

RATS
READING AREA TRANSPORTATION STUDY

FFY 2027-2050 LONG RANGE TRANSPORTATION PLAN

DRAFT



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FFY 2027-2050
LONG RANGE TRANSPORTATION PLAN
DRAFT MARCH 2026

READING AREA TRANSPORTATION STUDY
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READING AREA TRANSPORTATION STUDY
LONG RANGE TRANSPORTATION PLAN STEERING COMMITTEE

This plan was developed in cooperation with numerous federal, state, and local transportation representatives. Throughout the development process, the Reading MPO Long Range Transportation Plan (LRTP) Steering Committee provided valuable input, recommendations, and insight to develop this plan and ensure that the goals, objectives and policies will meet the needs of Berks County residents for the next 20 years.

THANK YOU! ***to the Reading MPO LRTP Steering Committee.***

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EXECUTIVE SUMMARY

The Reading Area Transportation Study (RATS) Long Range Transportation Plan (LRTP) provides context and detail to support future transportation funding and projects for Berks County's highways, bridges, and transit infrastructure over the next 20 years. This plan is developed following federal and state guidelines. Federal, state, and local plans are incorporated throughout this Long Range Transportation Plan to ensure consistency and help achieve the goals and objectives identified in this plan. The LRTP is fiscally constrained and does not program more projects than anticipated funding amounts. This plan identifies nearly $2 billion in transportation projects and line items through 2050.

This plan uses performance-based and data driven planning to support more effective and structured project selection and programming decisions. In addition, this plan incorporates a lowest life-cycle cost approach, focusing on making improvements to extend the life cycles of roadways and bridges. The plan outlines the region's long-range transportation vision and identifies the projects that are necessary through the year 2050 in order to attain that vision. Most importantly, federal funding cannot be allocated to transportation projects unless they are included within the list of projects that is included in this plan.

The most recent federal legislation, the Infrastructure Investment and Jobs Act (IIJA) of 2021, authorized $351 billion for highway and bridge programs and $91 billion for transit programs over the federal fiscal years 2022 through 2026. Pennsylvania's allocation for highway and bridge programs was approximately $13 billion with approximately $3.3 billion for freight and transit programs over the 5 years. Funds were also allocated for safety programs, climate change mitigation, expansion of the electric vehicle (EV) network, airport infrastructure improvements, and various discretionary grant programs. As of the writing of this plan, the IIJA has not been reauthorized, and a new transportation funding bill has not been established. As a result, funding for projects after FFY 2026 is assumed to remain flat at the last year of the bill's allocation levels, consistent with statewide financial guidance. As new legislation is developed and authorized, RATS will incorporate any changes into future transportation planning documents.

VISION STATEMENT

The Reading Area Transportation Study will promote a well maintained and balanced multimodal transportation system that will safely and efficiently move people and goods.

Background Trends

- In 2024, Berks County's population totaled 433,015, ranking 9th for most populated county in Pennsylvania
- By 2050, Berks County's population is projected to grow to 460,295 persons
- According to the U.S. Census Bureau definition of 'urban', 30 out of 72 municipalities in Berks County are considered 'urban'
- In Berks County, approximately 18% of the population is 65 and over
- In 2024, 13.5% of Berks County residents identified themselves as being disabled
- In 2024, 5.8% of Berks County households had limited to no proficiency with the English language
- In 2024, 8.7% of Berks County households do not have access to a vehicle
- According to the U.S. Census standards for identifying minorities, Berks County's average minority population was 26.1% in 2024.
- Berks County gained approximately 16,336 jobs from 2014 to 2024
- Over 97,000 Berks County residents commute out of the county for work
- More people are driving further distances for work than they had in 2018
- The predominant mode of travel to work remains driving alone versus carpooling or public transit use
- Agriculture remains the predominant land use accounting for 36% of the nearly 550,000 acres of land that comprises Berks County

State of the System Trends

- Berks County had 3,292.52 linear miles of roadway in 2024
- Berks County Total Daily Vehicle Miles Traveled (DVMT) in 2024 was 9,028,964
- In 2024, there were 303,238 licensed drivers in Berks County
- There were 407,561 registered vehicles in Berks County in 2024
- A large portion of Berks County's roadways were in 'Good' condition in 2024
- Berks County had a total of 880 bridges in 2024; 62 posted, 11 closed
- In 2024, 6% of state-owned bridges in Berks County were in 'Poor' condition and 30% of local-owned bridges were in 'Poor' condition
- The Congestion Management Process evaluates 33 corridors for congestion in Berks County – 3 were identified as highly congested and 19 as moderately congested
- Despite increases in population, vehicle registrations, and Vehicle Miles Traveled (VMT), Berks County fatal crashes decreased nearly 30% and suspected serious injury crashes decreased approximately 8% from 2005 to 2024
- The majority of crashes in Berks County involve aggressive driving, speeding, and distracted driving behaviors

- Crashes involving Vulnerable Road Users (VRUs) increased from 2020 to 2024
- Truck freight is the region's most utilized method of transporting goods with I-176, I-78, I-76, and portions of US 422, US 222, PA 724, and SR 61 being the primary routes for truck traffic
- Four railroad companies conduct business on 125 linear miles of operational railroad lines in Berks County
- BARTA provided Fixed Route Service to over 2 million passengers in 2025 in Berks County
- There are 1,319 miles of sidewalks in Berks County
- The Reading Regional Airport is Berks County's primary general aviation facility

Issues

- Funding impacts the ability to address issues identified within the transportation system in Berks County
- Driving behaviors and age are major factors influencing safety on Berks County roadways
- The lack of available truck parking along major roadways continues to impact the movement of freight and impact safety throughout the region
- Expansion in warehouse and logistics developments increase the vehicle and truck volumes on major roadways in Berks County
- The 'Poor' condition rating for local-owned bridges in Berks County is greater than state-owned bridges
- Funding to maintain and improve local-owned bridges is minimal when compared to the overall need
- Congestion on Berks County roadways increases travel times
- Gasoline taxes, a major source of revenue to fund transportation improvements, have not increased
- There is an increased need to expand the infrastructure for alternative fuel vehicles including electric, propane, and natural gas vehicles
- There is an increased need to plan for the integration of autonomous vehicles, highly automated vehicles, and connected vehicles
- The increased use of electric powered micromobility vehicles on a vehicular focused transportation system creates safety implications
- Berks County does not currently have passenger air service or passenger rail service
- There are gaps in the active transportation network in Berks County

Goals and Performance Measures

This plan identifies 5 goals to help guide improvements that address the issues and needs of the transportation system in Berks County. Several objectives are identified to help achieve progress towards the goals in this plan. Additionally, performance measures are identified and analyzed to help track how well we will meet our mission over time. The goals, objectives, and performance measures support the vision statement for the Reading Area Transportation Study.

Goal 1	**Keep travelers safe and secure for all modes of transportation.**
Goal 2	**Maintain and improve the existing multimodal transportation system and services within fiscal constraints.**
Goal 3	**Invest in projects that strengthen and enhance economic development and tourism opportunities.**
Goal 4	**Give travelers a variety of well-designed transportation choices that are in good condition.**
Goal 5	**Enhance the County transportation system to address environmental impacts.**

RATS employs a qualitative approach in selecting projects using data to make investment and policy decisions to achieve the goals. We expect these projects to make positive, substantive progress towards meeting this plan's performance measures. Several performance measures and targets relating to safety, pavement and bridge conditions, and congestion management and air quality are identified in this plan. Additionally, projects that are programmed in support of the performance measures are identified. A map of all programmed projects identified in this plan can be found at the end of this executive summary.

The Long Range Transportation Plan is divided into three intervals as follows:

Short–Term (Years 1–4): This segment is also referred to as the Transportation Improvement Program (TIP). It includes the highest priority projects for the region. Most projects on the TIP have advanced to at least the environmental assessment/ preliminary engineering state. Most are scheduled for construction during the four – year period. Projects must be on the TIP to receive federal funding. To view projects included in the draft FFY 2027-2030 TIP, please visit https://onemap.penndot.gov/onemap/?mapId=113603

Mid–Term (Years 5–12): Projects in this category are generally in the early stages of detailed study. Some but not all may have advanced to the environmental and engineering analysis stage. Most projects in this category will be in the Needs Analysis stage. In most cases, specific funding requirements for projects in this phase will be very preliminary. Projects in the short-term and mid-term project list constitute the Pennsylvania Twelve Year Transportation Program (TYP). Major capital projects must be on the Twelve Year Program to receive state funding.

Long–Term (Years 13+): These are projects that have been identified in the mid-term as extending beyond year 12. Projects on the long range plan will require substantial further analysis and funding commitments before they can move forward to the environmental assessment, preliminary design, final design and construction. These also include ongoing programs or practices expected to continue through this period. Finally, it includes line items within specific funding categories that will be drawn upon to fund both asset management and program driven projects as they are identified in subsequent LRTP and TIP updates.

Major Corridor Initiatives

Over the 20+ years of this LRTP, RATS has initiated project programming for several major corridors in Berks County.

US 222 North Corridor

Short-Range – Widening of US 222 from Maidencreek Township through Richmond Township to the Kutztown Bypass including median barriers and construction of roundabouts at its intersections with Pleasant Hills Road and Richmond Road.

Mid-Range – Construction will be completed on the widening project.

Long-Range – Anticipated reconstruction of the section of US 222 North extending from the Kutztown Bypass to the Lehigh County Line.

US 422 West Shore Bypass Corridor

A phased reconstruction and widening to 6-lanes extending from SR 12 to just east of I-176 including upgraded interchanges and replacement of all related structures including the Bingaman Street Bridge.

Short-Range – Phase 1 - Completion of utility relocations and start of reconstruction from the Buttonwood Street overpass to just east of Lancaster Avenue, including the Penn Street/Penn Avenue and Lancaster Avenue interchanges, the reconstruction of the Bingaman Street Bridge, reconstruction of 2 bridges west of I-176 over Norfolk Southern railroad and the Schuylkill River and relocation of bicycle and pedestrian facilities associated with the Thun Trail.

Mid-Range – Construction will continue on Phase 1. Construction will begin on Phase 2 which extends from PA 12 to the Buttonwood Street overpass and from east of the Lancaster Avenue interchange to east of I-176, including reconstruction of the North Wyomissing Boulevard and I-176 interchanges and major bridge crossings of the Schuylkill River.

Long-Range – Anticipated completion of the US 422 West Shore Bypass reconstruction.

US 222 Auxiliary Lanes

Short-Range – Completion of utility relocations and construction of an additional auxiliary lane on US 222 southbound beginning where Berkshire Boulevard passes over US 222 to the Paper Mill Road exit.

Mid-Range – Construction of a northbound auxiliary lane on US 222 from the entrance ramp of the State Hill Road interchange to the SR 422 eastbound exit ramp.

Other major road and bridge projects that are identified in this plan include intersection and safety projects on PA 12 extending from Elizabeth Avenue to Mount Laurel Avenue in Alsace Township; intersection improvements on SR 183 at Old 22 in Upper Tulpehocken Township and in the area of Bernville Borough, Jefferson Township, and Penn Township; widening of SR 183 between US 222 and West Leesport Road in Bern Township; and three phases of widening and safety improvements to the SR 3023 State Hill Road Corridor extending from Colony Drive to Penn Avenue in the Borough of Wyomissing.

RATS also prioritizes and programs funding for transit projects with the South Central Transit Authority for its BARTA service area in Berks County. Transit projects consist primarily of scheduled vehicle replacements, facility improvements, and operational subsidies. This plan includes the Berks County portion of SCTA's Capital Improvement Program through 2050.

Funding from various discretionary grant programs is also planned and programmed based on the program requirements. PennDOT, SCTA, and municipalities are responsible for project implementation.

The Reading Regional Airport is a general aviation airport located in Bern Township and operated by the Reading Regional Airport Authority. It is the only public use airport in Berks County with asphalt runways. The Reading Regional Airport Authority receives federal, state, and local funding outside of RATS highway, bridge, and transit funding programs. While RATS does not fund airport improvements, RATS continues to support and coordinate with Reading Regional Airport in implementing their Strategic Plan. The Reading Regional Airport Authority Capital Improvement Program is included in this LRTP in support of the Reading Regional Airport achieving its goals.

The Schuylkill River Passenger Rail Authority (SRPRA), comprised of Berks, Chester, and Montgomery Counties and other stakeholders, was established in 2022 to evaluate and analyze the potential for reestablishing passenger rail service between Reading and Philadelphia. The process being undertaken by the SRPRA is building upon the lessons learned from prior studies and is primarily focused on partnering with Amtrak as the proposed operator and participating in the Federal Railroad Administration's (FRA) Intercity Rail Corridor Identification and Development Program (CIDP). Funding from FRA is integral to the success of SRPRA's objectives. RATS and staff continue to support the efforts of the SRPRA to reestablish passenger rail service in Berks County.

Plan Consistency

RATS considered previously developed plans and policies to ensure consistency in direction. At the federal level, it must be consistent with applicable laws, rules, and regulations. It must be consistent with the state's transportation plans, programs, and policies. It must also be consistent with the policies and objectives of the Berks County Comprehensive Plan.

RATS Long Range Transportation Plan Steering Committee

To ensure plan consistency and consideration of all modes of transportation, MPO staff established the RATS LRTP Steering Committee in July 2024. The Steering Committee included federal, state, and local transportation organizations and stakeholders that helped coordinate, review and advise MPO staff throughout the development of this LRTP. The first meeting of the Steering Committee was held in August 2024, and quarterly meetings thereafter were conducted virtually throughout the development process. The committee provided valuable insight in identifying current transportation system trends and future considerations based on trends identified throughout the document.

Public Participation

Multiple outreach meetings were conducted throughout the development of this LRTP. The official 30-day public review and comment period began on March 22 and ended on April 24. There were 4 public outreach meetings (2 in-person and 2 virtual) conducted during this period. There was a total of X comments received during this period. The comments received and responses to those comments can be found in the TIP and LRTP Appendix document.

INTRODUCTION

Welcome to the Long Range Transportation Plan (LRTP) for Berks County. This is our full-length document that provides context and detail to support future transportation funding and projects for Berks County's highways, bridges, and transit infrastructure. This plan addresses how we can meet the expectations for the Berks County transportation system over the next 20 years.

This plan focuses on maintenance and safety rather than adding capacity to the transportation network. It identifies nearly $2 billion in transportation projects through 2050. Progress has been made to improve poor bridges, improve safety, and to bring our county transportation infrastructure to modern standards, but there is always more to be done. Funding is limited and costs associated with projects continue to increase over time, all while our roads and bridges continue to age.

From 2024 to 2026, we spoke with many Berks County residents about their opinions, issues, and needs related to the existing transportation system. The challenges for us and our partners to build, operate, and maintain a system that meets the needs of Berks County have never been greater. To meet these challenges, this plan presents quality information in understandable terms and is flexible enough to adapt to a constantly changing landscape of needs and resources. We have strived to bring transparency to the tough transportation decisions that we have to make every day.

Our transportation system is complex. At approximately 865 square miles, Berks County is a large county ranking 18th largest in the state by area. It has nearly 3,300 miles of roads and approximately 880 bridges. The highway network is the backbone of Berks County's transportation system. Although most households have at least one car for transportation, some people remain transit dependent. Local bus service, as well as paratransit service for persons with disabilities and elderly residents, is provided in and around the Reading metro area. Intercity bus service links the region to adjacent counties, Philadelphia and New York City. Taxi service is available in the region. Although trucks handle most of the region's freight shipments, rail service is available via Norfolk Southern and several local railroads. Passenger rail service continues to be promoted and supported through coordination between local, state, and federal organizations and programs. The County's primary aviation facility, Reading Regional Airport, provides general aviation, corporate, and charter passenger services. Walkways, bikeways, greenways, and other transportation enhancements are growing alternatives to motorized transportation and are discussed in this plan.



VISION STATEMENT

The Reading Area Transportation Study will promote a well maintained and balanced multimodal transportation system that will safely and efficiently move people and goods.

Transportation decision making and funding is spread among many partners – legislators, PennDOT, local governments, RATS MPO, the Berks County Planning Commission, transit providers, privately-owned rail freight operators, transportation stakeholders and many others. In this document, we offer a snapshot of how these partners relate and how their respective transportation assets interconnect. Together, these pieces and partners form Berks County's transportation system.

Each Urbanized Area (UA) in the United States with a population of 50,000 or more is required by federal regulation to have a designated Metropolitan Planning Organization (MPO) to facilitate transportation planning on the local level. In Pennsylvania, there are 19 MPOs. The Reading Area Transportation Study (RATS) is the regional transportation planning organization for the Reading, Pennsylvania metropolitan area. The Reading MPO covers all of Berks County. Because the Reading urbanized area has a population greater than 200,000, the Reading MPO is designated as a Transportation Management Area (TMA). RATS facilitates the regional, performance-based planning process that serves as the basis for spending state and federal transportation funds for improvements to streets, highways, bridges, public transit, bicycle and pedestrian networks allocated to Berks County.

Created in 1964, RATS is comprised of two committees – the Technical Committee and the Coordinating Committee. The Technical Committee reviews items brought before the group and recommends actions to the Coordinating Committee. The Coordinating Committee is the policy body that formally adopts or approves items reviewed by the Technical Committee.

The eight-member RATS Technical Committee consists of representatives from:

- PennDOT Central Office in Harrisburg (1)
- PennDOT District 5-0 Office in Allentown (1)
- City of Reading (2)
- Berks County Planning Commission (2)
- South Central Transit Authority (SCTA) (1)
- Reading Regional Airport Authority (RRAA) (1)

The ten-member RATS Coordinating Committee consists of one representative each from:

- PennDOT Central Office in Harrisburg
- PennDOT District 5-0 Office in Allentown
- Berks County Board of Commissioners
- Berks County Planning Commission
- City of Reading
- Boroughs
- 1st Class Townships
- 2nd Class Townships
- South Central Transit Authority (SCTA)
- Reading Regional Airport Authority (RRAA)

RATS is responsible for prioritizing approximately $62 million annually to advance highway and bridge transportation projects throughout the County. Additional funding for transit projects is prioritized and programmed in coordination with South Central Transit Authority for BARTA in Berks County. Funding from various discretionary grant programs is also planned and programmed based on the program requirements. PennDOT, SCTA, and municipalities are responsible for project implementation.

The transportation planning staff of the Berks County Planning Commission serves as the technical staff to RATS. The staff coordinates and administers these committees, their meetings, and leads development of the package of federally required MPO products or programs including, but not limited to: the Long Range Transportation Plan (LRTP), short-range Transportation Improvement Program (TIP), associated transportation conformity determinations (if required), the Unified Planning Work Program (UPWP), and the Congestion Management Process (CMP).

The TIP is a capital-funding program that contains all surface transportation projects eligible for federal funding and programmed for implementation over the next four years. The UPWP identifies yearly work tasks that RATS will accomplish to meet the goals and objectives outlined in the LRTP. Since Berks County is a Transportation Management Area (TMA), RATS uses the CMP to monitor and manage traffic congestion in an effort to maximize the use of existing roads and improve air quality.

THE LONG RANGE TRANSPORTATION PLAN

The LRTP discusses socioeconomic trends affecting travel, the current state of the County transportation network, and characterizes transportation needs and multimodal transportation strategies to address these needs. The plan must be reviewed and updated every four years. The last plan was updated and approved in 2022. The RATS LRTP must be consistent with both federal and state guidelines, as well as with the Pennsylvania statewide LRTP.

This plan uses performance-based and data driven planning to support more effective and structured project selection and programming decisions. In addition, this plan incorporates a lowest life-cycle cost approach, focusing on making improvements to extend the life cycles of roadways and bridges. The plan outlines the region's long-range transportation vision and identifies the projects that are necessary through the year 2050 in order to attain that vision. Most importantly, federal funding cannot be allocated to transportation projects unless they are included within the list of projects that is included in this plan. The projects must be fiscally constrained, meaning that RATS cannot plan to spend more money than it reasonably expects to receive.

The primary focus of this plan is "asset management" – to maintain and improve the County's transportation system with an emphasis on making better use of existing highway, bridge and transit facilities, while seeking to improve safety and reduce traffic congestion, energy consumption, and motor vehicle emissions. Due to its size and topography, Berks County has countless transportation assets – ranging from thousands of miles of roads, approximately 880 bridges, hundreds of miles of rail track to fleets of buses. Many parts of the County transportation network have reached the end of their designed life span and have deteriorated over time.

The amount of financial resources we have to preserve every bridge and road is small in comparison to the transportation needs for Berks County. The federal gas tax has not increased since 1993 and is used to help fund highway, bridge, and transit improvements. In Pennsylvania, the general Motor License Fund is a dedicated account used to support the state's transportation needs. The account is funded primarily through gas taxes and vehicle-related fees. In an effort to help fund growing transportation needs across Pennsylvania, the state increased the gas tax by three cents on January 1, 2023. This increase was repealed at the state level shortly after the increase took effect. These funding resources for transportation improvements continue to diminish as use of fuel efficient, alternative fuel vehicles, and construction costs have increased. This plan leverages expected revenues to best address the needs of maintaining the transportation system through proper asset management and the implementation of low-cost operation improvements where feasible.

RATS has considered all locally available modes of transportation in compiling this plan, including the existing and future highway system, railroads, air travel, public transit, bicycle and pedestrian travel, and methods for improving intermodal connections for freight. Elements of the plan include an inventory of the County's transportation system, a listing of current and future problems that will need to be addressed, and a discussion of strategies to alleviate or eliminate these problems and achieve the stated goals and objectives by the year 2050.

It is important to note that while this plan focuses on the future of the transportation system, data obtained and used to address future considerations is derived from the past. The transportation system was heavily impacted by the COVID-19 pandemic. As a result, some of the data obtained for 2020 yielded skewed results as travel was restricted and remote work options became available. Deviations in data and information resulting from the COVID-19 pandemic are identified where applicable throughout this plan.

Plan Consistency

RATS considered previously developed plans and policies to ensure consistency in direction. At the federal level, it must be consistent with applicable laws, rules, and regulations. It must be consistent with the state's transportation plans, programs, and policies. It must also be consistent with the policies and objectives of the Berks County Comprehensive Plan. Those requirements are summarized below.

Federal Transportation Requirements (MAP–21, FAST Act, and IIJA)

The RATS 2050 LRTP is governed by many pieces of federal legislation over time that have incorporated various goals and approaches that MPOs need to follow. The Moving Ahead for Progress in the 21st Century Act (MAP-21) of 2012 helped establish a performance-based program and federal planning factors that need to be addressed and incorporated in the transportation planning program. The performance-based approach includes the establishment of performance measures and targets to help achieve goals and objectives. The Fixing America's Surface Transportation (FAST) Act of 2015 continued the emphasis on safety and strengthened the relationship between planning and the National Environmental Policy Act (NEPA). The federal planning factors and their relationship to this plan, as well as performance measures and targets are identified in Chapter 4 – Recommendations of this LRTP.

The most recent federal legislation, the Infrastructure Investment and Jobs Act (IIJA) of 2021, authorized $351 billion for highway and bridge programs and $91 billion for transit programs over the federal fiscal years 2022 through 2026. Pennsylvania's allocation for highway and bridge programs was approximately $13 billion with approximately $3.3 billion for freight and transit programs over the 5 years. Funds were also allocated for safety programs, climate change mitigation, expansion of the electric vehicle (EV) network, airport infrastructure improvements, and various discretionary grant programs. As of the writing of this plan, the IIJA has not been reauthorized, and a new transportation funding bill has not been established. As a result, funding for projects after FFY 2026 is assumed to remain flat at the last year of the bill's allocation levels. As new legislation is developed and authorized, RATS will continue to incorporate those principles into future transportation planning documents.

The Federal Highway Administration (FHWA) developed rules to guide the development of performance measures at state and regional levels. Both PennDOT and RATS use performance measures as they carry out Federal-Aid highway programs to assess system performance. This LRTP has addressed MAP-21, FAST Act, and IIJA requirements. RATS, in coordination with PennDOT, will incorporate these measures and targets in current and future LRTP updates.

In addition to MAP-21, FAST Act, and IIJA, a number of other federal and state laws, regulations, executive orders, policy directives, and planning frameworks influence and guide this plan:

- United States Department of Transportation (USDOT) 23 CFR (Code of Federal Regulation) Parts 450 and 500, and 49 CFR Part 613
- Clean Air Act Amendments of 1990
- United States Environmental Protection Agency (EPA) Conformity Regulation (40 CFR Parts 51 and 93)
- Americans with Disabilities Act (ADA)
- Title VI of the 1964 Civil Rights Act and related Presidential Executive Orders

State Transportation Requirements

PennDOT established a Statewide Long Range Transportation Plan and a comprehensive Freight Movement Plan (FMP) that were adopted in 2021. Statewide plans are also required to be compliant with federal transportation regulations. Both of these plans are currently being updated with completion anticipated to be in June 2026. Additional statewide plans that are considered and discussed throughout this LRTP include, but are not limited to:

- Pennsylvania State Rail Plan
- Pennsylvania Statewide Airport System Plan
- Pennsylvania Active Transportation Plan
- Historic Metal Truss Bridge Management Plan
- Pennsylvania Strategic Highway Safety Plan
- Regional Operations Plans

The RATS LRTP is consistent with the overall goals and policies of state and federal guidance. PennDOT continues to enhance and reassess performance measures and targets for the state. RATS has adopted performance measures and targets set by PennDOT. Chapter 4 – Recommendations further addresses performance measures and targets. It should be noted that this LRTP uses PennDOT-sourced data for pavement and bridge conditions, crash statistics, and relevant freight data so that our local performance targets and the data supporting them are consistent.

Berks County Comprehensive Plan

The Berks County Planning Commission updated the County Comprehensive Plan in 2020. A new County Comprehensive Plan is currently in development. The goals and objectives of the RATS LRTP are a component of the Berks County Comprehensive Plan. This ensures consistency between the two planning processes.

RATS Long Range Transportation Plan Steering Committee

To ensure plan consistency and consideration of all modes of transportation, MPO staff established the RATS LRTP Steering Committee in July 2024. The Steering Committee included federal, state, and local transportation organizations and stakeholders that helped coordinate, review and advise MPO staff throughout the development of this LRTP. The first meeting of the Steering Committee was held in August 2024, and quarterly meetings thereafter were conducted virtually throughout the development process. The committee provided valuable insight in identifying current transportation system trends and future considerations based on trends identified throughout the document.

Public Participation

Early efforts were made to engage and gather public input prior to development of the plan. A total of 14 initial public outreach meetings were conducted. The first set of public outreach meetings, held in October 2024, focused on development of the Vision Statement, Goals, and Objectives of the LRTP. Additionally, preliminary discussions regarding current transportation issues and needs were conducted. The second set of public outreach meetings, held in April and May 2025, focused on providing the public the opportunity to discuss current and potential future transportation issues and needs relating to any and all modes of transportation in Berks County. The majority of meetings were held in person across Berks County. For each set of initial public outreach meetings, at least one virtual meeting was available using Microsoft Teams.

As part of the initial public outreach, a survey was available for Berks County residents to provide input on the Vision Statement, Goals, Objectives, and identify transportation-related issues and needs.

MPO staff also participated in several opportunities to engage the public. A presentation on the LRTP and the development process was made to Reading City Council members at their Committee of the Whole meeting in May 2025. Council members provided input on current transportation issues and needs within the City of Reading. MPO staff sought public input at the Berks County Office of Aging Open House event. Participants provided insight into mobility and accessibility issues and needs within the transportation system. Additionally, MPO staff, as part of the Berks County Planning Commission Joint Comprehensive Planning Program, encouraged various Joint Comprehensive Planning committees to participate in RATS public outreach meetings and events, providing input on future transportation considerations within those Joint Planning regions.

Finally, MPO staff developed an LRTP Development Portal on Berks County Planning Commission's website, where the public could view draft maps and sections as they were prepared throughout the development process, LRTP Steering Committee meeting notes, and an anticipated timeline ending with the adoption/approval of the RATS LRTP. Documentation of public outreach efforts can be found in the TIP and LRTP Appendices document.

Plan Adoption

The LRTP is adopted by RATS and is provided for information purposes to decision makers of its member jurisdictions, the FHWA, the Federal Transit Administration (FTA), PennDOT, South Central Transit Authority (SCTA), and most importantly, the public. Once the plan is approved, projects identified in the plan are eligible for federal and state funding. Inclusion of a project on either the LRTP or Transportation Improvement Program (TIP) is not a commitment of funds, an obligation of funds or a grant of funds. Projects included in the project lists will be scheduled for funding and construction within current and future RATS Transportation Improvement Plans (TIPs). All projects programmed in these TIPs must first be identified in the LRTP or consistent with LRTP goals.

Projects identified in the LRTP that are on the short-range project lists will be programmed first as part of TIP development, which is updated every two years. Additionally, projects from the mid-range and long-range lists may also be advanced for funding and construction in the next two-year update of the TIP in FFY 2029, as identified in the state's Twelve Year Program (TYP), and before this LRTP is updated again by FFY 2031. Should the need arise to revise or amend this LRTP prior to the 4-year update cycle, RATS will follow the procedures identified in the RATS Public Participation Plan, as well as the guidance provided by PennDOT and the Federal Highway Administration. Additional information relating to the LRTP amendment procedure can be found in the TIP and LRTP Appendix document.

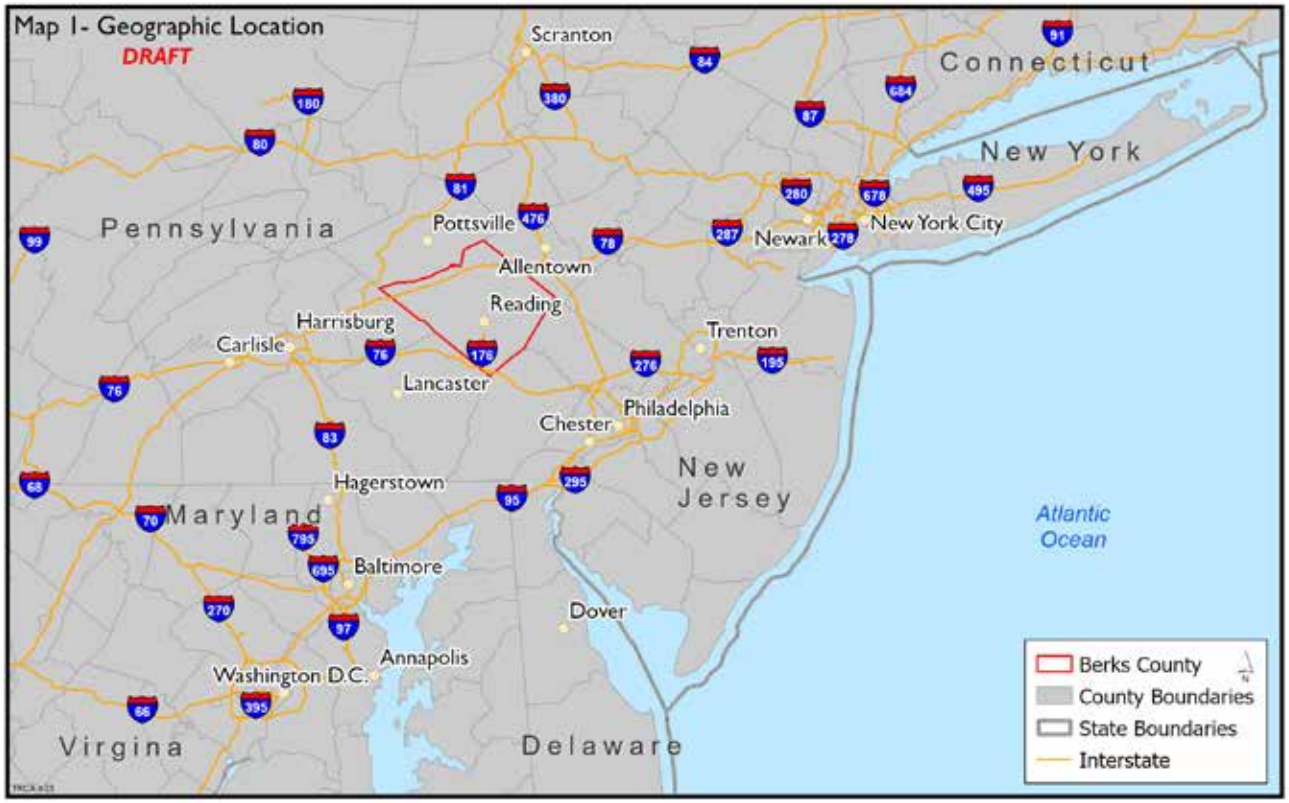
DEMOGRAPHICS

Berks County's transportation system is an essential asset, connecting residents and businesses to jobs, markets, goods, and services at local, national, and global levels. To anticipate how transportation in the county will evolve over the next 25 years, it is critical to analyze the socioeconomic and land-use factors that shape travel demand and patterns.

Population and employment growth typically drive increases in travel and commerce. Additional demographic and economic variables—such as age distribution, per capita income, the proximity of housing to jobs and services, household structure, education levels, and transportation costs—also play key roles in determining travel needs and preferences. Travel behavior often varies significantly across age groups. For instance, recent trends show that younger Americans are driving less than earlier generations for a variety of reasons, while older adults are staying in the workforce longer and maintaining more active lifestyles than their predecessors. These evolving demographics will guide future transportation planning, helping to create a balanced, multimodal system capable of addressing diverse mobility needs.

Geographic Location

Berks County is a county of the third class, comprised of 72 municipalities: 1 city, 27 boroughs, and 44 townships. It is located in southeastern Pennsylvania, surrounded by six other counties: Schuylkill County to the north, Lebanon and Lancaster counties to the west, Lehigh and Montgomery counties to the east and Chester County to the south (see Map 1). Reading, a city of the third class, serves as the county seat. The county's geographic location and transportation network promote accessibility and mobility for people and freight to several surrounding larger metropolitan areas including Allentown (39 miles), Philadelphia (56 miles), Baltimore (97 miles), and New York City (125 miles).



Berks County's topography has profoundly influenced its historical development and transportation network. The county spans a diamond-shaped area of 864 square miles, with its northern and southern borders defined by sections of the Blue and South Mountains—two ridges of the Appalachian chain—that rise to an average elevation of about 640 feet above sea level. Combined with the Schuylkill River and its extensive system of creeks and streams, the region's abundant limestone geology and rich, fertile soils attracted early settlers in the early 18th century.

Population

As of 2024, Berks County is home to 433,015 residents and is the ninth most populated county in Pennsylvania. In comparison to the six neighboring counties, it ranks fourth in overall population. From 2010 to 2020, population increased 4.2 percent, exceeding state figures but falling below the national rate of growth. Population growth slowed between 2020 and 2024, above the state but consistent with national trends.

Most counties show modest growth through 2030 - 2040, but that pattern diverges by 2050. Berks County's population shows growth through 2040, but that growth dramatically slows in 2040 – 2050. Surrounding counties like Lehigh, Lebanon, and Lancaster show the most sustained growth, while the older, industrial Schuylkill County is steadily losing population. Berks County ranked fourth in the number of in-migrants between 2017 – 2018. In 2021 – 2022, the latest data available, the county fell to fifth compared to the other six surrounding counties. The reasons for this are numerous but could include retirements or decisions on improving quality of life and employment prospects.

COUNTY POPULATION BETWEEN 2010 AND 2024

County	2010	2020	2024 Est.	% Change 10-20	% Change 20-24
Chester	498,886	534,413	547,840	7.1%	2.5%
Montgomery	799,874	856,553	867,573	7.1%	1.3%
Lehigh	349,497	374,557	378,792	7.2%	1.1%
Berks	**411,442**	**428,849**	**433,015**	**4.2%**	**1.0%**
Lancaster	519,445	552,984	557,931	6.5%	0.9%
Lebanon	133,568	143,257	144,186	7.3%	0.6%
Schuylkill	148,289	143,049	143,558	-3.5%	0.4%
Pennsylvania	12,702,379	13,002,700	13,018,639	2.4%	0.1%
United States	308,745,538	331,449,281	334,922,499	7.4%	1.0%

Source: U.S. Census, Census 2010, 2020, and American Community Survey, 2024 5-year Estimates (DP05)

COUNTY POPULATION PROJECTIONS, 2020 - 2050

County	2020 Census	2030 Projected	2040 Projected	2050 Projected	% Change 20-30	% Change 40 -50
Berks	**428,849**	**442,748**	**453,624**	**460,295**	**3.2%**	**1.5%**
Chester	534,413	552,077	567,038	571,892	3.3%	0.9%
Lancaster	552,984	569,039	583,665	599,146	2.9%	2.7%
Lebanon	143,257	148,872	155,167	161,410	3.9%	4.0%
Lehigh	374,557	391,415	405,502	416,810	4.5%	2.8%
Montgomery	856,553	864,526	866,836	858,686	0.9%	-0.9%
Schuylkill	143,049	138,732	133,698	127,877	-3.0%	-4.4%
Pennsylvania	13,002,700	13,185,540	13,226,568	13,195,997	1.4%	-0.2%

Source: U. S. Census, 2020 Dicennial Census, The Center for Rural Pennsylvania *Pennsylvania Population Projections 2030-2050*

COUNTY MIGRATION FOR 2017-2018 AND 2021-2022

2017-2018	In	Out	Difference
Chester	22,216	19,741	2,475
Montgomery	36,395	34,209	2,186
Berks	**13,063**	**12,582**	**481**
Lebanon	5,473	5,179	294
Schuylkill	4,053	3,869	184
Lehigh	16,237	16,436	-199
Lancaster	14,520	16,391	-1,871

2021-2022	In	Out	Difference
Chester	23,058	20,829	2,229
Schuylkill	5,259	4,246	1,013
Montgomery	37,432	36,797	635
Lebanon	5,540	5,148	392
Berks	**13,629**	**13,541**	**88**
Lehigh	16,501	17,023	-522
Lancaster	15,081	16,200	-1,119

Source: Internal Revenue Service, Statistics of Income Office, Migration Data, County to County Migration Data, 2017-2018 and 2021-2022

Population Density

Of the seven counties, Berks County has the fifth highest population density. This is in part due to the physical size of the county. The county is the 18th largest in the state and only Lancaster County is larger when comparing the seven neighboring counties.

The United States Census Bureau defines a place "urban' when the population density is a least 1,000 people per square mile. Based on current estimates, 30 of the 72 municipalities in Berks County could be considered "urban" by this definition.

Population density is an important consideration in transportation planning. As more people move into and within the county, the density of residential and employment opportunities changes in both magnitude and distribution. Reading and most of the older boroughs contain the highest densities of persons and jobs, while the rural areas contain more land and therefore, lower densities (see Map 2). The provision of transportation services is affected in different ways by density of people and jobs. Mass transit services operate more efficiently in very dense, urban areas. Areas that were formerly rural are now developing at suburban densities but are neither dense enough nor close enough to the transit system to warrant system expansion. Many rural roads, bridges, and intersections are not constructed to standards adequate to handle increased demands created by new development.

POPULATION DENSITY BY COUNTY, 2024

County	Size (Sq. Mi.)	2024 Pop. Est.	Density
Montgomery	483.0	867,573	1796.2
Lehigh	345.2	378,792	1097.3
Chester	750.5	547,840	730.0
Lancaster	943.8	557,931	591.2
Berks	**856.5**	**433,015**	**505.6**
Lebanon	361.8	144,186	398.5
Schuylkill	778.6	143,558	184.4

Source: U.S. Census Bureau, American Community Survey, 2024 Estimates (DP05)

Households

The household is the primary driver of trip making, so it is important to examine trends and forecasts of the number of households. Large families tend to generate fewer trips per person than do smaller families because there is a tendency towards increased vehicle occupancy with each trip. The number of households increased by 2.7 percent in Berks County between 2019 and 2024 ranking sixth out of the 7 counties. The lower rate of household growth mirrors the slow population growth the county is experiencing. In 2024, a Berks County household had 2.57 people per household (PPH), down slightly from 2.62 in 2019. The county has slightly more people per household than the state average of 2.39. Map 3 shows the persons per household by municipality in Berks County.

NUMBER OF HOUSEHOLDS, 2019 TO 2024

County	2019	2024	% Change
Chester	200,402	212,491	6.0%
Montgomery	334,387	350,351	4.8%
Lebanon	57,609	59,921	4.0%
Lancaster	210,985	219,224	3.9%
Lehigh	146,145	151,220	3.5%
Berks	**167,105**	**171,580**	**2.7%**
Schuylkill	69,870	67,295	-3.7%
Pennsylvania	5,693,314	5,806,452	2.0%
United States	137,428,986	143,775,355	4.6%

Source: U.S. Census, American Community Survey, 2019 and 2024 5-year Estimates (DP04)

Population Density by Municipality

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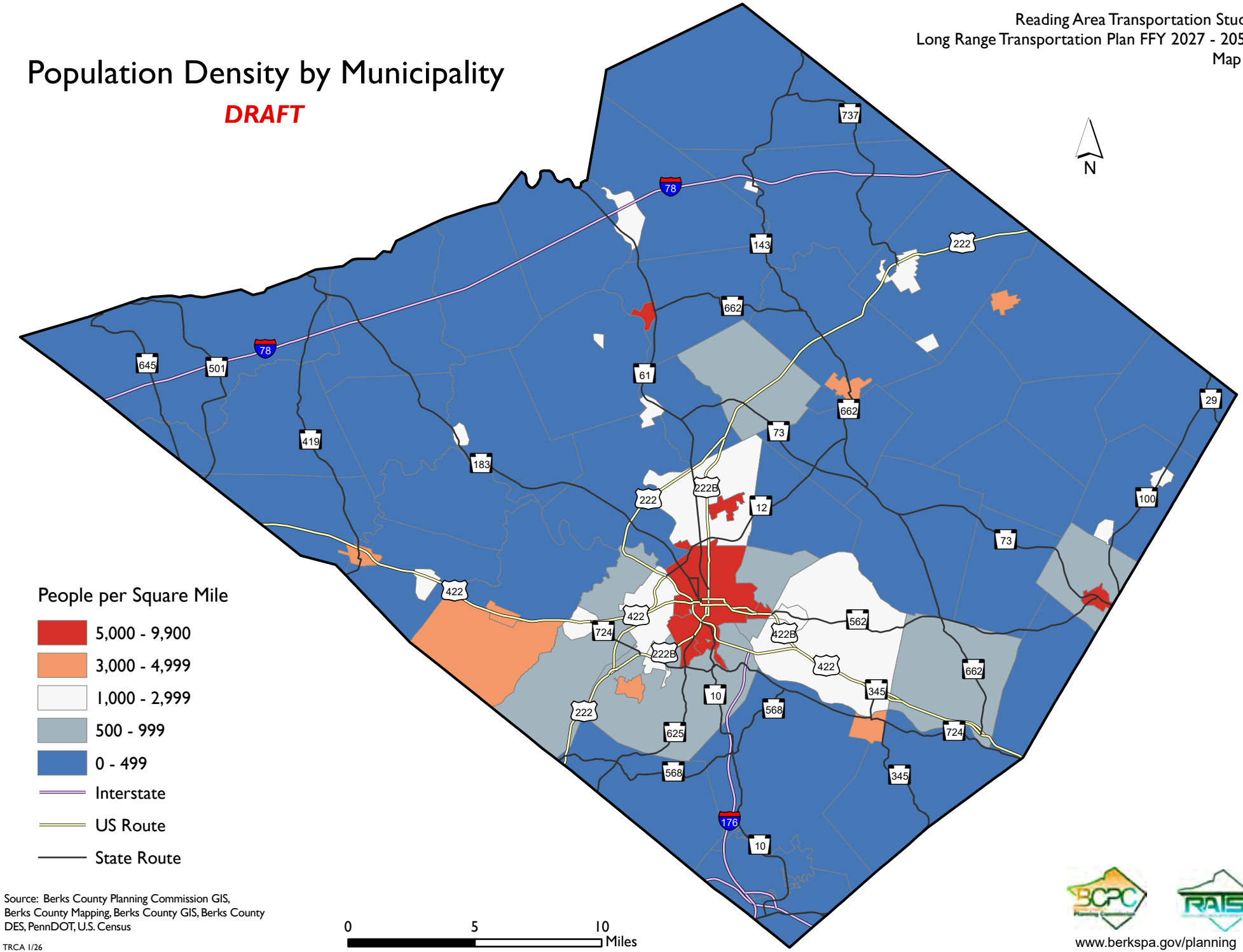

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, U.S. Census

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Persons Per Household by Municipality

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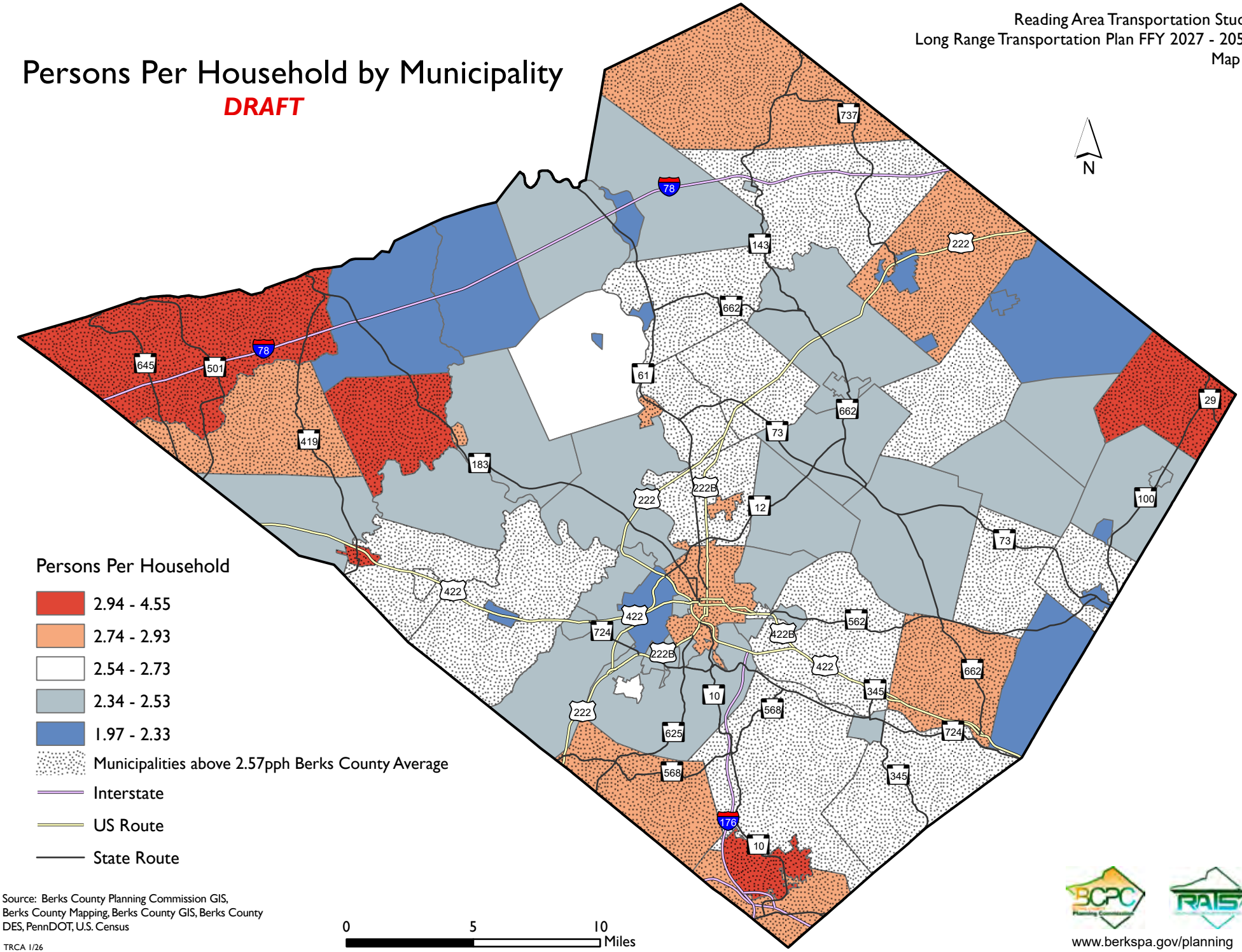

Persons Per Household

- 2.94 - 4.55
- 2.74 - 2.93
- 2.54 - 2.73
- 2.34 - 2.53
- 1.97 - 2.33
- Municipalities above 2.57pph Berks County Average
- Interstate
- US Route
- State Route

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, U.S. Census

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Berks County Poverty

In 2024, Berks County had the second highest overall poverty rate of the seven counties and is 0.5 higher than the state poverty rate. From 1960 – 2000, Schuylkill County had the highest overall poverty rate. Berks surpassed Schuylkill in the 2000 – 2010 decade. According to the latest estimates Schuylkill County again has the highest poverty rate out of the seven-county region. While the highest rates of poverty are in the City of Reading, several boroughs and townships have had considerable poverty gains in the last decade. (see Map 4)

To provide some explanation of why some Berks County municipalities saw substantial increases in poverty, staff explored American Community Survey data on usual hours worked during a week for those between the ages of 16 and 64 and median household incomes. Most Berks County municipalities have seen declines in hours worked with sharp declines in full-time employment hours. There have also been substantial increases in part-time employment and no employment whatsoever.

Berks County median household incomes grew 25.9 percent between 2019 and 2024. This rate is slightly below both state and national figures. There are some Berks County municipalities that have median household incomes that are below the state median.

Berks County Elderly Population

As the "baby boom" generation ages, the amount of elderly population in the region will increase which will have a significant impact on the transportation system. Driving will become difficult or impossible for many, as they grow older, with an increasing need for transit and paratransit services. Improvements in roadway signage, lighting, or other highway system elements will be needed to accommodate a higher number of drivers with visual or other physical challenges due to aging. In Berks County, 18 percent of the population is 65 and over, up from 16.9 percent in 2019. Statewide, the population age 65 and older is expected to rise from 19.5 percent in 2024 to 23 percent in 2040. Map 5 shows the concentrations of the 65 and over population by municipality in Berks County. According to the Federal Highway Administration, in 2023, drivers 65+ accounted for approximately 25.2 percent of all licensed drivers in Pennsylvania.

Elder mobility will be a focus of long- range transportation and safety planning. The vast majority of older adults prefer to "age in place" by continuing to live in their current homes and communities. Many older adults in Berks County are dependent on cars, particularly in the suburban and rural areas of the county, which typically developed around the motor vehicle as the primary mode of transportation.

Berks County Disabled Population

In 2024, 13.5 percent of Berks County residents identified themselves as being disabled. This is a very slight decrease from 13.7 percent in 2019. Map 6 shows the concentration of disabled people in Berks County. Disabled mobility will also be a focus of long-range transportation and safety planning as the majority of disabled people prefer to live in non-institutionalized settings such as nursing or personal care facilities or in their own homes. This trend will be constantly monitored and documented in subsequent plan updates because if the numbers increase rather than decrease it may elevate the need for transit and paratransit services in the boroughs and townships outside the metropolitan area.

Berks County Limited English Proficiency Households

Individuals who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English are considered by federal law to be limited English proficient, or "LEP." This language barrier may prevent individuals from accessing services and benefits. In 2024, 5.8 percent of Berks County households had limited to no proficiency with the English language. Map 7 shows many of those households are in the City of Reading, with other concentrations in Muhlenberg Township, Laureldale, Mount Penn and Kutztown Boroughs. Reading and Muhlenberg exceed the countywide average.

Berks County Zero Vehicle Households

Despite the dominance of automobiles, 8.7 percent of Berks County households do not have access to a vehicle. This is a slight increase from 8.3 percent in 2019. Map 8 shows the percentage of these households by municipality. Although the majority of Zero Vehicle Households are in the City of Reading, Map 8 shows several municipalities meet or exceed the county average. Lack of access to a personal vehicle or transit may leave residents with poor access to employment and healthcare centers. The more limited access to a private automobile, the more reliant on public transportation an individual or household becomes.

Berks County Minority Population

Minority populations are defined as those groups differing, especially in race or ethnic background from the majority of a population. For the purposes of this analysis, the United States Census standards for identifying minorities will be used. The average minority population in Berks County is 26.1 percent, an increase of 4.9 percent since 2019. The municipalities that exceed the county average are highlighted on Map 9.

