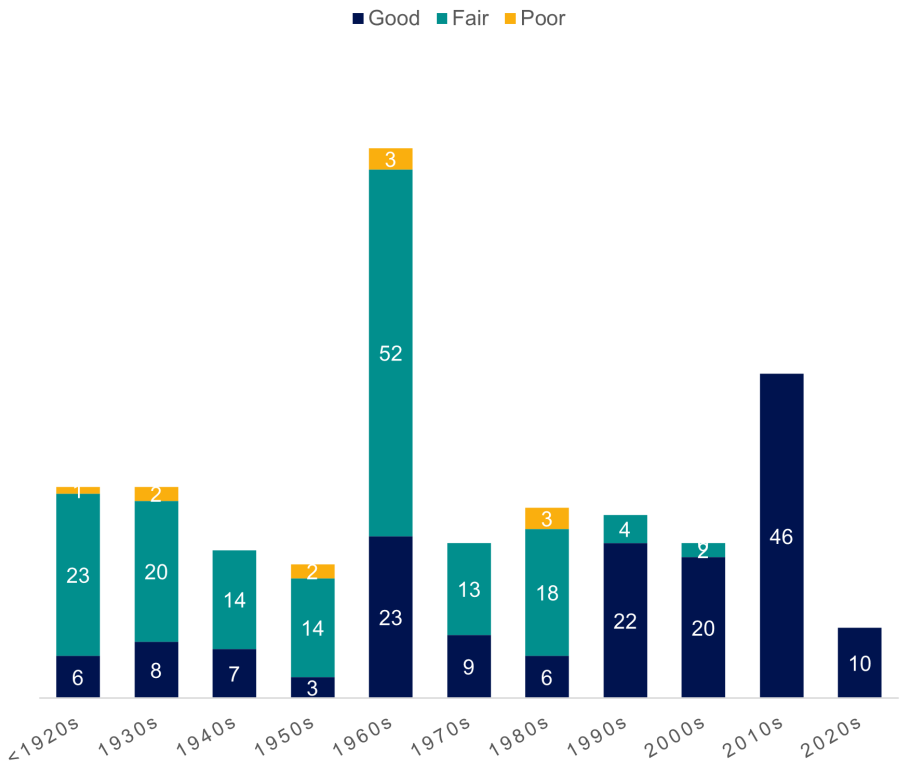



Figure 31: Cambria County Bridge Conditions by Count, January 2024

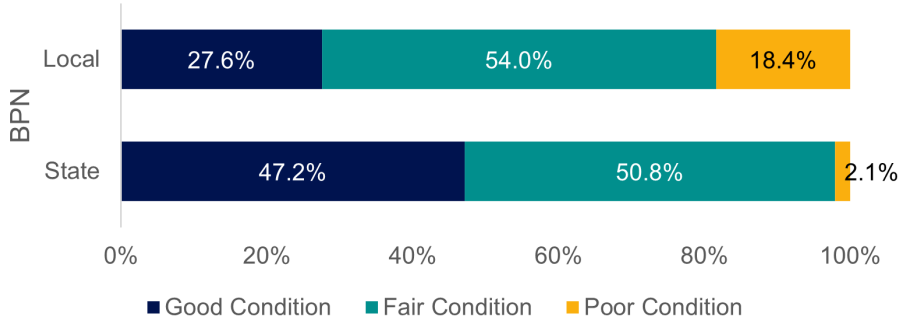
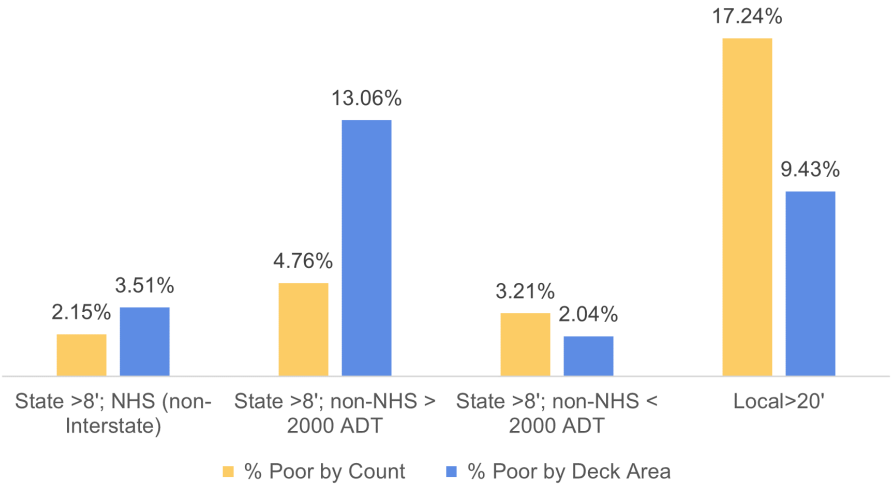



Figure 32: Cambria County Percentage of "Poor" Bridges by BPN, 2022




The county had four structures on BPN 3 that were rated as "Poor," two of which were structures over 200 feet in length. Three of the four are either programmed for improvements on the TIP or have recently been improved and are no longer "Poor."

Source: PennDOT Bridge Management System


# System Management and Operations

## Overview

- The MPO participates in the development of Regional Operations Plans (ROP—a regional planning document aimed at identifying existing traffic system management and operations (TSMO) infrastructure and needs as well as a vision and goals).
- Improving TSMO is a way to increase the travel time reliability and capacity of the county's roadways by using a wide range of strategies to help manage traffic and reduce congestion. The MPO is committed to identifying operations activities and projects necessary to meet the mission, vision, and goals of the program.
- In the initial 2018 Central Region ROP, 42 projects were identified, ranging from intelligent transportation systems (ITS) and traffic signal improvements to incident management and preventive safety technologies. Integrated Corridor Management (ICM) was also a key component of the ROP. These projects take a holistic approach, maximizing the existing capacity of parallel routes and emphasizing multimodal approaches to congestion management.
- An interim update to the ROP in 2021 documented the status of ROP projects, including those that have been completed. These include a $755,000 traffic signal improvement project along PA 56 near US 219. A number of other projects have been documented, including queue detection along US 22 eastbound near US 219, and along US 219 southbound at its interchange with Elton Road. While 16 new projects were added as part of the Interim Update to the ROP, none were in Cambria County.
- There are 138 signalized intersections in Cambria County.

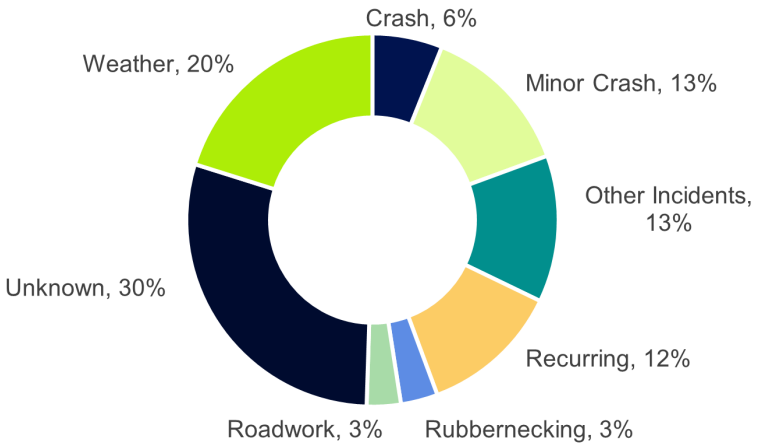
## Planning Implications

- Ongoing planning for TSMO will help ensure that the MPO is optimizing its transportation network, reducing congestion, delays, and opportunity costs.
- Improving transportation operations is also important for freight movement, providing convenient, reliable, and predictable travel times for shippers and carriers.

**Figure 33: Pennsylvania's TSMO Regions**

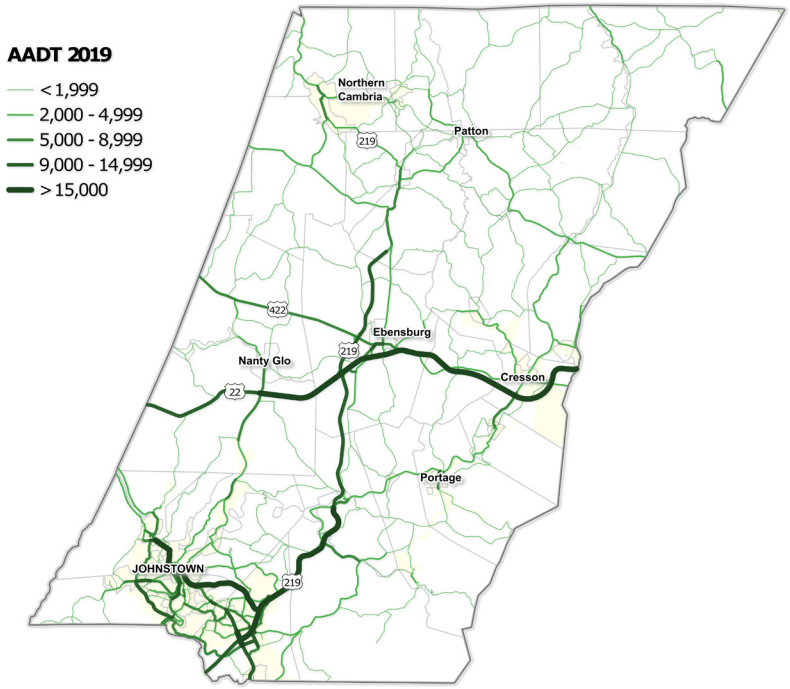

Source: PennDOT Bureau of Operations

### Figure 34: Causes of Congestion, Cambria County

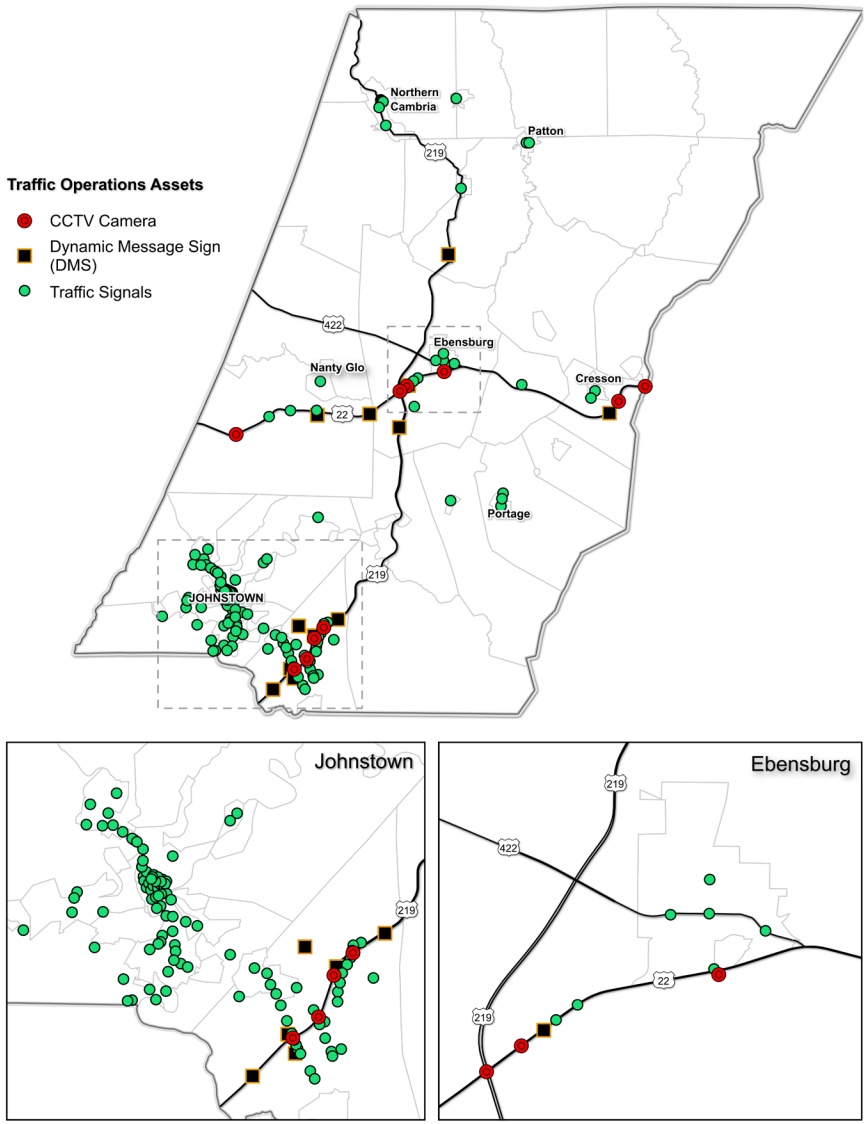



Source: PennDOT Bureau of Operations

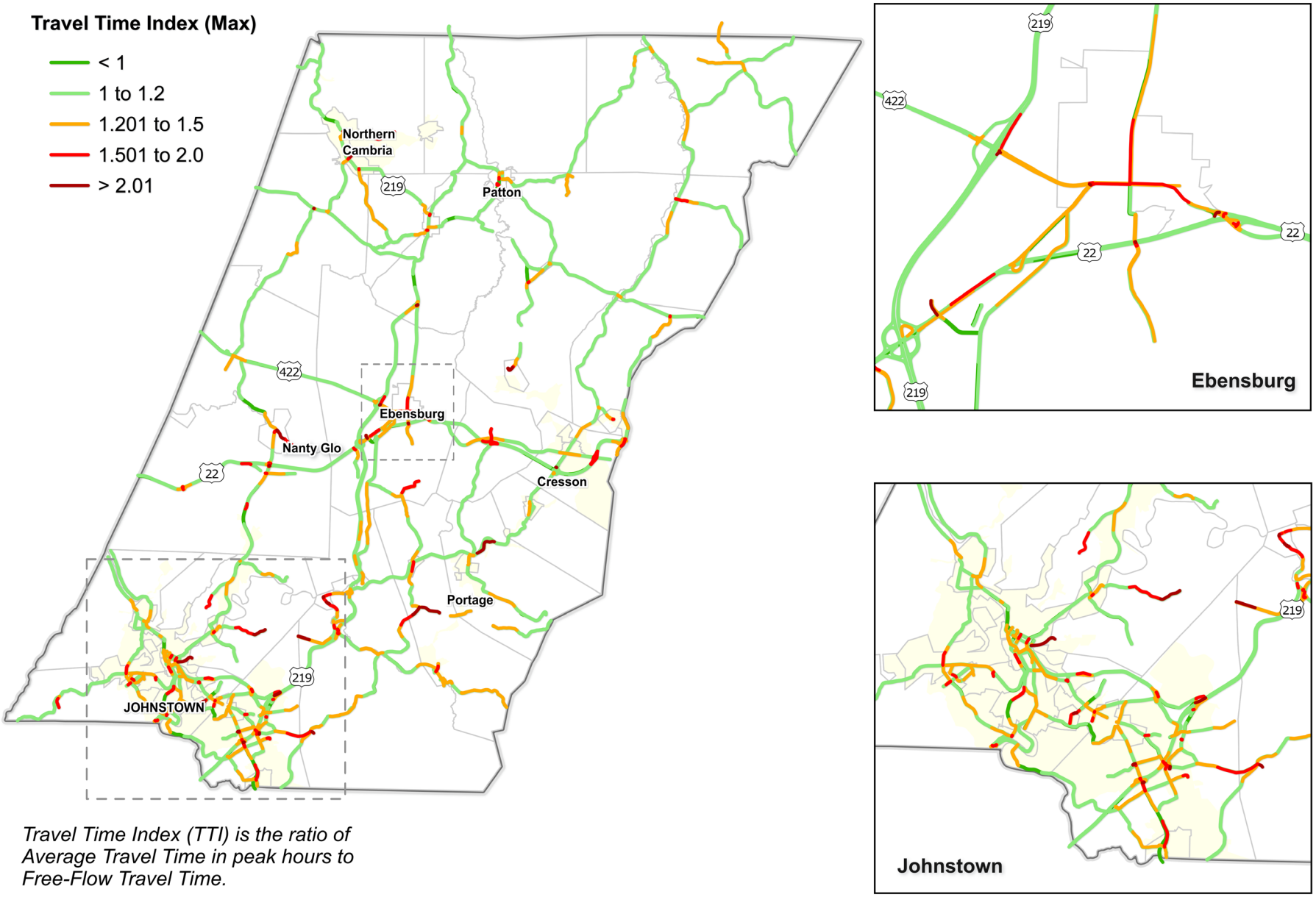
### Figure 35: AADT, 2019




### Figure 36: Traffic Signals, CCTV, and DMS Locations



## Figure 37: Congested Corridors, 2022




*Travel Time Index (TTI) is the ratio of Average Travel Time in peak hours to Free-Flow Travel Time.*


# Public Transportation

## Overview

- Cambria County Transit Authority (CamTran) is the county's primary public transportation service provider. The agency provides fixed-route bus, complementary paratransit service, and demand-responsive transportation. CamTran is the urban service area in Greater Johnstown and surrounding areas, while CamTran+ serves the county's northern environs and Windber Borough in Somerset County.
- CamTran's service encompasses the following:
  - » Urban Division offers 14 fixed-route services throughout the greater Johnstown area. Buses are equipped with bike racks to enhance the transportation network accessibility and provide greater access to recreational trails.
  - » Rural Division service (CamTran+) operates in the central and northern portions of the county with seven fixed-route options.
  - » Reserve-a-Ride is a door-to-door shared-ride service. Service is available in Cambria and Blair counties, as well as the northern regions of Bedford and Somerset counties.
  - » Persons with Disabilities (PwD) service provides transit for people ages 18 to 64 years old with a permanent or temporary disability.
  - » Park & Ride bus service is available in Ebensburg on US 22 with operating trips Monday through Friday at the morning and evening rush hours.
- During the FY 2021-22 reporting period, CamTran provided nearly 685,000 fixed-route passenger trips, over 111,000 of which were for seniors (Figures 38 and 39). Those figures reflect a partial recovery in ridership following the COVID-19 pandemic. By comparison, CamTran's pre-pandemic ridership in FY 2018-19 was 1.16 million passenger trips. Lower ridership translates to increased operating expenses per rider.
- Senior ridership accounts for approximately 16 percent of total fixed-route ridership.
- CamTran's fixed-route network provides transportation to and from most of the county's major employers and community hubs, including the Greater Johnstown region and into Windber, Ebensburg, and as far north as Northern Cambria Borough.
- The system operates a fleet of 72 vehicles, with a mix of compressed natural gas (CNG), diesel, and hybrid-electric vehicles. CamTran has also embraced alternative energy sources with 297 solar panels on its operations building in Johnstown.
- CamTran also operates the Johnstown Inclined Plane, a vehicular incline that opened in 1891 and connects the City of

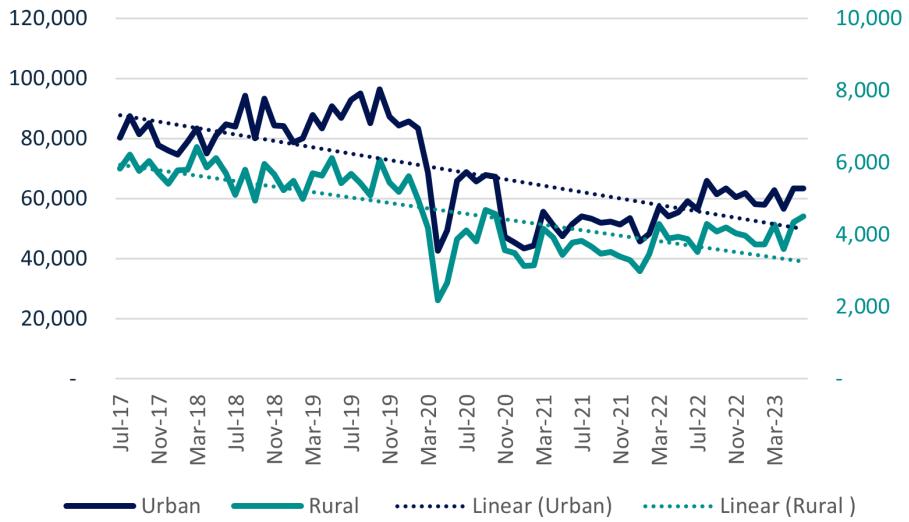
Johnstown with Westmont Borough. It is currently the subject of a $12 million renovation project. The inclined plane is integrated with CamTran's service, which provides connections from the incline to downtown Johnstown destinations. Annual incline ridership for FY 2018-19 was 65,804, before falling to 40,835 in FY 2019-20 due to COVID-19. During FY 2020-21, the incline was only open for six months, with a ridership of 20,193. The incline closed in January 2021 for renovations, which are ongoing.

- The Johnstown inclined plane is the steepest vehicular inclined plane in the world, with a grade of 70.9 percent. This distinguishing feature attracts tourists and also serves a vital transportation function, connecting the Johnstown valley with hilltop communities.

## Planning Implications

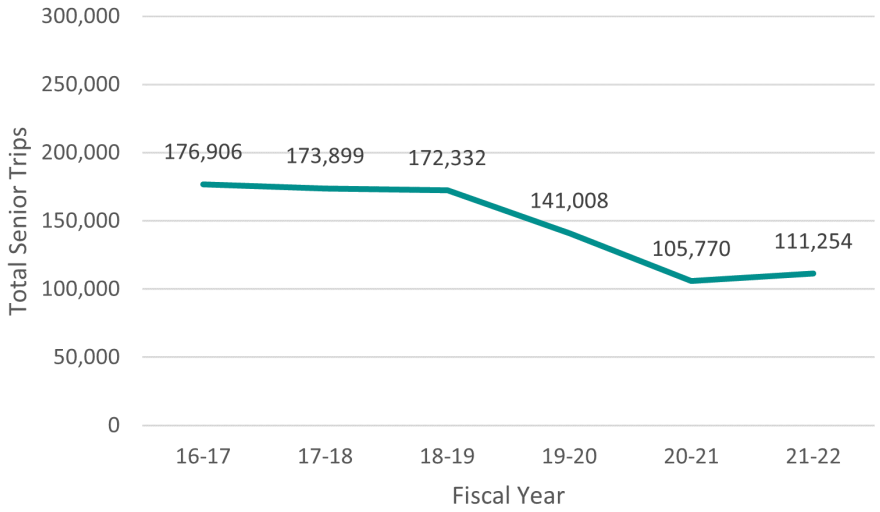
- Public transit ridership decreased significantly in Cambria County, as it did nationwide, due to the COVID-19 pandemic and the unprecedented impacts it caused to daily life. Public transportation services operated throughout the pandemic, offering lifeline services to transit-dependent populations.
- Public transit usage has not yet rebounded to pre-pandemic levels. Planning for public transportation services will need to encourage transit-oriented development to increase the attractiveness of transit as a transportation option and rebuild its passenger base.
- Declines in ridership and changing public preferences could signal potential for marketing campaigns and promotion while considering emerging mobility solutions such as micromobility.
- The MPO's Coordinated Public Transit Human Services Transportation Plan was last updated in February 2017. CamTran intends to revise the plan in 2024.
- Public transportation's role as an important element of meeting the county's mobility challenges will continue to evolve. As people turn to public transportation to meet mobility needs, the MPO must be ready to meet those challenges with the facilities and services that customers expect.

### Figure 38: CamTran, Total Fixed-Route Ridership



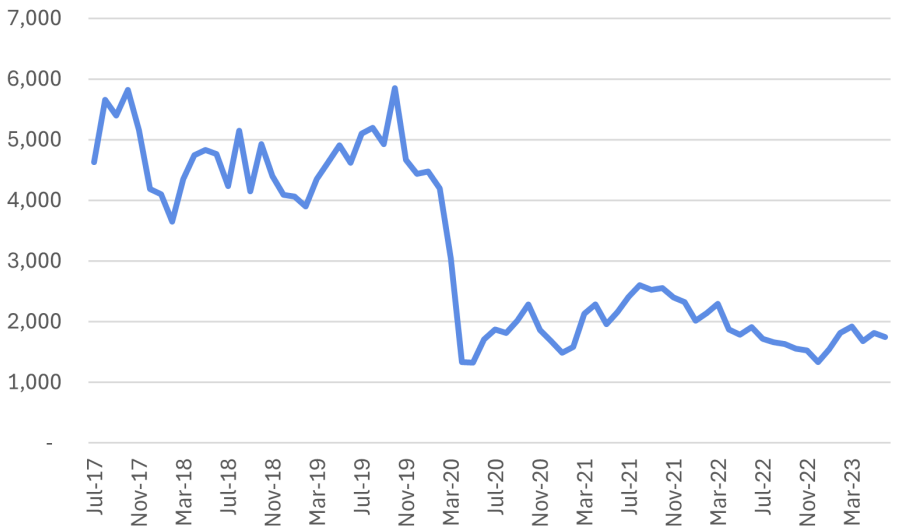

Source: CamTran

### Figure 39: CamTran, Total Senior Fixed-Route Ridership




Source: PennDOT Bureau of Public Transit Annual Report

### Figure 40: CamTran, Total Shared-Ride Trips

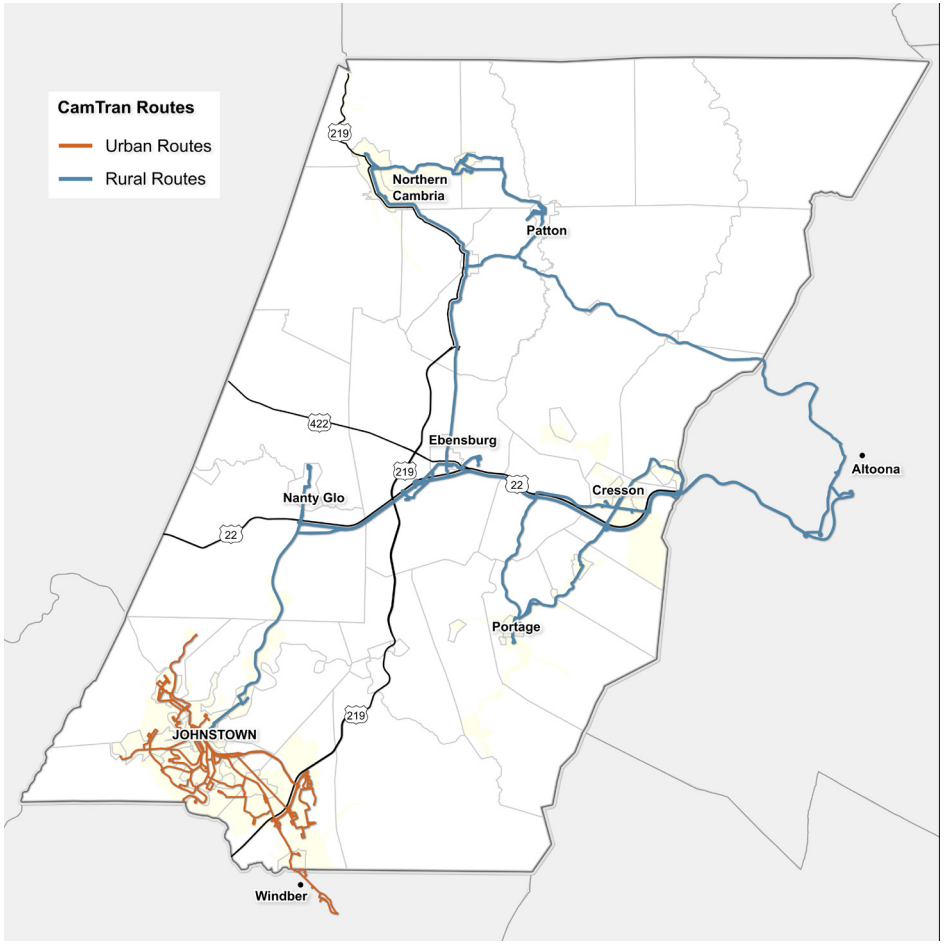



Source: CamTran

Transit data reflects a decline in ridership due to the COVID-19 pandemic, primarily in calendar years 2020 and 2021.

Subsequent years show ridership beginning to rebound.

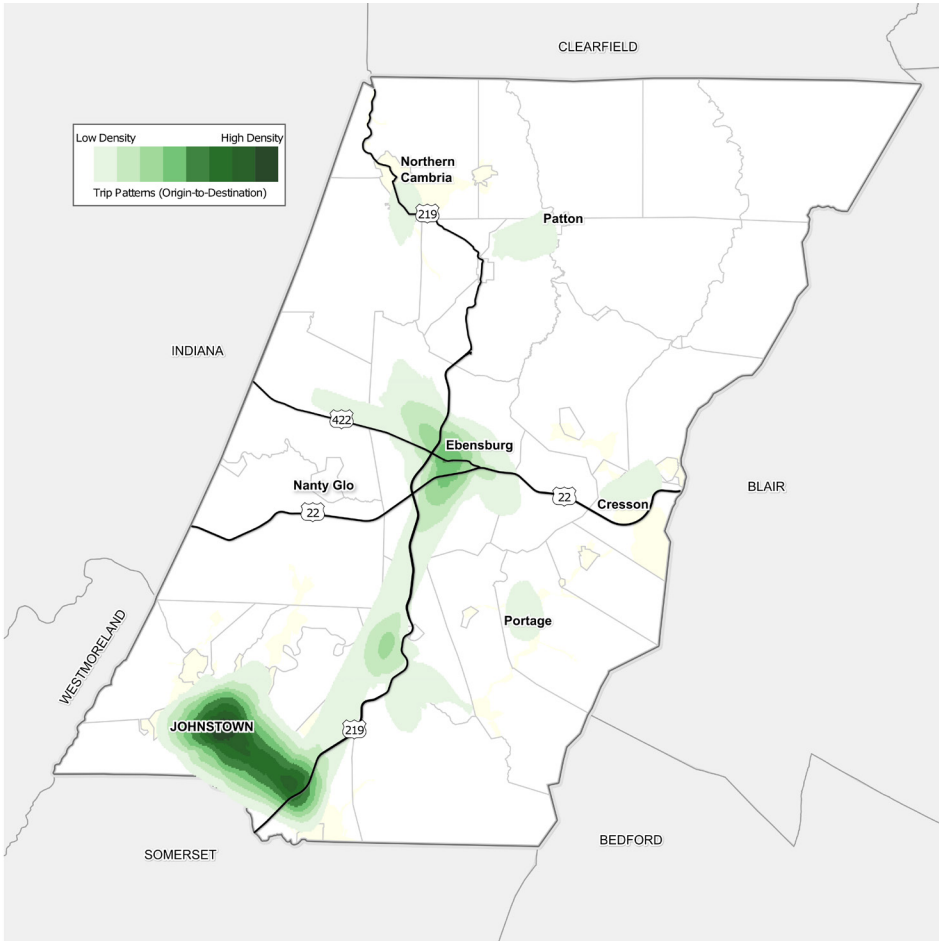
## Figure 41: CamTran's Bus Routes




Source: CamTran

CamTran and CamTran+ provide extensive coverage of Cambria County and into the adjoining counties of Blair and Somerset.

## Figure 42: Shared-Ride Trips




Source: EcoLane

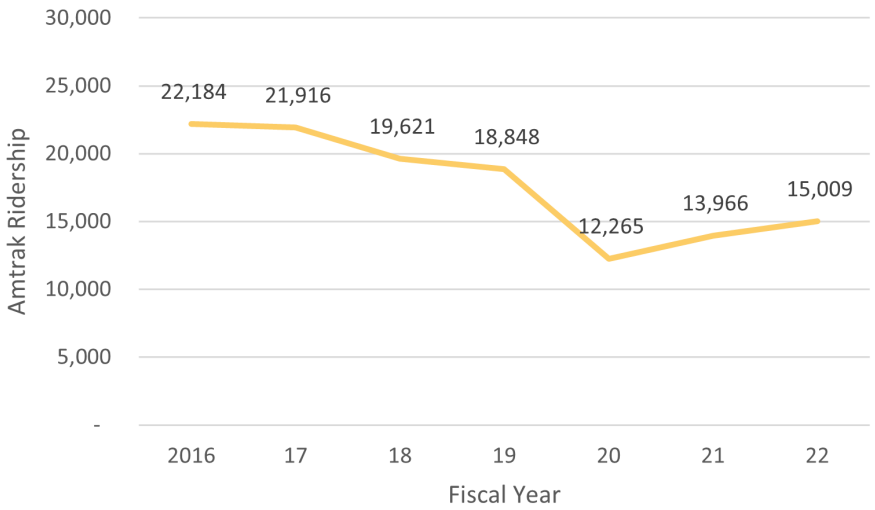
Johnstown and Ebensburg have the county's greatest concentration of shared-ride origin-to-destination trips.


# Passenger Rail

## Overview

- Amtrak provides intercity passenger rail service to Cambria County on Norfolk Southern (NS) lines from its station in downtown Johnstown. Amtrak currently provides one round trip daily via its *Pennsylvanian* service. A second daily train is slated to begin service by 2026.
- The Amtrak Johnstown Station underwent ADA improvements in 2018, which included upgrades to the restrooms, accessible pathways, and parking. Minor modifications to the entrances and ramps were also made to comply with ADA regulations.
- According to the FY 2022 fact sheet released by the Commonwealth of Pennsylvania, Amtrak's station in Johnstown reached a total ridership of approximately 15,000 in that year.
- Johnstown's Amtrak station is in stable condition, with a new roof. Station repairs and upgrades to the 1915 building are being addressed using $11.2 million in USDOT RAISE grant funding, as part of a multifaceted project to update public transportation facilities and public spaces in Johnstown.

**Figure 43: Amtrak Ridership by Fiscal Year, Johnstown Station**




Source: Amtrak Pennsylvania State Fact Sheet

Note that Amtrak suspended *Pennsylvanian* service in March, April, and May 2020 due to the COVID-19 pandemic.

## Planning Implications

- The additional service provided by a second train on the *Pennsylvanian* will make tourism and business travel more feasible between Johnstown and Pittsburgh.

# Rail Freight

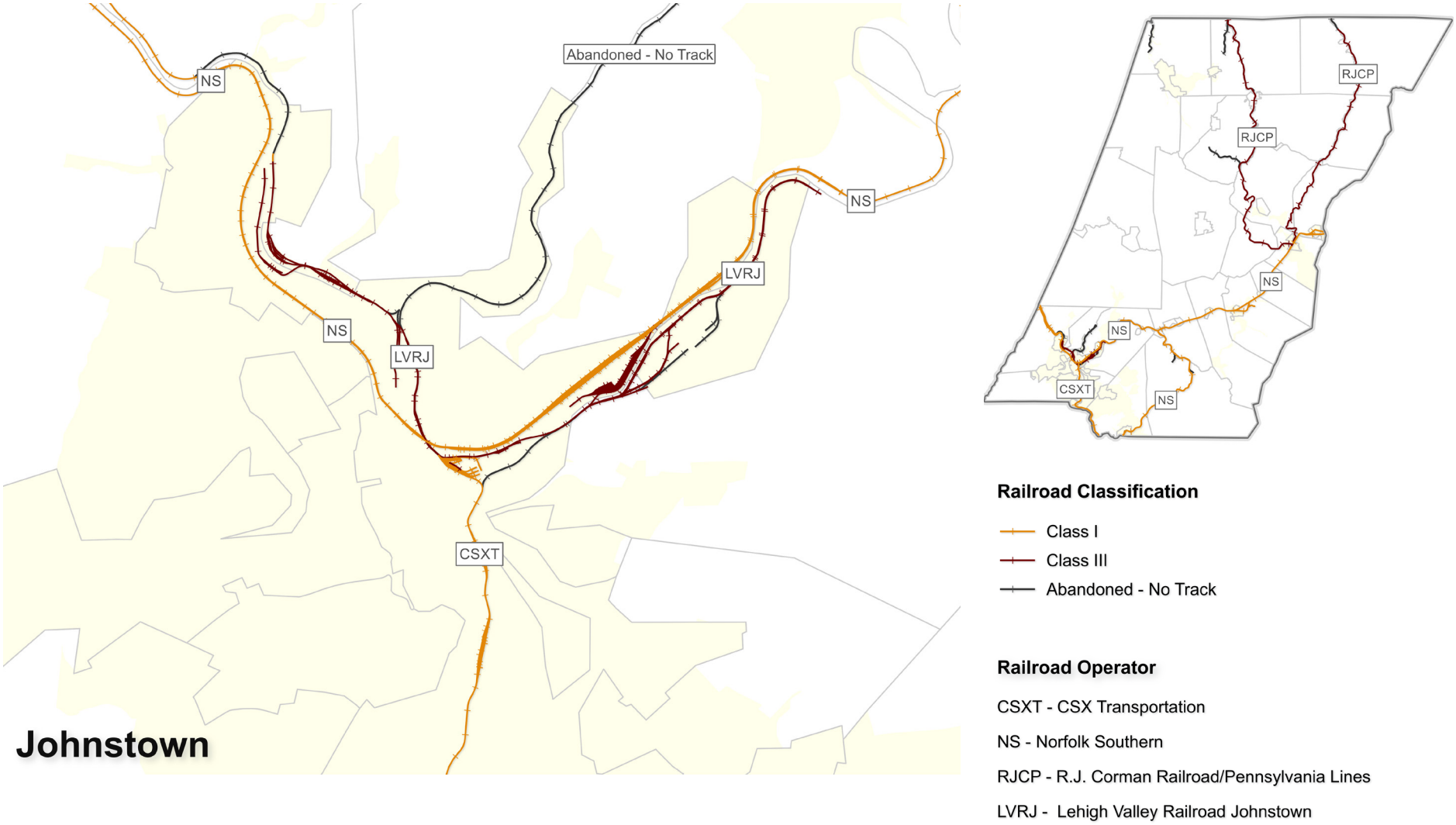
## Overview

- Rail freight transportation plays a vital role in boosting economic competitiveness and supporting sustained economic growth. Railroads offer shippers and receivers a cost-effective and environmentally friendly way of transporting heavy bulk products such as coal. Rail freight capacity helps to alleviate the strain on the roadway network by reducing the number of trucks on the road, which in turn helps to preserve pavement conditions. Given its critical role in the county's economy, it is essential to preserve and restore railroad infrastructure.
- The Keystone Corridor is a 349-mile-long railway route linking Philadelphia and Pittsburgh. Norfolk Southern (NS) owns the western portion of the line between Pittsburgh and Harrisburg, sharing the track with Amtrak passenger rail. Amtrak owns the eastern portion of the line between Harrisburg and Philadelphia.
- Class I rail freight service in the county is provided by NS and CSX Transportation (CSXT). NS operates approximately 70 miles of track throughout the southern parts of the county, and CSXT operates trackage from Johnstown into Somerset County.
- Two companies, Lehigh Valley Railroad Johnstown (LVRJ) and R.J. Corman Railroad/Pennsylvania Lines (RJCP), operate approximately 64 miles of class III (short line) railroad in the county. The northern half of the county is primarily served by RJCP, which operates on approximately 50 miles of track, while LVRJ operates about 15 miles of track throughout Johnstown.

## Planning Implications

- The presence of the NS mainline within the county is a tourism draw in its own right. The line attracts rail fans visiting locations such as the Horseshoe Curve and the tunnels in Gallitzin. Many communities along PA 53 have viewing parks and picnic areas along the mainline.
- Coordinating industrial land use and economic development planning along rail lines will help optimize rail freight transportation efficiency, support economic development, and reduce environmental and traffic impacts to communities.

## Figure 44: Railroad Network




# Active Transportation

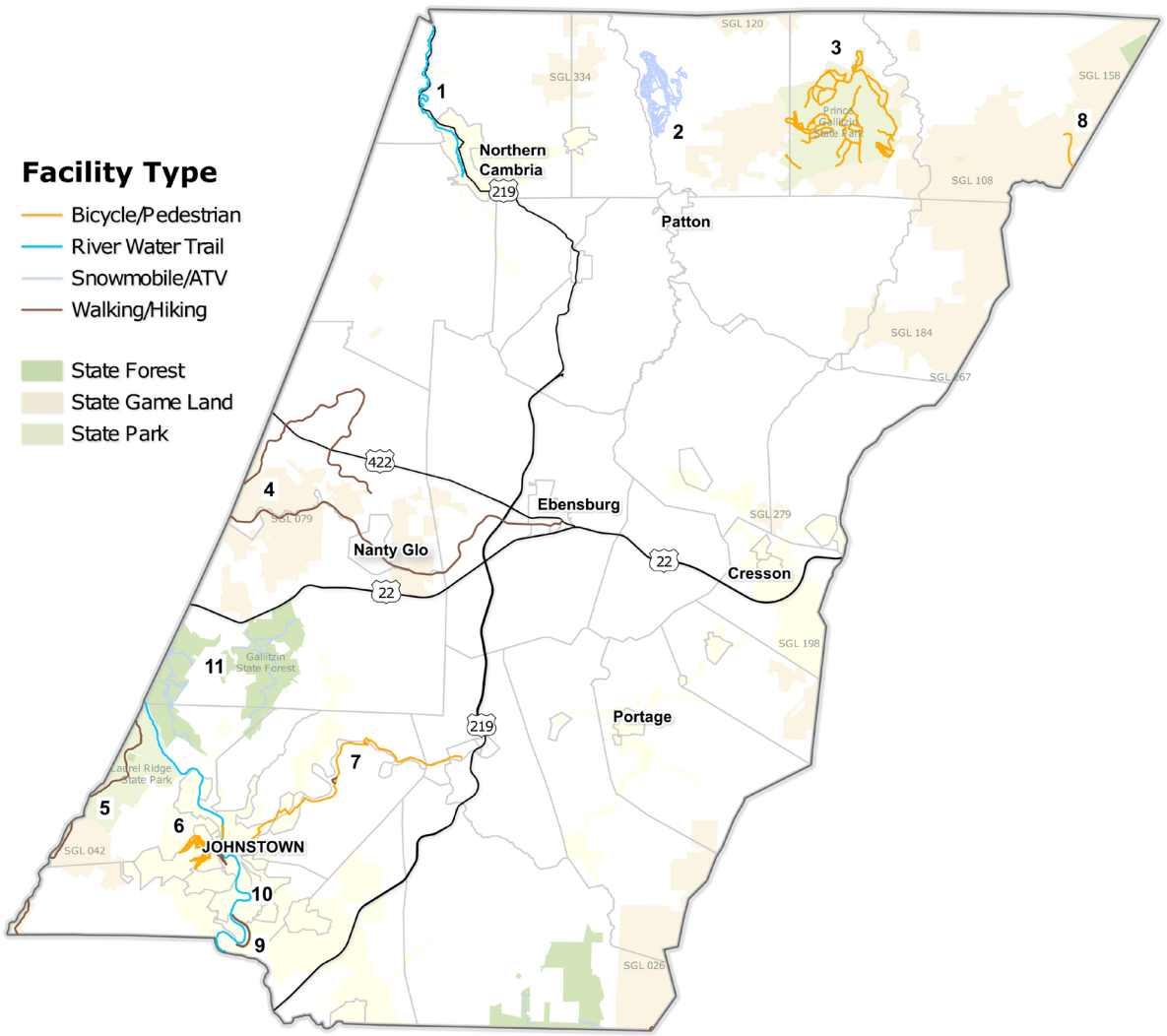
## Overview

- A Bicycle and Pedestrian Plan was adopted by the Cambria County Planning Commission in January 2019 and updated in April 2021.
- Cambria County features roughly 185 miles of trails (Figure 45). This includes bicycle, pedestrian, and hiking trails, as well as river waterways, snowmobile paths, and ATV routes, all designated for outdoor recreation.
- The adoption and implementation of sidewalk ordinances can enhance the safety and maintenance of pedestrian infrastructure in urban and densely populated areas. According to Cambria County's most recent bike-ped plan, approximately 40 percent of municipalities have some type of sidewalk regulations in place.
- Ensuring equitable and comprehensive access to active transportation across both urban and rural areas is important, given that approximately 11 percent of the county's households do not have access to a vehicle. The lack of access to transportation can limit employment opportunities, restrict access to healthcare, and reduce social mobility.
- The Cambria County Conservation & Recreation Authority (CCCRA) is working to secure the necessary funding to complete its planned loop on the Ghost Town Trail. When finished, the trail will be the first continuous loop rail-trail in the United States, as confirmed by the Rails to Trails Conservancy. In 2009, the trail welcomed around 80,000 users. Since the COVID-19 pandemic, this number has increased to approximately 160,000 per year.

## Planning Implications

- Bicycle and pedestrian networks are a valuable asset for enhancing economic opportunities, especially in proximity to employers and commercial areas. The improvement of safety measures along these networks can have positive effects on the communities they serve. By facilitating safer and more reliable transportation, such networks can contribute to the economic development of an area, while also promoting healthy lifestyles and social interaction.
- Cambria County has a diverse range of trails that traverse both rural and urban landscapes. Enhancing trail connectivity is a key factor in expanding access to and use of outdoor recreational activities.
- To enhance the livability, safety, and health of Cambria County and its communities, it is essential to address safety concerns such as high traffic speeds, limited bicycle facilities, and poor infrastructure maintenance (such as shoulder sweeping). Addressing these issues promotes active transportation.

## Figure 45: Cambria County Trails




1. Susquehanna River Water Trail - West Branch
2. Rock Run ATV Trails
3. Prince Gallitzin State Park Trails
4. Ghost Town Trail
5. Laurel Highlands Hiking Trail
6. Powell Stackhouse Park Trails
7. Path of the Flood Trail
8. Bells Gap Rail Trail
9. Jim Mayer Riverwalk
10. Kiski-Conemaugh River Water Trail
11. Rager Mountain Division Snowmobile Trails

# Aviation

## Overview

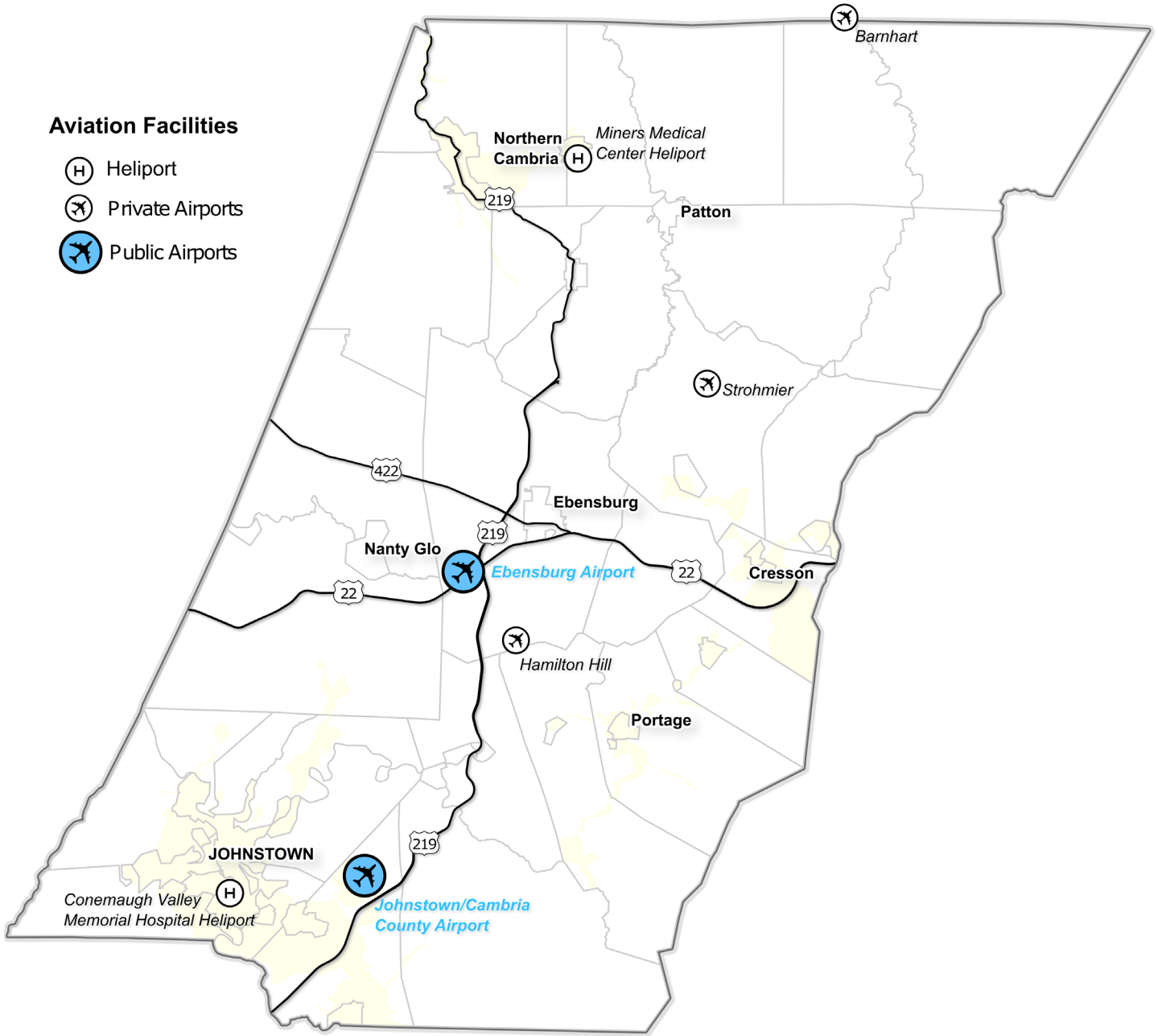
- Cambria County has five airports and two private heliports. Of the five airports, two are public-use: the Ebensburg Airport and the John Murtha Johnstown-Cambria County Airport, which serves as the region's commercial airport. These airports play a critical role in facilitating air transportation and connecting the county to other regions and the national and international aviation systems.
- Conemaugh Memorial Medical Center, serviced by one of the helipads, is the only Level 1 Trauma Center in the county. The next-closest Level 1 Trauma Center is in Pittsburgh.
- The John Murtha Johnstown-Cambria County Airport (JST) connects local residents with the broader aviation system. Besides commercial services, the airport handles a range of general aviation and military traffic. It offers services such as flight training, aerial advertising, air charters, and corporate/business flights.
- The Johnstown Airport is served by Skywest Airlines, flying as United Express. This service provides daily access to Chicago O'Hare and Washington-Dulles International airports, giving the airport major and diverse connections.
- There is a significant military presence at the airport. The Army National Guard is stationed at the airport and contributes to regular military activity, mainly for helicopter training and exercises. The airport is a valuable aviation hub, with a strategic location and comprehensive facilities that support transportation and logistics operations in the county.
- Activity has increased dramatically at the airport in recent years. Overall enplanements grew to 7,764 in 2022, and exceeded 10,000 during 2023—for the first time since 2006. The milestone makes the airport eligible for $1 million in Federal Aviation Administration (FAA) funding for the airfield.
- According to PennDOT's 2022 Aviation Economic Impact Study, the Johnstown airport has an impact of $76.3 million and a workforce of 523. It marked its 75th anniversary of service to the region during 2023.
- The Ebensburg airport supports emergency medical air transportation, private flight training, and military helicopter training.
- Airport Hazard Zoning, which keeps the area surrounding airports clear of potential obstacles to flight paths such as tall structures, promotes the safety of the public and the capacity of airports. Of the 12 municipalities surrounding the county's two public-use airports, six have passed Act 164 (Airport Hazard Zoning) Ordinances, as reported by the PennDOT Bureau of Aviation.

Johnstown-Cambria County Airport photo courtesy of Larry Nulton, Ph.D.

## Planning Implications

- Airport Hazard Zoning is needed to ensure compatibility through strategic land use management approaches that protect the airport's operational capability. These ordinances guide land use in the surrounding areas of airports to prevent accidents and hazards that could harm safety and airport operations. Only half of surrounding municipalities have currently enacted Act 164 (Airport Hazard Zoning) Ordinances.
- The airport currently does not have the air traffic to support a bus stop, although one could be viable in the future and would help provide more transportation interconnections as the airport continues to grow. These may include designated pick-up and drop-off zones for ride-sharing and taxi services.
- The Johnstown Airport Authority is pursuing an ultra-low-cost carrier. Increased air service would increase demand for parking capacity.
- The Johnstown airport has applied for funding for EV charging stations for vehicles and aircraft to reduce the net carbon footprint of aviation activity.
- In March 2024, Cambria County received $1.92 million from the U.S. Department of Transportation's Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program. The grant will enable the County's emergency services to use drones to deliver lifesaving medical supplies to rural areas. The program has the potential to become a model for other states as it is built and tested.

## Figure 46: Aviation Facilities, Cambria County



# Electric Vehicles

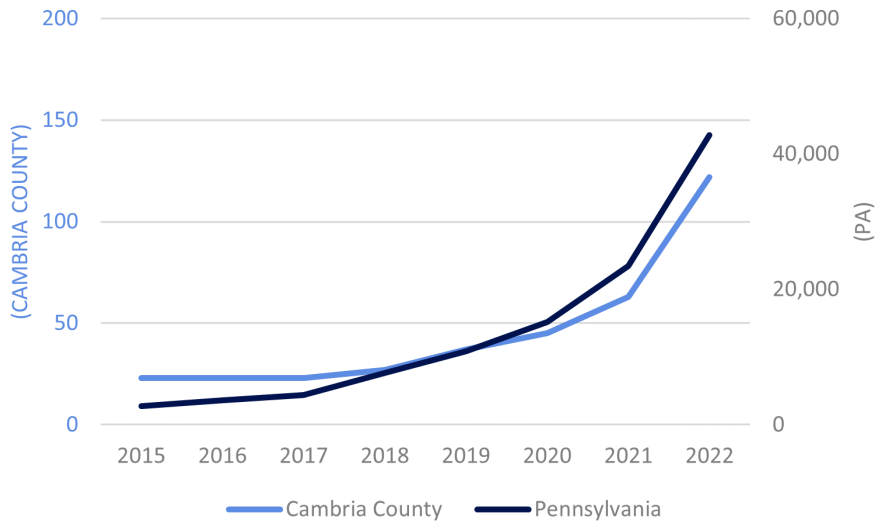
## Overview

- Electric vehicle (EV) registrations have increased significantly in the past five years, although they still represent a very small percentage of vehicles. Of the county's 115,905 vehicle registrations (2022), 122 are EVs (Figure 47).