Poverty Rates by Municipality

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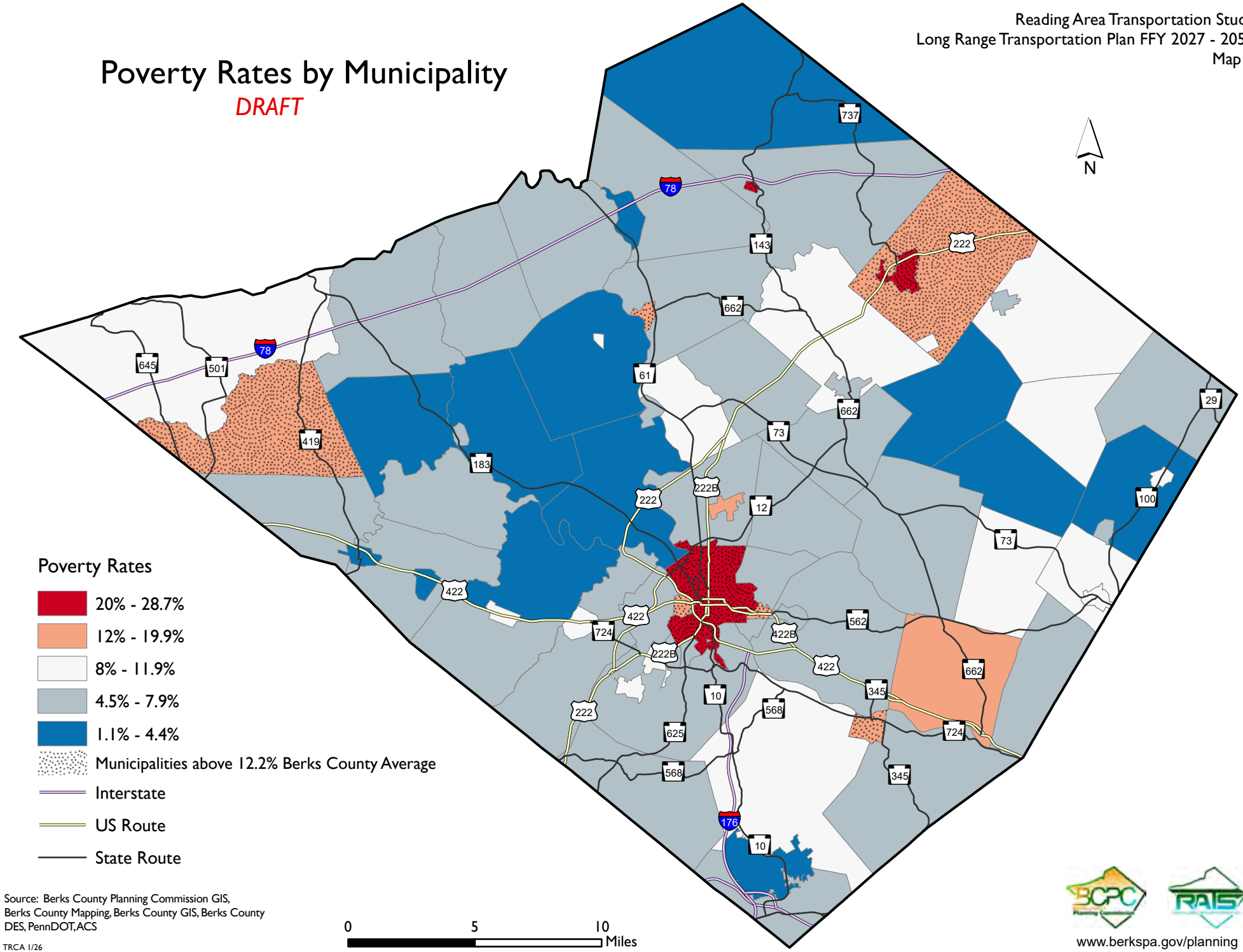

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, ACS

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Elderly Population by Municipality

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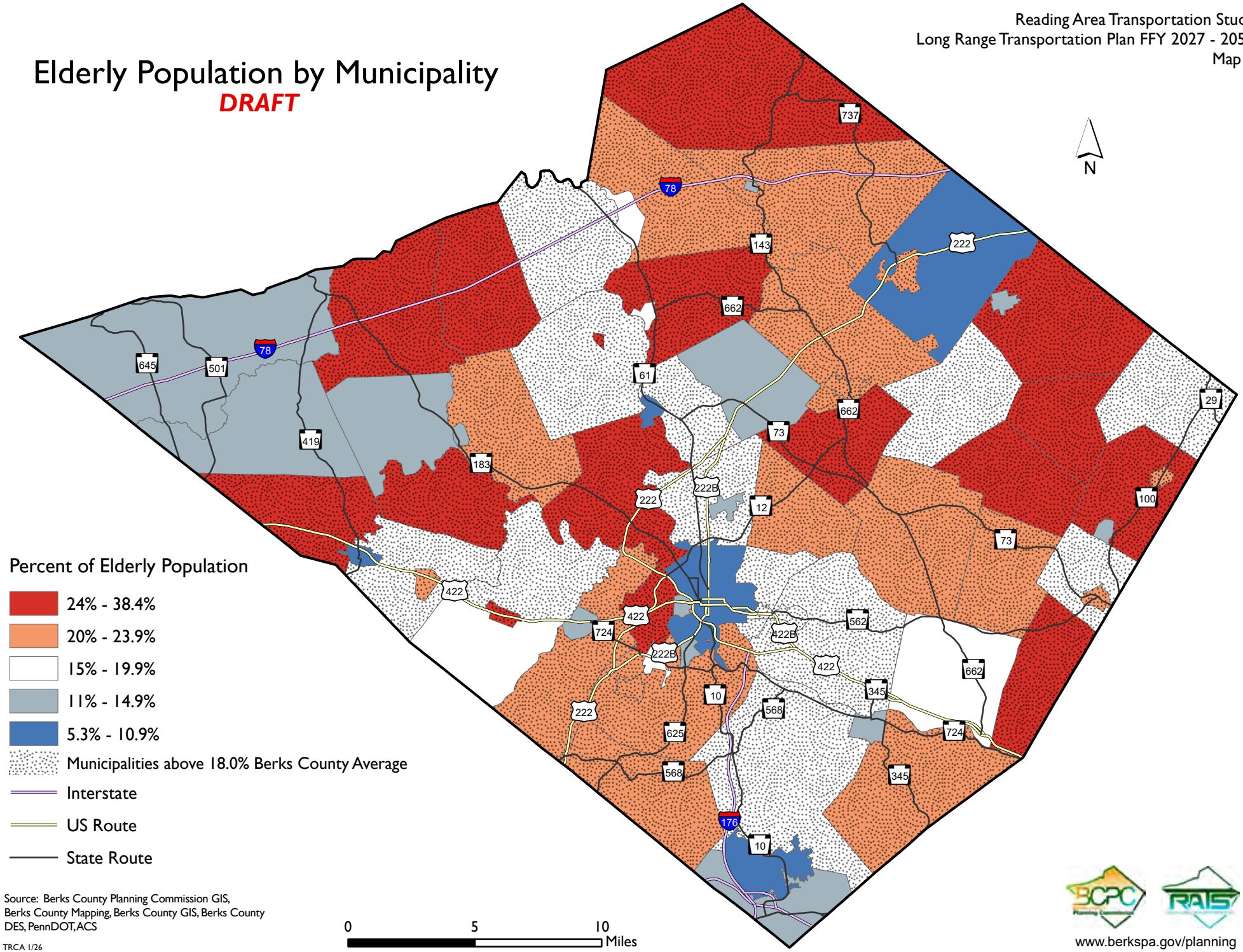

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, ACS

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Disabled Population by Municipality

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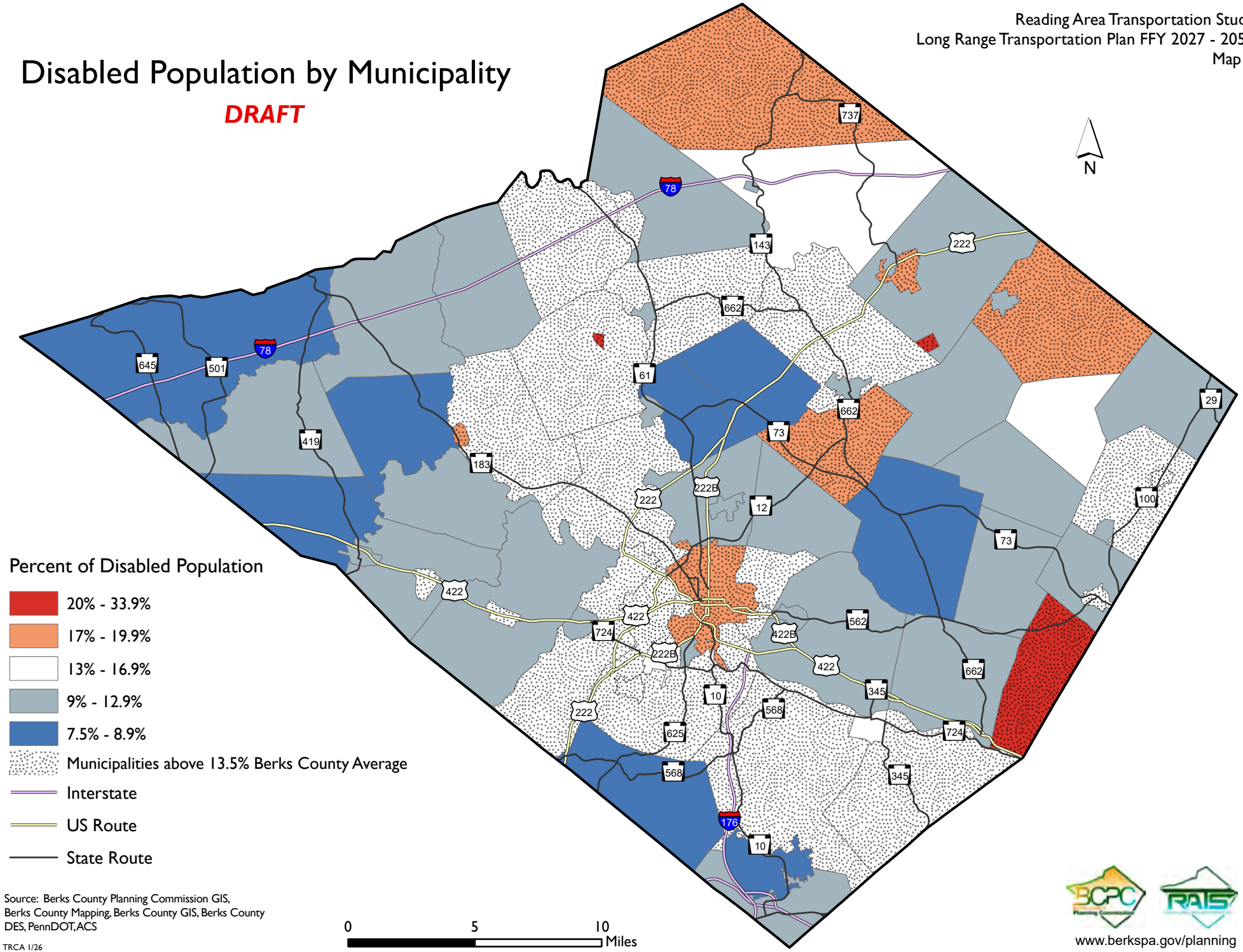

Percent of Disabled Population

- 20% - 33.9%
- 17% - 19.9%
- 13% - 16.9%
- 9% - 12.9%
- 7.5% - 8.9%
- Municipalities above 13.5% Berks County Average
- Interstate
- US Route
- State Route

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, ACS

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Limited English Households by Municipality

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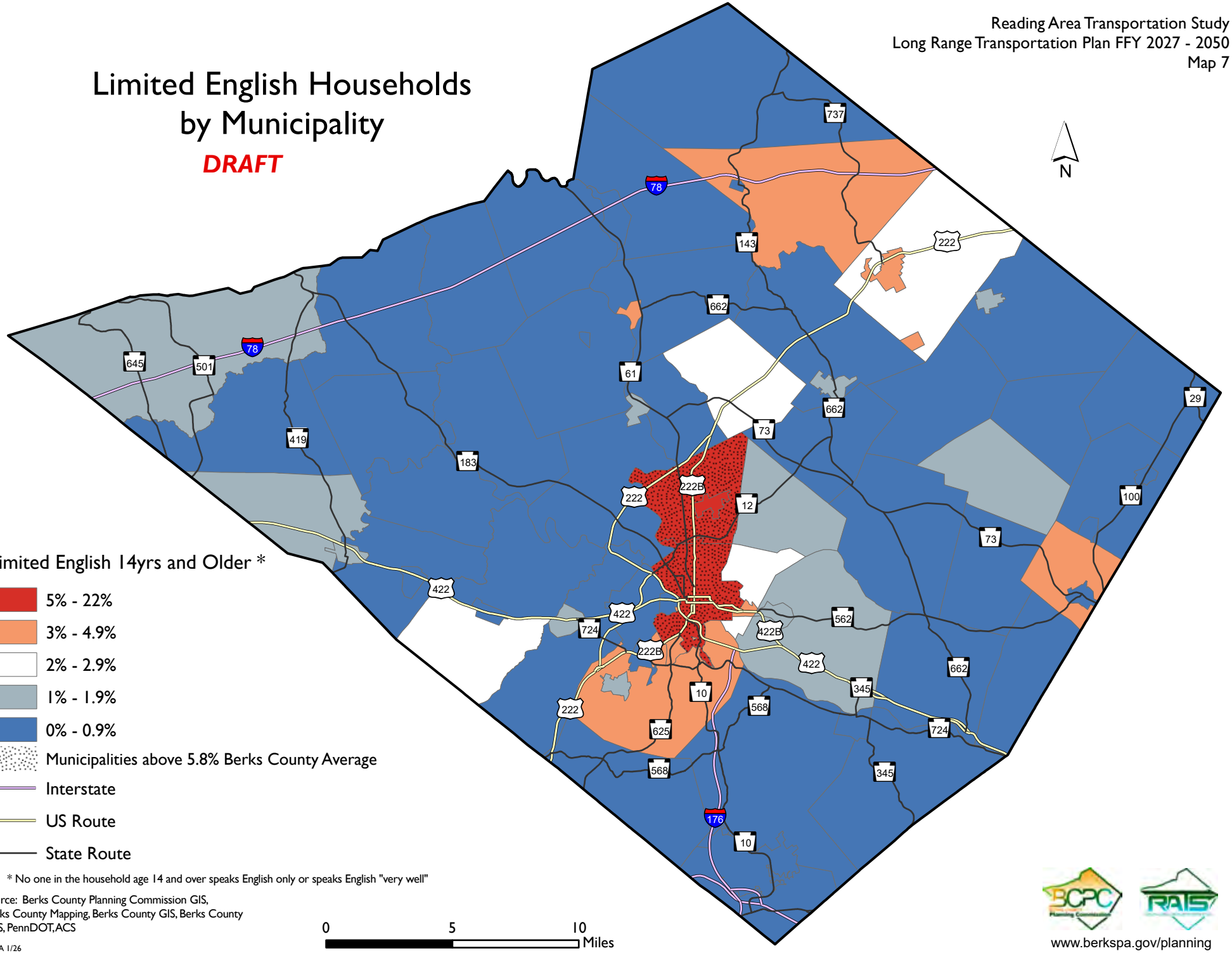

Limited English 14yrs and Older *

- 5% - 22%
- 3% - 4.9%
- 2% - 2.9%
- 1% - 1.9%
- 0% - 0.9%
- Municipalities above 5.8% Berks County Average
- Interstate
- US Route
- State Route

* No one in the household age 14 and over speaks English only or speaks English "very well"

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, ACS

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Zero Vehicle Households by Municipality

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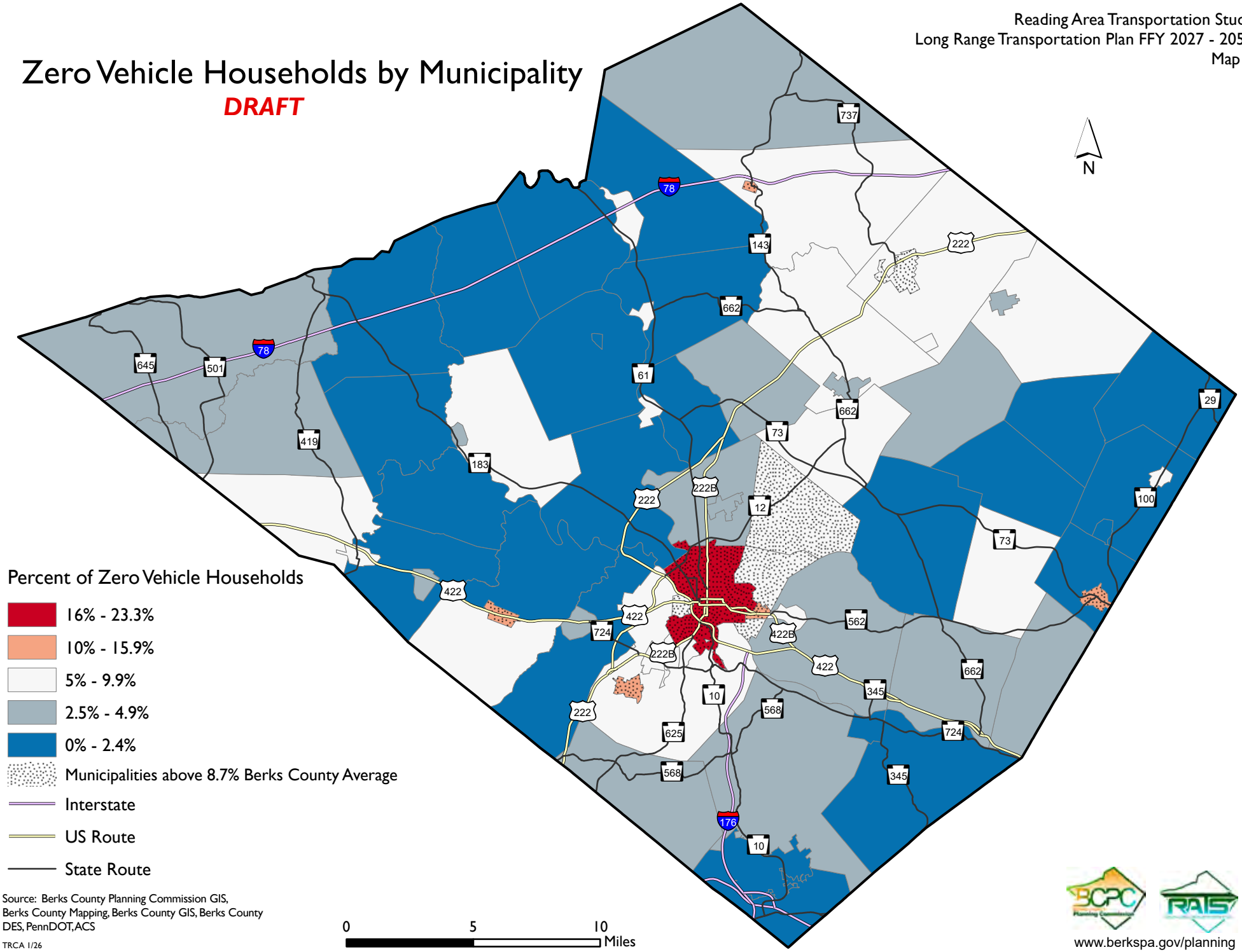

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, ACS

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Minority Households by Municipality

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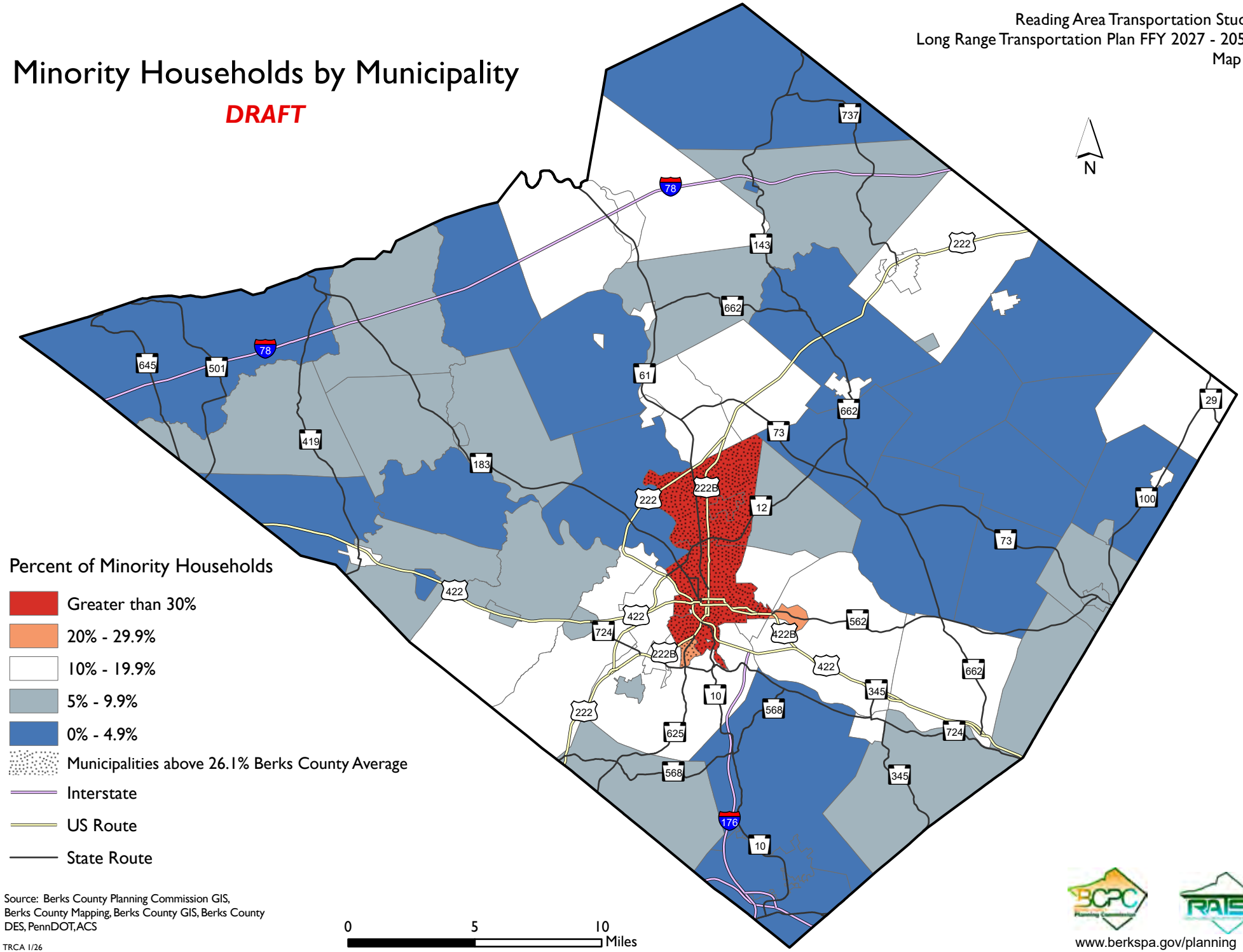

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, ACS

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ECONOMICS



Berks County's economy shapes its transportation patterns in several key ways. The size of the local workforce directly affects commuter traffic volume and the severity of rush-hour congestion. Residents' income levels help determine how many people can afford personal vehicles versus how many rely on public transportation. Additionally, the overall level of business and industrial activity in the county influences the volume of freight movement and, to some extent, the preferred modes of transportation for shipping goods.

While this section provides valuable economic data as it relates to the transportation network in Berks County, it is not intended to be a complete analysis of the economic vitality of the County. For a comprehensive picture of Berks County's current workforce landscape and future economic outlook please review the Berks County Workforce Development Board's report titled *Berks Workforce 2030* at: Berks-2030-Workforce-Report_clickable-TableofContents.pdf

Employment Gain/Loss

Including population changes, employment in Berks County was influenced mostly by the recovery from the December 2007-June 2009 recession and 2020 COVID-19 pandemic along with global economic impacts, technological innovation, changes in logistics management, continued offshoring of industry to other countries and demographic changes [e.g. Leading Edge (born between 1946-1951) Baby Boomer retirements]. While Berks County gained approximately 16,336 jobs between 2014 and 2024, employment grew at a slower rate than many of our neighboring counties and the state.

Map 10 shows employers with 100 people or more in Berks County and their location on the Berks County transportation network. Many of these businesses are within minutes of a state highway, Interstate or the Turnpike.

TOTAL EMPLOYMENT BY COUNTY AND PENNSYLVANIA, 2014 - 2024

County	2014	2024	Employment Gain
Montgomery	415,553	456,734	41,181
Chester	258,128	288,154	30,026
Lancaster	256,207	281,193	24,986
Lehigh	166,747	185,591	18,844
Berks	**196,201**	**212,537**	**16,336**
Lebanon	64,169	69,025	4,856
Schuylkill	63,551	64,590	1,039
Pennsylvania	5,946,480	6,332,886	386,406

Source: Source: U.S. Census Bureau 2014 to 2024 5-Year American Community Survey (DP03)

Largest Employers
Berks County

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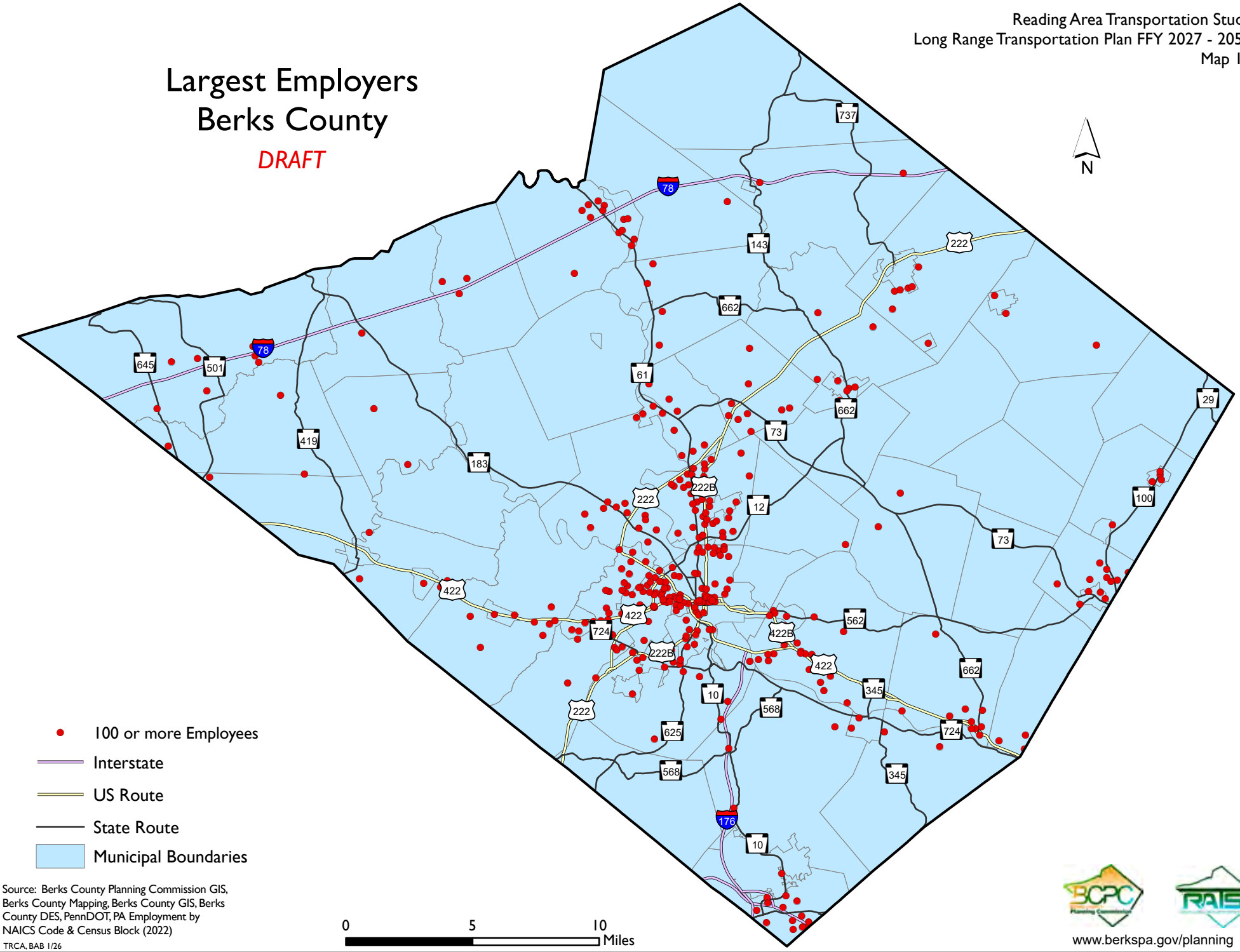

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, PA Employment by NAICS Code & Census Block (2022)

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Labor Force and Employment Trends

National, state, and county unemployment rates experienced a sharp rise due to the 2007-2009 recession. However, since 2014, the unemployment rate in Berks County has consistently decreased from 9.4 percent to 5.4 percent in 2024. Broken down, the labor force increased 3.8 percent during that time, employment increased 8.3 percent, and unemployment decreased 39.8 percent.

The labor force participation rate (labor force as a percentage of the population 16+) continues to decline in Berks County. While the decline in the participation rate is both a state and national trend, it would suggest that there are less people using the transportation network to get to and from work.

BERKS COUNTY EMPLOYMENT, 2014 - 2024

Year	Labor Force	Employed	Unemployed	Rate
2014	216,467	196,201	20,266	6.2%
2015	217,230	197,703	19,527	5.9%
2016	216,846	199,047	17,799	5.4%
2017	217,070	201,177	15,893	4.8%
2018	217,610	203,128	14,482	4.3%
2019	218,529	205,648	12,881	3.8%
2020	218,535	206,343	12,196	3.6%
2021	221,719	209,098	12,621	3.7%
2022	223,434	211,422	12,012	3.5%
2023	223,263	211,518	11,745	3.4%
2024	224,734	211,518	12,197	5.7%
Trend				

Source: Source: U.S. Census Bureau 2014 to 2024 5-Year American Community Survey (DP03)

BERKS COUNTY LABOR FORCE 2014 TO 2024

Year	16+ Pop.	Labor Force	Participation Rate
2014	329,111	216,467	65.8%
2015	330,102	217,230	65.8%
2016	330,820	216,846	65.6%
2017	332,475	217,070	65.3%
2018	333,733	217,610	65.2%
2019	335,068	218,529	65.2%
2020	336,742	218,535	64.9%
2021	342,555	221,719	64.7%
2022	345,342	223,434	64.7%
2023	346,504	223,263	64.4%
2024	349,775	224,734	64.3%

Source: U.S. Census Bureau 2014 and 2024 5-Year American Community Survey (DP03)



The table below presents data on the labor force participation rate for various age groups in Berks County, comparing figures from 2014 and 2024. For younger groups, the 16 to 19 age bracket saw a slight decline from 45.9 percent participation in 2014 to 45.3 percent in 2024, while the 20 to 24 group dropped from 76.5 percent to 74.5 percent. The prime working age categories show that in 2014, the combined 25 to 44 group had an 85.6 percent rate, in 2024 the U.S. Census Bureau collected data a little differently by breaking the age groups down into 25 to 29 (84.9%), 30 to 34 (84.2%), and 35 to 44 (85.7%). Regardless, the numbers indicate stable high participation in the labor force. Middle-aged workers in the 45 to 54 range remained steady at around 84.2 to 84.3 percent. For older adults, the 55 to 64 cohort in 2014 splits in 2024 to 77.6 percent for 55 to 59 and 62.4 percent for 60 to 64, suggesting increased participation among those nearing retirement. Interestingly, participation among seniors rose modestly, from 26.8 percent for the 65 to 74 group and 5.4 percent for the 75+ group in 2014 to 30.1 percent and 7.8 percent in 2024, respectively, reflecting broader trends of extended workforce involvement amid an aging population.

BERKS COUNTY PERCENT OF POPULATION BY AGE IN THE LABOR FORCE, 2014 AND 2024

Age Group	2014	% in Labor Force	2024	% in Labor Force
16 to 19	25,384	45.9%	25,338	45.3%
20 to 24	28,289	76.5%	27,824	74.5%
25 to 29	98,828	85.6%	26,193	84.9%
30 to 34			27,679	84.2%
35 to 44			53,025	85.7%
45 to 54	61,701	84.2%	52,457	84.3%
55 to 59	52,405	69.6%	29,521	77.6%
60 to 64			29,638	62.4%
65 to 74	32,443	26.8%	45,284	30.1%
75+	30,061	5.4%	32,816	7.8%

Source: U. S. Census Bureau, 2014 and 2024 5-Year American Community Survey (S2301)

Berks County Employment Projections

According to ten-year projections provided by the Berks County Economic Development Office, the county is expected to see a 4.0 percent increase in the total number of jobs during the ten-year period. The largest gains will be in the accommodation of food services industries.

BERKS COUNTY EMPLOYMENT PROJECTIONS, 2035

Industry	2025 Employment	2035 Forecast	# Change	% Change
Health Care and Social Assistance	32,257	32,347	90	0%
Manufacturing	31,969	32,505	536	2%
Retail Trade	19,583	23,829	4,246	22%
Educational Services	12,984	11,698	-1,286	-10%
Accommodation of Food Services	12,629	21,293	8,664	69%
Transportation and Warehousing	12,627	12,694	67	1%
Administrative and Support and Waste Management and Remediation Services	9,979	10,462	483	5%
Construction	9,606	7,810	-1,796	-19%
Other Services (except Public Administration)	8,637	9,388	751	9%
Professional, Scientific, and Technical Services	7,221	5,662	-1,559	-22%
Wholesale Trade	5,853	5,517	-336	-6%
Management of Companies and Enterprises	4,713	3,763	-950	-20%
Public Administration (Government)	4,488	3,788	-700	-16%
Finance and Insurance	4,007	3,093	-914	-23%
Agriculture, Forestry, Fishing and Hunting	3,148	3,466	318	10%
Arts, Entertainment, and Recreation	2,896	4,074	1,178	41%
Real Estate and Rental and Leasing	2,144	1,956	-188	-9%
Information	1,015	793	-222	-22%
Utility	735	581	-154	-21%
Mining, Quarrying, and Oil and Gas Extraction	220	197	-23	-10%
Total - All Industries	**186,711**	**194,916**	**8,205**	**4%**

Source: JobsEQ, Berks County Economic Development

Berks County Major Industries

As of 2024, the top three industries in terms of overall employment are trade/transportation/utilities, education and health services, and manufacturing. While the goods producing industries still provide higher wages and manufacturing still remains a major source of employment, the county has solidly transitioned into a services-dominated economy.

BERKS COUNTY 2024 ANNUAL AVERAGES					
Industry Sector	**Annual Establishments**	**Annual Average Employment**	**Total Annual Wages**	**Annual Average Weekly Wage**	**Annual Wages per Employee**
Financial Activities	702	5,573	$566,681,546	$1,956	$101,689
Construction	884	7,460	$588,085,649	$1,516	$78,831
Professional and Business Services	1,346	19,719	$1,608,156,602	$1,568	$81,554
Manufacturing	508	31,477	$2,453,863,638	$1,499	$77,957
Information	108	874	$52,542,002	$1,156	$60,088
Education and Health Services	1,222	31,605	$2,079,756,508	$1,265	$65,804
Trade, Transportation, and Utilities	1,820	35,284	$1,764,498,229	$962	$50,009
Natural Resources and Mining	130	2,688	$130,047,604	$931	$48,390
Other Services	902	5,488	$221,845,843	$777	$40,421
Leisure and Hospitality	919	14,903	$342,862,980	$442	$23,007
Federal Government	62	859	$70,064,026	$1,569	$81,604
State Government	31	2,694	$202,278,405	$1,444	$75,085
Local Government	283	15,068	$967,445,714	$1,235	$64,206
Goods-Producing	1,523	41,625	$3,171,996,891	$1,465	$76,204
Service-Providing	7,018	113,446	$6,636,343,710	$1,125	$58,498

Source: U.S. Bureau of Labor Statistics, QCEW

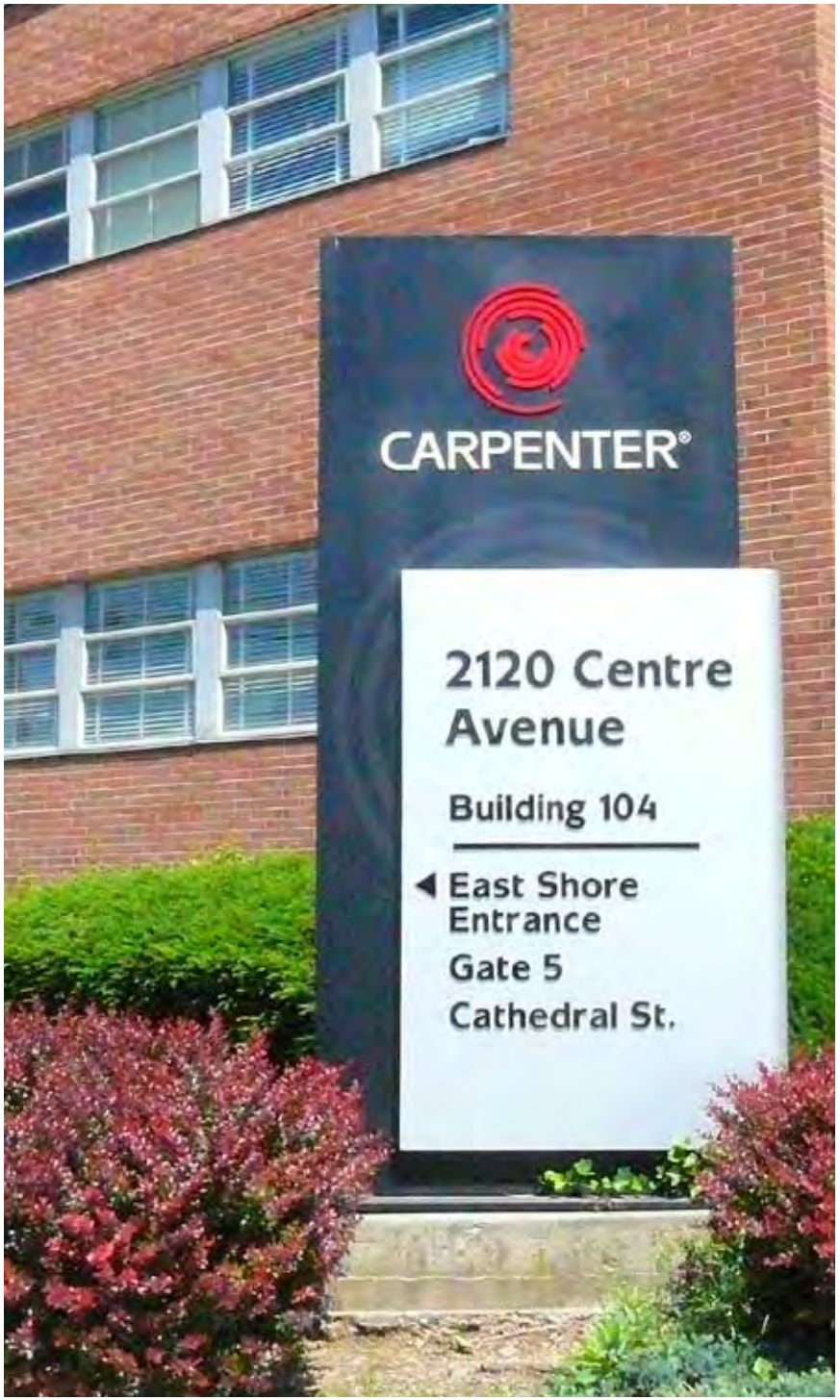
Berks County is home to numerous employers with 100 or more workers at a single site. A substantial portion of these are situated in the Reading urbanized area, particularly within the City of Reading itself. Overall, the primary trip generators—such as major employers and activity centers—are clustered in the Reading metropolitan area, which is also where most of the county's residents live.

Additionally, smaller concentrations of trip generators exist in the eastern, northern, and northeastern parts of the county, in and around the boroughs of Hamburg, Kutztown, and Boyertown, respectively. Ongoing expansion of logistics and warehousing along key transportation corridors is expected to shift and intensify these patterns in the coming years.

TOP 25 EMPLOYERS IN BERKS COUNTY - 2023

1. East Penn Mfg. Co.	14. Tower Health Medical Group
2. Reading Hospital	15. Giant Food Stores LLC
3. Carpenter Technology Corp.	16. Alcon Research Ltd.
4. Penske Truck Leasing	17. Berks County Intermediate Unit
5. Amazon	18. PA State System of Higher Education
6. Wal-Mart Associated Inc.	19. Dollar General
7. County of Berks	20. Ashley Furniture
8. Reading School District	21. Federal Government
9. Redner's Markets	22. Alvernia University
10. PA State Government	23. Supportive Concepts for Families
11. Saint Joesph Medical Center	24. Aim - Agency with Choice
12. Boscov's Dept Store LLC	25. The Reading Truck Group LLC
13. Wilson School District	

Source: Greater Reading Chamber Alliance



Berks County Gross Domestic Product

Berks County businesses generated nearly $26 billion in GDP in 2023, up nearly 25 percent or $5.1 billion since 2018. The County's finance/insurance/real estate/rental/leasing and manufacturing services are the largest contributors to GDP. In considering transportation needs, it is noteworthy that there was a nearly 67 percent increase in the output from the county's transportation and warehousing producing industry.

BERKS COUNTY REAL GDP IN 2018 AND 2023
(IN BILLIONS OF DOLLARS)

Industry Sector	2018	2023	$ Change 2018-2023	% Chang 2018-2023
All industry total	**20,864,174**	**25,974,930**	**5,110,756**	**24.5%**
Private industries	**18,890,866**	**23,891,807**	**5,000,941**	**26.5%**
Agriculture, forestry, fishing, and hunting	**275,969**	**254,359**	**-21,610**	**-7.8%**
Mining	**45,931**	**72,226**	**26,295**	**57.2%**
Utilities	**309,019**	**512,253**	**203,234**	**65.8%**
Construction	**912,089**	**1,123,623**	**211,534**	**23.2%**
Manufacturing	**3,953,345**	**4,293,809**	**340,464**	**8.6%**
Durable goods manufacturing	2,898,910	3,014,199	115,289	4.0%
Nondurable goods manufacturing	1,054,435	1,279,610	225,175	21.4%
Wholesale trade	**1,108,794**	**1,335,734**	**226,940**	**20.5%**
Retail trade	**1,163,747**	**1,603,514**	**439,767**	**37.8%**
Transportation and warehousing	**748,075**	**1,247,456**	**499,381**	**66.8%**
Information	**440,087**	**493,539**	**53,452**	**12.1%**
Finance, insurance, real estate, rental, and leasing	**4,137,175**	**5,518,940**	**1,381,765**	**33.4%**
Real estate and rental and leasing	3,123,099	4,206,564	1,083,465	34.7%
Professional and business services	**2,414,857**	**2,996,663**	**581,806**	**24.1%**
Professional, scientific, and technical services	964,275	1,223,048	258,773	26.8%
Management of companies and enterprises	820,692	976,685	155,993	19.0%
Administrative and waste management services	629,891	796,930	167,039	26.5%
Educational services, health care, and social assistance	**2,322,150**	**2,964,838**	**642,688**	**27.7%**
Health care and social assistance	2,163,095	2,766,413	603,318	27.9%
Arts, entertainment, recreation, accommodation, and food services	**545,432**	**826,020**	**280,588**	**51.4%**
Accommodation and food services	440,858	677,433	236,575	53.7%
Other services, except government	**514,196**	**2,083,124**	**1,568,928**	**305.1%**
Government	**1,973,308**	**2,083,124**	**109,816**	**5.6%**
Private goods-producing industries	**5,187,334**	**5,744,017**	**556,683**	**10.7%**
Private services-providing industries	**13,703,532**	**18,147,790**	**4,444,258**	**32.4%**

Source: U.S. Department of Commerce, Bureau of Economic Analysis

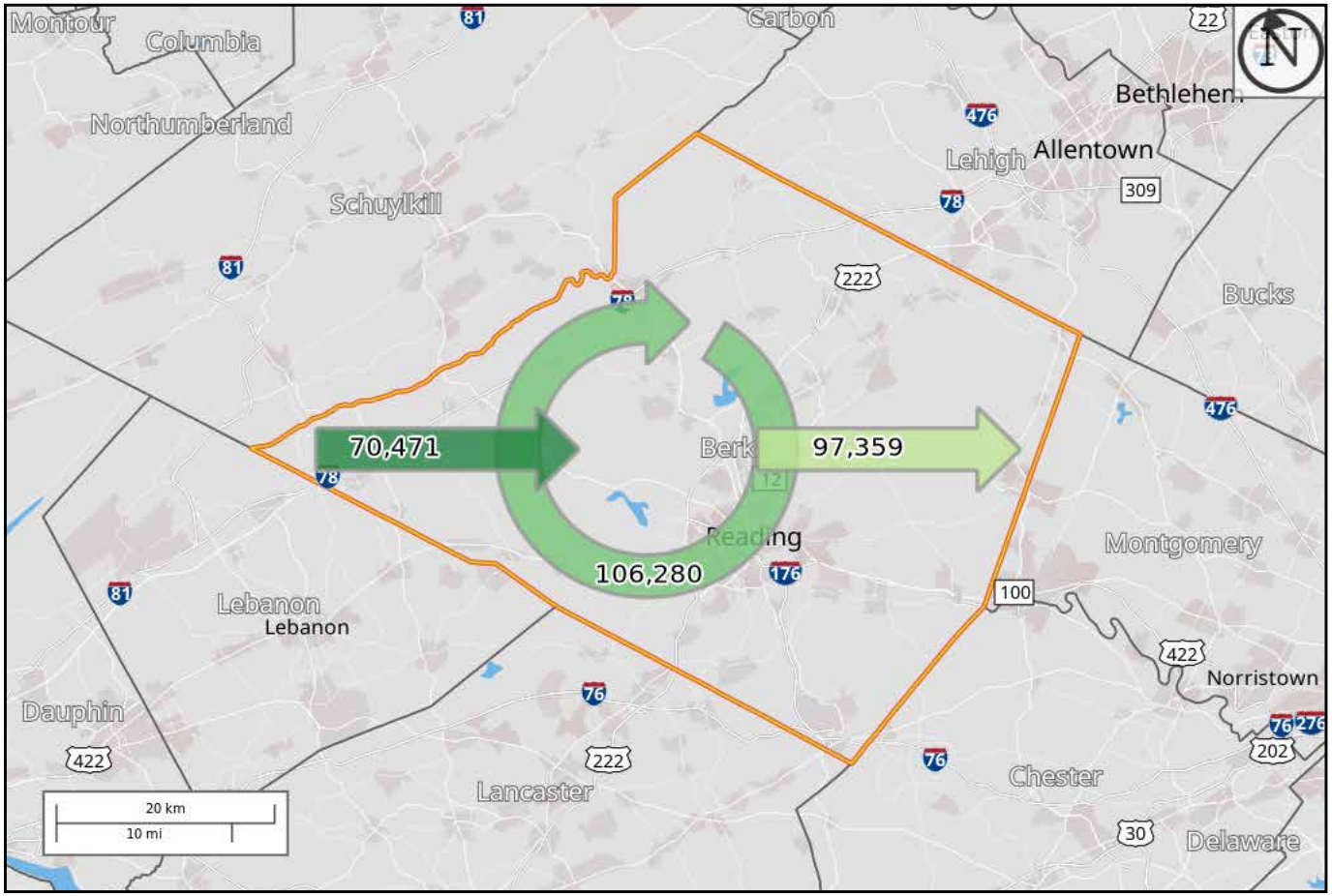
Berks County Commuting Patterns

Berks County remains a strong net exporter of labor, (i.e., more out-commuters than in-commuters) in 2022 (the most recent data available at the time of this writing). The county is the largest exporter of labor in the seven county region. Over 70,000 workers commute into the county for employment while over 97,000 residents commute out of Berks County for work. Routes 222 and 422 remain major conduits for commuters in Berks County.

COMMUTING PATTERNS BY COUNTY, 2022

County	Total All Jobs	In to Work	Staying to Work	Out to Work	Difference
Berks	**203,639**	**70,471**	**106,280**	**97,359**	**-26,888**
Chester	260,938	152,784	111,648	149,290	3,494
Lancaster	256,741	85,912	165,881	90,860	-4,948
Lebanon	67,007	25,408	25,626	41,381	-15,973
Lehigh	177,112	119,429	90,076	87,036	32,393
Montgomery	429,902	337,958	198,633	231,269	106,689
Schuylkill	64,706	22,944	27,314	37,392	-14,448

Source: U.S. Census LEHD, 2022



The majority of Berks County workers drive less than ten miles to work. However, more people are driving further distances for work than they had in 2018.

NUMBER OF RESIDENT WORKERS WHO COMMUTE TO WORK (IN MILES) IN 2022

County	Less than 10	%*	10 to 24	%*	25 to 50	%*	50 +	%*
Berks	88,340	43.4	54,407	26.7	39,382	19.3	21,510	10.6
Chester	98,493	37.7	100,153	38.4	38,197	14.6	24,095	9.2
Lancaster	130,149	50.7	65,801	25.6	30,404	11.8	30,387	11.8
Lebanon	29,268	43.7	20,754	31.0	7,535	11.2	9,450	14.1
Lehigh	96,933	54.7	31,103	17,6	26,529	15.0	22,547	12.7
Montgomery	207,508	48.3	156,754	36.5	33,720	7.8	31,920	7.4
Schuylkill	24,056	37.2	15,630	24.2	13,502	20.9	11,518	17.8

Source: U.S. Census LEHD, 2022

* % of total jobs

BERKS COUNTY DISTANCE TO WORK COMPARISON

Distance	2018	2022	Difference
Less than 10 Miles	48.9	43.4	-5.5
10-24 Miles	24.2	26.7	2.5
25-50 Miles	17.2	19.3	2.1
Greater than 50 Miles	9.7	10.6	0.9

Source: U.S. Census LEHD 2018 and 2022

Mode of Travel

The chart below compares the means of travel by age group of the labor force. The youngest age group maintained their share of driving alone and did less carpooling than in 2019. Their use of public transit was relatively unchanged. Decreases in the somewhat older age groups (45 – 54 and 55 – 59) suggest that some people in these age groups may have removed themselves from the workforce or transitioned to pre-retirement. The 45 – 54 age group shows an increase in transit usage and the 60+ age group showed increases in driving alone, carpooling, and using public transit. This may have impacts on future safety programming as well as an increased need for transit accessibility.

MODE OF TRAVEL TO WORK BY AGE GROUP IN BERKS COUNTY - 2019 AND 2024

Worker Age	Drive Alone			Carpooled			Public Transit		
	2019	2024	Difference	2019	2024	Difference	2019	2024	Difference
16 - 19	3.4%	3.7%	0.3%	10.4%	10.0%	-0.4%	7.3%	7.4%	0.1%
20 - 24	8.2%	8.9%	0.7%	14.4%	11.1%	-3.3%	18.5%	12.6%	-5.9%
25 - 44	39.3%	39.3%	0.0%	42.1%	44.4%	2.3%	38.2%	37.0%	-1.2%
45 - 54	22.7%	20.2%	-2.5%	19.3%	18.4%	-0.9%	12.0%	19.7%	7.7%
55 - 59	11.9%	11.0%	-0.9%	6.4%	6.1%	-0.3%	13.4%	9.9%	-3.5%
60+	14.5%	16.9%	2.4%	7.4%	9.9%	2.5%	10.6%	13.3%	2.7%

Source: U.S. Census Bureau, American Community Survey 2024 5-year Estimates (S0804)

The adjacent chart compares the means of travel by industry sector. Shifts can be seen in all modes but the most dramatic of them is in the Education/ Healthcare industry. Workers in those fields increased their use of carpooling and public transit. This trend seems to coincide with the amount of workers employed at a large schools or a regional health center like the Reading Hospital.

MODE OF TRAVEL TO WORK BY INDUSTRY IN BERKS COUNTY - 2019 AND 2024

Industry	Drive Alone (%)			Carpooled (%)			Public Transit (%)		
	2019	2024	Difference	2019	2024	Difference	2019	2024	Difference
Agriculture	1.4	1.6	0.2%	2.7	3.0	0.3%	0.7	2.4	1.7%
Construction	5.2	6.1	0.9%	6.1	9.2	3.1%	4.0	7.4	3.4%
Manufacturing	18.8	19.4	0.6%	22.0	19.1	-2.9%	8.9	7.6	-1.3%
Wholesale Trade	3.4	2.3	-1.1%	2.8	1.1	-1.7%	0.3	1.9	1.6%
Retail Trade	11.9	12.9	1.0%	14.6	12.8	-1.8%	22.4	17.2	-5.2%
Transportation/ Warehousing	5.6	6.5	0.9%	4.6	8.8	4.2%	8.1	2.3	-5.8%
Information and Finance	6.4	5.3	-1.1%	3.7	3.2	-0.5%	2.9	0.5	-2.4%
Professional/Management	8.4	7.7	-0.7%	7.6	7.4	-0.2%	11.2	9.4	-1.8%
Education/Healthcare	24.4	24.7	0.3%	17.7	22.3	4.6%	18.1	29.4	11.3%
Arts/Recreation	7.4	6.3	-1.1%	11.6	9.8	-1.8%	17.2	19.1	1.9%
Other Services	4.1	4.3	0.2%	6.1	2.3	-3.8%	4.0	1.1	-2.9%
Public Administration	3	2.8	-0.2%	0.6	0.8	0.2%	2.1	1.7	-0.4%

Source: U.S. Census Bureau, American Community Survey 2024 5-year Estimates (S0804)

The adjacent chart compares drive times between 2019 and 2024 for the different modes. Driving alone has the fastest drive times, in fact, the numbers show that drive times have decreased between 2019 and 2024. Generally, transit remains an attractive option for short commutes in the county, though there is significant growth in the 20 to 24 minute trip length as well.

TRAVEL TIME TO WORK IN BERKS COUNTY - 2019 AND 2024

Travel Time to Work (Minutes)	Drive Alone (%)			Carpooled (%)			Public Transit (%)		
	2019	2024	Difference	2019	2024	Difference	2019	2024	Difference
Less than 10	12.4	12.7	0.3%	13.4	11.1	-2.3%	3.4	7.9	4.5%
10 to 14	16.2	16.1	-0.1%	12.3	22.1	9.8%	3.5	2.5	-1.0%
15 to 19	19.8	18.1	-1.7%	19.8	15.5	-4.3%	14.9	7.6	-7.3%
20 to 24	16.3	16.3	0.0%	14.0	15.2	1.2%	15.2	24.7	9.5%
25 to 29	7.8	7.6	-0.2%	10.3	6.3	-4.0%	4.8	0.4	-4.4%
30 to 34	10.3	10.4	0.1%	11.2	10.5	-0.7%	15.5	14.8	-0.7%
35 to 44	5.5	7.2	1.7%	4.7	8.0	3.3%	11.7	11.1	-0.6%
45 to 59	6.2	6.1	-0.1%	6.2	6.2	0.0%	6.8	8.4	1.6%
60 or More	5.7	5.5	-0.2%	8.0	5.2	-2.8%	24.2	22.6	-1.6%
Mean Travel Time	23.2	n/a	n/a	25.0	n/a	n/a	38.2	n/a	n/a

Source: U.S. Census Bureau, American Community Survey 2024 5-year Estimates (S0804)

Comparison of Berks County Vehicle Miles Traveled (VMT) and County Gross Domestic Product

Historically people were driving more and more each year between the years 2015 through 2019. In 2020, the COVID 19 pandemic created an all-time low number for VMT in Berks County as people were relegated to staying home as a result of the pandemic. During this time there was also no growth in the County GDP. In 2021 VMT returned to pre-pandemic levels as people returned to work and businesses began to reopen. There was very little change in VMT between years 2022 and 2023.

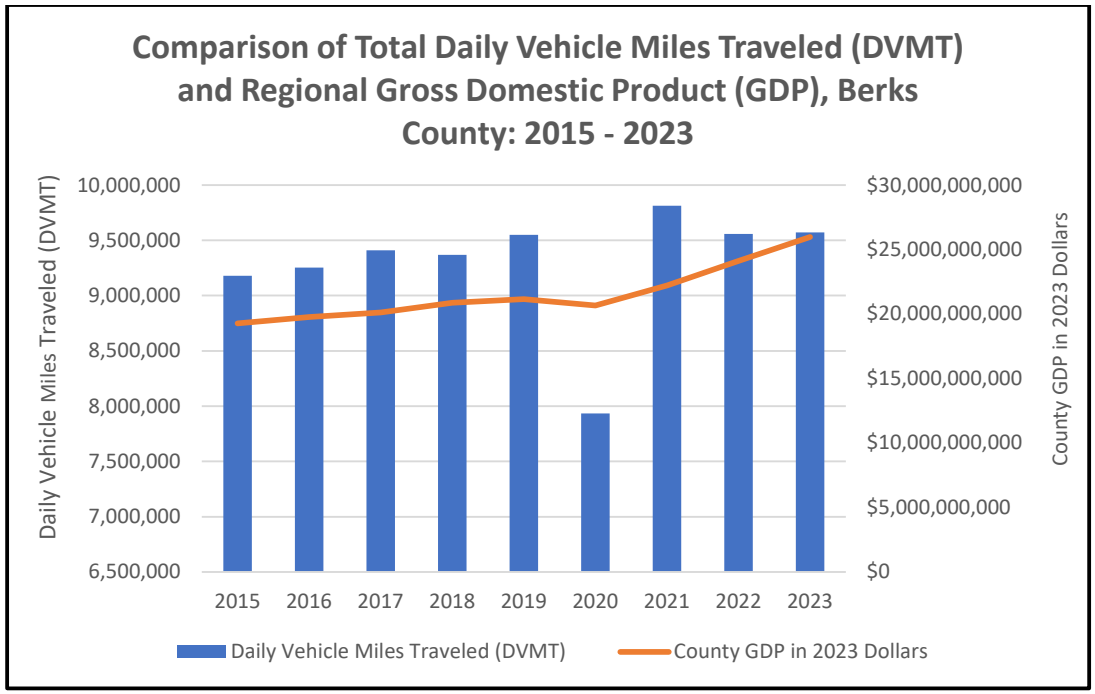
Using data from PennDOT and the U.S. Bureau of Economic Analysis, the chart below illustrates the decoupling of vehicle miles traveled (VMT) and gross domestic product (GDP) in Berks County.

Historically across the United States, economic growth (as measured by GDP) has closely tracked VMT: rising prosperity typically meant more driving, while recessions led to declines in both. This strong correlation held for decades.

However, since 2015—and excluding the sharp drop during the 2020 COVID-19 pandemic—Berks County has experienced steady economic expansion even as total vehicle trips on local roadways have declined or remained stagnant.

It is unclear whether this represents a temporary, cyclical shift driven by economic conditions or the start of a more permanent change in driving behavior, potentially influenced by demographic trends (such as aging populations, changing work patterns, emergence of online shopping and next-day deliveries, or shifts toward alternative transportation).

This local pattern aligns with broader national discussions about the gradual weakening of the traditional link between VMT and GDP growth in recent years.



Berks County Transportation Generators

Data provided by the RATS 2022 Coordinated Public Transit Human Services Transportation Plan shows major transportation generators in Berks County. Shown on Map 11, these locations are referred to as activity centers and include major employers (i.e., at least 100 employees at a single location) or a grouping of employers at business and industrial parks, medical facilities, retail destinations (shopping centers and malls and stand-alone big-box retailers), senior citizen facilities, and multi-family housing.

Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 11

Traffic Generators

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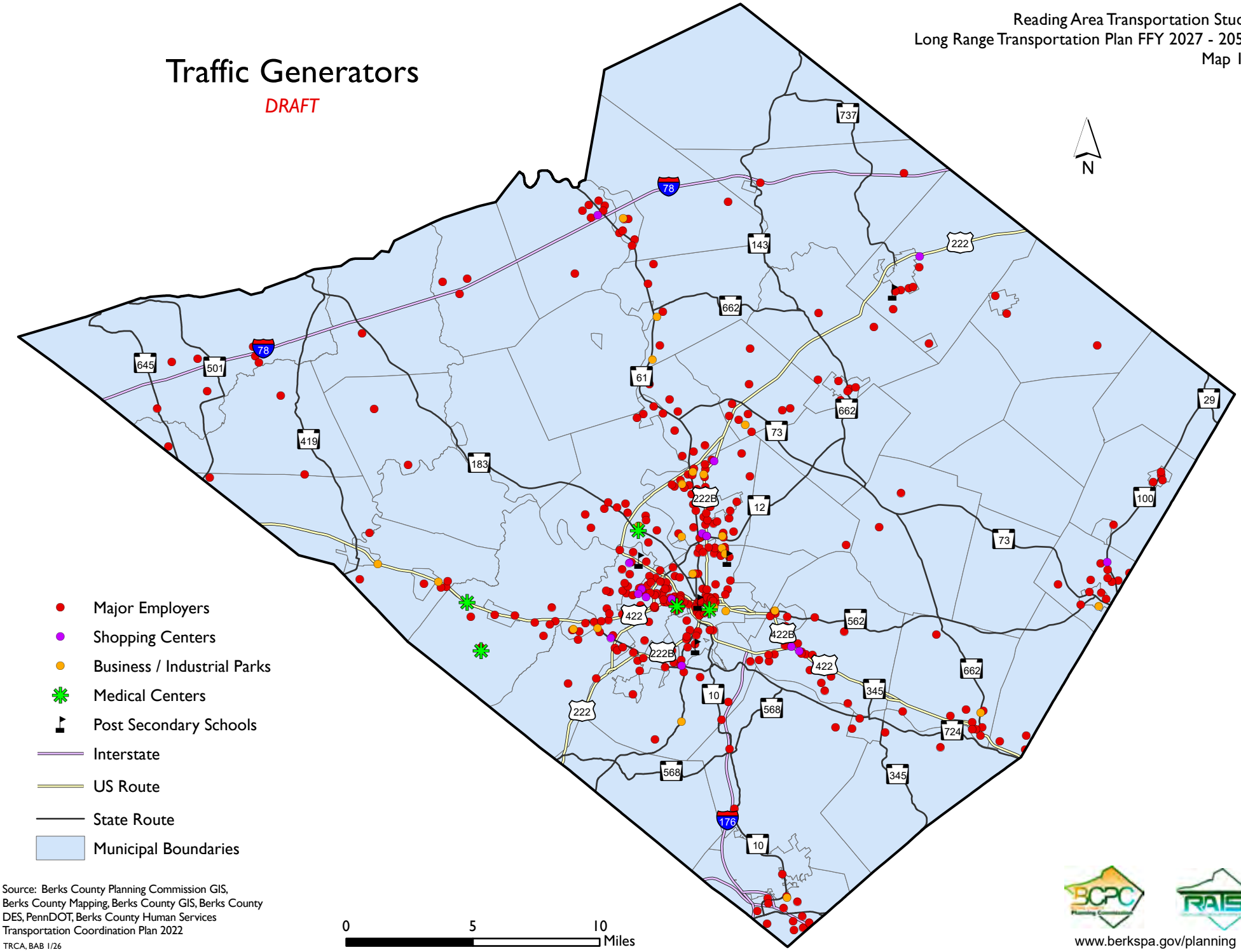

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, Berks County Human Services Transportation Coordination Plan 2022

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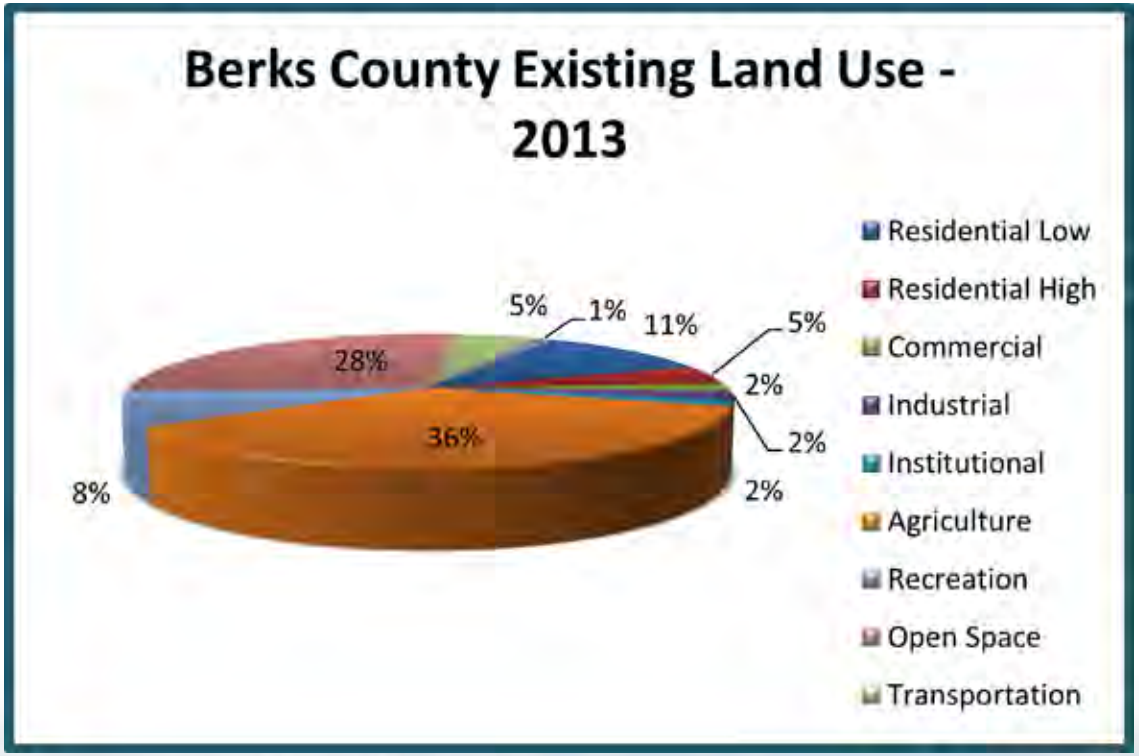
EXISTING AND FUTURE LAND USE

Coordinating the growth forecasts for the LRTP with the Berks County 2030 Comprehensive Plan Update, adopted in January 2020, is a key component to accurately representing future transportation needs. The Future Land Use Plan is a key tool used to determine where growth will occur in the future as well as the permitted and allowed types of development.

To protect natural resources while optimizing social infrastructure enhancements, including transportation, designation of wetlands and other protected areas are factored into the future land use designations. The Future Land Use Plan was used in the development of the socioeconomic data in the following ways:

- Identification of physical constraints imposed by environmental limitations such as floodplains, wetlands, and steep slopes.
- Direction of new growth towards existing urban areas that can accommodate growth and to vacant lands proximate to existing urban areas of the county.

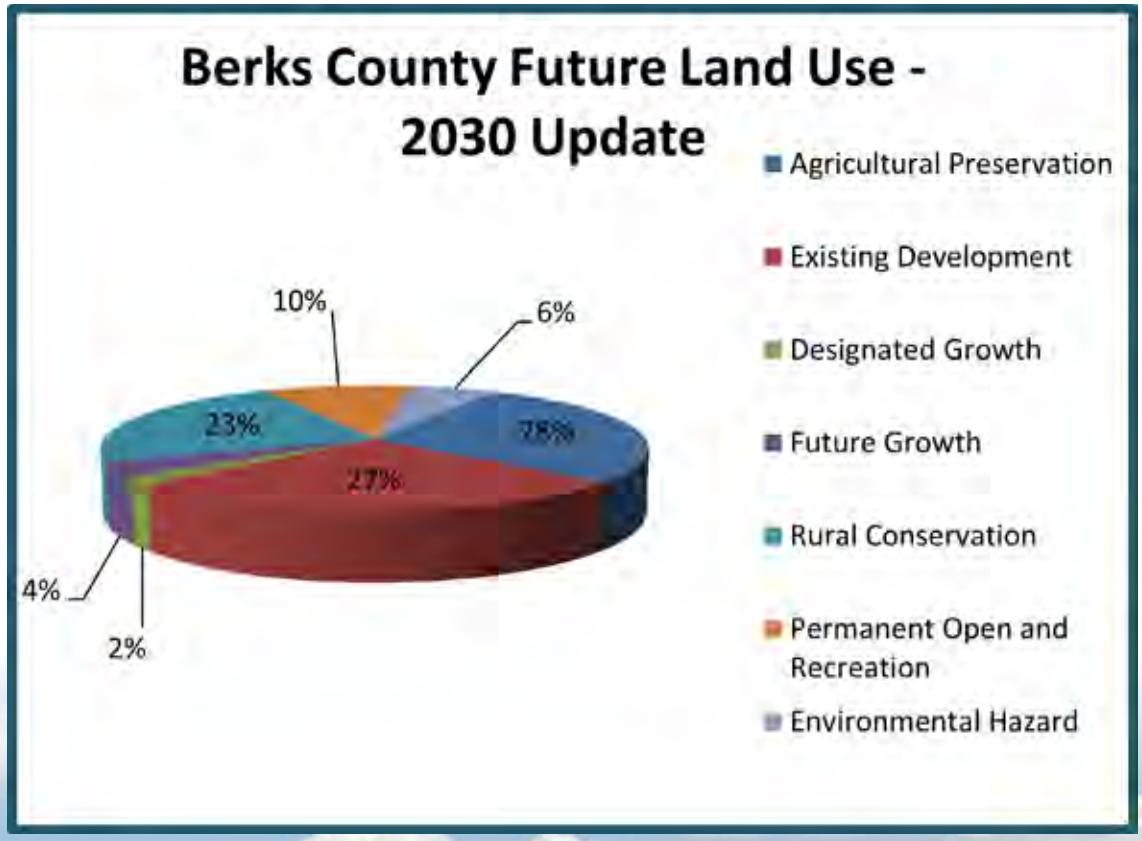


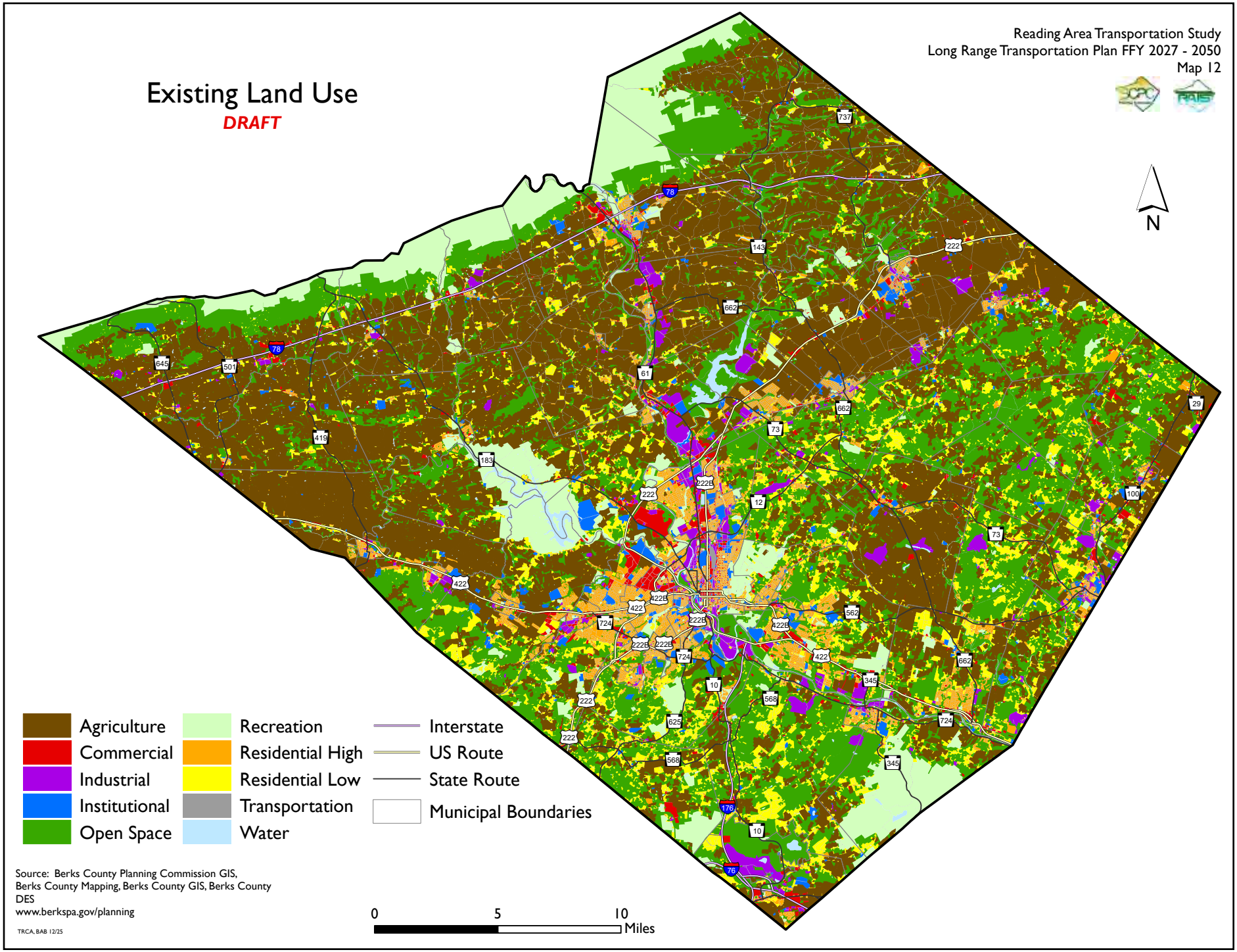


In 2013, Berks County had unique land use patterns when compared to other urban southeastern counties in Pennsylvania. Today, agriculture remains the predominant land use, accounting for 36 percent of the nearly 550,000 acres of land that comprises Berks County, followed by open space (28 percent) and low density residential (11 percent).

The largest use of land in the county is projected to be agriculture, with an assumption that the county will be 27 percent "developed".

Approximately 28 percent of the total county land area is designated for Agricultural Preservation. The future land use plan adds approximately 33,000 acres of urban land to accommodate expected urban development that includes new houses, industrial development, and expansion of institutional uses. Growth is directed towards existing major road corridors and existing interchanges on the Interstate system. Certain areas of the county will accommodate less growth than others based upon environmental and infrastructure constraints, the location of conservation easements, as well as local land development regulations. Rural conservation, covering 23 percent of the county, is the third highest category by percentage, and permits low-density development.




Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 12
Existing Land Use
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N
Agriculture
Commercial
Industrial
Institutional
Open Space
Recreation
Residential High
Residential Low
Transportation
Water
Interstate
US Route
State Route
Municipal Boundaries
Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES
www.berkspa.gov/planning
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Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 12

Future Land Use
2030 Update
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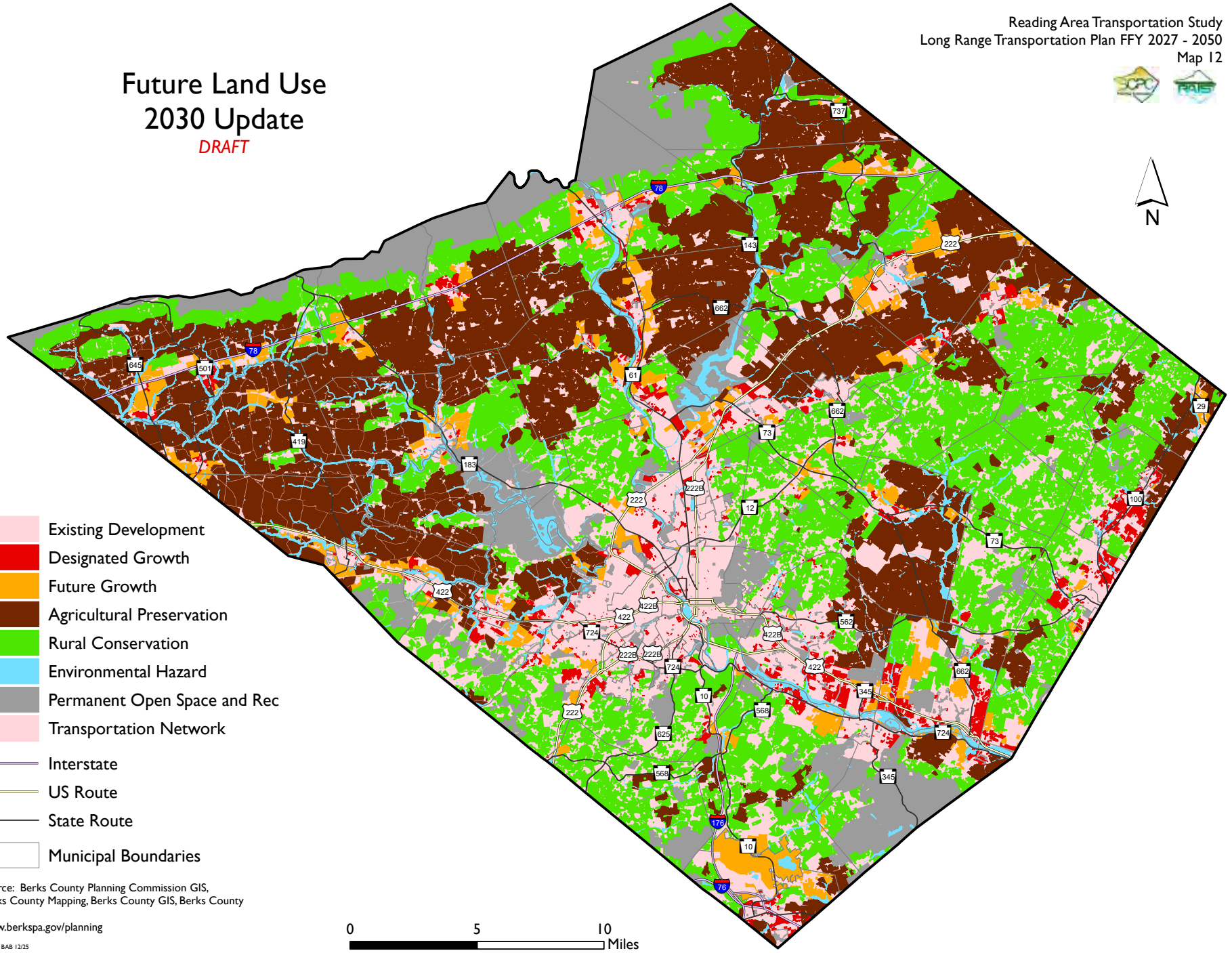

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES
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TRCA, BAB 12/25

ENVIRONMENTAL INTEGRATION

Transportation projects can have environmental impacts. Federal guidelines require MPOs to consult with state and federal resource regulatory agencies. The MPO maintains an environmental resource inventory that is used early in the project development process to identify potential project impacts on environmental resources. The early resource inventories and agency consultation during transportation planning can help to avoid potential delays in project delivery and minimize potential changes in project scope that may result in project cost increases.

Transportation projects in Berks County can face a range of complex, interrelated environmental and community issues. These often relate to the National Environmental Policy Act (NEPA) of 1969. NEPA is the 'umbrella' law that directs agencies to consider impacts to environmental resources specifically regulated by other federal and state laws, such as:

- Section 4(f) of the U.S. Department of Transportation Act, which requires consideration of impacts to publicly owned parks and recreation lands, wildlife and waterfowl refuges, and historic properties.
- Section 6(f) of the Land and Water Conservation Fund Act, which requires consideration of impacts to grant-assisted public recreation lands.
- Section 7 of the Endangered Species Act, which requires consideration of impacts to threatened and endangered species.
- Section 106 of the National Historic Preservation Act, which requires consideration of impacts to historic resources.
- Section 404 of the Clean Water Act, which requires consideration of impacts to wetlands and waters of the United States.
- PA Chapter 93, which sets water quality standards for waters of the Commonwealth.
- The Farmland Protection Policy Act, which aims to prevent the conversion of prime and unique farmland soils into non-agricultural uses.

Linking transportation and environmental planning is achieved through two types of consultation. The first concerns comparing transportation plans with natural and cultural resource information that is discussed in detail below. RATS will be involved in efforts aimed at 'Linking Planning and NEPA' (LPN) during the project development process. Additionally, RATS will be involved throughout the PennDOT Connects process, which involves collaboration with state, MPO, and local government representatives early in the project development process to identify potential environmental, community, and technological issues that could impact project scopes and cost estimates. The goal of these efforts is to develop a better understanding of transportation problems and related environmental characteristics of proposed transportation projects earlier to produce a realistic project scope of work that encompasses all of the relevant design and environmental issues.

The second type of required consultation concerns mitigation activities. Federal law mandates that long-range metropolitan transportation plans must include a discussion of types of potential environmental mitigation activities and areas to carry out these activities, including activities that may have the greatest opportunity to restore and maintain the environmental functions affected by the plan. This discussion is to be developed in consultation with federal, state, tribal, wildlife, land management, and regulatory agencies.

The LRTP includes projects expected to be constructed by 2050. The plan provides maps of common environmental features and historic areas and general mitigation strategies. The identification of environmentally sensitive areas and historic sites and the strategies are intended to provide for the long-term protection of these areas and properties.

The BCPC, RATS and state agencies conduct regional data collection, and as a result, maps of the most common environmental features and historic sites have been developed. The maps included in this section identify the location of the following features:

- Hydrology Network (surface waters, wetlands, and floodplains) (Map 14)
- Steep Slopes (Map 15)
- Prime Agricultural Soils (Map 16)
- County Greenway Network (Map 17)
- Natural Heritage Areas, Important Bird Areas, and Trout Streams (Map 18)
- Easements and Agricultural Zoning (Map 19)
- Historic Resources Listed on the National Register (Map 20)

While the responsibility for implementing environmental mitigation largely rests with PennDOT and local municipalities, both BCPC and RATS will continue to facilitate information sharing about potential mitigation locations, techniques, and best practices. RATS will continue to assist District 5-0 with finding suitable sites for a 'seasonal wetland' bank, where applicable, inside the county or other regional mitigation strategies. A 'seasonal wetland' bank is a wetland area that has been restored and protected to provide compensation for impacts to wetlands. These banks are established to generate environmental credits that can be used or sold to offset unavoidable wetland losses, ensuring that wetland functions are maintained even after development or other impacts occur. RATS will continue working with the BCPC and the Pennsylvania Historical and Museum Commission (PHMC) in identifying historic sites in Berks County.

Mitigation can be defined by the order of process sequencing as:

- Avoiding the impact altogether.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impacts by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

There are generally two categories of mitigation activities:

Best Management Practices (BMPs)

BMPs are existing policies, practices, and measures required by law, regulation, or policy that reduce the environmental impacts of designated activities, functions, or processes. Although they mitigate potential impacts by avoiding, minimizing, or reducing/eliminating impacts,

BMPs are distinguished from mitigation measures because BMPs are 1) existing requirements for the proposed action, 2) ongoing, regularly occurring practices, and 3) not specific to a proposed project. In other words, they are inherently part of the proposed action and are not additional mitigation measures proposed because of the NEPA environmental review process for the proposed action. The primary purpose of using BMPs in Berks County is through stormwater management – to protect beneficial uses of water resources through the reduction of pollutant loads and concentrations, and through reduction of discharges (volumetric flow rates) causing stream channel erosion.

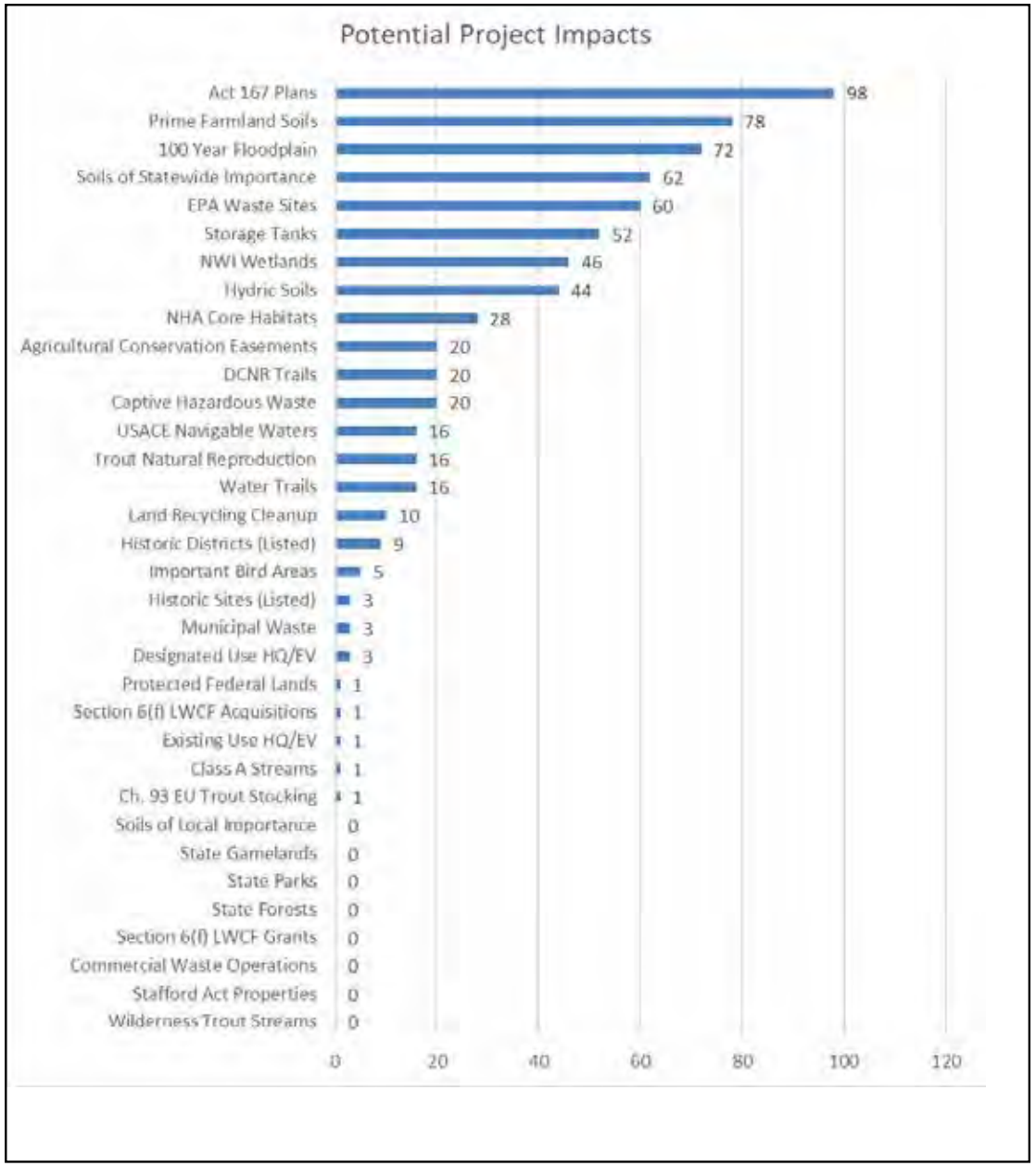
Mitigation Measures

Mitigation measures are additional, project specific measures proposed because of the NEPA environmental review process. Mitigation measures may be routinely applied across many transportation projects but are often determined on a project-by-project basis. The following table identifies the number of projects that could have a potential impact on a variety of environmental features.

The focus of this LRTP is asset management and maintenance first, with limited, capacity improvement projects and right-of-way acquisition. The majority of projects identified in this LRTP will likely not require substantial mitigation efforts. Measures can be taken to avoid, minimize, rectify, reduce, or compensate for project-specific impacts identified during the environmental review of the proposed project. If any, small, project specific actions will occur at individual project locations.

To get a better understanding of how projects in this plan may affect these natural features, RATS inventoried environmental features within 250 feet of each project.

In Pennsylvania, the Agency Coordination Meeting (ACM) is a forum where regulatory and resource agencies meet on a regular basis to discuss potential issues on various transportation projects (typically projects that require Environmental Impact Statements [EIS]), as well as review potential environmental concerns related to projects identified within the LRTP. Presentation of the LRTP and/or project-level impacts are at the discretion of PennDOT. This LRTP was presented to the ACM on December 10, 2025. The agencies were in agreement with the processes used by the MPO to identify environmental resources and provided additional guidance and resource links to expand our efforts.



RESILIENCY

From a transportation perspective, threats of extreme weather events (such as heat, drought, floods, and severe weather ranging from hurricanes to blizzards) pose substantial environmental, economic, public health and safety risks. An assessment of potential extreme weather impacts on transportation infrastructure could benefit regional planning activities. Often-cited resiliency strategies such as green infrastructure, heat island abatement, alternative fuels and fleets, and alternative transportation may help reduce future risks while creating other near-term community benefits.

The Berks County Department of Emergency Services develops and maintains a Berks County Emergency Operations Plan and a Hazard Vulnerability Assessment and Mitigation Plan that serve to coordinate emergency hazard mitigation activities. The Hazard Vulnerability Assessment and Mitigation Plan documents historic hazard events that occurred in Berks County dating back to 1958. In addition, a summarization of the hazards that present the greatest potential risk are identified. Part of the plan development process includes identifying what initiatives – mitigation actions – the County is taking (i.e., existing) or could take (i.e., potential) to minimize the effects of a hazard event on the Berks County population, economy, property, building stock, and infrastructure.

These include evacuation and transportation security planning that anticipates, absorbs, adapts to, and recovers from disruptions. These plans outline the types, frequencies, vulnerabilities, capabilities, and mitigations for various natural and man-made disasters. The plans establish an incident command system to coordinate emergency and evacuation responsibilities among the various emergency responders. RATS and the BCPC will continue to communicate with both PennDOT and the County Emergency Services Department to ensure that the plans remain current.

Federal regulations require PennDOT and MPOs to address changing weather conditions as a focus of long-range planning. In 2017, PennDOT completed its Extreme Weather Vulnerability Study (EWVS) which was developed to better anticipate the consequences and potential impacts of extreme weather events and to identify funding priorities and strategies to improve transportation system resiliency. Many of the strategies identified in the EWVS are incorporated into the County's current and ongoing efforts to mitigate changing weather conditions on existing and future infrastructure.

Current planning regulations already include a number of requirements that generally align with weather condition mitigation and adaptation. For example, provisions that relate to efficient management and operation of the transportation system, coordination with land use plans, congestion mitigation, and electric vehicle and alternative fuels use can be related to reducing harmful emissions. Further, RATS, in collaboration with PennDOT, will review historical impacts of events such as flooding, and attempt to mitigate those impacts through improved design and incorporating resiliency into the project prioritization process.



Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 14

Hydrology Network

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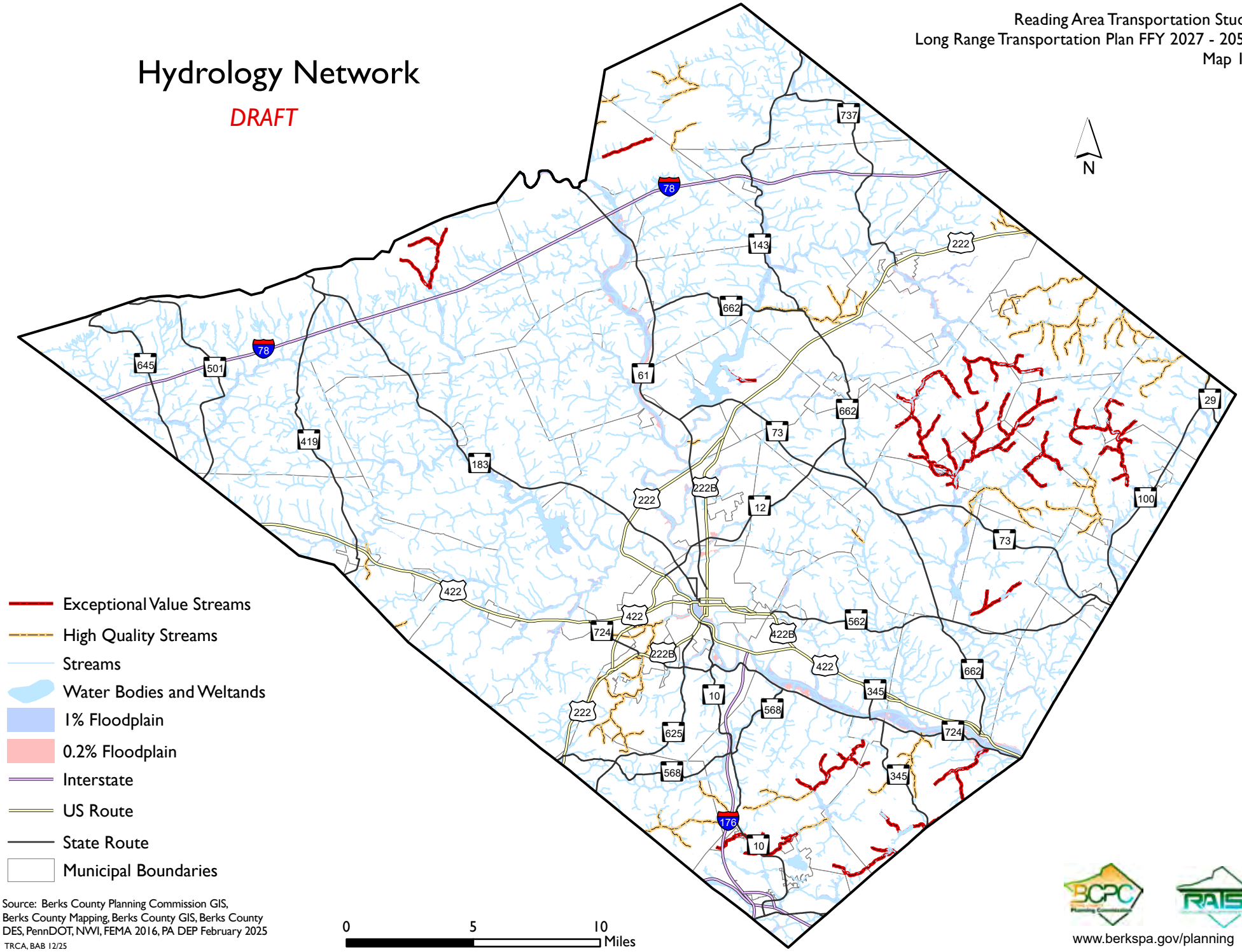

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, NWI, FEMA 2016, PA DEP February 2025

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Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 15

Slopes Greater Than 25%

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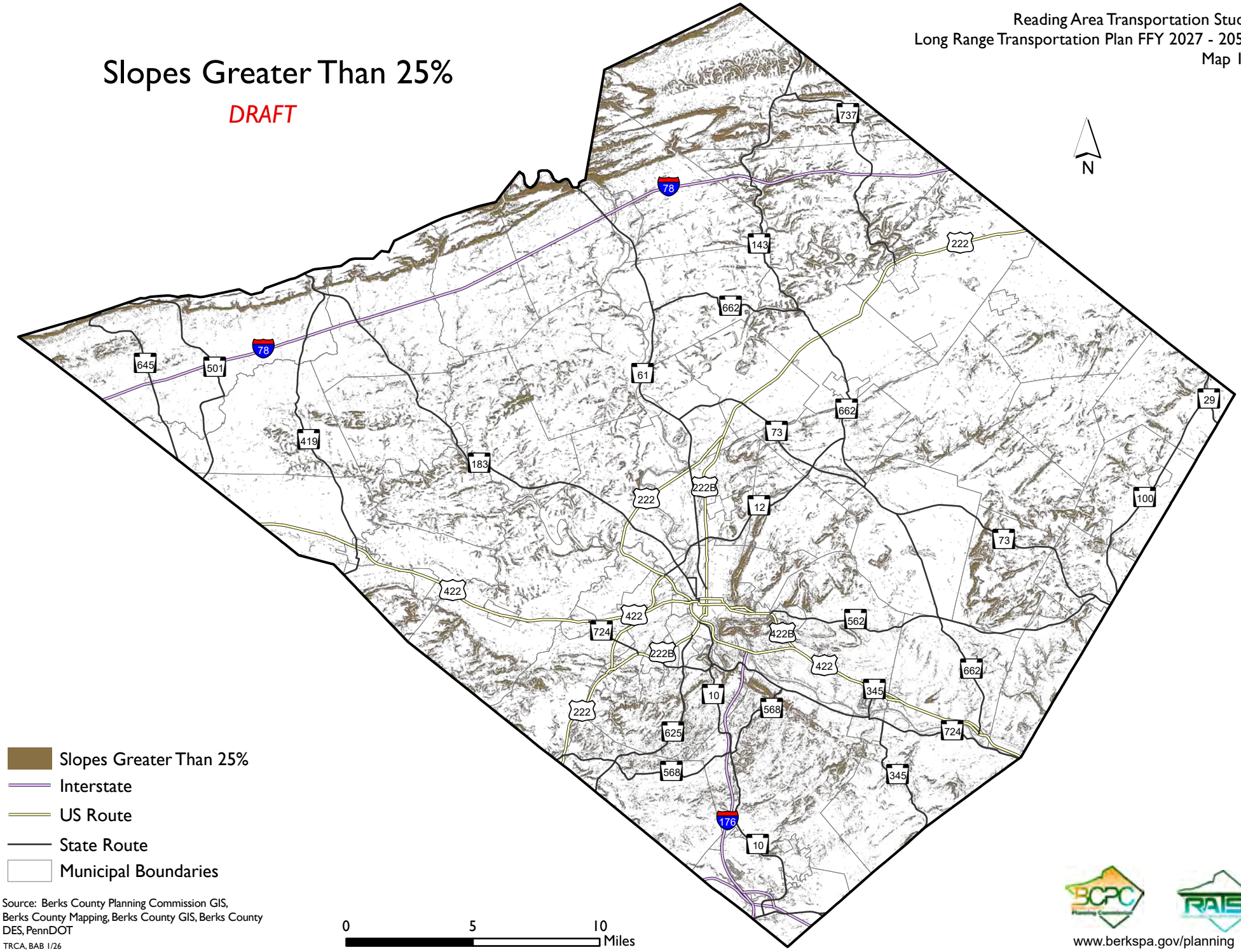

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT

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Prime Agricultural Soils

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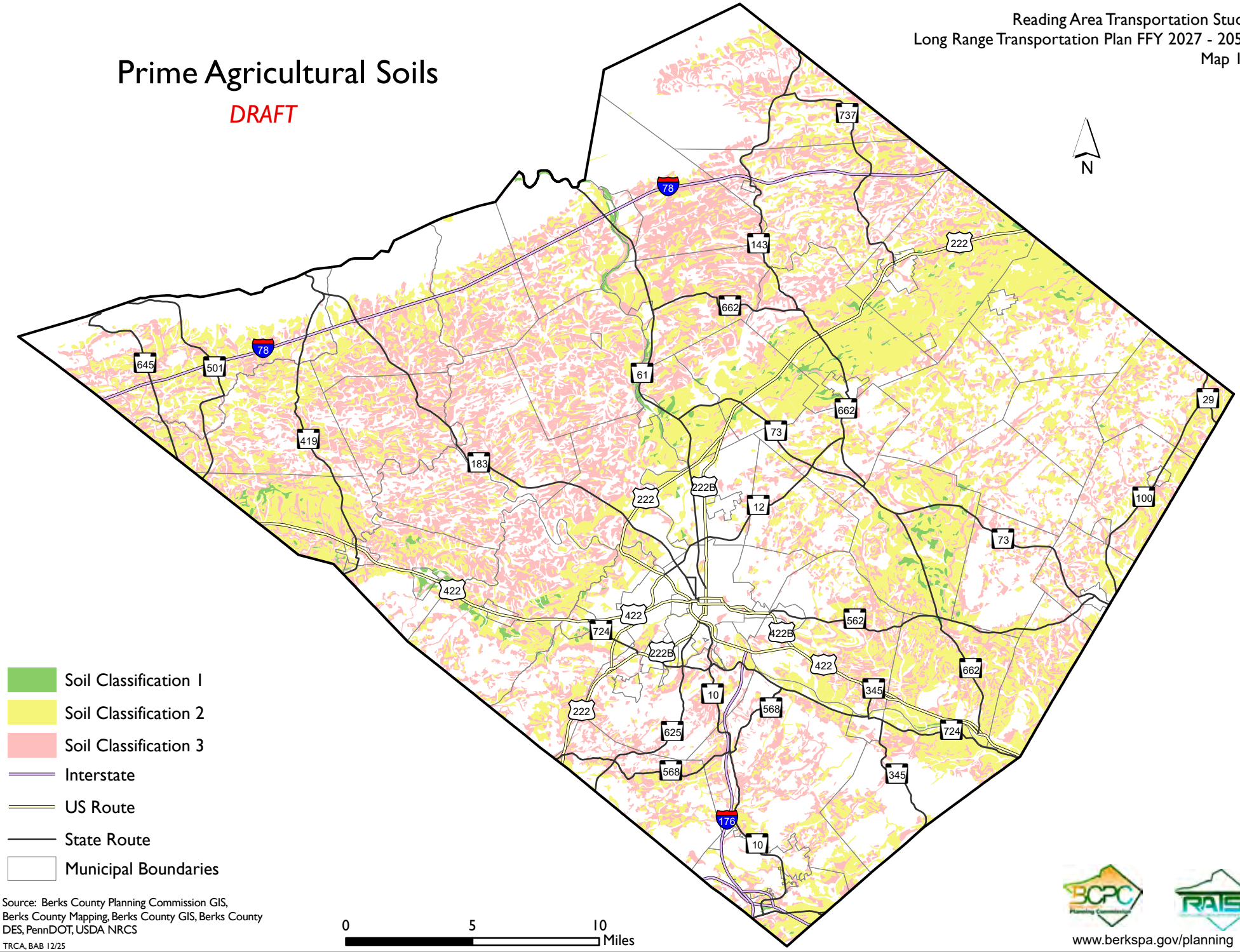

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, USDA NRCS

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County Greenway Network

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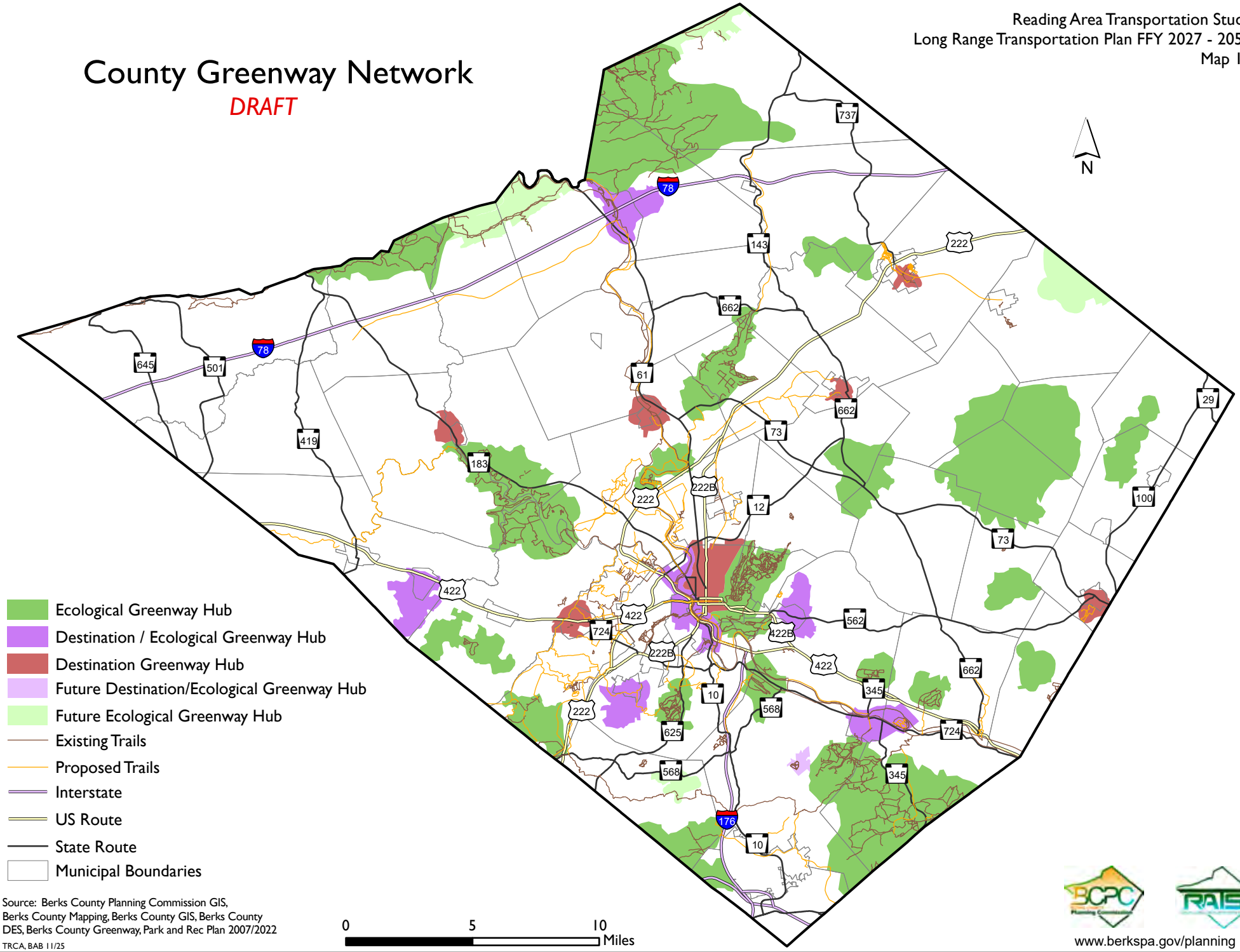

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, Berks County Greenway, Park and Rec Plan 2007/2022

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Natural Heritage Areas and Trout Streams

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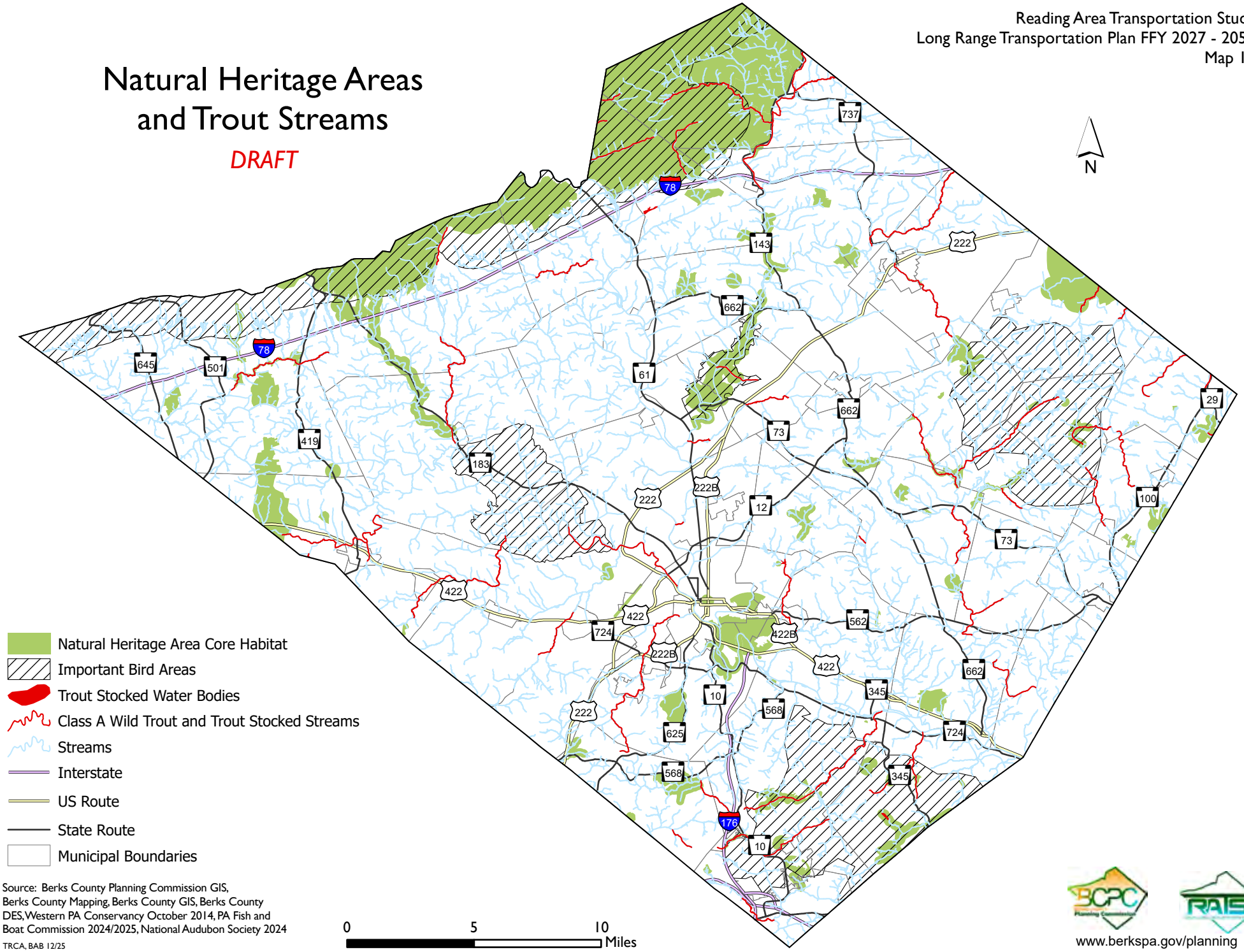

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, Western PA Conservancy October 2014, PA Fish and Boat Commission 2024/2025, National Audubon Society 2024

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Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 19

Easements and Agricultural Zoning

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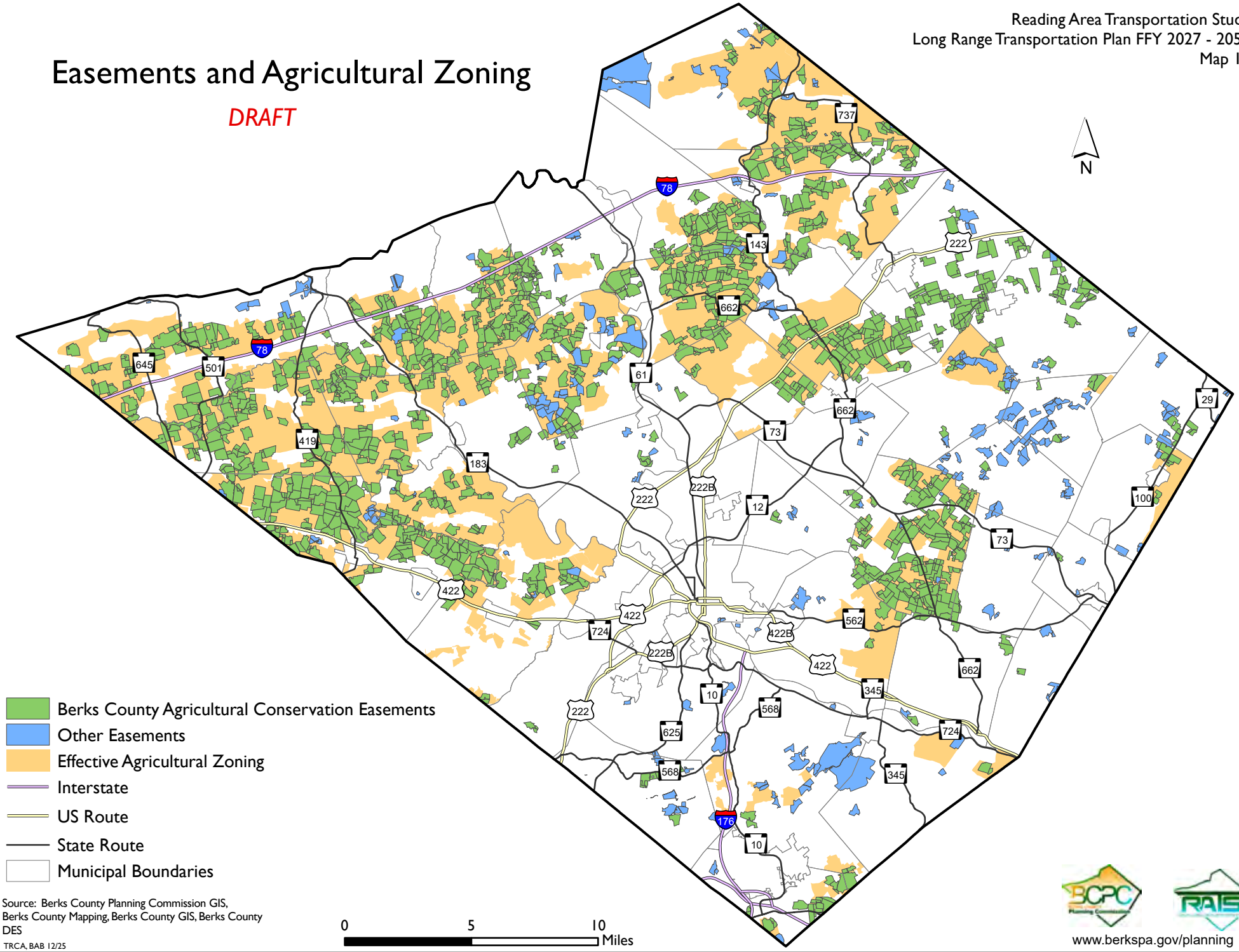

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES

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Historical Resources Listed on National Register

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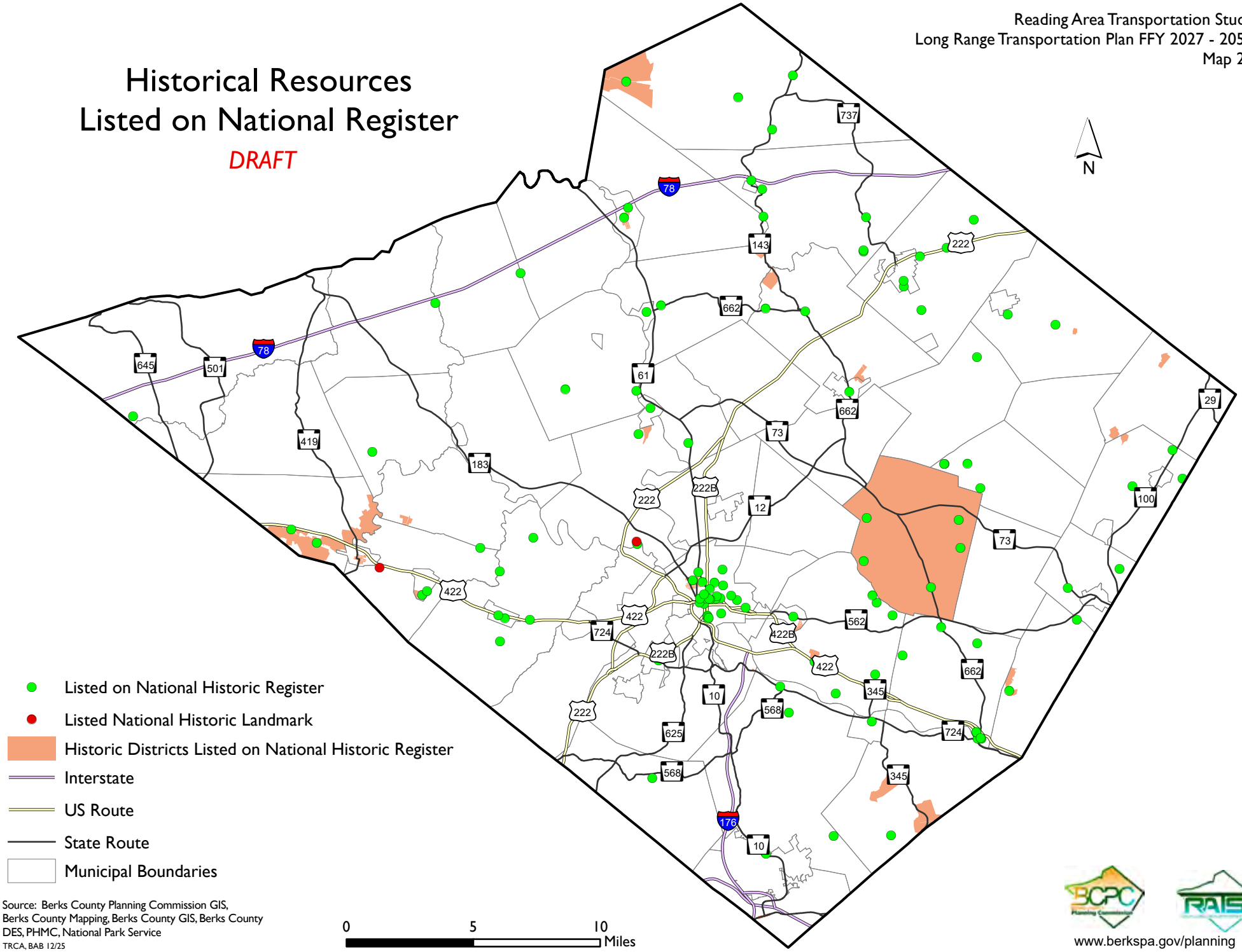

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PHMC, National Park Service

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ROADS AND BRIDGES

The regional highway system functions as the primary means of distributing people and goods within and throughout Berks County. 51.9 miles of Interstate and 36.8 miles of expressways accommodate most of the highway traffic.