## Planning Implications

- Although the county does not have designated alternative fuel corridors, the number of registered EVs is on the rise. As such, it is increasingly important to establish infrastructure that can support this growing trend. This infrastructure will be required to provide charging stations, maintenance, and other services that are essential for the proper functioning of EVs.
- Statewide, PennDOT is prioritizing charging stations along the Interstates. After that need is met, PennDOT will have a greater capacity to allocate funds toward enhancing EV charging availability in the state's rural areas.
- County planning for new EV infrastructure based on key corridors and destinations is needed to guide decision-making and prioritization efforts.

**Figure 47: Electric Vehicle Registrations, 2015 to 2022**




Source: PennDOT Annual Report of Registrations


# Performance Measures

## Overview

- In 2012, the federal surface transportation law MAP-21 was passed, which increased the emphasis on performance management in transportation planning. The focus on performance and outcomes is aimed at encouraging states and MPOs to allocate resources toward projects that will collectively contribute to achieving national objectives. The emphasis on performance management in transportation planning has continued with the passage of subsequent legislation such as the FAST Act in 2015 and the Bipartisan Infrastructure Law (BIL) in 2021.
- PennDOT develops state-level performance targets for each of the federally required measures: Safety (PM-1), System Condition (PM-2), and System Performance (PM-3). Pennsylvania's MPOs and RPOs may adopt the state targets or establish their own. The Cambria County MPO has committed to supporting all three state-designated performance targets.
- The Cambria County MPO has not met its safety targets (Figure 48). The county's annual average roadway fatality target was adjusted upward to 9.9 from 7.9 between 2019-23 and 2020-24. The region also did not meet its targets for average annual number of serious injuries or serious injury rate.
- Cambria County is meeting two out of three targets related to system condition. On the non-Interstate NHS network,[1] the percentage of the county's

**Figure 48: Performance Measure Targets (PM-1)**

| Performance Measure | Five-Year Rolling Averages | |
|---|---|---|
| | Baseline | Target |
| | 2018-2022 | 2020-2024 |
| Number of Fatalities | 9.4 | 9.9 |
| Fatality Rate | 0.943 | 0.988 |
| Number of Serious Injuries | 48.0 | 47.8 |
| Serious Injury Rate | 4.816 | 4.771 |
| Number of Non-Motorized Fatalities and Serious Injuries | 5.4 | 5.7 |

Note: Future VMT estimates are anticipated to remain steady over the next few years.

[1] Targets are not federally required for non-NHS roadways.

roadways rated as Excellent or Good is 26.12 percent, short of the 2025 target rate of 35 percent. The share of roadways in "Poor" condition has been trending in a positive direction over the past decade and is currently at 1.01 percent, better than the 2025 target rate of 2 percent. Cambria County bridges on the NHS rated "Poor" account for 3.53 percent of total bridge deck area, better than the 2025 target of 5 percent (Figure 49).

- Travel time reliability measures within the Johnstown region are currently at 97.7 percent, higher (better) than the statewide rate of 92.5 percent (and the statewide target of 88 percent). Since 2018, reliability of roadways within the Johnstown region has been consistently higher than that of the state as a whole (Figure 50).

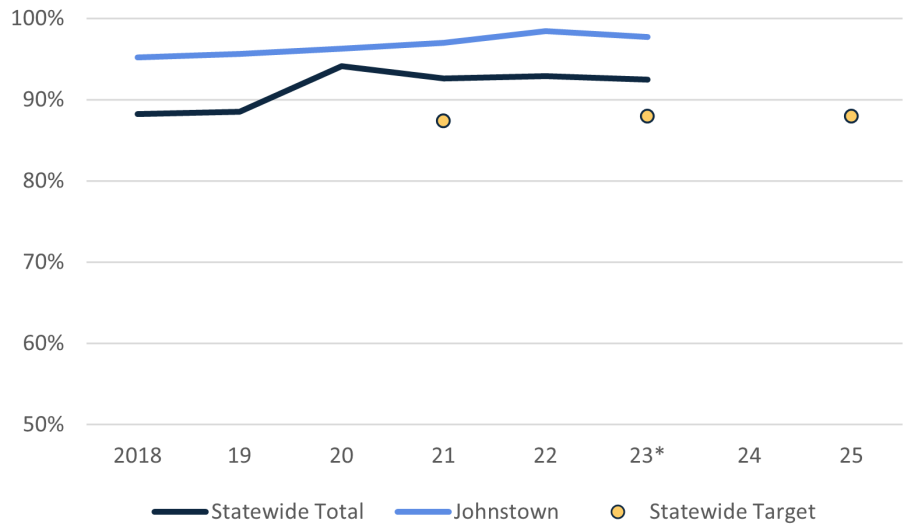
## Planning Implications

- Cambria County will continue to collaborate with PennDOT and FHWA on performance measurement.
- The strategic approach introduced by MAP-21 and continued under the FAST Act and BIL involves leveraging system information to guide investment and policy decisions. The objective is to assist MPOs in making well-informed investment decisions that enable them to optimize their results.

Figure 49: Performance Measure Targets (PM-2)

| | | Current (2022) | 2025 Target |
|---|---|---|---|
| NHS Bridges (Interstate and Non-Interstate) | Percent Poor by Deck Area | 3.53% | 5% |
| NHS Pavements (Interstate) | Percent Miles in Poor Condition | N/A | N/A |
| | Percent Miles in Good Condition | N/A | N/A |
| NHS Pavements (Non-Interstate) | Percent Miles in Poor Condition | 1.01% | 2% |
| | Percent Miles in Good Condition | 26.12% | 35% |

Figure 50: PM-3, Travel Time Reliability Measures, NHS Non-Interstate




Source: Pennsylvania Statewide and Regional Summary
(Data has not yet been certified by Pennsylvania)

**Figure 51: PM-2 Pavement Rating System**

| Rating | Good | Fair | Poor |
|---|---|---|---|
| IRI (inches/miles) | < 95 | 95 - 170 | > 170 |
| Cracking Percentage (%) | < 5 | CRCP: 5 - 10 | CRCP: > 10 |
| | | Jointed: 5- 15 | Jointed: > 15 |
| | | Asphalt: 5 - 20 | Asphalt: > 20 |
| Rutting (inches) | < 0.2 | 0.2 - 0.4 | > 0.4 |
| Faulting (inches) | < 0.1 | 0.10 - 0.15 | > 0.15 |

**Figure 52: PM-2 Bridge Rating System**

| Rating | Good | Fair | Poor |
|---|---|---|---|
| Deck | ≥ 7 | 5 or 6 | ≤ 4 |
| Superstructure | ≥ 7 | 5 or 6 | ≤ 4 |
| Substructure | ≥ 7 | 5 or 6 | ≤ 4 |
| Culvert | ≥ 7 | 5 or 6 | ≤ 4 |


# Environmental Resources

## Overview

- Cambria County contains many natural resources, including 76 miles of Class A streams, 75 square miles of state game land, and 185 miles of Explore PA trails that all have numerous sensitive natural resources.
- Using the county's 2025 Transportation Improvement Program (TIP), the MPO performed a buffer analysis based on the Pennsylvania National Diversity Inventory (PNDI) environmental review process for transportation projects. Projects that involved new roadways or network features were allotted a buffer of 2,640 feet, while others received a buffer of 200 feet. Environmental resources or features were counted as "potentially impacted" if they intersected with any project buffers.
- Cambria County's TIP is primarily composed of repair, restoration, and safety projects rather than new construction and major infrastructure projects. Most of the projects were designated a 200-foot buffer. Due to the smaller scale of the projects, they will have fewer adverse environmental impacts than larger-scale projects.
- The buffer analysis evaluated the TIP projects against a list of more than 30 types of natural resources to determine potential impacts. The top five affected resources are Prime Farmland Soils, NWI Wetlands, TMDL Streams, Integrated List Attaining Streams, and 100-year Floodplains (Figure 54).

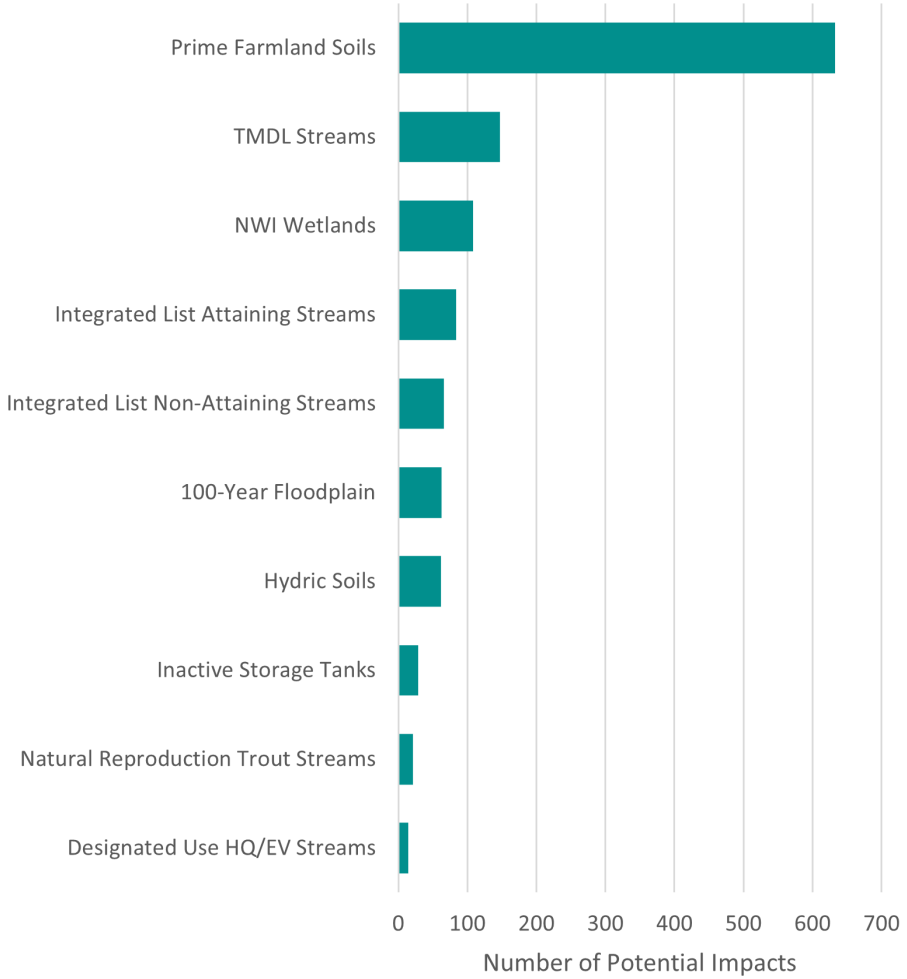
## Planning Implications

- The county's natural resources offer a variety of valuable benefits, including recreation opportunities, enhanced aesthetics and quality-of-life, economic potential, and support for environmental sustainability. Identifying and protecting areas with these resources is vital in planning and developing for the future.
- Given the potential impacts on bodies of water, the MPO will work with PennDOT, municipalities, and other environmentally concerned organizations, such as Cambria County's Conservation District, to mitigate harm to these resources. Protection of reservoirs, wetlands, rivers, and creeks is vital to the health of human communities and natural ecosystems. This is particularly important for bodies of water that support high levels of biodiversity or unique biological resources, provide drinking water, or are popular recreational destinations.
- Cooperative efforts in land use planning among municipal, county, state, and federal agencies; developers; and residents can lessen the impact of development on valuable natural resources. Discussion with local organizations and officials early in the project development process can provide insight into environmental concerns surrounding projects and help mitigate potential impacts.

By using the PennDOT Connects process, the county will collaborate with other organizations and agencies to ensure that projects on the TIP are carried out in a way that avoids, minimizes, or mitigates any potential impacts.

**Figure 53: Environmental Features**


**Figure 54: Top 10 Environmental Resources Impacted by 2025 TIP Projects**




# Revenue Forecast

## Overview

- The Federal Highway Administration requires long-range transportation plans to include an estimate of the amount of revenue the MPO could reasonably expect to receive over the life of the plan—in this case, through 2050.
- The MPO assumes an estimated $666.9 million in total revenue over the 25-year LRTP period. The 2025 12-Year Program (TYP) represents $307.6 million of this amount, leaving a balance of $359.3 million that will be programmed to advance a mix of highway, bridge, and safety projects in the "out years."
- No new state funding acts (such as Act 89 of 2013 or Act 44 of 2007) or increases to revenue from the state's Motor License Fund are anticipated as part of a conservative revenue forecast.
- As a conservative forecast, the MPO assumes that future federal surface transportation funding reauthorizations will provide no funding increases beyond BIL, which expires in September 2026.
- Potential funding from competitive PennDOT grant programs such as Green Light–Go and the Multimodal Transportation Fund was excluded from the revenue forecast, given the unpredictability of future discretionary awards.
- The county's draft 2025 Transportation Improvement Program (TIP) represents a total investment of $102.2 million—an increase of about $33 million from the 2019 TIP.
- Increases in revenue will be offset by inflation. The LRTP is financially constrained to $666.9 million through 2050, but after adjusting for inflation, its real value decreases to $578.6 million.
- Projects shown in Appendix A as part of the 2025 TYP are considered funded projects, or within the MPO's financial constraint. Projects that appear in Appendix B as "illustrative" are not currently funded. The MPO will consider the candidates from the illustrative list as future programs are being developed.
- Figure 55 details the anticipated revenue available to Cambria County over the various planning periods.

**Figure 55: Revenue per Planning Period**

| Planning Period | | Amount ($000s) |
|---|---|---|
| 2025-28 | TIP | $102,247 |
| 2025-36 | TYP | $307,591 |
| 2025-50 | LRTP | $666,915 |

**Figure 56: State and Federal Funding Categories with 2025 TIP Highway/Bridge Base Funding Allocation**

| Acronym | Program Name | Eligible Projects | Amount ($000s) |
|---|---|---|---|
| **BRIP** | Bridge Formula Investment Program | Replacement, rehabilitation, preservation, protection, or construction of highway bridges over 20 feet in length | $12,967 |
| **CRP - Urban** | Carbon Reduction – Urban Program | Traffic monitoring, management, and control facilities; public transit projects; bicycle, pedestrian, and non-motorized facilities; advanced transportation and congestion management technologies; and infrastructure-based Intelligent Transportation Systems | $674 |
| **CRP** | Carbon Reduction Program | Deployment of alternative fuel vehicles, public transportation projects, non-motorized transportation improvements, traffic management/monitoring/control, energy efficient alternatives to street lighting and traffic control devices, projects that reduce environmental/community impacts of freight movement, advanced transportation/ congestion management technologies | $1,847 |
| **CMAQ** | Congestion Mitigation and Air Quality | Congestion reduction and traffic flow improvements, travel demand management activities, transit improvements, carpooling/vanpooling, bicycle/pedestrian facilities and programs, freight and intermodal initiatives, etc. | $5,414 |
| **HSIP** | Highway Safety Improvement Program | Safety improvement projects that correct or improve a hazardous road location or feature, or address a highway safety problem | $4,408 |
| **BOF** | Bridge Off-System Funding | Replacement, rehabilitation, preservation, and protection of minor collector and local functional class bridges over 20 feet in length | $8,559 |
| **State Bridge** | State Bridge Funding (Appropriation 185/183) | State (185) and local (183) bridge capital projects | $14,798 |
| **State Highway** | State Highway Funding (Appropriation 581) | Highway capital projects | $21,879 |
| **STP** | Surface Transportation Program | Federal-aid highways and bridges, transportation enhancements/alternatives (bicycle, pedestrian, etc.), safety improvements, recreational trail projects, truck parking facilities, etc. | $10,710 |
| **NHPP** | National Highway Performance Program | Highway and bridge improvement projects on the NHS, resiliency improvements, transit/operational improvements, bicycle and pedestrian projects, highway safety improvements, environmental mitigation related to NHPP projects, etc. | $20,991 |
| | | **Total** | **$102,248** |

Figure 57: 2025 TIP Highway-Bridge Base Funding Allocation

| Funding Type | Amount ($000s) |
|---|---|
| NHPP | 20,991 |
| STP | 10,710 |
| State Highway | 21,879 |
| State Bridge | 14,798 |
| Off-System Bridges | 8,559 |
| HSIP | 4,408 |
| CMAQ | 5,414 |
| Carbon Reduction | 1,847 |
| Carbon Reduction – Urban | 674 |
| Bridge Formula Program | 12,967 |
| Total | $102,248 |

Source: PennDOT Financial Guidance Documentation

Figure 58: 2025-28 TIP Annual Averages

| Project Type | Amount ($000s) |
|---|---|
| Bridge | 9,082 |
| Roadway | 13,349 |
| Safety | 1,102 |
| Other | 1,984 |
| Total | $25,517 |

Source: PennDOT Financial Guidance Documentation

Figure 59: Financial Guidance Trends by TIP, 2015-25 ($000s)


Source: PennDOT Financial Guidance Documentation

Figure 60: Cambria County Carryovers ($000s)

| | |
|---|---|
| Base Financial Guidance amount | $102,069 |
| Anticipated carryover amount | ($69,750) |
| Total funding available for new projects | $32,319 |

Figure 61: Carryovers

| | |
|---|---|
| Local Bridges | $450,000 |
| State Bridges | $18.9 million |
| Roadways | $47.3 million |
| Other | $3.1 million |

Figure 62: 2025 TIP Summary

| | Amount ($000s) | Number of Projects |
|---|---|---|
| Base Financial Guidance Amount | $102,069 | 49 |
| Roadway Total | $65,924 | 13 |
| Raised Pavement Markings | 200 | 2 |
| Highway Restoration | 53,279 | 12 |
| Environmental Monitoring (Line Item) | 100 | – |
| Special Funding – CRP, CRPU, HSIP, CMAQ (Includes Line Items) | 12,345 | 1 |
| Bridge Total | $36,145 | 36 |
| State Bridges | 33,322 | 31 |
| Local Bridges | 2,823 | 5 |

# Project Selection and Prioritization

## LRTP Projects

The LRTP is a project-based plan. Ideas for projects are submitted by the public, municipalities, other stakeholders such as CamTran, PennDOT, and the MPO. An LRTP must be fiscally constrained, meaning that the estimated total cost of listed projects must not exceed the amount of funding reasonably expected to be available over the planning period (25 years). A project selection and prioritization process is necessary to ensure that the region's finite transportation funding is used to advance the projects that yield the most benefit, while aligning with federal and state requirements and the priorities articulated in the MPO's LRTP.

The Cambria County MPO conducts initial project prioritization using selection criteria aimed at quantifying the merits of a proposed project. The criteria are developed to emphasize federal and state priorities such as asset management and performance-based planning and programming.

For example, as described in the Performance Measures section, the Cambria County MPO has adopted state-designated measures related to system performance, as required by federal law. The measures address the following:

- Safety (PM-1)
- System Condition (PM-2)
- System Performance (PM-3)

Cambria County has not met its safety targets for annual average roadway fatalities and average annual number of serious injuries or serious injury rate. Therefore, projects proposed for the LRTP that would help improve safety performance in these areas are given a higher priority in the LRTP project selection process.

For this 2050 LRTP, the MPO revised its evaluation criteria to yield a more objective scoring of candidate projects. The MPO used a weighted scoring system as detailed in Figures 64, 65, and 66,

prioritizing projects that help meet system performance targets. Projects were scored against the criteria, then grouped into high–medium–low categories. Professional judgement and an understanding of total system needs across modes was used to prioritize projects within categories.

Projects that are within financial constraint are listed in Appendix A. This includes projects from the 2025 12-Year Program (projects from FFY 2025 through FFY 2036).

For longer-term project needs between FFY 2036 and FFY 2050 (or the "out years"), the MPO used line items to document the needed investment levels for highway, bridge, and safety projects. Funding shares were drawn from Financial Guidance documentation that PennDOT released in April 2023 and are on a 60.2 percent–35.5 percent–4.3 percent split by project type, respectively.

Project needs always outstrip available funding. The remaining projects that exceed anticipated funding are cataloged in this plan as Appendix B. They are considered to be "eligible, but unfunded" (or "illustrative") projects. They will be considered for future transportation programs as funding allows.

For future plan and program updates, the MPO is interested in establishing a formal prioritization process for projects related to CMAQ, HSIP, CRP, and BOF bridges.

## TIP Projects

The Transportation Improvement Program (TIP) is the first four years of the LRTP. It lists the projects expected to be undertaken soonest, in this case between FY 2025 and FY 2028.

Prioritization of projects to develop the TIP uses additional tools that produce a list of essential maintenance and rehabilitation projects to preserve asset condition in accordance with asset management principles and targets. Tools include PennDOT's BridgeCare system (also known as the Bridge Asset Management System, or BAMS) and its Pavement Asset Management System (PAMS). PennDOT District 9-0 also maintains tools such as its bridge risk assessment tools to evaluate the performance of the region's roadway and bridge network.

Asset management tools and calculations are not intended to replace human judgment or the traditional role of the MPO and its deliberations. Moreover, it should be understood that the use of asset management tools to meet federal condition targets for National Highway System roadways and bridges can come at the expense of other types of candidate projects, such as bicycle/pedestrian improvements or projects intended to stimulate or maintain an area's economic development potential. Addressing competing priorities across modes and functional classification within financial constraint is a critical function of the MPO in program development.

**Figure 63: Roadway Project Selection Criteria**

| Weight | Performance Measure | Individual Weight | Criteria Description | Definition Rating | Value Multiplier |
|---|---|---|---|---|---|
| 20% | PM-1 | 20% | Safety – Network Screening – What is the excess safety value of the roadway or intersection? (PM-1) | <-0.1 | 0 |
| | | | | -0.1 - 0.1 | 0.25 |
| | | | | 0.1 - 0.25 | 0.5 |
| | | | | >0.25 | 1 |
| 20% | PM-2 | 10% | System Deficiencies (Pavement) – IRI (PM-2) | N/A | 0 |
| | | | | Excellent | 0.125 |
| | | | | Good | 0.25 |
| | | | | Fair | 0.5 |
| | | | | Poor | 1 |
| | | 10% | System Deficiencies (Pavement) – OPI (PM-2) | N/A | 0 |
| | | | | Excellent | 0.125 |
| | | | | Good | 0.25 |
| | | | | Fair | 0.5 |
| | | | | Poor | 1 |
| 20% | PM-3 | 20% | Performance/Operations – Is project located on a corridor that is deemed unreliable? (PM-3) | No | 0 |
| | | | | Yes | 1 |
| 20% | Network | 5% | Network - Percent trucks – What is the overall percentage of medium/heavy duty commercial trucks? | 0%-4% | 0 |
| | | | | 5%-9% | 0.5 |
| | | | | 10% - 14% | 0.75 |
| | | | | >15% | 1 |
| | | 5% | Network – What Business Plan Network is the project on? | 4 | 0.25 |
| | | | | 3 | 0.5 |
| | | | | 2 | 0.75 |
| | | | | 1 | 1 |
| | | 5% | Network – Is the project on a LFAR-eligible facility? | No | 0 |
| | | | | Yes | 1 |
| | | 5% | National Highway System – Is the project located on the National Highway System? | No | 0 |
| | | | | Yes | 1 |

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| Weight | Performance Measure | Individual Weight | Criteria Description | Definition Rating | Value Multiplier |
|---|---|---|---|---|---|
| 10% | Environment | 5% | Project Impact/Benefit (Environmental) – Is the project located within any disadvantaged/EJ population areas? (We will assume ALL projects have a positive impact.) | No | 0 |
| | | | | Yes | 1 |
| | | 5% | Condition – Is the project located on a roadway segment prone to flooding (will it assist with stormwater management)? | No | 0 |
| | | | | Yes | 1 |
| 10% | Traffic | 10% | Traffic Volume – What is the daily traffic volume (AADT) at the project location? | AADT < 5,000 | 0 |
| | | | | AADT = 5,000 to 10,000 | 0.25 |
| | | | | AADT = 10,000 to 15,000 | 0.5 |
| | | | | AADT = 15,000 to 20,000 | 0.75 |
| | | | | AADT > 20,000 | 1 |
| 100% | | 100% | | | |

**Figure 64: Bridge Project Selection Criteria**

| Weight | Performance Measure | Individual Weight | Criteria Description | Definition Rating | Value Multiplier |
|---|---|---|---|---|---|
| 20% | PM-1 | 20% | Safety – Network Screening – What is the excess safety value of the roadway or intersection? (PM-1) | <-0.1 | 0 |
| | | | | -0.1 - 0.1 | 0.25 |
| | | | | 0.1 - 0.25 | 0.5 |
| | | | | >0.25 | 1 |
| 20% | PM-2 | 20% | Condition – Is bridge good/fair/poor condition? (PM-2) | Good | 0 |
| | | | | Fair | 0.5 |
| | | | | Poor | 1 |
| 20% | PM-3 | 20% | Performance/Operations – Is project located on a corridor that is deemed unreliable? (PM-3) | No | 0 |
| | | | | Yes | 1 |
| 20% | Network | 5% | Network – Percent trucks – What is the overall percentage of medium/heavy duty commercial trucks? | 0%-4% | 0 |
| | | | | 5%-9% | 0.5 |
| | | | | 10% - 14% | 0.75 |
| | | | | >15% | 1 |
| | | 5% | Network – What Business Plan Network is the project on? | 4 | 0.25 |
| | | | | 3 | 0.5 |
| | | | | 2 | 0.75 |
| | | | | 1 | 1 |
| | | 5% | Network – Is the project on a BOF-eligible facility? | No | 0 |
| | | | | Yes | 1 |
| | | 5% | National Highway System – Is the project located on the National Highway System? | No | 0 |
| | | | | Yes | 1 |

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| Weight | Performance Measure | Individual Weight | Criteria Description | Definition Rating | Value Multiplier |
|---|---|---|---|---|---|
| 10% | Environment | 5% | Project Impact/Benefit (Environmental) – Is the project located within any disadvantaged/EJ population areas? (We will assume ALL projects have a positive impact.) | No | 0 |
| | | | | Yes | 1 |
| | | 5% | Condition – Is the project located on a bridge segment prone to flooding (will it assist with stormwater management)? | No | 0 |
| | | | | Yes | 1 |
| 10% | Traffic | 10% | Traffic Volume – What is the daily traffic volume (AADT) at the project location? | AADT < 5,000 | 0 |
| | | | | AADT = 5,000 to 10,000 | 0.25 |
| | | | | AADT = 10,000 to 15,000 | 0.5 |
| | | | | AADT = 15,000 to 20,000 | 0.75 |
| | | | | AADT > 20,000 | 1 |
| 100% | | 100% | | | |

**Figure 65: Multimodal Project Selection Criteria**

| Weight | Performance Measure | Individual Weight | Criteria Description | Definition Rating | Value Multiplier |
|---|---|---|---|---|---|
| 50% | Accessibility | 25% | Multimodal Accessibility/Mobility – How many of the following are affected by the project?<br>A) Bus B) Bicycle C) Pedestrian D) Rail E) Air F) Auto | None will be affected | 0 |
| | | | | One will be affected | 0.5 |
| | | | | Two will be affected | 0.75 |
| | | | | Three+ will be affected | 1 |
| | | 25% | Multimodal Accessibility/Mobility – Recreational Access – Does the project provide access to or provide additional recreational or tourism opportunities? | No | 0 |
| | | | | Yes | 1 |
| 50% | Growth | 12.5% | Sustainability/Smart Growth – Is the project located in a Federal Opportunity Zone ("OZones")? | No | 0 |
| | | | | Yes | 1 |
| | | 12.5% | Multimodal Network Growth – Does the project extend or complete a network/service area? | No | 0 |
| | | | | Yes | 1 |
| | | 25% | Multimodal Network Growth – Does the project improve safety? (Such as Traffic Lights, Signs, Crosswalks, Alternative Route, etc.) | No | 0 |
| | | | | Yes | 1 |
| 100% | | 100% | | | |


# Public Engagement

## Overview

- The MPO engaged the public as part of the LRTP update. This included two public surveys described below, and a public meeting held during the plan's 30-day public review and comment period.

## MPO Public Survey

- As part of the LRTP update, the MPO released a public survey. The survey was open from November 20, 2023, to January 19, 2024, and received 410 responses.
- Survey promotion involved a multi-channel approach, leveraging social media, the MPO website, local press, and targeted email outreach to community leaders and stakeholders, as well as direct engagement with school districts (Figure 68). In addition, approximately 20 municipal offices and public libraries were visited in person and provided business cards with a QR code linking to the survey.
- The survey asked respondents to:
  - » List their top three transportation priorities (Figure 70).
  - » Rate potential strategies.
  - » Identify problem locations on a map and describe project-worthy issues (Figure 72).
- The map received a total of 666 pins (Figure 73). The top three improvement categories noted on the map were Roadway, Walking/Biking, and Public Transit.

## STC Public Survey

- To supplement the public outreach results, the MPO evaluated the 2023 survey results collected during the update of the state's 12-Year Program. This prior survey effort was administered by the State Transportation Commission (STC).
- The statewide survey recorded more than 10,000 responses, with 47 from Cambria County.
- The survey asked respondents to:
  - » Rate the mode of transportation they use most.
  - » Prioritize transportation concerns.
  - » Identify transportation issues on an interactive map.
  - » Propose allocation of a hypothetical transportation budget across project types.
  - » Provide basic demographic information.
- Summary results follow.
  - » **Budget Allocation** – Each survey participant was instructed to allocate a hypothetical total of $100 among six different categories: Maintenance, More Lanes / New Roads, Ride More / Drive Less, Bicycling / Walking, Technology, and Economic Support. The responses demonstrated a preference toward spending on maintenance, followed by technology (Figure 66).

- **Transportation Modes** – Individuals rated their transportation mode usage from never to every day for eight categories: Aviation, Bicycling, Carpool / Ride Share, Drive Alone, Motorcycle, Passenger Rail, and Public Transit.
- **Priorities** – Priority ratings were evaluated by allocating 20 points to across 10 categories. Top priorities selected were road pavement, bridges, walking, and Interstate highways.
- **Transportation Issues** – There were 33 issues mapped, including comments. Figure 67 lists the comment count by category of transportation.

**Figure 66: Budget Allocation, STC Survey, 2023**

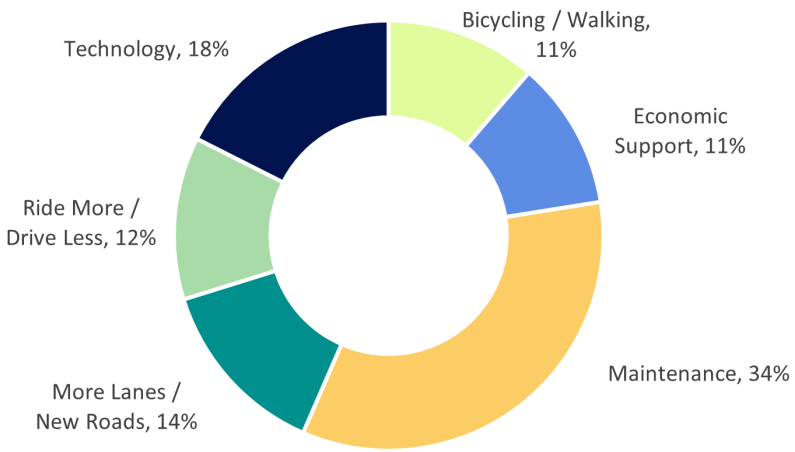



**Figure 67: Mapped Categories Count, STC Survey, 2023**

| Category | Count | Percent |
|---|---|---|
| Bridge | 3 | 9% |
| Pedestrian / Bike | 4 | 12% |
| Roadway | 22 | 67% |
| Transit | 4 | 12% |

**Figure 68: MPO Public Survey Promotion Poster**

Figure 69: Count of Mapped Issue Locations by Municipality, MPO Public Survey

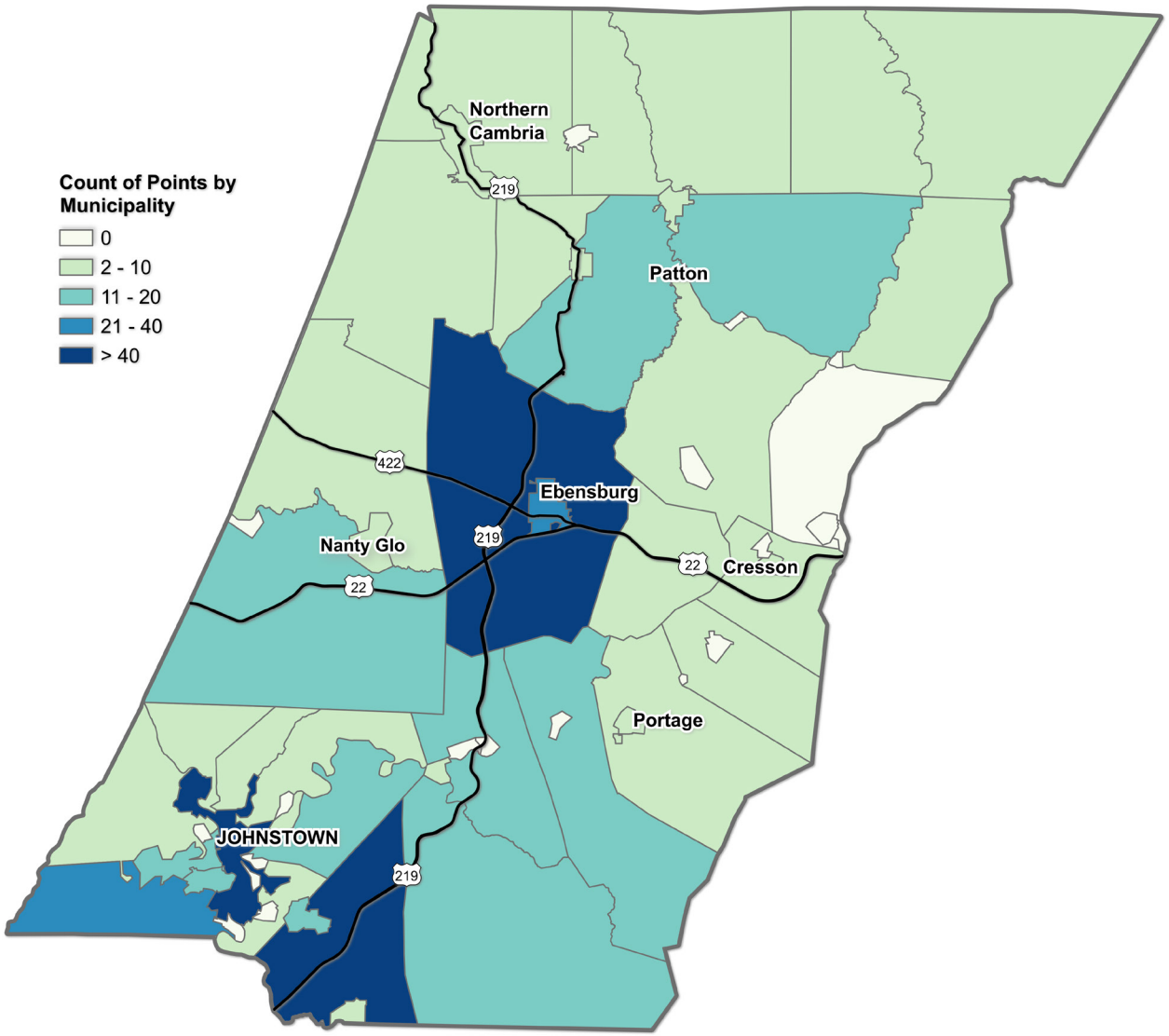


Figure 70: Transportation Priorities, MPO Public Survey

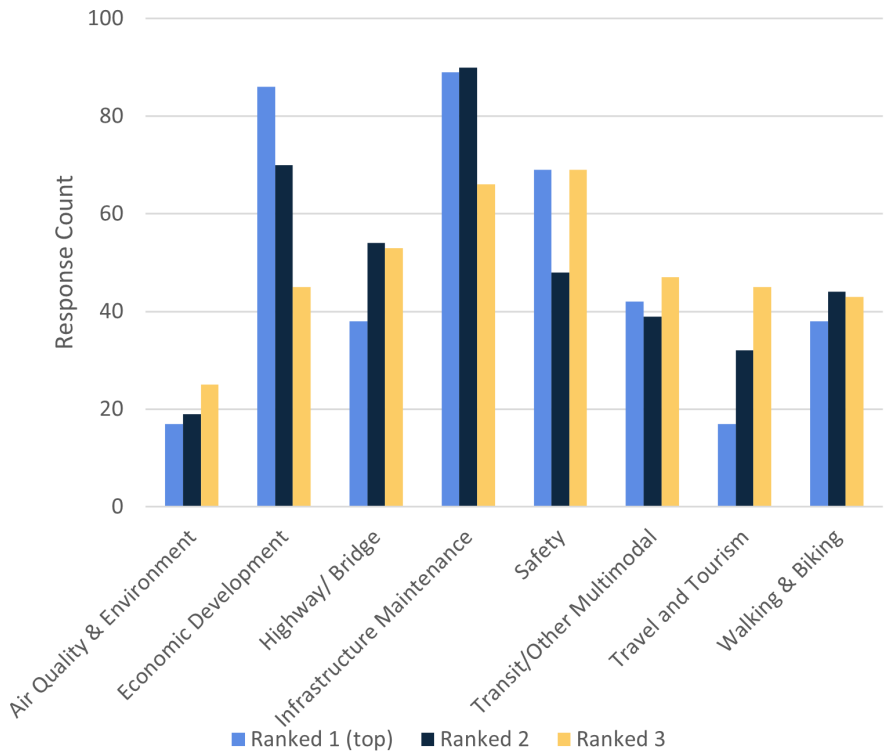



Figure 71: Age of Respondents, MPO Public Survey

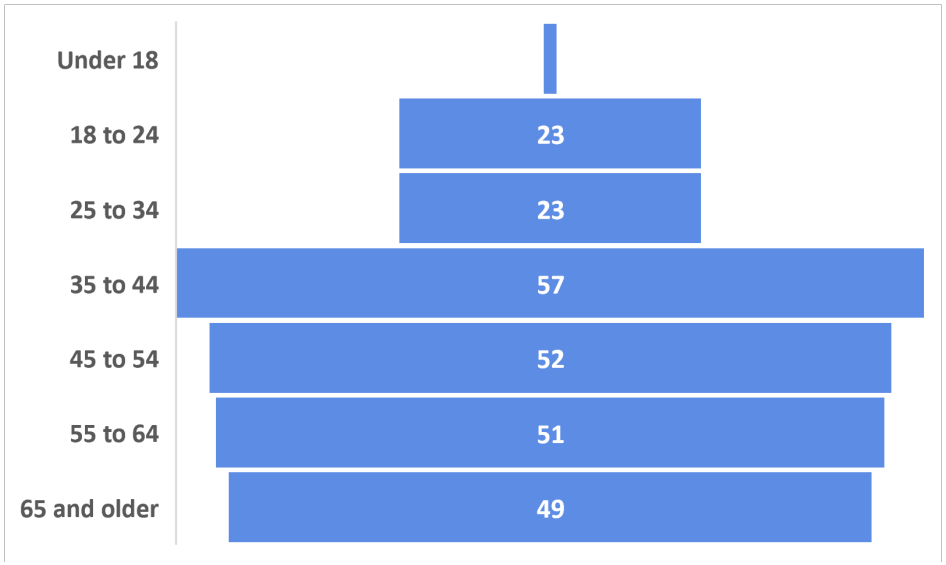
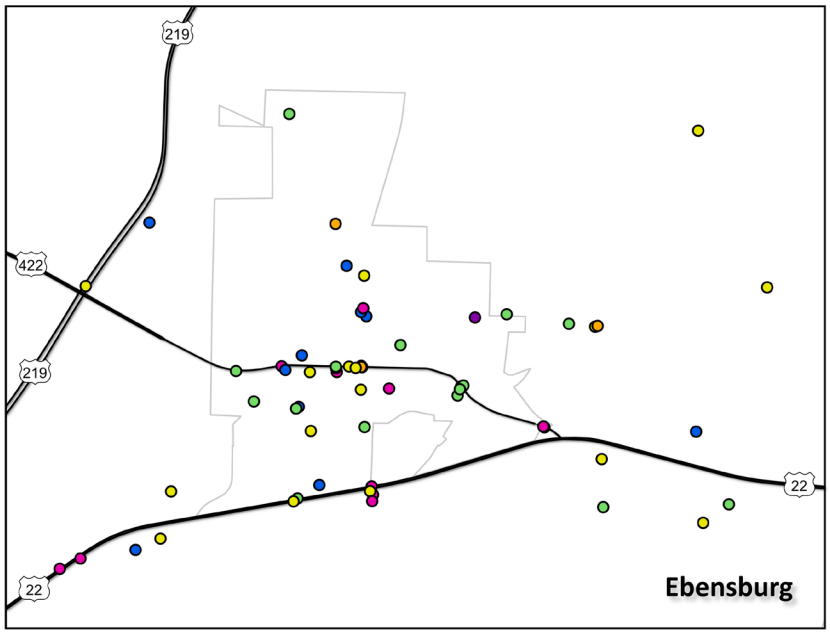
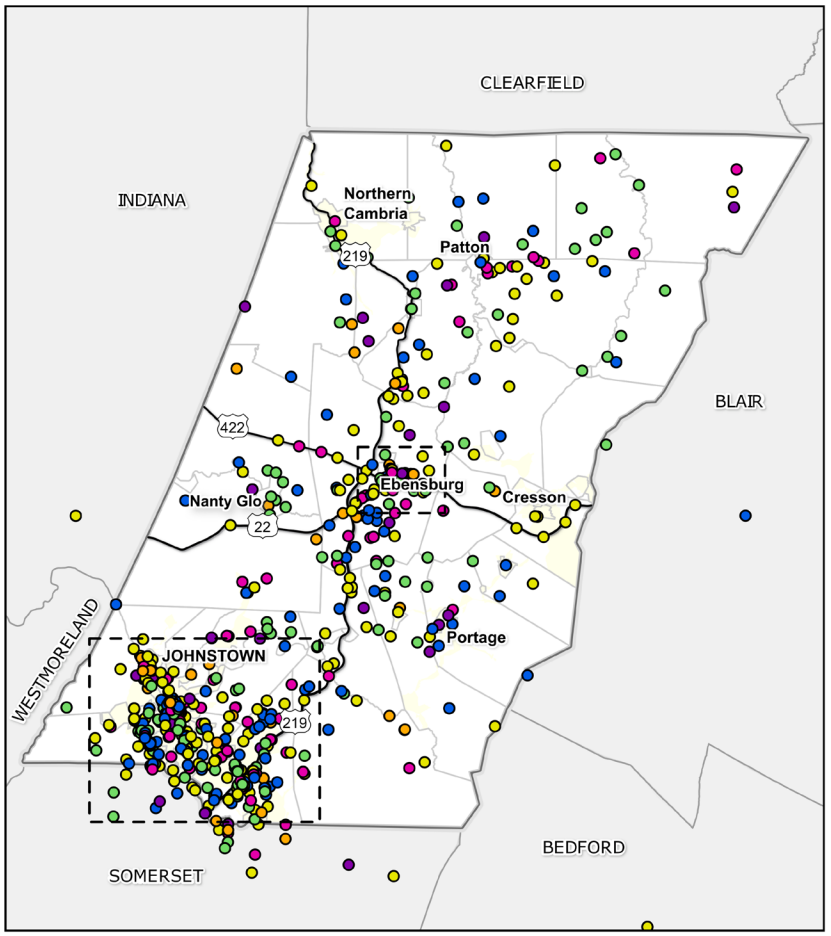


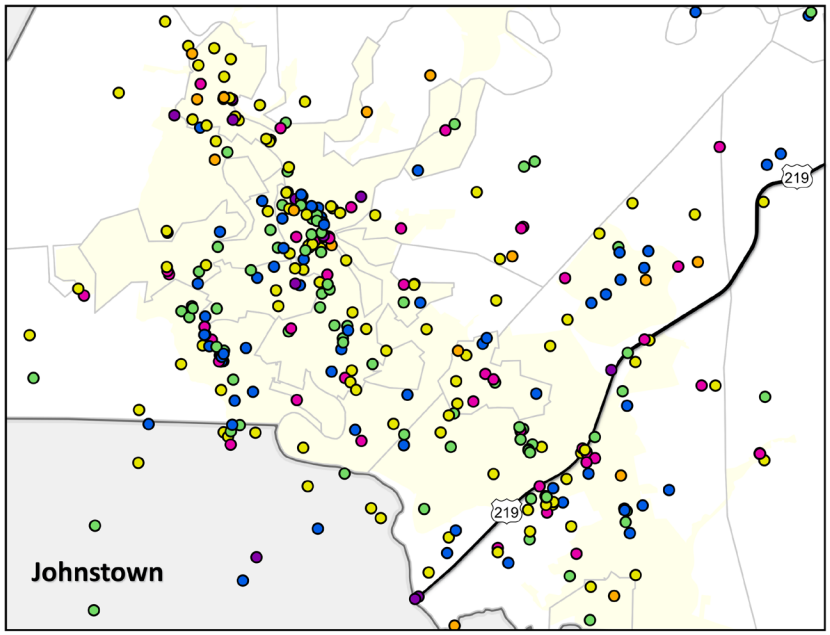

Figure 72: Map Marker Distribution, MPO Public Survey

| Category | Count | Percent |
|---|---|---|
| Bridge | 37 | 6% |
| Freight | 37 | 6% |
| Intersection | 103 | 15% |
| Public Transit | 132 | 20% |
| Roadway | 209 | 31% |
| Walking/Biking | 148 | 22% |

## Figure 73: Mapped Issues, MPO Public Survey




MPO Public Survey

- Intersection
- Bridge
- Freight
- Public Transit
- Roadway
- Walking/Biking


# Strategic Directions

The MPO will implement the LRTP by means of the strategies listed in this section, which are organized according to the following topic areas:

- Safety
- Bicycle and Pedestrian
- Environmental
- Economic Development
- Highway/Bridge
- Public Transportation
- Travel and Tourism

The strategies complement and expand upon those already established in previous Cambria County plans.


# SAFETY

Implementing safety initiatives across the county is the MPO's top priority. For the five-year period ending in 2022, the county registered an average of 1,065 crashes and nine fatalities per year. The total five-year average number of crashes and fatalities have both been decreasing. The MPO will continue to address safety issues while collaborating with PennDOT and other organizations with a role in transportation safety.

### Plan for improved traffic incident management.

- The County is taking steps to enhance the emergency response capabilities of those who respond to and clear incidents from the county's roadways. Additionally, efforts are underway to improve Intelligent Transportation Systems (ITS) infrastructure, which includes weather information systems and dynamic messaging signs. New data and tools have provided valuable insights into incident management by identifying the causes of non-recurring congestion. Common causes of congestion in Cambria County are weather, minor crashes, and other incidents. The US 22, US 219, and US 422 corridors experience the most non-recurring delays.

### Identify priority roadway corridors and intersections for safety improvements.

- The MPO will coordinate with PennDOT District 9-0 to minimize safety concerns on roadways. This includes evaluating candidate corridors for road safety audits to identify needed safety improvements.

### Assist in updating the bike-ped plan, which was last updated in 2021.

- The county's goal is to update its bicycle/pedestrian plan every two years to maintain goals and objectives for enhancing infrastructure and safety for active transportation.

### Incorporate Vulnerable Road User (VRU) data into planning decisions and project listings.

- The MPO uses VRU information to enhance safety by utilizing quantitative

and qualitative data, community input, and land use context to identify specific improvement needs and strategies. The MPO will use VRU data to support decision-making.

- The MPO will pursue grants such as the SMART program to advance smart community technologies and systems for better transportation efficiency and safety. This includes integrating advanced aviation and autonomous vehicles as part of the changing landscape of transportation systems.


# TRANSIT AND OTHER MULTIMODAL

Ensuring access and mobility through improved public transportation is crucial, and therefore the MPO remains committed to planning for countywide public transportation service. The pandemic significantly impacted the demand for public transportation services, and while the demand is recovering, it has yet to return to pre-pandemic levels. Johnstown, served by CamTran, stands out as the smallest city in Pennsylvania with both bus and rail service.

### Support and promote the Johnstown inclined plane service and repair.

- The City of Johnstown features a unique mode of mountain transportation through its rail service, the inclined plane. The Johnstown inclined plane is the steepest vehicular inclined plane in the world, with a grade of 70.9 percent. The system is a vital attribute of the county, providing both residents and visitors with a unique way of traversing the mountainous terrain. Apart from serving as a unique mode of transportation, it is also a popular tourist attraction.

### Update the Local Coordinated Public Transit Human Service Transportation Plan (LCP).

- In 2017, the MPO adopted its latest LCP, which needs updating to provide a more precise picture of public transportation needs in the county. One key benefit of an updated plan would be to identify areas with a high percentage of senior citizens, which may warrant expanded transit service.
- The county's senior population is increasing, making access to medical care and other facilities increasingly important to Cambria County residents.

### Increase collaboration for shared-ride paratransit service across county lines.

- Medical facilities in Cambria County offer specialist services that may not be available in other counties. For Cambria County residents, coordinated transportation services could provide access to other healthcare hubs, such as Altoona.

### Evaluate bus routes and services in support of post-pandemic travel patterns.

- Cambria County lies within two major "laborsheds"—Altoona and Pittsburgh. Enhancing public transportation service

has the potential to increase transit ridership and connect workers to jobs.

### Improve multimodal connectivity to the county's airports and transportation hubs.

- The Johnstown–Cambria County Airport intends to apply for a multimodal grant to help fund construction of a new parking lot that will be linked to bike lanes and walking trails. The project aims to enhance the accessibility of airport services while connecting modes and promoting sustainable and eco-friendly practices.

### Meet ADA requirements for bus shelters and bus stops.

- Recent changes in the Americans with Disabilities Act (ADA) mandate new accessibility requirements for bus stops and shelters. The adoption of these requirements entails significant costs and will have a major impact on transit service. The MPO is supportive of CamTran efforts comply with the new regulations to ensure access to public transportation for people with disabilities.

### Remain actively engaged with PennDOT and Norfolk Southern to support efforts toward a second daily train on Amtrak's *Pennsylvanian* service.

- The expansion of passenger rail service on the *Pennsylvanian* route will provide essential mobility and economic benefits for Cambria County. The "second train" on the *Pennsylvanian* is anticipated to begin service in 2026; more travelers will be able to reach Johnstown, and Cambria County workers will be able to commute to Pittsburgh by rail.

### Maintain the viability of Johnstown's Amtrak station building.

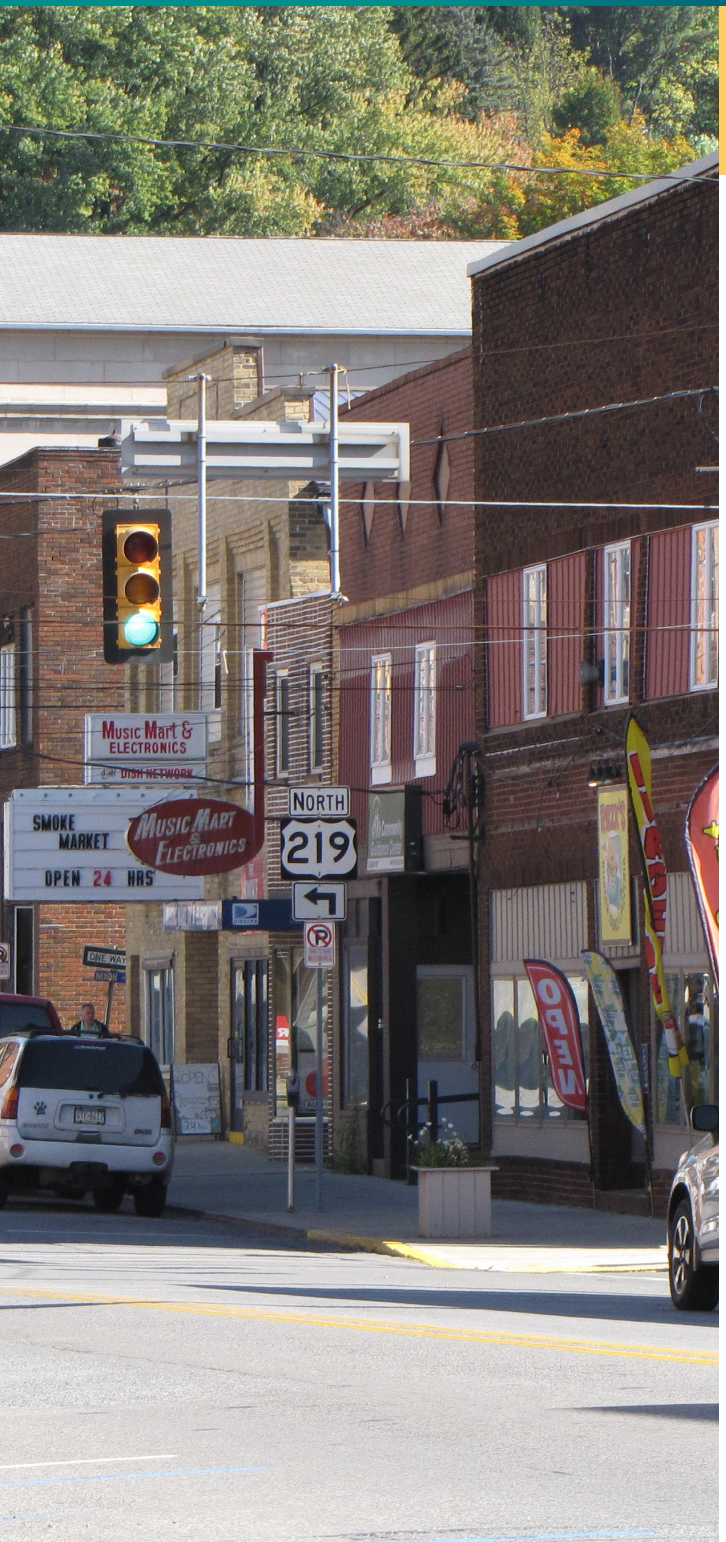
- The Amtrak train station, which is owned by the Johnstown Area Heritage Association, is not only an historic resource, it also includes an event center. Its location near the city limits means it contributes to visitors' first impression of Johnstown.
- Ongoing efforts to improve the Amtrak station have resulted in a new roof, a re-use study, and a RAISE grant that will address maintenance issues.
- Amtrak's ridership from the Johnstown station was approximately 15,000 in 2022.

### Assist in the City's vision of renovating the Intermodal Transit Center and parking garage in downtown Johnstown.

- The Transit Center Redesign project was recently initiated with the goal of modernizing the 40-year-old building and planning for the future needs of the community. The redesign will aim to integrate the center into the community, and serve as a catalyst for growth.

### Facilitate coordination between CamTran and Cambria Housing Authority.

- The Housing Authority manages approximately 1,500 public housing units, including 500 units in downtown Johnstown for elderly and disabled residents. Enhancing coordination between CamTran and Cambria Housing Authority can significantly improve community transit service, leading to more efficient transportation and greater access to destinations. By working together, these organizations can identify areas for improvement and implement strategies to maximize the effectiveness of transit services. This collaboration can benefit the community by providing more reliable and convenient transportation options that meet the needs of residents and visitors.
- This coordination is also in support of the provisions of BIL, which encourages and promotes surface transportation systems that will better connect housing and employment.




# ECONOMIC DEVELOPMENT

Facilitating mobility and access is a vital aspect of enhancing economic competitiveness. The LRTP acknowledges the significance of transportation in connecting workers with jobs, both within and beyond the county. The MPO recognizes that the efficient movement of people and goods is fundamental to supporting a thriving economy. The LRTP underscores the importance of developing a comprehensive transportation system that is safe, sustainable, and reliable. By prioritizing the development of a robust transportation infrastructure, the LRTP aims to strengthen economic growth, promote regional connectivity, and enhance the county's economic competitiveness.

### Support the county's airports as economic generators and providers of transportation.

- In September 2023, the Johnstown–Cambria County Airport reached a milestone of 10,000 enplanements for the 2023 calendar year, a threshold that had not been reached since 2006.
- The Johnstown airport is pursuing service expansion, which would have a significant impact on the surrounding areas. The airport seeks to attract a low-cost carrier in addition to its current service by Skywest Airlines. Additionally, the airport is pursuing funding for expanded parking capacity.

### Ensure access to key industrial parks.

- Business parks are key to the county's economy and the movement of goods. The county has three major industrial areas: Ebensburg/Cambria Township, Johnstown, and Richland Township. These areas serve as hubs for manufacturing and employment. Industrial parks with excellent access to highways, rail, and airports, along with transit service for employees, can attract businesses, promote trade, and contribute to the county's economic competitiveness.

### Conduct a goods movement study.

- One of Cambria County's major challenges in terms of freight movement is a lack of direct access to the Interstate Highway System. Additionally, the topography of the county poses difficulties for heavy trucks. For example, many trucking companies avoid using PA 56

due to the steep grades and winter maintenance concerns.

- Conducting and implementing a comprehensive Freight Study/Plan has the potential to significantly enhance access via rail and truck to businesses and industrial parks. Through a strategic assessment of existing transportation infrastructure, the study would identify opportunities for optimization and expansion, thereby facilitating improved connectivity and increased efficiency. The development of a plan would benefit businesses and industries seeking to expand their operations, as well as identify the needs of the county's shippers and freight carriers.

### Assist municipalities with planning initiatives such as the creation or update of comprehensive plans and implementation of land use management techniques.

- Proper land use management can help protect ongoing investments being made in transportation by promoting land development patterns that encourage the use of public transportation and bicycle/pedestrian modes of travel. It can also prevent haphazard growth, which helps maintain the functionality and longevity of the surrounding roadway network. There are 63 municipalities in Cambria County (32 boroughs, 30 townships, and one city), many of which do not maintain land use management tools and techniques. (Fewer than half (22) have a comprehensive plan, and only 21 administer a zoning ordinance.)
- The MPO will engage municipal governments to provide guidance on local land use planning, strategic placement and development of economic centers, and transportation infrastructure design. This partnership will aim to facilitate the creation of a comprehensive and integrated transportation system that aligns with the economic development goals of the county. By working together, the MPO and municipal governments can ensure that Cambria County's transportation system is designed to meet the needs of its residents and businesses, while also promoting sustainable growth and development.
- In September 2023, the City of Johnstown was awarded $150,000 through the Municipal Assistance Program (MAP) to develop a comprehensive plan that will ensure the city continues to make positive strides toward economic growth. This comes after the city's recent graduation from the Act 47 program for financially distressed municipalities. The plan will be developed in collaboration with a consultant, based on input from residents, visitors, and business owners.
- The city's previous comprehensive plan was adopted about 25 years ago.

**Figure 74: Land Use Management in Cambria County: Existing Plans and Commissions**

| Planning Tool | Number (Percentage) of Municipalities Using Tool |
|---|---|
| Comprehensive Plan | 22 (35%) |
| Zoning Ordinance | 21 (33%) |
| Planning Commission | 22 (35%) |

### Encourage ongoing initiatives by the Cambria County Emergency Management Agency and other partners to enter the Unmanned Aerial Vehicle (UAV) industry.

- The Johnstown-Cambria County Airport is prepared to take steps toward initiating the use of drones. Allowing drones to operate in the area will be beneficial for delivering emergency medical supplies, creating detailed maps, and assisting in emergency planning. The Cambria County Emergency Management Agency is spearheading this effort and will need partners and the approval of the Federal Aviation Administration (FAA). Throughout this process, the support of the MPO is key.
- Indiana University of Pennsylvania has been running the sole unmanned aircraft training center in the state for several years. Students will benefit from development of a test site at the Johnstown airport.


# HIGHWAY & BRIDGE

Cambria County has approximately 1,770 miles of roadway, 333 state-owned bridges, and 87 locally owned bridges. Maintaining the county's transportation assets is fundamental to ensuring their optimal performance, longevity, and cost-effectiveness. PennDOT and the MPO follow Lowest Life-Cycle Cost asset management principles for project and investment decision-making, as required by FHWA. For decades the Cambria County Planning Commission has had very similar priorities for highway improvements in the county. As noted previously in this LRTP, funding for improvements and especially for new construction is very limited. The Commission is quite aware of these limitations and developed its priorities accordingly. With these realities in mind, maximizing the benefits of existing major highway corridors is the essence of this plan.

### Upgrade PA 56 from Armagh to Cessna

- For many years Cambria County transportation planners have considered PA Route 56 into and out of the Johnstown Metropolitan Area to be the most important priority for economic development in the county. The vast majority of population and of commercial/industrial activity is located in the southern third of the county and is served by PA 56. Highway access east and west of Johnstown is outdated and needs to be upgraded to support these realities. While being fully aware of funding constraints, the Commission proposes that PA 56 from Armagh in Indiana County to Cessna in Bedford County be upgraded, in appropriate locations, to a modern two-lane roadway with adequate shoulders, turning lanes, passing lanes, and climbing lanes. This section passes through three different PennDOT Districts and five different counties. Support from all these entities will need to be solicited. This would be similar to the support Cambria County gave to other districts and counties for the total remake of US 22 from Mundy Corner to Monroeville in Allegheny County.
- A segment of PA 56 should be treated with some urgency. The roadway in the west end of the City of Johnstown

passes through residential neighborhoods and creates unsafe conditions. It is the primary route for heavy truck traffic to enter and leave the southern portion of the county. A rerouted roadway from Broad Street to the city line should be studied. Because this road is the major gateway to the Johnstown Metropolitan Area and has been designated as part of the National Highway System, timely action should be considered.

### Pursue Interstate designation for the US 219 corridor.

- US 219 from US 22 near Ebensburg to Interstate 68 in Maryland traverses most of the spine of Cambria County and also that of Somerset County. It was built or will be built to Interstate standards and its benefits for economic development and tourism should be maximized. Further funding for new construction would not be necessary.
- As stated earlier in this plan, Cambria County is one of 19 counties in Pennsylvania that is not directly served by the national Interstate Highway System. It is by far the most populous county in the state with this distinction.
- Advocating for Interstate status north of US 22 is not recommended. Funding for new construction on US 219 is not available and will not become available in the foreseeable future. It is believed that designation of US 219 south of US 22 is fiscally reasonable because such designation would not require new highway construction financing. Further, Interstate highways are intended to connect major four-lane highways such as US 22 and Interstate 68; the roadways north of US 22 do not meet this criteria.
- For designation as a part of the Interstate Highway System, 23 U.S.C. 103(c)(4)(A) requires that a highway meet all the standards of a highway on the Interstate System, be a logical addition or connection to the Interstate System, and have the affirmative recommendation of the State. Support for this designation should be achieveable.

### Continue ongoing emphasis on asset management.

- The MPO will continue collaborating with PennDOT to fund and plan for regular bridge maintenance activities. Smaller investments in timely maintenance can delay or eliminate the need for costly rehabilitation or replacement projects. The ultimate aim of asset management practices is to extend the useful life of an asset and reduce total life-cycle costs.

### Prioritize bridges for repair and upkeep.

- In the past, Off-System Bridge (BOF) funds were used to prioritize local bridges. However, with the 2021 passage of BIL, there is access to a greater pool of BOF funds ($8.5 million within the 2025 TIP).

### Assist municipalities in maintaining local bridges.

- Many local governments, especially those in remote areas, struggle to meet the required funding match for state and federal grants and programs. Maintaining and, where necessary, rehabilitating or replacing “Poor”-rated bridges is essential to public safety and mobility. The MPO aims to inform municipal officials on funding and finance options to complete needed bridge improvement projects. For example, municipalities can use funding sources from Act 89 for transportation, such as the $5 local use fee or retro reimbursement program, to finance local bridge improvements.[2]

[2] The Commissioners repealed the $5 local use fee in December 2023. It is uncertain whether will be reinstated under the new administration.


# TRAVEL & TOURISM

The FAST Act, passed in 2015, introduced new federal planning factors to long-term transportation planning, including travel and tourism. Cambria County encompasses two national park sites and roughly 185 miles of trails. Outdoor recreation has become a major draw for tourists in the county. There are numerous trails available for activities such as walking, hiking, biking, and river/water trails, which attract visitors from both within and beyond Pennsylvania. Johnstown's Incline—the steepest vehicular inclined plane in the world—is also a tourist draw. Tourism is expected to remain a major contributor to the region's economy, particularly as interest in outdoor recreation continues to be strong, during and after the COVID-19 pandemic.

### Support the installation of electric-vehicle charging stations near tourism destinations.

- There is expected to be an increasing demand for EV charging facilities at popular tourism destinations. The MPO will support the installation of charging stations at destinations with high levels of tourist traffic, including at trailheads.

### Address parking at major tourist and recreational destinations.

- Due to the influx of trail users, parking is deficient, especially for users who may be pulling a trailer. Improving parking will encourage the use of multiple ATV, river, and biking trails.

### Support the Cambria County Conservation & Recreation Authority to complete major trail extensions.

- The county's trail network is integral to its transportation network, as well as recreation and tourism promotion. A 2021 addition to the county's trail network extended the Johnstown Greenway Trail to reach the Path of the Flood Trail. Other planned additions to the trail network include the 9/11 National Memorial Trail and the Ghost Town Trail.
- According to the Rails to Trails Conservancy, the Ghost Town Trail will become the first continuous loop rail-trail in the nation upon completion of the seven-mile extension that is underway.

The new stretch will connect to the developed Ghost Town Trail in Cambria County near the US 219 overpass. The existing Ghost Town Trail is approximately 49 miles long. In 2009, it had approximately 80,000 users. Present-day estimates (post-COVID-19) place that figure at more than 160,000 users per year.

**Work with Visit Johnstown to support the transportation needs of Cambria County's two national park sites: the Johnstown Flood National Memorial and the Portage site.**

- Cambria County is home to two national park sites (out of the 21 total in Pennsylvania). This unique feature of the county presents an opportunity to attract tourists and visitors. The Flight 93 National Memorial lies just beyond the county in Somerset. The geographical proximity of these three sites offers opportunities for collaboration and joint marketing.
- Prince Gallitzin State Park is a popular destination for nature lovers and outdoor enthusiasts. The park surrounds Glendale Lake, which is a prime spot for boating and fishing. Visitors can also enjoy activities such as hiking, biking, and snowmobiling on the park's 33 miles of trails. In 2019, the park welcomed 2,033,886 visitors, making it the third-most-visited state park in Pennsylvania.
- The MPO will collaborate with major tourism destinations in the county to identify any transportation barriers that may hinder tourism.
- Involving tourism agencies, such as Visit Johnstown, in the planning process can help identify transportation infrastructure and service needs on major tourist routes. Investing in improvements that make it safer and more convenient for visitors to spend time and money in Johnstown leverages public- and private-sector investments in tourism and bolsters the economy.


# ACTIVE TRANSPORTATION (BIKE–PED)

Interest in outdoor recreation and trail activities has boomed since the COVID-19 pandemic. Resident and visitor use has exploded on the many diverse trails throughout Cambria County. In addition to off-road recreational bicycle and pedestrian use, the MPO aims to encourage and enable safer active transportation opportunities throughout the county.

### Increase outdoor recreation route signage/wayfinding/mapping to improve safety and increase use.

- Rural trail development in Cambria County has been expanding outdoor recreation options for residents and visitors for the past eight years. The Ghost Town Trail, The Path of the Flood Trail, Mountainside Bike Trails, and Rock Run Recreation Area for ATVs are just a few examples of the assets and trails that have been or are being developed. Better signage can increase awareness and usage of these facilities by both the local community and tourists.

### Support municipalities with downtown Complete Streets evaluations to improve safety and connectivity.

- Complete Streets audits of municipal Main Street/downtown areas identify the specific infrastructure needs of the community to accommodate all appropriate modes and types of users. By enhancing accessibility and safety for bicycles and pedestrians in the commercial centers of municipalities, routine activities can be made more convenient and safer, with the added health benefit of active transportation. Encouraging people to get out of their cars yields a more vibrant and active community.

### Collaborate with local governments to enhance and establish bicycle lanes.

- Protected bicycle lanes promote the safety and use of bicycles. Creating improved exclusive lanes in strategic areas can also increase access to outdoor recreation trails.

### Continue to update and coordinate with other entities on plan implementation and active transportation initiatives.

- Cambria County adopted its current Bicycle and Pedestrian Plan in April 2021. Additionally, the county developed maps highlighting trail assets, conditions, and development progress. The

MPO will continue to monitor the plan's implementation and renew information reflecting the progress made.

**Improve bicycle and pedestrian safety.**

- Five-year averages indicate that bicycle and pedestrian crashes have been decreasing in Cambria County. The MPO will continue to improve conditions for non-motorized users by working with PennDOT to implement key recommendations from the county's Bicycle and Pedestrian Plan and other low-cost opportunities to improve non-motorized safety and connectivity. The MPO will ensure that safety for non-motorized transportation users is incorporated into programmed projects, where feasible.

**Support local governments in obtaining funding for the maintenance of trails and facilities for active transportation.**

- Maintenance on trails and active transportation facilities come at a large cost but are important to the function and safety of the facility. The MPO will work with PennDOT to support this endeavor.

# ENVIRONMENT

The region's environmental resources are crucial to its quality of life and overall functioning. As part of its mission, the MPO works to reduce the negative environmental impacts of transportation projects and activities. The MPO collaborates with PennDOT and other agencies throughout the project planning process to identify and address potential harmful impacts.

### Support CamTran in the shift to alternative fuels.

- The utilization of vehicles operating on alternative fuels can significantly benefit the environment. Currently, CamTran has 72 vehicles in its fleet, including one hybrid/electric and 41 compressed natural gas (CNG) vehicles. CamTran operates a CNG station in Ebensburg that could serve as a valuable resource for further adoption of CNG.[3] In support of CamTran's shift to alternative fuels, the MPO will support infrastructure projects that complement the implementation of these fuels.

### Shift toward clean energy electric vehicle (EV) charging stations.

- Installing EV charging stations in Cambria County is important, even though the county does not have any Interstates or designated Alternative Fuels Corridors (AFC). The number of EV registrations in the county is increasing, and visitors from surrounding counties and states may also require EV charging stations.

### Improve best practices to reduce environmental impact.

- Develop a collaborative relationship with environmental resource agencies to integrate best management practices for environmental sustainability into transportation planning and project development.

### Support environmental sustainability within the aviation sector.

- As the aviation industry continues to expand in the county, particularly at the Johnstown–Cambria County Airport, it becomes increasingly important to adopt environmentally sustainable practices. This can be achieved by focusing on reducing emissions, promoting the

[3] The CNG station was among the first in the state constructed for public use and funded by PennDOT.

use of eco-friendly technologies, and mitigating the environmental impact of aviation activities. One approach to reducing the net carbon footprint of aviation activities is to install EV charging stations for vehicles and aircraft. The Johnstown airport has already applied for funding and has plans in progress to move forward with this initiative.

**Install EV solar-powered EV charging stations near trailheads and other strategic locations.**

- Availability of this nascent technology encourages the use of environmentally sustainable transportation and helps reduce carbon emissions.

**Evaluate the potential benefits of relocating and repurposing historic bridges and structures instead of demolishing them.**

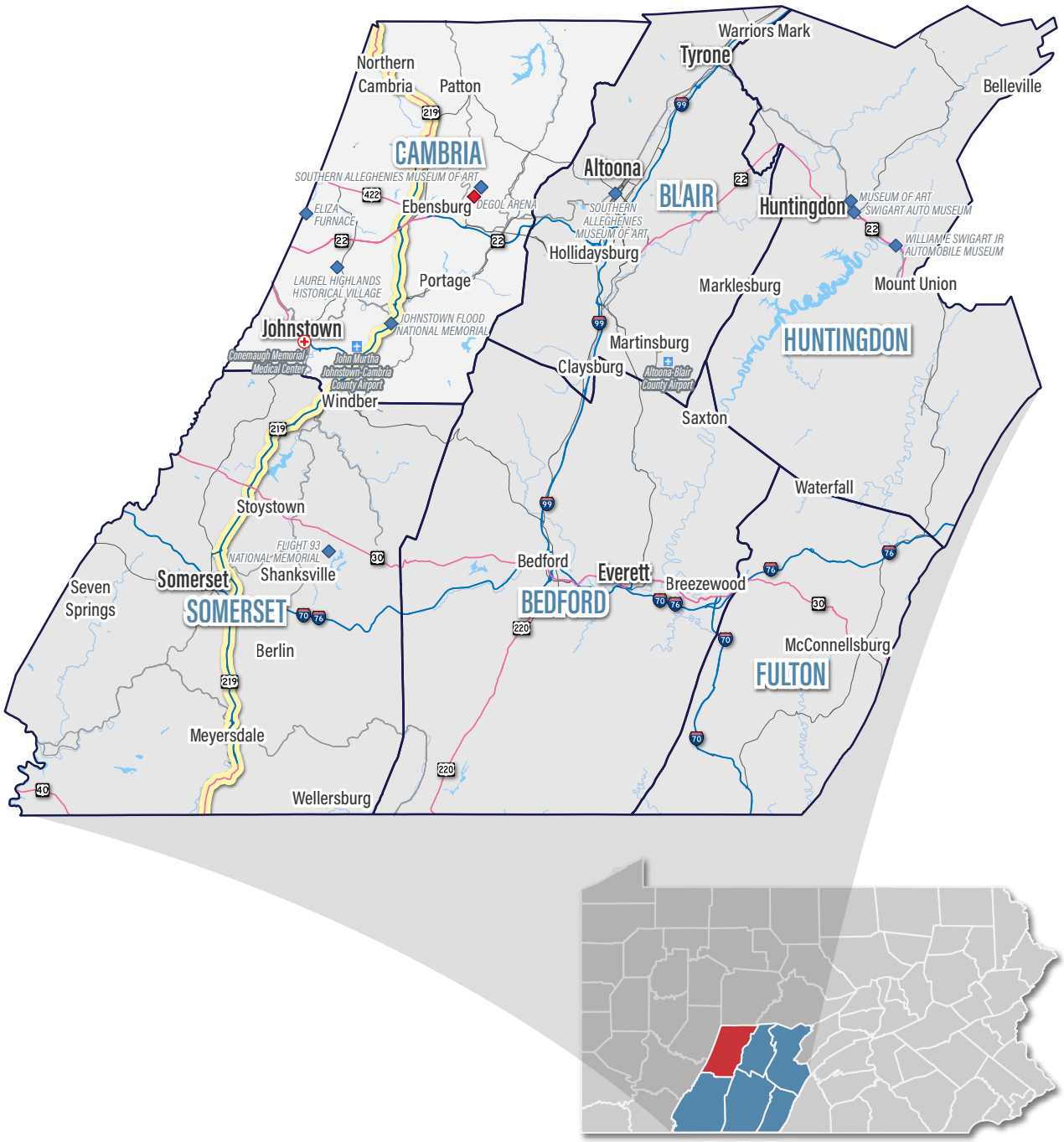
- Aligning with PennDOT's vision for mitigating harm to historical structures, specifically bridges, is a priority for the MPO. Historically meaningful bridges that cannot be rehabilitated to meet present-day safety requirements and traffic needs can sometimes be relocated and repurposed for non-motorized use.

**Assess potential harms to vulnerable species and implement prevention and mitigation strategies.**

- The county has numerous preserved recreational spaces that also provide unique habitats for vulnerable species. The MPO will work with PennDOT and other invested parties to select mitigation strategies that are congruent with the county's distinct environmental attributes.

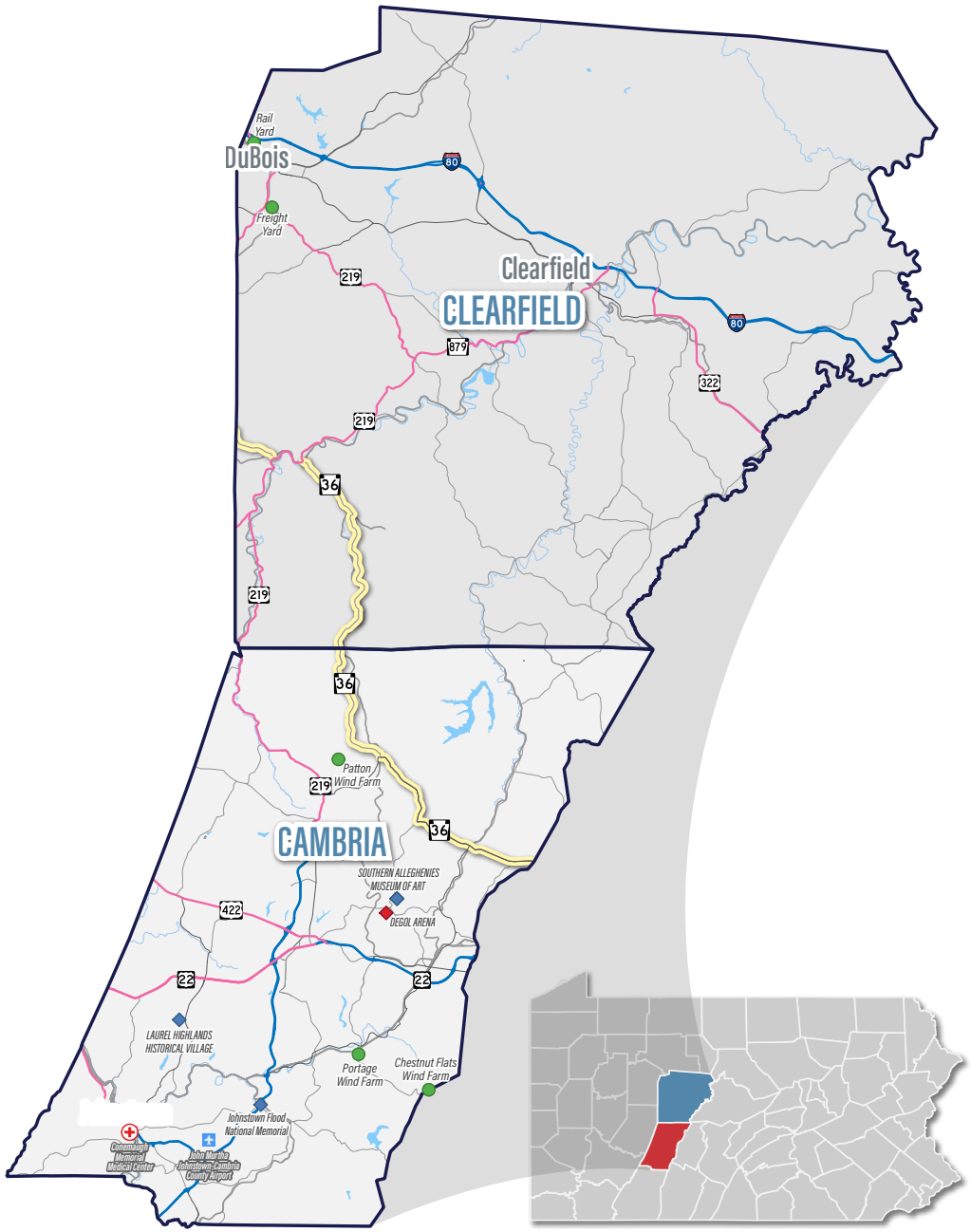
# Beyond the Borders

Cambria County is situated adjacent to two Metropolitan Planning Organization (MPO) regions and two Rural Planning Organization (RPO) regions, namely, Southern Alleghenies, Altoona/Blair County, North Central/Clearfield County, and the Southwestern Pennsylvania Commission (SPC)/Indiana and Westmoreland counties. Given that transportation is not constrained by political boundaries, this section of the LRTP identifies and discusses the major transportation issues that Cambria County shares with its neighbors. Additionally, this section provides an analysis of potential opportunities for collaborative efforts aimed at addressing mutual transportation concerns.



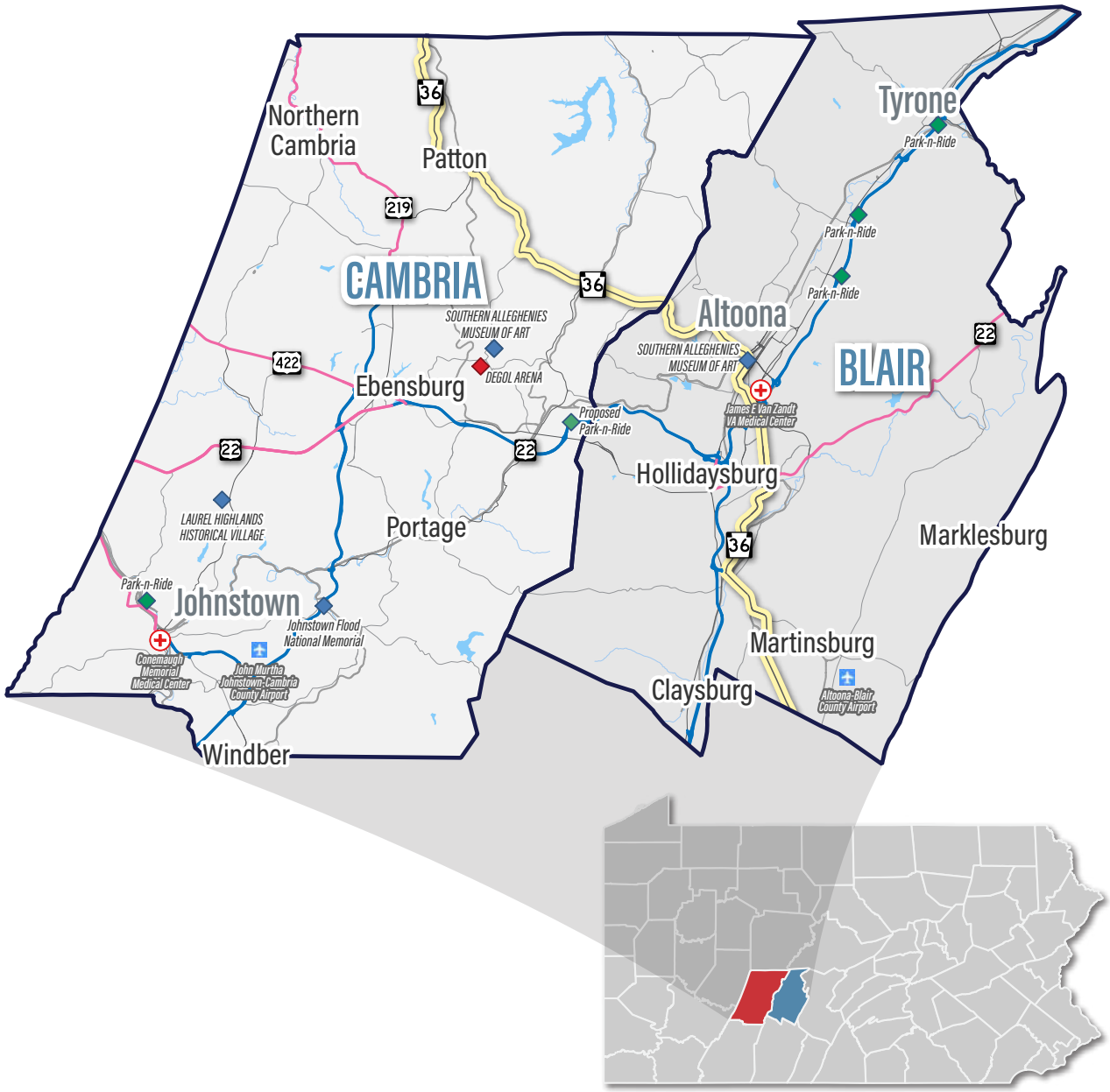

## Southern Alleghenies

- US 219 plays a significant role in promoting workforce and tourism access between Cambria and Somerset counties. The mutual inflow and outflow of workers between these two planning regions highlights the importance of this route in facilitating the movement of people and goods.
- The Southern Alleghenies RPO region does not have ample medical facilities; many residents travel to other counties such as Cambria. There are opportunities to collaborate on transit connections between Cambria and Somerset counties.
- As Cambria and Pittsburgh have the only Level 1 trauma centers in the region, Cambria's central location provides advantages for bordering counties. Due in part to proximity, older residents of Somerset County access medical facilities available in Johnstown.
- Johnstown is home to many of Cambria County's tourism assets. The proximity of both developed commercial areas and tourist sites presents an opportunity for promoting tourism across county lines, for the mutual benefit of Cambria County and its neighboring counties.



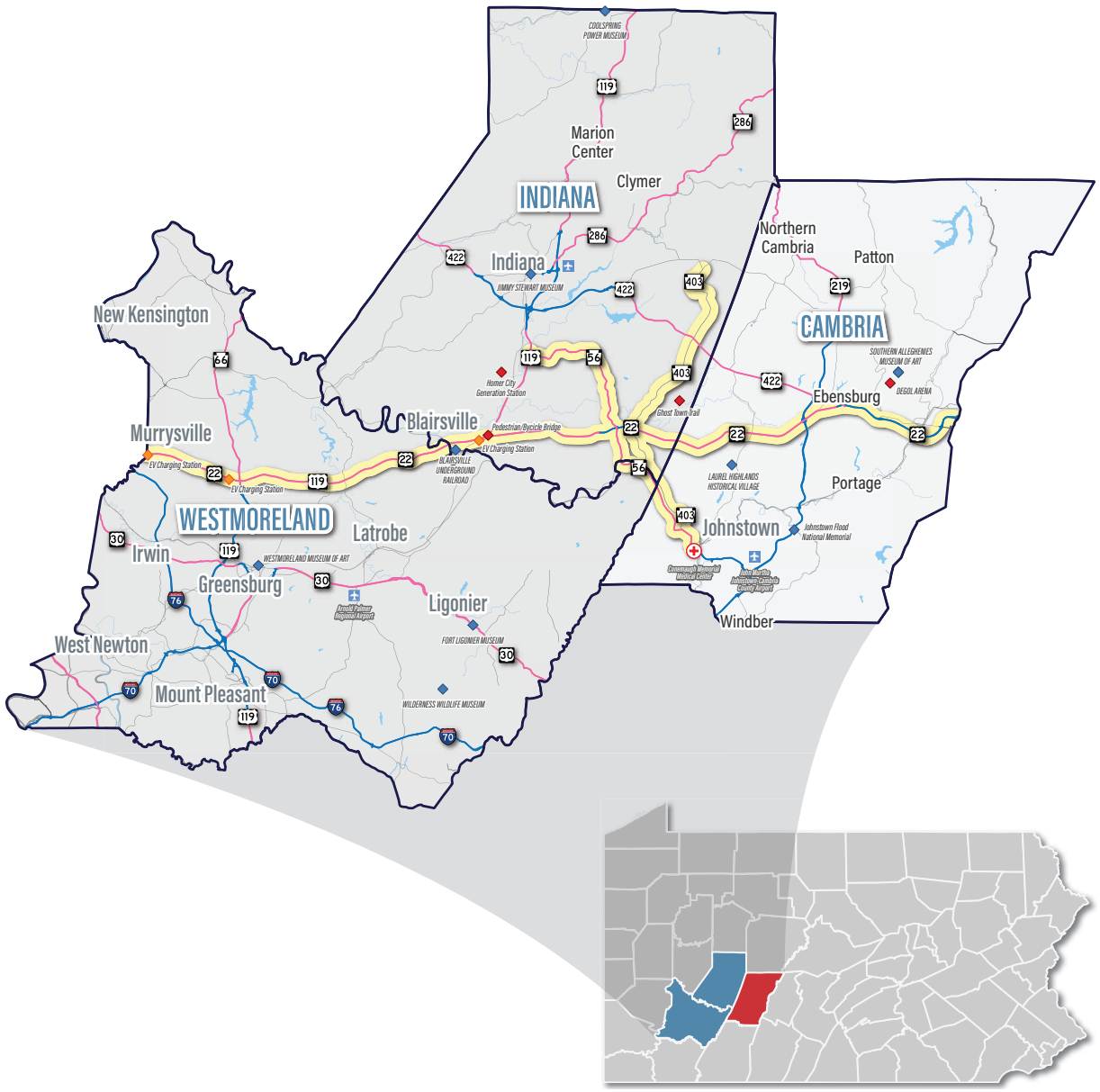

## North Central/Clearfield County

- The demand for travel between Cambria County and Clearfield County is the lowest among all of Cambria County's neighboring regions. The designation of US 220 as Interstate 99 in neighboring Blair County has lessened the demand for a modern, north-south highway north of Ebensburg. Northern Cambria is a farming community with a significant Amish population, and it is important to maintain the established roadway routes.
- Clearfield County planners cited a potential need for public transportation service for those accessing medical and Veterans Administration services in Altoona.
- Windmills are transported from the freight yard in DuBois to a wind farm in Patton. These windmills reach the Falls Creek railyard via rail or truck. The various components of the windmills are transported along PA 36 to the staging area for the mills. Transportation of large windmill parts poses safety risks to both the cargo and other road users. It may also strain rural road infrastructure not designed for heavy or oversized loads.




## Altoona/Blair County

- Strong commuter flows exist between Cambria and Blair counties, making US 22 an important roadway for long-term planning and collaboration.
- Planning coordination is also needed between the two MPO regions concerning the trails they share, most notably the 9/11 Memorial Trail.
- Good transit connections are needed between CamTran's rural transit routes and those of neighboring counties. Many residents, especially the elderly, need access to medical facilities in Blair County.
- Individuals in Northern Cambria use PA 36 primarily to access retail destinations in Blair County. As the main route connecting the two counties, PA 36 is a focus of inter-county planning collaboration.
- A park-and-ride facility near Cresson or the Gallitzin interchange would be a convenient option for commuters traveling outside the county, and would reduce traffic and associated emissions.




## SPC – Indiana and Westmoreland Counties

- Plan updates related to active transportation and freight are an opportunity to collaborate with adjacent counties on related cross-border initiatives.
- Asset management treatments on major roads could be a coordinated effort between Cambria County and SPC, such as pavement maintenance on US 22.
- During planning it is important to consider trail connections in neighboring counties, such as the Ghost Town Trail that traverses both Cambria and Indiana counties. A few miles west of the Cambria County border, there is a bicycle and pedestrian bridge where US 22 interchanges with US 119. This bridge is significant to Cambria County cyclists because it provides a major route to cross US 22.
- In July 2023, Pennsylvania's largest active coal-fired power plant, the Homer City Generating Station, was permanently closed. Its shutdown will impact the surrounding areas, including Cambria County, by reducing demand for the transportation of coal. The main roads leading to the plant, PA 403 and PA 56, will likely experience a reduction in traffic until the site is repurposed.
- In conjunction with SPC, Cambria anticipates the integration of EV charging stations on major roads, including US 22, extending beyond the current statewide Interstate initiatives.

# Appendix A: 12-Year Program Projects

| S.R. | Section | MPMS # | Project Title | Phase | Area | 2025–2036 12-Year Program Amount |
|---|---|---|---|---|---|---|
| 0 | | 94756 | Local Br Line Item | C | BRDG | $1,000,000 |
| 0 | | 94756 | Local Br Line Item | C | BRDG | 4,065,000 |
| 0 | | 117025 | Bridge PM Reserve Line Item | C | BRDG | 1,000,000 |
| 0 | | 117025 | Bridge PM Reserve Line Item | C | BRDG | 4,876,060 |
| 0 | | 118410 | 2025 RPM Installation Cambria County | C | HRST | 100,000 |
| 0 | | 119315 | Johnstown CRP Line Item | C | HRST | 803,000 |
| 0 | | 119315 | Johnstown CRP Line Item | C | HRST | 1,099,000 |
| 0 | | 119315 | Johnstown CRP Line Item | C | BRDG | 2,365,000 |
| 0 | | 119315 | Johnstown CRP Line Item | C | BRDG | 2,073,000 |
| 0 | | 119505 | Cambria County Environmental Monitoring | P | HRST | 100,000 |
| 0 | | 120442 | Cambria Epoxy Overlay Contract | P | BRDG | 100,000 |
| 0 | | 120442 | Cambria Epoxy Overlay Contract | C | BRDG | 6,000,000 |
| 0 | | 120734 | 2026 RPM Installation Cambria County | C | HRST | 100,000 |
| 0 | BHR | 22437 | Bridge & Highway Reserve | C | HRST | 14,070,636 |
| 0 | BHR | 22437 | Bridge & Highway Reserve | C | BRDG | 1,000,000 |
| 0 | BHR | 22437 | Bridge & Highway Reserve | C | HRST | 1,000,000 |
| 0 | BHR | 22437 | Bridge & Highway Reserve | C | HRST | 4,431,000 |
| 0 | BHR | 22437 | Bridge & Highway Reserve | C | HRST | 9,172,000 |
| 0 | BHR | 22437 | Bridge & Highway Reserve | C | BRDG | 1,000,000 |

| S.R. | Section | MPMS # | Project Title | Phase | Area | 2025–2036 12-Year Program Amount |
|---|---|---|---|---|---|---|
| 0 | PCS | 115615 | Johnstown Urban Ind. Park Cnnctr St | F | HCON | 67,111 |
| 0 | PCS | 115615 | Johnstown Urban Ind. Park Cnnctr St | C | HCON | 1,229,386 |
| 0 | WMT | 118336 | Westmont Streetscape | +C | TENH | 700,000 |
| 22 | 0 | 116931 | US 22 - PA 271 to SR 4031 | P | HRST | 1,000,000 |
| 22 | 0 | 116931 | US 22 - PA 271 to SR 4031 | F | HRST | 700,000 |
| 22 | 0 | 116931 | US 22 - PA 271 to SR 4031 | +C | HRST | 2,695,000 |
| 22 | 0 | 116931 | US 22 - PA 271 to SR 4031 | +C | HRST | 8,959,300 |
| 22 | 0 | 120300 | US 22 - Indiana Co Line to Mundy's Corner Int. | P | HRST | 1,000,000 |
| 22 | 0 | 120300 | US 22 - Indiana Co Line to Mundy's Corner Int. | F | HRST | 700,000 |
| 22 | 0 | 120300 | US 22 - Indiana Co Line to Mundy's Corner Int. | C | HRST | 12,618,000 |
| 22 | 0 | 120436 | US 22 over SR 8004 | P | BRDG | 100,000 |
| 22 | 0 | 120436 | US 22 over SR 8004 | U | BRDG | 100,000 |
| 22 | 0 | 120436 | US 22 over SR 8004 | R | BRDG | 100,000 |
| 22 | 0 | 120436 | US 22 over SR 8004 | C | BRDG | 2,271,000 |
| 22 | 0 | 120437 | US 22 over PA 160 | P | BRDG | 100,000 |
| 22 | 0 | 120437 | US 22 over PA 160 | U | BRDG | 100,000 |
| 22 | 0 | 120437 | US 22 over PA 160 | R | BRDG | 100,000 |
| 22 | 0 | 120437 | US 22 over PA 160 | C | BRDG | 2,500,000 |
| 22 | 030 | 113997 | US 22 - PA 164 to Blair Cnty Line | C | HRST | 3,365,314 |
| 22 | 030 | 113997 | US 22 - PA 164 to Blair Cnty Line | C | HRST | 9,818,686 |
| 22 | 035 | 110424 | US 22 - SR 4031 to PA 164 | P | HRST | 1,586,000 |
| 22 | 035 | 110424 | US 22 - SR 4031 to PA 164 | F | HRST | 750,000 |
| 22 | 035 | 110424 | US 22 - SR 4031 to PA 164 | C | HRST | 13,731,207 |
| 22 | 32B | 117007 | US 22 Segment 351 Over Norfolk Southern Railroad | +C | BRDG | 1,100,000 |
| 22 | 33B | 117008 | US 22 Segment 350 Over Norfolk Southern Railroad | +C | BRDG | 1,100,000 |
| 36 | 0 | 120339 | PA 36 - Blair County to SR 1010 | P | HRST | 150,000 |
| 36 | 0 | 120339 | PA 36 - Blair County to SR 1010 | C | HRST | 5,500,000 |
| 53 | 0 | 120336 | PA 53 - PA 164 to Cresson-Portage Int | P | HRST | 200,000 |
| 53 | 0 | 120336 | PA 53 - PA 164 to Cresson-Portage Int | +C | HRST | 4,782,000 |

| S.R. | Section | MPMS # | Project Title | Phase | Area | 2025–2036 12-Year Program Amount |
|---|---|---|---|---|---|---|
| 53 | 0 | 120337 | PA 53 - PA 36 to SR 1026 | P | HRST | 200,000 |
| 53 | 0 | 120337 | PA 53 - PA 36 to SR 1026 | +C | HRST | 5,000,000 |
| 53 | 0 | 120340 | PA 53 - SR 1026 to Clearfield Co Line | P | HRST | 200,000 |
| 53 | 0 | 120340 | PA 53 - SR 1026 to Clearfield Co Line | C | HRST | 3,500,000 |
| 53 | 037 | 107229 | PA 53 - SR 3024 to PA 164 | +C | HRST | 2,428,314 |
| 53 | 037 | 107229 | PA 53 - SR 3024 to PA 164 | +C | HRST | 893,470 |
| 53 | 25B | 88597 | Brubaker Run Bridge | F | BRDG | 350,000 |
| 53 | 25B | 88597 | Brubaker Run Bridge | U | BRDG | 75,000 |
| 53 | 25B | 88597 | Brubaker Run Bridge | R | BRDG | 75,000 |
| 53 | 25B | 88597 | Brubaker Run Bridge | C | BRDG | 1,966,000 |
| 53 | 29B | 22622 | PA 53 Pattys Run Bridge | P | BRDG | 400,000 |
| 53 | 29B | 22622 | PA 53 Pattys Run Bridge | F | BRDG | 225,000 |
| 53 | 29B | 22622 | PA 53 Pattys Run Bridge | U | BRDG | 25,000 |
| 53 | 29B | 22622 | PA 53 Pattys Run Bridge | R | BRDG | 25,000 |
| 53 | 29B | 22622 | PA 53 Pattys Run Bridge | +C | BRDG | 1,325,000 |
| 53 | 30B | 98750 | Bradley Run Bridge | P | BRDG | 400,000 |
| 53 | 30B | 98750 | Bradley Run Bridge | F | BRDG | 225,000 |
| 53 | 30B | 98750 | Bradley Run Bridge | U | BRDG | 25,000 |
| 53 | 30B | 98750 | Bradley Run Bridge | R | BRDG | 25,000 |
| 53 | 30B | 98750 | Bradley Run Bridge | C | BRDG | 1,329,528 |
| 53 | 31B | 98753 | PA 53 Lost Creek Bridge | P | BRDG | 400,000 |
| 53 | 31B | 98753 | PA 53 Lost Creek Bridge | F | BRDG | 225,000 |
| 53 | 31B | 98753 | PA 53 Lost Creek Bridge | U | BRDG | 25,000 |
| 53 | 31B | 98753 | PA 53 Lost Creek Bridge | R | BRDG | 25,000 |
| 53 | 31B | 98753 | PA 53 Lost Creek Bridge | +C | BRDG | 2,000,000 |
| 56 | 0 | 120433 | PA 56 over Paint Creek | P | BRDG | 100,000 |
| 56 | 0 | 120433 | PA 56 over Paint Creek | U | BRDG | 100,000 |
| 56 | 0 | 120433 | PA 56 over Paint Creek | R | BRDG | 100,000 |
| 56 | 0 | 120433 | PA 56 over Paint Creek | +C | BRDG | 850,000 |

| S.R. | Section | MPMS # | Project Title | Phase | Area | 2025–2036 12-Year Program Amount |
|---|---|---|---|---|---|---|
| 56 | 040 | 117119 | PA 56 - PA 403 to 2nd Avenue | C | HRST | 1,827,603 |
| 160 | 019 | 119242 | PA 160 Slide North of Wilmore | +C | HRST | 2,575,000 |
| 160 | 11B | 92692 | PA160 Laurel Run Brdg #3 | U | BRDG | 100,000 |
| 160 | 11B | 92692 | PA160 Laurel Run Brdg #3 | R | BRDG | 75,000 |
| 160 | 11B | 92692 | PA160 Laurel Run Brdg #3 | C | BRDG | 467,000 |
| 160 | 15B | 114040 | Sidman PA160 Super Repl 1 | C | BRDG | 1,800,000 |
| 160 | 16B | 114041 | Sidman PA160 Super Repl 2 | +C | BRDG | 2,600,000 |
| 160 | 18B | 88696 | PA160 Conemaugh Rvr Culv | F | BRDG | 652,500 |
| 160 | 18B | 88696 | PA160 Conemaugh Rvr Culv | U | BRDG | 150,000 |
| 160 | 18B | 88696 | PA160 Conemaugh Rvr Culv | R | BRDG | 150,000 |
| 160 | 18B | 88696 | PA160 Conemaugh Rvr Culv | C | BRDG | 1,227,500 |
| 219 | 0 | 117016 | US 219 Abandoned Railroad Tunnel Closure | P | HRST | 100,000 |
| 219 | 0 | 117016 | US 219 Abandoned Railroad Tunnel Closure | U | HRST | 25,000 |
| 219 | 0 | 117016 | US 219 Abandoned Railroad Tunnel Closure | R | HRST | 25,000 |
| 219 | 0 | 117016 | US 219 Abandoned Railroad Tunnel Closure | +C | HRST | 929,750 |
| 219 | 0 | 120334 | SR 219 - US 422 Int to Carrolltown Int | P | HRST | 1,250,000 |
| 219 | 0 | 120334 | SR 219 - US 422 Int to Carrolltown Int | F | HRST | 800,000 |
| 219 | 0 | 120334 | SR 219 - US 422 Int to Carrolltown Int | +C | HRST | 12,466,700 |
| 219 | 000 | 110437 | US 219 - PA 53 to US 422 | P | HRST | 2,492,171 |
| 219 | 000 | 110437 | US 219 - PA 53 to US 422 | F | HRST | 1,000,000 |
| 219 | 000 | 110437 | US 219 - PA 53 to US 422 | +C | HRST | 8,025,400 |
| 219 | 000 | 110437 | US 219 - PA 53 to US 422 | +C | HRST | 13,455,000 |
| 219 | 049 | 96489 | Moss Crk Rd-Indiana Co Line | U | HRST | 25,000 |
| 219 | 049 | 96489 | Moss Crk Rd-Indiana Co Line | C | HRST | 2,435,895 |
| 219 | 050 | 116926 | US 219 - PA 56 to PA 53 | +C | HRST | 8,745,000 |
| 219 | 050 | 116926 | US 219 - PA 56 to PA 53 | +C | HRST | 4,520,850 |
| 219 | 51B | 117761 | US 219 Bridge Preservations | +C | BRDG | 1,684,000 |
| 271 | 0 | 119278 | PA 271 Menoher Boulevard Rockfall Mesh | U | HRST | 50,000 |
| 271 | 0 | 119278 | PA 271 Menoher Boulevard Rockfall Mesh | R | HRST | 100,000 |

| S.R. | Section | MPMS # | Project Title | Phase | Area | 2025–2036 12-Year Program Amount |
|---|---|---|---|---|---|---|
| 271 | 0 | 119278 | PA 271 Menoher Boulevard Rockfall Mesh | C | HRST | 360,500 |
| 271 | 0 | 120343 | SR 271 - SR 3037 to Mundy's Corner Int | P | HRST | 250,000 |
| 271 | 0 | 120343 | SR 271 - SR 3037 to Mundy's Corner Int | C | HRST | 4,000,000 |
| 271 | 0 | 120432 | PA 271 over Little Conemaugh River | P | BRDG | 320,000 |
| 271 | 0 | 120432 | PA 271 over Little Conemaugh River | F | BRDG | 230,000 |
| 271 | 0 | 120432 | PA 271 over Little Conemaugh River | U | BRDG | 25,000 |
| 271 | 0 | 120432 | PA 271 over Little Conemaugh River | R | BRDG | 25,000 |
| 271 | 0 | 120432 | PA 271 over Little Conemaugh River | C | BRDG | 1,207,000 |
| 271 | 0 | 120435 | SR 271 over Little Conemaugh River | P | BRDG | 100,000 |
| 271 | 0 | 120435 | SR 271 over Little Conemaugh River | U | BRDG | 100,000 |
| 271 | 0 | 120435 | SR 271 over Little Conemaugh River | R | BRDG | 100,000 |
| 271 | 0 | 120435 | SR 271 over Little Conemaugh River | C | BRDG | 800,000 |
| 271 | 0 | 121384 | SR 271 Clinton Street Crossing | C | SAMI | 500,000 |
| 271 | 23B | 91675 | PA271 Susquehanna Rvr Br | U | BRDG | 75,000 |
| 271 | 23B | 91675 | PA271 Susquehanna Rvr Br | R | BRDG | 75,000 |
| 271 | 23B | 91675 | PA271 Susquehanna Rvr Br | +C | BRDG | 1,500,000 |
| 271 | 24B | 94468 | PA 271 Elk Creek Bridge | U | BRDG | 75,000 |
| 271 | 24B | 94468 | PA 271 Elk Creek Bridge | R | BRDG | 75,000 |
| 271 | 24B | 94468 | PA 271 Elk Creek Bridge | +C | BRDG | 750,000 |
| 271 | 25B | 94469 | PA 271 Browns Run Bridge | U | BRDG | 75,000 |
| 271 | 25B | 94469 | PA 271 Browns Run Bridge | R | BRDG | 75,000 |
| 271 | 25B | 94469 | PA 271 Browns Run Bridge | +C | BRDG | 492,000 |
| 271 | 26B | 117012 | PA 271 Over North Branch Blacklick Creek | U | BRDG | 75,000 |
| 271 | 26B | 117012 | PA 271 Over North Branch Blacklick Creek | R | BRDG | 75,000 |
| 271 | 26B | 117012 | PA 271 Over North Branch Blacklick Creek | +C | BRDG | 500,000 |
| 403 | 0 | 120434 | PA 403 over Laurel Run | P | BRDG | 100,000 |
| 403 | 0 | 120434 | PA 403 over Laurel Run | U | BRDG | 100,000 |
| 403 | 0 | 120434 | PA 403 over Laurel Run | R | BRDG | 100,000 |
| 403 | 0 | 120434 | PA 403 over Laurel Run | +C | BRDG | 765,000 |