Our experience and perception of the transportation system is largely based on the condition of the roads and bridges we drive on every day. As stated earlier, the primary focus of this plan is to develop and maintain the county's road and bridge network to be satisfactory and safe for existing and planned traffic. To aid in this process, the Reading Area Transportation Study Annual Pavement and Bridge Condition Report was created. Through multiple facets of identification and analysis completed, this report helps to guide investment decisions to keep Berks County's roads and bridges in good order by determining potential projects for inclusion in the RATS TIP and LRTP.

Roads

Historically, Berks County has been served by a radial system of five major arterial highways. U.S. 222 is the principal link between Reading and both Allentown and Lancaster, as well as a connection to the Pennsylvania Turnpike. PA 61 is the principal highway connection between Schuylkill County and Reading.

U.S. 422 provides a direct link to the Delaware Valley market center to the east. To the west, U.S. 422 connects Reading to Lebanon, Harrisburg and the Capitol region. Berks County has no Interstate link that crosses through the core urban area; however, Interstate 78 to the north and the Pennsylvania Turnpike (I-76) to the south bound the county. PA 183 and PA 61 act as connectors to I-78, while I-176 and U.S. 222 South link the urban area with the Turnpike.

In 2024, Berks County had 3,292.54 linear miles of roadway, largely owned by local government entities and PennDOT.

ROAD OWNERSHIP BY AGENCY 2024

Agency	Linear Miles	%
Local	2,413.18	73.29%
PennDOT	872.60	26.50%
Other State/Federal	2.02	0.01%
Turnpike	4.74	0.14%
Total	**3,292.54**	**100.00%**

Source: PennDOT, Pennsylvania Highway Statistics, 2024 Highway Data

Map 21 and the Roads by Functional Class table show the federal functional classifications assigned to roads in Berks County. The functional classification of a roadway may change over time based on changing traffic conditions. Classification of a road is based on an analysis of the volume of traffic using the facility, the type of trip provided, the length of trip, and the speed of the trip.

ROADS BY FUNCTIONAL CLASS 2024

Road Class	Miles	%
Local	2,388.8	72.55%
Minor Collector	163.3	4.96%
Major Collector	355.7	10.80%
Minor Arterial	202.2	6.14%
Principal Arterial	94.0	2.85%
Interstate	51.9	1.58%
Other Freeway/ Expressway	36.8	1.12%
Total	**3,292.7**	**100.00%**

Source: PennDOT, Pennsylvania Highway Statistics, 2024

Arterials provide the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control. These roads are typically classified as principal arterials (sub-grouped by Interstate, Freeway/ Expressway, and other principal arterials) and minor arterials.

Collectors provide a lower level of service at a slower speed. They provide service for shorter distances by collecting traffic from local roads and connecting them with arterials. Collectors are classified as major collectors and minor collectors.

Local roads and streets are, by far, the most numerous of the road types in the county, accounting for 72.55 percent of all road segment miles in Berks County. These roads provide access to individual properties and serve short distance, low speed trips.

Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 21

Functional Classification

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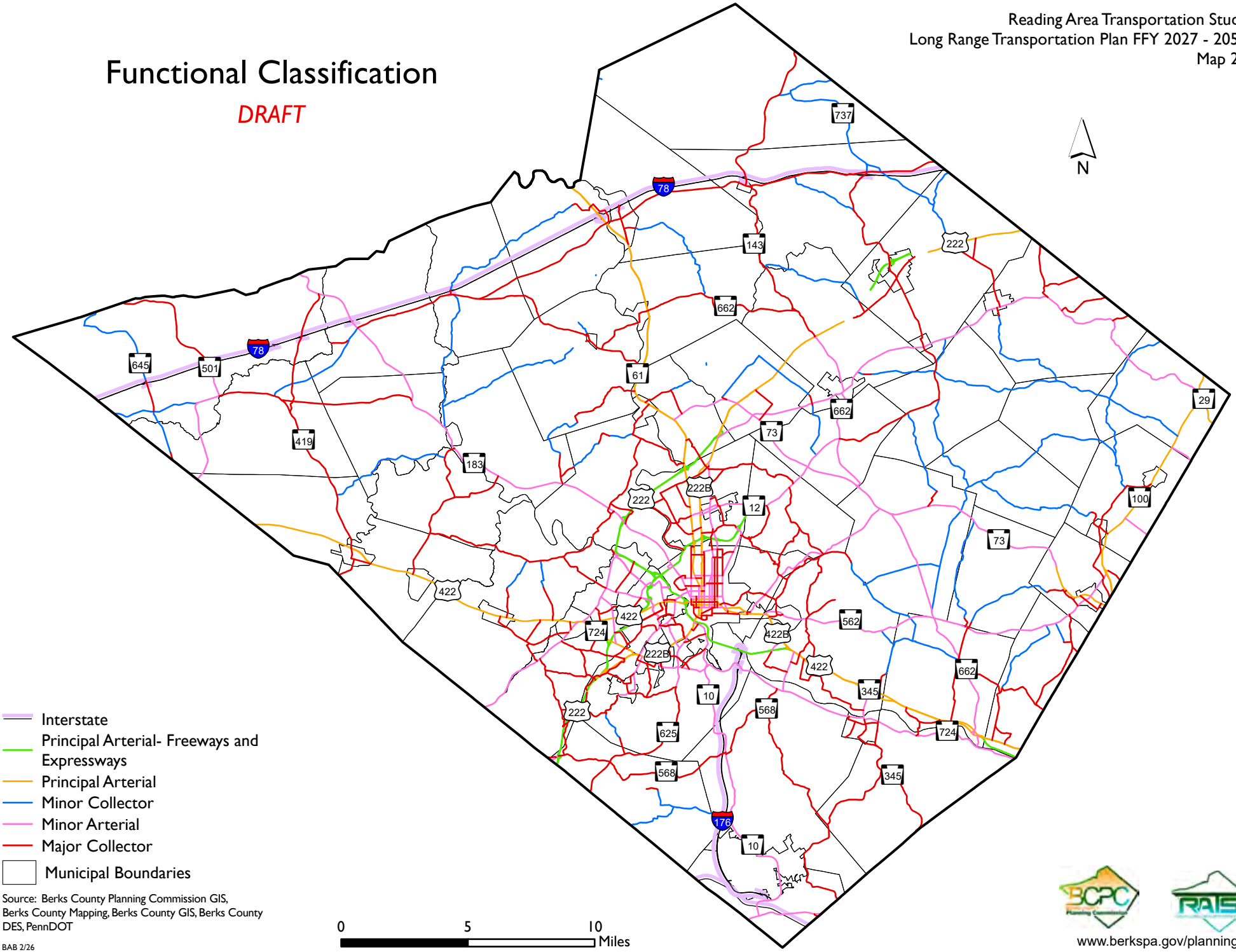

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT

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The National Highway System (NHS) consists of roadways important to the nation's economy, defense, and mobility. Principal Arterials are part of the National Highway System. Berks County has 184.4 miles of roads on the National Highway System and two intermodal connectors (see Maps 22 & 23). Currently, the NHS in Berks County is under review. Route mileage will change, and one Intermodal Connector is recommended for elimination.

NATIONAL HIGHWAY SYSTEM (NHS) IN BERKS COUNTY 2024

Agency	Linear Miles
Local	0.5
PennDOT	179.2
Turnpike	4.7
Total	**184.4**

Source: PennDOT, Pennsylvania Highway Statistics, 2024 Highway Data

The Federal Aid System (with the exception of rural minor collectors and local roads) is a collection of roads in the county that are eligible for federal funds. In 2024, the federal aid system represented 733.5 linear miles or 22.28% of all roadways in Berks County.

FEDERAL AID SYSTEM IN BERKS COUNTY 2024

Agency	Linear Miles
Local	140.0
PennDOT	593.5
Total	**733.5**

Source: PennDOT, Pennsylvania Highway Statistics, 2024

Average Annual Daily Traffic (AADT) is the total number of vehicles traveling along a roadway segment on an average day. Map 24 illustrates AADT on Berks County roadways.



National Highway System*

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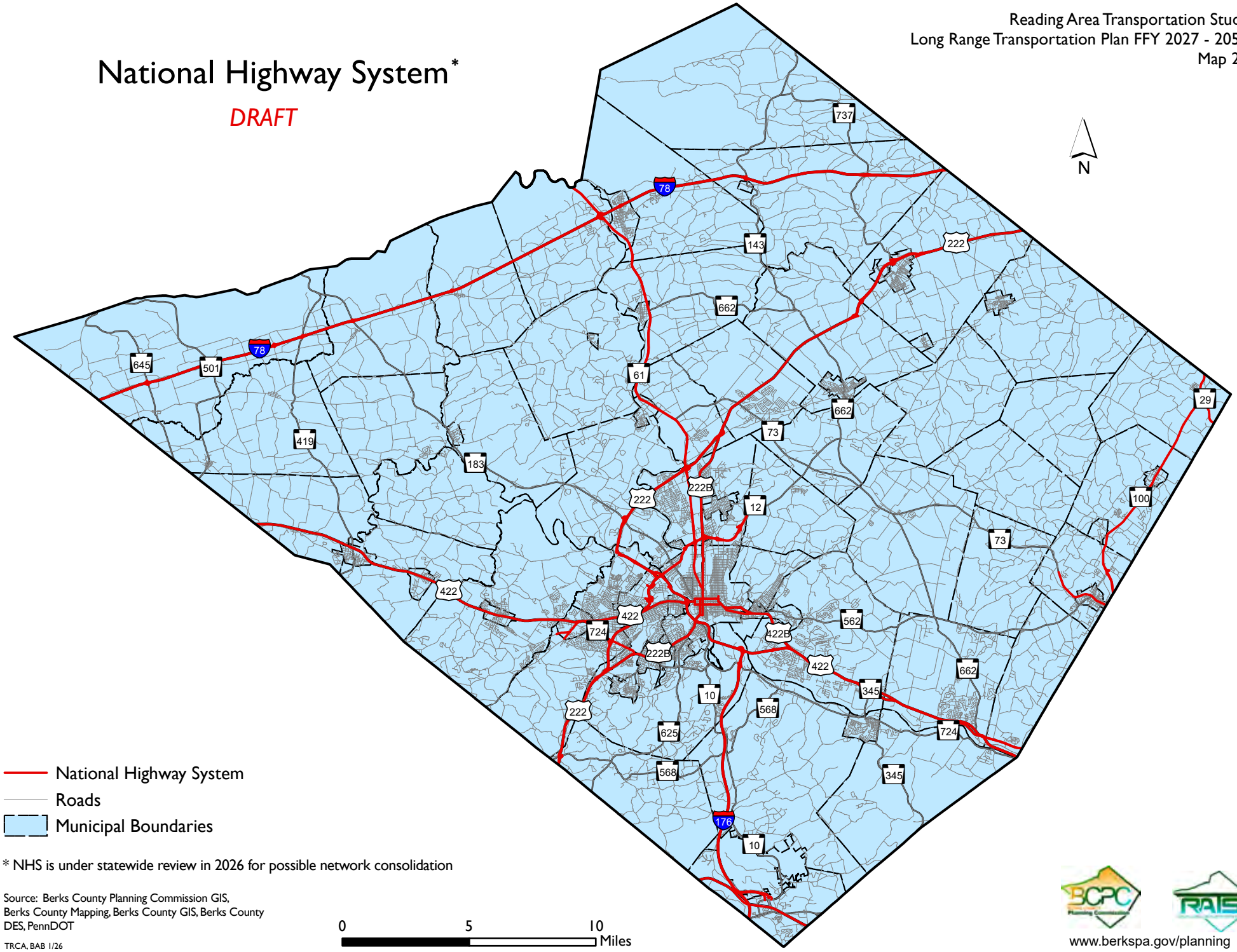

* NHS is under statewide review in 2026 for possible network consolidation

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT

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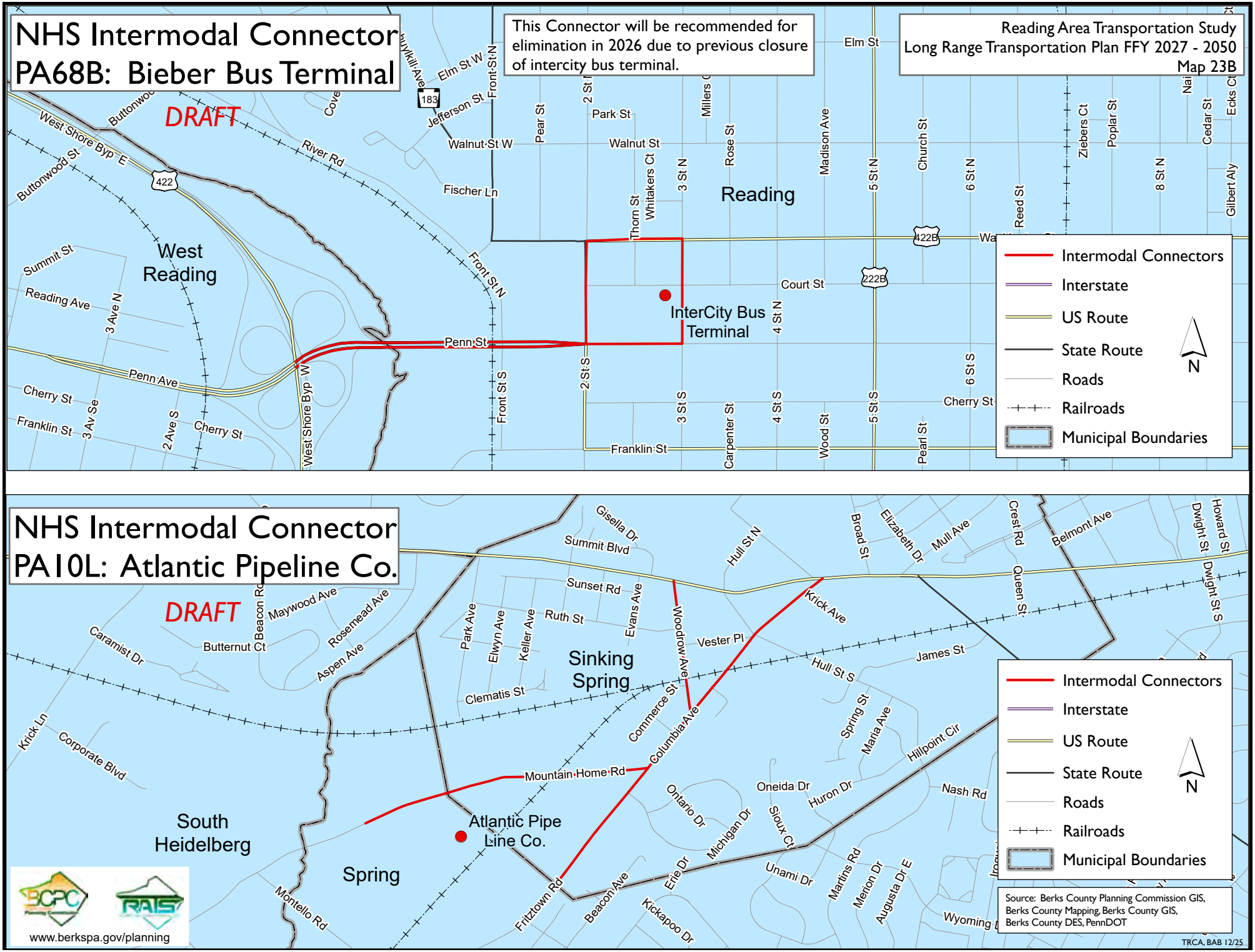
NHS Intermodal Connector
PA68B: Bieber Bus Terminal
DRAFT
This Connector will be recommended for elimination in 2026 due to previous closure of intercity bus terminal.
Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 23B
Reading
West Reading
InterCity Bus Terminal
Intermodal Connectors
Interstate
US Route
State Route
Roads
Railroads
Municipal Boundaries
N
NHS Intermodal Connector
PA10L: Atlantic Pipeline Co.
DRAFT
Sinking Spring
South Heidelberg
Spring
Atlantic Pipe Line Co.
Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT
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Traffic Volumes

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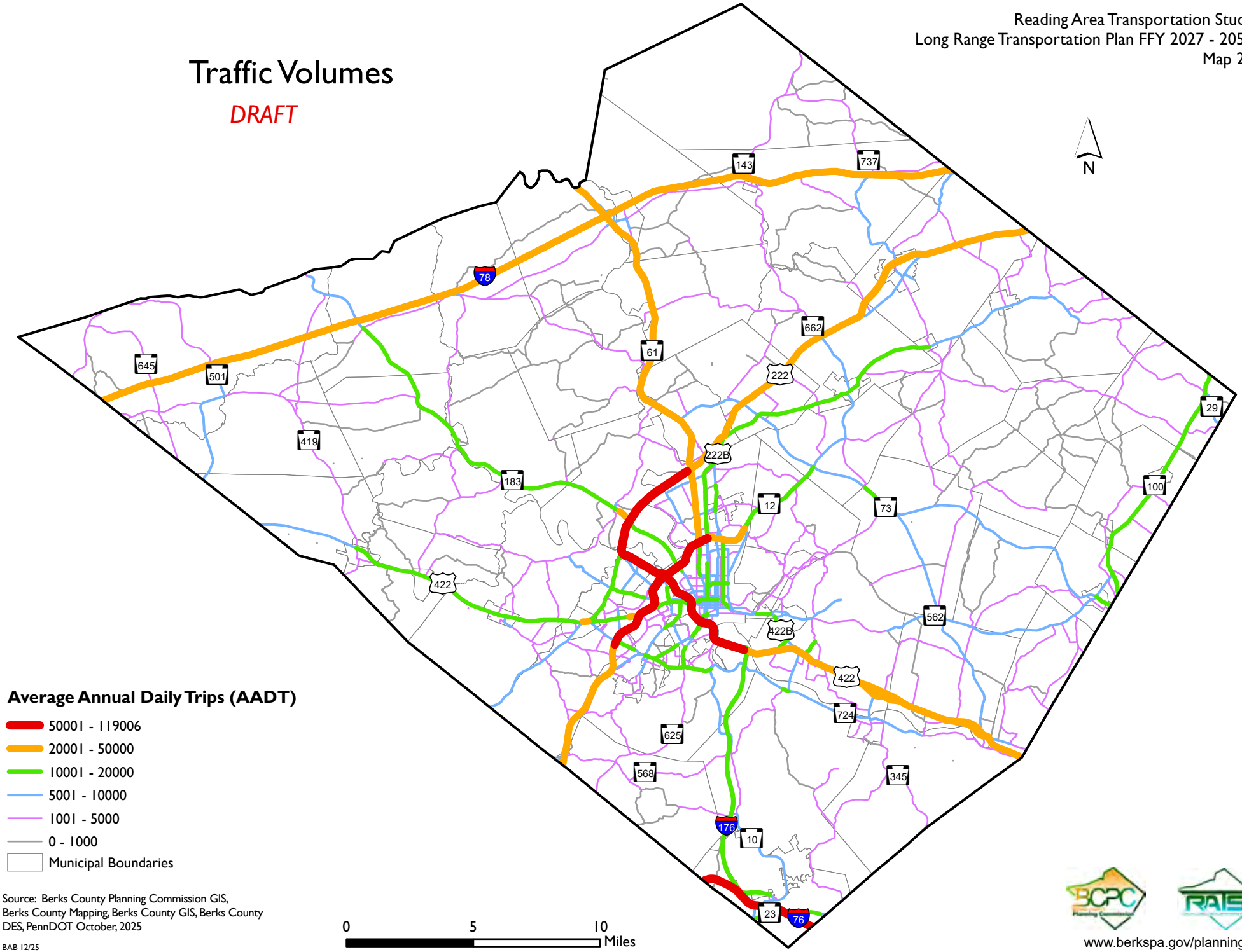

Average Annual Daily Trips (AADT)

- 50001 - 119006
- 20001 - 50000
- 10001 - 20000
- 5001 - 10000
- 1001 - 5000
- 0 - 1000
- Municipal Boundaries

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT October, 2025

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0 5 10 Miles

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Daily Vehicle Miles Traveled (DVMT)

In 2024 the county's roadways accommodated over 9 million miles of travel daily, the majority of which is on PennDOT owned roads. The COVID-19 pandemic decreased travel demand across the state and in Berks County in 2020, which should be kept in mind when viewing the two DVMT tables below. The 2020 Daily Vehicle Miles Traveled decreased to just under 8 million miles of travel daily from a DVMT of approximately 9.55 million in 2019, as less drivers traveled the roads due to the COVID-19 pandemic. This accounted for a 16.9% decrease in total DVMT for the year of 2020 compared to 2019. The DVMT on Berks County roads are still 500,000 less than in 2019.

The adjacent table shows DVMT for Berks County roads by the agency that owns them from 2020 through 2024. In 2024, the county's roadways accommodated over 9 million miles of daily travel, the majority of which is on PennDOT owned roads. The total DVMT for Berks County increased from 2020 to 2024 by 13.80%.

CHANGE IN DVMT BY AGENCY IN BERKS COUNTY FROM 2020-2024

Agency	2020	2021	2022	2023	2024	2020-2024 # Change	2020-2024 % Change
Local	1,264,344	1,626,303	1,704,877	1,506,007	1,388,118	123,774	9.79%
PennDOT	6,404,952	7,905,375	7,654,150	7,862,851	7,456,892	1,051,940	16.42%
Other State/Federal	115,953	136,456	16,203	11,535	606	-115,347	-99.48%
Turnpike	166,906	144,808	183,348	190,315	183,348	16,442	9.85%
Total	**7,934,155**	**9,812,942**	**9,588,578**	**9,570,708**	**9,028,964**	**1,094,809**	**13.80%**

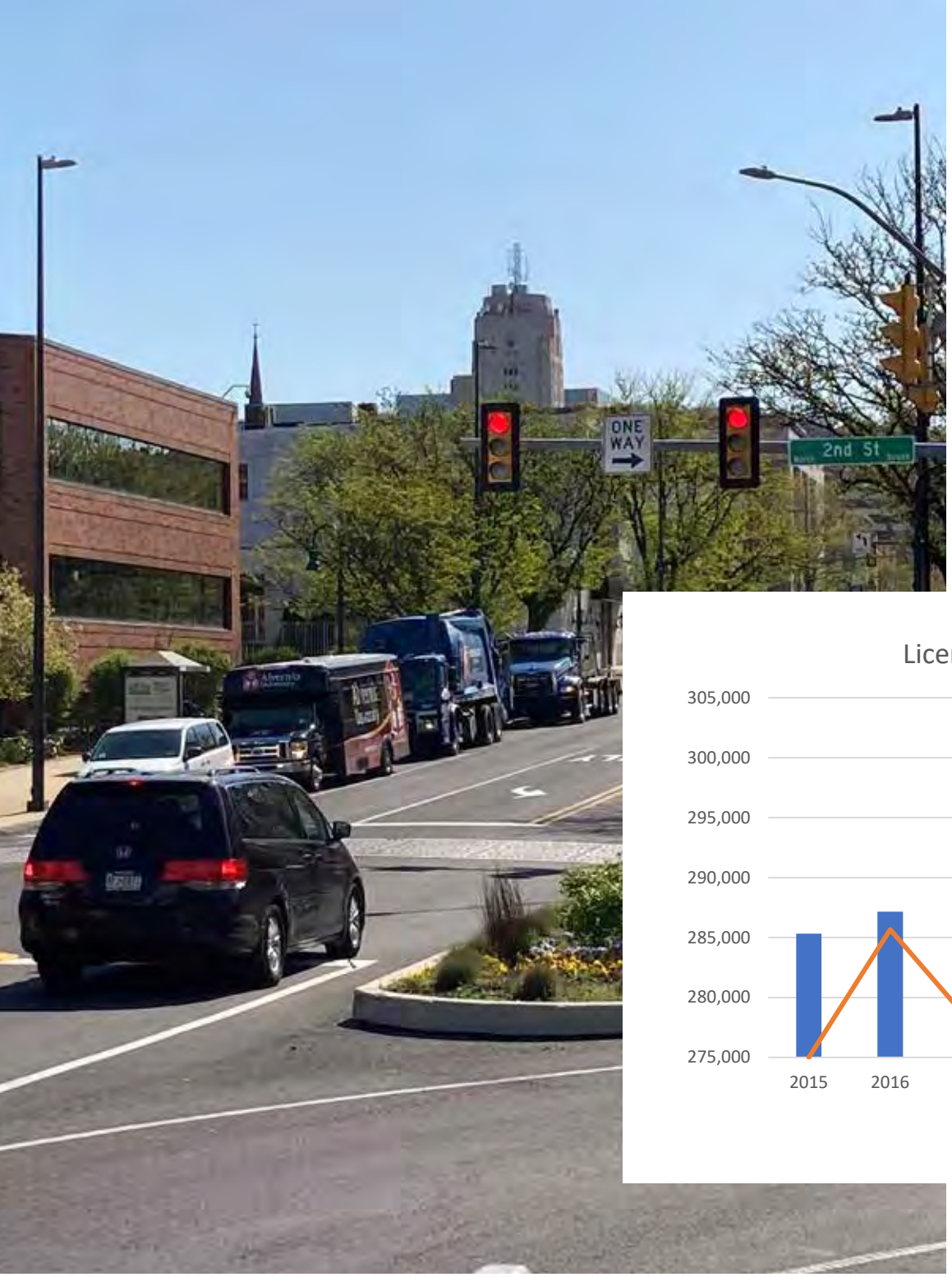
Source: PennDOT, Pennsylvania Highway Statistics, 2020-2024

The DVMT, broken out by functional classification, shows almost all classes of through roads increasing in use while lower capacity local roads decreased in use from 2020-2024. Particularly of note, travel on the freeways/expressways grew 21.23% from 2020-2024. As noted earlier, the COVID-19 pandemic decreased travel demand by 16.9% for 2020 compared to 2019. It should be noted that compared to the 2023 numbers, the only increase was in DVMT of the Interstate.

CHANGE IN DVMT BY ROAD CLASS IN BERKS COUNTY FROM 2020-2024

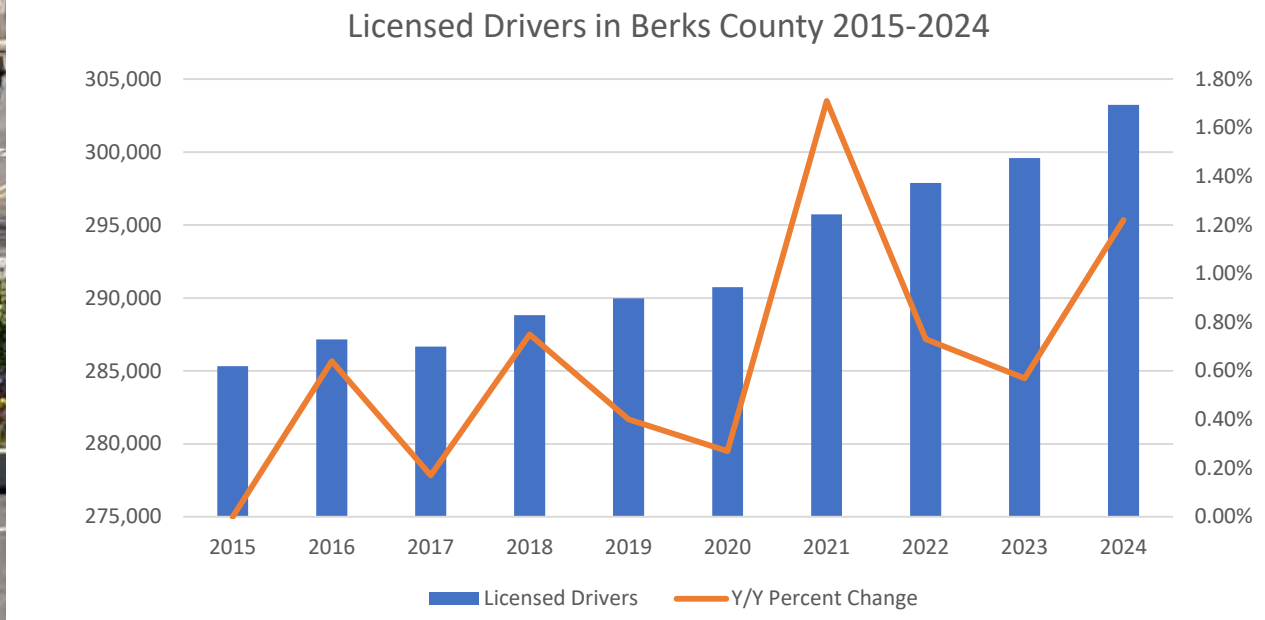
Road Class	2020	2021	2022	2023	2024	2020-2024 # Change	2020-2024 % Change
Local	1,039,823	1,327,886	1,307,074	1,076,916	980,398	-59,425	-5.71%
Minor Collector	196,167	223,363	225,571	237,636	229,873	33,706	17.18%
Major Collector	840,931	1,045,917	1,025,152	1,088,058	1,001,527	160,596	19.10%
Minor Arterial	1,413,606	1,695,536	1,669,323	1,702,402	1,596,009	182,403	12.90%
Principal Arterial	1,435,689	1,804,699	1,836,037	1,927,463	1,718,987	283,298	19.73%
Interstate	1,577,070	1,885,969	1,796,737	1,747,965	1,767,555	190,485	12.08%
Other Freeway/ Expressway	1,430,869	1,829,572	1,698,685	1,790,268	1,734,615	303,746	21.23%
Total	**7,934,155**	**9,812,942**	**9,558,579**	**9,570,708**	**9,028,964**	**1,094,809**	**13.80%**

Source: PennDOT, Pennsylvania Highway Statistics, 2020-2024



Driving Population

As of 2024, there were 303,238 licensed drivers in Berks County. The following chart shows the 6.28% growth in licensed drivers since 2015. The largest change in number of licensed drivers from year to year was between 2020 and 2021, which could be attributed to less desire and opportunity to obtain a license during the COVID-19 pandemic.



Registered Vehicles

The following chart provides a sample of the types of vehicles that use the Berks County road network. There are 20,541 (5.3%) more vehicles registered in 2024 than in 2014. The Other Vehicle Types class rose significantly, but that was due to including cargo trailers and recreational trailers into this category that were unreported in previous years. Passenger cars have been the predominant vehicle on the road – with a steady rate of around 66% of all vehicles since 2014. With the addition of motorcycles and pick-up trucks, 84.8% of registered vehicles in the county are largely for passenger use. This chart is not indicative of the predominance of tractor- trailers since such vehicles can be registered in nearly any state. However, the chart below shows 319 more of those vehicles registered overall across weight classes inside the county since 2014.

CHANGE IN NUMBER AND TYPE OF REGISTERED VEHICLES IN BERKS COUNTY 2014 TO 2024

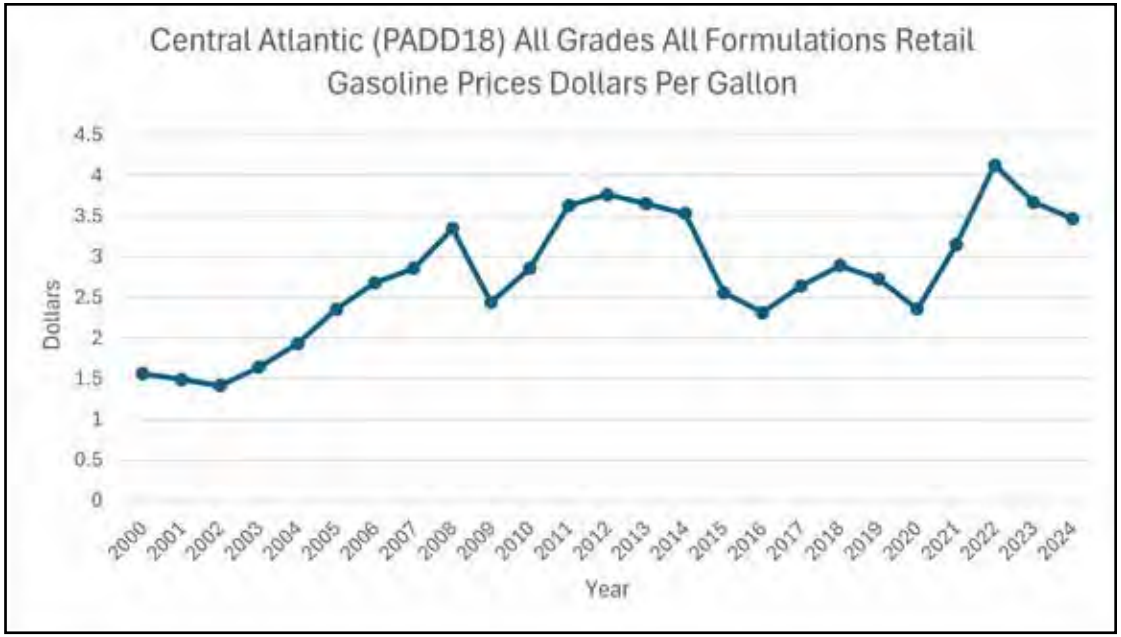
Registered Vehicles	2014	2014 % of Total	2019	2019 % of Total	2024	2024 % of Total	2014 to 2024 # Change	2014 to 2024 % Change
Passenger	259,504	67.1%	264,231	66.5%	268,777	65.9%	9,273	3.6%
Special Mobile Equipment	569	0.1%	591	0.1%	579	0.1%	10	1.8%
Farm Vehicles (no exemption cert.)	5	0.0%	4	0.0%	4	0.0%	-1	-20.0%
Motorhomes	1,248	0.3%	1,224	0.3%	1,148	0.3%	-100	-8.0%
Regular Motorcycle	15,412	4.0%	14,194	3.6%	14,437	3.5%	-975	-6.3%
Motorized Pedalcycle	72	0.0%	52	0.0%	52	0.0%	-20	-27.8%
Motor Drive Vehicle/Motor Driven Cycle	209	0.0%	146	0.0%	131	0.0%	-78	-37.3%
School Bus	1,416	0.4%	1,475	0.4%	939	0.2%	-477	-33.7%
Omni Bus	193	0.0%	161	0.0%	96	0.0%	-97	-50.3%
Bus	316	0.0%	242	0.0%	208	0.0%	-108	-34.2%
Mass Transit Bus	225	0.0%	228	0.0%	112	0.0%	-113	-50.2%
ARP Bus	66	0.0%	46	0.0%	39	0.0%	-27	-40.9%
Taxi	49	0.0%	47	0.0%	1	0.0%	-48	-98.0%
Limousine	55	0.0%	170	0.0%	113	0.0%	58	105.5%
Trailer (3,000 lbs or less)	21,025	5.4%	20,558	5.2%	19,281	4.7%	-1,744	-8.3%
Trailer (3,001 to 10,000 lbs)	11,997	3.1%	13,487	3.4%	13,416	3.3%	1,419	11.8%
Trailer (10,001 lbs or more)	8,658	2.2%	10,888	2.7%	12,645	3.1%	3,987	46.0%
Pickup Trucks (up to 14,000 lbs)	57,204	14.8%	59,651	15.0%	62,498	15.3%	5,294	9.3%
Truck (14,001 to 17,000 lbs)	1,053	0.3%	1,065	0.3%	1,098	0.3%	45	4.3%
Truck (17,001 to 21,000 lbs)	826	0.2%	1,037	0.3%	1,228	0.3%	402	48.7%
Truck (21,001, to 26,000 lbs)	2,325	0.6%	2,711	0.7%	3,136	0.8%	811	34.9%
Truck (26,001 to 30,000 lbs)	186	0.0%	147	0.0%	122	0.0%	-64	-34.4%
Trucks (30,001 to 33,000 lbs)	605	0.2%	510	0.1%	440	0.1%	-165	-27.3%
Truck (33,001+ lbs) Tractor Trailers	3,630	9.4%	3,772	0.9%	3,949	1.0%	319	8.8%
Other Vehicle Types	172	0.0%	512	0.1%	3,112	0.8%	2,940	1,709.3%
Total	387,020	100.0%	397,149	100.0%	407,561	100.0%	20,541	5.3%

Source: PennDOT Driver and Vehicle Services Annual Report of Registrations



Gasoline Prices

Despite gasoline prices remaining relatively low, it is still more expensive to drive around Berks County today than it was in the last 25 years. While gas prices generally do not affect how much we travel, it can affect how far and the mode in which we travel. If gas prices are high, we tend to keep trips closer to home, purchase more gas efficient vehicles, look to carpool, or if possible, take the bus or bike to work.



Source: United States Department of Energy, Energy Information Administration (EIA)
Note: This information is obtained from the EIA PASS 18 Annual Average Table

Roadway And Bridge Maintenance

Analyzing road and bridge conditions allows PennDOT and RATS to focus on setting goals to improve upon those conditions by programming road and bridge improvements. The Reading Area Transportation Study's Pavement and Bridge Condition Report is updated annually and identifies performance based on the trends of each indicator over a 5-year period. The RATS Pavement and Bridge Report is used to help develop the recommendations identified in Chapter 4 of this plan.

Roadway surfaces in Berks County are mostly comprised of paved surface roadways. Of the paved surface roadways, pavements are either asphalt or concrete. PennDOT assesses pavement surface conditions using a variety of metrics that include International Roughness Index (IRI) and Overall Pavement Index (OPI). PennDOT uses OPI to evaluate both the surface and subsurface of the road.

IRI measures pavement roughness in terms of the number of inches per mile that a laser, mounted in a specialized van, jumps as it is driven along a highway – the lower the IRI, the smoother the ride. IRI categories are the main factor PennDOT uses in determining pavement condition. The categories are different for each business plan network. The table below displays ranges assigned to IRI categories for each business plan network. Note, the lower the IRI, the better the IRI category and condition.

IRI Categories	Interstate	NHS Non-Interstate	Non-NHS ≥ 2,000 ADT	Non-NHS < 2,000 ADT
≤ 70	Excellent	Excellent	Excellent	Excellent
71-75	Good			
76-100		Good		
101-120	Fair		Good	
121-150		Fair		Good
151-170	Poor		Fair	
171-195		Poor		Fair
196-220			Poor	
>220				Poor

Source: PennDOT Roadway Management and Testing

The following tables track the number of miles in each IRI category and median IRI based on business plan network for Berks County roads from 2020-2024. The following line charts track the percentage of roadway categorized excellent to poor IRI from 2020-2024 for each business plan network. Map 25 shows the condition of roads based on IRI category in each planning region of the county.



Pavement Conditions

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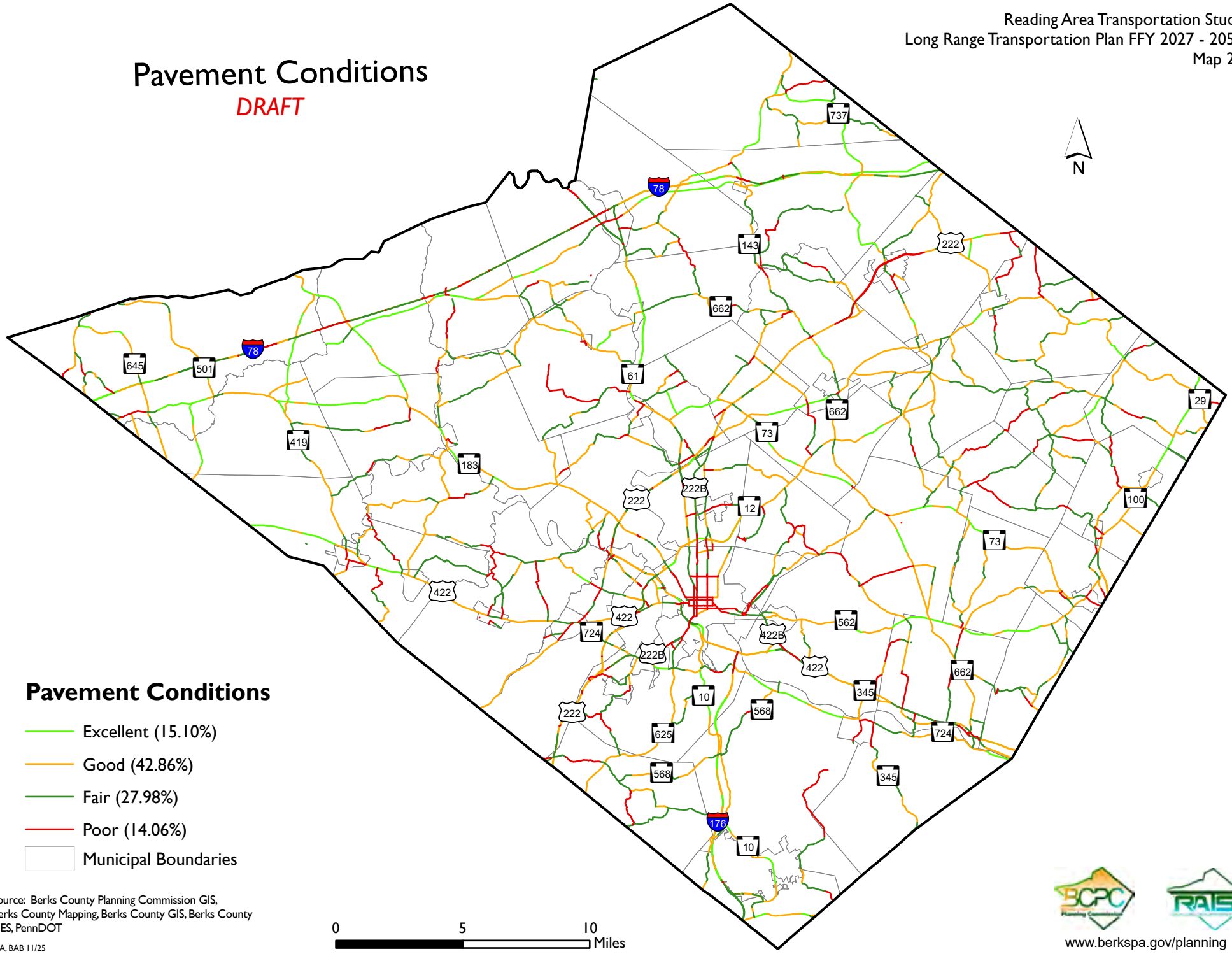

Pavement Conditions

- Excellent (15.10%)
- Good (42.86%)
- Fair (27.98%)
- Poor (14.06%)
- Municipal Boundaries

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT

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0 5 10 Miles

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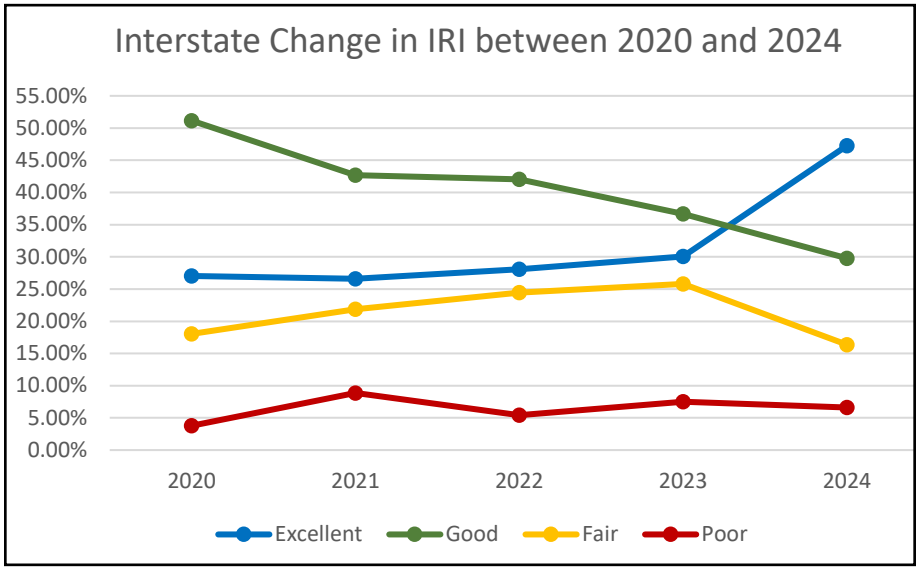
Overall, since 2020, Interstate roads in Berks County have improved, with the median IRI advancing from 81 to 72. The median IRI of 72 for Berks County interstate roads is considered good and near excellent by the IRI classification. The number of segment miles of poor condition interstate pavements have remained low, however nearly doubled between 2020 and 2024. The significant increase in excellent segment miles in 2024 can be attributed to large resurfacing and bridge maintenance projects on Interstate 78.

CHANGE IN NUMBER OF INTERSTATE SEGMENT MILES BY CONDITION AND MEDIAN IRI BETWEEN 2020 AND 2024

Condition	2020	2021	2022	2023	2024	# Change	% Change
Excellent	22.3	24.8	21.3	27.5	43.6	21.3	95.52%
Good	42.2	39.8	32.0	33.5	27.5	-14.7	-34.83%
Fair	14.9	20.4	18.6	23.6	15.1	0.2	1.34%
Poor	3.1	8.3	4.1	6.8	6.1	3.0	96.77%
Median IRI	81	83	82	85	72	-9	-11.11%

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024

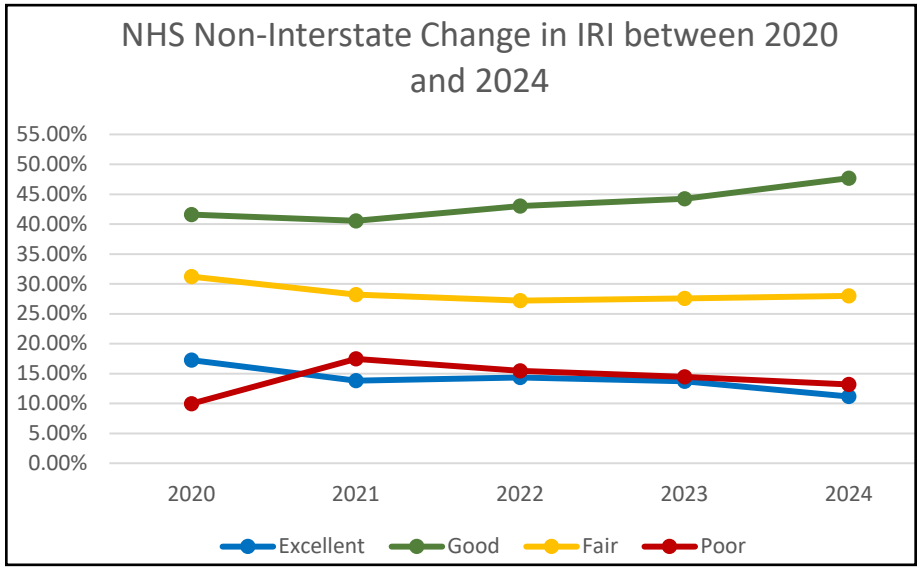


Non-interstate miles on the National Highway System (NHS) in Berks County have remained relatively stable, with the median IRI worsening by only one point from 110 to 111. These roads are considered good by the IRI classification.

CHANGE IN NUMBER OF NHS NON-INTERSTATE SEGMENT MILES BY CONDITION AND MEDIAN IRI BETWEEN 2020 AND 2024

Condition	2020	2021	2022	2023	2024	# Change	% Change
Excellent	34.9	28.3	29.4	28.1	22.3	-12.6	-36.10%
Good	84.3	83.1	88.1	90.6	95.1	10.8	12.81%
Fair	63.3	57.8	55.7	56.5	55.8	-7.5	-11.85%
Poor	20.2	35.7	31.6	29.6	26.3	6.1	30.20%
Median IRI	110	114	112	111	111	1	0.91%

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024

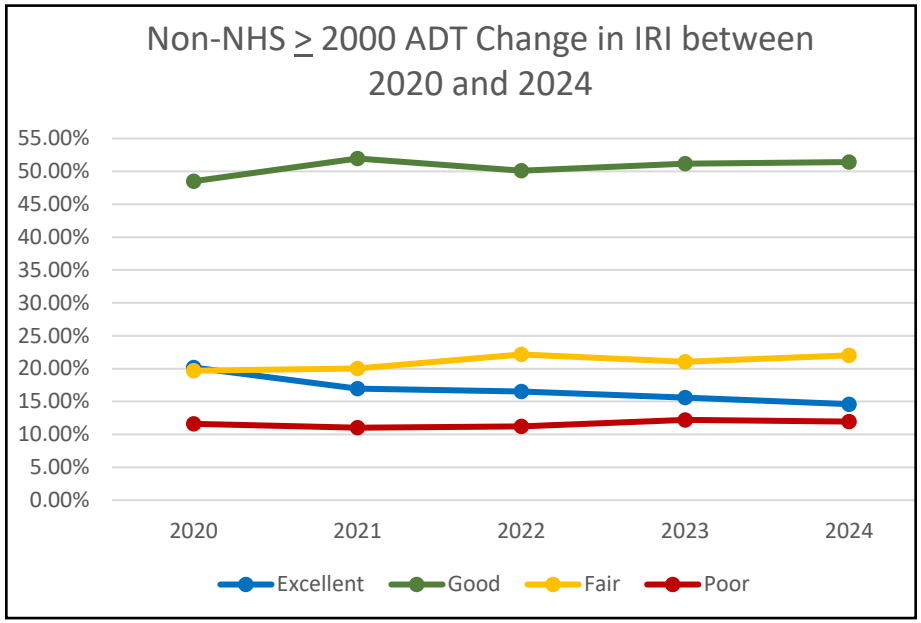


Berks County roads that are not on the NHS with 2,000 or more vehicle trips per day have remained relatively stable, despite the decrease in excellent condition segment miles. The median IRI increased from 128 to 134, while not an improvement, this business plan network remains in good condition.

CHANGE IN NUMBER OF NON-NHS ≥2000 ADT SEGMENT MILES BY CONDITION AND MEDIAN IRI BETWEEN 2020 AND 2024

Condition	2020	2021	2022	2023	2024	# Change	% Change
Excellent	71.4	60.5	59.5	59.8	54.7	-16.7	-23.39%
Good	171.8	185.4	180.1	196.4	192.5	20.7	12.05%
Fair	69.7	71.5	79.6	80.8	82.5	12.8	18.36%
Poor	41.2	39.3	40.3	46.9	44.8	3.6	8.74%
Median IRI	128	128	130	131	134	6	4.69%

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024

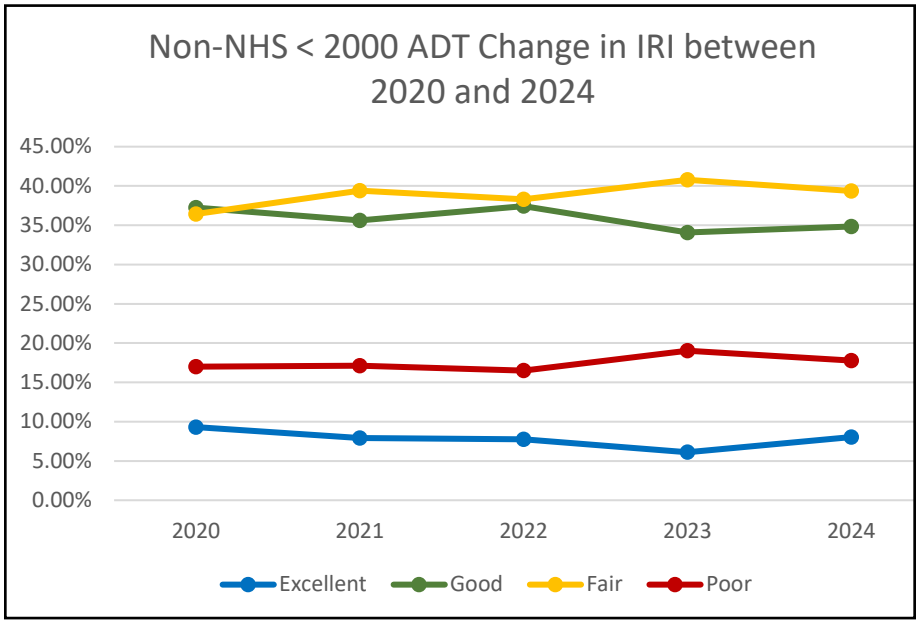


Berks County roads that are not on the NHS and see less than 2,000 vehicle trips per day have also declined in condition slightly with the median IRI changing from 173 to 178. This is the only business plan network not classified as good based on median IRI, instead a median IRI rating of 178 classifies this as fair.

CHANGE IN NUMBER OF NON-NHS <2000 ADT SEGMENT MILES BY CONDITION AND MEDIAN IRI BETWEEN 2020 AND 2024

Condition	2020	2021	2022	2023	2024	# Change	% Change
Excellent	31.6	26.7	25.8	19.0	25.7	-5.9	-18.67%
Good	126.3	120.1	124.3	105.9	111.6	-14.7	-11.64%
Fair	123.5	132.8	127.2	126.7	126.2	2.7	2.19%
Poor	57.7	57.7	54.8	59.1	57.0	-0.7	-1.21%
Median IRI	173	175	174	180	178	5	2.89%

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024

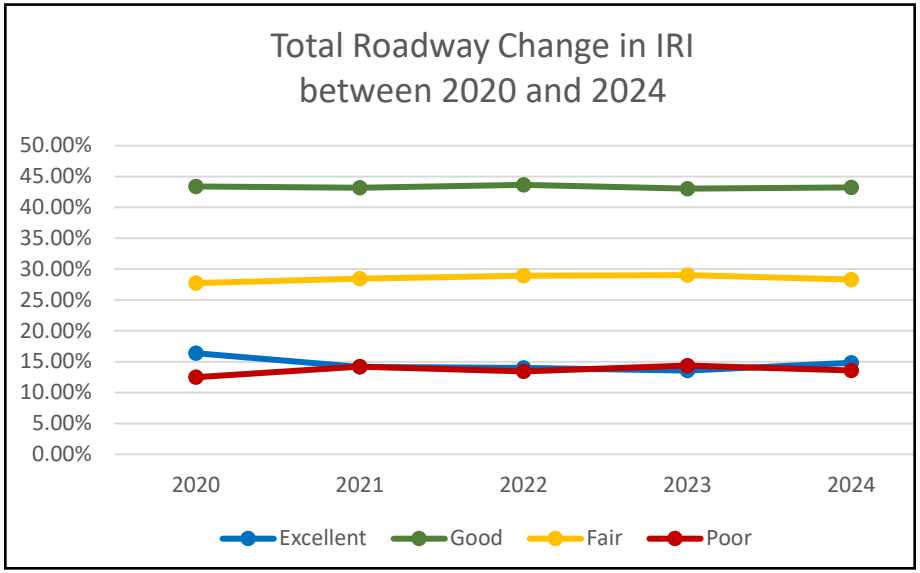


The total roadway network of Berks County has slightly declined in condition with a current median IRI of 140, however it has remained at this rating from 2021 through 2024. The largest change was a decrease in excellent condition roadway segment miles from 2020 to 2024.

CHANGE IN NUMBER OF TOTAL ROADWAY SEGMENT MILES BY CONDITION AND MEDIAN IRI BETWEEN 2020 AND 2024

Condition	2020	2021	2022	2023	2024	# Change	% Change
Excellent	160.2	140.3	136.0	134.3	146.3	-13.9	-8.68%
Good	424.6	428.3	424.4	426.3	426.7	2.1	0.49%
Fair	271.4	282.5	281.1	287.6	279.6	8.2	3.02%
Poor	122.2	141.0	130.8	142.4	134.2	12	9.82%
Median IRI	136	140	140	140	140	4	2.94%

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024



The following table displays the pavement condition by Business Plan Network for 2024, however, looks at the difference in appropriate Business Plan Networks by analyzing condition based on whether it is state-owned or a Local Federal Aid (LFA).