| S.R. | Section | MPMS # | Project Title | Phase | Area | 2025–2036 12-Year Program Amount |
|---|---|---|---|---|---|---|
| 756 | 009 | 108162 | PA 756 - PA 403 to SR 3016 | +C | HRST | 1,803,530 |
| 756 | 010 | 110119 | PA 756 - Lamberd Ave to Alvin St | C | HRST | 2,146,517 |
| 756 | 011 | 110118 | PA 756 - PA 160 to Industrial Park Rd | F | HRST | 300,000 |
| 756 | 011 | 110118 | PA 756 - PA 160 to Industrial Park Rd | U | HRST | 100,000 |
| 756 | 011 | 110118 | PA 756 - PA 160 to Industrial Park Rd | R | HRST | 100,000 |
| 756 | 011 | 110118 | PA 756 - PA 160 to Industrial Park Rd | C | HRST | 3,582,157 |
| 756 | 013 | 114001 | PA 756 - Alvin St to Industrial Park Rd | +C | HRST | 918,000 |
| 756 | 013 | 114001 | PA 756 - Alvin St to Industrial Park Rd | +C | HRST | 2,691,000 |
| 756 | 013 | 114001 | PA 756 - Alvin St to Industrial Park Rd | +C | SAMI | 2,193,000 |
| 756 | 013 | 114001 | PA 756 - Alvin St to Industrial Park Rd | +C | HRST | 335,000 |
| 865 | 0 | 120438 | PA 865 over Abandoned Railroad | P | BRDG | 100,000 |
| 865 | 0 | 120438 | PA 865 over Abandoned Railroad | U | BRDG | 100,000 |
| 865 | 0 | 120438 | PA 865 over Abandoned Railroad | R | BRDG | 100,000 |
| 865 | 0 | 120438 | PA 865 over Abandoned Railroad | C | BRDG | 800,000 |
| 865 | 04B | 98762 | Lloydsville Run Bridge | U | BRDG | 100,000 |
| 865 | 04B | 98762 | Lloydsville Run Bridge | R | BRDG | 100,000 |
| 865 | 04B | 98762 | Lloydsville Run Bridge | C | BRDG | 600,000 |
| 865 | 05B | 98764 | PA865 Powell Run Bridge | U | BRDG | 100,000 |
| 865 | 05B | 98764 | PA865 Powell Run Bridge | R | BRDG | 100,000 |
| 865 | 05B | 98764 | PA865 Powell Run Bridge | C | BRDG | 620,000 |
| 1001 | 0 | 120440 | SR 1001 over Railroad | P | BRDG | 300,000 |
| 1001 | 0 | 120440 | SR 1001 over Railroad | C | BRDG | 1,500,000 |
| 1002 | 0 | 120570 | SR 1002 over SR 219 | +P | BRDG | 650,000 |
| 1002 | 0 | 120570 | SR 1002 over SR 219 | +F | BRDG | 500,000 |
| 1002 | 0 | 120570 | SR 1002 over SR 219 | +C | BRDG | 2,409,000 |
| 1021 | 0 | 22478 | SR 1021 over Beaverdam Run | +P | BRDG | 700,000 |
| 1021 | 0 | 22478 | SR 1021 over Beaverdam Run | +F | BRDG | 600,000 |
| 1021 | 0 | 22478 | SR 1021 over Beaverdam Run | +C | BRDG | 4,167,000 |
| 1025 | 0 | 120430 | SR 1025 over Burgoon Run | P | BRDG | 375,000 |

| S.R. | Section | MPMS # | Project Title | Phase | Area | 2025–2036 12-Year Program Amount |
|---|---|---|---|---|---|---|
| 1025 | 0 | 120430 | SR 1025 over Burgoon Run | F | BRDG | 190,000 |
| 1025 | 0 | 120430 | SR 1025 over Burgoon Run | U | BRDG | 25,000 |
| 1025 | 0 | 120430 | SR 1025 over Burgoon Run | R | BRDG | 25,000 |
| 1025 | 0 | 120430 | SR 1025 over Burgoon Run | +C | BRDG | 1,442,000 |
| 1027 | 000 | 22633 | SR 1027 over Burgoon Run | P | BRDG | 575,000 |
| 1027 | 000 | 22633 | SR 1027 over Burgoon Run | +F | BRDG | 380,000 |
| 1027 | 000 | 22633 | SR 1027 over Burgoon Run | +U | BRDG | 100,000 |
| 1027 | 000 | 22633 | SR 1027 over Burgoon Run | +R | BRDG | 100,000 |
| 1027 | 000 | 22633 | SR 1027 over Burgoon Run | +C | BRDG | 1,665,000 |
| 2014 | 0 | 120342 | SR 2014 - SR 1036 to SR 1005 | P | HRST | 150,000 |
| 2014 | 0 | 120342 | SR 2014 - SR 1036 to SR 1005 | C | HRST | 4,000,000 |
| 2014 | 07B | 22570 | N Br Conemaugh Rn Br | U | BRDG | 25,000 |
| 2014 | 07B | 22570 | N Br Conemaugh Rn Br | R | BRDG | 25,000 |
| 2014 | 07B | 22570 | N Br Conemaugh Rn Br | C | BRDG | 1,395,000 |
| 2015 | 0 | 120448 | SR 2015 over Little Conemaugh Rvr, RR & RR Street | +P | BRDG | 500,000 |
| 2015 | 0 | 120448 | SR 2015 over Little Conemaugh Rvr, RR & RR Street | +F | BRDG | 300,000 |
| 2015 | 0 | 120448 | SR 2015 over Little Conemaugh Rvr, RR & RR Street | +C | BRDG | 2,000,000 |
| 2015 | 020 | 22595 | SR 2015 over Little Conemaugh River | P | BRDG | 100,000 |
| 2015 | 020 | 22595 | SR 2015 over Little Conemaugh River | U | BRDG | 25,000 |
| 2015 | 020 | 22595 | SR 2015 over Little Conemaugh River | R | BRDG | 25,000 |
| 2015 | 020 | 22595 | SR 2015 over Little Conemaugh River | +C | BRDG | 720,000 |
| 3016 | 0 | 120444 | SR 3016 over Solomon Run | +P | BRDG | 300,000 |
| 3016 | 0 | 120444 | SR 3016 over Solomon Run | +F | BRDG | 200,000 |
| 3016 | 0 | 120444 | SR 3016 over Solomon Run | +C | BRDG | 1,200,000 |
| 3026 | 02B | 22491 | Franklin Borough Clapboard | U | BRDG | 25,000 |
| 3026 | 02B | 22491 | Franklin Borough Clapboard | R | BRDG | 25,000 |
| 3026 | 02B | 22491 | Franklin Borough Clapboard | +C | BRDG | 1,345,000 |
| 3027 | 0 | 120552 | SR 3027 over PA 56 | P | BRDG | 300,000 |
| 3027 | 0 | 120552 | SR 3027 over PA 56 | U | BRDG | 25,000 |

| S.R. | Section | MPMS # | Project Title | Phase | Area | 2025–2036 12-Year Program Amount |
|---|---|---|---|---|---|---|
| 3027 | 0 | 120552 | SR 3027 over PA 56 | R | BRDG | 25,000 |
| 3027 | 0 | 120552 | SR 3027 over PA 56 | +C | BRDG | 1,672,000 |
| 3035 | 0 | 22532 | SR 3035 over Little Conemaugh River | +P | BRDG | 505,817 |
| 3035 | 0 | 22532 | SR 3035 over Little Conemaugh River | +F | BRDG | 380,000 |
| 3035 | 0 | 22532 | SR 3035 over Little Conemaugh River | +U | BRDG | 25,000 |
| 3035 | 0 | 22532 | SR 3035 over Little Conemaugh River | +R | BRDG | 25,000 |
| 3035 | 0 | 22532 | SR 3035 over Little Conemaugh River | +C | BRDG | 3,900,000 |
| 3041 | 0 | 120431 | SR 3041 (BRKEY 8665) over Laurel Run | P | BRDG | 100,000 |
| 3041 | 0 | 120431 | SR 3041 (BRKEY 8665) over Laurel Run | U | BRDG | 25,000 |
| 3041 | 0 | 120431 | SR 3041 (BRKEY 8665) over Laurel Run | R | BRDG | 25,000 |
| 3041 | 0 | 120431 | SR 3041 (BRKEY 8665) over Laurel Run | C | BRDG | 950,000 |
| 3041 | 0 | 120441 | SR 3041 (BRKEY 8664) over Laurel Run | P | BRDG | 300,000 |
| 3041 | 0 | 120441 | SR 3041 (BRKEY 8664) over Laurel Run | C | BRDG | 1,500,000 |
| 3104 | 02B | 114043 | Mount Airy Drive over US 219 Rehab | U | BRDG | 250,000 |
| 3104 | 02B | 114043 | Mount Airy Drive over US 219 Rehab | +C | BRDG | 3,260,000 |
| 4002 | 0 | 120428 | SR 4002 over Little Elk Creek | P | BRDG | 100,000 |
| 4002 | 0 | 120428 | SR 4002 over Little Elk Creek | U | BRDG | 25,000 |
| 4002 | 0 | 120428 | SR 4002 over Little Elk Creek | R | BRDG | 25,000 |
| 4002 | 0 | 120428 | SR 4002 over Little Elk Creek | +C | BRDG | 720,000 |
| 4007 | | 22338 | SR 4007 over California Run | P | BRDG | 100,000 |
| 4007 | | 22338 | SR 4007 over California Run | U | BRDG | 25,000 |
| 4007 | | 22338 | SR 4007 over California Run | R | BRDG | 25,000 |
| 4007 | | 22338 | SR 4007 over California Run | +C | BRDG | 720,000 |
| 4017 | 03B | 94491 | N Patton Chest Creek Brdg | U | BRDG | 150,000 |
| 4017 | 03B | 94491 | N Patton Chest Creek Brdg | R | BRDG | 250,000 |
| 4017 | 03B | 94491 | N Patton Chest Creek Brdg | +C | BRDG | 1,860,000 |
| 4019 | 0 | 120425 | SR 4019 over Little Chest Creek | P | BRDG | 100,000 |
| 4019 | 0 | 120425 | SR 4019 over Little Chest Creek | U | BRDG | 25,000 |
| 4019 | 0 | 120425 | SR 4019 over Little Chest Creek | R | BRDG | 25,000 |

| S.R. | Section | MPMS # | Project Title | Phase | Area | 2025–2036 12-Year Program Amount |
|---|---|---|---|---|---|---|
| 4019 | 0 | 120425 | SR 4019 over Little Chest Creek | C | BRDG | 720,000 |
| 7220 | 406 | 22391 | T-406 Jamestown Rd over NSRR | P | BRDG | 506,479 |
| 7220 | 406 | 22391 | T-406 Jamestown Rd over NSRR | F | BRDG | 200,000 |
| 7220 | 406 | 22391 | T-406 Jamestown Rd over NSRR | U | BRDG | 200,000 |
| 7220 | 406 | 22391 | T-406 Jamestown Rd over NSRR | R | BRDG | 200,000 |
| 7220 | 406 | 22391 | T-406 Jamestown Rd over NSRR | C | BRDG | 4,945,911 |
| 7227 | 000 | 67240 | T-513 over West Branch of the Susquehanna River | P | BRDG | 160,000 |
| 7227 | 000 | 67240 | T-513 over West Branch of the Susquehanna River | F | BRDG | 90,000 |
| 7227 | 000 | 67240 | T-513 over West Branch of the Susquehanna River | U | BRDG | 25,000 |
| 7227 | 000 | 67240 | T-513 over West Branch of the Susquehanna River | R | BRDG | 25,000 |
| 7227 | 000 | 67240 | T-513 over West Branch of the Susquehanna River | C | BRDG | 720,000 |
| 7301 | 0 | 117089 | Iron Street over Hinckston Run | P | BRDG | 350,000 |
| 7301 | 0 | 117089 | Iron Street over Hinckston Run | F | BRDG | 150,000 |
| 7301 | 0 | 117089 | Iron Street over Hinckston Run | U | BRDG | 25,000 |
| 7301 | 0 | 117089 | Iron Street over Hinckston Run | R | BRDG | 25,000 |
| 7301 | 0 | 117089 | Iron Street over Hinckston Run | C | BRDG | 1,130,000 |
| 7423 | SON | 22380 | Sonman Avenue over Trout Run | P | BRDG | 160,000 |
| 7423 | SON | 22380 | Sonman Avenue over Trout Run | F | BRDG | 90,000 |
| 7423 | SON | 22380 | Sonman Avenue over Trout Run | U | BRDG | 25,000 |
| 7423 | SON | 22380 | Sonman Avenue over Trout Run | R | BRDG | 25,000 |
| 7423 | SON | 22380 | Sonman Avenue over Trout Run | C | BRDG | 776,000 |
| 7434 | 0 | 120394 | 8th Street Bridge over Fox Run | P | BRDG | 350,000 |
| 7434 | 0 | 120394 | 8th Street Bridge over Fox Run | F | BRDG | 90,000 |
| 7434 | 0 | 120394 | 8th Street Bridge over Fox Run | U | BRDG | 25,000 |
| 7434 | 0 | 120394 | 8th Street Bridge over Fox Run | R | BRDG | 25,000 |
| 7434 | 0 | 120394 | 8th Street Bridge over Fox Run | C | BRDG | 700,000 |
| | | | | | TOTAL | $310,782,292 |

# Appendix B: Illustrative Projects (Exceeding Fiscal Constraint)

**ROADWAY PROJECTS**

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| **Adams Street, Bedford Street, and Baumer Street Intersection Alignment** | Entire intersection needs to be reworked or reengineered dedicated turning Lanes need to be implemented in property acquisition needs to be thought of for better flow of traffic | Johnstown | Public Survey | | Project | High |
| **Johnstown to Westmont Roadway Alignment** | Roadways leading from Johnstown to Westmont are narrow, poorly maintained, have sharp bends, and include pedestrian blind spots. | Southmont | Public Survey | | Project | High |
| **Ramp Installation from Menoher Blvd to Johnstown Expressway (PA 56)** | An off / on ramp to connect PA 56 to Menoher Blvd. Improve travel from Westmont to Richland and reduce traffic on Haynes Street. | Johnstown | Public Survey | | Project | High |
| **Bedford St and Adams St Intersection Improvements** | Intersection Improvements Bedford Street and Adams Street | Johnstown | Public Survey | | Project | High |
| **Scalp Ave and Eisenhower Blvd Intersection Improvements** | Congested intersection | Richland | Public Survey | | Project | High |
| **Rowena Drive (US 422) and US 22 Intersection Visibility** | Difficult to determine if safe to enter Rowena Drive (US 422) from US 22 | Cambria | Public Survey | US 22 Corridor Study | Project | High |
| **US 422 and Cardiff Road Intersection Safety Improvements** | Dangerous intersection, especially for trucks. Turning lanes would help or a lower speed limit. | Blacklick | Public Survey | | Project | High |
| **US 219 and PA 56 Intersection** | Intersection of US 219 and PA 56 | Richland | Public Survey | US 219 Corridor Study | Project | High |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Eisenhower Blvd next to Scalp Ave (PA 56) Intersection Improvements | Intersection Improvements Eisenhower Blvd next to PA 56 | Richland | Public Survey | | Project | High |
| Resurface Bedford Street and Clinton Street | Road in need of resurfacing and lane lines painted seasonally. | Johnstown | STC | Maintenance | Project | High |
| US 219 and Plank Road Intersection Improvements | Difficult to see when turning left to continue on 219 N | East Carroll | Public Survey | US 219 Corridor Study | Project | Medium |
| US 219 and Galleria Drive Intersection Signage | Better signage in this area so people know they can not turn. | Richland | Public Survey | US 219 Corridor Study | Project | Medium |
| Central Ave (PA 403) Safety Improvements | Safety Improvements on Central Ave (PA 403) across B&O Railroad (James Mayer Riverwalk) | Johnstown | Public Survey | | Project | Medium |
| Freight Improvements Harold Ave | Freight Improvements Harold Ave | Johnstown | Public Survey | Freight Movement Plan | Project | Medium |
| Admiral Peary Hwy (US 22) and Wilmore Road Intersection Light Recalibration | Red light indicator for traffic light does not always activate before light changes. | Cambria | Public Survey | US 22 Corridor Study | Project | Medium |
| Scalp Ave (PA 56) and Eisenhower Blvd Intersection Traffic Light Recalibration | Intersection needs longer turning lanes on Eisenhower Blvd. and traffic light timing needs adjusted | Richland | Public Survey | | Project | Medium |
| Laurel Ave and Strayer Street (PA 56) Intersection Light Configuration | Light is very long from Laurel Ave, causes people to travel narrow residential side streets/alleys to avoid this light. | Johnstown | Public Survey | | Project | Medium |
| Goucher and Franklin St Intersection Safety Improvements | Ferndale Ave to Franklin St and Franklin St to Goucher St intersection visibility and traffic light improvements. | Johnstown | Public Survey | | Project | Medium |
| US 219 and Elton Road (PA 756) Intersection Traffic Light Safety Adjustment | Turning right from the Route 219 exit ramp onto Elton Road has safety issues from poor line of sight. | Richland | Public Survey | US 22 Corridor Study | Project | Medium |
| Repave Main Street through Scalp Level | Repave Main Street through Scalp Level | Richland | Public Survey | Maintenance | Project | Medium |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| PA 756, Scalp Ave (PA 56), and Belmont Street Intersection Safety | PA 756, Scalp Ave, and Belmont Street Intersection Signage | Geistown | Public Survey | Maintenance | Project | Medium |
| Woodmont Road and Menoher Blvd (PA 271) Intersection Safety Improvements | Intersection Safety Improvements at Woodmont Road and Menoher Blvd (PA 271) | Upper Yoder | Public Survey | | Project | Medium |
| Corridor Safety on Menoher Blvd Through Westmont | Corridor Safety on Menoher Through Westmont | Westmont | Public Survey | | Project | Medium |
| Extend Ramp onto Johnstown Expressway (PA 56) | Short ramp onto Johnstown Expressway (PA 56) where road intersects Walters Ave | Richland | Public Survey | | Project | Medium |
| Scalp Ave (PA 56) and Luray Ave Intersection Safety Improvements | The visibility at this intersection poor. | Richland | Public Survey | Scalp Ave Corridor Study | Project | Medium |
| Franklin Street and Haynes Street Intersection Light Adjustments | Intersection needs a green arrow for left-hand turns from Franklin onto Haynes. | Johnstown | Public Survey | | Project | Medium |
| Roosevelt Blvd (PA 56) and John Street Intersection Safety Improvements | High traffic and dangerous. | Johnstown | Public Survey | | Project | Medium |
| Broad Street Calming Measures Through Johnstown | Broad Street Calming Measures Through Johnstown | Richland | Public Survey | | Project | Medium |
| Expand Roosevelt Blvd to Two Lanes | Needs to be reworked back into two lanes | Johnstown | Public Survey | | Project | Medium |
| Westmont Shopping Center Roadway Improvement | The roads are terrible in this area. Especially in the Dollar Tree shopping plaza. | Lower Yoder | Public Survey | | Project | Medium |
| US 219 Safety Improvements | US 219 between Galleria Drive and the Sidman exit | Adams | Public Survey | | Project | Medium |
| Complete US 219 | Reinforce the completion of 219 to assist in our economic growth and connectivity. | Croyle | Public Survey | | Project | Medium |
| Bypass from Broad Street to PA 403 | Bypass from Broad Street to PA 403 or PA 56 past Coopersdale / West End would improve traffic flow and travel times to US 22 | Johnstown | Public Survey | | Project | Medium |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Franklin Street and Locust Street (PA 271) Intersection Upkeep | Overgrown trees & brush on the river shore and the angle of the intersection make coming into Franklin from the bridge very dangerous. | Franklin | Public Survey | Maintenance | Project | Medium |
| Harmony Drive and William Penn Ave (PA 271) Intersection Improvements | Visibility Improvements at Harmony Drive and William Penn Ave | Jackson | Public Survey | | Project | Medium |
| Buzz Wagner Memorial Hwy and Birtle Rd Intersection Improvements | Blind turns | Richland | Public Survey | | Project | Medium |
| Admiral Peary Hwy (US 22) Improvements | Admiral Peary Hwy (US 22) improvements near Minni Mall Rd | Cambria | Public Survey | | Project | Medium |
| Broad Street (PA 56) Configuration | Broad St corridor, consider different lane configuration from 4-lane cross-section to 3-lane cross-section that includes a two-way center turn lane and dedicated bicycle facilities. | Johnstown | Public Survey | | Project | Medium |
| 5-Way Intersection Safety Improvement | Safety at Clinton Street, Railroad Street, Church Ave, Gautier Street | Johnstown | Public Survey | | Project | Medium |
| William Penn Ave (PA 271) and Park Hill Drive Feasibility Study | Consider feasibility of roundabout at PA 271 junction. | East Taylor | Public Survey | | Project | Medium |
| Scalp Ave (PA 56) Intersection Crosswalk Improvements | Pedestrians not allowed to cross at intersections. | Geistown | Public Survey | | Project | Medium |
| Benshoff Road and Iron Street Intersection Safety | Traffic coming down the hill has the right of way. Traffic coming from the west end seldom stop at the stop sign. | Johnstown | Public Survey | | Project | Medium |
| Minno Drive Congestion and Safety Improvements | Congestion and crashes on Minno Drive near Westmont Shopping Center | Lower Yoder | Public Survey | | Project | Medium |
| US 219 and US 422 Intersection Safety Improvements | Safety Improvements at US 219 and US 422 Intersection | Cambria | Public Survey | US 219 Corridor Study | Project | Medium |
| US 422 (Ben Franklin Hwy) and Sylvan Glen Drive Intersection Safety | Illegal left turn needs addressed | Cambria | Public Survey | | Project | Medium |
| Safety Improvements On-ramp from Galleria Drive to US 219 | On ramp needs merge controls. | Richland | Public Survey | US 219 Corridor Study | Project | Medium |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Repave Ridge Road | Surface is bad. Road needs 3R | | Public Survey | Maintenance | Project | Medium |
| Stormwater Runoff and Maintenance on Admiral Peary Hwy | Stormwater Runoff and Maintenance on Admiral Peary Hwy | Cresson | Public Survey | Maintenance | Project | Medium |
| Richland Town Centre Walmart Safety Improvements | Improved signs and painted lines around the Wal-Mart area. | Richland | Public Survey | Maintenance | Project | Medium |
| Repair Former C&I Bridge Over US 22 | Safety concern for the highway below. | Cambria | Public Survey | | Project | Medium |
| Repave US 219 Through Croyle | Repave US 219 Through Croyle | Croyle | Public Survey | Maintenance | Project | Medium |
| US 422 Route Safety Improvements | Route 422 is dangerous truck traffic as well as for regular car and school bus travel | Cambria | Public Survey | US 422 Corri-dor Study | Project | Medium |
| US 22 through Ebensburg Safety Improvements | Route 22 business corridor via Ebensburg needs to time red lights like Murryville did. | Cambria | Public Survey | US 22 Corri-dor Study | Project | Medium |
| Franklin Street (PA 403) and Napoleon Street Intersection Alignment | Alignment and rock wall make for poor visibility when turning right on red from Napoleon Street to Franklin Street. | Johnstown | Public Survey | | Project | Medium |
| Johnstown Expressway (PA 56) Merge Lane Alignment | Unsafe merge, extend the merge lane so traffic exiting at the glass road interchange don't have to merge. | Johnstown | Public Survey | | Project | Medium |
| Install Additional Off Ramps on Johnstown Expressway (PA 56) | Have on off ramp on both sides. | Johnstown | Public Survey | | Project | Medium |
| Stormwater Runoff on Admiral Peary Hwy | Stormwater Runoff and Maintenance on Admiral Peary Hwy | Cresson | Public Survey | Maintenance | Project | Medium |
| US 219 and Carroll Street Intersection Crosswalk | There is no crosswalk enforcement or accessible crosswalks for the intersection. | Carrolltown | Public Survey | US 219 Corri-dor Study | Project | Medium |
| High Street (US 422) and Julian Street Intersection Crosswalk Safety | Crosswalks need better lighting | Ebensburg | Public Survey | Maintenance | Project | Medium |
| Wilmore Road (PA 160) and Ebony Road Intersection Improvements | Intersection Improvements at PA 160 (Wilmore Road) and Ebony Road | Cambria | Public Survey | | Project | Medium |
| PA 36 and Glendale Lake Road Safety Improvements | Safety when merging PA 36 and Glendale Lake Road | Clearfield | Public Survey | | Project | Medium |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| High Street (US 422) and Julian Street Intersection Crosswalk Safety | Crosswalks need better safety | Ebensburg | Public Survey | | Project | Medium |
| Washington Street Safety Improvements | Washington Street in Johnstown Maintenance and Safety Improvements. | Johnstown | Public Survey | | Project | Medium |
| US 219 and Bedford Street Intersection Improvement | Intersection is too complicated and congested. | Richland | Public Survey | US 219 Corridor Study | Project | Medium |
| Intersection Safety Improvements High Street and Cherry Street | Crosswalks are not observed by motorist. | Ebensburg | Public Survey | | Project | Medium |
| US 22 and Walmart Drive Intersection Safety Improvements | Intersection Safety Improvements at US 22 and Walmart Drive | Cambria | Public Survey | US 22 Corridor Study | Project | Medium |
| Broad Street and Fairfield Ave Intersection Improvements | Intersection Improvements Broad Street and Fairfield Ave | Johnstown | Public Survey | | Project | Medium |
| Additional Turn Lane On High Street Intersecting with Manor Drive | Consider a turn lane addition on High Street at this intersection. | Ebensburg | Public Survey | | Project | Medium |
| US 219, Elton Road, and Theatre Drive Intersection Maintenance | Cars traveling north on Theatre Dr merge at the intersection. Painting line across the intersection would help prevent accidents. | Richland | Public Survey | Maintenance | Project | Medium |
| Install a Signal at US 219 Off-ramp to US 422 | Dangerous intersection, install a signal at US 219 off-ramp to US 422. | Cambria | Public Survey | | Project | Medium |
| Wilmore Road, Admiral Peary Hwy (US 22) Intersection Safety Improvements | This traffic signal is hazardous. This should be a right turn in and out only. It is too steep for a traffic light. | Ebensburg | STC | | Project | Medium |
| Admiral Peary Hwy (US 22) and Cook Road Intersection Alignment | A roundabout would make traffic flow better and safer. | Cambria | STC | | Project | Medium |
| Resurface High Street (US 422) and Spruce Street | Resurface High Street and Spruce Street | Ebensburg | STC | Maintenance | Project | Medium |
| Broad Street Reconfiguration | Needs center turn lane and elimination it two driving lanes to improves safety and reduce speeding. Along Broad Street from Washington Street to Laurel Ave | Johnstown | STC | | Project | Medium |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Repave Galleria Drive | Repave Galleria Drive | Richland | STC | Maintenance | Project | Medium |
| Broad St (PA 56) Improvements | Improvements on Broad St (PA 56) | Johnstown | Public Survey | | Project | Medium |
| Repave D St Ext | Sinking roadway. | Lower Yoder | Public Survey | Maintenance | Project | Medium |
| Truck Lane on US 22 in Ebensburg | Truck Lane on US 22 in Ebensburg | Cambria | Public Survey | | Project | Medium |
| East Conemaugh Bridge Intersection Safety Improvements | | East Conemaugh | Public Survey | | Project | Medium |
| US 219 and Admiral Peary Hwy (US 22) Intersection Improvement | Merging congestion from US 219 to US 22. | Cambria | Public Survey | | Project | Medium |
| Safety on Menoher Blvd (PA 271) in Upper Yoder | Safety on Menoher Blvd (PA 271) in Upper Yoder | Upper Yoder | Public Survey | | Project | Medium |
| Milton St and Center St Intersection Improvements | Intersection Improvements Milton St and Center St | Ebensburg | Public Survey | | Project | Medium |
| Truck Improvements on Union St | Truck Improvements on Union St | Johnstown | Public Survey | | Project | Medium |
| Barnett St onto Southmont Blvd Visibility | When approaching Southmont Blvd on Barnett St, visibility is limited by parked cars. | Johnstown | Public Survey | | Project | Medium |
| US 219 (Ditters Curve) Roadway Alignment | Tight curve through Northen Cambria on US 219 is dangerous | Northern Cambria | Steering Committee | | Project | Medium |
| US 22 and Beulah Road Intersection Traffic Light Adjustment | The traffic lights at US 22 and Beulah Road, need to be recalibrated. They are not in sync and create a traffic flow issue, especially during peak hours for work. | Cambria | Public Survey | US 22 Corridor Study | Project | Medium |
| Congestion on Scalp Ave (PA 56) | High congestion on Scalp Ave between US 219 and Eisenhower Blvd which causes unsafe conditions. | Richland | Public Survey | Scalp Ave Corridor Study | Study | Medium |
| Rowen Drive (US 422) and Admiral Peary Hwy (US 22) Congestion | Congestion Rowen Drive (US 422) and Admiral Peary Hwy (US 22) | Cambria | Public Survey | US 22 Corridor Study | Study | Medium |
| High Street and Center Street Congestion | Congestion High Street and Center Street | Ebensburg | Public Survey | | Study | Medium |
| Ebensburg Congestion | Truck traffic passing through center of town instead of using highway. | Ebensburg | Public Survey | | Study | Medium |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Extend Four-Lane US 219 Northbound from Ebensburg | Extend US 219 Northbound from Ebensburg | East Carroll | Public Survey | US 219 Corridor Study | Study | Medium |
| US 22 Congestion Reduction | Invest in smart technology to eliminate stop-and-go congestion through Cambria Township. | Cambria | Public Survey | TSMO | Study | Medium |
| US 422 (Ben Franklin Hwy) and High Street Intersection Congestion Improvements | US 422/High Street light gets congested during commuter traffic hours. | Ebensburg | Public Survey | | Study | Medium |
| Extend Four-Lane US 219 Northbound from Ebensburg | Extend US 219 Northbound from Ebensburg | East Carroll | Public Survey | US 219 Corridor Study | Study | Medium |
| Northbound US 219 Safety Improvements | Safety Improvements US 219 Northbound in East Carroll to relieve Truck Hazards. | East Carroll | Public Survey | US 219 Corridor Study | Study | Medium |
| US 219 Congestion | Congestion on US 219 West of Ebensburg | Cambria | Public Survey | US 219 Corridor Study | Study | Medium |
| US 219 Congestion | 4 lane roadway ends, turning into a windy road through small towns. | East Carroll | Public Survey | Freight Movement Plan | Study | Medium |
| Congestion Admiral Peary Hwy (US 22) | Congestion Admiral Peary Hwy (US 22) | Cambria | Public Survey | US 22 Corridor Study | Study | Medium |
| William Penn Hwy (US 22) Safety Improvement | Safety Improvement on William Penn Hwy (US 22) in Cresson | Cresson | Public Survey | US 22 Corridor Study | Study | Medium |
| Four-Lane US 422 | Make US 422 a four-lane road | Blacklick | Public Survey | US 422 Corridor Study | Study | Medium |
| Extend Four-Lane US 219 Northbound from Carroltown | Extend Four-Lane US 219 Northbound from Carroltown | Susquehanna | Public Survey | US 219 Corridor Study | Study | Medium |
| Freight Issues North Center & High street | Address freight related issues. | Ebensburg | Public Survey | Freight Movement Plan | Study | Medium |
| Increase Truck Parking | Parking Near Laurel Avenue (PA 403) and Iron Street | Johnstown | Public Survey | Freight Movement Plan | Study | Medium |
| Re-Route Freight out of Ebensburg | Congestion Issues through Ebensburg. North Center & High street. | Ebensburg | Public Survey | Freight Movement Plan | Study | Medium |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| US 219 Safety Improvements | Safety Improvements on US 219 | Susquehanna | Public Survey | US 219 Corridor Study | Study | Medium |
| Refocus Traffic to US 219 and Eisenhower Blvd | Need interchange here to serve commercial activities along Eisenhower. Traffic is coming through Scalp Ave which is congested and has turning issues when traffic is present. | Richland | STC | Maintenance Project | Study | Medium |
| Complete the US 219 4-Lane Roadway | Route 219 North four lane ends. The completion of US 219 to the New York border would have a massive economic impact. | East Carroll | STC | US 219 Corridor Study | Study | Medium |
| Connect US 219 to PA 36 | The Northern section of Cambria is passed over. Better access is needed to improve commerce. | East Carroll | STC | US 219 Corridor Study | Study | Medium |
| Re-Route Freight off of Strayer St (PA 56) | Frequent fright traffic through residential neighborhood. | Johnstown | Public Survey | Freight Movement Plan | Study | Medium |
| Menoher Blvd. (PA 271) and Goucher St Congestion | Congestion, Menoher Blvd., PA 271, and Goucher St | Westmont | Public Survey | | Study | Medium |
| Goucher Street and Sunray Drive Intersection Safety Improvements | Green arrow to flashing turning lane light happens too quickly | Upper Yoder | Public Survey | | Project | Low |
| Repair Potholes in Johnstown | Improve potholes in Johnstown | Richland | Public Survey | Maintenance | Project | Low |
| PA 756 and PA 160 Intersection Geometry | Intersection is still difficult to see oncoming traffic from PA 160. The curve on PA 160 needed to be eliminated when they made the improvements. | Adams | Public Survey | | Project | Low |
| Improve Freight Corridor Access to the Johnstown Airport | Would like to see cargo/freight increase out of the airport. | Richland | Public Survey | Freight Movement Plan | Project | Low |
| Glendale Lake Road and Grozanick Road Intersection Safety Improvements | Dangerous intersection | Clearfield | Public Survey | | Project | Low |
| Johnstown Roadway Repairs | Overall potholes and construction repairs need to be taken care of. | Johnstown | Public Survey | Maintenance | Project | Low |
| Frankstown Rd and Truman Blvd Intersection Improvements | Safety Improvements | Conemaugh | Public Survey | | Project | Low |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Repave Woodmont Road | Repave Woodmont Road | Upper Yoder | Public Survey | Maintenance | Project | Low |
| Truman Blvd and Fulmer Road Intersection Geometry off Frankstown Road | Align Truman Blvd and Fulmer Road off Frankstown Road | Conemaugh | Public Survey | | Project | Low |
| Wilmore Road (PA 160) and Ebony Road Intersection Improvements | Intersection Improvements at PA 160 (Wilmore Road) and Ebony Road | Cambria | Public Survey | | Project | Low |
| Repave Evergreen Road (PA 160) | Repave Evergreen Road (PA 160) through Wilmore | Summerhill | Public Survey | | Project | Low |
| Widen Sheridan Street | Widen Sheridan Street for safety. | Johnstown | Public Survey | | Project | Low |
| Repave Castle, Taft, Earl and Blackberry Streets | Repave Castle, Taft, Earl and Blackberry Streets | Middle Taylor | Public Survey | Maintenance | Project | Low |
| Stormwater Runoff Frankstown Road | Along Frankstown where water runs onto the northbound lane and freezes. | Richland | Public Survey | | Project | Low |
| Stormwater Runoff Rockville Road | Along Rockville Road where water runs onto the northbound lane and freezes. | Croyle | Public Survey | | Project | Low |
| Repave Darr Street | Poor Condition | Geistown | Public Survey | Maintenance | Project | Low |
| Frankstown Road and Mt Hope Road Intersection Safety | Poor intersection visibility | Richland | Public Survey | | Project | Low |
| PA 756 and PA 160 Intersection Traffic Light Installation | Needs a traffic light at PA 160 PA 756 intersection | Adams | Public Survey | | Project | Low |
| Widen Elton Street and PA 160 | Elton road and PA 160 have anticipated commercial growth therefore need to be wider. | Adams | Public Survey | | Project | Low |
| Install Safety Light on Glendale Lake Road | School zone needs flashing speed limit sign. | Clearfield | Public Survey | | Project | Low |
| Repave Hostler Road | Repair Hostler Road | Richland | Public Survey | Maintenance | Project | Low |
| Spinner Road and Admiral Peary Hwy Intersection | Intersection of Spinner Road and Admiral Peary Hwy | Munster | Public Survey | | Project | Low |
| Repave St Augustine Road | Repave St Augustine Road | Clearfield | Public Survey | Maintenance | Project | Low |
| Intersection Configuration Criste Rd/ Vale Wood Rd. | No left hand turn for freight trucks. | Munster | Public Survey | | Project | Low |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Colonel Drake Hwy (PA 36) and Glendale Lake Road Intersection Safety | Intersection of PA 36 and Glendale lake road is unsafe turning from north bound PA 36 onto GLR. | Clearfield | Public Survey | | Project | Low |
| Beulah Road and Ghost Town Trail Bridge Intersection Alignment | Straighten out the road with the ghost town bridge so cars can see on coming traffic. Can get more parking for the trail. | Cambria | Public Survey | | Project | Low |
| Goucher Street and Mowery Ave Intersection Safety Improvements | Poor visibility turning onto Goucher. | Upper Yoder | Public Survey | | Project | Low |
| Center Street Safety Improvements | Safety Improvements on Center Street in Front of Cambria County Court House | Ebensburg | Public Survey | | Project | Low |
| Repave Mizel Lane | Repave Mizel Lane in Conemaugh | Conemaugh | Public Survey | Maintenance | Project | Low |
| Intersection Safety Improvement at Bond St and Cypress Ave | Irregular stop sign placement makes traffic flow difficult and cars frequently run stop signs because of it. | Johnstown | Public Survey | Maintenance | Project | Low |
| Repave Cramer Pike (PA 403) from US 22 to US 422 | Rough sections of road from US 22 to US 422 (PA 403 Cramer Pike). | Jackson | Public Survey | Maintenance | Project | Low |
| Hostetler Road and Erickson Drive Intersection Reconfiguration | Recent project reconfigured intersection, people are running off road large pot hole is developing in dirt. | Richland | STC | Maintenance | Project | Low |
| Stormwater Management Near PA 53 in Wilmore | No inlet boxes for stormwater runoff. The homeowners that live there are getting their yards and basements flooded during high rainfall. | Wilmore | STC | Maintenance | Project | Low |
| PA 160 and PA 756 Intersection Geometry | Vehicle lights blind each other due to different elevations. | Adams | STC | | Project | Low |
| Stormwater Management Frankstown Road | The drainage is an issue here that needs to be addressed. Especially in the winter the undrained water on the roadway freezes and causes a safety concern. | Conemaugh | STC | | Project | Low |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| William Penn Ave (US 22) and Admiral Peary Hwy (PA 271) Intersection Improvement | Intersection improvement to increase sight distance for Pace Street. | Jackson | Public Survey | | Project | Low |
| Repair Laurel Ave Railroad Underpass | Repair Laurel Ave Railroad Underpass; low vertical clearance for trucks. | Johnstown | Public Survey | Freight Movement Plan | Project | Low |
| Repave Eisenhower Blvd | Repair Eisenhower Blvd in Ferndale | Stonycreek | Public Survey | Maintenance | Project | Low |
| Truck Improvements on Goucher St | Truck Improvements on Goucher St | Southmont | Public Survey | Freight Movement Plan | Project | Low |
| Install Interchange on US Highway 219 and Tower Rd | Install Interchange on US Highway 219 and Tower Rd in Croyle Township | Croyle | Public Survey | | Project | Low |
| Goucher St and Sunshine Ave Intersection Improvements | Intersection Improvements Goucher St and Sunshine Ave | Westmont | Public Survey | | Project | Low |
| Re-Route Freight/Trucks out of Rock Run | Large vehicle's with trailers cannot safely traverse through Rock Run. | Patton | Public Survey | Freight Movement Plan | Study | Low |
| Improve Freight Movement through Johnstown | Improve freight movement through downtown Johnstown to increase opportunity. | Johnstown | Public Survey | Freight Movement Plan | Study | Low |
| Freight Improvements on Evergreen Rd | Freight Improvements on Evergreen Rd | Summerhill | Public Survey | Freight Movement Plan | Study | Low |
| Freight Route Reconfiguration | The mountains and hills are challenging through Johnstown | Richland | Public Survey | Freight Study | Study | Low |
| US 422 Safety Improvements | Safety Improvements US 422 to Indiana, including heavy truck movement. | Cambria | Public Survey | US 422 Corridor Study | Study | Low |
| Extend Four-Lane US 219 Northbound from Ebensburg | Extend US 219 Northbound from Ebensburg | Cambria | Public Survey | US 219 Corridor Study | Study | Low |
| Small Freight Corridors | Roads are not large enough to allow good shipping and allowing industry to improve. | Conemaugh | Public Survey | Freight Movement Plan | Study | Low |
| Connect US 219 to PA 36 | Connect US 219 to PA 36 | East Carroll | Public Survey | US 219 Corridor Study | Study | Low |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| **Refocus Traffic to US 219 and Eisenhower Blvd** | Interchange would provide better access to business corridor easier access to Ferndale section of Johnstown and reduce traffic on Scalp Ave. Bridge is already there just needs ramps. | Richland | STC | Scalp Ave Corridor Study | Study | Low |
| **Truck Parking on Ridge Rd (PA 555)** | Truck Parking on PA 555 (Ridge Rd) | Barr | Public Survey | Truck Parking Study | Study | Low |
| **Goucher St Improvements** | Improvements on Goucher St in front of Hiram G Andrews Center | Upper Yoder | Public Survey | | Study | Low |
| **Center St Improvements** | Improvements on Center St out of Ebensburg | Ebensburg | Public Survey | | Study | Low |
| **US 219 Signage** | US 219 Signage | East Carroll | Public Survey | | Not an LRTP Project | Medium |
| **Fairfield Ave and Broad Street Intersection Signage** | Adjust Signage, people won't turn right on red because there is a sign stating 'stop here on red'. | Johnstown | Public Survey | Maintenance | Not an LRTP Project | Medium |
| **Sync Hayne Street Traffic Lights** | Sync Hayne Street Traffic Lights | Johnstown | Public Survey | | Not an LRTP Project | Medium |
| **US 219 Signage Improvement** | Improve signage along all main arteries and US 219 and clear overgrowth away from signs. | Richland | Public Survey | | Not an LRTP Project | Medium |
| **US 22 and Mini Mall Road Intersection Traffic Light Recalibration** | The traffic lights at US 22 and Mini Mall Road need to be recalibrated. | Cambria | Public Survey | US 22 Corridor Study | Not an LRTP Project | Medium |
| **William Penn Hwy Winter Maintenance in Cresson** | William Penn Hwy Winter Maintenance in Cresson | Cresson | Public Survey | Maintenance | Not an LRTP Project | Medium |
| **US 22 and Beulah Road Intersection Traffic Light Adjustment** | | Cambria | Public Survey | US 22 Corridor Study | Not an LRTP Project | Medium |
| **Jaycee Drive and Scalp Ave (PA 56) Intersection Traffic Light Recalibrations** | Jaycee Drive light doesn't trigger, dangerous during heavy traffic times. | Richland | Public Survey | | Not an LRTP Project | Medium |
| **US 219, Elton Road, and Theatre Drive Intersection Light Recalibrations** | Lights work against each other. | Richland | Public Survey | US 219 Corridor Study | Not an LRTP Project | Medium |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Donald Lane and Elton Road Intersection Light Recalibration | Traffic Lights | Richland | Public Survey | | Not an LRTP Project | Medium |
| US 219 Roadway Repairs | Roadway Repairs between Johnstown and Ebensburg on US 219 | Adams | Public Survey | Draft 2025 TIP - Project ID: 116926 | Not an LRTP Project | Medium |
| Johnstown Expressway (PA 56) | Johnstown Expressway Repair | Dale | STC | 2021 TIP - Project ID: 96482 | Not an LRTP Project | Medium |
| US 422 Speed Limit Adjustment | Speed limit on US 422 in front of the Admiral Peary VoTech. | Cambria | STC | Speed limit study | Not an LRTP Project | Medium |
| Maintenance Haynes Street (PA 271) | Lane lines need to be painted seasonally. Street lights need to be replaced on this main corridor. | Johnstown | STC | Maintenance | Not an LRTP Project | Medium |
| Corridor Designation on Center St (US 219) | Change the designation of this state road to a municipal road and have restricted access for trucks. | Ebensburg | STC | | Not an LRTP Project | Medium |
| Maintenance Haynes Street (PA 271) | Lane lines need to be painted seasonally. Street lights need to be replaced on this main corridor. | Johnstown | STC | Maintenance | Not an LRTP Project | Medium |
| Traffic Calming On US 422 | Traffic Calming for the residential reduced speed zone in Belsano. | Blacklick | Public Survey | | Not an LRTP Project | Medium |
| Scalp Ave (PA 56) Intersection Traffic Light Recalibration | The length of the traffic line entering the plaza occasionally backs up and causes one of the two lanes to be blocked. | Richland | Public Survey | Maintenance | Not an LRTP Project | Medium |
| US 22 and Mini Mall Rd Intersection Traffic Light Recalibration | People tend to ride through the area with elevated speeds. This intersection can be particularly congested as well at times. | Cambria | Public Survey | | Not an LRTP Project | Medium |
| Roosevelt Blvd Lighting | Lighting on Roosevelt Blvd near the Johnstown Stone Bridge | Johnstown | Public Survey | Maintenance | Not an LRTP Project | Medium |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| **Use the Johnstown Airport for Freight Movement** | Trucks could pick up and drop off freight at the Airport. The Airport has land designated as KOEZ and ALDZ to promote land development by offering tax incentives to businesses moving to the Airport. | Richland | Public Survey | | Not an LRTP Project | Low |
| **Johnstown Expressway (PA 56) Roadway Lines** | Lines and demarcation skills updated annually. | Dale | Public Survey | 2021 TIP - Project ID: 96482 | Not an LRTP Project | Low |
| **Countywide Roadway Condition** | Roads can just be rough and hard on your car again county wide | Westmont | Public Survey | | Not an LRTP Project | Low |
| **Highway System to US 22/Pittsburgh** | Develop a new highway system going out of Johnstown to US22/Pittsburgh | Johnstown | Public Survey | | Not an LRTP Project | Low |
| **Winter Maintenance** | Better snow removal | | Public Survey | Maintenance | Not an LRTP Project | Low |
| **Improvements Turkey Path Rd** | Turkey Path Rd | Summerhill | Public Survey | Maintenance | Not an LRTP Project | Low |
| **Lemon Drop Rd Improvements** | | East Carroll | Public Survey | Maintenance | Not an LRTP Project | Low |
| **Marina Road and PA 53 Intersection Marking** | Marina Road and PA 53 needs to be marked | Reade | Public Survey | Maintenance | Not an LRTP Project | Low |
| **Repave Aviation Drive** | Aviation drive is in poor condition. | Richland | Public Survey | Maintenance | Not an LRTP Project | Low |
| **US 219 and Bedford Street Lane Markings** | Better lane markings at intersection of US 219 and Bedford Street | Richland | Public Survey | Maintenance | Not an LRTP Project | Low |
| **PA 53 and Munster Road Intersection Lane Markings** | No line markers to stop at the intersection | Portage | Public Survey | Maintenance | Not an LRTP Project | Low |
| **Repave Sheridan Street and Grandinett Steet Area** | Potholes and big bumps along N Sheridan Street and Grandinett Steet | Johnstown | Public Survey | Maintenance | Not an LRTP Project | Low |
| **US 22 and Beulah Road Intersection Traffic Light Adjustment** | | Clearfield | Public Survey | US 22 Corridor Study | Not an LRTP Project | Low |

## ROADWAY PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Repave Roadway in Johnstown | Johnstown and roads leading to the city are in poor condition. | | Public Survey | Maintenance | Not an LRTP Project | Low |
| Glendale Lake Road Safety Lights | School zone needs flashing speed limit sign. | Patton | Public Survey | | Not an LRTP Project | Low |
| County-wide Road Repair | County-wide Road Repair | Cambria | Public Survey | Maintenance | Not an LRTP Project | Low |
| County-wide Road Repair | All roads in central and northern Cambria need improved access for the population and businesses | Allegheny | Public Survey | Maintenance | Not an LRTP Project | Low |
| Mill Creek Road Signage | Signage on Mill Creek Road | Westmont | Public Survey | Signage | Not an LRTP Project | Low |
| Increase Signage on Goucher St | Better signage on truck load limits. | Lower Yoder | Public Survey | Signage | Not an LRTP Project | Low |
| Roadway Maintenance on Manor Dr | The road is very slick from loose gravel. | Cambria | Public Survey | Maintenance | Not an LRTP Project | Low |
| US 219 Designation | US 219 need to continue as a highway to the Maryland border. | Richland | Public Survey | | Not an LRTP Project | Low |
| Von Lunen Rd Street Lights | Need street lights on Von Lunen Rd | Johnstown | Public Survey | Maintenance | Not an LRTP Project | Low |
| Crawford Ave and Chestnut Ave Traffic Light Recalibration | Intersection Safety Improvements at Crawford Ave and Chestnut Ave | Northern Cambria | Public Survey | | Not an LRTP Project | Low |
| Signage for Roundabout between Scalp Ave, Belmont St, and Bedford St. | Roundabout between Scalp Ave, Belmont St, and Bedford St. The local public doesn't know how to handle a roundabout. More education efforts are necessary than an article on PennDOT's website. | Geistown | Public Survey | Signage | Not an LRTP Project | Low |
| Goucher St and Hershberger Rd Intersection Light Recalibration | The green light on one intersection goes too quick. | Upper Yoder | Public Survey | Maintenance | Not an LRTP Project | Low |

## BRIDGE PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| US 219 Bridge Repair Into Somerset County. | Plan funding to replace large span structure. | Richland | Public Survey | | Project | High |
| Bike/Pedestrian Bridge Installation over the East Conemaugh River | The Urban Connectivity plan recommended a separate bike-ped bridge to Maple Ave. | Johnstown | Public Survey | | Project | High |
| Fairfield Ave Railroad Underpass | Underpass needs signs indicating vertical clearance | Johnstown | Public Survey | | Project | Medium |
| Little Conemaugh River Bridge Repair | Bridge Repair in Johnstown. | Johnstown | Public Survey | | Project | Medium |
| Reopen and Repair Bridge on Fairfield and Tremont Rd | Reopen and Repair Bridge. | Lower Yoder | Public Survey | | Project | Medium |
| Repair Main St and Railroad Underpass | Repair Main St and Railroad Underpass | Portage | Public Survey | | Project | Low |
| Reconstruction of NS Keystone Bridge | Norfolk Southern Keystone bridge needs reconstructed for heavy truck issues and line of sight issues. | Portage | STC | Freight Move-ment Plan | Project | Low |
| Repairs on Lee St, Portage Underpass under Railroad | Repairs on Lee St, Portage Underpass under Railroad | Portage | Public Survey | | Project | Low |
| Reopen and Repair Hinckston Run Dam Bridge | Hinckston Run Dam bridge has bee closed for years, needs repaired and reopened. | East Taylor | Public Survey | | Project | Low |
| | | | | | | |
| Increased Signage for Bridges | Trucks cross bridges from Sidman/St. Michael to Portage, crossing bridges that they should not. | Summerhill | Public Survey | Signage | Not an LRTP Project | |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| **Trail link from Ghost Town Trail to Wilmore Dam** | Fund trail link from Ghost Town Trail to Wilmore Dam to Path of the Flood. | Summerhill | Public Survey | | Project | High |
| **Develop Trailhead and River Access** | Demolish the former Sheesley's Concrete plant for development of trail head and river access as well as cross walk safety. | Johnstown | Public Survey | Trailhead Evaluation | Project | High |
| **UPJ & Penn Highlands Educational Corridor Safety Improvements** | Bicycle/Pedestrian issues around the UPJ & Penn Highlands educational corridor. | Richland | Public Survey | Corridor Study | Project | High |
| **Inclined Plane Walking Trail to the 9/11 Trail Corridor** | Complete Inclined Plane walking trail to the 9/11 trail corridor | Johnstown | Public Survey | | Project | High |
| **Walnut St bridge Pedestrian Improvements** | From the Flood Museum across Walnut St bridge to Cambria City on the Path of the Flood Trail | Johnstown | Public Survey | | Project | High |
| **Trail Improvements for ADA Accessibility** | Trails being established are not wheelchair accessible. | Lower Yoder | Public Survey | Active Trans-portation Plan | Study | High |
| **Sidewalk Extensions to Goucher St** | Goucher street has no sidewalks making walkability difficult. | Upper Yoder | Public Survey | | Project | Medium |
| **Central Ave and Valley Pike Roadway Configuration** | Install road diet on Central Ave and Valley Pike in Johnstown | Johnstown | Public Survey | | Project | Medium |
| **Franklin St (PA 271) and Main St Crosswalk Safety Improvements** | Crosswalk Safety Improvements Franklin St (PA 271) and Main St | Johnstown | Public Survey | | Project | Medium |
| **Front Street in Mineral Point Trailhead and River Access.** | Develop trail head parking and river front access along Front Street in Mineral Point. | East Taylor | Public Survey | Trailhead Evaluation | Project | Medium |
| **PA 56 and Washington St Intersection Safety Improvement** | Dangerous crossing PA 56 and Washington St | Johnstown | Public Survey | | Project | Medium |
| **Trail connection from Ghost Town Trail to Munster** | Trail from the present end of the Ghost Town Trail to Munster Road, also the extension to Loretto | Cambria | Public Survey | | Project | Medium |
| **Completion of C&I Trail** | Final connection from Cardiff to the east side of Nanty Glo to complete the C&I Trail | Blacklick | Public Survey | | Project | Medium |
| **Southern Johnstown Trail Connection** | Trail connection from Bens Creek to the James Mayer Riverwalk | | Public Survey | | Project | Medium |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Trail Connection in Mineral Point | Connection Staple Bend Tunnel Trail and Path of the Flood Trail | East Taylor | Public Survey | Active Transportation Plan | Project | Medium |
| Sidewalk Installation for Safety in Belmont | No access for children to get to the playground on a busy street. Addition of a sidewalk would be ideal for safety. | Richland | Public Survey | | Project | Medium |
| Off Road Trail Connecting Tunnel to Trail | Off road trail system needed to connect Tunnel and existing trail. Challenge is crossing US 22 with overpass or tunnel. Need cooperation with PennDOT Forest and County Authority. | Conemaugh | STC | | Project | Medium |
| Downtown Johnstown Bus Shelters | Elderly have to stand with no protection from the elements, need shelters. | Johnstown | Public Survey | | Project | Medium |
| ADA Compliance for CamTran Buses | CamTran buses do not accommodate larger wheelchair users. | Johnstown | Public Survey | Local Coordinated Plan | Project | Medium |
| Crosswalk Safety Issues | Crossing along Main Street causes issues | Scalp Level | Public Survey | | Project | Medium |
| PA 271 and Tech Park Dr. Intersection Safety Improvement | Tight turns for trucks, therefore causes hazards. | Johnstown | Public Survey | | Project | Medium |
| Chestnut St and McCoy St Crosswalk Safety Improvements | Crosswalk Safety Improvements Across Chestnut St/McCoy St in Nanty Glo | Nanty Glo | Public Survey | | Project | Medium |
| High St and Julian St Crosswalk Safety Improvements | Crosswalk Safety Improvements in Ebensburg High St/ Julian St | Ebensburg | Public Survey | | Project | Medium |
| Pedestrian Safety for Travel Under US 219 | Pedestrian Safety for Travel Under US 219 | Richland | STC | | Project | Medium |
| Franklin Street Bike Lane Drainage | The bike lane on Franklin Street has drainage causing cyclists to ride on the street instead of the bike lane. | Southmont | STC | | Project | Medium |
| US 219 Bike/Ped Safety Improvements Through Richland | Bike/Ped Safety Improvements on US 219 through Richland | Richland | Public Survey | | Project | Medium |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Glendale Lake Trail Expansion | Lack of bicycle access around Glendale lake | White | Public Survey | Active Transportation Plan | Project | Medium |
| Safety Improvements Crossing US 422 on the Ghost Town Trail | Ebensburg Ghost Town Trail crossing over US 422 will need alert lights/warnings, etc. to help people cross safely. | Ebensburg | Public Survey | | Project | Medium |
| Path of the Flood Trail Protected Bike Lanes | Protected bike lanes from Franklin to downtown Johnstown along the Path of the Flood trail | Franklin | Public Survey | | Project | Medium |
| High St and Center St Intersection Safety Improvement | Pedestrians tend not to get the right of way on the cross walk. | Ebensburg | Public Survey | | Project | Medium |
| Ghost Town Trail Safety Improvements Into Nanty Glo | Cardiff Rd into Nanty Glo is dangerous for bikers. Signs and safety measures need to be added. | Blacklick | Public Survey | Active Transportation Plan | Project | Medium |
| Ebensburg Pedestrian Safety | | Ebensburg | Public Survey | Ebensburg Complete Streets Evaluation | Project | Medium |
| Bicycle Safety Improvements Along Menother Blvd | Add a protected bike lane along this major corridor. | Southmont | Public Survey | Active Transportation Plan | Project | Medium |
| Franklin St Bicycle Lanes | Bike lanes that start/stop randomly along Franklin St, south of Johnstown. | Johnstown | Public Survey | Active Transportation Plan | Project | Medium |
| Safety Improvements Across Chestnut St (PA 271) on the Ghost Town Trail | The crossing at the Ghost Town Trail needs safety improvements, including updated striping, traffic calming measures to reduce vehicle speeds, more signage indicating the crossing, and increased lighting of the sidewalk to improve pedestrian visibility at dusk and nighttime. | Nanty Glo | Public Survey | | Project | Medium |
| Expand Airport Parking | Expand parking and prepare for personal drone use. | Richland | Public Survey | | Project | Medium |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Ebensburg Bus Shelters | Need shelters on existing stops. | Cambria | Public Survey | | Project | Medium |
| Richland Center Bus Stop | Entire city routes | Richland | Public Survey | Local Coordinated Plan | Project | Medium |
| Bus Transit at the Johnstown Airport | A regular scheduled bus stop should be aligned with flight schedules to provide transit between airport, downtown, and the rail station | Richland | Public Survey | Local Coordinated Plan | Project | Medium |
| Installation of Sidewalks near Geistown | Lack of sidewalks | Geistown | Public Survey | | Project | Medium |
| Sidewalk Installation on Industrial Park Road | Sidewalk installation on Industrial Park Road east of Richland. | Richland | Public Survey | Active Transportation Plan | Project | Medium |
| Gallitzin Interchange Park and Ride | Add a park and ride lot at the Gallitzin interchange. People are already parking here but something should be designed to make it safer and get the parked vehicles well separated from moving traffic | Tunnelhill | STC | | Project | Medium |
| Downtown Johnstown Bike Study | There are not enough bike lanes in the county, especially in the City of Johnstown. | Westmont | Public Survey | Downtown Complete Streets/Bike/Ped Study | Study | Medium |
| Johnstown Bike Lanes | Need more bike lanes throughout Johnstown | Johnstown | Public Survey | Downtown Johnstown Complete Streets | Study | Medium |
| Scalp Avenue Pedestrian Improvements | No sidewalks along Scalp Avenue | Richland | Public Survey | Bicycle and Pedestrian Safety Study on Scalp Ave | Study | Medium |
| Install Bike Lanes on Franklin Street in Johnstown | Install bike lanes on Franklin Street in Johnstown, between Hickory Street and downtown. | Johnstown | Public Survey | Downtown Johnstown Complete Streets | Study | Medium |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| **Ghost Town Trail Connection out of Ebensburg** | Ghost Town Trail Connection out of Ebensburg across US 422 to SFU. | Ebensburg | Public Survey | Active Transportation Plan | Study | Medium |
| **Goucher St Sidewalk Study** | No sidewalk from Goucher St / Lindburg Ave to Giant Eagle | Upper Yoder | Public Survey | | Study | Medium |
| **Menoher Blvd (PA 271) Bike/Ped Improvements** | Bike/Ped Improvements on Menoher Blvd (PA 271) | Johnstown | Public Survey | | Study | Medium |
| **Johnstown Area Trail Expansion** | More trails would increase exercise and recreational activities. | Johnstown | Public Survey | | Study | Medium |
| **Develop Trail Connection** | Trail needs to be developed from Mineral Point (and the Path of the Flood Trail) to Nanty Glo (the Ghost Town Trail). | East Taylor | Public Survey | | Study | Medium |
| **Glendale Lake Trail Connections** | Lack of trail connection | Chest | Public Survey | Active Transportation Plan | Study | Medium |
| **Trail Expansion on Abandoned Rail** | Trail expansion on abandoned rail along PA 53 north of Prince Gallitzin Sate Park | Reade | Public Survey | Active Transportation Plan | Study | Medium |
| **Somerset County Trail Connections** | Lack of trail connection | | Public Survey | Active Transportation Plan | Study | Medium |
| **Ghost Town Trail Extension East** | Ghost Town Trail connection east through into Cresson and Loretto | Ebensburg | Public Survey | Active Transportation Plan | Study | Medium |
| **Extension of Trails into Northern Cambria** | No trail resources are in the Northern Cambria region of the county. | Susquehanna | Public Survey | Active Transportation Plan | Study | Medium |
| **Rail-Trail Creation South of Dysart** | Abandoned rail could become rail trail. | Dean | Public Survey | Active Transportation Plan | Study | Medium |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Trail Connection | Trail connection near Ebensburg | Cambria | Public Survey | Active Transportation Plan | Study | Medium |
| Trail Connection St Michael to the Path of the Flood Trail | Trail from Berwind Park to the Path of the Flood Trail | Adam | Public Survey | Active Transportation Plan | Study | Medium |
| Trail Connection into Ashville | Trail connection | Allegheny | Public Survey | Active Transportation Plan | Study | Medium |
| Trail Connection North of Prince Gallitzin Sate Park | Trail connection north of Prince Gallitzin Sate Park near Flinton | White | Public Survey | Active Transportation Plan | Study | Medium |
| Ghost Town Trail to Prince Gallitzin State Park Trail Connection | Trails to connect Prince Gallitzin State Park to Carrolltown, then to Ghost Town Trail | East Carroll | Public Survey | Active Transportation Plan | Study | Medium |
| Ghost Town Trail to Loretto Trail Connection | Trail Extension from the Ghost Town Trail to Loretto | Allegheny | Public Survey | Active Transportation Plan | Study | Medium |
| Trail Connection Near PA 553 (Ridge Rd) | Trail connection | Barr | Public Survey | Active Transportation Plan | Study | Medium |
| Installation of Trails Along Wilmore Dam | Need walking and biking trail along Wilmore Dam. Road grade is already there. | Summerhill | Public Survey | Active Transportation Plan | Study | Medium |
| Ghost Town Trail Connection in Beula | Ghost Town Trail connection with new trail built. | Cambria | Public Survey | Active Transportation Plan | Study | Medium |
| Create Rail trail in Northern Cambria | Old railroad could be trails in the Northern part of the county. | Northern Cambria | Public Survey | Active Transportation Plan | Study | Medium |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| **Trail Connection in Ebensburg** | Trail connection | Ebensburg | Public Survey | Active Transportation Plan | Study | Medium |
| **Old Blue Bridge Trail Connection in South Fork** | Trail connection to the Old Blue Bridge | South Fork | Public Survey | Active Transportation Plan | Study | Medium |
| **Trail Development Ebensburg to Loretto** | Ebensburg to Loretto to Cresson trail development | Cambria | Public Survey | Active Transportation Plan | Study | Medium |
| **Trail Connection South of Ebensburg near PA 160** | Trail connection | Summerhill | Public Survey | Active Transportation Plan | Study | Medium |
| **Extend Trails to Carrolltown** | There is no trails that connect to Carrolltown. | Carrolltown | Public Survey | Active Transportation Plan | Study | Medium |
| **Trail Connection Ebensburg to Munster** | | Allegheny | Public Survey | Active Transportation Plan | Study | Medium |
| **Trail Extension from Johnstown Trails to Ghost Town Trail** | Trail Extension from Johnstown Jim Mayer / Sandyvale trail to the Ghost Town Trail | Johnstown | Public Survey | County-Wide Trail Study | Study | Medium |
| **Trail Connection to Patton** | Build trail to Patton and connect to Carrolltown Park. | East Carroll | Public Survey | Active Transportation Plan | Study | Medium |
| **Sidewalk Study in Vinco** | No sidewalks in Vinco | Cambria | Public Survey | Active Transportation Plan | Study | Medium |
| **Bike Lane Safety Improvement** | Better bike lanes are needed along with shareable roads. | Conemaugh | Public Survey | Downtown Complete Streets/Bike/ Ped Study | Study | Medium |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Extend CamTran Johnstown Service Hours | All of CamTran, times don't seem to be early/late enough for workers and very few covered stops. | Johnstown | Public Survey | Local Coordinated Plan | Study | Medium |
| Sidewalk Safety and ADA Concerns | | Westmont | Public Survey | Active Transportation Plan | Study | Medium |
| Service Connection Johnstown to Altoona | No regular services between Altoona and Johnstown. | | Public Survey | Local Coordinated Plan | Study | Medium |
| Roadway Safety Improvements for Bicycles | Pave wider shoulders for cyclists to get off traffic lanes. | Upper Yoder | Public Survey | Active Transportation Plan | Study | Medium |
| Ghost Town Trail Connection out of Ebensburg | Extend the Ghost Town Trail over US 422 (Rowena Dr). | Ebensburg | Public Survey | Active Transportation Plan | Study | Medium |
| Johnstown Bus Stop (Galleria) | Entire city routes | Richland | Public Survey | Local Coordinated Plan | Study | Medium |
| Bike Trail Connections to Richland | No bike trails in Richland for safe multimodal access. | Richland | Public Survey | Active Transportation Plan | Study | Medium |
| Bus Stop Near Intersection of US 219 and US 22 | Bus Stop Near Intersection of US 219 and US 22 | Cambria | Public Survey | Local Coordinated Plan | Project | Low |
| Bus Stop at the Vinco Shopping Center off of William Penn Ave (PA 271) | Bus Stop at the Vinco Shopping Center off of PA 271 (William Penn Ave) | Jackson | Public Survey | Local Coordinated Plan | Project | Low |
| Bus Stop at the Parkhill Shopping Center off of William Penn Ave (PA 271) | Bus Stop at the Parkhill Shopping Center off of PA 271 (William Penn Ave) | East Taylor | Public Survey | Local Coordinated Plan | Project | Low |
| Repave Old PA 53 | Repave Old PA 53 for vehicles, but also a biking/ walking trail. | Croyle | Public Survey | Maintenance | Project | Low |
| Bus Stop (Gerry Ln and Bedford St) | Gerry Ln and Bedford St Bus Stop | Geistown | Public Survey | Local Coordinated Plan | Project | Low |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Bus Stop (Hiram G Andrews Center) | Hiram G Andrews Center | Upper Yoder | Public Survey | Local Coordinated Plan | Project | Low |
| Accessibility along High St | Provide increased accessibility from the apartments into town. | Ebensburg | Public Survey | Ebensburg Complete Streets Evaluation | Project | Low |
| Bus Stop at the Vinco Shopping Center off of William Penn Ave (PA 271) | Bus Stop at the Vinco Shopping Center off of PA 271 (William Penn Ave) | Jackson | Public Survey | Local Coordinated Plan | Project | Low |
| Expand Service in North Cambria | Difficult to get to upper part of county with public transport | Clearfield | Public Survey | Local Coordinated Plan | Study | Low |
| Bus Service Area | Increase footprint of public transportation to allow better access for employees of local businesses. | Johnstown | Public Survey | Local Coordinated Plan | Study | Low |
| Patton and Carrolltown Area Walkability Improvements | Need walking trails in Patton and Carrolltown area. | Clearfield | Public Survey | Active Transportation Plan | Study | Low |
| Richland/Geistown Bus Shuttle | "Maybe a shuttle around Richland/Geistown to go to the mall, groceries on Scalp, Wal Mart area, etc. " | Richland | Public Survey | Local Coordinated Plan | Study | Low |
| Rural Bus Service Area | Limited public transportation in all rural areas of the County | Barr | Public Survey | Local Coordinated Plan | Study | Low |
| Fixed Route Service in Portage | Limited fixed route | Portage | Public Survey | Local Coordinated Plan | Study | Low |
| Richland Bus Service Area Study | Need more buses than run to PHCC and UPJ, to shopping, and around Richland. | Richland | Public Survey | Local Coordinated Plan | Study | Low |
| Increase Bus Service Frequency | CamTran needs to increase days of operation. | Cambria | Public Survey | Local Coordinated Plan | Study | Low |
| Fixed Route Service into South Fork | No fixed route | South Fork | Public Survey | Local Coordinated Plan | Study | Low |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| **Scalp Avenue (PA 56) and Bedford St (PA 756) Sidewalk Improvements** | Sidewalk improvements along Scalp Ave and Bedford Street in Geistown and Richland | Johnstown | Public Survey | Active Transportation Plan | Not an LRTP Project | Medium |
| **Roosevelt Blvd (PA 56) Sidewalk Improvements** | Walking on Roosevelt Blvd (PA 56) northern Johnstown dangerous and there are little to no sidewalks. | Johnstown | Public Survey | Downtown Johnstown Complete Streets | Not an LRTP Project | Medium |
| **Scalp Avenue (PA 56) Sidewalk Improvements** | No sidewalk or pedestrian crossing. | Richland | Public Survey | Bicycle and Pedestrian Safety Study on Scalp Ave | Not an LRTP Project | Medium |
| **Franklin St (PA 403) Sidewalk Improvements** | Sidewalk Improvements on Franklin St (PA 403) | Johnstown | Public Survey | Active Transportation Plan | Not an LRTP Project | Medium |
| **Goucher Street Sidewalk Improvements** | There is not a sidewalk on Goucher Street from Keppler Dr to the intersection on Menoher Blvd. | Upper Yoder | Public Survey | Active Transportation Plan | Not an LRTP Project | Medium |
| **University of Pittsburgh Johnstown Bike/Pedestrian Improvements** | Few sidewalks or crosswalks | Richland | Public Survey | Active Transportation Plan | Not an LRTP Project | Medium |
| **Admiral Peary Highway (US 219) Bicycle/Pedestrian Improvements** | Bicycle/Pedestrian Improvements Admiral Peary Highway (US 219) | Ebensburg | Public Survey | Active Transportation Plan | Not an LRTP Project | Medium |
| **Sidewalk Improvements for ADA Accessibility** | Sidewalks downtown are dangerous for wheelchair users | Richland | Public Survey | Active Transportation Plan | Not an LRTP Project | Medium |
| **Scalp Avenue (PA 56) and Luther Rd Sidewalk Improvements** | Sidewalk improvements on Scalp Avenue (PA 56) and Luther Rd to the US 219 S ramp Is not walkable | Richland | Public Survey | Active Transportation Plan | Not an LRTP Project | Medium |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| Downtown Johnstown Pedestrian Improvements | Sidewalks in Johnstown are broken, focus on rebuilding downtown by making it more pedestrian-friendly. | Johnstown | Public Survey | Downtown Johnstown Complete Streets | Not an LRTP Project | Medium |
| Bedford St (PA 756) Sidewalk Improvements | Sidewalks along Bedford Street in Richland/ Geistown. | Richland | Public Survey | Active Transportation Plan | Not an LRTP Project | Medium |
| Sidewalk Improvements West of Lilly | Cannot walk along roadways to nearest town to grocery store. | Munster | Public Survey | Active Transportation Plan | Not an LRTP Project | Medium |
| Bike Trails to Pittsburgh | Trail connection cross borders. | Washington | Public Survey | Active Transportation Plan | Not an LRTP Project | Medium |
| Transit Options to Pittsburgh Airport | No transit options to Pittsburgh airport | | Public Survey | In Progress | Not an LRTP Project | Low |
| Transit Options (Walnut St) | | Johnstown | Public Survey | Local Coordinated Plan | Not an LRTP Project | Low |
| Johnstown Amtrak Service | More Amtrak trains stop in Johnstown | Westmont | Public Survey | In Progress | Not an LRTP Project | Low |
| Bus Service on J Street in Johnstown | No bus service on J Street | Johnstown | Public Survey | Local Coordinated Plan | Not an LRTP Project | Low |
| Second Train to Pittsburgh | More trip options from Amtrak | Johnstown | Public Survey | In Progress | Not an LRTP Project | Low |
| Bus Stop at County Human Resources Services | County Human Resources Services Bus Stop | Ebensburg | Public Survey | Local Coordinated Plan | Not an LRTP Project | Low |
| Roadway Safety Signs | More signs needed to remind drivers to share the road. | Upper Yoder | Public Survey | Active Transportation Plan | Not an LRTP Project | Low |
| Increase passenger rail | Increase passenger rail and connecting service options. | Johnstown | STC | Local Coordinated Plan | Not an LRTP Project | Low |

## MULTIMODAL PROJECTS

| Project Name/Location | Project Description | Municipality | Source | Notes | Project/ Study | Priority |
|---|---|---|---|---|---|---|
| **Wayfinding for Bus Stop Signs** | Difficult for students to easily navigate to downtown locations and/or Amtrak/Greyhound/ airport | Richland | Public Survey | Signage | Not an LRTP Project | Low |
| **Wayfinding for Bus Stops in Lily** | Unclear signage and direction | Lilly | Public Survey | Signage | Not an LRTP Project | Low |
| **CamTran Service Schedule** | CamTran bus stop doesn't start early enough in the morning and there is not weekend service. | Upper Yoder | STC | Local Coordinated Plan | Not an LRTP Project | Low |
| **Improve Trailhead Signage Across the County** | Improve Trailhead Signage Across the County | Richland | Public Survey | Signage | Not an LRTP Project | Low |
| **Sidewalk Repair Downtown Johnstown** | Downtown sidewalks are full of broken pavement and holes. | Johnstown | Public Survey | Maintenance Project | Not an LRTP Project | Low |

# Appendix C: Transit TIP

| Project | Project Title | Sponsor | FFY 2025 | FFY 2026 | FFY 2027 | FFY 2028 | Total |
|---|---|---|---|---|---|---|---|
| 70579 | Security / Oper Assist | CAMTRAN | $10,612,000 | $11,143,000 | $11,699,000 | $10,256,000 | $43,710,000 |
| 70582 | Purchase (veh/Equip) | CAMTRAN | | 800,000 | 800,000 | 800,000 | 2,400,000 |
| 70597 | Capital Assistance - ADA | CAMTRAN | 375,000 | 375,000 | 375,000 | 375,000 | 1,500,000 |
| 106960 | Facility Improve rural | CAMTRAN | | 60,000 | | | 60,000 |
| 106963 | Shop Tools-Equip-Incline | CAMTRAN | | 50,000 | 50,000 | 50,000 | 150,000 |
| 106964 | Shp Tools & Equip - Rural | CAMTRAN | 75,000 | 50,000 | 50,000 | 50,000 | 225,000 |
| 106966 | Farebox System Urb/Rural | CAMTRAN | 2,000,000 | | | | 2,000,000 |
| 106967 | Computer Upgrades | CAMTRAN | 50,000 | 50,000 | 100,000 | 50,000 | 250,000 |
| 106982 | Replace Op. Vehicle C-13 | CAMTRAN | | 45,000 | | 70,000 | 115,000 |
| 106985 | Office Furniture & Equipm | CAMTRAN | | 40,000 | | | 40,000 |
| 111053 | Shop Tools Equip - Urban | CAMTRAN | 100,000 | 50,000 | 50,000 | 50,000 | 250,000 |
| 111055 | Bus Replace - Urban #1 | CAMTRAN | | 3,462,000 | | 2,083,000 | 5,545,000 |
| 111056 | Bus Mid-Life Overhaul | CAMTRAN | | 1,250,000 | | | 1,250,000 |
| 115302 | Replace Tech Equip Rural | CAMTRAN | | 12,000 | | 12,000 | 24,000 |
| 115303 | Security improvements | CAMTRAN | | 72,000 | 24,000 | 24,000 | 120,000 |
| 116038 | Facility Imp/ inc - SOGR | CAMTRAN | 27,000 | 27,000 | 27,000 | 27,000 | 108,000 |
| 116561 | Reseal Park Lot Ebensburg | CAMTRAN | | 16,000 | | | 16,000 |
| 116563 | Ebensburg blding improvem | CAMTRAN | 2,500,000 | | | | 2,500,000 |
| 116564 | Reseal Parking Lot Jtown | CAMTRAN | | | 15,000 | | 15,000 |
| 118266 | Vehicle/Equip. & Facility | CAMTRAN | 800,000 | | | | 800,000 |
| 118267 | Bus Replace Rural Div. #2 | CAMTRAN | | | 393,000 | | 393,000 |

| Project | Project Title | Sponsor | FFY 2025 | FFY 2026 | FFY 2027 | FFY 2028 | Total |
|---|---|---|---|---|---|---|---|
| 118270 | Bus Replace Rural Div. #3 | CAMTRAN | | | 655,000 | | 655,000 |
| 118271 | Replace Vehicles Urban #3 | CAMTRAN | | | 50,000 | | 50,000 |
| 118272 | Replace Op. Vehicles Urb. | CAMTRAN | | | 180,000 | | 180,000 |
| 119573 | Bus Replacement-Rural | CAMTRAN | | 752,000 | 564,000 | | 1,316,000 |
| 121432 | Replace Gasoline Shared-R | CAMTRAN | | 330,000 | 655,000 | | 985,000 |
| 121433 | Replace Operations Vehicl | CAMTRAN | | | 100,000 | | 100,000 |
| 121434 | Replace Buses C-171, C-17 | CAMTRAN | | | 600,000 | | 600,000 |
| 121435 | Johnstown Final Solar | CAMTRAN | | | 1,000,000 | | 1,000,000 |
| | Totals for: Cambria County Transit Authority/CAMTRAN | | $16,539,000 | $18,584,000 | $17,387,000 | $13,847,000 | $66,357,000 |

# Appendix D: Disposition of Comments Received on the LRTP

To be inserted following public comment period

# Appendix E: Performance Reports

## 2022 Performance Measures Annual Report -- Pavements

**Johnstown**

**2022 MAP-21 Pavement Performance by Business Plan Network (Based on Total PA Lane Miles*)**

| MAP-21 Pavement Performance Measures | Good | | Fair | | Poor | | Missing (Max 5%) | |
|---|---|---|---|---|---|---|---|---|
| | Lane Miles | % | Lane Miles | % | Lane Miles | % | Lane Miles | % |
| Interstate | - | - | - | - | - | - | - | - |
| NHS, Non-Interstate | 90.6 | 26.12% | 252.8 | 72.87% | 3.5 | 1.01% | 5.1 | 1.46% |

| MAP-21 Pavement Performance Measure Targets | Good | | | | Poor | | | |
|---|---|---|---|---|---|---|---|---|
| | 2023 Target | 2024 Target | 2025 Target | 2026 Target | 2023 Target | 2024 Target | 2025 Target | 2026 Target |
| Interstate | - | - | - | - | - | - | - | - |
| NHS, Non-Interstate | 34% | 32% | 37% | 35% | 2% | 2% | 2% | 2% |

· MAP-21 pavement performance measures required for FHWA reporting include four distress components which translate to good, fair, or poor condition scores. See table on reverse of this page for distress and thresholds. Three conditions apply to each pavement type.

· A pavement 10th mile section is considered in good condition if all three distress components are rated as good. A pavement 10th mile section is considered in poor condition if two or more of its three distress components are rated as poor.

· FHWA requires that no more than 5 percent of a state's NHS Interstate lane-miles be in poor condition. Additionally, state DOTs are required to establish targets.

· FHWA has not established a minimum condition for NHS non-Interstate roadways, but requires the state DOT to establish targets.

· FHWA requires that no more than 5 percent of a state's mileage be unreported or missing.

· Conditions are assessed and analyzed for pavement "sections" that cannot exceed 0.10 miles in length, which differs from PennDOT's historic segment level data.

· MAP-21 performance measures apply to all Interstate and NHS Non-Interstate miles in PA, regardless of ownership. Therefore, PA Turnpike and local-owned miles are in Statewide totals, but not in each District's totals. Local-owned miles are included in MPO/RPO totals as appropriate.

· MAP-21 rulemaking requires that states develop and implement a risk-based asset management plan to achieve and sustain a state of good repair over the life cycle of transportation assets and to improve or preserve the condition of the NHS. Asset Management encompasses two related means of doing so: making infrastructure last as long as reasonably possible, and keeping up on preservation activities to minimize costlier major repairs. Together, these practices extend the life of assets and reduce the cost of maintaining them in the desired state of good repair. This is known as operating the network at the lowest life-cycle cost (LLCC).

· MAP-21 performance measures are not to drive planning and programming, but rather be an indication of performance achieved by states operating at the LLCC.

**2022 Pavement Smoothness (IRI) Summary by Business Plan Network (Based on PennDOT Segment Miles)**

| Business Plan Network | Excellent | | Good | | Fair | | Poor | | Median IRI | Tested Seg-Mi |
|---|---|---|---|---|---|---|---|---|---|---|
| | Seg-Mi | % | Seg-Mi | % | Seg-Mi | % | Seg-Mi | % | | |
| Interstate | - | - | - | - | - | - | - | - | - | - |
| NHS, Non-Interstate | 61.0 | 35.28% | 78.0 | 45.12% | 24.9 | 14.41% | 9.0 | 5.19% | 86 | 172.9 |
| Non-NHS, ≥ 2000 ADT | 54.9 | 31.18% | 82.7 | 46.96% | 24.9 | 14.15% | 13.6 | 7.71% | 114 | 176.0 |
| Non-NHS, < 2000 ADT | 76.5 | 19.70% | 118.2 | 30.45% | 109.0 | 28.06% | 84.7 | 21.80% | 169 | 388.4 |
| Total - Roadway | 192.4 | 26.09% | 278.9 | 37.83% | 158.8 | 21.54% | 107.2 | 14.54% | 131 | 737.3 |

**2022 Overall Pavement Index (OPI) Summary by Business Plan Network (Based on PennDOT Segment Miles)**

| Business Plan Network | Excellent | | Good | | Fair | | Poor | | Median OPI |
|---|---|---|---|---|---|---|---|---|---|
| | Seg-Mi | % | Seg-Mi | % | Seg-Mi | % | Seg-Mi | % | |
| Interstate | - | - | - | - | - | - | - | - | - |
| NHS, Non-Interstate | 2.2 | 1.28% | 115.5 | 67.44% | 45.7 | 26.66% | 7.9 | 4.61% | 83 |
| Non-NHS, ≥ 2000 ADT | 33.4 | 19.05% | 82.9 | 47.37% | 55.4 | 31.64% | 3.4 | 1.94% | 84 |
| Non-NHS, < 2000 ADT | 99.1 | 25.52% | 183.9 | 47.38% | 89.4 | 23.04% | 15.8 | 4.06% | 77 |
| Total - Roadway | 134.6 | 18.33% | 382.3 | 52.06% | 190.5 | 25.93% | 27.0 | 3.68% | 81 |

**Total Miles**

| PennDOT Seg-Mi | PA Lane Miles |
|---|---|
| - | - |
| 174.0 | 352.1 |
| 177.0 | |
| 389.2 | |
| 740.2 | |

- The IRI and OPI data presented herein is segment level.
- For the Interstate and NHS, Non-Interstate Business Plan Networks, the IRI and OPI data is for 2022. For the Non-NHS Business Plan Networks, the IRI and OPI data for most recent year captured, either 2021 or 2022.
- PennDOT has historically classified Good Interstate IRI as ≤100, and Poor Interstate IRI as >150; for NHS Non-Interstate, Good is ≤120 and Poor is >170. This practice is maintained in the IRI data presented herein, but differs from the MAP-21 definitions defined in the table on the reverse of this page.

**2022 Out-Of-Cycle (OOC) Assessment by Business Plan Network (Based on PennDOT Segment Miles)**

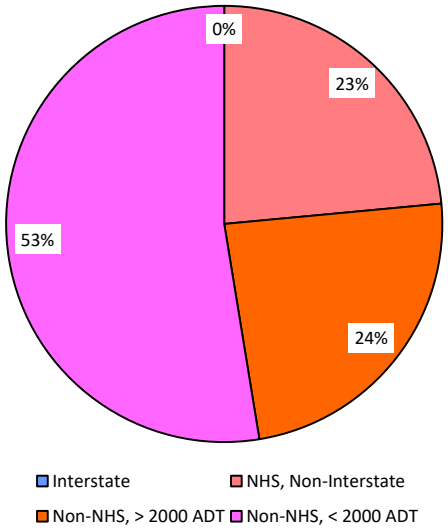
| Business Plan Network | High Level Bituminous | | Low Level Bituminous | | | | Concrete | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Seg-Mi | OOC Mi[1] | Seg-Mi | OOC Mi[2] | OOC Mi[3] | Total | Seg-Mi | OOC Mi[4] | OOC Mi[5] | Total |
| Interstate | - | - | - | - | - | - | - | - | - | - |
| NHS, Non-Interstate | 171.19 | 102.95 | 0.00 | 0.00 | 0.00 | 0.00 | 19.26 | 17.30 | 4.27 | 21.57 |
| Non-NHS, ≥ 2000 ADT | 109.67 | 76.68 | 66.43 | 33.21 | 8.42 | 41.63 | 2.41 | 1.93 | 1.42 | 3.34 |
| Non-NHS, < 2000 ADT | 33.50 | 20.39 | 350.83 | 55.78 | 63.29 | 119.07 | 0.56 | 0.29 | 0.36 | 0.64 |
| Total - Roadway | 314.37 | 200.02 | 417.26 | 88.99 | 71.71 | 160.70 | 22.23 | 19.51 | 6.04 | 25.56 |

- Out-Of-Cycle Categories:
  - 1 - High Level Bituminous Pavement with Age > 12 Years or > 17 Years with Interim Surface Seal
  - 2 - Low Level Bituminous Surface with Age > 7 Years
  - 3 - Low Level Bituminous Pavement with Age > 20 Years or no Structural Layers
  - 4 - Concrete Pavements with Age > 30 Years
  - 5 - Concrete Pavements with Age > 20 Years and No Concrete Pavement Restoration (CPR)
- Total Low Level OOC represents the miles that are OOC for either Category 2 or 3. Segments that are OOC for both categories are not double counted. Total Concrete OOC represents the miles that are OOC for either Category 4 or 5. Segments that are OOC for both categories are not double counted.

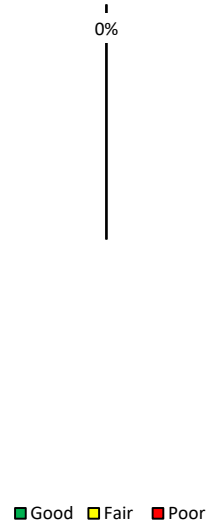
- The IRI miles and Total PennDOT miles include bridge lengths.
  The Total PA miles, used for MAP-21, do not include bridge lengths.
  The Treatment Network miles do not include bridge lengths.

`

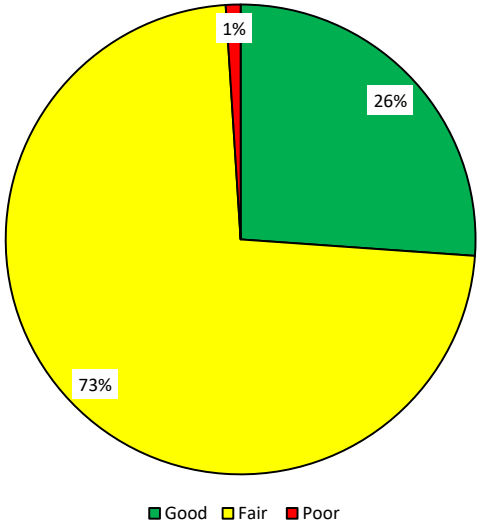
**Percent Total PennDOT Segment Miles by Business Plan Network**




**MAP-21 Interstate Performance All PA Miles**



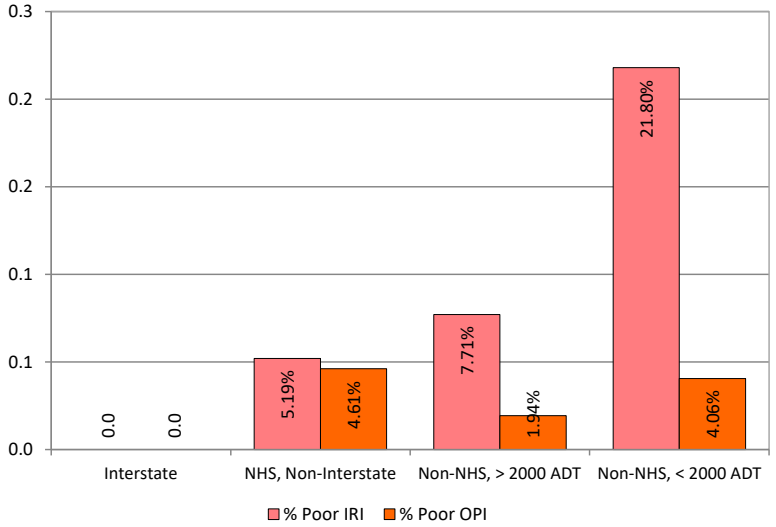

**MAP-21 NHS Non-Interstate Performance All PA Miles**



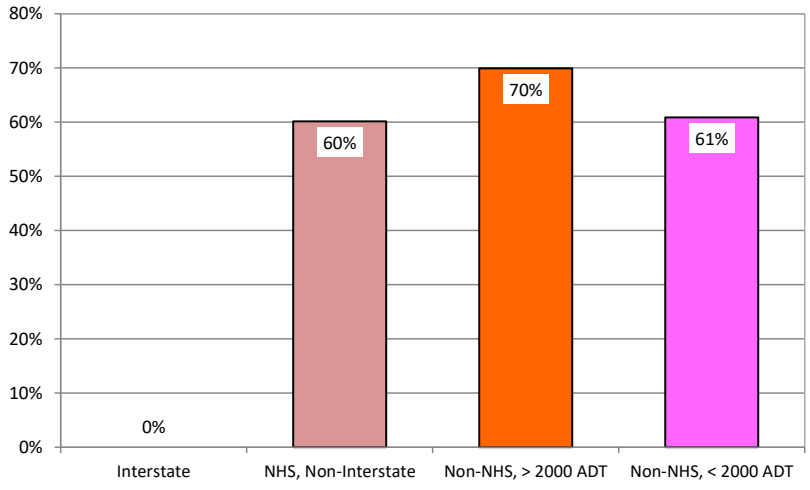

**MAP-21 Pavement Conditions and Thresholds**

| Rating | Good | Fair | Poor |
|---|---|---|---|
| IRI (inches/mile) | <95 | 95–170 | >170 |
| Cracking Percentage | <5 | CRCP: 5–10<br>Jointed: 5–15<br>Asphalt: 5–20 | CRCP: >10<br>Jointed: >15<br>Asphalt: >20 |
| Rutting (inches) | <0.20 | 0.20–0.40 | >0.40 |
| Faulting (inches) | <0.10 | 0.10–0.15 | >0.15 |

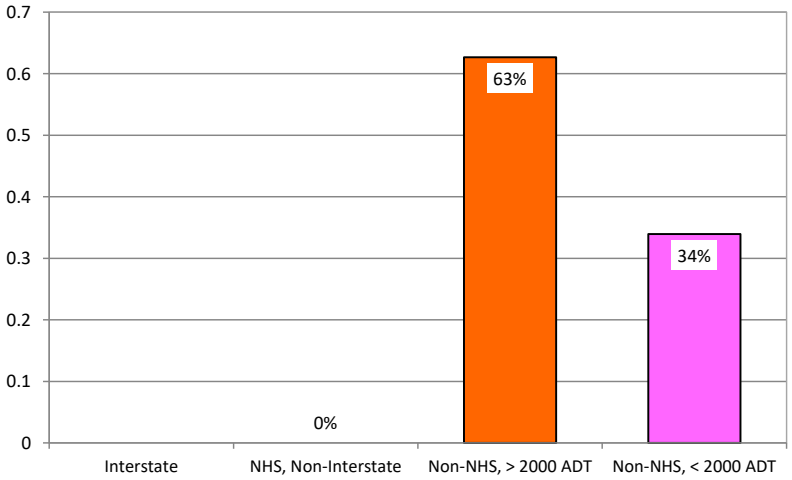
**Percent of Poor IRI and Poor OPI by Business Plan Network**



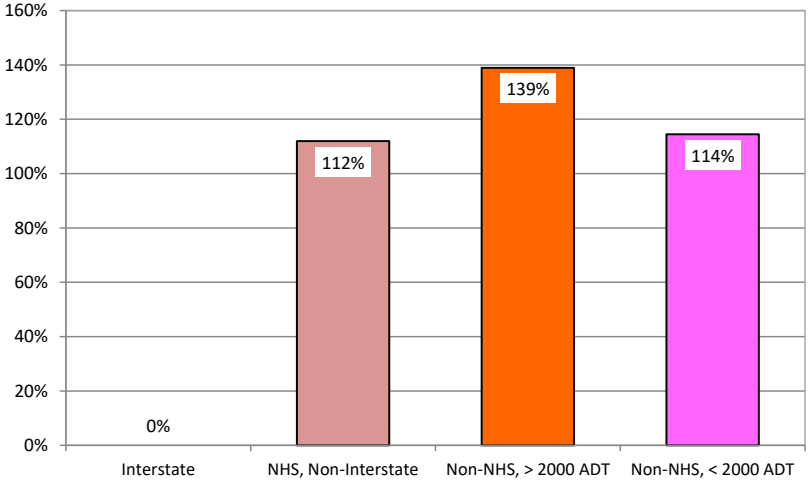

**Percent of High Level Bituminous Miles Out-Of-Cycle by Business Plan Network**




**Percent of Low Level Bituminous Miles Out-Of-Cycle by Business Plan Network**




**Percent of Concrete Miles Out-Of-Cycle by Business Plan Network**




2018-MPO/RPO, 6/16/2023

## End of Calendar Year 2022 Performance Measures Annual Report -- Bridges

**Johnstown**

**MAP-21 Bridge Performance (Based on all NHS Bridge Owners Greater than or Equal to 20' in Length)**

| MAP-21 Bridge Performance Measure | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Good | | | | Fair | | | | Poor | | | |
| | Count | Count % | Deck Area (Msf) | Deck Area % | Count | Count % | Deck Area (Msf) | Deck Area % | Count | Count % | Deck Area (Msf) | Deck Area % |
| Interstate (Including Ramps) | 0 | 0.00% | 0.000 | 0.00% | 0 | 0.00% | 0.000 | 0.00% | 0 | 0.00% | 0.000 | 0.00% |
| NHS, Non-Interstate | 21 | 34.43% | 0.157 | 20.84% | 39 | 63.93% | 0.571 | 75.63% | 1 | 1.64% | 0.027 | 3.53% |
| Total NHS | 21 | 34.43% | 0.157 | 20.84% | 39 | 63.93% | 0.571 | 75.63% | 1 | 1.64% | 0.027 | 3.53% |

| | Map-21 Goal | End of Year 2022 Value | 2021 Target | 2023 Target | 2025 Target |
|---|---|---|---|---|---|
| Total NHS Deck Area Poor % | 10.00% | 3.53% | 4.25% | 5.00% | 5.00% |

| | Count | Deck Area (Msf) |
|---|---|---|
| Interstate (Including Ramps) | 0 | 0.000 |
| NHS, Non-Interstate | 61 | 0.756 |
| Total NHS | 61 | 0.756 |

- MAP-21 bridge data is assessed and analyzed by National Bridge Inventory Standards (Bridges 20' and greater), which differs from PennDOT's 8' and greater reporting.
- MAP-21 performance measures apply to all Interstate and NHS Non-Interstate bridges in PA, regardless of ownership. Therefore, PA Turnpike and local-owned bridges are included in totals.

- MAP-21 bridge performance measures required for FHWA reporting include good, fair, or poor condition scores for each bridge.
  End of Calendar Year 2022 Status of Bridges in Region (Based on 8' and greater)
  fair if the minimum condition rating is 6 or 5, and poor if the minimum condition rating is 4 or less.
- FHWA requires that no more than 10 percent of a state's total NHS Bridge Deck Area be in poor condition. Additionally, state DOTs are required to establish biennial targets for poor deck area.
- FHWA has not established a minimum condition for Interstate only bridges or NHS non-Interstate bridges, but requires the state DOT to establish targets.
- FHWA requires that no more than 5 percent of a state's bridge data be unreported or missing.
- MAP-21 rulemaking requires that states develop and implement a risk-based asset management plan to achieve and sustain a state of good repair over the life cycle of the asset to improve or preserve the condition of the NHS. Asset Management encompasses two related means of doing so: making infrastructure last as long as reasonably possible through keeping up on preservation activities to minimize costlier major repairs, and utilizing a structure for its entire service life. These practices allow the department to operate to lowest life cycle cost (LLCC) on the network level.

· MAP-21 performance measures are not to explicitly drive planning and programming, but rather be an indication of performance achieved by states operating at the LLCC.

| Business Plan Network | Total Bridge Count | Total Deck Area (Msf) | Aver. Bridge DA (sf) | Closed Bridges | Posted Bridges | Poor Count | % Poor by Count | Poor-Deck Area (Msf) | % Poor by Deck Area | Non-Poor Bridges with a "5" Condition Rating |
|---|---|---|---|---|---|---|---|---|---|---|
| State ≥8'; Interstate/Ramps | 0 | 0.0000 | 0 | 0 | 0 | 0 | 0.00% | 0.0000 | 0.00% | 0 |
| State ≥8'; NHS (non-Interstate) | 93 | 0.7742 | 8,324 | 0 | 0 | 2 | 2.15% | 0.0272 | 3.51% | 16 |
| State ≥8'; non-NHS > 2000 ADT | 84 | 0.3192 | 3,800 | 0 | 0 | 4 | 4.76% | 0.0417 | 13.06% | 10 |
| State ≥8'; non-NHS < 2000 ADT | 156 | 0.3131 | 2,007 | 0 | 3 | 5 | 3.21% | 0.0064 | 2.04% | 30 |
| **Total - State Bridges (≥8')** | **333** | **1.4065** | **4,224** | **0** | **3** | **11** | **3.30%** | **0.0753** | **5.35%** | **56** |
| Local≥20' | 87 | 0.1847 | 2,123 | 1 | 9 | 15 | 17.24% | 0.0174 | 9.43% | 31 |

**Reducing Rate of Deterioration through Investment (Non-Replacement) (Based on 8' and greater)**

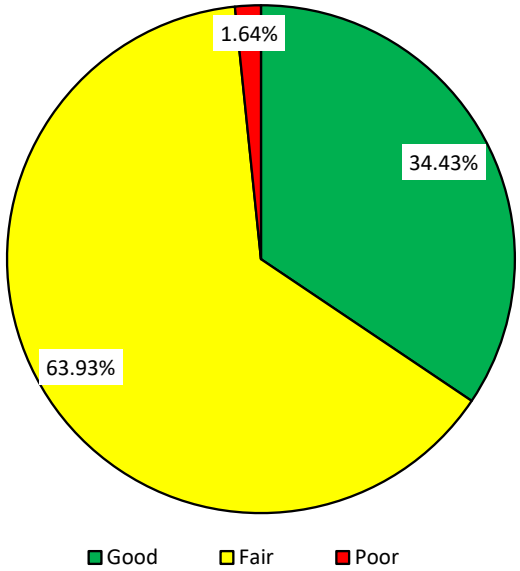
| Business Plan Network | Annual New Poor Count (Poor "on") | Annual New Poor Count (Poor "off") | Annual New Poor DA (Poor "on") | Annual New Poor DA (Poor "off") | Preservation (million$) | Preservation (#bridges) |
|---|---|---|---|---|---|---|
| State ≥8'; Interstate/Ramps | 0 | 0 | 0.00% | 0.00% | $0.00 | 0 |
| State ≥8'; NHS (non-Interstate) | 0 | 0 | 0.00% | 0.00% | $0.00 | 0 |
| State ≥8'; non-NHS > 2000 ADT | 2 | 0 | 0.16% | 0.00% | $1.35 | 3 |
| State ≥8'; non-NHS < 2000 ADT | 1 | 0 | 0.16% | 0.00% | $6.06 | 4 |
| **Total - State Bridges (≥8')** | **3** | **0** | **0.07%** | **0.00%** | **$7.41** | **7** |
| Local≥20' | 0 | 2 | 0.00% | 2.56% | $0.00 | 0 |

**2022 Performance Measures Annual Report -- Bridges**

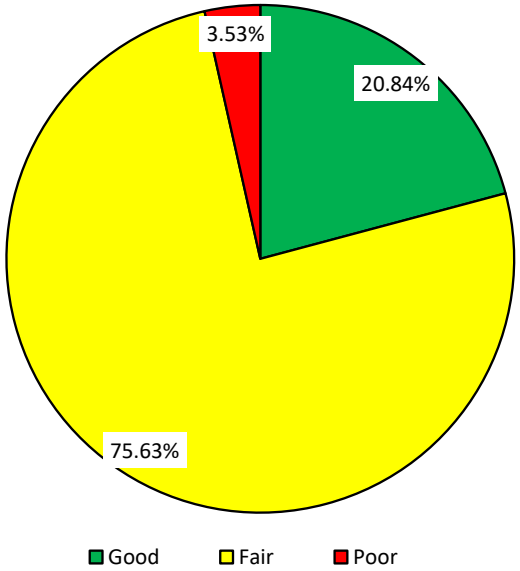
**Johnstown**

## MAP-21 Bridge Performance (Based on all NHS Bridge Owners Greater than or Equal to 20' in Length)

### By Count



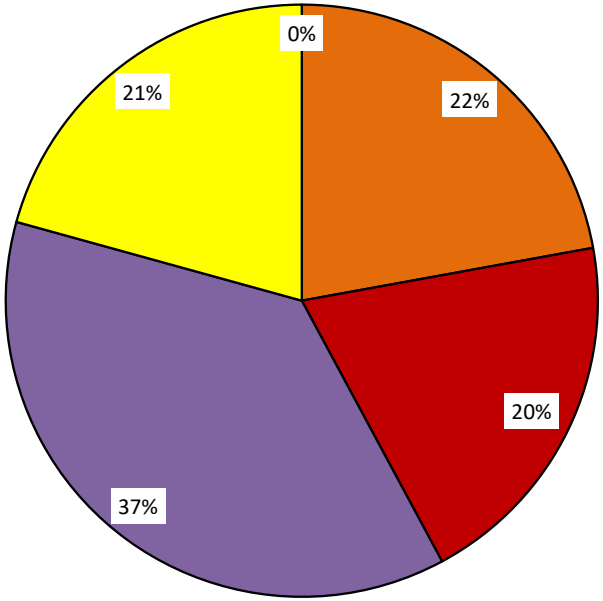

### By Deck Area



## End of Calendar Year 2022 Status of Bridges in Region (Based on 8' and greater)

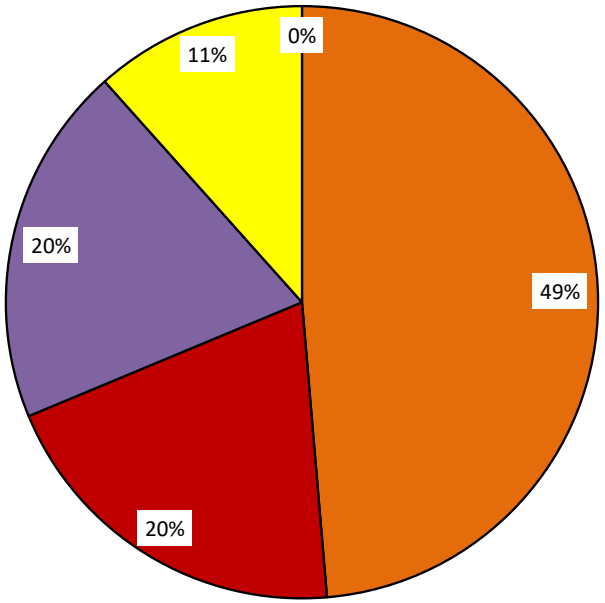
PennDOT Data 8' and Greater By Business Plan Network

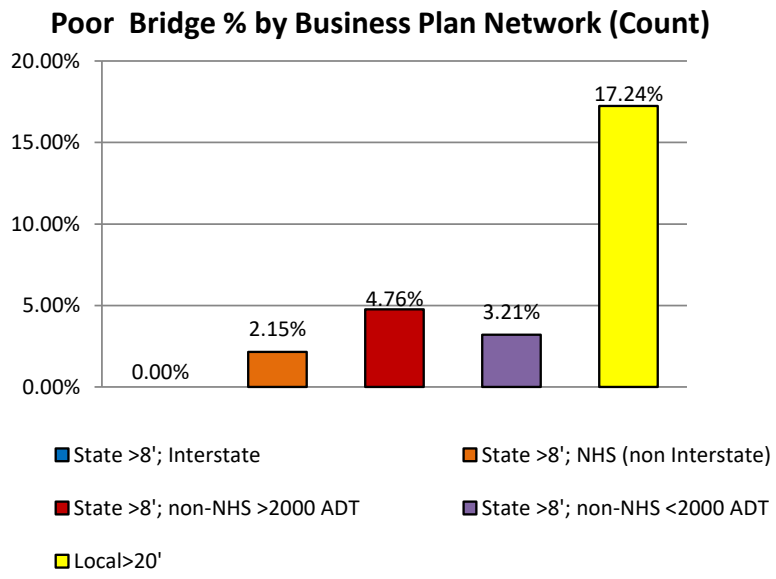
### % Bridges by BPN (Count)

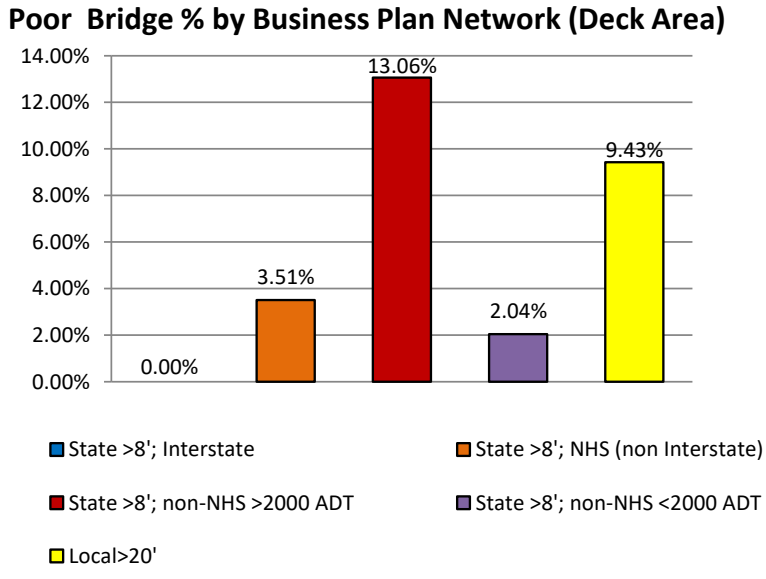



PennDOT Data 8' and Greater By Business Plan Network

### % Bridges by BPN (Deck Area)




Poor Bridge % by Business Plan Network (Count)
20.00%
15.00%
10.00%
5.00%
0.00%
0.00%
2.15%
4.76%
3.21%
17.24%
State >8'; Interstate
State >8'; NHS (non Interstate)
State >8'; non-NHS >2000 ADT
State >8'; non-NHS <2000 ADT
Local>20'


Poor Bridge % by Business Plan Network (Deck Area)
14.00%
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%
0.00%
3.51%
13.06%
2.04%
9.43%
State >8'; Interstate
State >8'; NHS (non Interstate)
State >8'; non-NHS >2000 ADT
State >8'; non-NHS <2000 ADT
Local>20'

# Appendix F: Air Quality Conformity Analyses and Adopting Resolution

# Air Quality Conformity Analysis Report

## Johnstown Area Transportation Study (JATS) 2025-2028 Transportation Improvement Program (TIP) and 2050 Long Range Transportation Plan (LRTP)

**National Ambient Air Quality Standards (NAAQS) Addressed:**

- **1997 8-Hour Ozone Maintenance Area**
- **2006 24-Hour $PM_{2.5}$ Maintenance Area**

**Prepared by:**

**Johnstown Area Transportation Study**
**and Pennsylvania Department of Transportation**

**April 2024**

## Table of Contents



## Table of Exhibits



## Summary of Attachments

**Attachment A**: Project List
**Attachment B**: Detailed Emission Results
**Attachment C**: Sample MOVES Input Files

# Overview

This report provides an analysis of the air quality implications of the current Johnstown Area Transportation Study (JATS) Metropolitan Planning Organization (MPO) 2025-2028 Transportation Improvement Program (TIP) and 2050 Long Range Transportation Plan (LRTP). The analysis demonstrates transportation conformity under the 1997 8-hour ozone National Ambient Air Quality Standard (NAAQS) and the 2006 24-hour fine particulate ($PM_{2.5}$) NAAQS. The air quality conformity determination reflects an assessment of the regionally significant, non-exempt transportation projects included in both the current TIP and recently updated LRTP.