2024 PAVEMENT IRI SUMMARY BY BUSINESS PLAN NETWORK

Business Plan Network	Excellent		Good		Fair		Poor		Total
	Seg-Mi	%	Seg Mi	%	Seg Mi	%	Seg Mi	%	Tested Seg Mi
Interstate	43.6	46.78%	27.8	29.83%	15.1	16.20 %	6.7	7.19%	93.2
Total NHS Non-Interstate	27.4	13.05%	96.9	46.14%	56.2	26.76%	29.5	14.05%	210.0
• State-Owned	1.6	5.63%	10.2	35.92%	12.3	43.31%	4.3	15.14%	• 28.4
• LFA	25.8	14.21%	86.7	47.74%	43.9	24.17 %	25.2	13.88%	• 181.6
Total Non-NHS ≥ 2,000 ADT	54.7	14.50%	192.6	51.05%	82.8	21.95%	47.2	12.51%	377.3
• State-Owned	37.9	13.12%	137.1	47.46%	70.5	24.40%	43.4	15.02%	• 288.9
• LFA	16.8	19.00%	55.5	62.78%	12.3	13.91%	3.8	4.30%	• 88.4
Total Non-NHS < 2,000 ADT	25.7	7.98%	112.3	34.89 %	126.4	39.27%	57.5	17.86%	321.9
• State-Owned	25.7	8.34%	107.7	34.96%	122.2	39.66%	52.5	17.04%	• 308.1
• LFA	0.0	0.00%	4.6	33.33%	4.2	30.43%	5.0	36.23%	• 13.8
Total – Roadway	**151.4**	**15.10%**	**429.6**	**42.86 %**	**280.5**	**27.98%**	**140.9**	**14.06%**	**1,002.4**

Source: PennDOT's Roadway Management System (RMS) Road Segments RMSSEG: 1/3/2025

Bridges

The Schuylkill River, two lakes and countless streams provide ample recreational activities and commercial activities but create transportation challenges to safely and efficiently move people and freight over them in Berks County. In 2024, there are 880 bridges in Berks County, with the majority owned by PennDOT. These bridges are those that require inspections – state bridges longer than eight feet and local bridges longer than 20 feet. The slight change in the total number of bridges is in part due to PennDOT efforts to improve the classification of bridges. Map 26 shows the approximate location of bridges in the county.

As Berks County's bridges continue to age and deteriorate, it is sometimes necessary to close bridges unexpectedly due to problems revealed during routine inspections. Bridges closed to traffic are those structures deemed unsafe to carry any type of traffic. The number of bridges closed to traffic in the county increased 57.14% since 2020. As of 2024, 11 bridges are closed, with the majority being bridges owned by local municipalities. Map 26 shows the location of the closed and posted bridges.

BRIDGES IN BERKS COUNTY BETWEEN 2020 AND 2024

Bridge Type	2020	2021	2022	2023	2024	# Change	% Change
State ≥8' Interstate/Ramps	65	64	60	64	64	-1	-1.53%
State ≥8' NHS (non-interstate)	150	151	150	150	150	0	0.00%
State ≥8' non-NHS >2000 ADT	239	236	237	246	243	4	1.67%
State ≥8' non-NHS <2000 ADT	191	194	194	183	187	-4	-2.09%
Local ≥20'	236	236	236	236	236	0	0.00%
Total Bridges by Year	**881**	**881**	**877**	**879**	**880**	**-1**	**-0.11%**

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024

CLOSED BRIDGES IN BERKS COUNTY BETWEEN 2020 AND 2024

Bridge Type	2020	2021	2022	2023	2024	# Change	% Change
State ≥8' Interstate/Ramps	0	0	0	0	0	0	0.00%
State ≥8' NHS (non-interstate)	0	0	0	0	0	0	0.00%
State ≥8' non-NHS >2000 ADT	0	0	0	0	0	0	0.00%
State ≥8' non-NHS <2000 ADT	1	2	1	1	3	2	200.00%
Local ≥20'	6	6	6	7	8	2	33.33%
Total Closed Bridges by Year	**7**	**8**	**7**	**8**	**11**	**4**	**57.14%**

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024

Load posting a bridge is required by the National Bridge Inspection Standards when a bridge is not capable of safely carrying a legal load. If a bridge is deemed deficient, officials will post a maximum load for the bridge. Bridges may also be posted for other load capacity restrictions including speed and number of vehicles permitted on the bridge. Sixty-two (62) bridges are posted in Berks County as of 2024, with the majority of those bridges owned by local municipalities. The number of posted bridges decreased 20.51% since 2020.

POSTED BRIDGES IN BERKS COUNTY BETWEEN 2020 AND 2024

Bridge Type	2020	2021	2022	2023	2024	# Change	% Change
State ≥8' Interstate/Ramps	2	2	0	0	0	-2	-200.00%
State ≥8' NHS (non-interstate)	1	1	1	1	1	0	0.00%
State ≥8' non-NHS >2000 ADT	6	2	2	2	2	-4	-66.67%
State ≥8' non-NHS <2000 ADT	8	10	8	7	6	-2	-25.00%
Local ≥20'	61	60	56	55	53	-8	-13.11%
Total Posted Bridges by Year	**78**	**75**	**67**	**65**	**62**	**-16**	**-20.51%**

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024



Bridge Ownership and Condition

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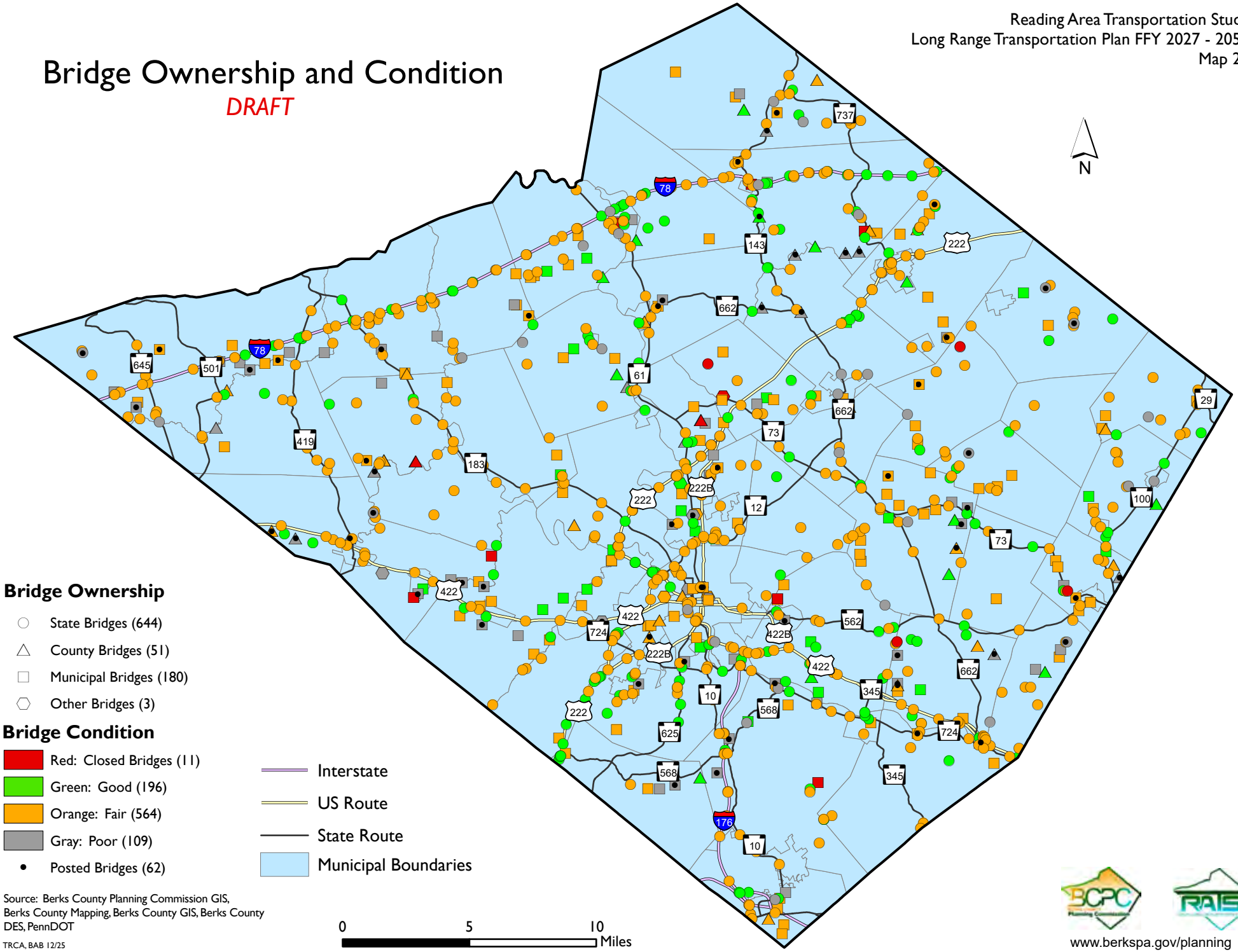

Bridge Ownership

- State Bridges (644)
- County Bridges (51)
- Municipal Bridges (180)
- Other Bridges (3)

Bridge Condition

- Red: Closed Bridges (11)
- Green: Good (196)
- Orange: Fair (564)
- Gray: Poor (109)
- Posted Bridges (62)

- Interstate
- US Route
- State Route
- Municipal Boundaries

0 5 10 Miles

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT

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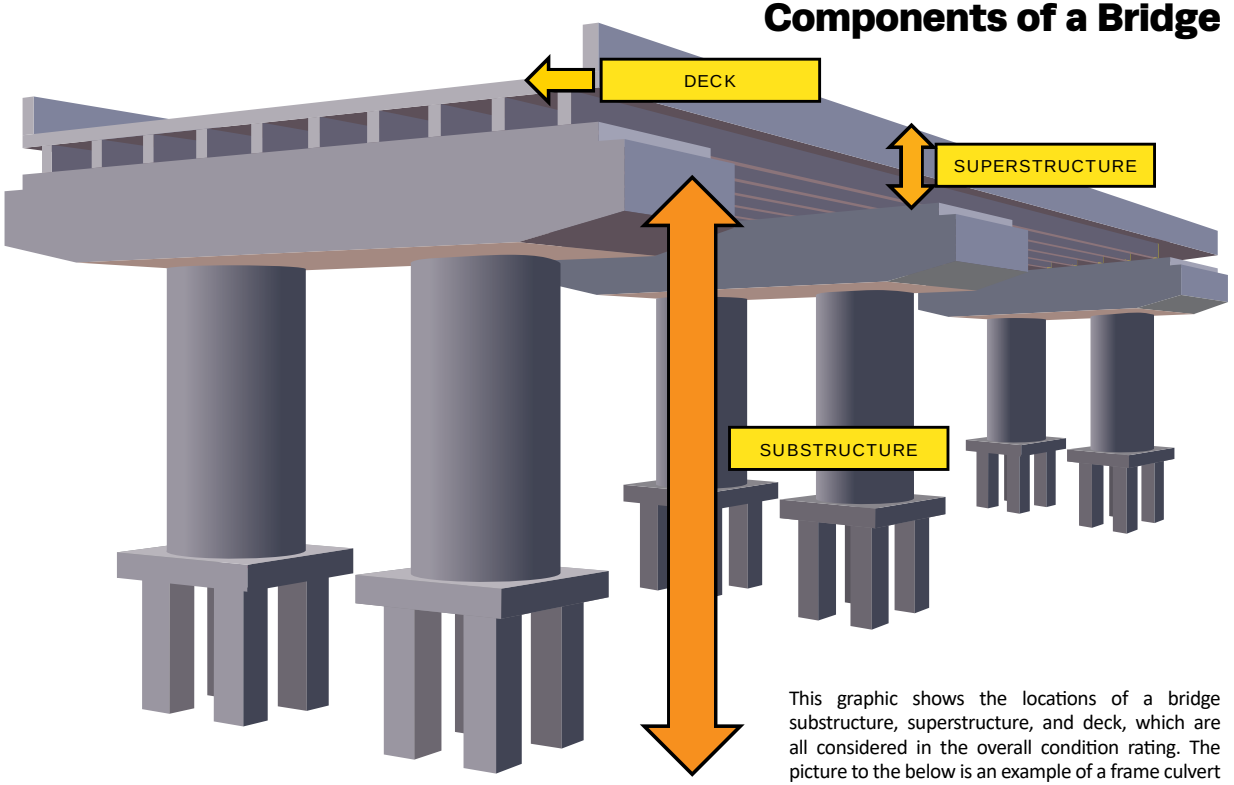
Bridge Inspection Overview

Bridges are characterized by the condition of their major components. State-owned bridges 8 feet in length or more and local-owned bridges over 20 feet in length are inspected on a regular, rotating basis of every two years, unless a higher frequency is determined. These inspections result in condition ratings for the deck, substructure, and superstructure. If the bridge is a culvert, then the one structural piece is given a condition rating. If any one of these structural parts has a condition rating of 4 or less, that bridge is deemed Poor. Bridges and culverts with a condition rating of 5 for any of the structural parts are considered Fair. Bridges and culverts with a condition rating of 6 or higher are considered Good. Each of these components is rated based on the Federal Highway Administration's Pavement and Bridge Condition Report Performance Measures final rule, which became effective in February 2017.

A poor designation does not imply that a bridge is unsafe. However, such bridges typically require significant maintenance and repair to remain in service and would eventually require major rehabilitation or replacement to address the underlying deficiency. Some examples of underlying deficiencies can include inadequate under-clearances, insufficient load-carrying capacity, poor alignment with the roadway, or can no longer adequately service today's traffic.

Components of a Bridge

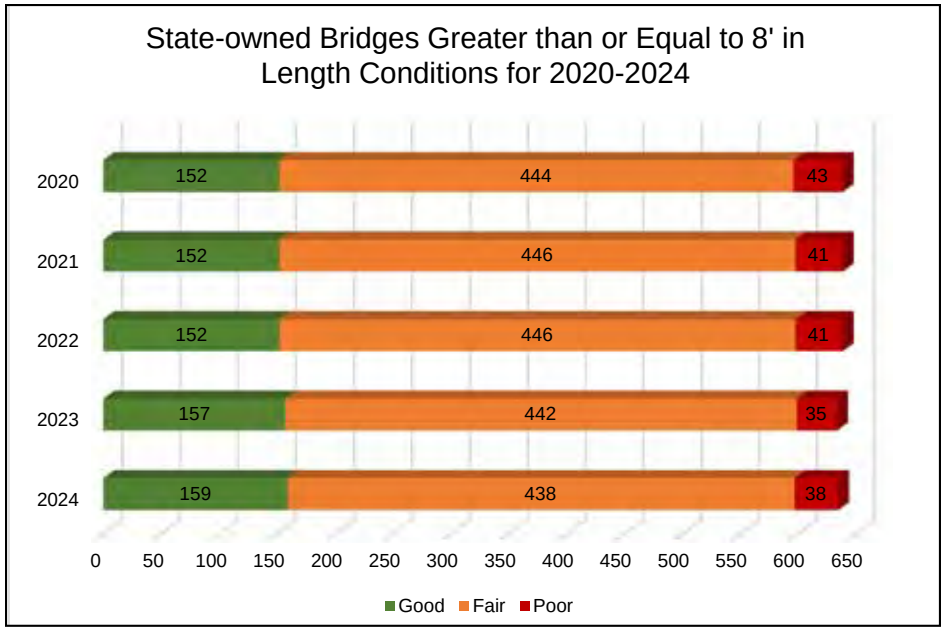


This graphic shows the locations of a bridge substructure, superstructure, and deck, which are all considered in the overall condition rating. The picture to the below is an example of a frame culvert in Muhlenberg Township. Since this type of bridge is one structural piece, it receives one condition rating.



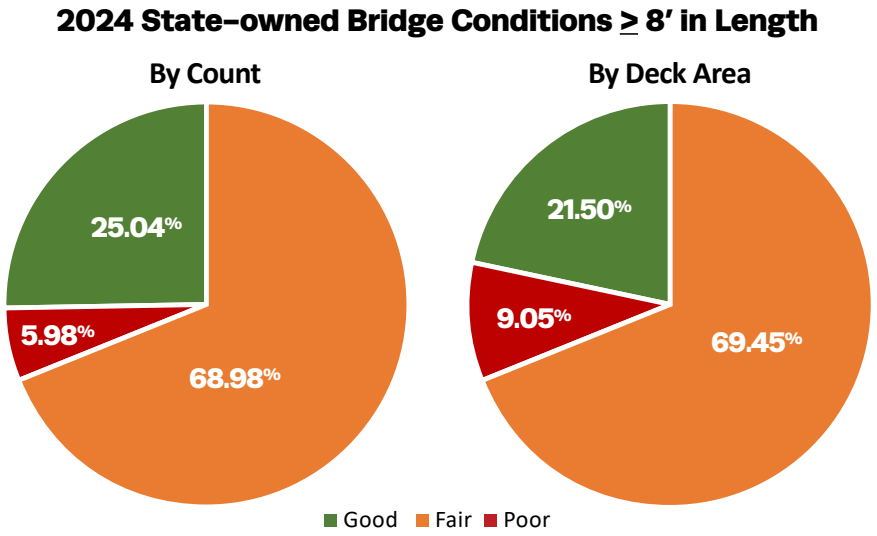
State-owned Bridge Conditions

The following tables and charts explore the conditions for inspected state-owned bridges greater than or equal to 8 feet in length.



Source: PennDOT BMS2 Website Berks County State and Local Bridge Condition Report 8/26/2020, 12/08/2022, 1/5/2023, 1/4/2024, 1/3/2025

It is important to consider that bridges may be different lengths and carry different numbers and widths of lanes, although only 5.98% of state-owned bridges were in poor condition in 2024, 9.05% of the state bridge deck area was in poor condition.



Source: PennDOT BMS2 Website Berks County State and Local Bridge Condition Report 1/3/2025

Local-owned Bridge Conditions

Local-owned bridges consist of county, township, borough/city, and railroad owned bridges.

2024 LOCAL-OWNED BRIDGES ≥ 20' CONDITIONS BY COUNT BY BUSINESS PLAN NETWORK

Business Plan Network	Good		Fair		Poor		Total
	#	%	#	%	#	%	#
Local ≥ 20'	37	15.81%	126	53.85%	71	30.34%	234
• County	14	27.45%	21	41.18%	16	31.37%	51
• Township	20	12.66%	91	57.59%	47	29.75%	158
• Borough/City	2	9.09%	14	63.63%	6	27.27%	22
• Railroad	1	33.33%	0	0.00%	2	66.66%	3

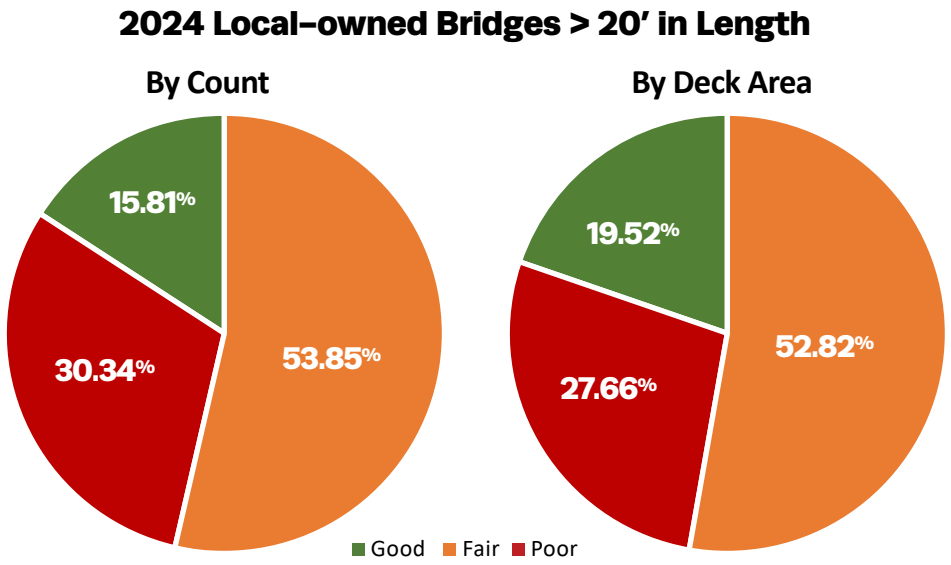
Source: PennDOT BMS2 Website Berks County State and Local Bridge Condition Report 1/3/2025

2024 LOCAL-OWNED BRIDGES > 20' CONDITIONS BY DECK AREA BY BUSINESS PLAN NETWORK

Business Plan Network	Good		Fair		Poor		Total
	Deck Area SF	%	Deck Area SF	%	Deck Area SF	%	Deck Area SF
Local ≥ 20'	88,402.3	19.52%	239,219.8	52.82%	125,270.9	27.66%	452,893.0
• County	44,427.7	26.64%	89,899.6	53.90%	32,468.8	19.47%	166,796.1
• Township	38,106.5	18.23%	98,005.2	46.90%	72,866.2	34.87%	208,977.9
• Borough/City	3,338.5	4.97%	51,315.0	76.40%	12,512.3	18.63%	67,165.8
• Railroad	2,529.6	25.41%	0.0	0.00%	7,423.6	74.59%	9,953.2

Source: PennDOT BMS2 Website Berks County State and Local Bridge Condition Report 1/3/2025

It is important to consider that bridges may be different lengths and carry different numbers and widths of lanes, although 30.34% of local-owned bridges were in poor condition in 2024, this represented 27.66% of local bridge deck area.



Source: PennDOT BMS2 Website Berks County State and Local Bridge Condition Report: 1/3/2025

State-owned Bridges Versus Local-owned Bridges

The preceding tables and charts highlight the disparities that exist between state-owned bridge conditions compared to local-owned bridge conditions. While state-owned bridges greater than or equal to 8 feet in length are regularly inspected, only local-owned bridges greater than or equal to 20 feet require regular inspection. The majority of state-owned bridges in Berks County are either in Good or Fair condition by both Count (totaling 94.02%) and Deck Area (totaling 90.95%). Comparatively, a greater percentage of the larger local-owned bridges are in Poor condition, with fewer local-owned bridges in Good and Fair condition by both Count (totaling 69.66%) and Deck Area (totaling 72.07%).

CONGESTION MANAGEMENT PROCESS

RATS updated the Congestion Management Process (CMP) in November 2025 and this LRTP will include the CMP by reference. Development and maintenance of a CMP is a requirement for all MPOs in Transportation Management Areas (TMAs) under federal law. A CMP has great benefit - it provides a systematic and continuous method to pinpoint roadway congestion and to help identify improvements that alleviate it.

The CMP and the included CMP Network addresses the multimodal transportation network, consistent with federal guidelines. The CMP Network was defined by analyzing criteria outlined below which reflect travel times, traffic volumes and speed, and non-recurring factors (crashes), which are sources of congestion that can occur at any time.

The Expanded National Highway System (NHS) serves as the base for the CMP Network. These higher-order roadways (interstates, expressways, principal arterials) serve to move large volumes of traffic over longer distances, while still providing for local and regional travel. Congestion and crashes on the NHS have the potential to disrupt large amounts of regional and long-distance traffic and freight movement. Crashes on limited-access expressways and interstates can result in long delays due to limited exit points and few detour routes. Arterials move regional and local traffic as well, and may have higher volumes, concentrated access points, traffic signals and other factors that contribute to longer delays.

High Volume/Capacity (V/C) Segments show that a road's capacity is approaching (or has approached) the maximum number of vehicles it can carry. Volume-to-Capacity (V/C) ratios examine the number of vehicles on the road in a given period (usually one hour) versus that roadway's physical capacity. When the V/C ratio reaches 1.00, physical capacity has been reached, and congestion begins. V/C ratios greater than 1.00 show worsening congestion. Basically, the higher the V/C ratio, the more congestion on a particular road segment.

Travel Time Index (TTI) is a measure derived from INRIX (International Roadway and Traffic Information Exchange) Road Analytics software XD travel time data and is defined as the ratio of the peak period average travel time to the free-flow travel time (uncongested travel time) for a given roadway segment. Free-flow values were determined for this, and all other INRIX based measures, using reference speeds provided by INRIX for each road segment based on 85th percentile observed speeds for all time periods. The greater the TTI value, the more congestion it indicates. A TTI of 1.00 indicated vehicles are traveling at free-flow speeds, while one at 1.50 indicates a 20-minute free-flow trip takes 30 minutes. Roadways with a TTI between 1.20 and 1.50 are considered moderately congested, and ones greater than 1.50 are considered highly congested. For the CMP, staff analyzed the data for weekdays during peak hours 7:00AM – 9:00AM and 4:00PM – 6:00PM.

Planning Time Index (PTI) is a measure also derived from the INRIX XD travel time data but is defined as the ratio of the peak period 95th percent travel time to the free-flow travel time for a given road segment. The 95th percentile indicates that 95 percent of the travel times are less, and 5 percent more, and measures the variability of reliability of travel. A PTI of 1.00 means the trip time is consistently the same from day to day, while higher values mean more variation and congestion. A PTI of 3.00 indicates a 20-minute free-flow trip will take 60 minutes in the peak period, which is equivalent to one workday a month, where one might expect to leave 40 minutes earlier to arrive on time. Roadways with a PTI between 2.00 and 3.00 are considered moderately unreliable and ones greater than 3.00 are considered highly unreliable. For the CMP, staff analyzed the data for weekdays during peak hours 7:00AM – 9:00AM and 4:00PM – 6:00PM.

High Crash Corridors derived from PennDOT's Pennsylvania Crash Information Tool (PCIT) are used to identify corridors that have high frequency of reportable crashes. Since congestion can cause accidents and accidents can cause congestion, these high crash corridors were included in the network selection process.

Freight and Intermodal Corridors were derived from PennDOT's 2045 Freight Movement Plan (PUB 791 (05-23)). Utilizing the Federal Highway Administration's (FHWA) established National Highway Freight Network (NHFN) PennDOT developed the statewide plan to examine trends and issues associated with freight throughout the Commonwealth. The NHFN includes the following subsystems of roadways:

- **Primary Highway Freight System (PHFS):** This is a network of highways identified as the most critical highway portions of the U.S. freight transportation system determined by measurable and objective national data. As of the 2022 Congressional re-designation of the PHFS, this network consists of about 41,799 centerlines miles, including 38,014 centerline miles of Interstate and 3,785 centerline miles of non-Interstate roads.
- **Other Interstate portions not on the PHFS (non-PHFS):** These highways consist of the remaining portion of Interstate roads not included in the PHFS. These routes provide important continuity and access to freight transportation facilities. These portions amount to an estimated 10,265 centerline miles of Interstate nationwide and will fluctuate with additions and deletions to the Interstate Highway System. The mileage for Non-PHFS Interstate is based on the Interstate Mileage reported in the National Highway System (NHS) as of October 17, 2019.
- **Critical Rural Freight Corridors (CRFCs):** These are public roads not in an urbanized area which provide access and connection to the PHFS and the Interstate with other important ports, public transportation facilities, or other intermodal freight facilities. As of January 2023, there are about 5,390 centerline miles designated as CRFCs.
- **Critical Urban Freight Corridors (CUFCs):** These are public roads in urbanized areas which provide access and connection to the PHFS and the Interstate with other ports, public transportation facilities, or other intermodal transportation facilities. As of January 2023, there were about 2,656 centerline miles designated as CUFCs.

In Berks County the PHFS consists of Interstate 78, Interstate 176, US 222 South and US 422. The County has no non-PHFS designated roadways. PA 61 is designated as a CUFC and U.S. 222 North is considered a CRFC. For purposes of our CMP we identify each corridor as critical.

Bottlenecks are specific physical locations on roadways that routinely and predictably experience congestion because the traffic volumes exceed highway capacity. Surge demand higher than can be accommodated by base capacity brings about bottleneck congestion. Bottlenecks are characterized by queues upstream and freely flowing traffic downstream.

Bottlenecks may be compared to a storm pipe that can carry only so much water – during floods the excess water just backs up behind it, much the same as traffic at bottleneck locations. However, the situation is even worse for traffic. Once the traffic flow breaks down to stop-and-go conditions, capacity is actually reduced – fewer cars can get through the bottle neck because of the extra turbulence.

Using the INRIX Roadway Analytics software RATS staff was able to identify the top bottleneck areas in Berks County for 2024 based on the *Total Delay* encountered at that particular site. The *Total Delay* is the speed differential factor, weighted by the volume estimate, considers raw speed drop, weighted by queue lengths for each time interval and queue length.

Transit Routes show BARTA's fixed-route, scheduled bus transit services in Berks County. Current BARTA fixed-route transit service was examined as part of the network building process. In FFY 2024-2025, BARTA provided 2,163,706 trips on its system of 22 fixed routes. Of those trips, approximately 59 percent were for work purposes, 36 percent were for shopping, and the remaining 5 percent were for personal business, school, medical, social, and other purposes.

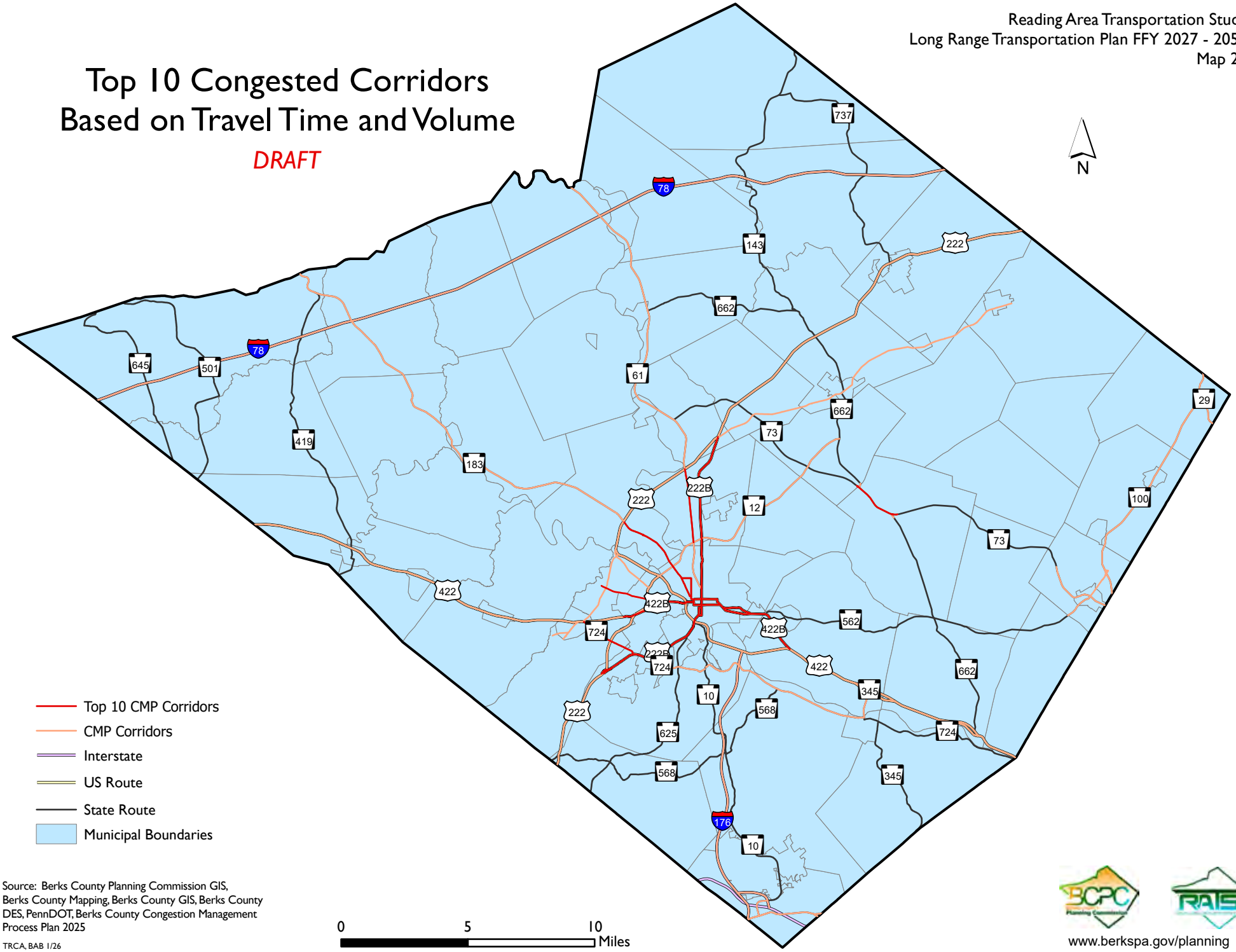
The CMP Network is divided into a series of 33 corridors. Each corridor is assessed in detail within the CMP. The most congested corridors in Berks County are shown on the following table and on Map 27. These corridors were ranked using both the peak Travel Time Index (TTI) and the Average Annual Daily Trips (AADT) in that corridor for the year 2024. Please note that these rankings are not a definitive account of congestion along the network or a representation of prioritizing one corridor over another for improvements. Rather, it is an introduction to useful data and highlights the bottlenecks and most congested segments in Berks County. Three corridors are defined as Highly Congested (red) and an additional 19 corridors are defined as Moderately Congested (yellow).

MOST CONGESTED CORRIDORS RANKED BY TRAVEL TIME AND DAILY TRAFFIC

Rank	Corridor	Average TTI*	Max AADT
1	**SR 3023 (State Hill Road)**	**1.67**	**23,706**
2	**PA 724 (Sinking Spring to U.S. 222 Business)**	**1.59**	**17,930**
3	**U.S. 222 Business (U.S. 422 West Shore Bypass to PA 12)**	**1.55**	**21,854**
4	**U.S. 222 Business (PA 12 to U.S. 222 Merge)**	**1.48**	**31,531**
5	**PA 73 (Oley Area)**	**1.48**	**18,495**
6	**U.S. 422 Business (Penn Street Bridge to U.S. 422 Merge)**	**1.44**	**51,157**
7	**PA 61 (PA 12 to U.S. 222)**	**1.38**	**29,010**
8	**U.S. 422 Business (U.S. 222 Merge to U.S. 422 Interchange)**	**1.36**	**27,173**
9	**U.S. 222 Business (U.S. 222 Merge to U.S. 422 West Shore Bypass)**	**1.35**	**24,807**
10	**PA 183 (Washington Street to U.S. 222)**	**1.34**	**31,863**
11	PA 345 (PA 724 to U.S. 422)	1.33	9,630
12	PA 562 and SR 2067	1.32	18,102
13	PA 10	1.32	7,765
14	SR 1010	1.30	14,184
15	PA 401	1.30	6,419
16	PA 724 (U.S. 222 Business to Interstate 176)	1.29	19,005
17	SR 3021 (Paper Mill Road)	1.29	16,170
18	PA 61 (U.S. 222 Business to PA 12)	1.27	19,640
19	PA 73 (Boyertown Area)	1.27	10,839
20	U.S. 222 (U.S. 222 Business Merge to Lehigh County)	1.25	47,719
21	PA 23	1.23	14,197
22	PA 724 (Interstate 176 to Birdsboro)	1.21	10,608
23	U.S. 422 (West Shore Bypass to Montgomery County)	1.19	35,671
24	PA 61 (U.S. 222 to Schuylkill County)	1.19	29,946
25	SR 3055 (Van Reed Road)	1.18	11,655
26	U.S. 422 (Lebanon County to U.S. 222 Merge)	1.16	43,730
27	PA 183 (US 222 to Schuylkill County)	1.11	31,813
28	PA 100	1.08	24,803
29	SR 2089	1.06	3,810
30	PA 29	1.04	12,899
31	PA 12 (Pricetown Road)	1.03	27,433
32	U.S. 422 (West Shore Bypass)	0.98	84,788
33	Interstate 78	0.97	38,366
34	PA 12 (Warren Street Bypass)	0.94	80,393
35	Interstate 176	0.94	16,749
36	U.S. 222 (Lancaster County to U.S. 422 Merge)	0.88	51,071
37	U.S. 222 (U.S. 422 Merge to U.S. 222 Business Merge)	0.82	113,173

Top 10 Congested Corridors Based on Travel Time and Volume

DRAFT



Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, Berks County Congestion Management Process Plan 2025

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SAFETY

Maintaining a safe transportation system is essential to sustaining and enhancing the quality of life for Berks County residents. Deaths and injuries resulting from traffic crashes are a public health concern and impact local communities with medical costs, lost wages, insurance costs, taxes, police, fire, and emergency medical services, legal and court costs, and property damage. In addition, traffic crashes can create travel time delays, congestion, and impact air quality.

As part of its safety program, PennDOT collects traffic crash data for the entire state and reports data at the state, county, and municipal level. For the purposes of this plan, county crash data for Berks County was analyzed using the Pennsylvania Crash Information Tool (PCIT). In addition, the 2022 Pennsylvania Strategic Highway Safety Plan was used in the development of this chapter and the plan's safety performance measures. Motor vehicle crashes generally involve multiple contributing factors that may be related to drivers, the roadway, or the vehicle(s) involved, thus making transportation safety a multidisciplinary concern.

Analyzing crash trends allows PennDOT and RATS to focus on setting goals to improve upon those trends by programming safety improvements to the road system itself or encouraging greater emphasis on education and enforcement. The Reading Area Transportation Study's Traffic Safety Report (RATS-Safety-Report-2025-FINAL.pdf) is updated annually and analyzes additional crash data, identifies potential countermeasures to address safety, and reviews the MPO's safety performance measures and targets. The RATS Traffic Safety Report is used to help develop the recommendations identified in Chapter 4 of this plan.

Berks County has a significant number of crashes – ranking sixth in the state in the number of overall crashes and fifth in the number of fatal crashes between 2020 and 2024. These are consistent with Berks County's overall ranking with respect to total population (9th in 2024) total linear miles of roadway (8th in 2024), and total Vehicle Miles Traveled (VMT) (7th in 2024).

TOP 10 COUNTIES IN PA BY CRASHES 2020-2024	
Allegheny	53,928
Philadelphia	45,578
Montgomery	38,407
Lancaster	27,180
Bucks	27,036
Berks	23,740
Delaware	23,359
Lehigh	23,316
York	22,124
Chester	20,454

TOP 10 COUNTIES IN PA BY FATAL CRASHES 2020-2024	
Philadelphia	677
Allegheny	354
Lancaster	262
Bucks	242
Berks	216
Montgomery	209
York	173
Luzerne	158
Westmoreland	155
Chester	145

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

Although significant progress has been made, lives are still being lost on Berks County roads. The chart below shows that fatalities have increased 30.6% from 2020 to 2024. Injury and property damage only crashes increased as well and remain the prominent type of crash throughout the years shown.

BERKS COUNTY CRASHES BY SEVERITY BETWEEN 2020 AND 2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
Fatal	36	40	46	47	47	216	11	30.6%
Injury	1,762	1,959	1,973	1,965	1,947	9,606	185	10.5%
Property Damage Only	2,371	2,691	2,768	2,542	2,587	12,959	216	9.1%
Total	4,169	4,690	4,787	4,554	4,581	22,781	412	9.9%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

The toll from those crashes in Berks County is significant. Approximately 51,000 people and nearly 43,000 vehicles have been involved in crashes since 2020.

PERSONS AND VEHICLES INVOLVED IN BERKS COUNTY CRASHES BETWEEN 2020 AND 2024

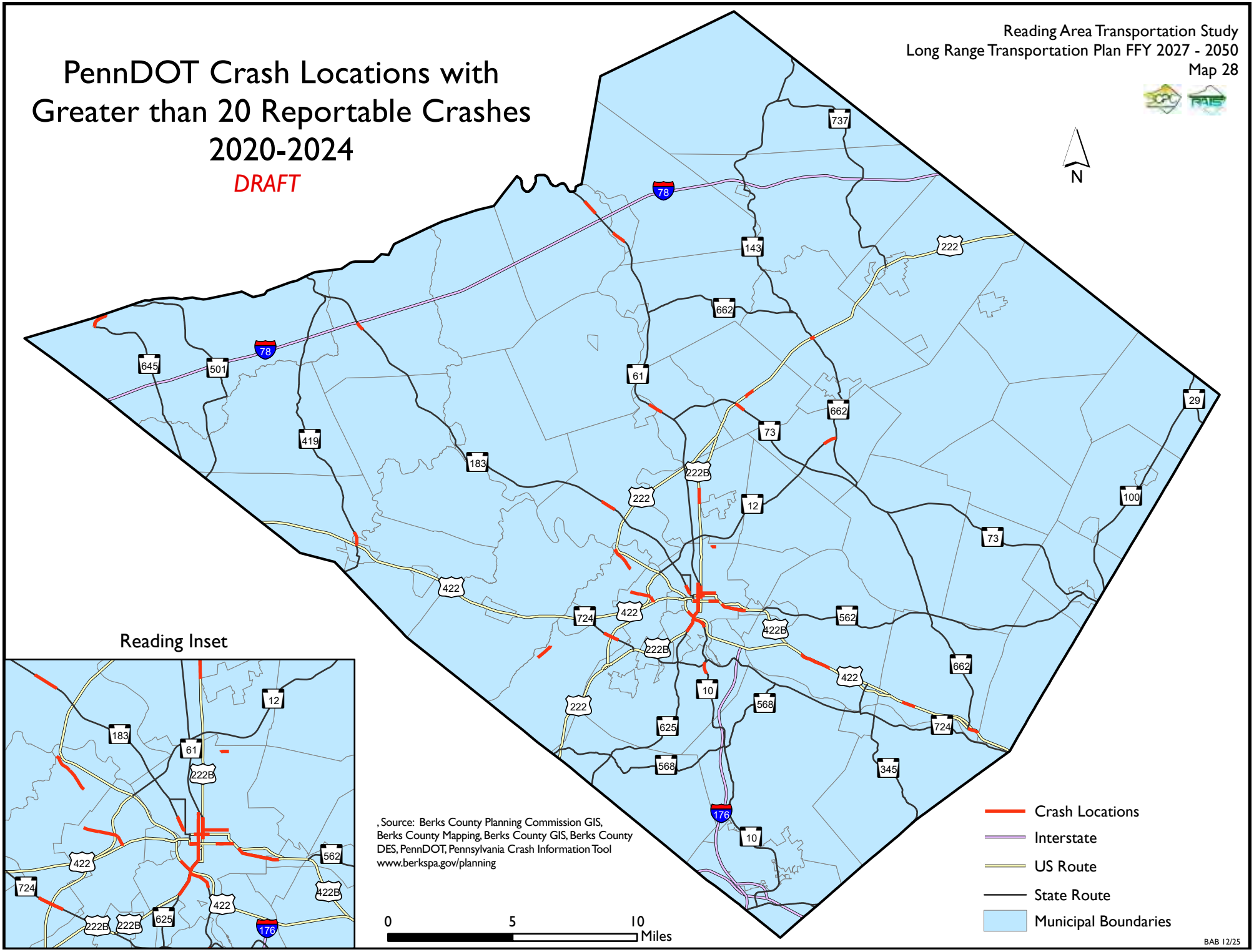
	2020	2021	2022	2023	2024	Total	# Change	% Change
Persons	9,427	10,685	10,600	10,089	10,361	51,162	934	9.9%
Vehicles	7,843	8,947	8,916	8,500	8,509	42,715	666	8.5%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

Crash Corridors

PennDOT has a variety of crash information available through their website. PennDOT's Pennsylvania Crash Information Tool (PCIT) provides users the ability to search specific criteria related to crashes, persons, and vehicles. Date ranges as well as locations can also be specified. A variety of options are available for the selected data to be displayed including either by point map or heat map, table, or report.

Using PCIT data, the map on the following page identifies roadway segments where more than 20 reportable crashes occurred between 2020 and 2024. Major roadways with higher traffic volumes are the main locations for the larger number of reportable crash incidents in Berks County.


PennDOT Crash Locations with
Greater than 20 Reportable Crashes
2020-2024
DRAFT
Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
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N
Reading Inset
, Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, Pennsylvania Crash Information Tool
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Interstate
US Route
State Route
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A Closer Look at Crash Severity

Although fatal crashes increased from 2020 to 2024, over the 20-year period from 2005 to 2024, fatal crashes decreased nearly 30% and suspected serious injury crashes decreased approximately 8%. While fatal crashes and suspected serious injury crashes showed decreases over this 20-year period, the population, total vehicle registrations, and daily VMT for Berks County increased.



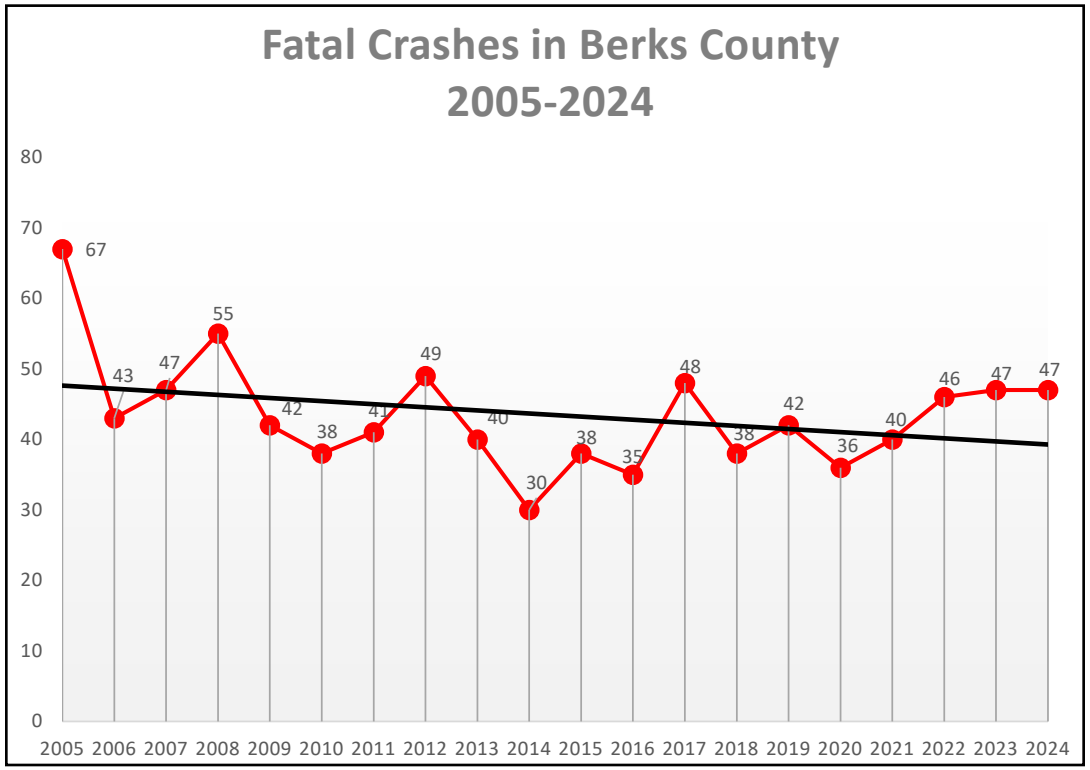
FATAL AND SERIOUS INJURY CRASHES COMPARISON 2005 TO 2024

	2005	2024	# Change	% Change
Fatal Crashes	67	47	-20	-29.85%
Suspected Serious Injury Crashes	181	166	-15	-8.29%
Population	395,933	439,117	43,184	10.91%
Vehicle Registrations	367,794	407,561	39,767	10.81%
VMT	8,879,040	9,028,867	149,827	1.69%

Source: PennDOT Pennsylvania Crash Information Tool, 2005-2024; Population (Persons), U.S. Census Bureau; PennDOT Annual Report of Registrations 2005-2024; PennDOT Highway Statistics 2005-2024

Fatal Crashes

Fatal crashes on Berks County roads are attributed to a number of factors. Most fatal crashes are the result of driver behavior, namely aggressive driving. The old description of aggressive driving notes at least one driver's action was considered aggressive while the new description identifies at least 2 actions of a driver as being aggressive. Both time of day and poor weather conditions do not appear to be an important factor. Less than half of all fatal crashes occurred at night and fewer occurred on wet, icy, or snowy roads.



Source: PennDOT Pennsylvania Crash Information Tool, 2005-2024

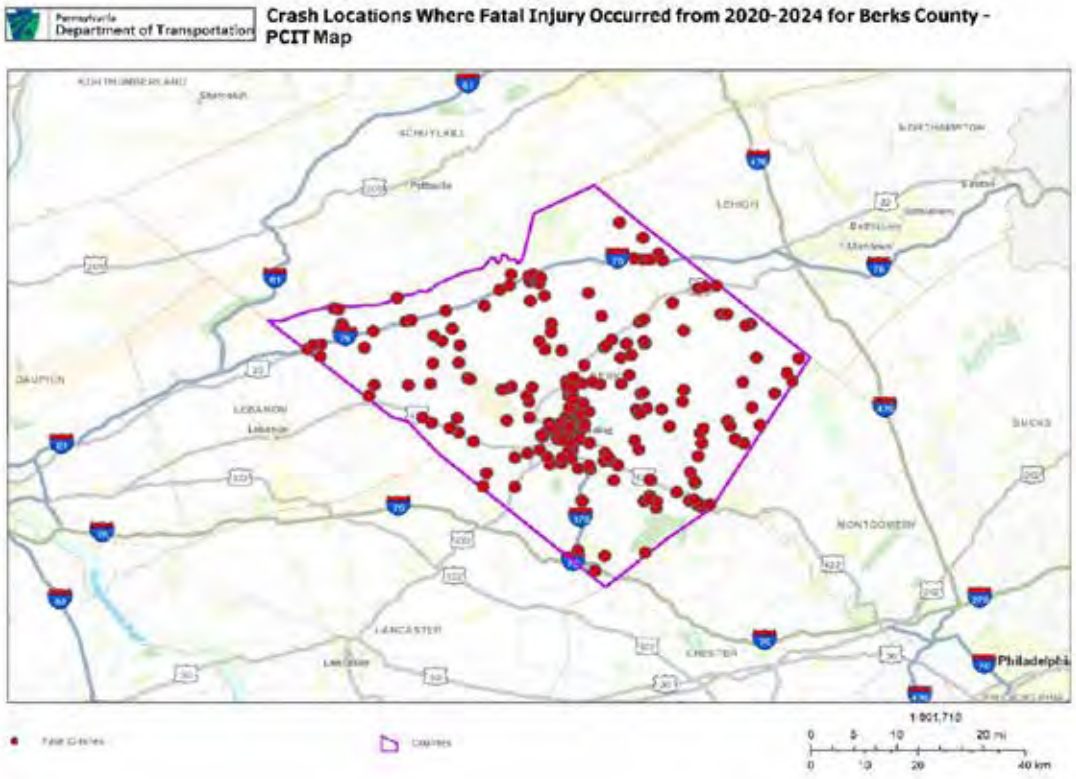
Driver error is identified as the predominant reason fatal crashes occurred in Berks County between 2020 and 2024. The main prime factors for this time period relating to driver error include driving too fast for road conditions (total 28), speeding (total 24), and driving on the wrong side of the roadway (total 19). Many unknown factors (total 54) are also identified for the 2020-2024 period.

FATAL CRASHES IN BERKS COUNTY BY PRIME FACTOR TYPE BETWEEN 2020 AND 2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
Driver	33	35	42	38	40	188	7	21.2%
Environmental/Roadway	1	2	0	3	3	9	2	200.0%
Pedestrian	1	3	4	4	0	12	-1	-100.0%
Vehicle	1	0	0	1	0	2	-1	-100.0%
Unknown	0	0	0	1	4	5	4	400.0%
Total	36	40	46	47	47	216	11	30.6%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

Fatal crashes between 2020 and 2024 predominantly occurred in and around the City of Reading, as well as along major corridors throughout Berks County.



The majority of fatal crashes involved hitting fixed objects and angle crashes between 2020 and 2024.

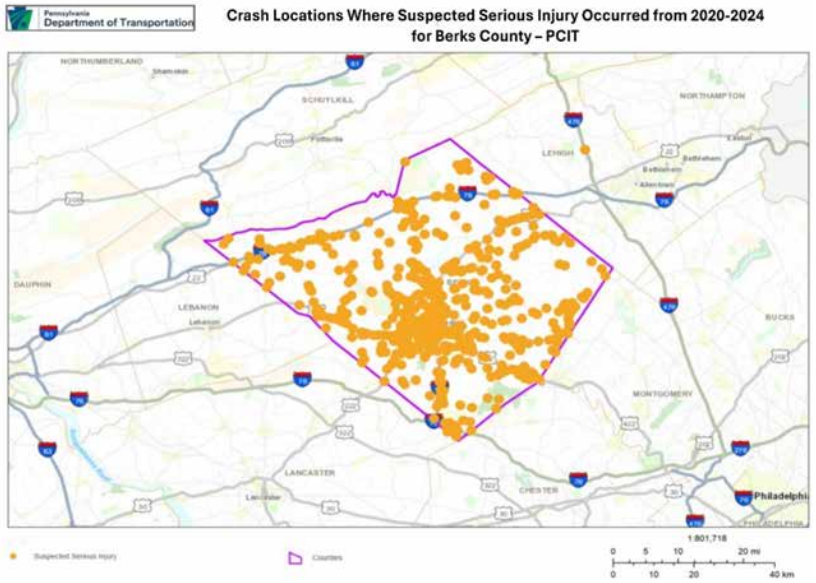
FATAL CRASHES BY COLLISION TYPE IN BERKS COUNTY BETWEEN 2020 AND 2024								
	2020	2021	2022	2023	2024	Total	# Change	% Change
Angle	10	11	14	6	15	56	5	50.0%
Head-on	1	3	8	11	3	26	2	200.0%
Hit fixed object	13	10	10	16	17	66	4	30.8%
Hit Non-motorist	5	6	9	6	6	32	1	20.0%
Non collision	3	3	1	0	0	7	-3	-100.0%
Other or unknown	0	0	0	2	1	3	1	100.0%
Rear-end	3	7	2	2	3	17	0	0.0%
Rear-to-rear (Backing)	0	0	0	0	0	0	0	0.0%
Sideswipe (Opposite Direction)	1	0	0	0	1	2	0	0.0%
Sideswipe (Same Direction)	0	0	2	4	1	7	1	100.0%
Total	36	40	46	47	47	216	11	30.6%

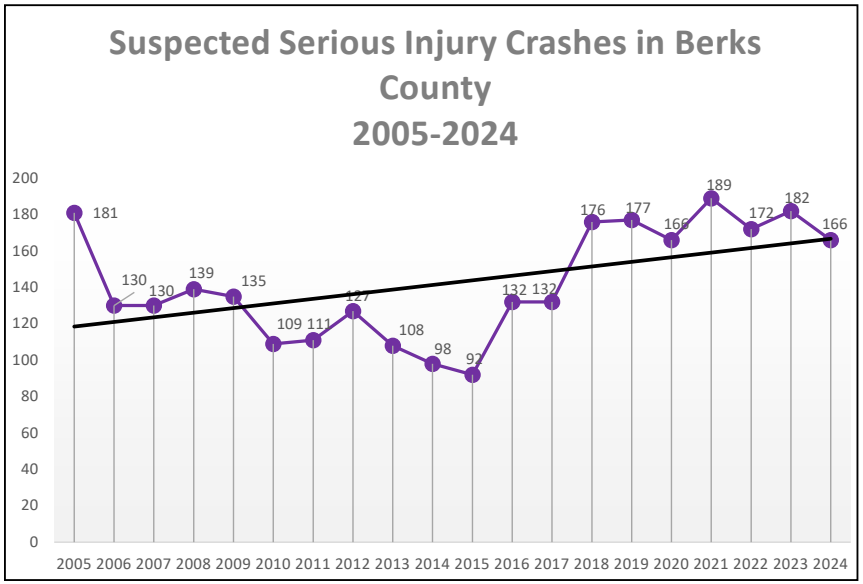


Safety Improvements are programmed for the intersection of PA12 with Elizabeth Avenue and Hill View Road in Alsace Township with construction anticipated to begin in 2027.

Injury Crashes

According to the United States Centers for Disease Control (CDC), motor vehicle crashes are a leading cause of death, resulting in 120 deaths per day, across the United States. In Pennsylvania, more than more than 3 persons were fatally injured each day, resulting in over 1,100 fatalities in 2024. The total fatal injury crashes in Pennsylvania in 2024 caused over $15 billion in comprehensive loss, including medical bills and work loss costs.





Source: PennDOT Pennsylvania Crash Information Tool, 2005-2024

Restraint Use

One of the most important actions a motorist can take to save lives and prevent serious injuries while traveling is to use safety belts. While overall seatbelt use has remained near the state average, the number of crashes that involved unbelted occupants in annual crashes in Berks County decreased significantly since 2020 dropping to 7.4% in 2024 from 10.3% in 2020 representing a 21.7% decrease in unbelted occupants involved in crashes.