This document replaces the previously approved conformity demonstration of the TIP and LRTP, and ensures that the findings meet all current criteria established by the U.S. Environmental Protection Agency (EPA) for the applicable NAAQS.

## Background on Transportation Conformity

Transportation conformity is a way to ensure that federal funding and approval are awarded to transportation activities that are consistent with air quality goals. Under the Clean Air Act (CAA), transportation and air quality modeling procedures must be coordinated to ensure that the TIP and the LRTP are consistent with the area's applicable State Implementation Plan (SIP). The SIP is a federally approved and enforceable plan by which each area identifies how it will attain and/or maintain the health-related primary and welfare-related secondary NAAQS.

In order to receive transportation funding and approvals from the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA), state and local transportation agencies must demonstrate that the plans, programs, or projects meet the transportation conformity requirements of the CAA as set forth in the transportation conformity rule. Under the transportation conformity rule, transportation plans are expected to conform to the applicable SIP in nonattainment or maintenance areas. The integration of transportation and air quality planning is intended to ensure that transportation plans, programs, and projects will not:

- Cause or contribute to any new violation of any applicable NAAQS.
- Increase the frequency or severity of any existing violation of any applicable NAAQS.
- Delay timely attainment of any applicable NAAQS, any required interim emissions reductions, or other NAAQS milestones.

The transportation conformity determination includes an assessment of future highway emissions for defined analysis years, including the end year of the LRTP. Emissions are estimated using the latest available planning assumptions and available analytical tools, including EPA's latest approved on-highway mobile sources emissions model, the Motor Vehicle Emission Simulator (MOVES). The conformity determination provides a tabulation of the analysis results for applicable precursor pollutants, showing that the required conformity test was met for each analysis year.

### Report Contents

This document includes a summary of the methodology and data assumptions used for the conformity analysis. As shown in **Exhibit 1**, attachments containing additional detail have been provided with the document. In addition, modeling input and output files have been reviewed by the Environmental Protection Agency (EPA) Region III and the Pennsylvania Department of Environmental Protection (DEP).

**EXHIBIT 1: SUMMARY OF ATTACHMENTS**

| Attachment | Title | Description |
|---|---|---|
| **A** | Project List | Provides a list of regionally significant highway projects that have been updated or added to the TIP and LRTP. |
| **B** | Detailed Emission Results | Provides a detailed summary of emissions by roadway type. |
| **C** | MOVES Sample Run Specification | Provides example MOVES data importer (XML) and run specification (MRS) files. |

## National Ambient Air Quality Standard Designations

The CAA requires the EPA to set NAAQS for pollutants considered harmful to public health and the environment. A nonattainment area is any area that does not meet the primary or secondary NAAQS. Once a nonattainment area meets the standards and additional redesignation requirements in the CAA [Section 107(d)(3)(E)], EPA will designate the area as a maintenance area.

Cambria County is currently included in the *Johnstown, PA* maintenance area under both the 1997 8-hour ozone NAAQS and the 2006 24-hour $PM_{2.5}$ NAAQS. Cambria County is in attainment for all other current NAAQS. Transportation conformity requires nonattainment and maintenance areas to demonstrate that all future transportation projects will not prevent an area from reaching its air quality attainment goals.

### Final Particulate Matter

Fine particulate matter ($PM_{2.5}$) can be emitted directly into the atmosphere (sources include exhaust and dust from brake and tire wear) or formed in the atmosphere by combinations of precursor pollutants (secondary formation). Sulfates and nitrates are two types of pollutants that contribute to secondary formation. Sulfate emissions are a result of power plant and industry emissions, while nitrate emissions result from automobiles, power plants, and other combustion sources. Scientific studies have shown a significant correlation between exposure to fine particulates and severe health issues such as heart disease, lung disease, and premature death.

The pollutants that could be analyzed in the conformity analysis are: [1] direct $PM_{2.5}$ emissions (tail pipe emissions, brake and tire wear), [2] re-entrained road dust, and [3] precursors nitrogen oxides ($NO_X$), volatile organic compounds (VOC), sulfur oxides ($SO_X$) and ammonia ($NH_3$). The EPA has ruled that until the EPA or DEP find that other precursor pollutants are significant contributors, and a SIP revision is

approved stating such findings, direct $PM_{2.5}$ emissions and NOx are the only pollutants that must be analyzed for transportation conformity (40 CFR 93.119(f)(8)–(10)).

***1997 Annual $PM_{2.5}$ and 2006 24-hour $PM_{2.5}$ Standards***

The EPA published the 1997 annual $PM_{2.5}$ NAAQS on July 18, 1997, (62 FR 38652), with an effective date of September 16, 1997. An area is in nonattainment of this standard if the 3-year average of the annual mean $PM_{2.5}$ concentrations (for designated monitoring sites within an area) exceed 15.0 micrograms per cubic meter ($\mu g/m^3$). Cambria County was designated as part of the Johnstown nonattainment area under the 1997 annual $PM_{2.5}$ NAAQS, effective April 5, 2005 (70 FR 944).

The EPA published the 2006 24-hour $PM_{2.5}$ NAAQS on October 17, 2006, (71 FR 61144), with an effective date of December 18, 2006. The rulemaking strengthened the 1997 24-hour standard of 65 $\mu g/m^3$ (62 FR 38652) to 35 $\mu g/m^3$ and retained the 1997 annual $PM_{2.5}$ NAAQS of 15 $\mu g/m^3$. An area is in nonattainment of the 2006 24-hour $PM_{2.5}$ NAAQS if the $98^{th}$ percentile of the annual 24-hour concentrations, averaged over three years, is greater than 35 $\mu g/m^3$. Cambria County was designated as a nonattainment area as part of the Johnstown nonattainment area under the 2006 24-hour $PM_{2.5}$ NAAQS, effective December 14, 2009 (74 FR 58688).

A redesignation request and maintenance plan applicable to both the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS was approved by EPA and effective July 16, 2015 (80 FR 42046). The maintenance plan includes 2017 and 2025 $PM_{2.5}$ and NOx mobile vehicle emission budgets (MVEBs) for transportation conformity purposes.

EPA took final action on the "*Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements*" rule on August 24, 2016 (81 FR 58010 effective on October 24, 2016). In that rulemaking, EPA finalized the option that revokes the 1997 primary annual $PM_{2.5}$ NAAQS in areas that are designated as attainment or maintenance of that NAAQS. After revocation, areas no longer have to expend resources on CAA air quality planning and conformity determination requirements associated with the 1997 annual $PM_{2.5}$ NAAQS.

***2012 Annual $PM_{2.5}$ Standard***

The EPA published the 2012 annual $PM_{2.5}$ NAAQS on January 15, 2013, (78 FR 3086), with an effective date of March 18, 2013. The EPA revised the annual $PM_{2.5}$ NAAQS by strengthening the standard from 15 $\mu g/m^3$ to 12 $\mu g/m^3$. An area is in nonattainment of this standard if the 3-year average of the annual mean $PM_{2.5}$ concentrations for designated monitoring sites in an area is greater than 12.0 $\mu g/m^3$. On December 18, 2014, EPA issued final designations for the standard that were revised on April 7, 2015 (80 FR 18535). Cambria County was designated in attainment of this standard.

***2024 Annual $PM_{2.5}$ Standard***

On February 7, 2024, EPA strengthened the annual PM2.5 standard at 9.0 µg/$m^3$ to provide increased public health protection, consistent with the available health science. The nonattainment areas have not been designated yet for this new standard.

## Ozone

Ozone is formed by chemical reactions occurring under specific atmospheric conditions. Precursor pollutants that contribute to the formation of ozone include VOC and $NO_X$, both of which are components of vehicle exhaust. VOCs may also be produced through the evaporation of vehicle fuel, as well as by displacement of vapors in the gas tank during refueling. By controlling VOC and $NO_X$ emissions, ozone formation can be mitigated.

***1997 and 2008 8-hour Ozone NAAQS***

The EPA published the 1997 8-hour ozone NAAQS on July 18, 1997, (62 FR 38856), with an effective date of September 16, 1997. An area was in nonattainment of the 1997 8-hour ozone NAAQS if the 3-year average of the individual fourth highest air quality monitor readings, averaged over 8 hours throughout the day, exceeded the NAAQS of 0.08 parts per million (ppm). On May 21, 2013, the EPA published a rule revoking the 1997 8-hour ozone NAAQS, for the purposes of transportation conformity, effective one year after the effective date of the 2008 8-hour ozone NAAQS area designations (77 FR 30160).

The EPA published the 2008 8-hour Ozone NAAQS on March 27, 2008, (73 FR 16436), with an effective date of May 27, 2008. EPA revised the ozone NAAQS by strengthening the standard to 0.075 ppm. Thus, an area is in nonattainment of the 2008 8-hour ozone NAAQS if the 3-year average of the individual fourth highest air quality monitor readings, averaged over 8 hours throughout the day, exceeds the NAAQS of 0.075 ppm. Cambria County was designated as an attainment area under the 2008 8-hour ozone NAAQS, effective July 20, 2012 (77 FR 30088). As a result, transportation conformity is not required for the standard.

On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA* ("*South Coast II*," 882 F.3d 1138) held that transportation conformity determinations must be made in areas that were either nonattainment or maintenance for the 1997 ozone national ambient air quality standard (NAAQS) and attainment for the 2008 ozone NAAQS when the 1997 ozone NAAQS was revoked. These conformity determinations are required in these areas after February 16, 2019. Cambria County was maintenance at the time of the 1997 ozone NAAQS revocation on April 6, 2015 and was also designated attainment for the 2008 ozone NAAQS on May 21, 2012. Therefore, per the *South Coast II* decision, this conformity determination is also being made for the 1997 ozone NAAQS.

***2015 8-hour Ozone NAAQS***

In October 2015, based on its review of the air quality criteria for ozone and related photochemical oxidants, the EPA revised the primary and secondary NAAQS for ozone to provide requisite protection of public health and welfare, respectively (80 FR 65292). The EPA revised the levels of both standards to 0.070 ppm, and retained their indicators, forms (fourth-highest daily maximum, averaged across three consecutive years) and averaging times (eight hours). On April 30, 2018, EPA completed area designations, and Cambria County was designated as an attainment area for the standard.

## Interagency Consultation

As required by the federal transportation conformity rule, the conformity process includes a significant level of cooperative interaction among federal, state, and local agencies. For this air quality conformity analysis, interagency consultation was conducted as required by the Pennsylvania Conformity SIP. This included conference call(s) or meeting(s) of the Pennsylvania Transportation-Air Quality Work Group (including the Pennsylvania Department of Transportation (PennDOT), DEP, EPA, FHWA, FTA and representatives from larger MPOs within the state). Meetings and conference calls are conducted quarterly. The meeting on February 7, 2024 included the review all planning assumptions, methodologies and analysis years for the conformity determination.

## Analysis Methodology and Data

This transportation conformity analysis was conducted using EPA's MOVES model, which is the official model for estimating emissions from highway vehicles for SIP emission inventories and transportation conformity (75 FR 9411. MOVES3 has been used for this conformity determination and is (in addition to MOVES4) currently considered one of the latest approved model versions for SIP and transportation conformity purposes (88 FR 32167). After September 12, 2025, MOVES4 must be used for conformity determinations.

Planning assumptions are updated following EPA and FHWA joint guidance (EPA420-B-08-901) that clarifies the implementation of the latest planning assumption requirements in 40 CFR 93.110. This analysis utilizes the latest available traffic, vehicle fleet and environmental data to estimate regional highway emissions.

PennDOT updates many of the key planning assumptions on a triennial basis to support EPA's National Emissions Inventory (NEI) and FHWA's latest planning assumption requirements for transportation conformity. The PennDOT triennial data update is typically used to inform the planning assumptions for the future analysis years used for transportation conformity.

Due to the impacts that COVID has had on the vehicle fleet turnover, PennDOT, in coordination with the Pennsylvania Air Quality Workgroup, has determined that the estimates of the vehicle fleet age for the most recent available data (2020-2022) may not be reflective of future conditions or longer term trends.

Thus, the vehicle age assumption relied on previous planning assumptions used for past conformity analyses.

All other data assumptions for the conformity analysis relied on the latest available planning assumptions or national/local defaults consistent with methods used for past conformity analyses and EPA's technical guidance. This includes information and characteristics related to fuels, inspection maintenance (I/M) program parameters, heavy-truck long duration idling, and environmental data (e.g. temperatures and humidity).

The analysis methodology and data inputs for this analysis were developed through interagency consultation and used available EPA guidance documents that included:

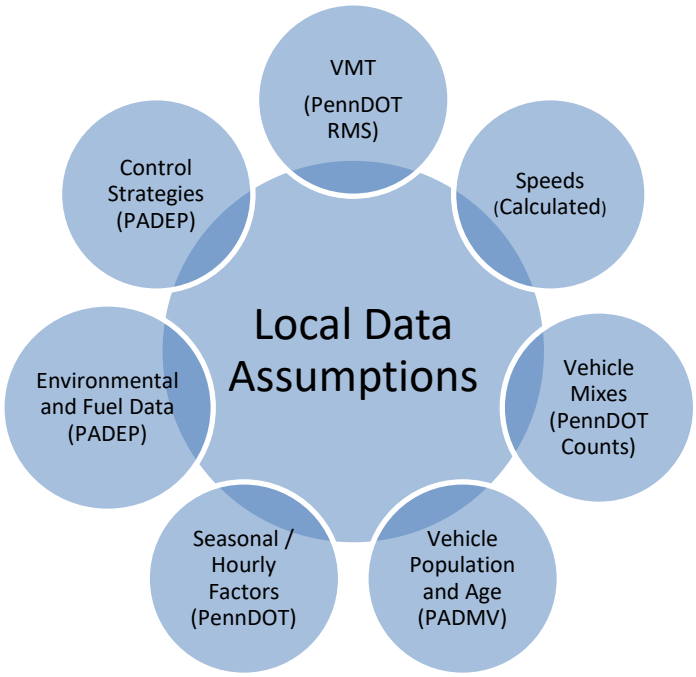
- *Policy Guidance on the Use of MOVES3 for State Implementation Plan Development, Transportation Conformity, General Conformity, and Other Purposes,* US EPA Office of Transportation and Air Quality, EPA-420-B-20-044, November 2020.
- *MOVES3 Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity,* US EPA Office of Transportation and Air Quality, EPA-420-B-20-052, November 2020.

A mix of local and national default (internal to MOVES) data are used in the analysis. As illustrated in **Exhibit 2**, local data has been used for data items that have a significant impact on emissions, including: vehicle miles of travel (VMT), vehicle population, congested speeds, and vehicle type mix, as well as environmental and fuel assumptions. Local data inputs to the analysis process reflect the latest available planning assumptions using information obtained from PennDOT, DEP and other local/national sources.

The methodology used for this analysis is consistent with the methodology used to develop SIP inventories. This includes the use of custom post-processing software (PPSUITE) to calculate hourly speeds and prepare key traffic input files to the MOVES emission model. PPSUITE consists of a set of programs that perform the following functions:

- Analyzes highway operating conditions.
- Calculates highway speeds.
- Compiles VMT and vehicle type mix data.
- Prepares MOVES runs and processes MOVES outputs.

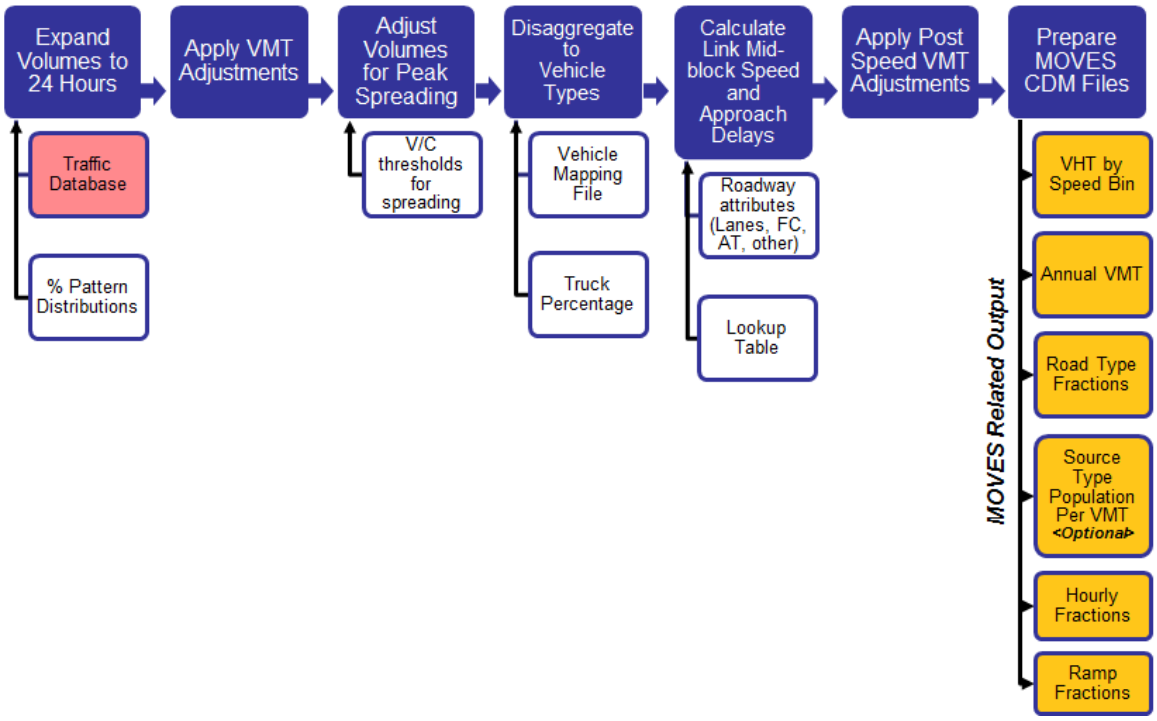
**EXHIBIT 2: LOCAL DATA INPUTS USED FOR CONFORMITY RUNS**




PPSUITE is a widely used and accepted tool for estimating speeds and processing emissions rates. The PPSUITE tool has been used for developing on-highway mobile source inventories in SIP revisions, control strategy analyses, and conformity analyses in other states. The software was developed to utilize accepted transportation engineering methodologies. The PPSUITE process is integral to producing traffic-related input files to the MOVES emission model. **Exhibit 3** summarizes the key functions of PPSUITE within the emission calculation process. Other MOVES input files are prepared externally to the PPSUITE software, including vehicle population, vehicle age, environmental and fuel input files.

The CENTRAL software is also used in this analysis. CENTRAL is a menu-driven software platform that executes the PPSUITE and MOVES processes in batch mode. The CENTRAL software allows users to execute runs for a variety of input options and integrates custom MySQL steps into the process. CENTRAL provides important quality control and assurance steps, including file naming and storage automation.

**EXHIBIT 3: EMISSION CALCULATION PROCESS**




## Key MOVES Input Data

A large number of inputs to MOVES are needed to fully account for the numerous vehicle and environmental parameters that affect emissions. These inputs include traffic flow characteristics, vehicle descriptions, fuel parameters, I/M program parameters and environmental variables. MOVES includes a default national database of meteorology, vehicle fleet, vehicle activity, fuel and emission control program data for every county; EPA, however, cannot certify that the default data is the most current or best available information for any specific area. As a result, local data, where available, is recommended for use when conducting a regional conformity analysis. A mix of local and default data is used for this analysis. These data items are discussed in the following sections.

**Roadway Data**

The roadway data inputs to emissions calculations for this conformity analysis are based on information from the RMS database maintained by PennDOT's Bureau of Planning and Research (BPR). PennDOT obtains this information from periodic visual and electronic traffic counts. RMS data is dynamic, since it is continually reviewed and updated from new traffic counts and field visits conducted by PennDOT. Information on roadways included in the USDOT National Highway System is reviewed, at minimum, on an annual basis, while information on other roadways is reviewed at least biennially. On a triennial basis, a current "snapshot" of the RMS database is taken and downloaded to provide an updated record of the Commonwealth's highway system for estimating emissions. The RMS database contains all state highways, including the Pennsylvania Turnpike, divided into segments approximately 0.5 miles in length.

These segments are usually divided at important intersections or locations where there is a change in the physical characteristics of the roadway (e.g. the number of lanes changes). There are approximately 82,000 state highway segments across all 67 Pennsylvania counties. The following information is extracted from RMS for emission calculations:

- Lanes.
- Distances.
- Volumes representing Average Annual Daily Traffic (AADT).
- Truck percentages.
- PennDOT urban/rural classifications.
- PennDOT functional class codes.
- Number of signals (based on linkage to PennDOT's Geographic Information System (GIS) signal location data).

RMS volumes and distances are used in calculating highway VMT totals for each county. As discussed in the next section, adjustments are needed to convert the volumes to an average summer weekday, winter weekday, and monthly day (including weekends and weekdays), as applicable to the pollutant/precursor being analyzed. In addition, the traffic volumes must be forecast to support future years. Lane values and traffic signals are important inputs for determining the congestion and speeds for individual highway segments. Truck percentages are used in the speed determination process in order to split volumes to individual vehicle types used by MOVES software. Road segments are classified not only by function, but also by whether it is located in an urban, small urban or rural area. The PennDOT urban/rural (UR) and functional classes (FC) designations are important indicators of the type and function of each roadway segment. These variables provide valuable insights into other characteristics not contained in the RMS data, which are used for speed and emission calculations.

VMT forecast growth rates are based on PennDOT's VMT forecasting system, as documented in the report "*Statistical Evaluation of Projected Traffic Growth, Traffic Growth Forecasting System: Final Report, March 14, 2005*". The PennDOT forecasting system includes the development of VMT forecasts and growth rates for four functional classifications in each Pennsylvania county: urban interstate, urban non-interstate, rural interstate, and rural non-interstate. The forecasts use statistical relationships based on historic HPMS VMT trends and future county socioeconomic projections based on the Woods and Poole Economics, Inc. State Profile (http://www.woodsandpoole.com/). The statistical models incorporate historical VMT trends, socioeconomic data (households, mean household income), and a relative measure of transportation capacity (lane miles per capita). PennDOT's BPR maintains and updates these growth rates on a periodic basis based on new demographic projections and updated information on HPMS VMT. The results of the updated VMT forecasts have been shared with the participants in the Pennsylvania Air Quality Working Group.

**Other Supporting Traffic Data**

Other traffic data is used to adjust and disaggregate traffic volumes. Key sources used in these processes include the following:

- *Highway Performance Monitoring System (HPMS VMT)*: According to EPA guidance, baseline inventory VMT computed from the RMS highway segment volumes must be adjusted to be consistent with HPMS VMT totals. The VMT contained in the HPMS reports are considered to represent average annual daily traffic (AADT), an average of all days in the year, including weekends and holidays. Adjustment factors are calculated for the 2022 analysis year. These factors are used to adjust locally modeled roadway data VMT to be consistent with the reported HPMS totals and are applied to all county and facility group combinations within the region. These adjustments are important to account for local roadway VMT not represented within the regional travel demand model.
- *Seasonal Factors*: The traffic volumes estimated from the RMS are adjusted to summer or average monthly conditions (as needed for annual processing), using seasonal adjustment factors prepared by PennDOT's BPR in their annual traffic data report published on the BPR website (http://www.dot.state.pa.us/ Search: Research and Planning). The seasonal factors are also used to develop MOVES daily and monthly VMT fraction files, allowing MOVES to determine the portion of annual VMT that occurs in each month of the year.
- *Hourly Patterns*: Speeds and emissions vary considerably depending on the time of day. In order to produce accurate emission estimates, it is important to estimate the pattern by which roadway volume varies by breaking the data down into hourly increments. Pattern data is in the form of a percentage of the daily volumes for each hour. Distributions are provided for all the counties within the region and by each facility type grouping. The hourly pattern data has been developed from 24-hour vehicle count data compiled by PennDOT's BPR, using the process identified in PennDOT's annual traffic data report. The same factors are also used to develop the MOVES hourly fraction file.

**Vehicle Class**

Emission rates within MOVES also vary significantly by vehicle type. MOVES produces emission rates for thirteen MOVES vehicle source input types. VMT, however, is input to MOVES by six HPMS vehicle groups (note that passenger cars and light trucks are grouped for input to MOVES3). **Exhibit 4** summarizes the distinction between each classification scheme.

**EXHIBIT 4: MOVES SOURCE TYPES AND HPMS VEHICLE GROUPS**

| SOURCE TYPES | | HPMS Class Groups | |
|---|---|---|---|
| 11 | Motorcycle | 10 | Motorcycle |
| 21 | Passenger Car | 25 | Passenger Car |
| 31 | Passenger Truck | 25 | Passenger/Light Truck |
| 32 | Light Commercial Truck | 40 | Buses |
| 41 | Intercity Bus | 50 | Single Unit Trucks |
| 42 | Transit Bus | 60 | Combination Trucks |
| 43 | School bus | | |
| 51 | Refuse Truck | | |
| 52 | Single Unit Short-haul Truck | | |
| 53 | Single Unit Long-haul Truck | | |
| 54 | Motor Home | | |
| 61 | Combination Short-haul Truck | | |
| 62 | Combination Long-haul Truck | | |

The emissions estimation process includes a method to disaggregate the traffic volumes to the thirteen source types and then to recombine the estimates to the six HPMS vehicle classes. Vehicle type pattern data is used by PPSUITE to distribute the hourly roadway segment volumes among the thirteen MOVES source types. Similar to the 24-hour pattern data, this data contains percentage splits to each source type for every hour of the day. The vehicle type pattern data is developed from several sources of information:

- PennDOT truck percentages from the RMS database.
- Hourly distributions for trucks and total traffic compiled by PennDOT's BPR.
- School bus registration data from PennDOT's Bureau of Motor Vehicles Registration Database.

Vehicle type percentages are also input into the capacity analysis section of PPSUITE to adjust the speeds in response to truck volume. Larger trucks take up more roadway space compared to an equal number of cars and light trucks, which is accounted for in the speed estimation process by adjusting capacity using information from the Transportation Research Board's fifth edition of the *Highway Capacity Manual*. (http://hcm.trb.org/).

**Vehicle Ages**

Vehicle age distributions are input to MOVES for each of the thirteen source types. These distributions reflect the percentage of the vehicle fleet falling under each vehicle model year (MY), to a maximum age of 31 years. The vehicle age distributions were prepared from the most recently available registration download from PennDOT's Bureau of Motor Vehicles Registration Database. Due to data limitations, information for light duty vehicles (including source types 11, 21, 31 and 32) was used as local data for MOVES inputs, while heavy-duty vehicles (including source types 41, 42, 43, 51, 52, 53, 54, 61, and 62) used the MOVES3 national default data. The registration data download is based on MOBILE6.2 vehicle

categories. The data was converted to source types using the EPA convertor spreadsheets provided with the MOVES emission model.

**Vehicle Population**

The vehicle population information, including the number and age of vehicles, impacts forecasted start and evaporative emissions within MOVES. Similar to vehicle ages, MOVES requires vehicle populations for each of the thirteen source type categories. County vehicle registration data was used to estimate vehicle population for light-duty vehicles, transit buses, and school buses. Other heavy-duty vehicle population values were based on VMT for each source type using the vehicle mix and pattern data discussed previously. PPSUITE automatically applies MOVES default ratios of VMT and source type population (e.g. the number of miles per vehicle by source type) to the local VMT estimates to produce vehicle population. For the preparation of source type population for other required conformity analysis years, base values were adjusted using forecast population and household data for the area. Growth rates were limited so as to not exceed the VMT growth assumptions.

**Meteorology Data**

Average monthly minimum temperatures, maximum temperatures, and humidity values are consistent with the regional State Implementation Plan (SIP) modeling conducted by DEP. The data was obtained from AccuWeather, Inc. (www.accuweather.com). The 10-year (2010-2020) average minimum and maximum monthly temperature and relative humidity values were obtained for each of the 10 airport locations in Pennsylvania.

**Fuel Parameters**

The MOVES3 default data assumptions have been reviewed and determined adequate to be used as inputs to the MOVES emissions modeling. Key assumptions include:

- 10.0 RVP used for summer months.
- 100% market share of 10% ethanol throughout the year for analysis years 2025, 2035 and 2045 (based on MOVES3 defaults).

**I/M Program Parameters**

The inspection maintenance (I/M) program inputs to the MOVES model are based on current programs within each county (all PA I/M programs are based on county boundaries). All analysis years include Pennsylvania's statewide I/M program. The default I/M program parameters included in MOVES were examined for each county and necessary changes were made to the default parameters to match the 2021 I/M program performance.

In order to assure that emission controls are working properly, vehicle inspection and maintenance (I/M) programs have been adopted in some nonattainment areas. These programs have the added benefit of improving the fuel efficiency of vehicles. The Pennsylvania inspection and maintenance (I/M) program

was upgraded and expanded throughout the state with a phase-in period starting in September 2003 and fully implemented by June 2004.

The I/M program requirements vary by region (five regions) and include on-board diagnostics (OBD) technology that uses the vehicle's computer for model years 1996 and newer to identify potential engine and exhaust system problems that could affect emissions. The program, named PAOBDII, is implemented by region as follows:

- *Philadelphia Region* - Bucks, Chester, Delaware, Montgomery and Philadelphia Counties
  [Includes tailpipe exhaust testing using ASM2015 or equipment for pre-1996 vehicles up to 25 years old]
- *Pittsburgh Region* - Allegheny, Beaver, Washington and Westmoreland Counties.
  [Includes tailpipe exhaust testing using PA 97 equipment for pre-1996 vehicles up to 25 years old]
- *South Central and Lehigh Valley Region* - Berks, Cumberland, Dauphin, Lancaster, Lebanon, Lehigh, Northampton and York Counties.
  [Includes gas cap and visual inspection only for 1975 through 1995 model years]
- *North Region* - Blair, Cambria, Centre, Erie, Lackawanna, Luzerne, Lycoming, and Mercer Counties.
  [Gas cap and visual inspection only – No OBD]
- *Other 42 Counties* – Includes the remaining 42 counties not included above.
  [Visual inspection only – No OBD]

**Other Vehicle Technology and Control Strategy Data**

Federal Programs

Current federal vehicle emissions control and fuel programs are incorporated into the MOVES3 software. The MOVES3 model includes the National Program standards covering light duty vehicles through model year 2026, heavy duty greenhouse gas standards for model year 2014-2018 vehicles, and the Tier 3 vehicle standards. Modifications of default emission rates are required to reflect the early implementation of the National Low Emission Vehicle (NLEV) program in Pennsylvania. To reflect these impacts, EPA has released instructions and input files that can be used to model these impacts. The NLEV input database was created for Pennsylvania per EPA's instructions and was used for this inventory.

MOVES3 also incorporates the following new federal emission standard rules:

- *Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2 (HD GHG2) Rule*: MOVES3 accounts for the HD GHG2 rule published in 2016. The rule set stricter fuel economy standards for HD vehicles which reduce CO2 emissions, but also impact other pollutants through changes in glider sales, hoteling activity, vehicle mass and road load coefficients.
- *Safe Affordable Fuel Efficient (SAFE) Vehicles Rule*: MOVES3 also accounts for the March 2020 SAFE standards for light-duty vehicles. These standards were less stringent than the preceding fuel economy standards, and thus increased fuel consumption and CO2 emissions.

State Programs

The Pennsylvania Clean Vehicles (PCV) Program, adopted in 1998, incorporated the California Low Emission Vehicle Regulations (CA LEV) by reference. The PCV Program allowed automakers to comply with the NLEV program as an alternative to this Pennsylvania program until MY2006. Beginning with MY2008, all "new" passenger cars and light-duty trucks with a gross vehicle weight rating (GVWR) of 8,500 pounds or less sold/leased and titled in Pennsylvania must be certified by the California Air Resources Board (CARB) or be certified for sale in all 50 states. For this program, a "new" vehicle is a qualified vehicle with an odometer reading less than 7,500 miles. DEP and PennDOT both work with the public, including manufacturers, vehicle dealers and consumers, to ensure that vehicles sold and purchased in Pennsylvania or vehicles purchased from other states by Pennsylvania residents comply with the requirements of the PCV Program, in order to be titled in Pennsylvania. Additionally, PennDOT ensures that paperwork for title and registration includes proof of CARB- or 50-state emission certification or that the vehicle owner qualifies for an exemption to the requirements, as listed on PennDOT's MV-9 form and in the PCV Program regulation. When necessary, information from PennDOT's title and registration process may be used to audit vehicle title transactions to determine program compliance.

The impacts of this program are modeled for all analysis years beyond 2008 using the same instructions and tools downloaded for the early NLEV analysis. EPA provided input files to reflect state programs similar to the CAL LEV program. Modifications to those files were made to reflect a 2008 program start date for Pennsylvania.

## Analysis Process Details

The previous sections have summarized the input data used for computing speeds and emission rates for this conformity analysis. This section explains how PPSUITE and MOVES use that input data to produce emission estimates. **Exhibit 5** provides a more detailed overview of the PPSUITE analysis procedure using the available traffic data information described in the previous sections.

### VMT Preparation

Producing an emissions inventory with PPSUITE requires a process of disaggregation and aggregation. Data is available and used on a very detailed scale – individual roadway segments for each of the 24 hours of the day. This data needs to be processed individually to determine the distribution of vehicle hours of travel (VHT) by speed and then aggregated by vehicle class to determine the input VMT to the MOVES emission model. Key steps in the preparation of VMT include:

- *Assemble VMT* - The RMS database contains the roadway segments, distances and travel volumes needed to estimate VMT. PPSUITE processes each segment by simply multiplying the assigned travel volume by the distance to obtain VMT.
- *Apply Seasonal Adjustments* – PPSUITE adjusts the traffic volumes to the appropriate analysis season using an average monthly day to support annual $PM_{2.5}$ analyses. These traffic volumes are assembled

by PPSUITE and extrapolated over the course of a year to produce the annual VMT file input to MOVES.

- *Disaggregate to Hours* - After seasonal adjustments are applied, the traffic volumes are distributed to each hour of the day. This allows for more accurate speed calculations (effects of congested hours) and allows PPSUITE to prepare the hourly VMT and speeds for input to MOVES.
- *Peak Spreading* - After distributing the daily volumes to each hour of the day, PPSUITE identifies hours that are unreasonably congested. For those hours, PPSUITE then spreads a portion of the volume to other hours within the same peak period, thereby approximating the "peak spreading" that normally occurs in such over-capacity conditions. This process also helps prevent hours with unreasonably congested speeds from disproportionately impacting emission calculations.
- *Disaggregation to Vehicle Types* - EPA requires VMT estimates to be prepared by the five HPMS vehicle groups, reflecting specific local characteristics. As described in the previous section, the hourly volumes are disaggregated into thirteen MOVES source types based on data from PennDOT, in combination with MOVES defaults. The thirteen MOVES source types are then recombined into five HPMS vehicle classes.
- *Apply HPMS VMT Adjustments* - Volumes must also be adjusted to account for differences with the HPMS VMT totals, as described in previous sections. VMT adjustment factors are provided as inputs to PPSUITE and are applied to each of the roadway segment volumes. VMT adjustment factors are also applied to runs for future years.
- *Apply VMT Growth Adjustments* Volumes must also be adjusted to estimate future year VMT. VMT growth factors are provided as inputs to PPSUITE, and are applied to each of the roadway segment volumes. The VMT growth factors were developed from the PennDOT BPR Growth Rate forecasting system.

**Speed Estimation**

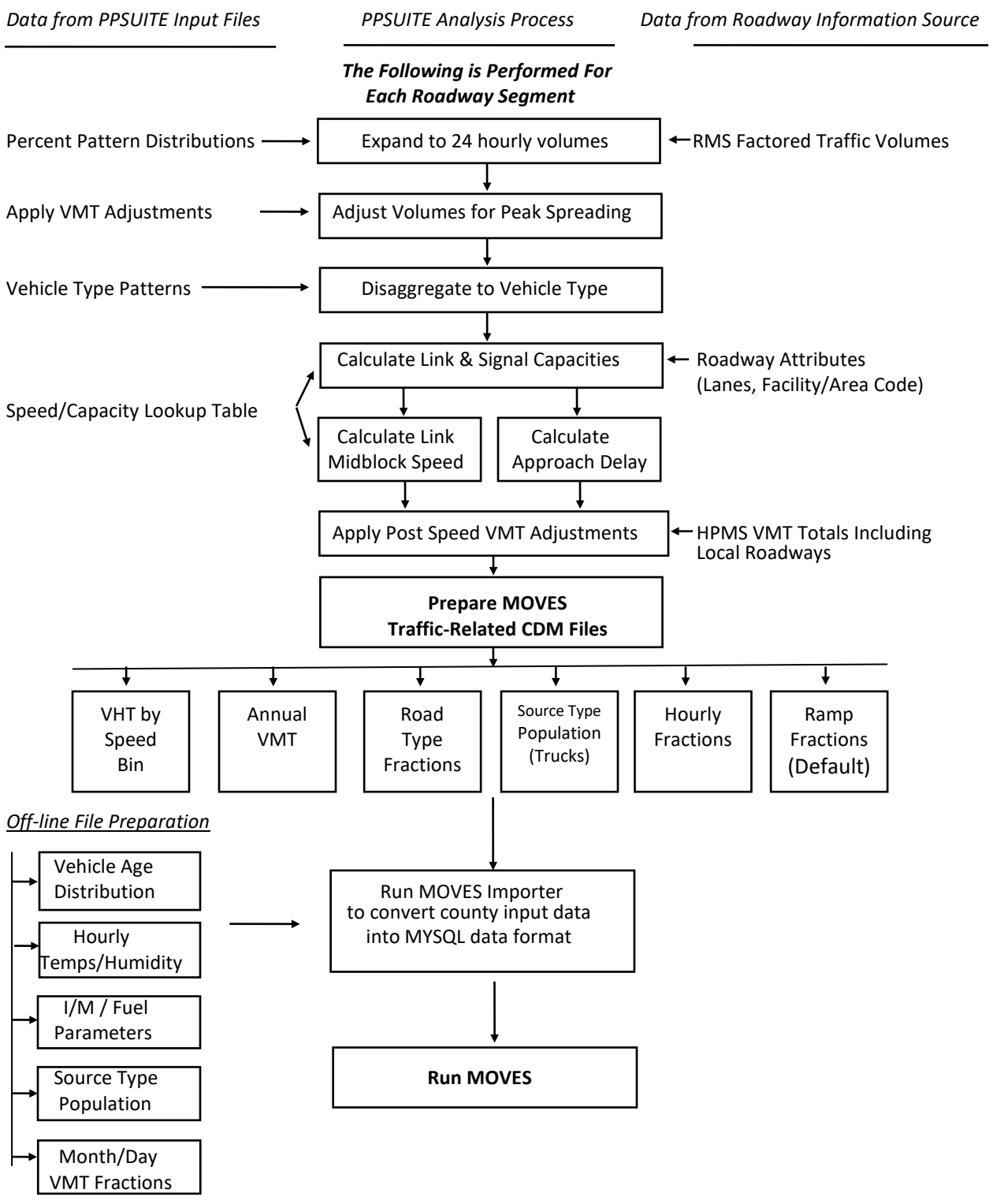
Emissions for many pollutants (including VOC and NOx) vary significantly with travel speed. VOC emissions generally decrease as speed increases, while $NO_X$ emissions decrease at low speeds and increases at higher speeds. Because emissions are so sensitive to speed changes, EPA recommends special attention be given to developing reasonable and consistent speed estimates. EPA also recommends that VMT be disaggregated into subsets that have roughly equal speeds, with separate emission factors for each subset. At a minimum, speeds should be estimated separately by road type.

The computational framework used for this analysis meets and exceeds the recommendation above relating to speed estimates. Speeds are individually calculated for each roadway segment and hour. Rather than accumulating the roadway segments into a particular road type and calculating an average speed, each individual link hourly speed is represented in the MOVES vehicle hours of travel (VHT) by a speed bin file. This MOVES input file allows the specification of a distribution of hourly speeds. For example, if 5% of a county's arterial VHT operates at 5 mph during the AM peak hour and the remaining 95% operates at 65 mph, this can be represented in the MOVES speed input file. For the roadway vehicle

emissions calculations, speed distributions are input to MOVES by road type and source type for each hour of the day.

To calculate speeds, PPSUITE first obtains initial capacities (i.e., how much volume the roadway can serve before heavy congestion) and free-flow speeds (speeds assuming no congestion) from a speed/capacity lookup table. As described previously, this data contains default roadway information indexed by the area and facility type codes. For areas with known characteristics, values can be directly coded to the database and the speed/capacity default values can be overridden. For most areas where known information is unavailable, the speed/capacity lookup tables provide valuable default information regarding speeds, capacities, signal characteristics, and other capacity adjustment information used for calculating congested delays and speeds. The result of this process is an estimated average travel time for each hour of the day for each highway segment. The average travel time multiplied by traffic volume produces vehicle hours of travel (VHT).

## EXHIBIT 5: PPSUITE SPEED/EMISSION ESTIMATION PROCEDURE



**Developing the MOVES Traffic Input Files**

The PPSUITE software is responsible for producing the following MOVES input files during any analysis run:

- VMT by HPMS vehicle class.
- VHT by speed bin.
- Road type distributions.
- Hourly VMT fractions.

These files are text formatted files with a *.csv extension. The files are provided as inputs within the MOVES County Data Manager (CDM) and are described below:

- *VMT Input File*: VMT is the primary traffic input affecting emission results. The roadway segment distances and traffic volumes are used to prepare estimates of VMT. PPSUITE performs these calculations and outputs the MOVES annual VMT input file to the County Data Manager (CDM). The annual VMT is computed by multiplying the RMS roadway adjusted VMT by 365 days (366 days in a leap year).
- *VHT by Speed Bin File*: As described in the previous section, the PPSUITE software prepares the MOVES VHT by speed bin file, which summarizes the distribution of speeds across all links into each of the 16 MOVES speed bins for each hour of the day by road type. This robust process is consistent with the methods and recommendations provided in EPA's technical guidance for the MOVES3 model (http://www.epa.gov/otaq/models/moves/) and ensures that MOVES emission rates are used to the fullest extent.
- *Road Type Distributions*: Within MOVES, typical drive cycles and associated operating conditions vary by roadway type. MOVES defines five different roadway types as follows:

  1 Off-Network.
  2 Rural Restricted Access.
  3 Rural Unrestricted Access.
  4 Urban Restricted Access.
  5 Urban Unrestricted Access.

  For this analysis, the MOVES road type distribution file is automatically generated by PPSUITE using defined equivalencies. The off-network road type includes emissions from vehicle starts, extended idling, and evaporative emissions. Off-network activity in MOVES is primarily determined by the Source Type Population input.

**MOVES Runs**

After computing speeds and aggregating VMT and VHT, PPSUITE prepares traffic-related inputs needed to run EPA's MOVES software. Additional required MOVES inputs are prepared externally from the

processing software and include temperatures, I/M program parameters, fuel characteristics, vehicle fleet age distributions, and source type population. The MOVES county importer is run in batch mode. This program converts all data files into the SQL format used by the MOVES model. At that point, a MOVES run specification file (*.mrs) is created which specifies options and key data locations for the run. The MOVES run is then executed in batch mode. A summary of key MOVES run specification settings is shown in **Exhibit 6**. MOVES can be executed using either an inventory or rate-based approach. For this analysis, MOVES is applied using the inventory-based approach. Using this approach, actual VMT and population are provided as inputs to the model; MOVES is responsible for producing the total emissions for the region.

**EXHIBIT 6: MOVES RUN SPECIFICATION FILE PARAMETER SETTINGS**

| Parameter | Setting |
|---|---|
| **MOVES Version** | MOVES3.1 |
| **MOVES Default Database Version** | MOVESDB20221007 |
| **Scale** | COUNTY |
| **Analysis Mode** | Inventory |
| **Time Span** | **Annual Runs:**<br>Single MOVES run with 12-month inputs including all days and hours |
| **Input Time Aggregation** | Hour |
| **Geographic Selection** | County [FIPS] |
| **Vehicle Selection** | All source types<br>Gasoline, Diesel, CNG, E85, Electricity |
| **Road Type** | All road types including off-network |
| **Pollutants and Processes** | All $PM_{2.5}$ categories, $NO_X$, VOC |
| **Database selection** | Early NLEV database<br>PA-Specific CA LEV program database |
| **General Output** | Units:<br>Emission = grams; Distance = miles;<br>Time = hours; Energy = Million BTU |
| **Output Emissions** | Time = Hour or Month, Emissions by Process ID, Source Type and Road Type |

## Conformity Analysis Results (Fine Particulate Matter)

Transportation conformity analyses of the current TIP and LRTP have been completed for Cambria County. The analyses were performed according to the requirements of the Federal transportation conformity rule at 40 CFR Part 93, Subpart A. The analyses utilized the methodologies, assumptions and data as presented in previous sections. Interagency consultation has been used to determine applicable emission models, analysis years and emission tests.

**Emission Tests**

On July 16, 2015, EPA approved the Commonwealth of Pennsylvania's request to redesignate the *Johnstown, PA* area to attainment for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS (80 FR 42046). The maintenance plan includes Cambria County 2017 and 2025 $PM_{2.5}$ and NOx MVEBs for transportation conformity purposes. All MVEBs are summarized in **Exhibit 7**.

**EXHIBIT 7: ANNUAL $PM_{2.5}$ MOTOR VEHICLE EMISSION BUDGETS**

| Pollutant | 2017 Budget (tons/year) | 2025 Budget (tons/year) |
|---|---|---|
| **$PM_{2.5}$** | 62.79 | 46.71 |
| **NOx** | 1,707.03 | 1,077.46 |

**Analysis Years**

Section 93.119(g) of the Federal Transportation Conformity Regulations requires that emissions analyses be conducted for specific analysis years as follows:

- A near-term year, one to five years in the future.
- The last year of the LRTP's forecast period.
- All established MVEB years.
- Attainment year of the standard if within timeframe of TIP and LRTP.
- An intermediate year or years such that if there are two years in which analysis is performed, the two analysis years are no more than ten years apart.

All analysis years were determined through the interagency consultation process. **Exhibit 8** provides the analysis years used for this conformity analysis.

**EXHIBIT 8: TRANSPORTATION CONFORMITY ANALYSIS YEARS**

| Analysis Year | Description |
|---|---|
| 2025 | Budget Year |
| 2035 | Interim Year |
| 2045 | Interim Year |
| 2050 | LRTP Horizon Year |

**Components of the $PM_{2.5}$ Regional Emissions Analysis**

$PM_{2.5}$ can be the result of either direct or indirect emissions. Direct transportation emissions can be the result of brake or tire-wear, particulates in exhaust emissions, or dust raised by on-road vehicles or construction equipment. Possible indirect transportation related emissions of $PM_{2.5}$ include: $NH_3$, $NO_X$, $SO_X$, and VOC. The EPA has ruled that regional analysis of direct $PM_{2.5}$ emissions must include both exhaust and brake/tire-wear emissions. EPA's current regulations specify that road dust should be included in the regional analysis of direct $PM_{2.5}$ emissions only if the EPA or the state air agency have found it to be a significant contributor to the region's nonattainment. Neither the EPA nor the state air agency has determined road dust to be a significant contributor in the nonattainment area for this conformity determination.

Until a SIP revision is approved proving that $NO_X$ is insignificant, EPA's current regulations state that indirect $PM_{2.5}$ emissions must be analyzed for $NO_X$. Conversely, VOC, $SO_X$ and $NH_3$ must be analyzed only if the state(s) or the EPA determines one or more of these pollutants significant. Therefore, $NO_X$ is the only indirect $PM_{2.5}$ component analyzed for the nonattainment area in this conformity determination.

**Regionally Significant Highway Projects**

For the purposes of conformity analysis, model highway networks are created for each analysis year. The analyses only include new projects which may have a significant effect on emissions in accordance with 40 CFR Parts 51 and 93. These projects typically include those that increase roadway capacity or significantly impact vehicular speeds. Projects such as bridge replacements and roadway restoration projects, which constitute the majority of the TIP and LRTP list, have been excluded from consideration since they are considered exempt under 40 CFR 93.126-127. A list of highway projects is shown in **Attachment A**.

**Analysis Results**

An emissions analysis has been completed for the 2006 24-hour $PM_{2.5}$ NAAQS. Forecast years have been estimated using the procedures and assumptions provide in this conformity report. A detailed emission summary is also provided in **Attachment B**. Example MOVES importer (XML) and run specification (MRS) files are provided in **Attachment C**.

**Exhibit 9** summarizes the annual $PM_{2.5}$ and $NO_X$ emissions. Emissions are compared against the available 2017 and 2025 SIP MVEBs listed in **Exhibit 7**. The results illustrate that projected emissions are below the applicable MVEBs.

**EXHIBIT 9: ANNUAL PM2.5 EMISSION ANALYSIS RESULTS AND CONFORMITY TEST**
(Annual)

| Pollutant | | 2025 (tons/year) | 2035 (tons/year) | 2045 (tons/year) | 2050 (tons/year) |
|---|---|---|---|---|---|
| $PM_{2.5}$ | | 15.95 | 10.80 | 9.18 | 8.87 |
| $NO_X$ | | 447.24 | 235.16 | 219.52 | 218.66 |
| MVEBs 2006 $PM_{2.5}$ NAAQS | $PM_{2.5}$ | **46.71** | **46.71** | **46.71** | **46.71** |
| | $NO_X$ | **1,077.46** | **1,077.46** | **1,077.46** | **1,077.46** |
| Conformity Result | | **Pass** | **Pass** | **Pass** | **Pass** |

## Conformity Analysis Results (Ozone)

On November 29, 2018, EPA issued *Transportation Conformity Guidance for the South Coast II Court Decision*[1](EPA-420-B-18-050, November 2018) that addresses how transportation conformity determinations can be made in areas that were nonattainment or maintenance for the 1997 ozone NAAQS when the 1997 ozone NAAQS was revoked, but were designated attainment for the 2008 ozone NAAQS in EPA's original designations for this NAAQS (May 21, 2012).

The transportation conformity regulation at 40 CFR 93.109 sets forth the criteria and procedures for determining conformity. The conformity criteria for TIPs and LRTPs include: latest planning assumptions (93.110), latest emissions model (93.111), consultation (93.112), transportation control measures (93.113(b) and (c), and emissions budget and/or interim emissions (93.118 and/or 93.119).

For the 1997 ozone NAAQS areas, transportation conformity for TIPs and LRTPs for the 1997 ozone NAAQS can be demonstrated without a regional emissions analysis, per 40 CFR 93.109(c). This provision states that the regional emissions analysis requirement applies one year after the effective date of EPA's nonattainment designation for a NAAQS and until the effective date of revocation of such NAAQS for an area. The 1997 ozone NAAQS revocation was effective on April 6, 2015, and the *South Coast II* court upheld the revocation. As no regional emission analysis is required for this conformity determination, there is no requirement to use the latest emissions model, or budget or interim emissions tests.

Therefore, transportation conformity for the 1997 ozone NAAQS can be demonstrated by showing the remaining requirements in Table 1 in 40 CFR 93.109 have been met. These requirements, which are laid out in Section 2.4 of EPA's guidance and addressed below, include:

[1] Available from https://www.epa.gov/state-and-local-transportation/policy-and-technical-guidance-state-and-local-transportation

- Latest planning assumptions (93.110)
- Consultation (93.112)
- Transportation Control Measures (93.113)
- Fiscal constraint (93.108)

The use of latest planning assumptions in 40 CFR 93.110 of the conformity rule generally applies to a regional emissions analysis. In the 1997 ozone NAAQS areas, the use of latest planning assumptions requirement applies to assumptions about transportation control measures (TCMs) in an approved SIP. However, the Johnstown SIP maintenance plan does not include any TCMs. All remaining requirements are addressed in the previous interagency consultation section and the following conformity determination section of this document.

## Conformity Determination

**Financial Constraint**

The planning regulations, Sections 450.324(f)(11) and 450.326(j), requires the transportation plan and TIP to be financially constrained while the existing transportation system is being adequately operated and maintained. Only projects for which construction and operating funds are reasonably expected to be available are included. JATS, in conjunction with PennDOT, FHWA and FTA, has developed an estimate of the cost to maintain and operate existing roads, bridges and transit systems in Cambria County and have compared the cost with the estimated revenues and maintenance needs of the new roads over the same period. The TIP and LRTP have been determined to be financially constrained.

**Public Participation**

The TIP and LRTP have undergone the public participation requirements as well as the comment and response requirements according to the procedures established in compliance with 23 CFR part 450, the JATS Public Participation Plan, and Pennsylvania's Conformity SIP. The draft document was made available for a 30-day public review and a public meeting.

**Conformity Statement**

The conformity rule requires that the TIP and LRTP conform to the applicable SIP(s) and be adopted by the MPO/RPO before any federal agency may approve, accept, or fund projects. Conformity is determined by applying criteria outlined in the transportation conformity regulations to the analysis.

The TIP and LRTP for Cambria County are found to conform to the applicable air quality SIP(s) or EPA conformity requirements. This finding of conformity positively reflects on the efforts of the JATS and its partners in meeting the regional air quality goals, while maintaining and building an effective transportation system.

# Resources

**MOVES Model**

Modeling Page within EPA's Office of Mobile Sources Website contains a downloadable model, MOVES users guide and other information. See (http://www.epa.gov/omswww/models.htm)

*Policy Guidance on the Use of MOVES3 for State Implementation Plan Development, Transportation Conformity, and Other Purposes*, US EPA Office of Air and Radiation, *EPA-420-B-20-044, November 2020*

*MOVES3 Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity. US EPA Assessment and Standard Division, Office of Transportation and Air Quality, EPA-420-B-20-052, November 2020.*

**Traffic Engineering**

*Highway Capacity Manual, fifth edition (HCM2010),* Transportation Research Board, presents current knowledge and techniques for analyzing the transportation system.

*Traffic Data Collection and Factor Development Report, 2022 Data,* Pennsylvania Department of Transportation, Bureau of Planning and Research.

## Highway Vehicle Emissions Analysis Glossary

**AADT:** Average Annual Daily Traffic, average of ALL days

**CAA:** Clean Air Act as amended

**CARB:** California Air Resources Board

**CFR**: Code of Federal Regulations

**County Data Manager (CDM):** User interface developed to simplify importing specific local data for a single county or a user-defined custom domain without requiring direct interaction with the underlying SQL database in the MOVES emission model

**DEP:** Department of Environmental Protection.

**Emission rate or factor:** Expresses the amount of pollution emitted per unit of activity. For highway vehicles, this is usually expressed in grams of pollutant emitted per mile driven

**EPA:** Environmental Protection Agency.

**FC:** Functional code. Applied to road segments to identify their type (freeway, local, etc.)

**FHWA:** Federal Highway Administration

**FR:** Federal Register

**FTA:** Federal Transit Administration

**Growth factor:** Factor used to convert volumes to future years

**HPMS:** Highway Performance Monitoring System

**I/M:** Vehicle emissions inspection/maintenance programs are required in certain areas of the country. The programs ensure that vehicle emission controls are in good working order throughout the life of the vehicle. The programs require vehicles to be tested for emissions. Most vehicles that do not pass must be repaired.

**LRTP:** Long Range Transportation Plan

**MOVES:** Motor Vehicle Emission Simulator. The latest model EPA has developed to estimate emissions from highway vehicles

**MVEB:** motor vehicle emissions budget

**NAAQS:** National Ambient Air Quality Standard

**NTD:** National Transit Database

**Pattern data:** Extrapolations of traffic patterns (such as how traffic volume on road segment types varies by time of day, or what kinds of vehicles tend to use a road segment type) from segments with observed data to similar segments

**PPSUITE:** Post-Processor for Air Quality. A set of programs that estimate speeds and prepares MOVES inputs and processes MOVES outputs

**Road Type:** Functional code, applied in data management to road segments to identify their type (rural/urban highways, rural/urban arterials, etc.)

**RMS:** Roadway Management System

**SIP:** State Implementation Plan

**Source Type:** One of thirteen vehicle types used in MOVES modeling

**TAZ:** Traffic Analysis Zone System

**TIP:** Transportation Improvement Program

**VHT:** Vehicle hours traveled

**VMT:** Vehicle miles traveled. In modeling terms, it is the simulated traffic volumes multiplied by link length

**VOC:** volatile organic compound emissions

# ATTACHMENT A

## Project List

The following Cambria County FY2025-2028 TIP and 2050 LRTP air quality significant highway projects are included in the conformity analysis:

| MPMS # | Project Name | Description |
|---|---|---|
| Air Quality Significant Projects on FY2025-2028 TIP and 2050 LRTP | | |
| **114001** | PA 756 – Alvin Ave to Industrial Park Rd | This project involves roadway improvements on PA 756 (Elton Road) from T-464 (Alvin Street) to T-737 (Industrial Park Road) in Richland Township, Cambria County. It will improve intersection safety by improving sight distance, adding left turn lanes, improving driver awareness and updating traffic signals throughout corridor to help support a reduction in congestion. |
| **115615** | Johnstown Urban Ind. Park Connector St | Construct a new access road from Iron Street to Johnstown Urban Industrial Park in the City of Johnstown, Cambria County |

# ATTACHMENT B

## Detailed Emission Results*

## Annual $PM_{2.5}$ Analysis

**All table values and totals have been estimated from the MOVES detailed output and rounded to 1-2 decimal points. Due to rounding, individual table entries may not add exactly to the total*

# Detailed Emission Results for Annual $PM_{2.5}$ Analysis

## Cambria County PM2.5 Annual Emission Summary

***2025 FFY25 TIP Conformity (By Road Type)***

| County | Road Type | Annual VMT | Speed (mph) | Emissions (Tons/Year) | |
|---|---|---|---|---|---|
| | | | | NOx | $PM_{2.5}$ |
| Cambria | Off-Network | N/A | N/A | 103.91 | 4.54 |
| | Rural Restricted | 0 | N/A | 0.00 | 0.00 |
| | Rural UnRestricted | 461,655,376 | 48.2 | 156.67 | 5.63 |
| | Urban Restricted | 278,256,354 | 55.4 | 91.52 | 2.92 |
| | Urban UnRestricted | 273,722,675 | 35.5 | 79.93 | 3.82 |
| | *Subtotal* | *1,013,634,406* | | *432.02* | *16.91* |
| Off-Model Project Emission Benefits | | | | 15.22 | -0.96 |
| **Region Total** | | **1,013,634,406** | | **447.24** | **15.95** |
| | | | **(Kg/Year)** | **405,733** | **14,473** |

## Cambria County PM2.5 Annual Emission Summary

***2025 FFY25 TIP Conformity (By Emission Process)***

| County | Emission Process | Emissions (Tons/Year) | |
|---|---|---|---|
| | | NOx | $PM_{2.5}$ |
| Cambria | Running Exhaust | 351.51 | 7.56 |
| | Start Exhaust | 73.92 | 3.84 |
| | Brakewear | 0.00 | 2.79 |
| | Tirewear | 0.00 | 1.65 |
| | Evap Permeation | 0.00 | 0.00 |
| | Evap Fuel Vapor Venting | 0.00 | 0.00 |
| | Evap Fuel Leaks | 0.00 | 0.00 |
| | Crankcase Running Exhaust | 2.46 | 0.96 |
| | Crankcase Start Exhaust | 0.00 | 0.03 |
| | Crankcase Extended Idle Exhaust | 0.03 | 0.02 |
| | Extended Idle Exhaust | 3.84 | 0.05 |
| | Auxiliary Power Exhaust | 0.26 | 0.00 |
| | *Subtotal* | *432.02* | *16.91* |
| Off-Model Project Emission Benefits | | 15.22 | -0.96 |
| **Region Total** | | **447.24** | **15.95** |
| | **(Kg/Year)** | **405,733** | **14,473** |

## Cambria County PM2.5 Annual Emission Summary

***2025 FFY25 TIP Conformity (By Source Type)***

| County | Source Type | Annual VMT | Emissions (Tons/Year) | |
|---|---|---|---|---|
| | | | NOx | $PM_{2.5}$ |
| Cambria | Motorcycle | 6,461,088 | 5.30 | 0.15 |
| | Passenger Car | 508,879,430 | 41.83 | 4.13 |
| | Passenger Truck | 330,586,060 | 87.68 | 4.53 |
| | Light Commercial Truck | 84,797,950 | 36.56 | 1.55 |
| | Intercity Bus | 40,500 | 0.15 | 0.00 |
| | Transit Bus | 4,114,256 | 16.96 | 0.31 |
| | School Bus | 1,004,600 | 2.94 | 0.11 |
| | Refuse Truck | 1,164,832 | 3.71 | 0.07 |
| | Single Unit Short-haul Truck | 26,119,440 | 32.52 | 0.82 |
| | Single Unit Long-haul Truck | 1,593,390 | 1.69 | 0.04 |
| | Motor Home | 2,412,083 | 7.07 | 0.26 |
| | Combination Short-haul Truck | 11,382,757 | 40.79 | 0.86 |
| | Combination Long-haul Truck | 35,078,019 | 154.82 | 4.06 |
| | *Subtotal* | *1,013,634,406* | *432.02* | *16.91* |
| Off-Model Project Emission Benefits | | | 15.22 | -0.96 |
| **Region Total** | | **1,013,634,406 (Kg/Year)** | **447.24** **405,733** | **15.95** **14,473** |

## Cambria County PM2.5 Annual Emission Summary

***2035 FFY25 TIP Conformity (By Road Type)***

| County | Road Type | Annual VMT | Speed (mph) | Emissions (Tons/Year) | |
|---|---|---|---|---|---|
| | | | | NOx | $PM_{2.5}$ |
| Cambria | Off-Network | N/A | N/A | 77.88 | 4.26 |
| | Rural Restricted | 0 | N/A | 0.00 | 0.00 |
| | Rural UnRestricted | 469,791,144 | 48.2 | 80.99 | 3.23 |
| | Urban Restricted | 291,604,915 | 55.1 | 44.87 | 1.63 |
| | Urban UnRestricted | 269,031,411 | 35.6 | 42.08 | 2.47 |
| | *Subtotal* | *1,030,427,470* | | *245.82* | *11.59* |
| Off-Model Project Emission Benefits | | | | -10.66 | -0.79 |
| **Region Total** | | **1,030,427,470 (Kg/Year)** | | **235.16** **213,332** | **10.80** **9,802** |

## Cambria County PM2.5 Annual Emission Summary

***2035 FFY25 TIP Conformity (By Source Type)***

| County | Source Type | Annual VMT | Emissions (Tons/Year) | |
|---|---|---|---|---|
| | | | NOx | $PM_{2.5}$ |
| Cambria | Motorcycle | 6,568,298 | 5.31 | 0.15 |
| | Passenger Car | 517,323,540 | 23.49 | 3.87 |
| | Passenger Truck | 336,074,160 | 31.02 | 3.73 |
| | Light Commercial Truck | 86,202,160 | 9.91 | 1.02 |
| | Intercity Bus | 36,523 | 0.09 | 0.00 |
| | Transit Bus | 4,187,905 | 9.42 | 0.10 |
| | School Bus | 1,024,621 | 1.78 | 0.02 |
| | Refuse Truck | 1,186,228 | 2.82 | 0.02 |
| | Single Unit Short-haul Truck | 26,559,467 | 24.52 | 0.43 |
| | Single Unit Long-haul Truck | 1,605,381 | 1.25 | 0.02 |
| | Motor Home | 2,445,616 | 3.64 | 0.15 |
| | Combination Short-haul Truck | 11,465,076 | 31.75 | 0.49 |
| | Combination Long-haul Truck | 35,748,494 | 100.81 | 1.59 |
| | *Subtotal* | *1,030,427,470* | *245.82* | *11.59* |
| Off-Model Project Emission Benefits | | | -10.66 | -0.79 |
| **Region Total** | | **1,030,427,470 (Kg/Year)** | **235.16 213,332** | **10.80 9,802** |

## Cambria County PM2.5 Annual Emission Summary

***2035 FFY25 TIP Conformity (By Emission Process)***

| County | Emission Process | Emissions (Tons/Year) | |
|---|---|---|---|
| | | NOx | $PM_{2.5}$ |
| Cambria | Running Exhaust | 186.94 | 2.70 |
| | Start Exhaust | 53.85 | 4.06 |
| | Brakewear | 0.00 | 2.83 |
| | Tirewear | 0.00 | 1.67 |
| | Evap Permeation | 0.00 | 0.00 |
| | Evap Fuel Vapor Venting | 0.00 | 0.00 |
| | Evap Fuel Leaks | 0.00 | 0.00 |
| | Crankcase Running Exhaust | 2.43 | 0.28 |
| | Crankcase Start Exhaust | 0.00 | 0.03 |
| | Crankcase Extended Idle Exhaust | 0.02 | 0.01 |
| | Extended Idle Exhaust | 2.08 | 0.01 |
| | Auxiliary Power Exhaust | 0.49 | 0.00 |
| | *Subtotal* | *245.82* | *11.59* |
| Off-Model Project Emission Benefits | | -10.66 | -0.79 |
| **Region Total** | **(Kg/Year)** | **235.16 213,332** | **10.80 9,802** |

## Cambria County PM2.5 Annual Emission Summary

***2045 FFY25 TIP Conformity (By Road Type)***

| County | Road Type | Annual VMT | Speed (mph) | Emissions (Tons/Year) | |
|---|---|---|---|---|---|
| | | | | NOx | $PM_{2.5}$ |
| Cambria | Off-Network | N/A | N/A | 77.18 | 3.20 |
| | Rural Restricted | 0 | N/A | 0.00 | 0.00 |
| | Rural UnRestricted | 478,327,608 | 48.2 | 73.02 | 2.88 |
| | Urban Restricted | 300,631,589 | 55.1 | 39.75 | 1.44 |
| | Urban UnRestricted | 269,030,284 | 35.6 | 37.76 | 2.26 |
| | *Subtotal* | *1,047,989,481* | | *227.71* | *9.79* |
| Off-Model Project Emission Benefits | | | | -8.19 | -0.61 |
| **Region Total** | | **1,047,989,481** | **(Kg/Year)** | **219.52**<br>**199,143** | **9.18**<br>**8,326** |

## Cambria County PM2.5 Annual Emission Summary

***2045 FFY25 TIP Conformity (By Source Type)***

| County | Source Type | Annual VMT | Emissions (Tons/Year) | |
|---|---|---|---|---|
| | | | NOx | $PM_{2.5}$ |
| Cambria | Motorcycle | 6,677,604 | 5.40 | 0.16 |
| | Passenger Car | 525,932,740 | 21.27 | 3.34 |
| | Passenger Truck | 341,669,060 | 24.73 | 2.98 |
| | Light Commercial Truck | 87,634,150 | 7.57 | 0.82 |
| | Intercity Bus | 34,109 | 0.08 | 0.00 |
| | Transit Bus | 4,274,373 | 9.21 | 0.09 |
| | School Bus | 1,046,997 | 1.75 | 0.02 |
| | Refuse Truck | 1,218,816 | 2.84 | 0.02 |
| | Single Unit Short-haul Truck | 27,111,868 | 24.63 | 0.43 |
| | Single Unit Long-haul Truck | 1,657,864 | 1.27 | 0.02 |
| | Motor Home | 2,496,398 | 2.09 | 0.06 |
| | Combination Short-haul Truck | 11,723,911 | 31.11 | 0.45 |
| | Combination Long-haul Truck | 36,511,591 | 95.75 | 1.39 |
| | *Subtotal* | *1,047,989,481* | *227.71* | *9.79* |
| Off-Model Project Emission Benefits | | | -8.19 | -0.61 |
| **Region Total** | | **1,047,989,481**<br>**(Kg/Year)** | **219.52**<br>**199,143** | **9.18**<br>**8,326** |

## Cambria County PM2.5 Annual Emission Summary

***2045 FFY25 TIP Conformity (By Emission Process)***

| County | Emission Process | Emissions (Tons/Year) | |
|---|---|---|---|
| | | NOx | $PM_{2.5}$ |
| Cambria | Running Exhaust | 169.68 | 1.90 |
| | Start Exhaust | 53.23 | 3.06 |
| | Brakewear | 0.00 | 2.87 |
| | Tirewear | 0.00 | 1.70 |
| | Evap Permeation | 0.00 | 0.00 |
| | Evap Fuel Vapor Venting | 0.00 | 0.00 |
| | Evap Fuel Leaks | 0.00 | 0.00 |
| | Crankcase Running Exhaust | 2.41 | 0.21 |
| | Crankcase Start Exhaust | 0.00 | 0.02 |
| | Crankcase Extended Idle Exhaust | 0.02 | 0.01 |
| | Extended Idle Exhaust | 1.82 | 0.01 |
| | Auxiliary Power Exhaust | 0.55 | 0.00 |
| | *Subtotal* | *227.71* | *9.79* |
| Off-Model Project Emission Benefits | | -8.19 | -0.61 |
| **Region Total** | | **219.52** | **9.18** |
| | **(Kg/Year)** | **199,143** | **8,326** |

## Cambria County PM2.5 Annual Emission Summary

***2050 FFY25 TIP Conformity (By Road Type)***

| County | Road Type | Annual VMT | Speed (mph) | Emissions (Tons/Year) | |
|---|---|---|---|---|---|
| | | | | NOx | $PM_{2.5}$ |
| Cambria | Off-Network | N/A | N/A | 78.44 | 3.00 |
| | Rural Restricted | 0 | N/A | 0.00 | 0.00 |
| | Rural UnRestricted | 482,571,428 | 48.2 | 72.51 | 2.85 |
| | Urban Restricted | 293,304,693 | 55.0 | 38.60 | 1.39 |
| | Urban UnRestricted | 268,107,932 | 35.6 | 37.00 | 2.22 |
| | *Subtotal* | *1,043,984,053* | | *226.55* | *9.46* |
| Off-Model Project Emission Benefits | | | | -7.89 | -0.59 |
| **Region Total** | | **1,043,984,053** | | **218.66** | **8.87** |
| | | | **(Kg/Year)** | **198,362** | **8,046** |

## Cambria County PM2.5 Annual Emission Summary

***2050 FFY25 TIP Conformity (By Source Type)***

| County | Source Type | Annual VMT | Emissions (Tons/Year) | |
|---|---|---|---|---|
| | | | NOx | $PM_{2.5}$ |
| Cambria | Motorcycle | 6,650,548 | 5.38 | 0.16 |
| | Passenger Car | 523,801,980 | 21.86 | 3.30 |
| | Passenger Truck | 340,282,290 | 24.45 | 2.79 |
| | Light Commercial Truck | 87,281,440 | 7.53 | 0.78 |
| | Intercity Bus | 32,805 | 0.08 | 0.00 |
| | Transit Bus | 4,275,460 | 9.29 | 0.09 |
| | School Bus | 1,046,632 | 1.77 | 0.02 |
| | Refuse Truck | 1,215,909 | 2.84 | 0.02 |
| | Single Unit Short-haul Truck | 27,077,261 | 24.64 | 0.43 |
| | Single Unit Long-haul Truck | 1,653,899 | 1.27 | 0.02 |
| | Motor Home | 2,494,591 | 2.06 | 0.06 |
| | Combination Short-haul Truck | 11,715,594 | 30.81 | 0.44 |
| | Combination Long-haul Truck | 36,455,644 | 94.58 | 1.35 |
| | *Subtotal* | *1,043,984,053* | *226.55* | *9.46* |
| Off-Model Project Emission Benefits | | | -7.89 | -0.59 |
| **Region Total** | | **1,043,984,053 (Kg/Year)** | **218.66 198,362** | **8.87 8,046** |

## Cambria County PM2.5 Annual Emission Summary

***2050 FFY25 TIP Conformity (By Emission Process)***

| County | Emission Process | Emissions (Tons/Year) | |
|---|---|---|---|
| | | NOx | $PM_{2.5}$ |
| Cambria | Running Exhaust | 167.20 | 1.79 |
| | Start Exhaust | 54.62 | 2.87 |
| | Brakewear | 0.00 | 2.87 |
| | Tirewear | 0.00 | 1.69 |
| | Evap Permeation | 0.00 | 0.00 |
| | Evap Fuel Vapor Venting | 0.00 | 0.00 |
| | Evap Fuel Leaks | 0.00 | 0.00 |
| | Crankcase Running Exhaust | 2.38 | 0.20 |
| | Crankcase Start Exhaust | 0.00 | 0.02 |
| | Crankcase Extended Idle Exhaust | 0.02 | 0.01 |
| | Extended Idle Exhaust | 1.77 | 0.01 |
| | Auxiliary Power Exhaust | 0.55 | 0.00 |
| | *Subtotal* | *226.55* | *9.46* |
| Off-Model Project Emission Benefits | | -7.89 | -0.59 |
| **Region Total** | **(Kg/Year)** | **218.66 198,362** | **8.87 8,046** |

# ATTACHMENT C

## Sample MOVES Data Importer (XML) Input File
## and
## Run Specification (MRS) Input File

**(Sample for 2025 Annual Runs)**

## MOVES County Data Manager Importer File – Annual Run (MOVESIMPORTER.XML)

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## MOVES Run Specification File – Annual Run (MOVESRUN.MRS)

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# Appendix G: Environmental Justice Benefits and Burdens Analysis

Presidential Executive Order 12898 states that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Within the transportation field, environmental justice is guided by three core principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority or low-income populations.

Because the Cambria County MPO utilizes federal funds to plan and implement transportation projects the MPO is responsible for undertaking analysis of federally funded projects listed within the LRTP. In order to show that our plan meets these objectives, an Equity Analysis—also known as a "Benefits and Burdens Analysis"—was prepared.

In accordance with FHWA and FTA joint guidance issued to the MPOs and RPOs of Pennsylvania, equity analysis should perform the following four "core elements:"

- Identify environmental justice populations
- Assess conditions and identify needs
- Evaluate burdens and benefits
- Identify and address disproportionate and adverse impacts and inform future planning efforts

## Identification of Traditionally Underserved and Under-Represented Populations

Executive Order 12898 specifies that minority and low-income populations must be considered in Environmental Justice analysis. These populations were identified using data from the 2020 U.S. Census and 2019 data releases from the American Community Survey (ACS). The following definitions are used for the purposes of this analysis:

- **Minority:** Any individual or group that self-identifies as a member(s) of the racial categories of Black/African American, Asian American, American Indian/Alaskan Native, Native Hawaiian/other Pacific Islander, and the ethnic category Hispanic/Latino.
- **Low-income:** Households at or below the federal poverty level. In the same spirit, the Cambria County MPO's environmental justice equity analysis also identifies people with disabilities and people with limited English proficiency (identified as individuals speaking English "not very well" or speaking English "not at all").

### Minority and Low-Income Profile

The Cambria County MPO is a single-county MPO in Southcentral Pennsylvania. Cambria County demographic data was drawn from the U.S. Census Bureau 2018-2022 American Community Survey 5-Year Estimates. This was the most recent data available during TIP development.

Table G-1: Cambria County Demographics

| Demographic Indicator | Cambria County Population | Cambria County Percentage |
|---|---|---|
| Total Population | 133,263 | 100.00% |
| White alone, non-Hispanic | 121,836 | 91.43% |
| Black or African American alone, non-Hispanic | 4,540 | 3.41% |
| American Indian and Alaska Native alone, non-Hispanic | 26 | 0.02% |
| Asian alone, non-Hispanic | 660 | 0.50% |
| Native Hawaiian and Other Pacific Islander alone, non-Hispanic | 21 | 0.02% |
| Some other race alone, non-Hispanic | 283 | 0.21% |
| Two or more races | 3,433 | 2.58% |
| Hispanic or Latino | 2,464 | 2.15% |
| Minority | 11,427 | 8.57% |
| Low-Income | 18,240 | 14.36% |
| Other Potentially Disadvantaged Populations | | |
| Limited English Proficiency Households | 363 | 0.66% |
| Persons with a Disability | 21,698 | 16.81% |
| Elderly (65 years or older) | 30,817 | 23.12% |
| Carless Households | 6,184 | 11.20% |
| Housing Units with No Internet | 7,165 | 12.97% |
| Housing Units with No Computer | 5,542 | 10.04% |

Source: 2018-2022 American Community Survey 5-Year Estimates

### Minority Intervals for Cambria County MPO

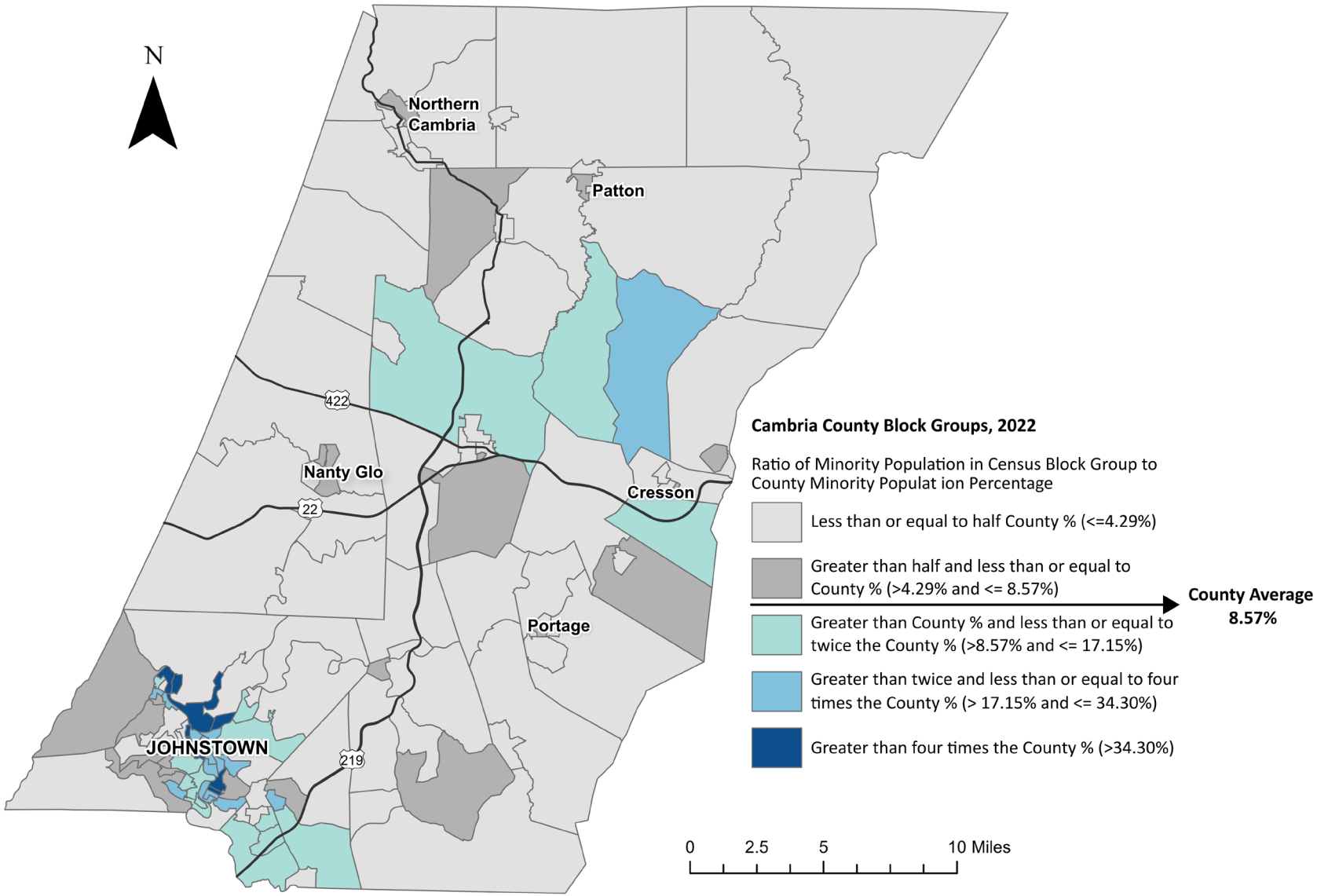
Data from the 2018-2022 American Community Survey 5-Year Estimates were used to evaluate the locations in Cambria County compared to the minority concentration in 128 census block groups. The total county population used for this analysis was 133,263 and the total minority population was 11,427. In Cambria County, 8.57 percent of the population is minority. Using that percentage, census blocks were divided into intervals described in Table G-2.

**Table G-2: Minority Population Intervals**

| | Minority Interval | | Total Population | Total Population (%) | Minority Population | Minority Population (%) |
|---|---|---|---|---|---|---|
| 1 | **Census Block Minority Population Percentage <= 4.29%** (census block group minority population percentage less than or equal to half of countywide population percentage) | 1,268 people live in these census blocks. Of those, 1.89% are minority. | 67,199 | 50.43% | 1,268 | 11.10% |
| 2 | **Census Block Minority Population Percentage > 4.29% and <= 8.57%** (census block group minority population percentage greater than half and less than or equal to countywide or regional minority population percentage) | 1,468 people live in these census blocks. Of those, 5.85% are minority. | 25,085 | 18.82% | 1,468 | 12.85% |
| 3 | **Census Block Minority Population Percentage > 8.57% and <= 17.15%** (census block group minority population percentage greater than county minority population percentage and less than or equal to twice the countywide or regional minority population percentage) | 2,541 people live in these census blocks. Of those, 12.08% are minority. | 21,028 | 15.78% | 2,541 | 22.24% |
| 4 | **Census Block Minority Population Percentage > 17.15% and <= 34.30%** (census block group minority population percentage greater than twice and less than or equal to four times the countywide or regional minority population percentage) | 3,317 people live in these census blocks. Of those, 25.11% are minority. | 13,211 | 9.91% | 3,317 | 29.03% |
| 5 | **Census Block Minority Population Percentage > 34.30%** (census block group minority population percentage greater than four times county minority population percentage) | 2,833 people live in these census blocks. Of those, 42.03% are minority. | 6,740 | 5.06% | 2,833 | 24.79% |

Figure G-1 shows the distribution of census block groups with low and high concentrations of minority populations. The densest concentrations are in and around the City of Johnstown.

**Figure G-1: Minority Populations 2018 -2022**



### Low-Income Intervals for Cambria County MPO

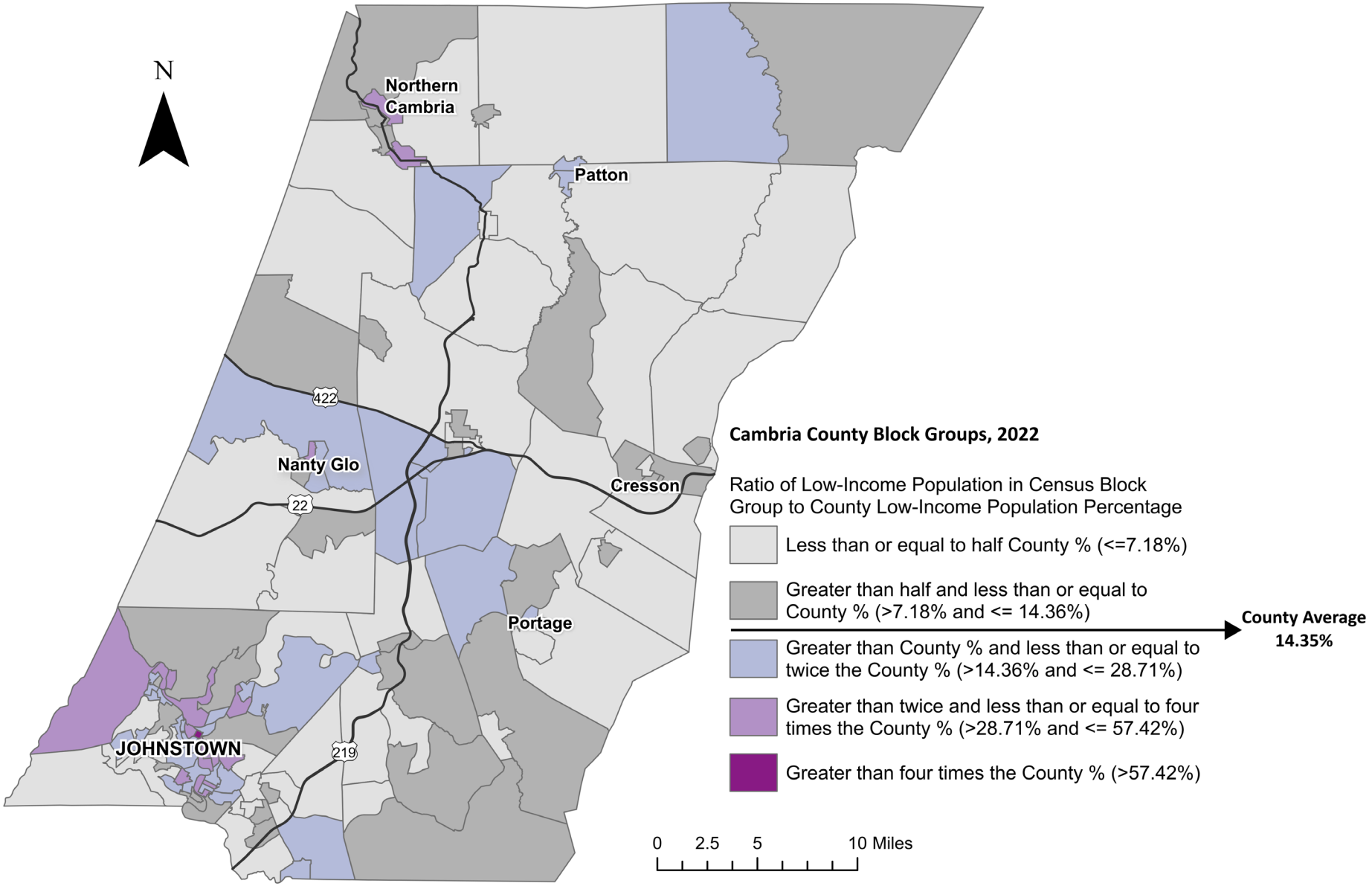
Data from 2018-2022 American Community Survey 5-Year Estimates were used to evaluate the locations in Cambria County compared to the low-income concentration in the 128 census block groups. The total county population used for this analysis was 133,263 and the total low-income population was 18,240. In Cambria County, 14.36 percent of the population is low-income. Using that percentage, census blocks were divided into intervals described in Table G-3.

**Table G-3: Low-Income Population Intervals**

| | Low-Income Interval | | Total Population | Total Population (%) | Low-Income Population | Low-Income Population (%) |
|---|---|---|---|---|---|---|
| 1 | **Census Block Low-Income Population Percentage <= 7.18%** (census block group low-income population percentage less than or equal to half of countywide or regional low-income population percentage) | 1,911 people live in these census blocks. Of those, 4.24% people are low-income. | 45,114 | 35.51% | 1,911 | 10.48% |
| 2 | **Census Block Low-Income Population Percentage > 7.18% and <= 14.36%** (census block group low-income population percentage greater than half and less than or equal to countywide or regional low-income population percentage) | 3,683 people live in these census blocks. Of those, 10.37% are low-income. | 35,528 | 27.96% | 3,683 | 20.19% |
| 3 | **Census Block Low-Income Population Percentage > 14.36% and <= 28.71%** (census block group low-income population percentage greater than county low-income population percentage and less than or equal to twice the countywide or regional minority population percentage) | 6,486 people live in these census blocks. Of those, 21.31% are low-income. | 30,430 | 23.95% | 6,486 | 35.56% |
| 4 | **Census Block Low-Income Population Percentage > 28.71% and <= 57.42%** (census block group low-income population percentage greater than twice and less than or equal to four times the countywide or regional low-income population percentage) | 5,853 people live in these census blocks. Of those, 37.72% are low-income. | 15,519 | 12.21% | 5,853 | 32.09% |
| 5 | **Census Block Low-Income Population Percentage > 57.42%** (census block group low-income population percentage greater than four times county low-income population percentage) | 307 people live in these census blocks. Of those, 66.02% of those people are low-income. | 465 | 0.37% | 307 | 1.68% |

Figure G-2 shows the distribution of census block groups with low and high concentrations of low-income populations. The densest concentrations are in and around the City of Johnstown.

**Figure G-2: Low-Income Populations 2018 -2022**



## Assessment of Current Conditions

### Pavement Condition

Condition data for pavement assets are compiled by PennDOT's Bureau of Maintenance and Operations (BOMO) and made available through the Roadway Management System (RMS) annually. The primary pavement condition and performance measures are the International Roughness Index (IRI) and the Overall Pavement Index (OPI). IRI is based on the smoothness of the pavement, while OPI combines a number of pavement factors including IRI to provide a more holistic measure of pavement performance. Condition data is collected on Interstate and NHS roads every year and on all non-NHS roads every two years. For this evaluation, both the IRI and OPI were evaluated for all State Road segments in Cambria County.

Table G-4: Distribution of IRI by Minority Population Interval – Based on 8.57% County Average

| Minority Interval ID | IRI Quality Range | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Excellent | | Good | | Fair | | Poor | | Other | | Total Miles |
| | Miles | Percent | Miles | Percent | Miles | Percent | Miles | Percent | Miles | Percent | |
| Interval 1 | 162.0 | 78% | 178.1 | 67% | 109.3 | 73% | 83.4 | 74% | 23.0 | 47% | 555.9 |
| Interval 2 | 12.1 | 6% | 31.5 | 12% | 13.0 | 9% | 11.3 | 10% | 6.9 | 14% | 74.8 |
| Interval 3 | 32.0 | 15% | 41.1 | 15% | 14.6 | 10% | 10.9 | 10% | 11.2 | 23% | 109.9 |
| Interval 4 | 2.8 | 1% | 15.5 | 6% | 6.7 | 5% | 4.8 | 4% | 6.7 | 14% | 36.4 |
| Interval 5 | 0.0 | 0% | 1.5 | 1% | 5.1 | 3% | 3.0 | 3% | 1.5 | 3% | 11.1 |
| Total Roadway Mileage | 208.9 | 100% | 267.6 | 100% | 148.9 | 100% | 113.4 | 100% | 49.3 | 100% | 788.0 |

Table G-5: Distribution of OPI by Minority Population Interval – Based on 8.57% County Average

| Minority Interval ID | OPI Quality Range | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Excellent | | Good | | Fair | | Poor | | Other | | Total Miles |
| | Miles | Percent | Miles | Percent | Miles | Percent | Miles | Percent | Miles | Percent | |
| Interval 1 | 103.8 | 75% | 252.1 | 70% | 141.8 | 74% | 49.9 | 72% | 8.1 | 31% | 555.9 |
| Interval 2 | 12.0 | 9% | 29.8 | 8% | 22.26 | 12% | 5.3 | 8% | 5.4 | 20% | 74.8 |
| Interval 3 | 20.4 | 15% | 57.2 | 16% | 17.1 | 9% | 8.8 | 13% | 6.2 | 24% | 109.9 |
| Interval 4 | 2.5 | 2% | 16.6 | 5% | 7.8 | 4% | 4.3 | 6% | 5.1 | 19% | 36.4 |
| Interval 5 | 0.0 | 0% | 4.6 | 1% | 3.8 | 2% | 1.1 | 2% | 1.4 | 6% | 11.1 |
| Total Roadway Mileage | 138.8 | 100% | 360.3 | 100% | 193.0 | 100% | 69.6 | 100% | 26.4 | 100% | 788.0 |

Table G-6: Distribution of IRI by Low-Income Population Interval – Based on 14.36% County Average

| Low-Income Interval ID | IRI Quality Range | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Excellent | | Good | | Fair | | Poor | | Other | | Total Miles |
| | Miles | Percent | Miles | Percent | Miles | Percent | Miles | Percent | Miles | Percent | |
| Interval 1 | 124.5 | 60% | 141.1 | 53% | 76.8 | 52% | 58.4 | 52% | 21.5 | 44% | 422.3 |
| Interval 2 | 48.2 | 23% | 67.7 | 25% | 41.0 | 28% | 26.0 | 23% | 7.6 | 15% | 190.5 |
| Interval 3 | 33.6 | 16% | 49.7 | 19% | 23.0 | 15% | 23.6 | 21% | 14.8 | 30% | 144.7 |
| Interval 4 | 2.5 | 1% | 9.1 | 3% | 8.1 | 5% | 4.8 | 4% | 5.2 | 11% | 29.7 |
| Interval 5 | | 0% | 0.0 | 0% | 0.0 | 0% | 0.6 | 0% | 0.3 | 1% | 0.9 |
| Total Roadway Mileage | 208.9 | 100% | 267.6 | 100% | 148.9 | 100% | 113.4 | 100% | 49.3 | 100% | 788.0 |

Table G-7: Distribution of OPI by Low-Income Population Interval – Based on 14.36% County Average

| Low-Income Interval ID | OPI Quality Range | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Excellent | | Good | | Fair | | Poor | | Other | | Total Miles |
| | Miles | Percent | Miles | Percent | Miles | Percent | Miles | Percent | Miles | Percent | |
| Interval 1 | 72.7 | 52% | 201.2 | 56% | 102.4 | 53% | 36.6 | 53% | 9.5 | 36% | 422.3 |
| Interval 2 | 38.0 | 27% | 76.6 | 21% | 54.4 | 28% | 17.8 | 26% | 3.7 | 14% | 190.5 |
| Interval 3 | 26.9 | 19% | 67.9 | 19% | 28.6 | 15% | 11.9 | 17% | 9.4 | 36% | 144.7 |
| Interval 4 | 1.2 | 1% | 14.4 | 4% | 7.5 | 4% | 2.9 | 4% | 3.6 | 14% | 29.7 |
| Interval 5 | 0.0 | 0% | 0.2 | 0% | 0.0 | 0% | 0.4 | 1% | 0.3 | 1% | 0.9 |
| Total Roadway Mileage | 138.8 | 100% | 360.3 | 100% | 193.0 | 100% | 69.6 | 100% | 26.4 | 100% | 788.0 |

Of the state road miles evaluated, Cambria County's overall pavement condition is very good. Only 8.83 percent of miles have poor OPI and only 14.39 percent have poor IRI. The remaining are in fair, good, or excellent condition. The overall good quality of the roads is a benefit to all countywide users. Looking more closely at each interval, of all the segment-miles in a high minority area (Interval 5), 9.96 percent of the miles have a poor OPI. To compare, the miles in areas with less diversity (Interval 1), are 8.98 percent poor OPI. However, the size in each interval makes comparisons difficult. Of the 70 miles of poor pavement, only 1 mile of poor OPI was located in high minority concentration areas (Interval 5), and about 15 miles were in minority interval areas 3 to 5 combined. Of all poor-condition roads by OPI, 71.77 percent were in Interval 1 areas.

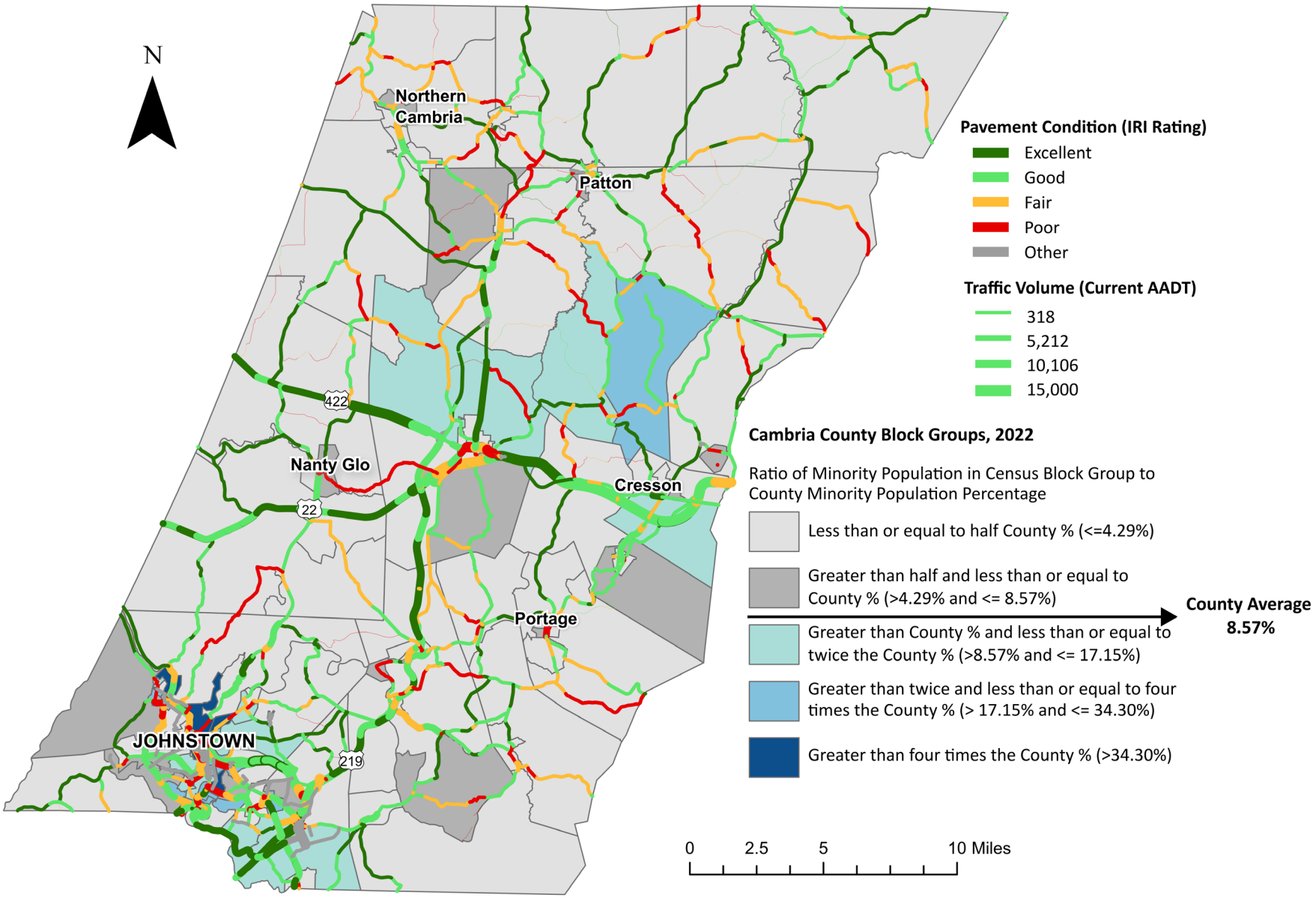
The same interval size problem occurs when analyzing the pavement condition in low-income areas. There is approximately one mile  located in the highest concentration census block of low-income residents (Interval 5). There is not enough data to draw a strong conclusion.

Intervals with poverty rates above the countywide average (Intervals 3, 4, and 5) contain only 22 percent of all roadway miles. Intervals 4 and 5 have just 3.9 percent of total county roadway milage combined.  Although there are much fewer state roadway miles in intervals with higher poverty rates, 17.7 percent of pavement in Intervals 4 and 5 is rated poor for IRI. In Interval 5 (with just 0.9 miles), 54 percent is rated poor for IRI and 33 percent is rated other. There are no miles rated excellent or good in this interval. In comparison, Interval 1 contains 53.6 percent of the county's state roadway miles. Of those miles, 13.8 percent are rated poor and 62.9 percent are rated excellent or good.

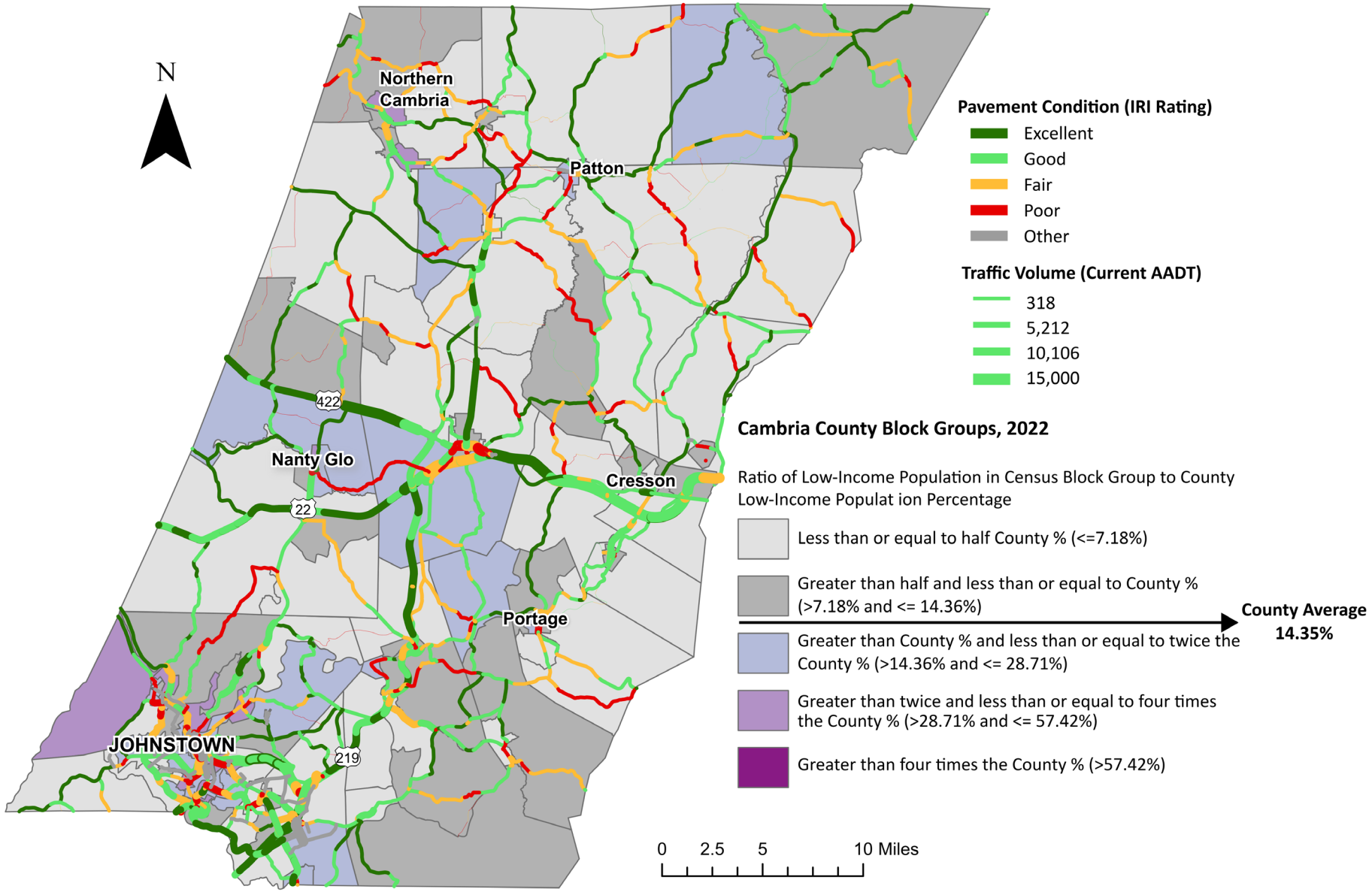
Overall, of the state roadway miles, intervals with poverty rates above the countywide average contain 20.2 percent of the roadway mileage rated excellent for OPI in the county and 17.3 percent for IRI. In all, 25.6 percent of the county's poor IRI and 21.8 percent of poor OPI are found in these intervals, despite this interval containing only 22 percent of all roadway miles.

Although there are significantly fewer roadway miles in the block groups with high low-income and minority populations, efforts should be made to create a more equal percentage of ratings among OPI and IRI condition of state roadway miles within each interval. The consideration of resurfacing/repaving projects to poor-condition miles should be focused in areas with higher than the county average of minority and low-income populations.

Figure G-3: Concentration of Minority Population and Pavement Condition Segments



## Figure G-4: Concentration of Low-Income Population and Pavement Condition Segments



### Bridge Condition

Bridge condition data was collected from PennDOT's Bridge Management System 2 (BMS2). The portal contains inspection data for bridges over 20 feet in length using National Bridge Inspection Standards (NBIS). The inspection process rates the deck, superstructure, and substructure separately. If one of those elements is in poor condition, the entire bridge is rated in poor condition. The total number of bridges in Cambria County is 421. Of these, 25, or 5.9 percent, are in poor condition.