PERCENT SEATBELT USE IN CRASHES

Year	Berks	Pennsylvania
2015	80	80
2016	79	80
2017	80	80
2018	79	80
2019	80	81
2020	79	79
2021	79	80
2022	78	81
2023	77	81
2024	78	82

Source: 2019 and 2024 PennDOT Pennsylvania Crash Facts and Statistics Booklets



CRASHES INVOLVING UNBELTED OCCUPANTS BETWEEN 2020 AND 2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
Crashes	451	448	430	372	353	2,054	-98	-21.7%
Percentage of Annual Total Crashes	10.3%	9.1%	8.6%	7.9%	7.4%	8.7%	-2.9%	-28.1%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

Suspected serious injury crashes involving unbelted occupants showed the largest decrease representing a 58% reduction from 2020 to 2024. Out of the total number of fatal crashes for Berks County from 2020 to 2024, the percentage of fatal crashes that involved unbelted occupants was nearly 30%.

CRASH SEVERITY INVOLVING UNBELTED OCCUPANTS IN BERKS COUNTY BETWEEN 2020 AND 2024

	2020	2021	2022	2023	2024	Total	# Change	% Change	Total Severity Crashes	% of Total Severity Crashes
Fatal	11	14	13	14	11	63	0	0.0%	216	29.2%
Injury	263	252	239	226	206	1186	-57	-21.7%	9,606	12.3%
Possible Injury	50	47	25	40	38	200	-12	-24.0%	1,881	10.6%
Suspected Minor Injury	135	146	130	127	118	656	-17	-12.6%	5,385	12.2%
Suspected Serious Injury	50	43	38	34	21	186	-29	-58.0%	875	21.3%
Property Damage Only	165	179	175	126	129	774	-36	-21.8%	12,959	6.0%
Total	674	681	620	567	523	3065	-151	-22.4%		

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

Driving Behaviors

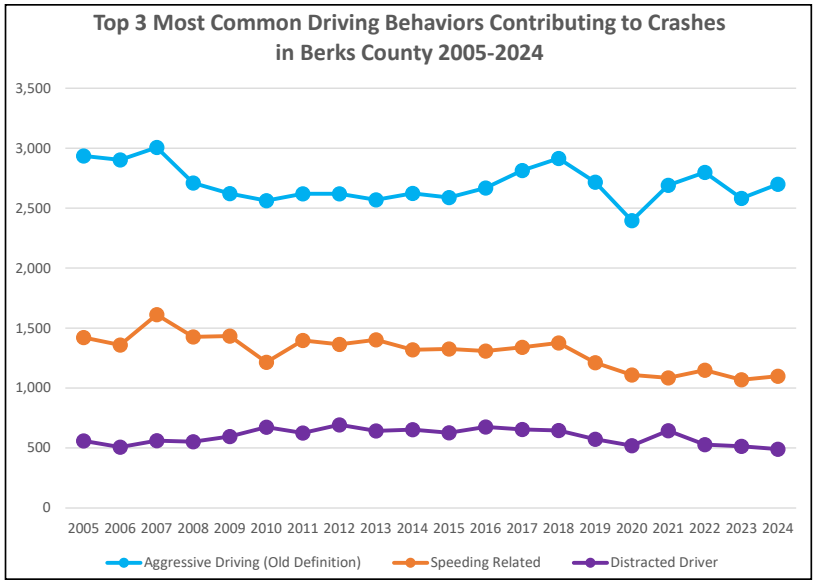
Driving behavior plays a major role in crash trends in Berks County. In many instances, crashes involving driving behaviors could be avoidable. Aggressive driving, speeding, and distracted driving continue to be the largest contributors to crashes in Berks County. Generally, vehicle manufacturers now include hands-free technology for cell phones as part of their standard vehicle package. Additional technology is also becoming standard such as navigation and weather applications. In many cases, the increase in available technology has contributed to distracted driving by providing additional visual distractions and feature adjustments while driving.

Of these three driving behaviors, aggressive driving remains the predominant contributor to crashes and increased almost 13% from 2020 to 2024 while speeding related and distracted driving decreased slightly.

BERKS COUNTY CRASHES BY DRIVING BEHAVIOR 2020-2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
Aggressive Driving	245	292	308	317	412	1,574	167	68.2%
Aggressive Driving (Old Definition)	2,396	2,691	2,798	2,581	2,700	13,166	304	12.7%
Speeding Related	1,110	1,086	1,149	1,069	1,100	5,514	-10	-0.9%
Distracted Driving	520	644	529	515	491	2,699	-29	-5.6%
Unbelted	451	448	430	372	353	2,054	-98	-21.7%
Curve Driver Error	124	156	141	158	196	775	72	58.1%
Tailgating	162	195	186	169	226	938	64	39.5%
Running Red Lights	194	203	211	167	186	961	-8	-4.1%
Fatigue or Asleep	117	140	124	154	113	648	-4	-3.4%
Running Stop Sign	125	152	133	138	117	665	-8	-6.4%
Impaired Driver	356	445	402	370	336	1,909	-20	-5.6%
Cell Phone	43	46	82	86	99	356	56	130.2%
Total	5,843	6,498	6,493	6,096	6,329	31,259	486	8.3%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024



Road Conditions

We drive in sometimes challenging road conditions. When road conditions deteriorate, we tend to stay off the roads or drive more carefully. When road conditions are favorable, there are generally more vehicles on the road and drivers tend to drive faster. This means that more crashes occur during dry road conditions during daylight hours with clear weather.

BERKS COUNTY CRASHES BY ROAD CONDITION 2020-2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
Dry	3,222	3,964	3,783	3,753	3,666	18,388	444	13.78%
Ice/Frost	73	63	110	28	48	322	-25	-34.25%
Mud, Dirt, Gravel	6	12	8	1	9	36	3	50.00%
Oil	1	1	0	2	1	5	0	0.00%
Other	0	4	6	4	2	16	2	200.00%
Sand	0	0	0	1	0	1	0	0.00%
Slush	21	36	61	8	38	164	17	80.95%
Snow	77	111	140	39	173	540	96	124.68%
Unknown	13	12	12	10	8	55	-5	-38.46%
Water (Standing or Moving)	22	15	18	19	8	82	-14	-63.64%
Wet	925	701	851	859	794	4,130	-131	-14.16%
Total	4,360	4,919	4,989	4,724	4,747	23,739	387	8.88%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

Encounters with wildlife on our roads and bridges can present safety issues for the motoring public. Wildlife movements can be sudden and unpredictable, which causes motorists to react quickly. In some instances, crashes with wildlife are unavoidable. Additionally, roadways and bridges can separate species habitats which creates an increase in the species presence on a roadway or bridge. Sometimes, those species crossing roadways and bridges are species that may be unique to a location or are protected due to low population counts. To address crashes involving wildlife, PennDOT evaluates all projects for potential wildlife crossings and has incorporated this into their Design Manual – 2.

Given the state's large deer population, crashes involving deer are growing. According to PennDOT and the Pennsylvania Game Commission, deer-vehicle crashes rise dramatically in October and November, mostly because of the "rut", or deer-mating season, which peaks late October to mid-November.

DEER RELATED CRASHES BY MONTH IN BERKS COUNTY BETWEEN 2020 AND 2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
January	12	16	7	16	16	67	4	33.3%
February	11	2	15	11	7	46	-4	-36.4%
March	7	10	6	4	9	36	2	28.6%
April	9	12	9	5	4	39	-5	-55.6%
May	18	11	16	14	18	77	0	0.0%
June	9	14	12	16	21	72	12	133.3%
July	7	10	7	6	17	47	10	142.9%
August	7	5	10	15	4	41	-3	-42.9%
September	9	14	16	13	16	68	7	77.8%
October	26	40	31	48	61	206	35	134.6%
November	37	34	37	54	43	205	6	16.2%
December	11	15	19	29	14	88	3	27.3%
Total	163	183	185	231	230	992	67	41.1%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

Intersections

Crashes at intersections showed a relatively steady increase from 2020 to 2024 in Berks County with stop controlled intersections increasing 27.4%. Due to the turning movements occurring at intersections, the predominant collision type is generally an angle crash.

BERKS COUNTY CRASHES BY INTERSECTION CONTROL TYPE 2020-2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
Signalized Intersection	660	769	780	713	738	3,660	78	11.8%
Stop Controlled	543	704	665	689	692	3,293	149	27.4%
Unsignalized Intersection	1,116	1,271	1,331	1,282	1,259	6,259	143	12.8%
Total	2,319	2,744	2,776	2,684	2,689	13,212	370	16.0%

Source: PennDOT, Pennsylvania Crash Information Tool, 2020-2024



Special Zones

Crashes in work zones are a major concern as the majority of them could be avoided if drivers abide by signage and follow the lower speeds implemented in active work zones. In an effort to combat crashes in active work zones, Pennsylvania implemented the Automated Work Zone Speed Enforcement (AWZSE) program in March 2020. Vehicle mounted systems are used to record drivers that exceed posted work zone speed limits by 11 miles per hour or more. The pilot program aimed at reducing driver speeds in work zones and improving driver behaviors in work zones to save worker and traveler lives, promote work zone safety, and complement existing enforcement by the Pennsylvania State Police. In late 2023, Governor Josh Shapiro signed House Bill 1283, establishing Act 38 of 2023 which made the newly named Work Zone Speed Safety Camera (WZSSC) program a permanent tool to improve work zone safety on appropriate PennDOT and PA Turnpike roadways. The program became effective on February 15, 2024. As part of the program, PennDOT develops an annual report (2025-WZSSC-Annual-Report.pdf) that analyzes and documents the success of the program.

While crashes in school zones remains low, there continues to be a high number of crashes in work zones especially in 2021 which peaked at 151 crashes. Additional programs and continued driver education on work zone safety have helped reduce the number of crashes in these zones representing a 23.3% decrease in Berks County from 2020 to 2024.

SPECIAL ZONE CRASHES IN BERKS COUNTY BETWEEN 2020 AND 2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
Work Zones	86	151	99	81	66	483	-20	-23.3%
School Zones	21	15	23	17	18	94	-3	-14.3%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

Special Types of Vehicles

Given the increase in online purchasing, warehousing and that the County Interstate system is a major freight corridor, it is not surprising to see more heavy trucks on the road and as a result, involved in more crashes.

CRASHES BY SELECT VEHICLE TYPE IN BERKS COUNTY BETWEEN 2020 AND 2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
Heavy Truck Related	276	357	392	301	303	1,629	27	9.8%
Commercial Vehicle	281	377	431	367	366	1,822	85	30.2%
School Buses	3	4	6	10	2	25	-1	-33.3%
Horse and Buggy	0	0	1	2	1	4	1	100.0%
Trains	0	1	0	3	2	6	2	200.0%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

At-Risk Drivers

At-risk drivers include older drivers (65+) and young drivers (16-20). Older drivers are in crashes at a higher rate due to visual, cognitive and physical skill deterioration. Younger drivers are less experienced and less mature which contributes to the higher crash rate among that age group. A common theme throughout this plan is the rise of elderly drivers on the road. The number of elderly drivers will continue to increase, eventually outnumbering the younger drivers, as the baby boomer generation continues to age. Driver licensing requirements have aided in reducing crashes among age 16 population. However, this age group and the age 17 group shows the greatest increases among these at-risk populations by approximately 30% and 34% respectively from 2020 to 2024. The 50-64 age group continues to have the highest number of total crashes annually across this 5-year time period.

BERKS COUNTY CRASHES BY YOUNG AND MATURE DRIVERS 2020-2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
Age 16	66	64	70	84	86	370	20	30.3%
Age 17	159	190	218	198	213	978	54	34.0%
Age 18	234	263	276	248	258	1,279	24	10.3%
Age 19	214	249	255	225	254	1,197	40	18.7%
Age 20	239	258	251	246	240	1,234	1	0.4%
Age 50-64	1,127	1,302	1,300	1,177	1,255	6,161	128	11.4%
Age 65-74	441	487	534	486	511	2,459	70	15.9%
Age 75+	259	300	318	323	313	1,513	54	20.8%
Total	2,739	3,113	3,222	2,987	3,130	15,191	391	14.3%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024



Vulnerable Road Users

Vulnerable road users (VRU) are those individuals that are using the road without a vehicle surrounding them for protection. Most commonly, these are pedestrians, bicyclists, and other persons using non-motorized means of transportation. For comparison purposes of this part of the plan, they are included in the following table.

Fatal crashes involving bicyclists decreased approximately 67% from 2020 to 2024. Additionally, fatal crashes involving pedestrians remained steady from 2020 to 2024 in Berks County with a single peak occurring in 2022.

CRASHES INVOLVING VRUS IN BERKS COUNTY BETWEEN 2020 AND 2024

Pedestrians	2020	2021	2022	2023	2024	Total	# Change	% Change
Crashes	122	124	134	124	153	657	31	25.4%
Suspected Serious Injury	15	22	20	34	25	116	10	66.7%
Fatal Crashes	5	5	8	5	5	28	0	0.0%
Bicycles	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**	**# Change**	**% Change**
Crashes	25	21	22	37	50	155	25	100.0%
Suspected Serious Injury	1	3	3	4	6	17	5	500.0%
Fatal Crashes	3	1	1	1	1	7	-2	-66.7%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

Motorcycles

While fatality rates for vulnerable road users are low and declining, the chart below shows that motorcycle fatalities had a high occurrence from 2020 to 2024. Pennsylvania's motorcycle helmet law requires any person that operates or rides a motorcycle to wear protective headgear unless they are over 21 years of age **and** has either two years of riding experience or has completed a PennDOT approved motorcycle safety course. Since 2020, motorcyclists involved in crashes have increased helmet use 40%.

CRASHES INVOLVING MOTORCYCLES IN BERKS COUNTY BETWEEN 2020 AND 2024

Motorcycles	2020	2021	2022	2023	2024	Total	# Change	% Change
Crashes	146	151	164	193	166	819	20	13.7%
Suspected Serious Injury	34	45	41	39	39	198	5	14.7%
Fatal Crashes	7	8	8	15	14	52	7	100.0%

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

MOTORCYCLE HELMET USE IN BERKS COUNTY CRASHES BETWEEN 2020 AND 2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
Helmet Used	55	69	80	83	77	364	22	40.0%
No Helmet Used	68	59	62	68	48	305	-20	-29.4%
Unknown Helmet Use	23	23	22	42	41	151	18	78.3%
Total	146	151	164	193	166	820	20	13.7%

Source: PennDOT, PennDOT Crash Data Downloads, 2020-2024

In addition, motorcyclists involved in crashes and identified as having had motorcycle safety training has increased since 2020 approximately 44 percent.

MOTORCYCLE DRIVERS INVOLVED IN CRASHES WITH SAFETY TRAINING IN BERKS COUNTY BETWEEN 2020 AND 2024

	2020	2021	2022	2023	2024	Total	# Change	% Change
With Training	43	49	49	58	62	261	19	44.2%
No Training	31	35	25	41	45	177	14	45.2%
Unknown	72	67	90	94	59	382	-13	-18.1%
Total	146	151	164	193	166	820	20	13.7%

Source: PennDOT, PennDOT Crash Data Downloads, 2020-2024

A Closer Look at Heavy Truck Safety

Berks County experiences a significant amount of truck traffic on its roadway system due to the geographic location and proximity to other major warehousing hubs. Interstate 78 carries a significant amount of truck traffic between regional industrial centers and industrial parks located in Berks County such as Berks Park 78. The data below looks at safety trends for heavy trucks (defined as a truck with gross vehicle weight rating (GVWR) greater than 10,000 pounds). The data also shows where Berks County ranks out of 67 counties in Pennsylvania for frequency of crashes shown in the following chart.

Overall Berks County sees many heavy truck crashes and has been ranked in the top ten for crash frequency across Pennsylvania from 2020-2024.

HEAVY TRUCK RELATED CRASHES BETWEEN 2020 AND 2024

Year	Berks County	Pennsylvania	% of All PA Crashes	County Ranking
2020	276	6,563	4.2%	6
2021	357	7,499	4.8%	6
2022	392	7,769	5.0%	4
2023	301	6,906	4.4%	5
2024	303	6,991	4.3%	5

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

Heavy truck involvement in fatal crashes has fluctuated over the years. The County ranked in the top 10 of all fatal crashes in Pennsylvania for every year since 2021.

HEAVY TRUCK RELATED FATAL CRASHES BETWEEN 2020 AND 2024

Year	Berks County	Pennsylvania	% of All PA Fatal Crashes	County Ranking
2020	2	115	1.7%	16
2021	9	147	6.1%	2
2022	5	152	3.3%	3
2023	7	143	4.9%	1
2024	6	126	4.8%	3

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

The County is also in the top ten for crashes that involve heavy trucks that result in suspected serious injury.

HEAVY TRUCK RELATED SUSPECTED SERIOUS INJURY CRASHES BETWEEN 2020 AND 2024

Year	Berks County	Pennsylvania	% of All PA SSI Crashes	County Ranking
2020	12	273	4.4%	6
2021	20	321	6.2%	2
2022	12	278	4.3%	4
2023	8	258	3.1%	8
2024	13	274	4.7%	4

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024

SECURITY

freight, and the transportation infrastructure from both natural and manmade disasters. Nationally, the Federal government has instituted several programs to help secure the transportation assets across the country, as well as guide and coordinate emergency management activities. Locally, emergency management programs at both the state and local levels aim to prevent, prepare for, respond to, and recover from disasters that may compromise the transportation infrastructure and be hazardous for the people who use them.

MAP-21 identifies the security of the transportation system as a separate planning factor for consideration in the LRTP. The key agencies involved in the security of the Berks County transportation network include: PennDOT, Pennsylvania State Police (PSP), Pennsylvania Emergency Management Agency, Berks County Department of Emergency Services and local police and fire departments. RATS does not have primary responsibility for security issues, although some security issues may have an impact on transportation programs at the regional level. The MPO role in security may take many forms including facilitator, participant, or leader in the security-related activities.

When crashes, unexpected incidents, or adverse weather conditions occur, accommodating or detouring traffic quickly becomes a priority focus of managing the incident. Detouring interstate traffic and heavy truck volumes onto lesser state roads, along busy arterials, or through residential areas is a challenge to accomplish safely and efficiently. Although unexpected incidents occur on all levels of roadway, emergency gates have been added at five Interstate-78 interchanges as part of larger construction projects, as shown on Map 39, to restrict traffic from detouring onto local roads, stop additional traffic from entering the interstate, and protect first responders and related personnel during serious incidents created by crashes and/or weather. In response to a serious incident or weather, these gates with active warning lights would be pulled down in addition to flipping signs to inform motorists of ramp closures.

In addition to the contribution of safety provided by the emergency gates, a temporary traffic signal exists at the State Route 737 interchange, and one is proposed for installation at the State Route 143 interchange. These temporary traffic signals provide another layer of protection and traffic control during incidents where Interstate-78 traffic is being detoured due to closure between exits 35 and 45 while better maintaining the flow of traffic on detour routes without the need for flaggers.

PennDOT, PSP and Berks County's public safety agencies plan further for incidents by using and updating detour maps and manuals, holding annual coordination meetings, and installing and maintaining key Intelligent Transportation Systems (ITS) elements such as cameras, dynamic message signs, highway advisory radios, and emergency sign trailers to aid rapid response. The ITS of Berks County continues to grow as different locations are identified that would benefit from the installation of this equipment. The RATS ITS Camera Gaps, MPMS Project 120991, plans to add four new cameras to various locations across Berks County. The northern extent of the DVRPC PA 100 and Hanover Street, MPMS Project 82124, will include the addition of two cameras and one dynamic message sign along State Route 100 as it extends approximately one and a quarter mile



into Berks County from Montgomery County along this corridor. These projects and investments are an integral part of the state and regional ITS network. Map 39 shows existing and proposed Berks County ITS infrastructure as of the writing of this plan.

PennDOT maintains a traffic management center at PennDOT District 5-0 headquarters in Allentown that provides coordinated regional operations by 24-hour a day monitoring of major state routes in the county and the installed ITS elements. The ITS component of security entails maintaining the control and monitoring capabilities of the transportation infrastructure in the event of crashes, severe weather, natural disasters, terrorist attacks, and other unforeseen events.

The County's ITS system allows PennDOT to share up to the minute data with police, fire, and public works departments of various agencies in the area. PennDOT receives data from the Computer Aided Dispatch (CAD) from the Berks County 911 center, which provides notifications of incidents without the police having to send updates. This information helps PennDOT respond to incidents more quickly and with the right equipment. These quick response times allow traffic lanes to become unobstructed faster, thus reducing traveler delay and secondary crashes. ITS information is disseminated to the public via a website (www.511pa.com) that shows video images, weather updates, and lane closures caused by incidents and construction.

In March 2019 the Freeway Service Patrol, a program aimed to enhance motorist safety along portions of State Routes 12, 222, and 422 in Berks County, was introduced. This public/private partnership utilizes the existing ITS infrastructure to inform roving tow truck patrol units of incidents occurring on these highways during AM and PM peak traffic hours. The drivers of these patrols are trained to assist police agencies as requested, secure crash scenes, provide first aid, and control traffic. When a vehicle has rendered its driver stranded on the shoulder of the highway, the patrol unit will tow the vehicle and driver to the closest exit. Services included are providing fuel, jump starts, directions, and changing flat tires with no cost to the motorist.

The Berks County Freeway Service Patrol covers 25.1 miles in Zone 1 and 23.6 miles in Zone 2. The response area is an additional 11.2 miles of SR 222 and 4.6 miles of SR 422. Through their added assistance at crash scenes, to clearing disabled vehicles and debris from travel lanes and road shoulders, the Freeway Service Patrol aims to reduce secondary crashes and make these routes safer for motorists in Berks County. The table below shows the number of assists and the number of actions taken broken down annually. Assists refer only to towing abandoned vehicles, checking on drivers, crashes, crashes with injuries, clearing debris, towing disabled vehicles, flooding, assisting pedestrians, assisting police, and managing vehicle fires. Multiple actions may be taken at each assist site and are not defined as assists, but as actions taken. Actions taken include adding coolant and fuel, marking vehicles as abandoned, recharging batteries, changing tires, waking drivers, and traffic control such as setting flares.

BERKS COUNTY FREEWAY SERVICE PATROL ASSISTS

	2019*	2020	2021	2022	2023	2024
Zone 1	691	607	546	499	352	383
Zone 2	794	743	537	557	260	287

BERKS COUNTY FREEWAY SERVICE PATROL ACTIONS TAKEN

Zone 1	1,222	1,001	934	887	615	577
Zone 2	1,359	1,156	962	1,047	478	428

Source: PennDOT District 5 Service Patrol Assists Reports *2019 data is partial (March-December) as this was the inaugural year of the Freeway Service Patrol in Berks County

Other transportation-related security efforts occur at the local level but are primarily mode specific. BARTA has security cameras on its buses that provide a record of any on-board or traffic incidents and serve as a security measure for the vehicles. Local airports have a number of security measures in place, from fencing and lighting to security plans. The Reading Regional Airport complies with guidelines from the Transportation Security Administration for the screening of passengers and freight. Norfolk Southern has a security plan that defines four Alert Levels and three general areas of emphasis: (1) operations (including transportation, engineering, and mechanical); (2) information technology and communications; and (3) railroad police. Norfolk Southern also provides rail incident response training to local police and fire personnel.

Intelligent Transportation Systems (ITS) and Freeway Service Patrol Routes

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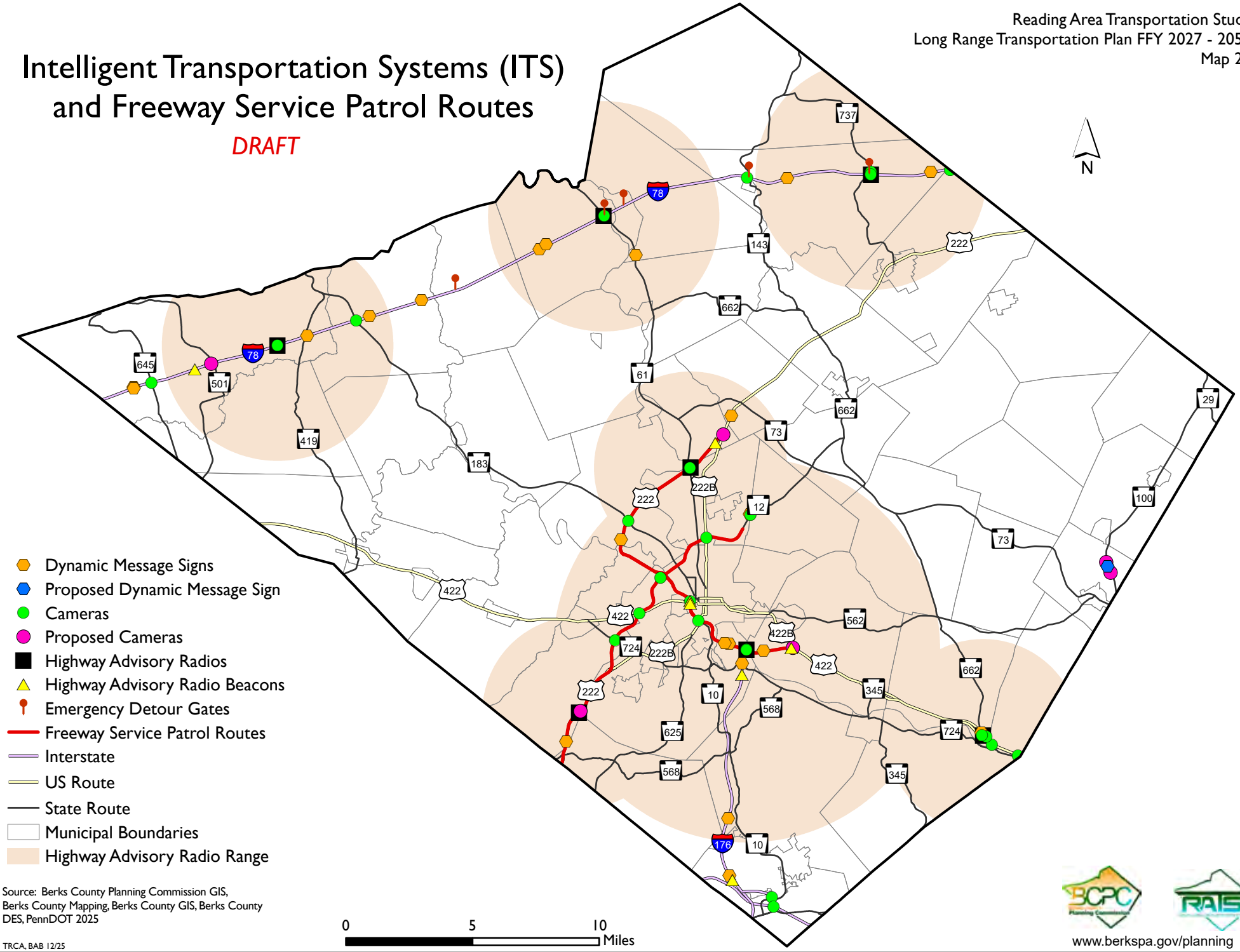

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT 2025

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FREIGHT

Eastern Pennsylvania's historical role as an industrial and commercial hub, bolstered by its strategic location near natural resources and robust transportation infrastructure, has made it a key player in the nation's freight handling and logistics. Its proximity to major markets like New York, New Jersey, and Philadelphia, along with access to interstate highways, rail networks, international ports, and airports, drives its appeal. Affordable land compared to urban cores further enhances its attractiveness for logistics and warehousing.

The surge in e-commerce, accelerated by the COVID-19 pandemic and declining brick-and-mortar retail, has fueled rapid growth in warehouse and distribution facilities. This expansion extends beyond metropolitan areas into historically rural parts of Eastern Pennsylvania, driven by the need for multi-stage distribution systems to meet direct-to-consumer demand. However, this growth brings significant community impacts, including:

- **Increased truck traffic**: Higher volumes strain local roads and infrastructure.
- **Reduced land availability**: Development pressures limit space for other uses.
- **Equity issues**: Disparities arise in economic benefits and environmental impacts.
- **Emergency services demand**: Greater need for fire, medical, and safety resources.
- **Housing and workforce stress**: Rising demand exacerbates affordability and labor shortages.

These challenges highlight the need for balanced planning to mitigate impacts while leveraging the region's economic advantages.

The effectiveness and efficiency of freight transportation in Berks County, as well as surrounding counties, is a major factor in manufacturing and retail costs. Manufacturers look for reliability, speed, and quality control in the carriers that deliver their raw materials and finished products. Since the mid-1990s, the retail and wholesale industries use 'just-in-time' logistics management, where retailers assume that the cost of transporting a product will be less than the cost of maintaining large inventories of the product on site. This has prompted the growth of the logistics and warehousing industries, which rely on a network of warehouses and trucks to distribute freight. This change in how retailers manage inventory has had profound transportation and land use impacts in Berks and surrounding counties and, as a result, impacts on Berks County roads.

Freight takes a prominent role in this plan due to federal legislation that emphasizes freight as an integral component of transportation planning. Federal transportation legislation developed a national freight network to help states strategically direct resources to improve highway freight movement. The identification of local freight corridors and preservation of freight mobility is a component of this Long Range Transportation Plan. Freight rail service is secondary to truck freight because trucks are currently the most cost effective and flexible freight transportation mode for businesses and consumers in Berks County. The County does not have a substantial air freight component as of the writing of this plan, however, Quest Diagnostics, who is one of the main commercial operators out of the Reading Regional Airport does support some freight operations. It is the intent of the Reading Regional Airport to continue to facilitate and grow freight operations at the airport.



Berks County Freight Network

Trucks move a great majority of freight (in terms of both tonnage and value) within and through Berks County, illustrating the importance of the County's highway network. From Berks County, businesses can reach nearly 40% of the United States population and 50% of Canadian customers within a one-day drive.

Truck freight is the region's most utilized method of transporting goods. Of note, the sections of Interstates 176 (15 percent truck traffic), 78 (45 percent truck traffic), 76 PA Turnpike (22 percent truck traffic) and portions of US 422, US 222, and PA 724 extending from I-176 to the Sinking Spring Intermodal Facility in Berks County are on the Federal Highway Administration's (FHWA) Primary Freight Network (PFN). In the County, the Interstates are the primary routes transporting goods statewide. Routes 422, 222, and 61 are primary inter-county truck freight corridors. US 422 links the Reading Metropolitan Area with Lebanon and Montgomery Counties while US 222 (22 percent truck traffic) links Reading to Lehigh and Lancaster Counties. The Fogelsville area located in western Lehigh County has seen explosive growth in warehousing in the last decade. State Route 61 provides a north-south route into Schuylkill County and a direct link to I-78 and I-81. As shown on Maps 41 and 42, most of the freight generating businesses are located along these routes.

The County has one of the largest manufacturing concentrations in the region and serves as a major conduit between warehousing hubs elsewhere in Pennsylvania. This warehousing and industrial development is generally located along major freight corridors in eastern Pennsylvania, namely the Interstate system. Interstates 78 and 81 have been recognized as logistics corridors, which stretch from Northeastern Pennsylvania, through the Lehigh Valley (including Berks County as the westernmost county), and into Central Pennsylvania. Berks County is centrally located along this corridor as it is the westernmost county of the Lehigh Valley Region, which borders the southern portion of the Northeastern Pennsylvania Region, and borders Lebanon and Lancaster Counties to the east of the Central Pennsylvania Region. In addition, Berks is centrally located between industrial centers on Interstate 78. This corridor is leading in the growth of larger warehouses compared to major logistics markets in the country. Even with the growth of new larger warehouses, existing warehouses are being utilized creating a historic low of vacant warehouses along the I-78/I-81 corridor. Warehouse and distribution center development along Interstate 78 in Berks County is expected to continue to grow, particularly as properties become less available to the east of Berks County in Lehigh and Northampton Counties and New Jersey.

Truck parking has been an issue affecting drivers in recent times especially since the inception of the Electronic Logging Device (ELD) Mandate in December of 2017. With Interstate 78 being part of the logistics corridor, truck parking is of high demand across northern Berks County. When adequate truck parking is unavailable or full, some truck drivers resort to parking on the shoulders of ramps and interstates. A lack of truck parking has been recognized in Pennsylvania and state officials are searching for solutions for the safety of all drivers. One way of potentially increasing truck parking would be to encourage developers to include an area of safe truck parking within the property they are developing for the drivers that are delivering or picking up goods at their location.



Freight Generators by Sales Volume

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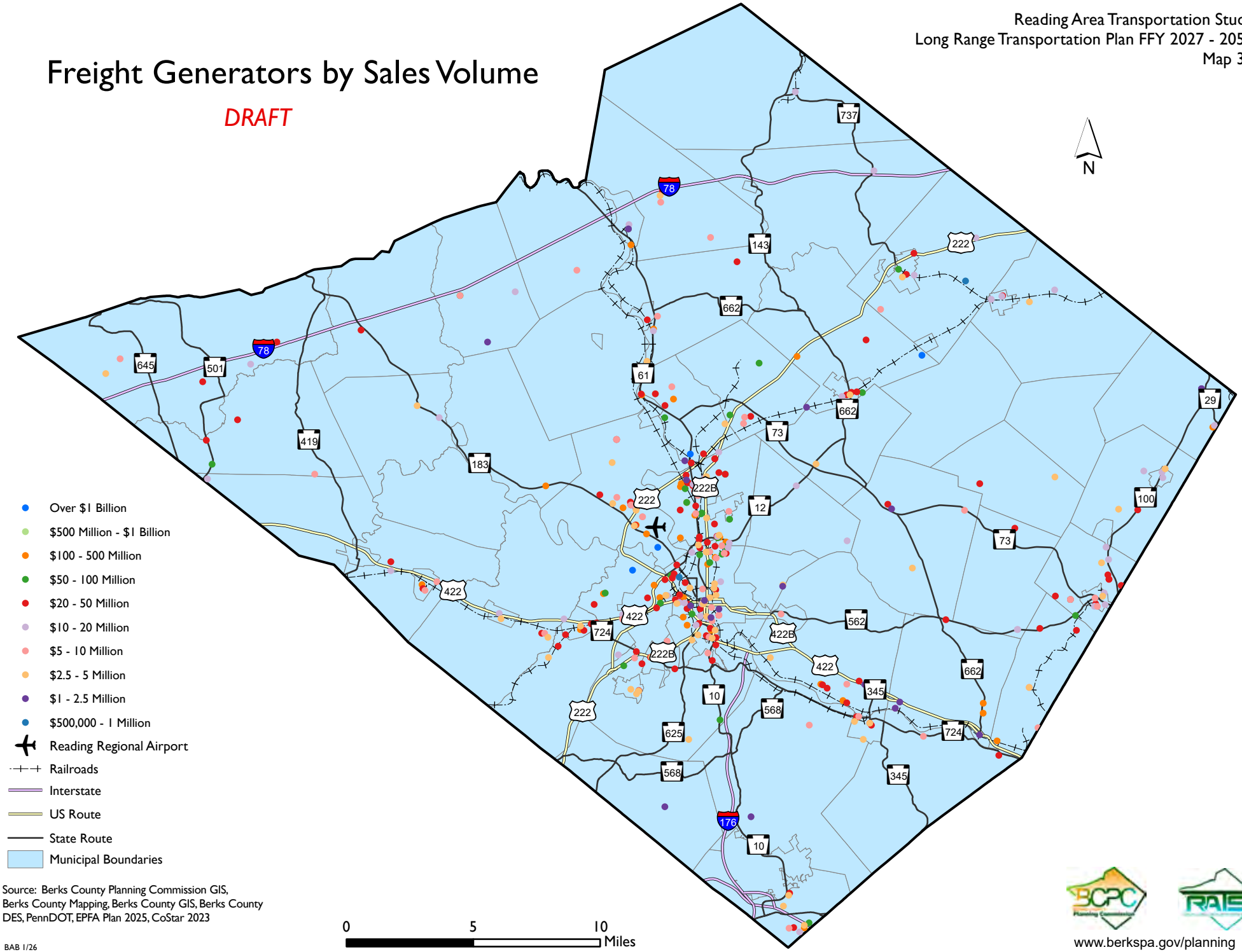

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, EPFA Plan 2025, CoStar 2023

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Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 31

Freight Corridors

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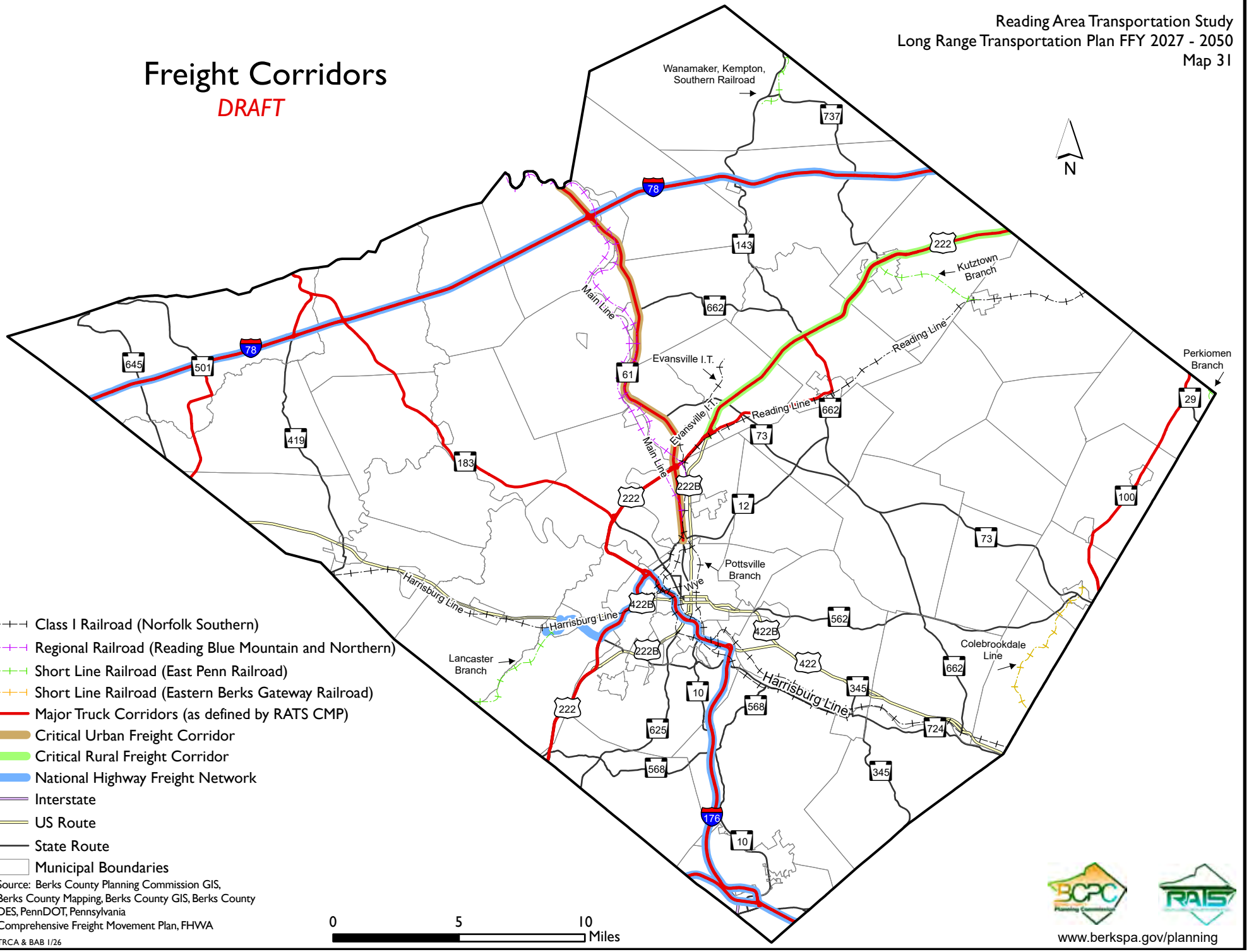

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, Pennsylvania Comprehensive Freight Movement Plan, FHWA

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Federal, State, and Local Freight Planning

National Freight Strategic Plan

The National Freight Strategic Plan https://www.transportation.gov/sites/dot.gov/files/2020-09/NFSP_fullplan_508_0.pdf defines the US DOT's vision and goals for the national multimodal freight system, assesses the conditions and performance of the freight system and barriers to freight system performance, and defines strategies to achieve its vision and goals. The plan was developed through a multi-agency effort involving extensive consultation with freight stakeholders in both the public and private sectors. The plan is used as a guide for developing national freight policy, programs, initiatives, and investments; inform State freight plans; identify freight data and research needs; and provide a framework for increased cross-sector, multijurisdictional, and multimodal coordination and partnerships. At the time of this writing the current 2020 National Freight Strategic Plan is being updated. The new plan is anticipated to be completed by February 2025.

The freight system in the US is critical to the Nation's economic growth and prosperity. American consumers and businesses rely on a safe, efficient, and reliable freight system to sustain their way of life. The National Freight Strategic Plan incorporates stakeholder input from across the freight industry to provide a vision for the Nation's multimodal freight system and a strategy for achieving that vision. The following table outlines the strategic goals and objectives of National Freight Policy:

GOAL	STRATEGIC OBJECTIVES
Safety Improve the safety,security, and resilience of the national freight system.	• Support the development and adoption of automation, connectivity, and other freight safety technologies • Modernize safety oversight and security procedures • Minimize the effects of fatigue and human error on freight safety • Reduce conflicts between passenger and freight traffic • Protect the freight system from natural and human-caused disasters and improve system resilience and recovery speed
Infrastructure Modernize freight infrastructure and operations to grow the economy, increase competitiveness, and improve quality of life.	• Fund targeted investments in freight capacity and national goals • Improve consideration of freight in transportation planning • Prioritize projects that improve freight intermodal connectivity, and enhance freight flows on first- and last-mile connectors and at major trade gateways • Develop a methodology for identifying freight bottlenecks across modes • Advance freight system management and operation practices • Stimulate job growth and economic competitiveness in rural and urban communities • Mitigate the impacts of freight movement on communities
Innovation Prepare for the future by supporting the development of data, technologies, and workforce capabilities that improve freight system performance.	• Support the development and adoption of automation and connectivity, including V2X (Vehicle to Everything) technologies • Support the safe deployment of UAS technology • Streamline or eliminate regulations to improve governance, efficiency, and economic competitiveness • Improve freight data, modeling, and analytical tools and resources • Strengthen workforce professional capacity • Invest in freight research • Support regulatory frameworks that foster freight innovation

Source: USDOT National Freight Strategic Plan (NFSP)

Pennsylvania 2045 Freight Movement Plan

Pennsylvania's 2045 Freight Movement Plan (FMP) https://www.pa.gov/content/dam/copapwp-pagov/en/penndot/documents/public/pubsforms/publications/pub%20791.pdf was developed in conjunction with the statewide 2045 Long-Range Transportation Plan (LRTP) in 2021. The current version is being updated with an anticipated completion of June 2026. The plan provides a comprehensive strategic direction for the movement of people and goods throughout Pennsylvania. The plan highlights two of Pennsylvania's most pressing freight challenges: improving collaboration in the freight transportation/land use planning process and the shortage of truck parking. There is much at stake in addressing land use issues related to freight, particularly with the rapid growth of warehouses and distribution facilities. The access needs and the associated implications for infrastructure and traffic congestion also make the transportation/land use connection particularly important. Truck parking challenges require collaboration between varied stakeholders to address this need. PennDOT and the regional planning agencies can fulfill an important role in handling these multi-faceted issues with both local and private stakeholders. The plan's five goals and objectives for each one of them are listed in the table below:

GOAL	STRATEGIC OBJECTIVES
Land Use Align freight mobility with economic development and land use	• Establish a core Pennsylvania highway freight network based on a refined methodology for identifying critical urban and rural freight corridors. • Establish statewide standards to measure benefits and costs of freight-oriented industrial development. • Collaborate with other organizations to assemble recommended industrial site development standards/ordinances.
Mobility Advance project investments that enhance freight mobility.	• Continue to identify and improve truck bottlenecks. • Preserve and enhance major freight transportation assets, including waterways, railroads, major truck corridors, and intermodal terminals, with the aim of supporting and promoting energy-efficient modes of freight transportation. • Pursue opportunities with public and private stakeholders to expand truck parking capacity. • Expand and diversify the composition of the Freight Work Group (FWG)
Analytic Tools and Processes Provide planning, data, and analytical tools for improved decision making and collaboration with freight stakeholders.	• Develop analytical tools, data, and forecasting techniques to measure costs and benefits of freight-related transportation initiatives, programs, and projects. • Enhance PennDOT's technical capabilities in freight planning, forecasting, modeling, and data • Expand PennDOT's data repository for Pennsylvania's freight transportation system. • Develop methods to track and evaluate air cargo trends, needs, and intermodal implications. • Examine the key topic areas of the Transportation Advisory Council (TAC) truck weight exemptions study of 2020. • Develop expanded freight performance measures for Pennsylvania's Transportation Performance Report (TPR).
Operations / Safety Improve multimodal freight transportation operations and safety.	• Reduce truck-related crashes, injuries, and fatalities statewide. • Reduce FRA-reportable incidents, injuries, and fatalities statewide. • Reduce non-recurring delays on the National Highway Freight Network. • Adapt to advances in truck automation, electrification, and other technologies. • Enhance interoperability of the highway network with neighboring states.
Environmental Stewardship Reduce, avoid and/or mitigate adverse environmental impacts from Pennsylvania's freight transportation system, and plan for environmental impacts to freight movement.	• Mitigate the severity of impacts of extreme weather and natural disasters on freight mobility. • Reduce freight movement-related emissions and its impact on local air quality. • Reduce freight movement's impact on flooding and stormwater runoff. • Support planning for freight movement's impacts on loss of wildlife and habitat.

Source: PA 2045 Freight Movement Plan

After the completion of Pennsylvania's previous multimodal long range transportation plan in 2016, also known as PA On Track, federal requirements and parameters for designating Critical Urban Freight Corridors (CUFCs) and Critical Rural Freight Corridors (CRFCs) in each state were established. PennDOT developed a detailed methodology for evaluating roadway segments across the state and prioritizing them for potential certification of CUFCs and CRFCs. This evaluation process included a wide range of criteria, such as freight tonnage, truck volumes, truck vehicle-miles traveled, proximity to major freight generators and intermodal facilities, weight restrictions, truck bottleneck locations, and others. As such, PennDOT designated a listing of proposed CUFCs and CRFCs, which FHWA certified in February 2019. Based on PennDOT's evaluation criteria State Route 61 is considered a CUFC and US 222 North is considered a CRFC in Berks County. This designation identifies routes critical to freight movement that extend the Primary Highway Freight System and allows eligibility for funding under the National Highway Freight Program (NHFP). PennDOT's Bureau of Planning and Research continually evaluates the CUFCs and CRFCs when developing the yearly Highway System Performance Monitoring System (HPMS) submittals to the Federal Highway Administration.

Eastern Pennsylvania Freight Alliance and the Eastern Pennsylvania Freight Infrastructure Plan

The Eastern Pennsylvania Freight Alliance (EPFA) is a consortium of five Metropolitan Planning Organizations (MPOs) including: the Reading Area Transportation Study (RATS), Lackawanna/ Luzerne Transportation Study (LLTS), Lebanon County Metropolitan Planning Organization (LEBCO), Lehigh Valley Transportation Study (LVTS), and Northeastern Pennsylvania Alliance (NEPA).

The MPOs referenced above have collaborated to address the unique opportunities and challenges associated with freight industry growth, such as impacts to mobility, safety, land uses, and maintaining a state of good repair of the transportation infrastructure across the region. The 10-County EPFA region (Berks, Carbon, Lackawanna, Lebanon, Lehigh, Luzerne, Monroe, Northampton, Pike, and Schuylkill Counties) is among the largest and fastest-growing freight handling regions in the country, with rapid development and redevelopment for warehouse and distribution functions. One of the first outcomes of this alliance is the region's freight plan known officially as the Eastern Pennsylvania Freight Infrastructure Plan: https://epennfa.org/

It is intent of the Reading MPO to have this plan, by reference, and the recommendations applicable to Berks County as addressed below, serve as the freight planning element of the Long Range Transportation Plan.

The Eastern Pennsylvania Freight Infrastructure Plan identifies challenges and develops opportunities for infrastructure investments and policy guidance that address the challenges of continued expansion of freight in the region, including those focused on mobility and reliability, safety and security, or infrastructure condition. The plan focuses on three key elements:

1. **Infrastructure:** Roads, bridges, pavement, rail facilities, rest areas/parking facilities
2. **Activity:** Truck traffic, bottlenecks, crashes, commodities, truck parking
3. **Land Use:** Freight generators and development areas that are directly linked to infrastructure and activity





In the early stages of plan development, a project specific public survey was deployed to obtain input from local residents and visitors, who were asked to identify and provide known concerns and opinions regarding freight transportation within the EPFA region. One of the questions asked was to list specific locations where your daily travel is impacted by trucks or freight. A review of responses indicated numerous corridors identified by more than 100 individual responses. More than 25% of all respondents highlighted I-78 or US 22 as routes where their daily travel is impacted by freight. Additional routes highlighted include Interstates (80, 81), US 222, State Routes (309, 100, 33, 512, 248, 191, 329, 61) and Airport Road (connecting to Lehigh Valley International Airport). Key locations along these corridors that were identified most frequently as they pertain to Berks County are listed below:

- I-78 – Exit 23 – Shartlesville
- US 222 – Bypass, Kutztown Road to I-78

EPFA Regional Action Plan

Freight, goods movement, and trucks are visible elements of daily life in Berks County, not only serving the needs of local and regional residents, but consumers throughout the northeastern United States and beyond. The County's geographic location uniquely positions it as a critical link in the regional and national freight network, strengthening the region's importance as a hub of freight-focused employment. Continued regional growth in the freight and goods movement sector creates challenges for infrastructure, land use, and the safety of all roadway users. The EPFA regional action plan outlines actions that, when implemented incrementally, will allow for local or regional investments that address existing challenges and the adoption of policies that will better plan for future challenges.

The Regional Action Plan is focused on two elements:

> **Infrastructure** recommendations are physical locations in need of improvements or further study that have been identified based on input from the analysis of the Regional Freight Profile, Stakeholder Input, and results of the Public Survey
>
> **Policy** recommendations are local or regional policy guidelines identified based on input received from Agency Partners and Stakeholders, as well as those that reflect current regional or statewide planning best practices.

Infrastructure Recommendations: Infrastructure improvement locations were generated from three elements: those identified through the data analyzed as part of the development of the regional freight profile, as well as those identified from stakeholder session feedback, or through the public survey. Many infrastructure improvement locations have been identified based on a review of data included in the EPFA Plan's Regional Freight Profile. The list of locations includes areas where one or more deficiencies were identified. These deficiencies include a history of crashes – particularly truck-involved crash hotspots that include fatalities and/or non-motorized users – identified truck bottlenecks, geometric constraints, substandard bridge conditions, or pavement conditions. The infrastructure recommendations are listed in numerical order. With number one being the highest priority.

1. Allentown Pike, US 222 Business to PA 73 (issues: safety, bottleneck) *****
2. US 222 Business at US 422 Interchange (issues: safety, bottleneck) ******
3. Downtown City of Reading (issues: safety, bridge condition, pavement condition) ******

4. I-78/PA 61 (issues: safety, bottleneck) *****
5. PA 12 near US 222/PA 183 and PA 61 (issues: safety, bridge geometry) **(* @ 183)**
6. US 422 at PA 662 (issues: safety, bridge geometry) ***
7. US 422 at US 222 (issues: safety, bridge geometry) ***
8. US 222 Business (Lancaster Avenue), PA 625 to US 422 (issues: bottleneck, bridge geometry) ******
9. US 222 at PA 73 (issue: safety) *****
10. US 222/PA 662 (issue: safety) *****
11. US 422 at PA 724 (issue: safety) ******
12. US 422 at US 422 Business and US 422 at US 222 Business (issue: safety) **
13. US 222 (Allentown Pike), at US 222 Business Interchange (issue: bottleneck) ***
14. US 222, PA 73 to PA 662 (issue: bottleneck) **
15. US 222 Business – South 4th Street, Pine Street to Laurel Street (issue: bottleneck) ***

***** Improved prior to plan completion ****** Programmed in FFY 25-27 TIP ******* Candidate project for future consideration

Policy Recommendations: Policy recommendations have been developed through input received from EPFA members, stakeholder session feedback, and comments received from the public survey. Policy recommendations were developed around different action areas; each is discussed separately below. Timeframes for implementation are Short-Term (less than one year), Mid-Term (1-2 years), and Long-Term (more than 2 years). Key action areas include:

Regional Coordination: Regional coordination is a prerequisite for regional policy. Given that the EPFA region includes 5 MPOs, 10 counties, and 400 municipalities, if coordinated policies are to be developed and advanced, a sustainable mechanism for that coordination must be put in place.

Action Area	Recommendation	Timeframe
Regional Coordination	Develop EPFA common goals and objectives.	Short-Term
Regional Coordination	Standardize formal meetings of the EPFA to advance outcomes of the Plan and support future needs associated with freight development.	Short-Term
Regional Coordination	Proactively track approved or proposed freight or logistics-focused developments to identify roadway connections that may need future investments.	Short-Term
Regional Coordination	Track AADTT annually to identify locations where growth in truck use may warrant a focused study or analysis	Short-Term
Regional Coordination	Track industrial real estate market trends to identify new and emerging industrial clusters, types of facilities being developed, etc.	Mid-Term

Source: Eastern PA Freight Infrastructure Plan

Regional Coordination Actions

- Initial EPFA contacts should coordinate a meeting, workshop, or virtual focus group to identify common goals and objectives that EPFA will aim to achieve.
- EPFA members should Initiate the development of a Memorandum of Understanding (MOU) to formalize the EPFA as an entity focused on the unique transportation and land use needs of freight within the region (the EPFA MOU was approved by each of the five MPO's effective_____2025).
- Establish regular monthly or quarterly EPFA meeting schedules. Ensure each member has an identified responsible point of contact. Appoint secretary to maintain roster of current contacts, and to create and maintain a shared file location (Dropbox, SharePoint, or similar) for EPFA information and materials.
- EFPA membership should prepare a database of approved or proposed developments to identify roadways in need of future investments, particularly those that may not be currently used by freight traffic.
- Additionally, EPFA members should actively track AADTT annually to determine roadways within the region where expanded truck use may need further study. Identify trends and areas where there are significant changes that need further investigation.
- EPFA core members should review industrial real estate data and trends on an annual or triennial basis. This analysis should focus on clusters where development activity is growing or emerging, identify the types of industrial buildings being developed, and consider impacts and needs. This may require the identification of MPO resources to pay for data and analysis.
- In developing a work program, each EPFA member should consider the feasibility of expanding the geographic scopes of transportation or freight-focused studies to include multiple EPFA member geographies.



Land Use: Land use recommendations are primarily centered on a need to advance regional or multi-jurisdictional zoning, or the development of model ordinance support for EPFA municipalities. As a matter of practice, few freight plans – whether modal, statewide, or regional in nature – attempt to address the critical relationships between freight transportation and the freight land uses that generate the underlying demand, primarily because transportation agencies preparing the plans have jurisdiction over transportation assets but not land use decisions, which are made locally.

Action Area	Recommendation	Timeframe
Land Use	Develop regional land use guidance document for EPFA member municipalities, including best practices guidance - especially in rural agricultural areas susceptible to change	Mid-Term
Land Use	Develop public information materials (documents, videos, etc.) to educate the public, elected officials, etc. on land use trends, impacts of certain development types in response to or anticipation of public concerns. Leverage TRB guidance and other existing materials as much as possible.	Mid-Term
Land Use	Perform an assessment of developable land, identifying potential conflicts, more/less desirable areas to focus development, etc.	Mid-Term
Land Use	Advance development of regional zoning guidance for industrial and warehousing uses.	Long-Term
Land Use	Consider opportunities for multi-jurisdictional land use planning, focused on industrial or warehousing uses.	Long-Term
Land Use	Advance development of regional zoning language that support truck parking on-site at industrial, distribution, or warehouse sites.	Long-Term

Source: Eastern PA Freight Infrastructure Plan

Land Use Policy Actions

- The EPFA should establish a standing working group representing interested regional planning agencies, counties, and municipalities, and subsequently charge the working group to implement the following:
    - Create a library of potentially applicable land use and zoning texts from regional, state, and national best practice, tapping resources such as Transportation Research Board (TRB), American Planning Association (APA), and USDOT.
    - Agree on recommended regional ordinance language guidance for use by counties or municipalities.
    - Perform consistency reviews with LRTPs and other governing policies to ensure any guidance documents align with local goals, objectives, or outcomes.
    - Perform outreach to and inform municipalities about the availability of the regional guidance and benefits of their use; promote dialogue and coordination between adjacent or interdependent municipalities.
    - Track and monitor the deployment of language guidance across the region.
    - Additionally, EPFA members should track available or developable land at a regional level to identify where growth in existing or the development of future industrial clusters may be most likely. This may also provide opportunities to focus development in more desirable areas by local or regional stakeholders.