Table G-8: Distribution of Bridge Condition by Minority Population Interval – Based on 8.57% County Average

| | Interval 1 | Interval 2 | Interval 3 | Interval 4 | Interval 5 | TOTAL |
|---|---|---|---|---|---|---|
| Total Population | 67,199 | 25,085 | 21,028 | 13,211 | 6,740 | 133,263 |
| Total Population (in %) | 50.43% | 18.82% | 15.78% | 9.91% | 5.06% | 100% |
| Minority Population | 1,268 | 1,468 | 2,541 | 3,317 | 2,833 | 11,427 |
| Minority Population (in %) | 11.10% | 12.85% | 22.24% | 29.03% | 24.79% | 100% |
| | | | | | | |
| All Bridges | 279 | 50 | 38 | 37 | 17 | 421 |
| All Bridges in (%) | 66.3% | 11.9% | 9.0% | 8.8% | 4.0% | 100.0% |
| All Poor Bridges | 14 | 4 | 2 | 3 | 2 | 25 |
| All Poor Bridges (%) | 56.0% | 16.0% | 8.0% | 12.0% | 8.0% | 100.0% |
| | | | | | | |
| All Bridges Total Deck Area | 774,105 | 111,598 | 297,695 | 103,510 | 422,295 | 1,709,204 |
| All Bridges Total Deck Area (%) | 45.3% | 6.5% | 17.4% | 6.1% | 24.7% | 100.0% |
| All Poor Deck Area | 17,199 | 4,977 | 20,907 | 3,468 | 28,707 | 75,258 |
| All Poor Deck Area (%) | 22.9% | 6.6% | 27.8% | 4.6% | 38.1% | 100.0% |
| | | | | | | |
| State Bridges | 230 | 36 | 35 | 21 | 12 | 334 |
| State Bridges (%) | 68.9% | 10.8% | 10.5% | 6.3% | 3.6% | 100.0% |
| Poor State Bridges | 5 | 1 | 2 | 0 | 1 | 9 |
| Poor State Bridges (%) | 55.6% | 11.1% | 22.2% | 0.0% | 11.1% | 100.0% |
| | | | | | | |
| Local Bridges | 49 | 14 | 3 | 16 | 5 | 87 |
| Local Bridges (%) | 56.3% | 16.1% | 3.4% | 18.4% | 5.7% | 100.0% |
| Poor Local Bridges | 9 | 3 | 0 | 3 | 1 | 16 |
| Poor Local Bridges (%) | 56.3% | 18.8% | 0.0% | 18.8% | 6.3% | 100.0% |

Table G-9: Distribution of Bridge Condition by Low-Income Population Interval – Based on 14.36% County Average

| | Interval 1 | Interval 2 | Interval 3 | Interval 4 | Interval 5 | TOTAL |
|---|---|---|---|---|---|---|
| Total Population | 45,114 | 35,528 | 30,430 | 15,519 | 465 | 127,056 |
| Total Population (in %) | 35.51% | 27.96% | 23.95% | 12.21% | 0.37% | 100% |
| Low-Income Population | 1,911 | 3,683 | 6,486 | 5,853 | 307 | 18,240 |
| Low Income Population (in %) | 10.48% | 20.19% | 35.56% | 32.09% | 1.68% | 100% |
| | | | | | | |
| All Bridges | 169 | 112 | 96 | 43 | 1 | 421 |
| All Bridges in (%) | 40.1% | 26.6% | 22.8% | 10.2% | 0.2% | 100% |
| All Poor Bridges | 7 | 8 | 4 | 6 | 0 | 25 |
| All Poor Bridges (%) | 28.0% | 32.0% | 16.0% | 24.0% | 0.0% | 100% |
| | | | | | | |
| All Bridges Total Deck Area | 555,272 | 370,956 | 620,996 | 152,304 | 9,676 | 1,709,204 |
| All Bridges Total Deck Area (%) | 32.5% | 21.7% | 36.3% | 8.9% | 0.6% | 100% |
| All Poor Deck Area | 22,844 | 13,721 | 32,024 | 6,669 | - | 75,258 |
| All Poor Deck Area (%) | 30.4% | 18.2% | 42.6% | 8.9% | 0.0% | 100% |
| | | | | | | |
| State Bridges | 143 | 87 | 77 | 26 | 1 | 334 |
| State Bridges (%) | 42.8% | 26.0% | 23.1% | 7.8% | 0.3% | 100% |
| Poor State Bridges | 5 | 2 | 2 | 0 | 0 | 9 |
| Poor State Bridges (%) | 55.6% | 22.2% | 22.2% | 0.0% | 0.0% | 100% |
| | | | | | | |
| Local Bridges | 26 | 25 | 19 | 17 | - | 87 |
| Local Bridges (%) | 29.9% | 28.7% | 21.8% | 19.5% | 0.0% | 100% |
| Poor Local Bridges | 2 | 6 | 2 | 6 | 0 | 16 |
| Poor Local Bridges (%) | 12.5% | 37.5% | 12.5% | 37.5% | 0.0% | 100% |

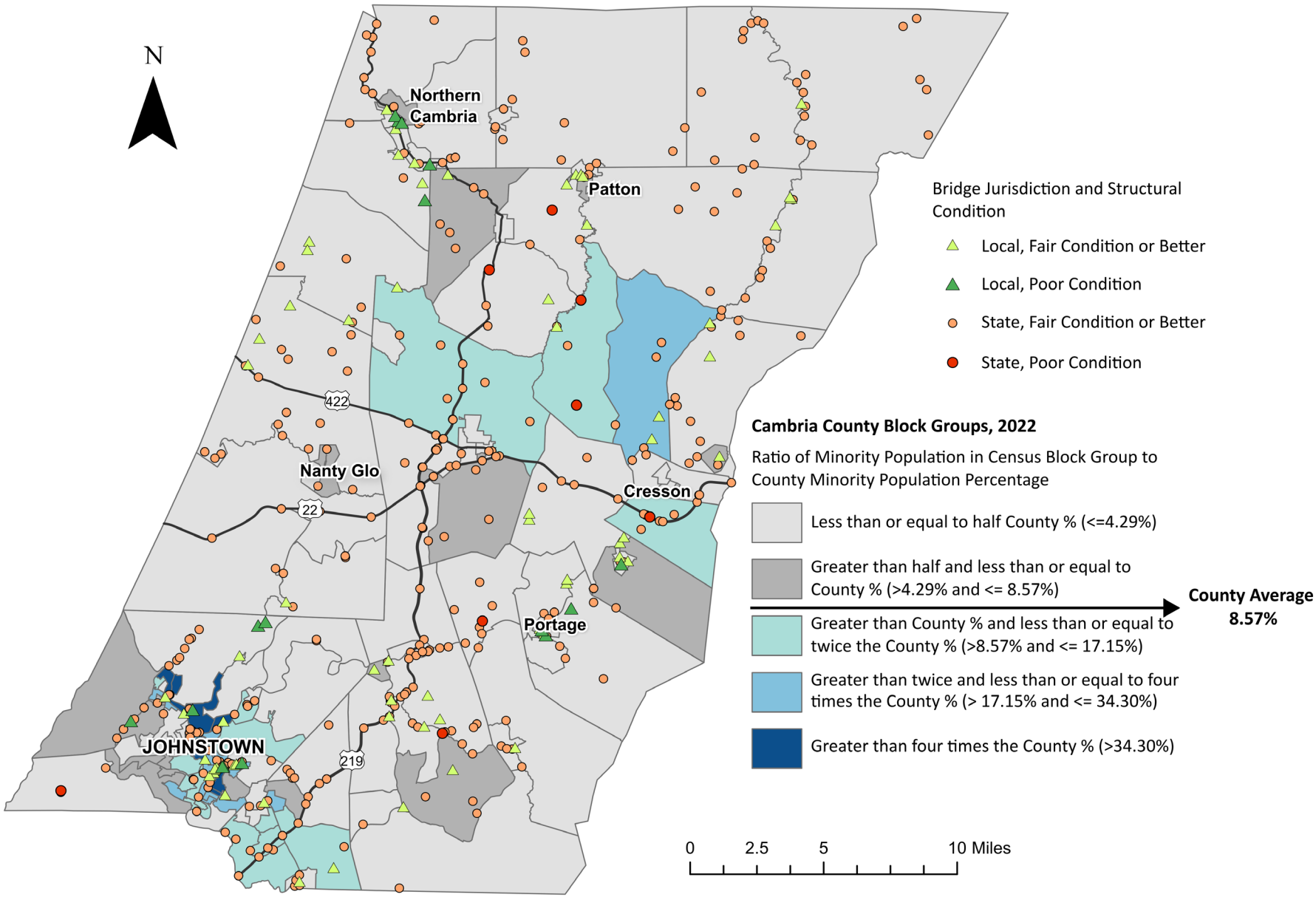
Overall, Cambria County bridges are in good condition, which is a benefit to everyone in Cambria County. As with pavement, sample size poses a challenge in evaluating the environmental justice of bridge condition. Seventy-eight (78) percent of all bridges are located in areas with few minority concentrations (intervals 1 and 2) and 60 percent of all bridges are located in areas with few low-income concentrations (intervals 1 and 2).

In areas with higher-than-average minority population (intervals 3, 4, and 5) of the 92 bridges in the census blocks, only seven are in poor condition. In areas with higher-than-average low-income population (intervals 3, 4, and 5) of the 140 bridges, only 10 are in poor condition.

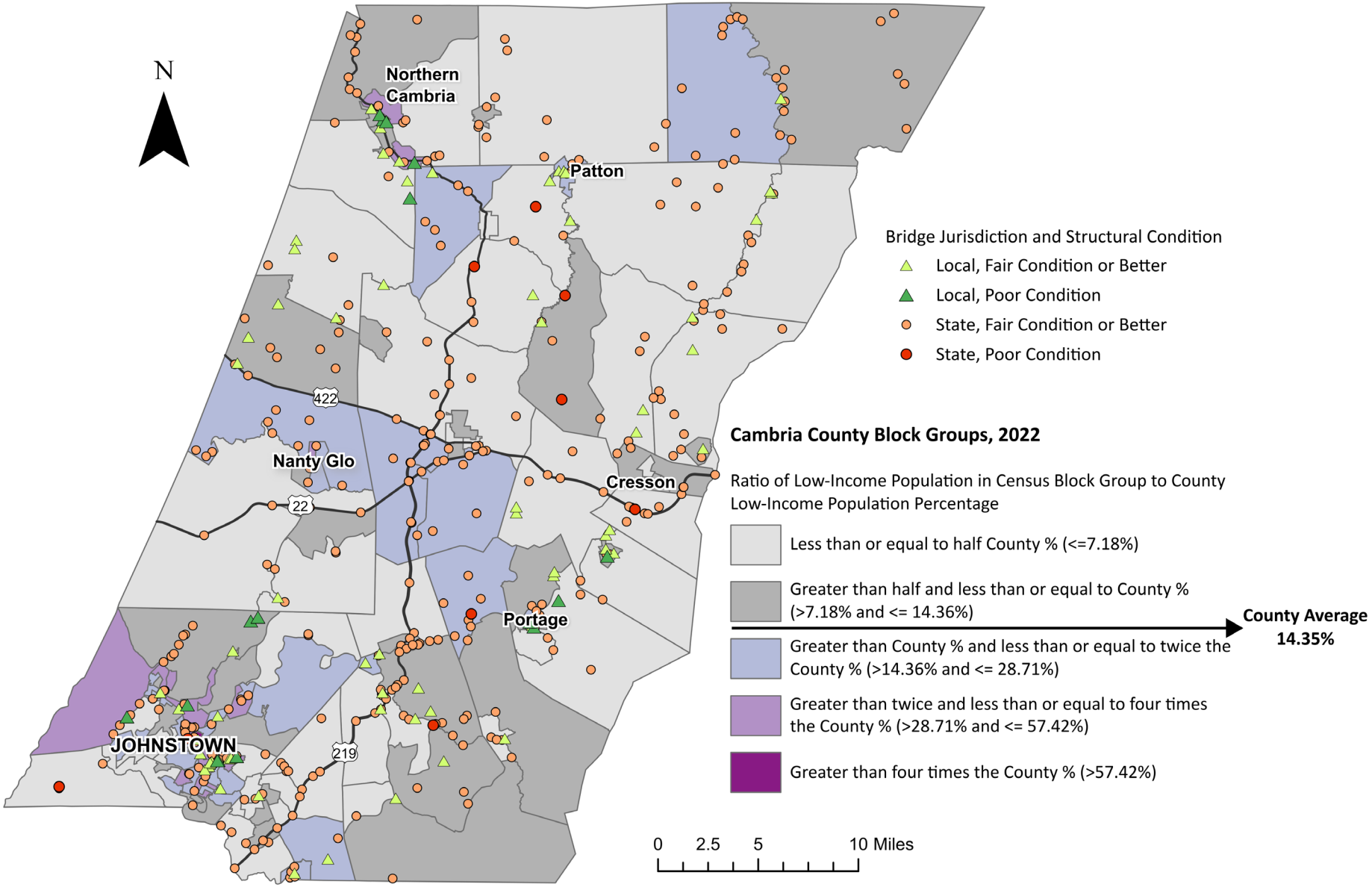
In census blocks where the minority population is higher than the average (intervals 3, 4, and 5), only three out of 68 state bridges are in poor condition. Similarly, in areas where the low-income population is higher than the average (intervals 3, 4, and 5), only two out of 104 state bridges are in poor condition.

No disproportionately high impacts to low-income and minority populations were found for bridge condition.

## Figure G-5: Concentration of Minority Population and Bridges



## Figure G-6: Concentration of Low-Income Population and Bridges



## Injury and Fatal Vehicular Crashes

Statewide crash data is collected by PennDOT and made publicly available through the Pennsylvania Crash Information Tool (PCIT). The most recent data available at the time of this analysis was from January 2018 to December 2022. The total number of reportable crashes in Cambria County for that period was 5,324. This includes vehicular crash fatalities and suspected serious injury crashes, crashes in which a person on a bicycle was involved, and crashes in which a pedestrian was involved.

Table G-10: Distribution of Crashes (2018-2022) by Minority Population Interval – Based on 8.57% County Average

| Minority Population Interval | All Reportable Crashes | Fatal Crashes | Suspected Serious Injuries Crashes | Percent Reportable Crashes | Percent Fatality | Percent Serious Injury Crash |
|---|---|---|---|---|---|---|
| 1 | 2,815 | 29 | 111 | 52.9% | 59.6% | 53.1% |
| 2 | 647 | 7 | 28 | 12.2% | 14.9% | 13.4% |
| 3 | 1,005 | 5 | 27 | 18.9% | 10.6% | 12.9% |
| 4 | 526 | 5 | 31 | 9.9% | 10.6% | 14.8% |
| 5 | 331 | 1 | 12 | 6.2% | 2.1% | 5.7% |
| **Total** | **5,324** | **47** | **208** | **100%** | **100%** | **100%** |

Table G-11: Distribution of Crashes (2018-2022) by Low-Income Population Interval – Based on 14.36% County Average

| Low-Income Population Interval | All Reportable Crashes | Fatal Crashes | Suspected Serious Injuries Crashes | Percent Reportable Crashes | Percent Fatality | Percent Serious Injury Crash |
|---|---|---|---|---|---|---|
| 1 | 2,351 | 28 | 84 | 44.2% | 59.6% | 40.2% |
| 2 | 1,115 | 9 | 45 | 20.9% | 19.1% | 21.5% |
| 3 | 1,233 | 7 | 48 | 23.2% | 14.9% | 23.0% |
| 4 | 597 | 3 | 28 | 11.2% | 6.4% | 13.4% |
| 5 | 28 | 0 | 4 | 0.5% | 0.0% | 1.9% |
| **Total** | **5,324** | **47** | **209** | **100%** | **100%** | **100%** |

Of the reported vehicular fatalities and serious injuries, 81 (31.6 percent) took place within census block groups with higher-than-average minority population, and 90 (35.2 percent) were located within block groups with higher-than-average low-income population. Unlike bridges or pavement, vehicular crashes are not necessarily tied to a specific location. A person with a low income could be in a crash in an area with a high-income population. However, safety for all is the highest priority of the Cambria County MPO's 2050 Long-Range Transportation Plan and it is clear that more can be done to improve safety in areas with low-income and minority populations.

### Non-Motorized Crashes

Non-motorized crashes were evaluated. The data in the charts below show the number of people riding a bicycle or walking who were involved in crashes. The data also shows the number of fatalities and serious injuries that occurred.

Table G-12: Distribution of Crashes (2018-2022) by Minority Population Interval – Based on 8.57% County Average

| Minority Population Interval | Bicycle | | | Pedestrian | | | Total Bicycle-Pedestrian Crashes | Percent Bicycle-Pedestrian Crashes |
|---|---|---|---|---|---|---|---|---|
| | Total Crashes | Fatalities | Suspected Serious Injuries | Total Crashes | Fatalities | Suspected Serious Injuries | | |
| 1 | 6 | 0 | 2 | 24 | 3 | 2 | 30 | 27.0% |
| 2 | 3 | 0 | 0 | 11 | 1 | 2 | 14 | 12.6% |
| 3 | 3 | 0 | 1 | 24 | 1 | 4 | 27 | 24.3% |
| 4 | 4 | 0 | 2 | 21 | 0 | 7 | 25 | 22.5% |
| 5 | 3 | 0 | 0 | 12 | 0 | 1 | 15 | 13.5% |
| **Total** | **19** | **0** | **5** | **92** | **5** | **16** | **111** | **100%** |

Table G-13: Distribution of Crashes (2018-2022) by Low-Income Population Interval – Based on 14.36% County Average

| Low-Income Population Interval | Bicycle | | | Pedestrian | | | Total Bicycle-Pedestrian Crashes | Percent Bicycle-Pedestrian Crashes |
|---|---|---|---|---|---|---|---|---|
| | Total Crashes | Fatalities | Suspected Serious Injuries | Total Crashes | Fatalities | Suspected Serious Injuries | | |
| 1 | 5 | 0 | 1 | 16 | 5 | 2 | 21 | 18.9% |
| 2 | 3 | 0 | 1 | 15 | 0 | 2 | 18 | 16.2% |
| 3 | 8 | 0 | 1 | 37 | 0 | 5 | 45 | 40.5% |
| 4 | 3 | 0 | 2 | 20 | 0 | 4 | 23 | 20.7% |
| 5 | 0 | 0 | 0 | 4 | 0 | 3 | 4 | 3.6% |
| **Total** | **19** | **0** | **5** | **92** | **5** | **16** | **111** | **100%** |

Of the reported bicycle and pedestrian crashes, 67 (60.4 percent) took place within census block groups with higher-than-average minority population, and 72 (64.9 percent) were located within block groups with higher-than-average low-income population. These numbers indicate that the majority of bicycle and pedestrian crashes occur in the higher-than-average minority and low-income block groups. More needs to be done to improve no-motorized safety in these areas.

As noted above, safety is the top priority for this LRTP. The MPO will continue to address safety issues while collaborating with PennDOT and other organizations with a role in transportation safety. Safety initiatives for implementation across the county include:

- Plan for improved traffic incident management.
- Identify priority roadway corridors and intersections for safety improvements.
- Assist in updating the bike-ped plan, which was last updated in 2021.
- Incorporate Vulnerable Road User (VRU) data into planning decisions and project listings.

The Cambria County MPO will consider the disproportionate distribution of bicycle and pedestrian crashes while implementing these strategies.

**Condition Summary**

The physical asset maintenance in Cambria County is overall very good. This, in turn, lowers the amount of poor pavement miles and poor bridges that are located in higher-than-average (intervals 3, 4, and 5) low-income and minority census blocks. Motorized vehicle crashes, both fatal and injury-causing, are prevalent in all census block groups. While the causes of crashes are diverse, the 2023-2026 Highway/Bridge TIP contains many safety-focused projects discussed in the Performance Management section.

More than half of all non-motorized crashes involving people walking or riding a bicycle occurred in environmental justice population areas. While the county has been working on a number of initiatives including Connecting Cambria Bicycle and Pedestrian Plan, Connecting Cambria 2.0, and Bicycle Level of Service and Trail mapping products have been produced, it is clear from the numbers that more work needs to be done to address these problems. The expansion of HSIP funding with the IIJA/BIL legislation in 2021 expanded eligibility to "vulnerable road users" and will be able to be used to address non-motorized safety issues going forward.

### Transit

The Cambria Transit Authority (CamTran) is especially focused on reaching environmental justice populations. Transit stops in each minority and low-income interval are shown in Tables G-14 and G-15. CamTran provides paratransit service throughout all of Cambria County, on a shared-ride basis, utilizing vehicles owned and operated by CamTran.

The public transportation projects on the 2023-2026 Transit TIP do not affect a specific geographic location. Thus, the transit projects are not included on the project maps.

Investing in public transit can provide more transportation options, expanding access to jobs, healthcare, and other essential destinations. CamTran's Local Coordinated Plan helps serve underserved populations through public transit.

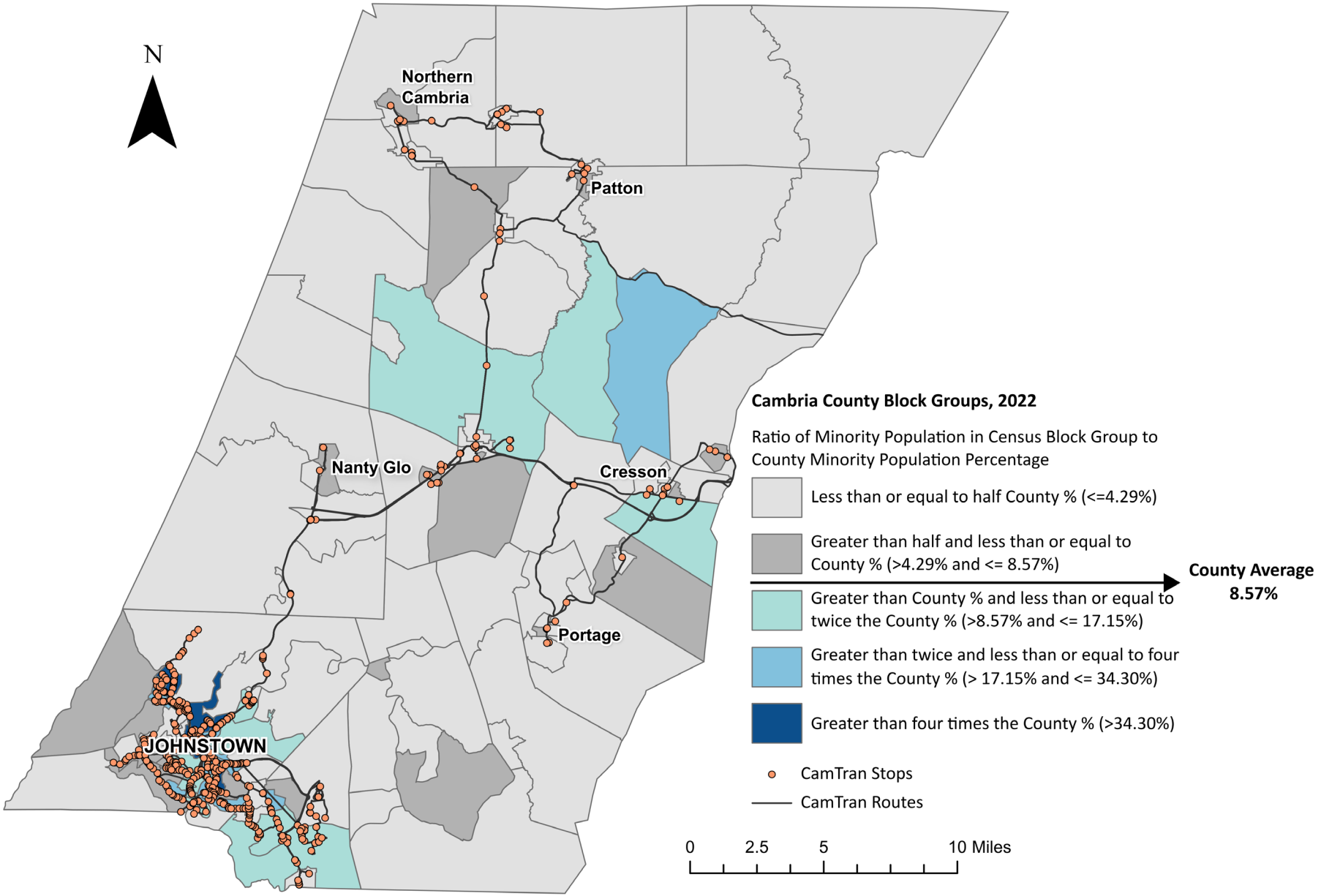
**Table G-14: Minority Transit Stops by Interval – Based on 8.57% County Average**

| | Interval 1 | Interval 2 | Interval 3 | Interval 4 | Interval 5 | TOTAL |
|---|---|---|---|---|---|---|
| Transit Stops | 174 | 80 | 108 | 114 | 89 | 565 |
| Transit Stops (%) | 31% | 14% | 19% | 20% | 16% | 100% |

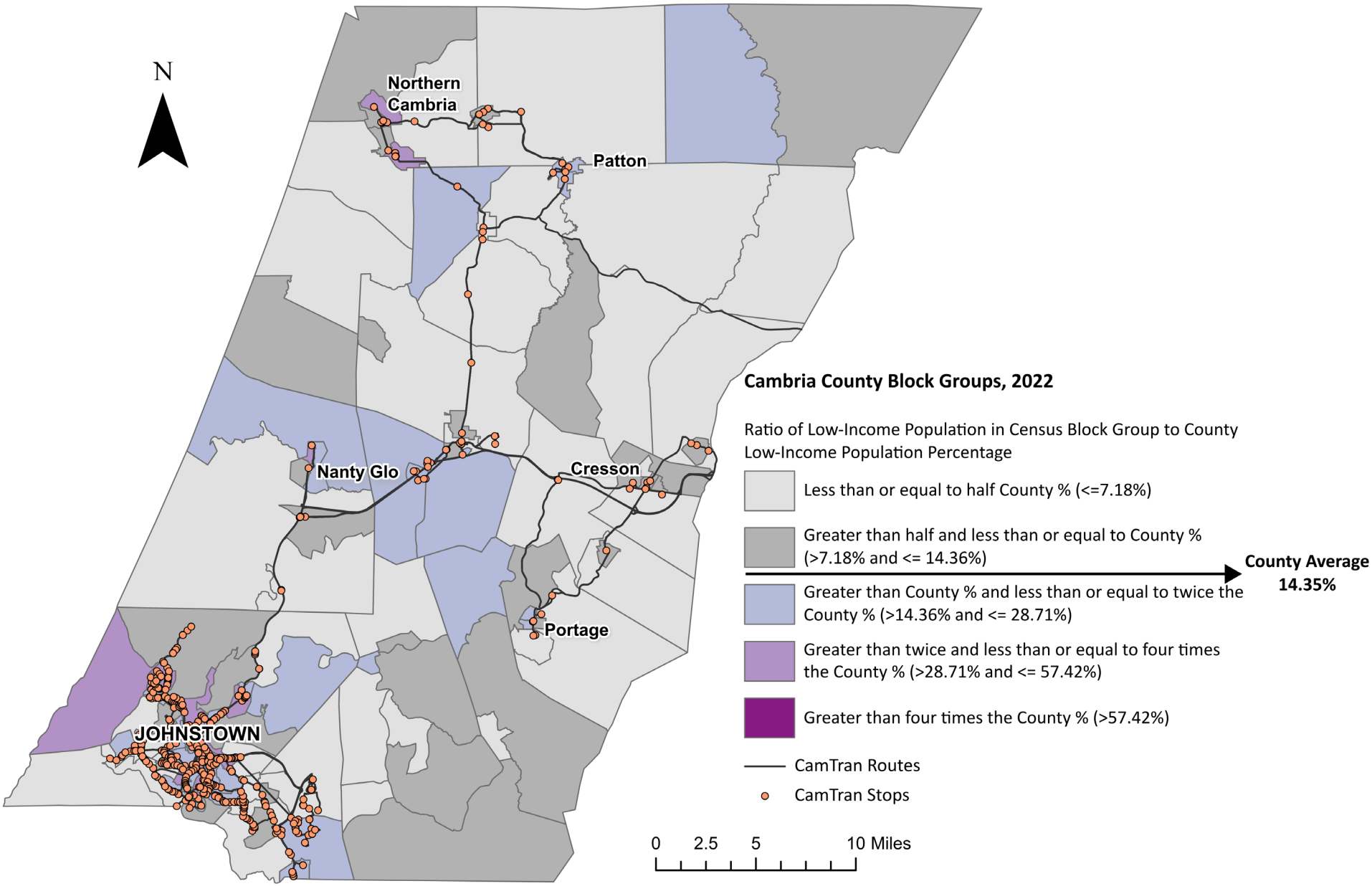
**Table G-15: Low-Income Transit Stops by Interval – Based on 14.36% County Average**

| | Interval 1 | Interval 2 | Interval 3 | Interval 4 | Interval 5 | TOTAL |
|---|---|---|---|---|---|---|
| Transit Stops | 119 | 93 | 202 | 144 | 7 | 565 |
| Transit Stops (%) | 21% | 16% | 36% | 25% | 1% | 100% |

Figure G-7: Concentration of Minority Population and Transit Stops



## Figure G-8: Concentration of Low-Income Population and Transit Stops



## Benefits and Burdens

The benefits that the Transportation Improvement Program (TIP) can provide to low-income and minority populations in Cambria County include improved access, mobility, safety, and environmental quality. The burdens of the program can be a reduction in any of those areas to a community. All conditions were overlaid onto low-income and minority concentration maps and tables.

To identify and address these benefits and burdens, a qualitative analysis of the 2025-2028 Highway/Bridge and Transit projects was undertaken.

While poor-condition bridges were fairly distributed in areas with low minority and low-income concentrations, the Cambria MPO continues to maintain all bridges safely. In addition to TIP base funds for bridge repair, the IIJA/BIL introduced a new bridge funding category—BRIP. Cambria County also administers programs for bridges owned by municipalities. These are the Cambria County At-Risk Bridge Program and the $5 Local Use Fee Program. These programs further enhance the condition of bridges throughout Cambria County.

For vehicular safety project selection, the MPO and PennDOT rely on the Network Screening Tool to evaluate locations where safety improvements are needed. These projects are selected to receive federal HSIP funds.

Injury or fatal crashes and pedestrian and bicycle crashes have a high concentration in low-income and minority population areas. This will be taken into consideration as projects in those areas move forward. Safety improvements such as accessible pedestrian signals, ADA curve ramps, widening shoulders, repairing sidewalks, and adding pedestrian refuge islands will be incorporated into projects wherever possible. The MPO will also work to advance the bike routes identified Cambria's Active Transportation Plan and the 2050 Long-Range Transportation Plan. Walking trails, bike lane recommendations, and sidewalk gaps are some of the issues the plans addressed.

### 2025-2028 Highway and Bridge Projects

All projects in the Draft 2025-2028 Highway/Bridge TIP (4 years) were overlaid onto the environmental justice maps, as discussed, following. Not all projects have a specific location.

## Qualitative Evaluation of TIP Projects

A qualitative evaluation of the 2025-2028 Highway and Bridge Program was undertaken to evaluate the potential adverse effects of the program that disproportionately impact minority and low-income populations. A few of these adverse effects could include destruction or disruption of community cohesion or a community's economic vitality, increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community, destruction or disruption of the availability of public and private facilities and services, adverse employment effects, or destruction or disruption of human-made or natural resources.

The Cambria County MPO reviewed transportation projects located in areas that were determined to be "high minority" or "high in-poverty." "High minority," for the purpose of this analysis, refers to census block groups that have a concentration of minority persons that is greater than or equal to the county average of 8.57 percent. "High in-poverty" refers to census block groups that have a concentration of low-income persons that is greater than or equal to the county average of 14.35 percent.

The projects were categorized by their potential to impact minority and low-income populations. Knowing a project's impact type clarifies the implications of its location near these populations. Some projects may deliver countywide benefits in terms of improved mobility and accessibility but have localized adverse effects that may be borne by minority and low-income populations in proximity to the project.

Tables G-16 and G-17 detail the estimated total cost of each project type, the percentage of the total cost, and the total per-capita cost.

**Table G-16: Minority Intervals and Estimated Cost by Project Type**

| Percent Minority by Block Group Interval | | Interval 1 | Interval 2 | Interval 3 | Interval 4 | Interval 5 | TOTAL |
|---|---|---|---|---|---|---|---|
| **Population Share by Interval** | Total Population | 67,199 | 25,085 | 21,028 | 13,211 | 6,740 | 133,263 |
| | Share of Total Population | 50% | 19% | 16% | 10% | 5% | |
| | Minority Population | 1,268 | 1,468 | 2,541 | 3,317 | 2,833 | 11,427 |
| | Share of Minority Population | 11% | 13% | 22% | 29% | 25% | |
| **Bridge Projects** (Bridge Preservation - Federal, Bridge Replacement, and Bridge Restoration) | Amount of Estimated Funding | $34,344,013 | $2,658,237 | $5,531,291 | $1,477,000 | $4,670,071 | $48,680,612 |
| | Percentage of Funding | 70.5% | 5.5% | 11.4% | 3.0% | 9.6% | |
| **Highway Projects** (Highway Restoration) | Amount of Estimated Funding | $48,742,015 | $4,858,914 | $7,534,603 | $1,071,101 | $1,313,571 | $63,520,204 |
| | Percentage of Funding | 76.7% | 7.6% | 11.9% | 1.7% | 2.1% | |
| **Maintenance Projects** (Preventative Maintenance) | Amount of Estimated Funding | $3,870,802 | | $310,863 | $7,958 | $31,180 | $4,220,802 |
| | Percentage of Funding | 91.7% | 0.0% | 7.4% | 0.2% | 0.7% | |
| **Safety Projects** (Rail Highway Grade Crossing, Safety Improvement) | Amount of Estimated Funding | $1,925,183 | $938,361 | $3,006,456 | $448,490 | $51,510 | $6,370,000 |
| | Percentage of Funding | 30.2% | 14.7% | 47.2% | 7.0% | 0.8% | |
| **All Projects** | Amount of Estimated Funding | $88,882,013 | $8,455,512 | $16,383,212 | $3,004,549 | $6,066,331 | $122,791,617 |
| | Percentage of Funding | 72.4% | 6.9% | 13.3% | 2.4% | 4.9% | |
| | Per-Capita Funding | $1,323 | $337 | $779 | $227 | $900 | $3,566 |

**Table G-17: Low-Income Intervals and Estimated Cost by Project Type**

| Percent Low-Income by Block Group Interval | | Interval 1 | Interval 2 | Interval 3 | Interval 4 | Interval 5 | TOTAL |
|---|---|---|---|---|---|---|---|
| **Population Share by Interval** | Total Population | 45,114 | 35,528 | 30,430 | 15,519 | 465 | 127,056 |
| | Share of Total Population | 36% | 28% | 24% | 12% | 0% | |
| | Minority Population | 1,911 | 3,683 | 6,486 | 5,853 | 307 | 18,240 |
| | Share of Minority Population | 10% | 20% | 36% | 32% | 2% | |
| **Bridge Projects** (Bridge Preservation - Federal, Bridge Replacement, and Bridge Restoration) | Amount of Estimated Funding | $22,447,342 | $8,334,485 | $10,169,051 | $7,729,734 | $0 | $48,680,612 |
| | Percentage of Funding | 46.1% | 17.1% | 20.9% | 15.9% | 0.0% | |
| **Highway Projects** (Highway Restoration) | Amount of Estimated Funding | $32,337,780 | $13,079,110 | $16,870,956 | $1,232,357 | | $63,520,204 |
| | Percentage of Funding | 50.9% | 20.6% | 26.6% | 1.9% | 0.0% | |
| **Maintenance Projects** (Preventative Maintenance) | Amount of Estimated Funding | $826,000 | | $3,386,844 | $7,958 | | $4,220,802 |
| | Percentage of Funding | 19.6% | 0.0% | 80.2% | 0.2% | 0.0% | |
| **Safety Projects** (Rail Highway Grade Crossing, Safety Improvement) | Amount of Estimated Funding | $3,824,244 | $0 | $2,480,582 | $6,641 | $58,533 | $6,370,000 |
| | Percentage of Funding | 60.0% | 0.0% | 38.9% | 0.1% | 0.9% | |
| **All Projects** | Amount of Estimated Funding | $59,435,367 | $21,413,595 | $32,907,433 | $8,976,689 | $58,533 | $122,791,617 |
| | Percentage of Funding | 48.4% | 17.4% | 26.8% | 7.3% | 0.0% | |
| | Per-Capita Funding | $1,317 | $603 | $ 1,081 | $578 | $126 | $3,706 |

**Table G-18: Types of Impacts on Low-Income and Minority Populations**

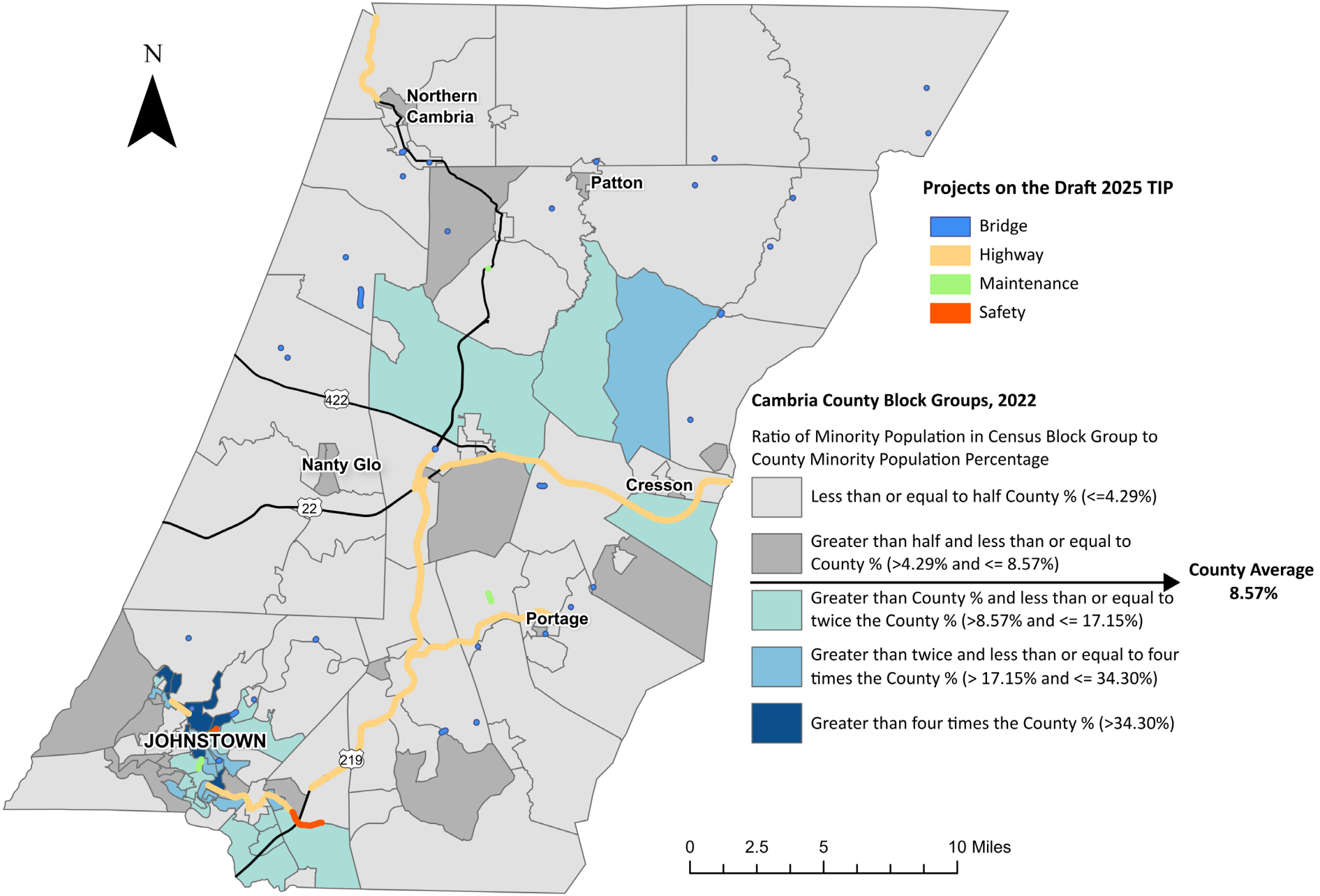
| | |
|---|---|
| High potential for adverse impacts | These may include major capital/capacity-adding or new right-of-way projects. |
| Medium potential for adverse impacts/potentially beneficial | These may include roadway and bridge maintenance projects. |
| Low potential for adverse impact/inherently beneficial | These may include transit, bike-ped, safety, or studies. |

**Table G-19: Impacts from the Draft 2025 TIP on Low-Income and Minority Populations – Based on Minority 8.57% and Low-Income 14.35% County Averages**

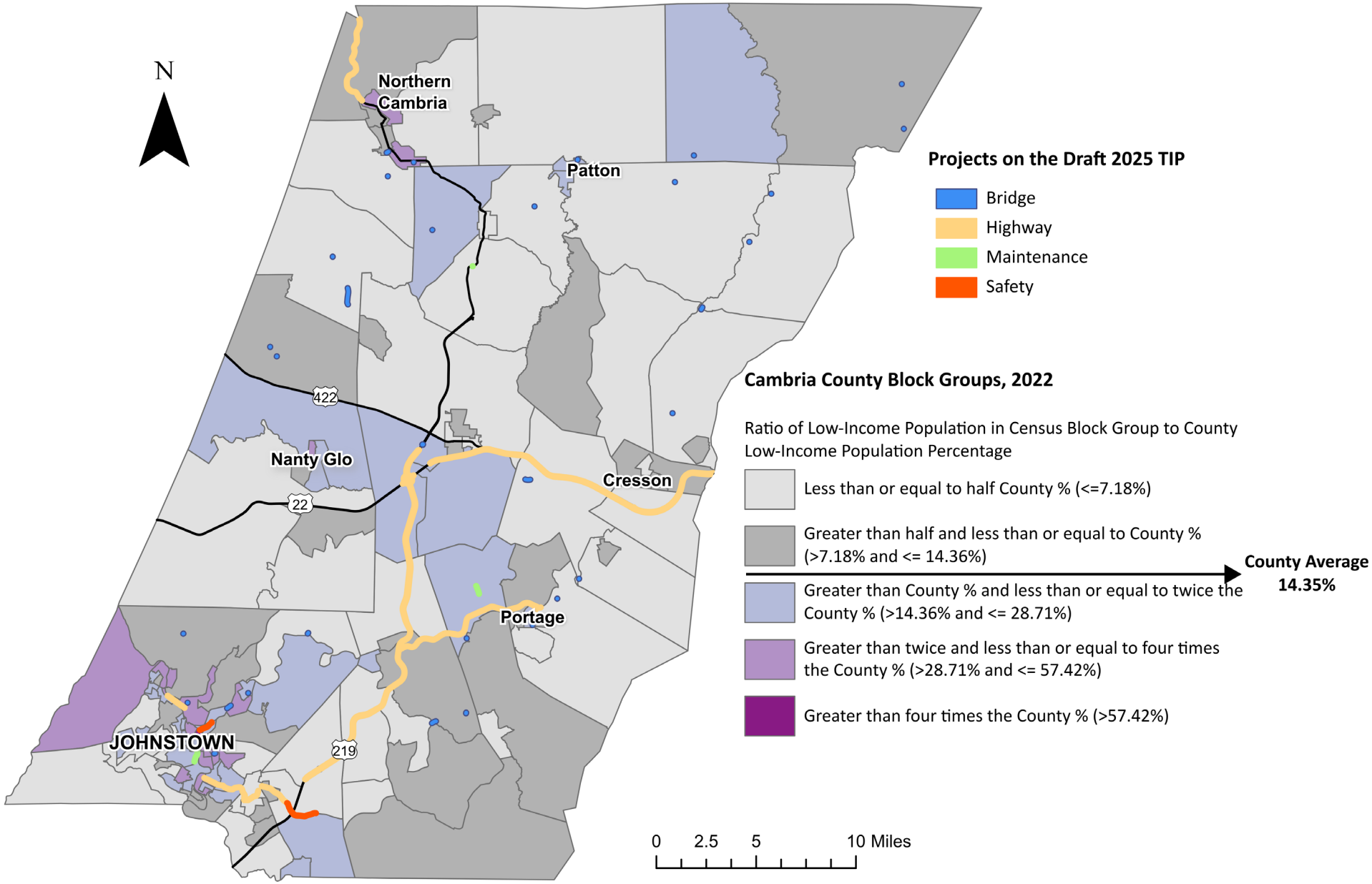
| MPMS # | Project Title | Minority Interval | Low-Income Interval | Project Type | Impact |
|---|---|---|---|---|---|
| 107229 | PA 53 - SR 3024 to PA 164 | Interval 1 | Interval 3 | Highway Restoration | Medium |
| 108162 | PA 756 - PA 403 to SR 301 | Interval 5 | Interval 4 | Highway Restoration | Medium |
| 110119 | PA 756 - Lamberd Ave to A | Interval 4 | Interval 2 | Highway Restoration | Medium |
| 110424 | US 22 - SR 4031 to PA 164 | Interval 3 | Interval 3 | Highway Restoration | Medium |
| 110437 | US 219 - PA 53 to US 422 | Interval 1 | Interval 3 | Highway Restoration | Medium |
| 113997 | US 22 - PA 164 to Blair C | Interval 3 | Interval 2 | Highway Restoration | Low |
| 114001 | PA 756 - Alvin St to Indu | Interval 3 | Interval 3 | Safety Improvement | Medium |
| 114040 | Sidman PA160 Super Repl 1 | Interval 2 | Interval 2 | Bridge Restoration | Medium |
| 114041 | Sidman PA160 Super Repl 2 | Interval 2 | Interval 2 | Bridge Restoration | Medium |
| 114043 | Mount Airy Drive over US | Interval 1 | Interval 1 | Bridge Restoration | Medium |
| 116926 | US 219 - PA 56 to PA 53 | Interval 1 | Interval 2 | Highway Restoration | Medium |
| 117007 | US 22 Segment 351 Over No | Interval 3 | Interval 1 | Bridge Restoration | Medium |
| 117008 | US 22 Segment 350 Over No | Interval 3 | Interval 1 | Bridge Restoration | Medium |
| 117012 | PA 271 Over North Branch | Interval 1 | Interval 1 | Bridge Restoration | Medium |
| 117016 | US 219 Abandoned Railroad | Interval 1 | Interval 1 | Preventive Maintenance | Medium |
| 117089 | Iron Street over Hincksto | Interval 5 | Interval 4 | Bridge Restoration | Medium |
| 117119 | PA 56 - PA 403 to 2nd Av | Interval 5 | Interval 4 | Highway Restoration | Medium |
| 117761 | US 219 Bridge Preservatio | Interval 2 | Interval 3 | Bridge Preservation - Federal | Medium |
| 119242 | PA 160 Slide North of Wil | Interval 1 | Interval 3 | Preventive Maintenance | Medium |
| 119278 | PA 271 Menoher Boulevard | Interval 5 | Interval 4 | Preventive Maintenance | Medium |
| 120394 | 8th Street Bridge over Fo | Interval 1 | Interval 4 | Bridge Restoration | Medium |
| 120425 | SR 4019 over Little Chest | Interval 1 | Interval 1 | Bridge Restoration | Medium |

| MPMS # | Project Title | Minority Interval | Low-Income Interval | Project Type | Impact |
|---|---|---|---|---|---|
| 120428 | SR 4002 over Little Elk C | Interval 1 | Interval 2 | Bridge Restoration | Medium |
| 120430 | SR 1025 over Burgoon Run | Interval 1 | Interval 1 | Bridge Restoration | Medium |
| 120431 | SR 3041 (BRKEY 8665) over | Interval 1 | Interval 2 | Bridge Restoration | Medium |
| 120432 | PA 271 over Little Conema | Interval 5 | Interval 4 | Bridge Restoration | Medium |
| 120552 | SR 3027 over PA 56 | Interval 4 | Interval 4 | Bridge Restoration | Medium |
| 121384 | SR 271 Clinton Street Cro | Interval 5 | Interval 5 | Rail Highway Grade Crossing | Low |
| 22338 | SR 4007 over California R | Interval 1 | Interval 1 | Bridge Restoration | Medium |
| 22380 | Sonman Avenue over Trout | Interval 2 | Interval 3 | Bridge Restoration | Medium |
| 22391 | T-406 Jamestown Rd over N | Interval 1 | Interval 1 | Bridge Restoration | Medium |
| 22491 | Franklin Borough Clapboar | Interval 1 | Interval 3 | Bridge Restoration | Medium |
| 22532 | SR 3035 over Little Conem | Interval 1 | Interval 3 | Bridge Restoration | Medium |
| 22570 | N Br Conemaugh Rn Br | Interval 1 | Interval 1 | Bridge Restoration | Medium |
| 22595 | SR 2015 over Little Conem | Interval 2 | Interval 1 | Bridge Restoration | Medium |
| 22622 | PA 53 Pattys Run Bridge | Interval 1 | Interval 1 | Bridge Restoration | Medium |
| 22633 | SR 1027 over Burgoon Run | Interval 1 | Interval 3 | Bridge Restoration | Medium |
| 67240 | T-513 over West Branch of | Interval 2 | Interval 3 | Bridge Restoration | Medium |
| 88597 | Brubaker Run Bridge | Interval 1 | Interval 1 | Bridge Replacement | High |
| 88696 | PA160 Conemaugh Rvr Culv | Interval 1 | Interval 3 | Bridge Restoration | Medium |
| 91675 | PA271 Susquehanna Rvr Br | Interval 1 | Interval 4 | Bridge Restoration | Medium |
| 92692 | PA160 Laurel Run Brdg #3 | Interval 1 | Interval 2 | Bridge Restoration | Medium |
| 94468 | PA 271 Elk Creek Bridge | Interval 1 | Interval 2 | Bridge Restoration | Medium |
| 94469 | PA 271 Browns Run Bridge | Interval 1 | Interval 1 | Bridge Restoration | Medium |
| 94491 | N Patton Chest Creek Brdg | Interval 1 | Interval 3 | Bridge Restoration | Medium |
| 96489 | Moss Crk Rd-Indiana Co Li | Interval 2 | Interval 4 | Highway Restoration | Medium |
| 98750 | Bradley Run Bridge | Interval 1 | Interval 1 | Bridge Restoration | Medium |
| 98753 | PA 53 Lost Creek Bridge | Interval 1 | Interval 1 | Bridge Restoration | Medium |
| 98762 | Lloydsville Run Bridge | Interval 1 | Interval 2 | Bridge Restoration | Medium |
| 98764 | PA865 Powell Run Bridge | Interval 1 | Interval 2 | Bridge Restoration | Medium |

## Figure G-9: Concentration of Minority and Draft 2025-2028 Transportation Improvement Program



## Figure G-10: Concentration of Low-Income and Draft 2025-2028 Transportation Improvement Program



## Conclusions

Based on the qualitative analysis, most projects will not require significant right-of-way acquisition, require the displacement of people, or cause burdens on the mobility, access, or environmental health of any community or population group. This is because most of the Highway and Bridge TIP is programmed to maintain the existing transportation system.

Most of the projects in the bridge and pavement categories of are believed to have some potential adverse or beneficial impact (Medium impact) on minority or low-income populations. More evaluation is required at each project. This is being done through the PennDOT Connects process.

Finally, some projects were labeled low impact. Transit projects and small safety projects such as railroad warning signs and ITS devices have little potential to have adverse impacts. Those projects with a fixed location are not located in areas with more than average low-income and minority populations. Overall, the 2025-2028 Cambria MPO Transportation Improvement Program will not exacerbate any of the existing conditions or place undue burden on any population.

# Appendix H: Acronyms

AADT .... Annual Average Daily Traffic

ACS ..... American Community Survey (U.S. Census Bureau)

ADA ..... Americans with Disabilities Act of 1990

ADT ..... Average Daily Traffic

AFC..... Alternative Fuels Corridor

AQ ..... Air Quality

ARC..... Appalachian Regional Commission

ATV..... All-Terrain Vehicle

BAMS ... Bridge Asset Management System

BIL ..... Bipartisan Infrastructure Law

BMP .... Best Management Practice

BOF..... Bridge Off-System Funding

BPN ..... Business Plan Network

BRIP..... Bridge Formula Investment Program

CCPC .... Cambria County Planning Commission

CCCRA... Cambria County Conservation & Recreation Authority

CMAQ ... Congestion Mitigation and Air Quality

CCMPO .. Cambria County Metropolitan Planning Organization

CNG ..... Compressed Natural Gas

CRP..... Carbon Reduction Program

CRFC .... Critical Rural Freight Corridors

CSA..... Combined Statistical Area

CSXT .... CSX Transportation

CUFC .... Critical Urban Freight Corridors

DVMT.... Daily Vehicle-Miles Traveled

EJ ..... Environmental Justice

EV..... Electric Vehicle

FAA ..... Federal Aviation Administration

FAST .... Fixing America's Surface Transportation Act

FFY ..... Federal Fiscal Year

FHWA ... Federal Highway Administration

HSIP .... Highway Safety Improvement Program

ICM..... Integrated Corridor Management

IRI ..... International Roughness Index

ITS..... Intelligent Transportation Systems

JST ..... John Murtha Johnstown–Cambria County Airport

LCP..... Local Coordinated Plan

LLCC..... Lowest Life-Cycle Cost

LOTTR ... Level of Travel Time Reliability

LQ..... Location Quotient

LRTP .... Long-Range Transportation Plan

LVRJ ..... Lehigh Valley Railroad Johnstown

MAP-21 .. Moving Ahead for Progress in the 21st Century Act

MPO .... Metropolitan Planning Organization

MSA ..... Metropolitan Statistical Area

NAICS ... North American Industry Classification System

NHFP .... National Highway Freight Program

NHPP ... National Highway Performance Program

NHS ..... National Highway System

NS..... Norfolk Southern

NWI ..... National Wetlands Inventory

OPI ..... Overall Pavement Index

PA ..... Pennsylvania

PAMS ... Pavement Asset Management System

PennDOT Pennsylvania Department of Transportation

PNDI .... Pennsylvania Natural Diversity Inventory

RAISE.... Rebuilding American Infrastructure with Sustainability and Equity Grant Program

RJCP..... R.J. Corman Railroad/Pennsylvania Lines

ROP ..... Regional Operations Plan

RPO ..... Rural Planning Organization

SPC..... Southwestern Pennsylvania Commission

SR..... State Route

STC ..... State Transportation Commission

STP ..... Surface Transportation Program

TIP ..... Transportation Improvement Program

TMDL ... Total Maximum Daily Load

TSMO ... Transportation System Management & Operations

TYP ..... 12-Year Program

UAV..... Unmanned Aerial Vehicle

USDOT... United States Department of Transportation

VRU ..... Vulnerable Roadway Users