Road Design and Maintenance: Winter weather, storm events, and work zone activities can create temporary disruptions in the availability and use of key truck routes, ranging from reduced capacity and performance to full unavailability for periods of time. Truck routes within the EPFA region should be actively managed to reduce the frequency and severity of disruption to the extent practical.

Action Area	Recommendation	Timeframe
Road Design and Maintenance	Focus on improving winter maintenance along key truck routes.	Short-Term
Road Design and Maintenance	Develop resilient road design guidelines to avoid or mitigate flooding and other risks.	Mid-Term

Source: Eastern PA Freight Infrastructure Plan

Road Design and Maintenance Policy Actions

- County agencies should work with PennDOT district offices to establish or reinforce coordinated plans across responsible jurisdictions for priority snow removal on key truck routes.
- EPFA members should share information and manage work zone activities related to municipal or county projects to minimize impacts to freight operations and particularly to communities where trucks might seek to re-route.
- County officials should collaborate with PennDOT district officials on the investigation of weather vulnerabilities on key truck routes and develop plan to prioritize improvements and actions to reduce those vulnerabilities.
- EFPA members, in partnership with local officials and PennDOT, should identify and adopt resilient road design guidelines. EFPA members should advocate for federal or state funding for resilience projects and apply for grants (or advise applicants in the region) as appropriate.

Truck Operations: Policy recommendations within the truck operations action area include addressing challenging issues associated with safe truck parking and the routing and operations of trucks on highways and in communities.

Action	Recommendation	Timeframe
Truck Operations	Identify local or regional ordinances that allow for or support development of truck parking opportunities within the County.	Mid-Term
Truck Operations	Advance local freight studies for urban areas identified as needing infrastructure improvements, including Allentown, Reading, Scranton, and Lebanon	Mid-Term
Truck Operations	Advance County-wide study to Identify locations that may support truck parking within Berks County.	Mid-Term
Truck Operations	Advance regional Truck Route study.	Mid-Term
Truck Operations	Develop Regional Routing Study focused on need for wayfinding signage to avoid bridge strikes, etc.	Mid-Term
Truck Operations	Anticipate the potential for new technologies (autonomous vehicles, AI routing, alternative delivery technologies) to change how trucks move to, from, through, and within the region. Assess readiness, opportunities to lead demonstration projects, etc.	Long-Term
Truck Operations	Assess corridor-level demand for alternative fuels (e.g., hydrogen) and electric charging	Long-Term

Source: Eastern PA Freight Infrastructure Plan

Truck Operations Policy Actions

- Establish core working group of EPFA representatives to:
  - Compile reports of unauthorized parking activities and related incidents, and regularly develop and update data on authorized and unauthorized truck parking activities;
  - Work in a coordinated manner with state agencies and private sector developers on increasing the inventory of "mainline" (Interstate or highway-based) parking;
  - Research, as part of the Land Use/Transportation coordination, the application of zoning to increase the inventory of on-site parking within-facilities;
  - Perform and support county/subregion feasibility evaluations on the potential for (and acceptability of) managed local truck parking facilities.
- For urban areas identified as infrastructure priorities, individual MPOs should work with the associated municipality to advance city-specific truck studies, including a review of where and how trucks interact with cyclists or pedestrians.
- Advance EPFA regional truck route study. This includes compiling potential routes or restrictions, as appropriate, as well as necessary traffic or infrastructure data to support this effort;
- Develop a coordinated EPFA strategy to develop, distribute, and promote preferred route information to regional truck operators and dispatchers;
- Stay apprised of new and emerging technologies and their applications. These could be topics at future EPFA meetings. EPFA members should collaborate with private companies, and/or academic institutions that may be looking for opportunities to deploy or pilot new technology.
- Collaborate with PennDOT and USDOT partners to advance improvements associated with alternative fuel corridors within the EPFA region.



Rail Policy Recommendations: Rail freight has positive and negative effects in the EPFA region. It offers an alternative to truck transportation over longer distances for regional freight shippers and receivers. But rail service also generates and concentrates truck trips at rail/truck transfer points, creating community impacts as well as development pressures. Increasingly, as the length of trains increase, at-grade crossings experience blockages while trains are switched in and out of railyards and customer facilities. Railroads are a critical part of a balanced freight ecosystem, and while they receive attention and planning through federally mandated state rail plans and other programs, it is also important to address local benefits and impacts.

Action Area	Recommendation	Timeframe
Rail	Coordinate with passenger rail studies in Reading, Wilkes-Barre, Allentown	Short-Term
Rail	Coordinate with the State Rail Plan	Short-Term
Rail	Work with existing rail operators and rail-served businesses to develop strategy aimed at limiting traffic impacts from stalled/idling/slow trains.	Short-Term
Rail	Perform a regional analysis of grade crossing safety aimed at identifying and prioritizing crossings in need of safety improvements.	Mid-term

Source: Eastern PA Freight Infrastructure Plan

Rail Policy Actions:

- Establish core working group of EPFA representatives to:
  - Identify and, to the extent practical, protect rail-adjacent development sites for use by rail-served industries (possibly following the model of NJTPA's Freight Rail Industrial Opportunities study);
  - Perform regional analysis of rail grade crossing safety, blockages, and other impacts;
  - Work with railroads and rail-served facilities to reduce the duration/frequency of grade crossing blockage events;
- Identify an EPFA member to proactively represent the alliance as a steering committee member for the Pennsylvania State Rail Plan
  - Actively coordinate and collaborate with development and deployment of passenger rail studies throughout the region.

Air Cargo Policy Recommendations: Air cargo is important for EPFA shippers and receivers, particularly given the expansion of ABE as a cargo hub. Additional air cargo needs are met by large national and international airports such as Philadelphia and Newark-Liberty/JFK, with air freight being trucked to and from these and other airports. This action area is focused on air-side facility recommendations, with land-side recommendations generally associated with specific infrastructure improvements or those found in the Truck Operations action area.

The airside facilities at ABE lack the capacity to serve existing and future cargo needs associated with the rapid growth of freight within the EPFA region. Investments in air cargo within the region should focus on the development of dedicated airside cargo (including cross-dock) facilities at ABE that increase efficiencies and reduce truck demand within the region.

In January 2024, the Lehigh-Northampton Airport Authority (LNAA) was awarded a $40.8M federal grant to fund the construction of the Northside Logistics and Cargo Complex (NLCC), a consolidated multimodal cargo facility at Lehigh Valley International Airport (ABE) in Lehigh County, Pennsylvania with connectivity to the National Highway System via designated truck routes and critical urban freight corridors. This initiative continues to utilize the regional freight corridors and utilizes available FHWA and Federal Aviation Administration (FAA) funding currently in place to develop additional air cargo capacity for the region.
The Reading Regional Airport is currently poised to offer space for air cargo carriers at its facility and intends to market itself as a potential location for air cargo carriers looking to expand their operations in the region. Through coordination with the Reading Regional Airport Authority, we will continue to monitor the status of air freight in Berks County to ensure adequate planning and implementation in support of future growth in this area.

Freight Workforce Access Recommendations: Freight generating and receiving facilities depend on workers, and those workers depend on reliable transportation options to and from the workplace. For those without a personal automobile or regular shared ride, active transportation and public transit are the primary options for workplace access. However, as freight facilities continue to develop outside of established clusters and regional transportation routes, they become increasingly difficult to reach. Providing workplace access options supports opportunities for the economically disadvantaged, while also expanding the pool of potential workers for freight facility operators and helping fill labor pool shortfalls. In other regions, major employers have established their own van and private transit services to fill gaps in the public transportation system.

Action Area	Recommendation	Timeframe
Freight Workplace Access	Identify underserved transit corridors and consider an expansion of service for major freight generating nodes	Mid-Term

Source: Eastern PA Freight Infrastructure Plan

Freight Workplace Access Policy Actions:

- Establish core working group of EPFA representatives to identify underserved transit corridors
- Partner with transit operators to identify opportunities to expand workforce access options, including: active transportation improvements; public transit service expansion; and private or public-private partnership van services.
- Partner with ridesharing or Transportation Management Associations (such as CommutePA) to link employees in need with industrial activity nodes.

Additional Coordination

In addition to the ongoing coordination between the group of Eastern Pennsylvania Freight Alliance members. The Reading MPO will continually collaborate with PennDOT, Lancaster MPO and DVRPC on freight involved initiatives and planning.



RAIL FREIGHT

Pennsylvania is a rail-intensive state. Railroads play a major role in moving freight within and throughout the state and across the country. The rail network in Berks County consists of Class I, Class II, and short line railroads. Class I railroads are freight railroads with an operating revenue of $457 million or more. Class II railroads are much smaller than Class I railroads and are often considered regional railroads with an operating revenue between $37 million and $457 million. Short line railroads are freight railroads with operating revenues of less than $475 million. Since 1981, this network has only served freight in the county. Presently, four railroad companies conduct business on 125 linear miles of operational railroad lines inside Berks County. The majority (approximately 101 miles or 81 percent) of the rail line mileage in the county is owned and operated by Norfolk Southern Corporation (NSC). The principal activity center for rail in the county is the Spring Street yard, located in the City of Reading at the junction of the Lebanon Valley Branch Line and the Reading Line. The Reading Line functions as a bridge between the Lehigh Line in Allentown/ Bethlehem and the Harrisburg Line in the Dauphin County area. The Reading Line is the most heavily used track in Pennsylvania in terms of both carloads and ton-miles of traffic moved. It is part of the corridor that carries most of the Norfolk Southern rail traffic from the metropolitan New York area to points west and south. At Reading, rail traffic can continue to Philadelphia, South New Jersey, and Harrisburg. This line is also part of the Strategic Rail Corridor Network (STRACNET).

Several short line railroads provide service in the county. Reading Blue Mountain and Northern Railroad (RBM&N) currently provides service on the line previously owned by Conrail along the west side of the Schuylkill River, north of Reading into northeastern Pennsylvania. The RBM&N also controls the Schuylkill Secondary Line that runs between Temple and Hamburg on the east side of the Schuylkill River.

East Penn Railroad owns and operates the Lancaster Line that runs from Sinking Spring to Ephrata, Lancaster County, and the Perkiomen Branch that runs from Allentown through Hereford Township to Pennsburg. East Penn provides additional service in Berks County on the Kutztown Transportation Authority-owned Kutztown Branch Line that runs between Topton and Kutztown. In total, East Penn Railroad, LLC operates 110 miles of track throughout southeastern Pennsylvania and Delaware.

The Eastern Berks Gateway Railroad provides service on the Colebrookdale Branch Line that runs from the Norfolk Southern Line in Pottstown to Boyertown linking Montgomery and Berks Counties.

The Colebrookdale Railroad, also Known as the Secret Valley Line is a tourist railroad. The railroad operates between Boyertown and Pottstown in Montgomery County. The Colebrookdale Railroad offers a variety of excursions originating out of Boyertown with plans to eventually have trains originating from Pottstown as well.

The Allentown and Auburn Railroad is another tourist carrier that operates between Topton and Kutztown on tracks owned by the Kutztown Transportation Authority. The railroad is not isolated as it shares an interchange with the Norfolk Southern Reading line in Topton. The Allentown and Auburn Railroad also offers freight services for local customers along the line.

The Wanamaker, Kempton and Southern Railroad is a third tourist carrier which operates between Wanamaker in Lehigh County and Kempton in Berks County, over tracks formerly part of the Reading Railroad's Schuylkill and Lehigh branch. The Wanamaker, Kempton and Southern is rail isolated. It does not connect to other rail lines or haul freight.

Road–Rail Crossings

A railroad at-grade crossing is an intersection where a roadway crosses railroad tracks at the same level (grade). At-grade crossings can also have significant impacts on the transportation network. The "gate- down delay" creates delays caused when passing trains block the crossing. In addition, grade crossings can reduce road capacity. The uneven surfaces at grade crossings require vehicles to cross at lower speeds and passing trains can preclude coordinating nearby traffic signals as they pass through that area.

There are 110 public at-grade highway-rail intersections in Berks County. Despite the number of crossings, the county has a low number of crashes at them, with 18 between 2020 and 2024. The annual average daily trips (AADT) on roadways with at-grade crossings are typically below 5,000 vehicles in Berks County, with the exception of the crossings shown below:

BERKS COUNTY ROAD/RAIL CROSSINGS WITH > 5,000 AADT

Railroad	Municipality	Street	2024 AADT
Norfolk Southern Corporation	City of Reading	North Eleventh Street	16,013
Eastern Berks Gateway Railroad	Boyertown Borough	Philadelphia Avenue	12,838
Reading/Blue Mountain & Northern Railroad	Perry Township	SR 61 / Pottsville Pike	10,575
Norfolk Southern Corporation	City of Reading	Philadelphia Avenue	10,331
East Penn Railroad, LLC	Sinking Spring Borough	Fritztown Road	9,065
East Penn Railroad, LLC	Spring Township	Vinemont Road	8,933
Norfolk Southern Corporation	Reading	Kutztown Road	8,676
Norfolk Southern Corporation	Maidencreek Township	Main Street	7,773
Norfolk Southern Corporation	City of Reading	Franklin Street	7,720
East Penn Railroad, LLC	Spring Township	Montello Road	6,934
Norfolk Southern Corporation	Sinking Spring Borough	Columbia Avenue	6,853
East Penn Railroad, LLC	Spring Township	Fritztown Road	6,035
Norfolk Southern Corporation	City of Reading	Chestnut Street	5,661
Norfolk Southern Corporation	Fleetwood Borough	South Richmond Street	5,239

Source: US DOT Federal Railroad Administration, Railroad Crossings – At Grade & GXAPS Report

Note that changes to railroad operations may increase or decrease rail traffic at a crossing, affecting type of capital and safety improvement needs. Demand for rail service can change with the arrival or departure of industrial customers on the line. These and other economic changes can affect the volume, location and timing of rail traffic.

The Federal Railroad Administration's Highway-Rail Grade Crossing Accident Prediction System (GXAPS) provides the chart below. These crossings are not considered dangerous or even the most heavily used crossings in the county. However, the model provides a listing of the crossings considering their physical and operating characteristics and accident history data that may be prone to crashes in the future and warrant additional attention. The table below and Map 43 on the following page identifies and shows the location of these crossings.

TOP TEN BERKS COUNTY ROAD/RAIL CROSSINGS WITH GREATEST POTENTIAL FOR CRASHES

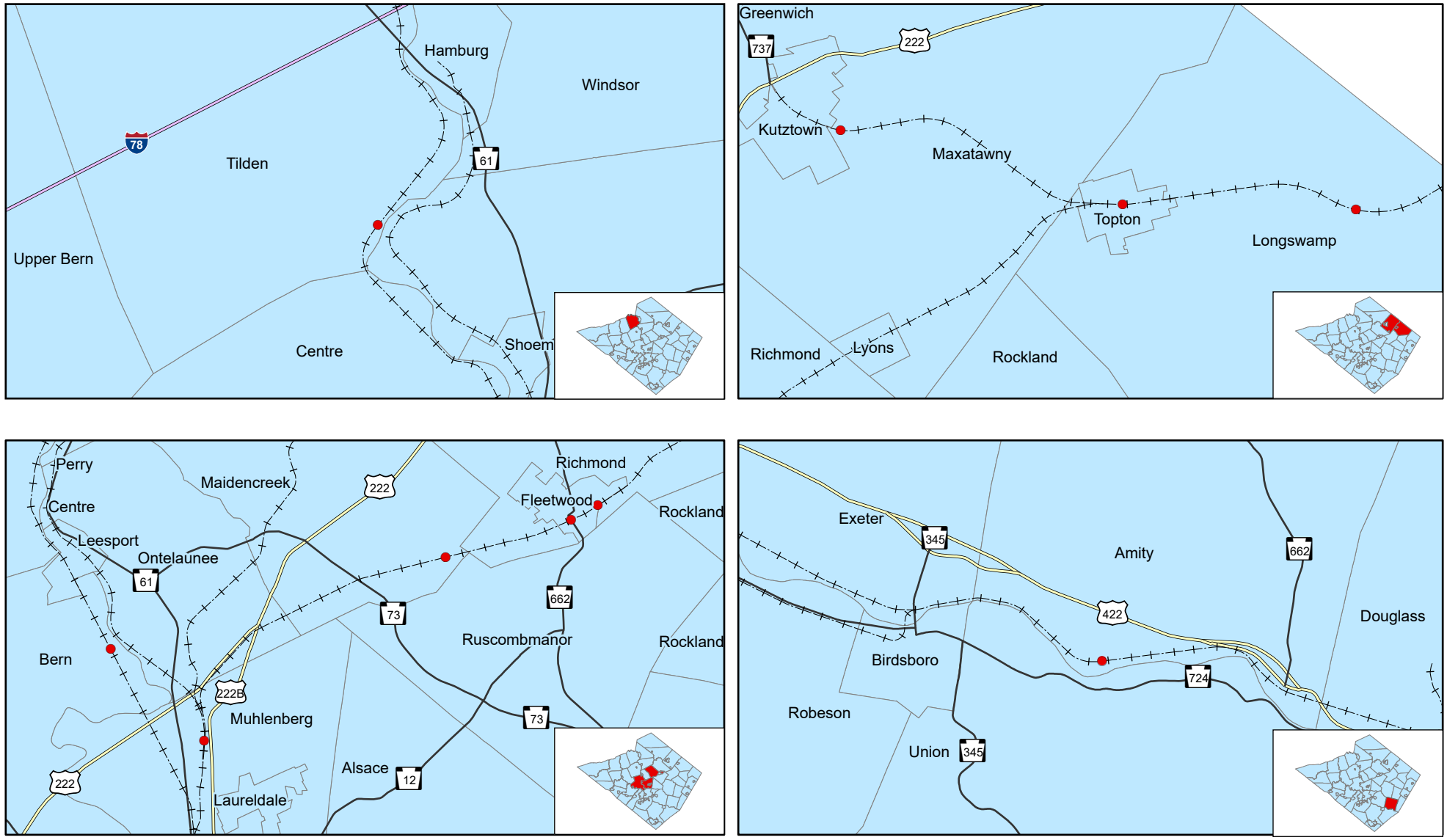
Railroad	Municipality	Street	2024 AADT
Norfolk Southern Corporation	Fleetwood Borough	Richmond Street	5,239
Reading/Blue Mountain & Northern Railroad	Tilden Township	Fisher Dam Road	N/A
Norfolk Southern Corporation	Maidencreek Township	Hill Road	N/A
Reading/Blue Mountain & Northern Railroad	Bern Township	Cross Keys Road	2,570
Norfolk Southern Corporation	Muhlenberg Township	Tuckerton Road	1,840
Norfolk Southern Corporation	Longswamp Township	Kennedy Avenue	N/A
Norfolk Southern Corporation	Amity Township	Main Street	3,625
Allentown & Auburn Railroad	Maxatawny Township	Kohler Road	N/A
Norfolk Southern Corporation	Fleetwood Borough	Willow Street	N/A
Norfolk Southern Corporation	Topton Borough	Main Street	N/A

Source: Federal Railroad Administration, Office of Safety Analysis, Highway-Rail Grade Crossing Accident Prediction System (GXAPS)

Federal Railroad Administration Office of Safety Analysis Road / Rail Crossings with Greatest Potential for Crashes

DRAFT

Reading Area Transportation Study
Long Range Transportation Plan FFY 2027- 2050
Map 32



Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, Federal Railroad Administration, Office of Safety Analysis (April 2025), Highway-Rail Grade Crossing Accident Prediction System (GXAPS)
BAB 12/25

- Top 10 Potential Crash Crossings
- Railroads
- Interstate
- US Route
- State Route
- Municipal Boundaries

www.berkspa.gov/planning

TRANSIT

Public transportation forms a key component of the Berks County transportation system. While most travel in the County is by automobile, there is a significant and growing segment of the population that relies on public transportation to fulfill their needs. Public transportation is provided by both non-profit and for-profit organizations, supplying both fixed route and demand response services.

The principal provider of public transportation services in Berks County is the South Central Transit Authority (SCTA). This authority oversees and manages two divisions: the Berks Area Regional Transportation Authority (BARTA) that serves Berks County and the Red Rose Transit Authority (RRTA) that serves Lancaster County.

Headquartered in Lancaster County, the SCTA Board is comprised of five members appointed by Lancaster County Commissioners and five members appointed by Berks County Commissioners. BARTA operates a traditional fixed route bus system operating in the urban area surrounding the City of Reading and a Special Services division that provides demand-response services to elderly and handicapped citizens through the County. BARTA buses continue to be identified with the BARTA colors, name and logo, and all schedule and service information are provided under the BARTA name.



BARTA Bus Routes

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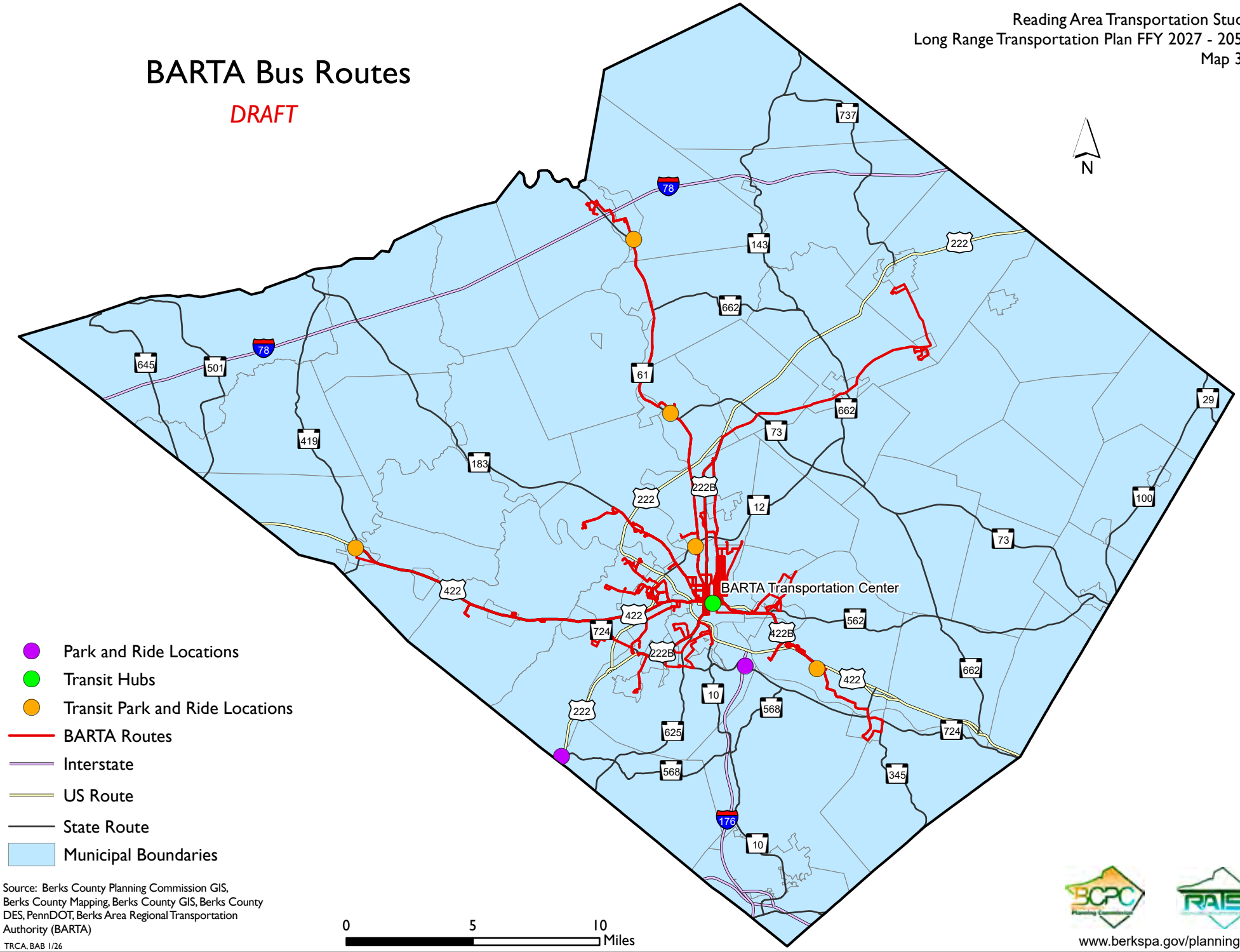

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, Berks Area Regional Transportation Authority (BARTA)

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Moving Ahead for Progress in the 21st Century Act (MAP-21) established new requirements for transit authorities on asset management and investment strategies. The SCTA is required to meet the provisions of MAP-21 and the guidelines provided by the Federal Transit Administration (FTA) to prepare a Transit Asset Management Plan (TAMP). This asset management plan is performance based and must include a systematic means of operating, maintaining, and improving public transportation capital assets effectively. The most recent edition of SCTA's Transit Asset Management Plan (TAMP) was adopted in June 2025. This plan is required to be updated as needed, but not less than every four years per FTA regulations. A separate document also required by FTA is the Public Transportation Agency Safety Plan. As taken from the SCTA website, by using the principles of Safety Management Systems (SMS), SCTA examines how organizational factors contribute to incidents, accidents, and near misses. SMS is a formal top-down, data driver, organization-wide approach to managing safety risks and assuring the effectiveness of safety risk mitigations. Through this approach, SCTA ensures that the safety of passengers and employees remains a top priority.

SCTA updated their Transit Development Plan (TDP) in March 2024 which included recommendations for changes to occur over time. Goal 2 identified in the 2024 SCTA Transit Development Plan Final Report is to "*…offer a network that links people to the places they need and want to go*". Desired locations for many is their jobs and/or shopping. One way to improve access to these locations would be for developers and planners to consider bus stop location early in the design process. As more businesses and jobs come to an area, planners and developers should work with BARTA early in the design process of a new project, rather than placing stops at later stages of construction, with considerations for pedestrian access, existing bus operations, and potential stop facilities.

An example of this type of coordination has been recently seen along the Route 61 Corridor which is serviced by BARTA's Route 20. As more businesses began development along the Route 61 corridor, planners worked with BARTA to add stops along this route and to accommodate the buses needs such as pull offs and larger turning radius. More stops have been added along the Route 61 corridor, BARTA's Route 20, to provide individuals access to new businesses and potential jobs.

The Pennsylvania Public Transportation Association (PPTA) in partnership with PennDOT published the Building Better Bus Stops Resource Guide in December 2020. This resource guide promotes safe access to fixed route bus service and provides municipalities, transit agencies, planners, and designers with resources to encourage consideration and incorporation of transit in planning and design. The review and implementation of strategies from this resource guide is encouraged to provide quality and efficient transit service and ensure bus stops meet the needs of all riders, transit agencies, and the community.

Fixed–Route Operations

BARTA provides fixed route services in the City of Reading, 17 Boroughs, and 15 Townships within Berks County and carries approximately 2.2 million passengers annually. Operating seven days a week, with a fleet of 50 buses, it services 39 bus shelters and nearly 1,500 bus stops on 19 routes with nearly 1.6 million revenue miles per year. According to the SCTA TDP BARTA Onboard Passenger Survey, most passengers (84%) walk or use a wheelchair to get to their bus stop. Overall, 63% of trips surveyed were for either work or school purposes, with the vast majority (59%) made up of work trips specifically. More than one third are made to go shopping (36%), and one fourth (25%) are made for a medical visit or to go to a doctor. The average age of BARTA riders is 44 years old, with 19% being between 25 and 34 years of age. Roughly 62% of riders are employed; mostly all use a cell phone, and 52% use the BARTA GoMobile smartphone App. More than four in ten (44%) of riders identify as white, and slightly less (37%) identify as Hispanic or Latino, or Black/African American (21%). Spanish is the most common second language spoken at home, with 24% speaking it. The most heavily traveled route is Route 1-Temple, which services 5th Street between Reading and Muhlenberg Township.

BARTA Fixed Route Ridership was down slightly for the fiscal year ending in June 2025 but up overall from 2021 to 2025. The COVID-19 Pandemic still limited travel early in 2021, but as restrictions eased passenger traffic increased.

BARTA FIXED ROUTE SERVICE

Customer Type	2021	2022	2023	2024	2025	# Change 2021-2025	% Change
Farepaying	1,166,756	1,362,473	1,571,523	1,666,351	1,630,300	463,544	39.7%
Senior Citizens	313,268	392,571	409,159	434,544	435,497	122,229	39.0%
Transfers	93,619	49,928	56,839	47,440	54,256	-39,363	-42.0%
Specials	248,425	49,047	42,760	50,116	43,653	-204,772	-82.4%
Total Passengers	**1,822,068**	**1,854,059**	**2,080,281**	**2,208,451**	**2,163,706**	**341,638**	**18.8%**

Source: South Central Transit Authority, Berks Area Regional Transit Authority Fiscal Year Summaries

BARTA RIDERSHIP JULY 2024 – JUNE 2025 FISCAL YEAR BY FIXED ROUTE	
Route	**Ridership**
Route 1 - Temple via 5th	463,711
Route 15 - Berkshire Mall	193,014
Route 4 - 10th St / 11th St	191,969
Route 16 - Broadcasting Square	178,470
Route 18 - Schuylkill Ave	147,707
Route 8 - Reiffton / Birdsboro	116,865
Route 14 - Wernersville via Sinking Spring	117,107
Route 3 - Temple via Kutztown Rd	122,868
Route 19 - Riverside / Cotton St	96,850
Route 10 - Brookline	72,456
Route 17 - Glenside	81,441
Route 5 - Albright College	87,612
Route 11 - Mohnton via Shillington	69,533
Route 20 - Rt 61 Hamburg	76,652
Route 7 - Pennside	51,454
Route 12 - Lincoln Park / Reading Hospital	34,343
Route 9 - Grill via Kenhorst	37,105
Route 22 - Lyon Station	18,852
Route 2 - Fairgrounds Square	3,509

Source: South Central Transit Authority Fixed Route Data Summary

Overall, most major trip origins and destinations (major employers, shopping centers, post-secondary schools) are served by BARTA fixed route bus service in and around the area surrounding the City of Reading. Most of the un-served origins and destinations are in the eastern, northeasters, northwestern, and southern peripheries of Berks County, which includes the boroughs of Boyertown and Kutztown.

BARTA's main vehicle servicing and administration facility is located on North 11th Street in the City of Reading. The main transfer point is the BARTA Transportation Center located at North 8th and Franklin Streets in downtown Reading. BARTA also provides service to five (5) Park and Ride lots in the county.

Special Services Operations

BARTA's Special Services Division is responsible for operating and administering most human service transportation in Berks County. These services include the Shared Ride, ADA, and Medical Assistance Transportation Program (MATP). They are specialized, demand-responsive paratransit services and provide public transportation to persons with disabilities who are unable to use fixed route transit.

BARTA provided nearly 176,000 trips in FY 2025 between their fleet of 42 paratransit vehicles and a contract with Easton Coach. Like fixed route service, increases in many of the Special Services categories can be attributed to a 'return to normal' after the COVID-19 pandemic. According to the SCTA TDP BARTA Special Services Customer Survey, most trips (95%) were for medical appointments, followed by shopping (6%) and Errands/Personal Business (3%). Unlike Fixed Route ridership with an overall increase, Special Services ridership decreased by 19.9%. The average age of the Special Services customer is 70 years old, with over 70% being aged 65 or older. Slightly more than one-half of customers (53%) identify as white, while roughly one third (35%) identify as Hispanic or Latino, and 9% identify as Black/African American.

BARTA SPECIAL SERVICES							
Customer Type	**2021**	**2022**	**2023**	**2024**	**2025**	**# Change 2021-2025**	**% Change**
Senior Citizens	47,508	55,803	62,965	63,777	63,154	15,646	32.9%
DPW-MATP	63,770	96,364	113,508	111,475	110,343	46,573	73.0%
BH/DS	323	4,527	4,555	6,603	5,071	4,748	1,470.0%
ADA Services	12,904	14,512	13,040	14,962	16,640	3,736	-69.6%
Area Agency on Aging	0	0	672	384	1,550	1,550	n/a
Other Agencies	5,633	41,715	37,725	37,221	43,045	37,412	664.2%
Fixed Route Offset	n/a	-67,086	-79,342	-75,183	-63,875	n/a	n/a
Total	130,138	145,835	153,123	158,839	175,928	45,790	-19.9%

Source: South Central Transit Authority Berks Area Regional Transit Authority Fiscal Year Summaries

Inter-City Bus Service

Prior to 2019, Carl R. Bieber, Inc. headquartered in Kutztown, serviced customers throughout the United States, but primarily in central and eastern Pennsylvania, New York City, and New Jersey. With a fleet of 66 buses, it maintained a scheduled line of daily runs to various locations, between Berks, surrounding counties, Philadelphia, and New York City until February 15, 2019, when Bieber's operations ceased. Subsequently there was no intercity bus service serving Berks County. Starting in August 2023 through March 2025, AMTRAK provided twice-daily bus service between the BARTA Transportation Center (BTC) in downtown Reading and 30th Street Station in Philadelphia. The service was not tied to efforts to reestablish passenger rail between Reading and Philadelphia. Though popular with riders – almost 28,000 passengers used the service from August 2023 through December 2024 - AMTRAK discontinued the service. Recently, several private bus operators have initiated limited services. OurBus is currently offering trips between Reading and Philadelphia as well as trips from Reading to New York City. FlixBus started offering new service connecting Reading to Philadelphia, Newark and New York City on May 22, 2025. FlixBus is partnering with SCTA by linking the service with the BARTA Transportation Center, giving riders easy connections between local public transit and long-distance transportation options. FlixBus offers three departures and arrivals per day Thursday through Monday and two departures and arrivals per day Tuesdays and Wednesdays.

CommutePA

Berks County joined CommutePA (formerly Commuter Services of Pennsylvania), a program of the nonprofit Susquehanna Regional Transportation Partnership in 2009. The program covers nine (9) counties in southcentral Pennsylvania. It is locally sponsored by RATS, BARTA, and Greater Reading Chamber Alliance and offers transportation demand management strategies and assistance to employers and individuals for finding options other than driving alone to work. The program goal is to reduce the number of vehicle miles traveled and to increase the efficiency of the highway system by reducing congestion and improving air quality. Participation in the program is free. Participation in the program has been successful – increasing involvement and reducing VMT since 2009. The program is funded with federal Congestion Mitigation & Air Quality (CMAQ) funds through participating MPOs.

As shown below, the CommutePA program continues to thrive in Berks County. The total number of enrollees continues to grow as does the number of employers and organizations that participate. The effects of telework due to/during COVID and subsequent reversal back to in-person work can be seen in the decline of the number of vehicle miles traveled (VMT) that are removed from the roadway system due to the CommutePA program. It should be noted that, even though VMT reductions are being seen, the 2024 reduction still resulted in 36 Tons of CO2 that were not emitted by single occupant vehicles.

COMMUTEPA – RIDESHARE PROGRAM

Berks County	2020	2021	2022	2023	2024	Change 2020-2024	% Change
Total New Enrollees Per Year	243	57	34	183	76	593	n/a
Total Employer/Organization Participation (#)	48	48	54	67	75	27	56.3%

Source: CommutePA

BERKS COUNTY COMMUTEPA PERFORMANCE MEASURES

Type	2020	2021	2022	2023	2024	# Change 2020-2024	% Change
Vehicle Miles Traveled Removed	243,437	117,293	78,688	98,137	81,963	-161,474	-66.3%
Commuters Enrolled	2,346	2,403	2,437	2,620	2,696	350	14.9%

Source: CommutePA (2018-2020 VMT Removed numbers are from real time data which was unavailable until 2018)

Taxi Service

There are seven (7) taxicab operators in Berks County as of 2025. All provide 24-hour/7-day service. The importance of the role played by taxi service, for all riders, is likely to grow in the future. Taxicabs operating within Pennsylvania are licensed by the Public Utility Commission but generally are for-profit enterprises. The Public Utility Commission lists the following taxi operators as active in Berks County: Reading Checker Cab Inc, La Mexicana Express Service LLC, Reading Metro Taxicab Inc, Grab A Cab Inc, Dominicana Taxi Express LLC, La Economica Limousine and Car Service, and Reading Yellow Cab Inc. There are also several van services that provide door-to-door transportation between Reading and airports & other transportation hubs in surrounding cities.

Ride Sharing

Many ridesharing companies are emerging across the country. Berks County is presently serviced by Uber and Lyft. Uber began operations in 2015 with a limited-service area in and around the City of Reading shortly followed by the emergence of Lyft. Service statistics are not available.

NON-MOTORIZED TRANSPORTATION

Non-motorized transportation is defined as any transportation other than by use of a motor vehicle including cars, buses, rideshares and motorcycles. In addition, “Active Transportation” or “Human Powered Transportation” is a method of travel that includes walking, bicycling and wheelchair travel as well as less common methods of transportation such as skateboards, scooters or buggies. Facilities serving these users include those built exclusively for non-motorized use such as sidewalks, trails, and shared use paths as well as on-road accommodations such as bicycle lanes, crosswalks and sharrows. Walking and bicycling serve as intermediate steps in the transit network since a person needs to walk or bicycle between the bus stop and the origin/destination. Non-motorized forms of transportation like walking and bicycling are commonly accessible, environmentally friendly and affordable options for transportation among many of Berks County’s population and therefore hold an important role in the County’s overall transportation system.

Berks County has a diverse mix of urban landscapes and rural villages, new development and historical areas, public transit and country roads, active recreation and laid-back trails. While these qualities make the County a desirable place to live, work and play, they also create challenges to safely and efficiently travel throughout the County without a motor vehicle. Berks County has extensive trail and sidewalk networks, but connectivity from one community to the other can often be lacking.
Additionally, Berks County has a unique group of non-motorized travelers that includes an estimated 150 traditional Mennonite households concentrated mostly in the Fleetwood/Kutztown area. Many of these households do not use cars, relying instead on horse and buggy, bicycling and walking as their methods of transportation. Particularly in and around the Fleetwood/Kutztown area, horse-drawn buggies or farm equipment often travel on both rural, sometimes narrow roads and regional, higher-speed roadways alongside cars and trucks as they commute to retail centers, places of worship, schools or between farm fields.

CRASHES INVOLVING HORSE AND BUGGY IN BERKS COUNTY

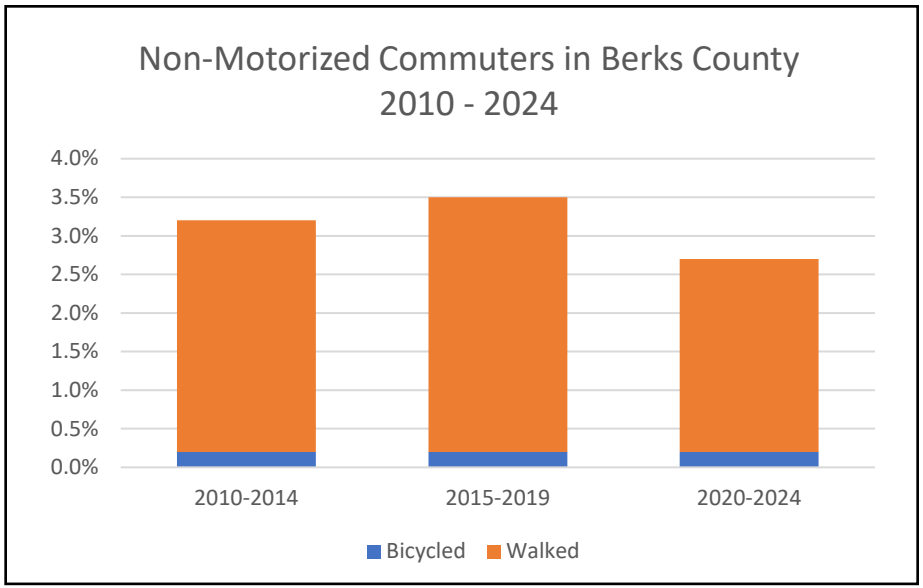
Type	2020	2021	2022	2023	2024	Total
Crashes	0	0	1	2	1	4
Injuries	0	0	3	4	1	8
Fatalities	0	0	0	0	0	0

Source: PennDOT Pennsylvania Crash Information Tool, 2020-2024



Non–motorized Transportation as a Means of Commuting

Census data shows that non-motorized transportation is not a common means of getting to and from work in Berks County. Arguably, much of the County's transportation infrastructure is designed to accommodate motor vehicles, complicating travel by walking or bicycling in many areas. Of note in the chart below is the increase in non-motorized travel between the 2010-2014 period and the 2015-2019 period, then a sharp decrease in the 2020-2024 period. It needs to be noted that the 2020-2024 period includes the effects of COVID 19 (2020) on both commuting and data collection, so those figures should be examined with caution.



SOURCE: U.S. Census Bureau, American Community Survey 5-year Estimates, Table S0801: 2010-2014, 2015-2019, 2020-2024

Bicycle and Pedestrian Transportation Planning

RATS has adopted a regional *Bicycle and Pedestrian Transportation Plan.* This plan, adopted in July 2020, and again in March 2022 with mapping amendments, evaluated the status of bicycle and pedestrian planning in Berks County based on level of service, demand and interest, and existing policy. The plan provides goals, recommendations, and implementation strategies along with a prioritized project listing. This plan is both a policy and project-based plan and supplements the LRTP. The plan recommends overarching county-wide concepts such as sidewalk and curb ramp installation and maintenance, preservation and expansion of the Schuylkill River Trail, Union Canal Towpath and other bicycle and pedestrian networks, expansion of non-motorized access to transit stops, schools, recreation areas and other popular destinations, and improved safety and security of all bicycle and pedestrian accommodations. The plan emphasizes intergovernmental cooperation to achieve these goals. The plan also contains a listing of recommended projects throughout the County's five planning regions based on three different surveys that gathered desired improvements from the public, the County's municipalities, and local non-profit groups involved in related transportation efforts. A link to the current *Bicycle and Pedestrian Transportation Plan* can be found here: https://www.berkspa.gov/departments/planning-commission/transportation-reading-mpo/plans-and-programs/bicycle-and-pedestrian-planning

Bicycles

There are several active groups and organizations that support and coordinate biking in Berks County. The Berks County Bicycle Club was founded in 1973. This club has created an online ride map database available to all looking for biking opportunities in Berks County and hosts events such as the annual Shoo-Fly Classic, a ride through the Oley Valley, and 'Cranksgiving', where participants ride to selected grocery stores and purchase food for donation during the Thanksgiving season.

Berks Area Mountain Biking Association (BAMBA), another bicycling advocacy group, was established in 2012 as the Berks County chapter of International Mountain Bicycling Association (IMBA). Today, BAMBA is an independent IMBA affiliate. According to their website, BAMBA "is a non-profit educational trail association whose mission is to create, enhance and preserve great trail experiences for mountain bikers in Berks County, Pennsylvania."

Reading and the surrounding area attained national designation as a "Bronze Level Riding Center" by the International Mountain Bicycling Association in 2015 for its 125 miles of mountain biking trails. With the help of BAMBA, the biking community is pursuing an upgrade for Berks County trails to "Silver Level Riding Center". In 2015 the League of American Bicyclists designated Reading City as a Bronze-level Bicycle Friendly City. That designation was effective for five years after which a new application needed to be submitted but was not.

Smoothly paved shoulders adjacent to travel lanes can significantly improve operating conditions for bicyclists and horse and buggies. The 2012 American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities states "…adding or improving paved shoulders can be the best way to accommodate bicyclists in rural areas and also benefit motor vehicle traffic." RATS will continue efforts to accommodate non-motorized travel with additional emphasis on providing and maintaining road shoulders in appropriate corridors.

Bike Share is a cooperative effort that places publicly available bicycles in locations where users can obtain one, use it as their needs dictate, and return it for others to use. These bicycles are serviced by a vendor; sponsorship can be either public or private; and typically rented for minimal costs via cellphone application. Current systems in Berks County are available in the Wyomissing / West Reading area (WyoWays, sponsored by Wyomissing Borough) and at Tower Health – Reading Hospital and Medical Center (for Tower Health employees). In Hamburg Borough, the Schuylkill River Greenways National Heritage Area manages a system called Bike Schuylkill, while outside of Berks in Pottstown their system is known as Bike Pottstown. Both systems generate access between the Schuylkill River Trail and the related boroughs. Through CommutePA, a group of transportation-minded organizations in the nine-county southcentral PA region meet quarterly to promote bike sharing and the expansion of services.

Micromobility

Bike Share is one segment of the evolving field of Micromobility. Defined by the FHWA as "Any small, low-speed, human or electric-powered transportation device, including

bicycles, scooters, electric-assist bicycles (e-bikes), electric scooters (e-scooters), and other small, lightweight, wheeled conveyances", the proliferation of these devices have made wheeled transportation readily available to segments of the population that may not have ready-access to a motor vehicle or public transportation. The availability of bike- and e-scooter share systems has been growing throughout the nation. One concern is that this growth is also introducing more vulnerable road users (VRU's) onto the roadway system and with it the potential for more VRU-related crashes. It should be noted that Pennsylvania law has not yet made scooters of any type legal for use on public roadways in the Commonwealth.

Sidewalks and Pedestrians

Map 34 shows that approximately 1,319 miles of sidewalks in Berks County are limited principally to the boroughs, the City of Reading, and some more urbanized townships. Sidewalks offer a mode of transportation to segments of the population who are less likely to own a vehicle and rely on walking or public transit as their primary mode of transportation. The presence of adequate sidewalks encourages those who use walking as a secondary means of transportation for health or environmental benefits as well. By encouraging the addition of safe, maintained, and well-placed sidewalks, the County hopes to add more non-motorized users to this critical part of the transportation infrastructure.

Many existing subdivisions and others that have been under development over the last 20 to 25 years in Berks County have had sidewalks incorporated with infrastructure construction. However, these sidewalks seldom connect to anything outside of the neighborhood. In addition to residential areas, several commercial developments in the region have sidewalks in place but there is little to no connectivity to adjacent neighborhoods. Connecting these commercial developments to the County's housing subdivisions as well as schools, recreation areas and employment centers is a priority identified in the Bicycle and Pedestrian Transportation Plan referenced above.

One area where sidewalk connectivity suffers is on bridges. When PennDOT repairs or replaces state-owned bridges, sidewalks are added only if the municipality executes a Sidewalk Maintenance Agreement with the Department. PennDOT does not maintain sidewalks; that is the municipality's or property owner's responsibility. Without municipal support of sidewalks on bridges, pedestrian connectivity suffers, and safety issues have the potential to increase especially among the very young, the elderly, and those with limited mobility. Municipalities are strongly encouraged to work with PennDOT during the PennDOT Connects process and execute the necessary maintenance agreements to ensure that sidewalks are placed onto new bridges and connectivity is maintained or improved.

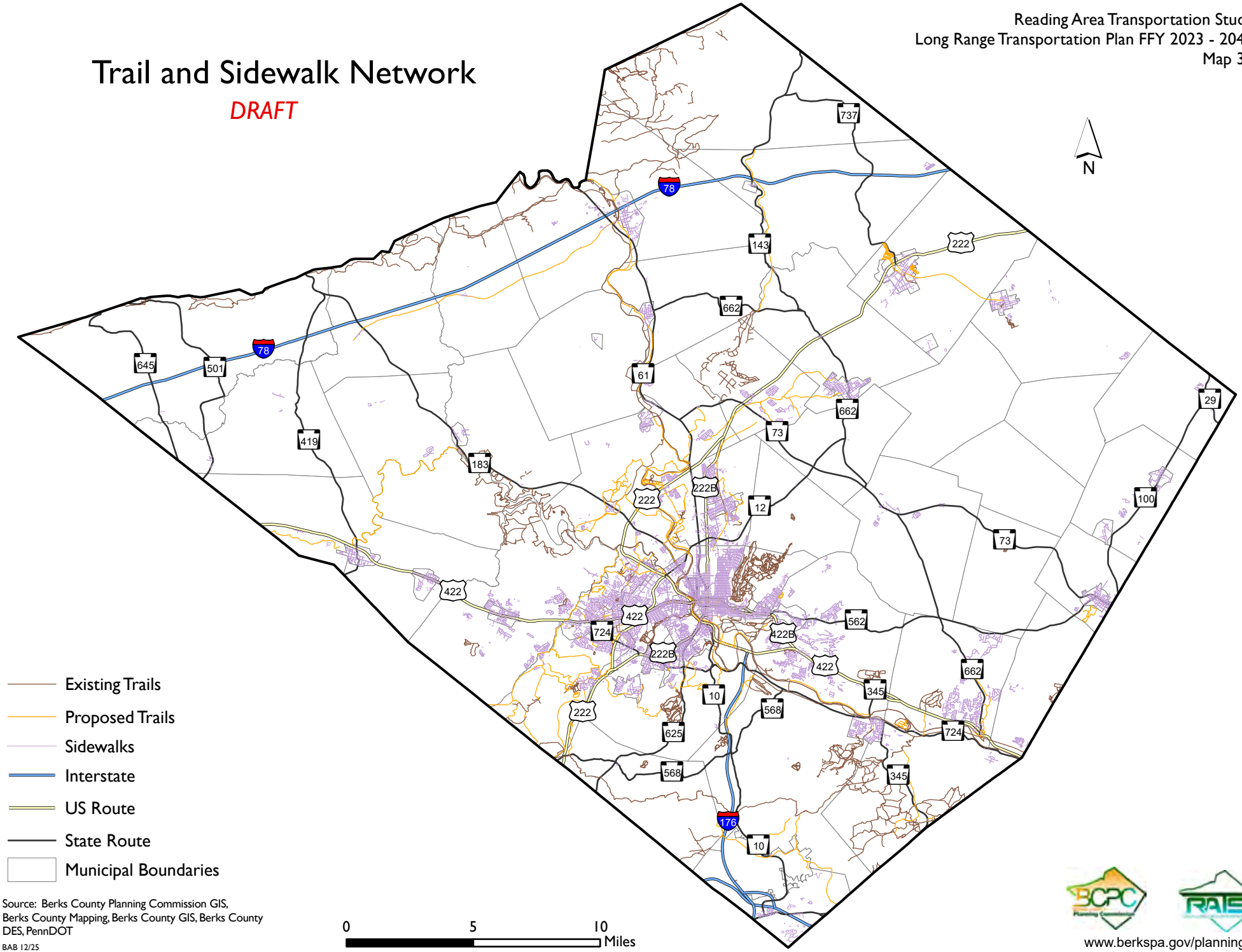
Trails and Greenways

Berks County has over 524 miles of extensive trail system ranging from paved multipurpose trails to more rugged trails suitable for hiking or mountain biking. Many trails are often connected to or parts of greenways - corridors of open space that can be a small park in a borough or the city to large areas of forest in the townships. The Schuylkill River Trail (SRT), when completed, will span approximately 124 miles from Philadelphia to Schuylkill County. The largest segments of uncompleted trail are in Berks County where the trail is located on local roads. The SRT serves as the backbone of the offroad network in Berks and is used for both recreation and commuting.

The Union Canal Bicycle & Walking Trail is a 4.5-mile-long crushed stone path that follows the Tulpehocken Creek between Stonecliffe Recreation Area and Reber's Bridge Road. Designated as a National Recreation Trail, the Union Canal Trail provides a link to multiple Berks County parks including Stonecliffe Recreation Area, the Berks Leisure Area, Red Bridge Park, Gring's Mill Recreation Area, and the Berks County Heritage Center. At Stonecliffe Recreation Area, the Union Canal Trail connects to the Schuylkill River Trail and at Reber's Bridge Road, a 1.8 mile connector trail links the Union Canal path to the Blue Marsh Lake Trail System.

Trail and Sidewalk Network

DRAFT



Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT

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Vulnerable Road Users and Pedestrian and Bicyclist Safety

The safety of non-motorized individuals is of great concern since they are the most vulnerable road users as they are not protected by a surrounding vehicle and with it, its safety features. As shown in the Vulnerable Road Users (VRU) chart located on Page 91, the number of crashes and persons involved in VRU crashes has increased between 2020 and 2024. but fatal crashes have remained relatively flat in that same period. It is important to educate all age groups on safe bicycle and pedestrian practices along with promoting the enforcement of the laws pertaining to motorists, bicyclists, and pedestrians to make safety a top priority in Berks County. Please see the Safety section of this plan for data related to pedestrian and bicycle crashes.

A VRU may be walking, biking, rolling, or using a mobility device such as a wheelchair. VRUs are particularly susceptible to being killed or injured in a crash, and they account for a growing share of all transportation fatalities, both in Pennsylvania and throughout the U.S. In 2024, PennDOT issued *Pennsylvania: A VRU Safety Assessment Report* which was a comprehensive statewide examination aimed at understanding the transportation safety challenges faced by VRUs. This report, an addendum to Pennsylvania's 2022 Strategic Highway Safety Plan, undertook a quantitative analysis of VRU crashes and associated data. By incorporating an approach to identify areas with a history of VRU crashes along with an analysis of demographic data, the report provides an analysis of high-risk areas as well as a toolkit of extensive systemic and spot-specific infrastructure enhancements and non-infrastructure program approaches to bicycle and pedestrian safety. The toolkit equips PennDOT with a range of solutions to bolster pedestrian and bicyclist safety across diverse settings throughout Pennsylvania including here in Berks County.

Complete Streets

Complete Streets is an approach to planning, designing, building, operating, and maintaining streets that enables safe access for all users including those traveling by active transportation. The design of Complete Streets considers people and place and varies by user need, but safety for all users is always the priority. Some elements of a Complete Street could include sidewalks, bike lanes, curb extensions, and median islands. These elements of a streetscape are especially important for older adults, children, adolescents, those with disabilities and people living in low-income communities as these people are less likely to own a car or drive. Ensuring Complete Streets integration into future projects can be done through the adoption and enforcement of Complete Streets policies. The City of Reading is the only Berks County community to incorporate Complete Streets policies into their plans and programs.

In August of 2015, Mayor Vaughn Spencer of Reading announced Reading's new status as a Complete Streets Community. Complete Streets create multi-modal transportation networks that have been designed for all users, regardless of age and abilities. These users include pedestrians, bicyclists, motorists, and transit vehicles. At the time of its unveiling, the Smart Growth America's National Complete Streets Coalition rated the City's policy as the best in the nation, achieving a perfect score of 100. Although supported by successive mayoral administrations, the Policy has not been formally adopted by City Council or implemented in any real fashion. Current City leaders are beginning to implement portions of the Complete Streets Policy by pursuing the completion and implementation of an Active Transportation Plan, adopting traffic calming measures, and implementing bicycle and pedestrian infrastructure in various portions of the City. While no other municipalities in Berks County have adopted Complete Streets or other similar policies, many are becoming more aware of the need for pedestrian and bicycle infrastructure.

Increasing Safe and Accessible Transportation Options (ISATO)

On November 15, 2021, the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58), also known as the "Bipartisan Infrastructure Law" (BIL), was signed into law. Section 11206 of the BIL, entitled Increasing Safe and Accessible Transportation Options (ISATO), requires certain funds to be used on Complete Streets and similar planning activities as part of the transportation planning processes. RATS staff has been working with Berks County municipalities involved in the Berks County Joint Local Planning Program to identify and prioritize potential projects for local implementation. These lists are incorporated into joint comprehensive plans. A methodology was devised for prioritizing these projects. Some plans also contain representations of potential projects including Complete Streets concepts as a way for local officials to visualize desired outcomes. Berks County Planning Commission staff are presently working these elements into the first round of three (3) Joint Local Comprehensive Plans, with more joint plans under consideration in upcoming years. The three current joint planning efforts include the Draft Eastern Berks Joint Comprehensive Plan (District & Rockland townships and Topton Borough); the SEAD Joint Comprehensive Plan (St. Lawrence Borough, Exeter, Amity, and Douglass townships); and the Fleetwood/Maidencreek/Richmond Joint Comprehensive Plan. These three plans alone encompass ten (10) municipalities. As more joint plans are created/updated, staff plans in incorporating ISATO concepts into them as well.

PASSENGER RAIL

Berks County is not currently served by passenger rail service. Originally served by both the Reading and Pennsylvania railroads, service was gradually reduced from the 1930s through the 1970s due to the loss of ridership to automobiles and changing land uses along the line along with growing operating costs. The Southeastern Pennsylvania Transportation Authority (SEPTA) provided the last passenger rail service in the County between Reading and Philadelphia. It ended in 1982. Since that time, multiple studies have been undertaken investigating the feasibility of restoring this service.

One of the more recent studies prepared by Transportation Economics and Management Systems, Inc. in July 2020 for Berks Alliance and the Greater Reading Chamber Alliance examined the potential for restoring passenger rail service to Berks County. The *Restoring Passenger Rail Service to Berks County, PA* plan includes information on service and operations, infrastructure needs and associated capital costs, projected ridership, benefits of reestablishing **intercity** passenger rail service, and next steps for implementation.

Another study was developed by PennDOT in December 2020. The *Reading to Philadelphia Passenger Rail Analysis* addresses the feasibility of restoring **commuter** passenger rail service along the historic rail corridor that connects Norristown to Pottstown and Reading. The analysis includes possible service alternatives, capital improvements, and identifies the next steps that are needed for implementation.

As a result of the PennDOT analysis, The Reading to Philadelphia commuter passenger rail corridor was identified and included in the 2020 Pennsylvania State Rail Plan (https://www.pa.gov/agencies/penndot/programs-and-doing-business/rail-freight-ports/planning). The plan provides an assessment of the current rail system, analysis of the role of rail and its integration within the state's transportation system and identifies future rail investments that would help achieve the state's vision for the rail system. The goals in the Pennsylvania State Rail Plan align with the state's LRTP and FMP goals for a multimodal transportation system. The state is currently in the process of updating the plan. The 2025 State Rail Plan will replace the 2020 State Rail Plan and will provide updates on rail development activity and will serve as a practical roadmap for future rail investment and policies.

In early 2021, the Tri-County Passenger Rail Committee was created to assess the potential to establish passenger rail service between Reading and Philadelphia. The Committee was a collaborative effort among Berks, Chester and Montgomery Counties. The Committee recognized the value that reestablishing service could have for economic development, property values, and increased job opportunities as a result of the additional transportation option passenger rail service offers.
The Tri-County Passenger Rail Committee evaluated both studies and mode options. **Intercity** service has fewer trips over longer distantances. **Commuter** service offers increased frequency and a greater number of stops but at a higher cost. As this analysis was under way, the Infrastructure Investment and Jobs Act (IIJA) was approved by the Federal government. It contained significant funds to improve intercity passenger rail service across the country. At this same time, Amtrak released its vision plan for passenger rail expansion that included, among many other possibilities, a proposed extension from its existing Northeast Corridor service in Philadelphia to Reading. Both Amtrak and SEPTA were contacted regarding their potential interest in serving this corridor. Amtrak indicated its interest in moving forward based on its vision plan. SEPTA was not interested in looking at expanding its services to this corridor at this time based on its current focus of expanding another line into the King of Prussia area and high system maintenance needs.

In 2022, the Tri-County Passenger Rail Committee recommended the establishment of an authority. The Schuylkill River Passenger Rail Authority (SRPRA), approved by the Berks County Commissioners in April 2022 and incorporated two months later, replaced the Tri-County Passenger Rail Committee and as a formal authroity has the power to enter into agreements, own property, receive state and federal funding and work with Amtrak, PennDOT, the Federal Railroad Administration and other necessary partners.

Although the creation of the SRPRA is not a guarantee that passenger rail service will return, it was a crucial next step in continuing the long process of research and planning. The process being undertaken by the SRPRA is building upon the lessons learned from the studies of years past and is primarily focused on partnering with Amtrak as the proposed operator and participating in the Intercity Rail Corridor Identification and Development Program (CIDP) being led by the Federal Railroad Administration (FRA). Other key stakeholders beyond the constituent counties of the Authority and Amtrak include the Pennsylvania Department of Transportation (PennDOT), the anticipated host railroads including Norfolk Southern and, CSX, or SEPTA, municipal governments, and sponsor organizations and advocacy groups along the Reading – Philadelphia Corridor segment.

The SRPRA project plan is a three (3) phase approach, focusing on the most viable and realistically attainable service options to restore passenger rail service to the region in the short-term. The long-term possibilities for the service have wide-reaching benefits to expand mobility opportunities and an alternative to driving for adjoining communities. Phase 1 includes the Reading – Philadelphia Segment. It is envisioned that this route will start by offering between four and six round-trips per day. This could grow to approximately eight or more daily round-trips once ridership grows. Part of this phase may involve the addition of Amtrak Thruway Bus Service to complement the passenger rail service. Phase 2 would involve the completion of the Reading – Philadelphia – New York One-Seat Ride. This phase would require the completion of the Gateway Project in New York and delivery of new Amtrak rolling stock. The Gateway Project includes the construction of a new Hudson Tunnel and the rehabilitation of the existing North River Tunnel, with a targeted completion of 2035 for the new tunnel. Once the new tunnel construction and existing tunnel rehabilitation are completed, this project will significantly increase the number of daily passenger trips and trains that can travel through the area. Phase 3 involves the long-term possibilities that could arise with the development of this new service. Long-term possibilities include the potential connection west from Reading to Harrisburg and east to the Lehigh Valley.

Funding from the FRA is integral to the success of SRPRA's objectives and preliminary planning has revolved around submitting a successful application and aligning with partners who can aid the SRPRA in getting to the next phase.

Corridor Identification and Development Program (CIDP)

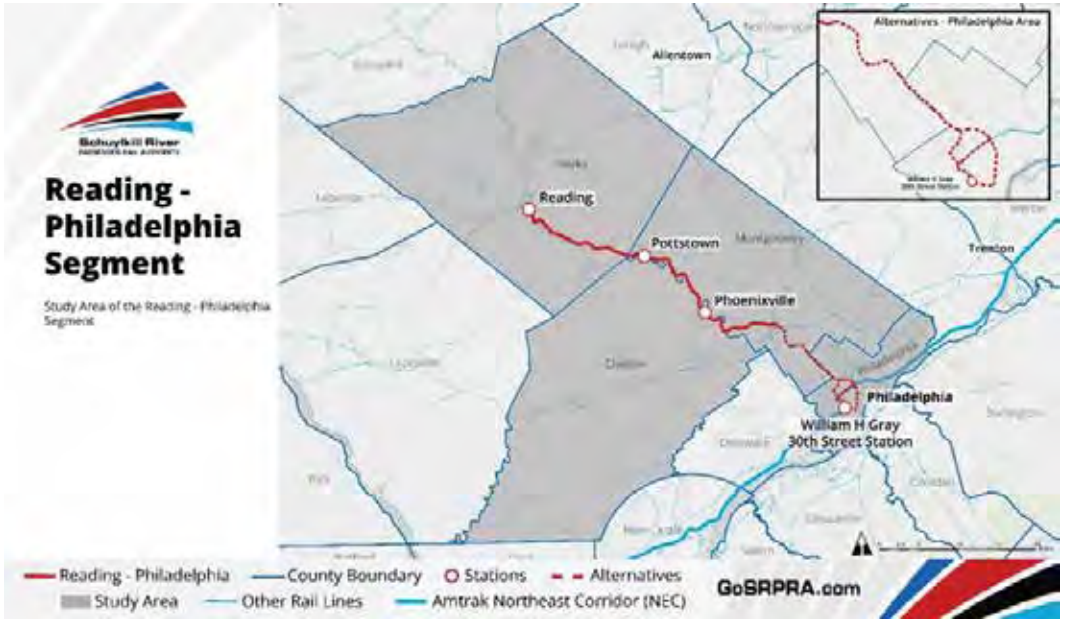
The FRA CIDP is the pathway for all **intercity** passenger rail corridor projects created as part of the Infrastructure Investment and Jobs Act (IIJA), aka the Bi-partisan Infrastructure Law, on November 15, 2021. SRPRA submitted an Expression of Interest letter to FRA in July 2022 and CIDP application in March 2023. SRPRA was accepted into the CIDP on December 8, 2023.
The FRA CIDP consists of three (3) steps:

1. **Scoping Exercise (CIDP Step 1)**
   Within this step, the statement of work, schedule, and cost estimate to prepare the Service Development Plan (SDP) are defined. Additionally, project management team roles and responsibilities, processes and procedures for maintenance of schedule and budget, and compliance with federal reporting requirements are addressed. The Scoping Exercise was formally completed in August 2025.

2. **Service Development Plan (SDP) (CIDP Step 2)**
   The SDP is a business plan, operating plan and capital plan, that documents the investment case for a proposed passenger rail service. The SDP must demonstrate operational feasibility, financial feasibility, and value and merit of the proposed passenger rail service. The FRA provides a structure within which an SDP must be organized. The structure includes the following components:
   - Formal Project Goals and Objectives / Statement of Purpose and Need
   - Identification and Evaluation of Alternatives
   - Ridership and Revenue Forecasts
   - Operational Analysis
   - Station and Access Analysis
   - Conceptual Engineering and Capital Programming
   - Operations and Maintenance Costs and Capital Replacement Forecasts / Financial Plan
   - Long-Term Governance Plan
   - Public Benefits Analysis

   The process of developing the SDP is iterative. As an example, during operations analysis, results may be found that change the infrastructure improvements needed to support the proposed service, which would in-turn affect capital and operations and maintenance costs. The targeted completion of this step is sometime in the year 2027.

3. **Preliminary Engineering and Design (CIDP Step 3)**
   During this step, critical infrastructure needs and improvements such as track, tunnels, stations, signals and positive train controls (PTC) are addressed at the 30% design level. Required NEPA documentation will also be prepared, currently envisioned to consist of categorical exclusion which would include selected analyses such as air quality impacts, traffic impacts, historical resources, and others.



Station Planning

Although the SRPRA has taken a leadership role in the effort to restore rail passenger service in the Reading – Philadelphia Corridor segment, the Authority will not have direct responsibility for some aspects of the project. Among these is the planning and development of passenger rail stations suitable for Amtrak intercity passenger train operations. The role of the Authority regarding stations is the subject of a formal policy, and the Authority has endorsed the use of all applicable Amtrak standards in the station planning and development process.

Station Development Policy

The SRPRA has adopted a policy regarding station development that is consistent with Amtrak's, by which primary responsibility for providing station facilities typically rests with local entities, including the municipalities in which proposed stations are located, as well as local private sector entities and civic organizations. The SRPRA will help coordinate and facilitate station development in a supporting role once the lead entity and its partners have committed to the station project. The Authority plans to take a major role with regard to the portion of station facilities within the host railroad right-of-way, essentially consisting of the station platform(s) and canopies.

Regarding standards, the Authority has shared Amtrak's Station Planning and Development Guidebook and Station Standards Handbook with parties pursuing a potential station in their community. These documents address the planning and development process, along with design standards generally required by Amtrak and specifically required for compatibility with freight trains in a shared-track environment such as is proposed between Reading and Philadelphia. The Authority has also made available Norfolk Southern's General Principles Guiding Norfolk Southern's Evaluation of Passenger Station Proposals, which will apply to stations developed on their property.

Local Station Partners
As station planning and development activities advance in the communities of Reading, Pottstown and Phoenixville, information will be shared on the Authority website: https://gosrpra.com/ and links will be provided to websites of station project sponsors.

The Reading MPO staff completed a preliminary evaluation of possible train station locations in the City of Reading. Although this evaluation was conducted without any direct contact with staff from either Norfolk Southern or Amtrak this evaluation established several basic operational needs to consider when identifying and evaluating potential passenger rail station locations in the City. To effectively determine the best potential site for the establishment of a passenger rail station location uniform criteria was established. The criteria included:

- The site should be within walking distance (1/3 mile or 10-minute walk) of the BARTA Intermodal connector.
- The site should be within walking distance (1/3 mile or 10-minute walk) of both the Santander Performing Arts Center and Santander Arena.
- The site should have proximity to trip generators and trip destinations, including the County Services Center and Courthouse.
- The site should have potential for adjacent redevelopment and potential Transit Oriented Development (TOD) sites.
- The site should have access to off-street parking
- The site should accommodate a high-level platform.
- Limit disruption to vehicular and pedestrian crossings on Penn, Cherry, Franklin, and Chestnut Streets.

Based on the criteria above, staff was able to identify viable potential train station locations and eliminate other sites from future consideration. On March 17, 2023, the Greater Reading Chamber Alliance was awarded a Pennsylvania Department of Community and Economic Development (DCED), Local Share Account (LSA) grant of $142,346 to support station development activities including site identification. The engineering firm Stantec was selected to perform the site analysis, and was provided with the previously developed list of candidate sites. As a result of the Stantec analysis, it was recommended that the existing Franklin Street Station be used as the station, with the space being shared with the current restaurant/brew pub tenant. The possibility of moving in the future to a new facility that would be integrated into the BARTA bus terminal was also identified. In addition to the station planning work performed in Reading, similar efforts are underway in Pottstown and Phoenixville. The Borough of Pottstown benefitted from a rail service and station planning workshop that was funded through a Thriving Communities grant from the United States department of Transportation, and is currently participating in a station area planning study being performed by the Delaware Valley Regional Planning Commission. The Borough of Phoenixville is currently working with private developers to explore potential station plans in their community.

Final Design, Engineering and Construction

Once all three steps of the CIDP have been completed, SRPRA will have Preliminary Design and environmental documentation materials and will be poised to enter final design and then construction. Final design and construction will require additional grant funding, applications for which are planned to be prepared during Step 3 of the CIDP effort.

Operation and Start of Service

During Steps 2 and 3 of the CIDP, and potentially into final design, agreements will be negotiated with Amtrak as the proposed operator, and with Norfolk Southern and either CSX or SEPTA as host railroads. These agreements will embody provisions developed collaboratively with Amtrak and the Host Railroads during and after the CIDP effort. Several important issues will remain to be fully addressed at that time. For example, the coordination of timing of the service start-up and delivery of Amtrak's new Aero trainsets, which will dictate whether the service is launched with existing locomotives and cars or with the new trainsets. Funding for the initial years of operation is anticipated to be provided by the FRA, but long-term funding and governance of the service remains to be agreed and finalized. Pending completion of all engineering, design and construction service could begin as soon as the year 2030.

Interim Bus Services

As a precursor to the availability of passenger rail service, in June 2022 Amtrak started offering the Amtrak Thruway Bus Service between Reading and Philadelphia. This service provided two daily round-trips connecting Reading and Pottstown to Amtrak's network via Philadelphia. However, this service was discontinued in March 2025. The decision to end the service was based primarily on the failure of the bus to generate sufficient connecting rail trips on Amtrak.

AVIATION

The Berks County Aviation network is a vital transportation link consisting of nine airports and seven heliports. They vary in size and function from small general aviation airports to larger facilities with corporate/commercial air service.

There are two public airports in Berks County. The largest is the Reading Regional Airport. This is the County's primary air connection to national markets. The smaller Grimes Airport is a privately owned, public use airport. The airport is also home to the Golden Age Aviation Museum. The museum focuses on pre-World War II aircraft and the early days of aviation. The Grimes Airport has one turf runway, Runway 11/29, which is 2,720 feet long. The majority of the airport's activity is recreational flying. In addition to the airports listed above the region has seven additional privately owned, private use airports.

Reading Regional Airport

The Reading Regional Airport, also known as Carl A. Spaatz Field, is a general aviation airport located in Bern Township and operated by the Reading Regional Airport Authority (RRAA). The airport is equipped with a control tower, a passenger terminal building, hangers, maintenance facilities, and crash-fire-rescue facilities. It has two Instrument Landing System (ILS) equipped asphalt runways: Runway 13/31 with a length of 6,350 feet and Runway 18/36 with a length of 5,151 feet. The Reading Regional Airport is the only public use airport in Berks County with asphalt runways. The airport had approximately 46,250 aircraft operations (flights arriving and flights departing) in 2024.

AIRCRAFT BASED AT THE READING REGIONAL AIRPORT - 2024

Type	#
Single Engine	83
Multi Engine	28
Jet	15
Helicopter	6
Other	1
Total Aircraft	133

Source: Federal Aviation Administration, Airport Data and Information Portal (ADIP)





Regular passenger service ended in 2004. In its current role, the airport concentrates primarily on serving general aviation and corporate aircraft. In the future, the airport sees itself serving more flight training activity, along with more recreational, business, and air taxi operations and continues to build and increase its reputation as a recreational and corporate general aviation facility.

In early 2022, the Commissioners of Berks County took control of the Reading Regional Airport. This was considered a positive step in making sure the airport continues safe, profitable, and efficient operations well into the future. In October 2022, the airport completed its strategic plan for the future of the airport. Part of implementing that plan included the County purchasing the two existing Fixed Base Operators (FBO) at the airport in early 2024. This created one FBO – Reading Aviation. An FBO is a service facility for aircraft and passengers at an airport. The FBO traditionally provides fuel, aircraft servicing, hospitality, and other services. A single FBO reduces the amount of confusion and lower service levels competition between multiple FBOs has historically created at the airport. The County taking over the FBOs allows the RRAA to improve consistency and facilitate future growth at the airport. With developers looking to build hangar space, business development along the Route 183 corridor and at Berks Park 183 industrial site, and any potential consideration of bringing back commercial air service, the airport anticipates significant development around its property. This development would provide ample opportunity for the airport, which in turn will create additional need for a focused plan to capitalize on those opportunities. The RDG Strategic Plan gives the Airport Authority and the County a blueprint as to what areas to focus on and what growth could look like in the future to ensure that the airport remains a leading economic and community development asset for Berks County. The development of the RDG Strategic Plan helps support the performance measures and goals in the Pennsylvania Statewide Airport System Plan (PA SASP) (https://www.pa.gov/content/dam/copapwp-pagov/en/penndot/documents/programs-and-doing-business/aviation/planning-and-zoning/documents/2016-sasp/2016%20sasp%20technical%20report%20vol%20i%20and%20ii%20cover-tofc-preface.pdf).

Berks Park 183 industrial site is directly adjacent to the airport at its northeastern corner. The Berks County Industrial Development Authority purchased the property in 2019 from the Federal Aviation Administration. The site originally served as a military base during World War II. To date the site has been redeveloped to include up to 816,000 square feet of industrial space thus creating new opportunities for business recruitment and job creation in the region. It is foreseen that this site could have a positive impact on the airport as tenants of the industrial site look to utilize the airport to supplement their operations.

Due to the COVID-19 pandemic, the numbers for total enplanements and total operations in 2020 decreased drastically at just over 43% from the previous year (2019). Total operations and based aircraft slowly increased after 2020. The Federal Aviation Administration expects increased interest in the airport due to an increased demand for corporate aircraft operations because of concerns about safety and flight delays at other larger airports. Of note, enplanements for 2024 are low because of some of the changes currently taking place at the airport. Namely, the County taking over operations as the sole FBO. This number is expected to increase as Reading Aviation settles into their role as the FBO at the airport. There was no forecast data available for enplanements.

READING REGIONAL AIRPORT/CARL A SPAATZ FIELD HISTORIC AND FORECAST DATA

Type	2020	2021	2022	2023	2024	% Change	2030 FCST	2040 FCST	2050 FCST
Total Enplanements	644	79	1,024	445	3	-99.5	N/A	N/A	N/A
Total Operations	30,199	31,833	37,911	40,308	46,250	53.2	51,562	53,364	55,296
Based Aircraft	97	97	115	117	115	18.6	127	147	167

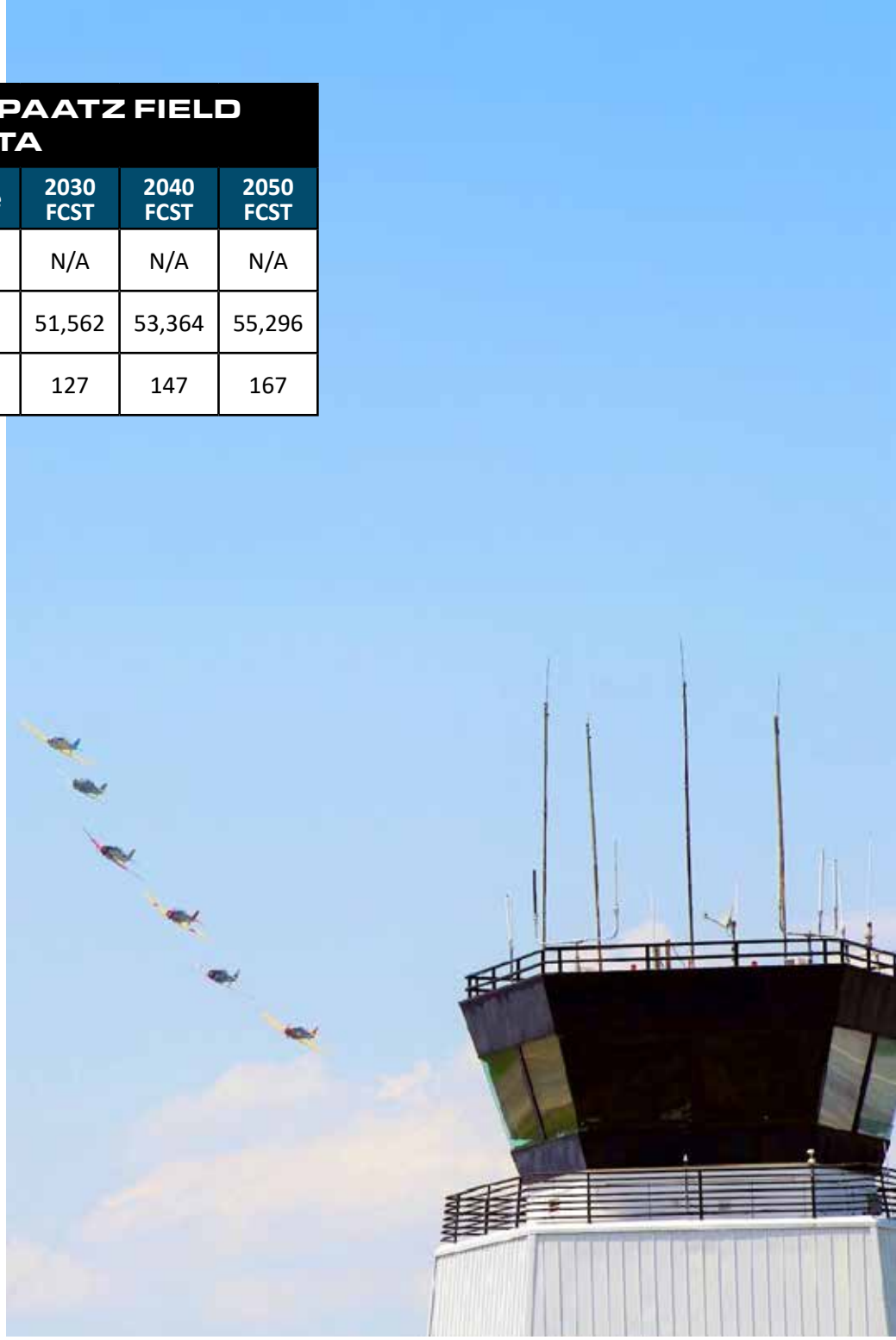
Source: Federal Aviation Administration, APO Terminal Area Forecast Detail Report

The airport is part of Foreign Trade Zone #147 and has become a tourist destination as it is home to the Mid-Atlantic Air Museum. The museum is home to dozens of rare aircraft and hosts a World War II Weekend since 1990 that draws more than 20,000 visitors annually.

The preservation of the airport from the encroachment of incompatible land uses is a priority for the Reading Regional Airport. Land use conditions around the airport are the primary concern. The following are examples of issues that could impact service.

- Tall structures such as buildings, cell towers, power lines, wind turbine towers, trees and other vegetation.
- Visual obstructions such as dust, glare, smoke and steam and equipment that can cause electronic interference such as cell towers and power grids.
- Sites that attract wildlife (especially birds) like surface waters, wetlands, and landfills.
- Developed land. Developed land puts more people on the ground in the path of the aircraft in case of an emergency landing or crash. Keeping land undeveloped around the airport can potentially reduce the amount of aircraft damage and enhance the survivability for the occupants of an aircraft forced to make an emergency landing away from one of the airport's runways.

As we enter 2026, the RRAA continues to implement its Strategic Plan and move forward with its business plan to grow the airport into a world class facility offering flight training, charter operations and aircraft maintenance. The RRAA will work closely with the County of Berks and the Greater Reading Chamber Alliance to further this goal as they proceed into the future. Moving forward, the Reading Regional Airport Authority will continually prepare for the future of aviation. With the prevalence of uncrewed aviation systems such as UAVs (Unmanned Aerial Vehicles), VTOL (Vertical Take-Off and Landing), and EVTOL (Electric Vertical Take-Off and Landing) aircraft for both passenger and cargo operations, the Reading Regional Airport is uniquely positioned to support the future of advanced air mobility.



Helicopters serve the Vertical Flight (VF) needs in Berks County. Helicopters operate within a radius of approximately 100 to 150 miles. Since helicopters operate at lower airspeeds and different flight profiles than fixed-wing aircraft, they are assigned to routes away from fixed-wing arrival and departure flows, preventing slow-flying helicopters from delaying faster fixed-wing aircraft. While the County's heliports are largely privately owned, there are three hospital heliports. State and Federal agencies require hospitals to have helipads in order to obtain certification as trauma facilities. These helipads, typically located in close proximity to the respective hospital's emergency room, are a mix of both rooftop and ground level operations.

The following charts and map show the 9 airports and 7 heliports in Berks County and where available, their based aircraft.

BERKS COUNTY AIRPORTS

Name	Municipality	Based Aircraft - 2024	Use	Surface Type
Reading Regional Airport (RDG)	Bern	133	Public	Asphalt
Grimes Airport (8N1)	Bethel	32	Public	Grass
Don's Place Airpark	Perry	1	Private	Grass
Cuatros Vientos Airport	Albany	N/A	Private	Grass
The Old Commonwealth Aerodrome	Upper Bern	1	Private	Grass
Skyline Airstrip	Perry	N/A	Private	Grass
Blue Mountain Academy Private Airport	Tilden	3	Private	Grass
Area 52 Airport	Hereford	5	Private	Grass
Boyer Airport	South Heidelberg	1	Private	Grass

Source: Federal Aviation Administration and AirNav.com

BERKS COUNTY HELIPORTS

Name	Municipality	Based Aircraft - 2024	Use
King Air Heliport	Albany	N/A	Private
Lehigh Valley Health Network Kutztown Heliport	Maxatawny	1	Private
Reading Hospital Heliport	West Reading	N/A	Private
Car Tech Heliport	Muhlenberg	N/A	Private
Metropolitan Edison Heliport	Muhlenberg	N/A	Private
St Joseph Regional Health Network Heliport	Bern	N/A	Private
GED Heliport	Exeter	1	Private

Source: Federal Aviation Administration and AirNav.com

FAA Licensed Aviation Facilities

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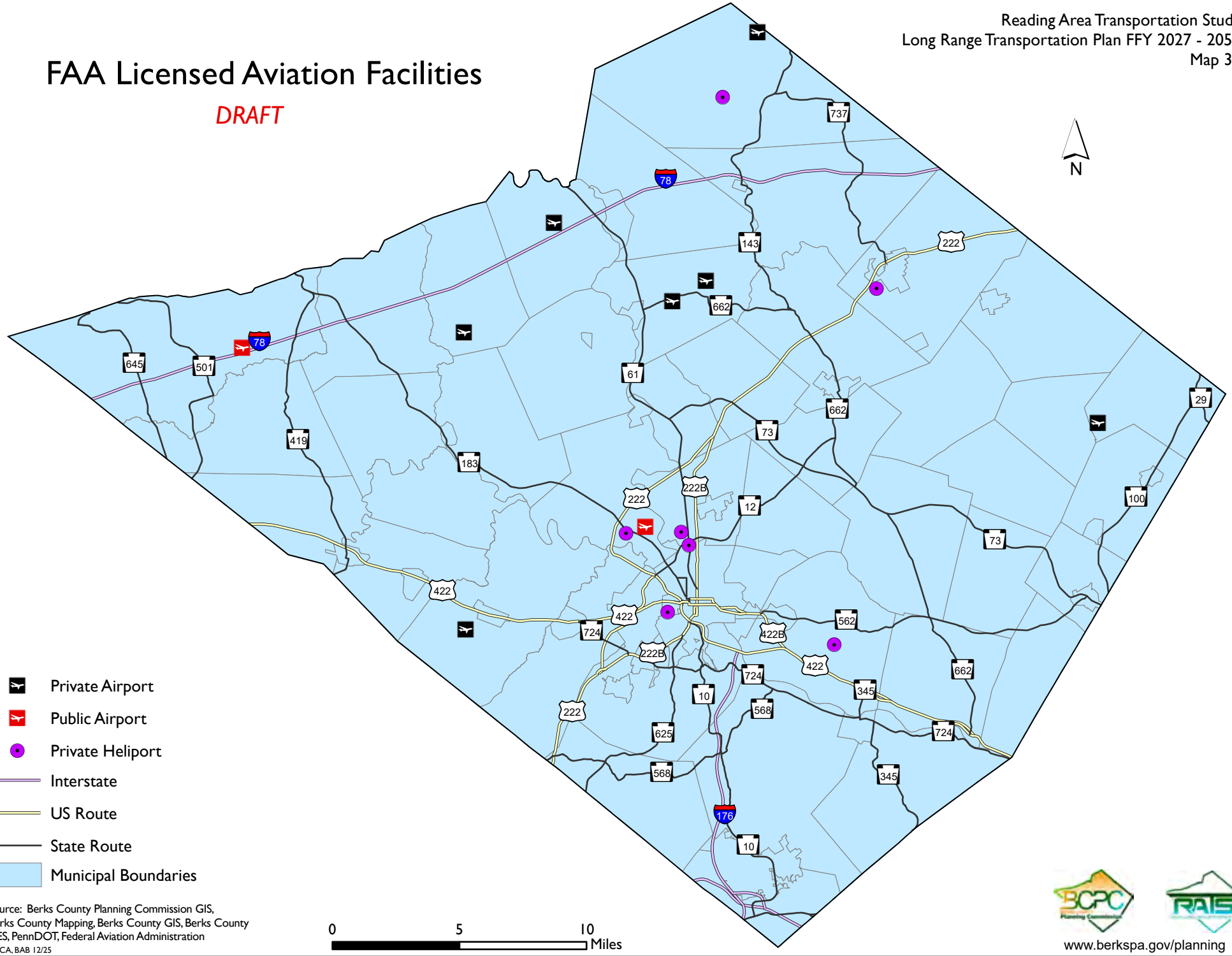

Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, Federal Aviation Administration

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ISSUES AND NEEDS

Throughout the development of this Plan, various issues and needs were identified related to transportation planning and programming. These came up during our initial data collection / analysis and the first two rounds of public outreach relating to Goals and Objectives and Issues and Needs, respectively. These were then reviewed with our Long Range Transportation Plan Steering Committee prior to being included in the Plan. The results are summarized below.



Planning Today for Tomorrow

The transportation system is constantly changing to try to meet the needs of all users for all modes of transportation. Maintaining and improving the existing transportation system helps address issues related to safety, congestion, and mobility. Funding is a major factor in our ability to address issues identified within the transportation system in Berks County. And, funding is always changing.

The Infrastructure Investment and Jobs Act (IIJA), enacted in November 2021, provided $350 billion nationally for Federal highway programs over the 5-year period from fiscal years 2022 through 2026. Additionally, several new and existing competitive grant programs were provided to help fund other various types of transportation projects and activities. The IIJA provided a slight increase in the Reading MPO's funding allotments for highway, bridge, and transit projects. As of the writing of this plan, there is no new transportation funding bill that has been passed and IIJA has not been reauthorized. Based on statewide guidance, funding for future years is assumed to remain at fiscal year 2026 allotment levels.

Through IIJA and contributions of discretionary grant funding through PennDOT, RATS has continued to pursue major improvements to major corridors such as US 222 and US 422 while, at the same time, addressing some of the needs related to safety, maintenance, and mobility. Despite an increase in funding, RATS continues to have finite resources to invest in transportation and unfortunately can not build and fix everything desired. RATS, along with PennDOT, has created investment priorities so that we can effectively utilize any and all available resources. This means that for the future, we will continue to not only focus resources on maintaining the existing infrastructure but also making proactive investments to make the transportation system safer and work better for you.

Safety and Modernization

Safety is the highest priority of this plan. Many factors can influence safety including demographics, driving behavior, and driver education. The young and mature driver age groups continue to have increases in crashes. Young drivers have less experience, and mature drivers are impacted by visual, cognitive, and physical skill deterioration. There was a 30 percent increase in crashes involving age 16 drivers, a 34 percent increase in crashes involving age 17 drivers, and a nearly 21 percent increase in crashes involving age 75 and over drivers.

RATS employs a systematic approach to prioritizing projects. Safety related projects are evaluated using current PennDOT crash and safety data, the RATS Annual Traffic Safety Report, comparing crash rates against statewide crash rates for roads with similar characteristics, and against current PennDOT District 5-0 safety concerns and guidelines. Generally, prioritization is given to locations where crash incidents occur most frequently and the number of severe crashes is greater. These locations are evaluated and generally require a multidisciplinary approach to improving traffic safety through engineering, education, and enforcement. As well, RATS will coordinate with municipalities to achieve their safety goals, such as with the City of Reading and their Vision Zero

Action Plan which was adopted in June, 2025. Additional information on project prioritization can be found in Chapter 4 of this plan.

RATS, in coordination with PennDOT, has implemented roundabouts at numerous intersections across Berks County. Roundabouts are a proven safety countermeasure in reducing the severity of crashes as well as providing operational benefits. Construction of the County's first roundabout was at the intersection of Routes 222 and 662 and was completed in 2019. Roundabouts continue to be planned and programmed at appropriate intersections in both the RATS TIP and RATS LRTP to address issues related to safety, congestion, and reliability.

Another area concerning safety includes the lack of available truck parking along major roadways leading into and through Berks County. The issue results from changes in laws that restrict the number of hours that truck drivers may operate as well as the overall increased volume of truck traffic.

The concern is not only a local issue but is a statewide and national issue as well. At the Federal level, FHWA developed a Truck Parking Development Handbook in 2022 (https://ops.fhwa.dot.gov/freight/infrastructure/truck_parking/index.htm) to aid in identifying truck parking issues and relevant regulations, factors influencing truck parking demands, and providing a quantitative approach for estimating truck parking demand including a cost-benefit analysis of truck parking developments and practices for siting truck parking facilities.

In 2023, the Pennsylvania Transportation Advisory Committee (TAC) developed the Expanding Truck Parking in Pennsylvania study to analyze the need for truck parking across the state of Pennsylvania (https://talkpatransportation.com/perch/resources/documents/tac-truck-parking-12-14-2023-compressed.pdf). The study identifies corridors within the state with the greatest need for truck parking. As a result of the TAC study, PennDOT announced in 2025 that additional truck parking locations will be added across Pennsylvania. By the end of 2026, over 1,200 truck parking spots at 133 locations across the Commonwealth will be established along Interstate on-ramps with good sight distance, weigh stations, and various other locations within the highway right-of-way. Additionally, the Pennsylvania Turnpike is evaluating truck parking location opportunities along its' system that could result in an additional 600 truck parking spaces. Finally, the Eastern PA Freight Alliance Infrastructure Plan (EPFA) recommends conducting a County-wide truck parking study to identify locations that may support truck parking in Berks County.

Additional Freight Considerations

With Berks County's location in proximity to major metropolitan areas and the significant growth in warehouse and logistics developments, freight movement by truck has significantly increased. Expansion of these facilities has grown to include not just the I-78 corridor, but other highways in Berks County including but not limited to PA 61, PA 100, PA 183, PA 645, US 422 and US 222. While some highways can accommodate large truck volumes, other roadways may not be suitable for truck traffic. Large trucks using local roads has become an issue during situations involving detours or simply the truck GPS providing inaccurate information to the truck driver seeking the shortest route to their destination regardless of existing road limitations.

The Eastern PA Freight Alliance Infrastructure Plan (EPFA), adopted by RATS in 2024, is a guiding document for future investments and policies aimed at mitigating the impacts of freight traffic within the region and identifies and includes issues and needs related to truck parking. The plan includes regional recommendations and local recommendations that address freight infrastructure and policy guidelines that address existing and future challenges.

State of Good Repair

Most of the modern Berks County transportation system was constructed between 1920 and 1970 with some bridges built before the 20th Century; the majority of the interstate highways in the County were constructed in the 1950s and 1960s. Most roads have been incrementally improved or repaired at one point or another; however, they are continuously subject to increased traffic and heavier loads than they were designed to handle.

As a result, a major priority is to preserve and maintain the existing transportation system and infrastructure with a primary focus on paving and upgrading existing roads. RATS is committed to making investments to preserve, maintain, address safety issues, and maximize the use of the existing transportation system before making investments to expand the capacity of the transportation system. In addition, RATS relies on PennDOT District staff and their expertise to provide informed decisions using Lowest Life Cycle Cost (LLCC) to conduct well-timed preservation activities to extend the life of a transportation asset to help minimize maintenance and infrastructure improvement costs.

System Productivity and Efficiency

Berks County is located at the crossroads of Pennsylvania's transportation system. The County is within one day's drive of numerous major metropolitan areas and major economic centers. Today, Interstate 78 – where 30% to 42% of traffic is trucks and Route 222 into Lehigh County is 10% to 21% trucks – are congested corridors according to RATS' Congestion Management Process (CMP).

Pennsylvania's multimodal freight transportation system carries 1.1 billion tons of freight, valued at $1.6 trillion, and is projected to grow to nearly 1.9 billion tons at a value of over $3.7 trillion by 2040. In 2011, trucks handled 76 percent of the tons moved in, out, internally, and through the state and 82% of the value. This is expected to grow to 80 percent and 86 percent, respectively, by 2040. Pennsylvania's Freight Movement Plan (FMP) is currently being updated with an anticipated completion of June 2026.

The potential conflict of competing for capacity, mobility, and accessibility within an aging transportation network must be balanced so that the growing volume of commuter and freight movement within the region can be accommodated without major capacity-adding projects. New road infrastructure is not able to keep up with this increase in travel demand – in fact; it is impractical to build enough roads and infrastructure to accommodate it.

The RATS Congestion Management Process (CMP), updated in 2025, evaluates congestion on 33 key corridors throughout Berks County. Three corridors were defined as Highly Congested and an additional 19 corridors were defined as Moderately Congested. The CMP provides recommended 'management' solutions corridors by targeting financial resources to provide strategies to address the congestion that are faster and less expensive to implement than constructing a new road.

PennDOT and RATS will need to continue and accelerate the expansion of the Intelligent Transportation Systems (ITS) network in the County. The advancement of ITS technologies is expected to bring significant improvement in transportation system performance, including reduced congestion and increased safety and traveler convenience with the provision of real time information to travelers. The use of ITS and the Freeway Service Patrol deployed in Berks County will aid in detecting collisions and other incidents on specific roads in the County, coordinating emergency response, and notifying motorists. These activities will shorten the duration of incidents and minimize congestion that can result.

RATS remains committed to encouraging commuters to use transit through BARTA and ridesharing options through CommutePA. While the number of farepaying passengers has been increasing since 2021, BARTA saw equally increased ridership in senior citizens using BARTA Special Services.

BARTA continues to plan for the expansion of outreach and services to meet the needs of this growing sector of the Berks County population in addition to other populations in Berks County.

Strategic Capacity Improvements

RATS will need to pursue strategic capacity improvements to improve the efficiency of the transportation system. Examples of such projects are the reconstruction of the obsolete West Shore Bypass (Route 422) around Reading and the widening of Route 222 North to the Lehigh County line to handle the increase in vehicle and truck traffic. These projects continue to move through the development process and are anticipated to move into construction in 2028 and late 2026/ early 2027 respectively.

Alternative Fuels

A growing issue is the introduction of alternative fueled vehicles, primarily liquid propane gas (LPG) and electric (EV). In the past, these were somewhat of a novelty but over recent years the growth of this sector has had dramatic impacts on both the environment, by lowering emissions, and on tax revenues, by lowering the consumption of gasoline, the tax on which is a primary source of revenue for transportation improvements.

To combat the lower consumption of gasoline by these vehicles which leads to lowered tax revenues, Acts 85 and 149 were signed into law in 2024. These Acts modernize how EV owners support road and bridge maintenance across the state through a yearly Road User Charge (RUC), which replaces the Alternative Fuels Tax that EV owners were previously required to calculate and pay annually. The RUC came into effect for vehicles in April of 2025. PennDOT intends to adjust the fee each year based on the previous years' charge and the change in the consumer price index. The new RUC makes sure every driver pays their fair share to help maintain roads and bridges no matter what type of fuel they use.

The Reading MPO has been working with PennDOT and other stakeholders to designate roadways in Berks County for the Federal Highway Administration's (FHWAs) Alternative Fuel Corridor (AFC) Program. This program was designed to expand the nation's alternative fueling network for electric, propane, and natural gas vehicles. In Berks County, three corridors, I-78, I-76 (the PA Turnpike), and US 422 have been designated. The designated routes are key state focus corridors for alternative fuel infrastructure and support regional and national travel and freight movement within Pennsylvania.

The Infrastructure Investment and Jobs Act (IIJA) contains specific funding to support the development of infrastructure to support the expansion of EVs. This statute was signed into law in November of 2021 and makes the most transformative investment in EV charging in United States (U.S.) history that aims to put the U.S. on a path to a nationwide network of 500,000 EV chargers that ensures a convenient, reliable, affordable, and equitable charging experience for all users. The IIJA is set to expire in September of 2026.

Further efforts have been made by PennDOT and the Department of Environmental Protection (DEP) to expand alternative fuel infrastructure throughout the state. The agencies have worked to support collaboration among city, regional and state agencies as well as other advocacy groups; develop partnerships to design, build, finance, operate and maintain alternative fuel stations; administer grant programs that are focused on the development of alternative fuel source infrastructure with an emphasis on the FHWA designated corridors; and educate and communicate the existence of this infrastructure to promote increased alternative vehicle usage.

Towards the end of 2023, PennDOT began tracking EV registrations quarterly by county and zip code. Berks County has consistently experienced .05% growth of electric vehicles quarterly since the initial collection date. Quarter 1 of 2025 shows 424,538 vehicles registered in Berks County. EVs represent 3,225 or 0.76% of all vehicles registered in Berks County. This places Berks County in the top third of Pennsylvania counties for percent of registered EVs. Out of the 6 surrounding counties, only two (Lebanon and Schuylkill) have lower percentages of EVs than Berks County, with neighboring Chester County being the highest in Pennsylvania at 2.69%. The Reading MPO acknowledges this growing market and will continue to support the efforts of state agencies and plan for the addition of alternatively fueled vehicles in Berks County.



Automated Vehicles, Highly Automated Vehicles, and Connected Vehicles

Automated vehicles (AVs) are vehicles capable of performing the functions required to operate a vehicle in traffic through the aid of various sensors and software. To receive this designation, a vehicle must perform driving tasks such as steering, accelerating, and braking without a human driver. Most new vehicles are equipped with some level of automation such as adaptive cruise control and lane-centering technology. Highly automated vehicles (HAVs) are AVs that can operate in high- or full-automation mode, meaning no human is driving the vehicle when the automated driving features are engaged. Connected vehicles (CVs) use technology to communicate with each other, connect to transportation infrastructure, or obtain data through common systems. Many AVs are already connected but can operate without being connected.

Pennsylvania has emerged as a leading location for on-road testing of HAVs as they advance toward practical use. PennDOT has taken action to support Pennsylvania's leadership in HAV research through various initiatives such as installation of technology allowing HAVs to communicate with the infrastructure at select signalized intersections, development of uniform standards and practices for HAVs, and development of a statewide data exchange for Vehicle-to-Everything (V2X) communication. PennDOT was involved early in the process and formed the Autonomous Vehicle Policy Task Force in 2016 to provide draft legislative policy recommendations for the testing of automated vehicles in Pennsylvania. Currently PennDOT is involved in the HAV Advisory Committee which identifies recommendations for Pennsylvania with the purpose of enhancing the safe and efficient movement of people and goods by advancing connected and automated vehicle technology.

Through direct involvement and research, PennDOT and the Pennsylvania Turnpike Commission have prepared documents and plans to better accommodate the rise and integration of these vehicle types. These include the Connected and Autonomous Vehicle 2040 Vision, The Statewide Connected and Automated Vehicles Strategic Plan, AV Testing Guidance, Vehicle Platooning Policy, Connected and Automated Vehicle Business Plan, and the Automated Vehicle Guidebook for Municipalities.

As HAVs become more common within Pennsylvania, they may begin to impact municipal policy and operations in various ways. The Automated Vehicle Guidebook for Municipalities identifies multiple topics of interest for municipalities to consider. Topics covered in this guidebook include safety, traffic enforcement, interacting with emergency service responders, infrastructure and risk management, potential fiscal impacts, planning, land use, zoning, and enhancing mobility.

Partial or complete automation of vehicles has the potential to provide a variety of benefits including but not limited to improved road safety, access for those who cannot drive, increased travel options, reduced driver stress, and reduced emissions. The Reading MPO acknowledges the potential benefits of these emerging vehicle types and will continue to support the efforts of state agencies and plan for the accommodation and integration of AVs, HAVs, CVs, and V2X communications.

Electric Powered Micromobility

A rapidly growing issue throughout Berks County, primarily seen within Boroughs and the City of Reading is the increase of electric powered micromobility vehicles. The Federal Highway Administration (FHWA) is continuing micromobility research regarding safety, access, mobility, data, regulation, and funding. The FHWA defines micromobility as: "Any small, low-speed, human or electric-powered transportation device, including bicycles, scooters, electric assist bicycles (e-bikes), electric scooters (e-scooters), and other small, lightweight, wheeled conveyances."

Planning for small, low-speed, human powered transportation devices has been a continuous process for the Reading MPO with the first Bicycle and Pedestrian Plan being published in 2000 and the vision of the Reading Area Transportation Study to promote a well maintained and balanced multimodal transportation system that will safely and efficiently move people and goods. The electrification of these small, low speed transportation devices however, has created additional concern for the traveling public that shares transportation infrastructure with these vehicles.

A primary advantage to micromobility is the flexibility to solve first and last mile challenges and complete shorter trips than an enclosed, higher speed vehicle would be needed to complete. Electric powered micromobility vehicles can expand the range that human powered micromobility devices would typically travel, are more affordable than enclosed vehicles, reduce emissions, and noise pollution. These electric powered devices can also increase mobility for older adults or individuals with disabilities as they are less strenuous to operate.

Despite the benefits of electric powered micromobility vehicles, as popularity grows, so does the concern amongst the public as well as public officials. A large focus of concern is where these vehicles can ride and how fast. This safety concern is for those that operate these vehicles as well as those that share the travel space these vehicles use. An important aspect of safety in this context is education, regulation, and enforcement. It is important for users, officials, and enforcers to be aware of the incorporation of electric powered micromobility vehicles into the PA Vehicle Code and how electric powered micromobility vehicles are regulated by traffic laws within the state of Pennsylvania. These laws address safety concerns such as maximum allowable speed, where they are allowed to be driven, as well as helmet, light, and passenger regulations. These also set a minimum age to operate and determine need for license, registration, and insurance.

Similar to human powered micromobility devices, their electric powered counterparts rely on safe, connected, and well-designed bicycle and pedestrian infrastructure. Users also lack the protection of an enclosed vehicle and are considered vulnerable road users. The growing popularity and use of these devices displays the need to continue planning for and adding to the existing active transportation infrastructure of Berks County with an emphasis on safety and connectivity. The Reading MPO acknowledges this growing market and will continue to support the efforts of state agencies and plan for the addition of electric powered micromobility vehicles in Berks County.

Passenger Rail

Berks County does not currently have passenger rail service. Providing passenger rail service to destination hubs such as Philadelphia and New York could help alleviate issues on major roadways related to congestion, provide economic benefits, and increased job opportunities. While the Schuylkill River Passenger Rail Authority (SRPRA) completed the first step in the Corridor Identification and Development Program (CIDP), the Authority is still waiting on approval from the Federal Railroad Administration (FRA) to move into the second step of the program. The second step is where the SRPRA will develop a business plan, capital plan, and operating plan that will document the investment case for proposed passenger rail service. Funding through the CIDP is critical to continue evaluating and developing potential passenger rail service in Berks County.

Aviation

While The Reading Regional Airport (RRA) coordinates with Boscov's Travel to provide charter air service to Orlando, Florida, the airport does not currently offer general passenger air service. With other airports in proximity to Berks County residents, such as Lehigh Valley International Airport and Lancaster Airport that do provide commuter air service, the RRA currently concentrates on serving general aviation for recreational and business needs. Additionally, funding is limited for

commuter air service and obtaining funding requires a need for commuter air service to be defined and demonstrated along with a precise plan for managing the service. The current Strategic Plan for the RRA focuses on establishing the airport as an economic hub and continually preparing for and considering future aviation needs.

Funding for Local Bridges

Bridges provide a means for traffic to cross depressions or obstructions that would otherwise impede the flow of traffic, providing connections across these barriers. Bridges can vary in length and width depending on the type of roadway the bridge is carrying. Fewer than 6% of state-owned bridges by Count are in poor condition and approximately 9% of state-owned bridges by Deck Area are in poor condition. Comparatively, local-owned bridges have significantly higher percentages of poor condition bridges by both Count (30.34%) and Deck Area (27.66%). Funding for local-owned bridges is limited and local-owned bridges must meet various criteria to receive funding for rehabilitation or replacement. In many instances, as part of the funding source requirements, a monetary match may be required. Many local municipalities lack the ability to meet those monetary match requirements for funding bridge maintenance and preservation activities. As part of RATS Transportation Improvement Program development process, every effort is made to incorporate funding for local-owned bridges to help reduce the number of local-owned bridges that are in poor condition.

The Active Transportation Network

As discussed in the non-motorized transportation section, the benefits of active transportation are staggering not only at the individual level but beyond, impacting economic, healthcare, and most importantly for this plan, transportation aspects. When opting for active transportation, vehicle miles traveled are reduced, lessening wear and tear on roadways. Fuel consumption is lowered leading to improved air quality. Safety on the roads is improved, as a result of fewer vehicles on the roadway which aids in reducing crashes and injuries.

The importance of active transportation and the corresponding network is further explored in multiple countywide plans as well as the primary focus of the PennDOT Pennsylvania Active Transportation Plan, PUB787 (4-20), and the U.S. DOT Guide for Maintaining Active Transportation Infrastructure for Enhanced Safety, FHWA-SA-23-005.

Within Berks County there are approximately 1,319 miles of sidewalks and 524 miles of trails. Maintaining, filling in missing gaps, and creating connections to the existing network are some of the main priorities of Berks County plans when considering the active transportation network. Beyond sidewalks and roadway shoulders, the trail network accommodates users for both recreation and commuting. The Schuylkill River Trail is identified in the Berks County Greenway, Park and Recreation Plan, Berks County Comprehensive Plan 2030 Update, and the Berks County Bicycle and Pedestrian Plan as a trail of importance and the backbone of the offroad network in Berks County. The completion of this trail as well as providing safe connections to it is noted as a policy, recommendation, and a placemaking strategy in these plans.

RATS recognizes the importance of the active transportation network and the Schuylkill River Trail in Berks County. Also recognized is the need for funding the maintenance, completion, and connections to the existing network. Beyond the allocated funding for this network, RATS aims to continue working alongside key partners and provide assistance where applicable to organizations looking to advance the network throughout the county.



GOALS AND STRATEGIC PERFORMANCE MEASURES

The biggest challenge for RATS will be to maintain the flexibility required to meet changing conditions. One area of focus for the planning process has been to identify emerging trends that affect the transportation system, which help to define future needs. Long range plans are meant to consider future transportation issues and needs based on current trends and projections. Future needs, known or unknown, generally take a backseat to the most pressing of today's issues and needs. This LRTP sets goals and objectives that RATS must manage effectively to meet challenges as they arise, rather than becoming locked into a project level plan that attempts to allocate resources precisely over a long period of time.

In coordination with the State Transportation Commission's Twelve Year Program update, survey participants were able to prioritize where funds should be spent and shared information about the current transportation system, funding, and the forecast for transportation funding. Participants shared a wide range of options and opinions about investment choices and the direction we should go in Berks County. They continue the trend of seeking investments in the maintenance and safety of existing highways and bridges, reducing congestion and improving traffic flow, and the establishment of passenger rail service from Reading to Philadelphia.

Many sections of this plan provided a detailed look at a variety of important population, economic and travel trends. Some key takeaways that influence the goals and performance measures include, but are not limited to:

- Overall demand for transportation will increase as the population and economy grows.
- The most popular choice for travel remains the automobile and the most popular choice for freight remains the truck. Therefore, congestion, safety, and system maintenance will continue to be priority concerns.
- Driving alone continues to be the primary means of travel in Berks County. Due to changing demographics and the availability of alternative modes of transportation, there is an increase in walking and ridesharing as modes of transportation.
- Out of the 644 state-owned bridges, 38 (6%) were rated poor in 2024. In contrast, out of the 236 local-owned bridges, 71 (30%) were rated poor in 2024. Identifying funding solutions for local-owned bridge repair and maintenance will continue to be a priority for RATS.
- There is a higher number of crashes involving drivers 50-64 years of age and crashes involving aggressive driving behavior. Driver education will continue to be needed as part of safety improvement planning.
- Berks County has a significant amount of crashes – sixth in the state in the total number of crashes and fifth in the number of fatal crashes from 2020-2024.
- The County has 39 locations reporting greater than 20 crashes.
- Crashes involving bicyclists and pedestrians continue to increase with pedestrians having a higher occurrence of fatalities and suspected serious injuries than bicyclists.
- Warehouse development and other factors continue to support an increase in truck traffic.
- Berks County continues to have a high occurrence of heavy truck related crashes – ranking in the top ten for crash frequency across Pennsylvania from 2020-2024.
- The County evaluates 33 corridors for congestion. The most heavily congested corridors are State Hill Road (Wyomissing), PA 724 (Spring), and 5th Street (Reading).

Berks County residents expect a lot from their transportation system in the future. Residents and municipalities have shared recommendations for dozens of projects, wants, and needs that significantly exceed the amount of money we anticipate available for transportation improvement projects. There continues to be a significant gap between the transportation system that people want and the one we can deliver with current funds.

The plan's goals and performance measures apply common SMART principles to ensure the goals and performance measures are:

Specific	Sufficient to guide the plan
Measurable	We can measure our progress towards the goals
Agreed	Consensus among partners
Realistic	Can be accomplished
Time-Bound	Identified timeframe for accomplishment

We use these goals, objectives, and performance measures to track how well we will meet our mission over time. The goals and objectives incorporate our performance measures to help provide direction for the future. Additionally, the 10 federal planning factors are incorporated into the goals and objectives of this plan. A full discussion of our performance measures and targets is provided in the next section of this chapter.

The federal planning factors incorporated into the following goals and objectives include:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increase the safety of the transportation system for motorized and non-motorized users.
3. Increase the security of the transportation system for motorized and non-motorized users.
4. Increase accessibility and mobility of people and freight.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvement and State and local planned growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
10. Enhance travel and tourism.

		Planning Factor(s) Addressed
Goal 1	**Keep travelers safe and secure for all modes of transportation.**	2, 3
Objectives	Reduce the number, frequency, and severity of crashes on our highway system by implementing projects to address safety issues for all users.	2, 3, 7, 9
	Work closely with municipalities, PennDOT, and SCTA/BARTA to ensure the safe interaction between all transportation modes and users.	2, 3, 4, 6, 7
	Increase public awareness of construction zone safety for workers and users.	2, 3
	Evaluate proposed land development plans to identify potential transportation safety issues during local and PennDOT review processes.	2, 3, 5, 7, 9
	Educate the public on future transportation projects and changes to increase safety awareness.	2, 3, 7
	Coordinate with appropriate agencies to identify and provide efficient emergency vehicle access to the transportation system where feasible.	2, 3, 4, 6, 7
Goal 2	**Maintain and improve the existing multimodal transportation system and services within fiscal constraints.**	4, 5, 6, 8
Objectives	Minimize maintenance costs of roadways, bridges, and public transportation through proper routine maintenance using Transportation Asset Management planning.	7, 8
	Improve the efficiency of the existing transportation system and services.	7, 8
	Major roadway widening or relocation should only be considered if efforts to improve capacity and safety of existing roadways can not meet desired service levels.	2, 4, 7, 8
	Reduce congestion, improve air quality, and increase the reliability of the transportation system.	4, 5, 6, 9
	Develop a full range of public transportation options using available funding.	4, 6

Goal 3	**Invest in projects that strengthen and enhance economic development and tourism opportunities.**	1, 4, 10
Objectives	Implement best practices that will enable the efficient movement of people and freight.	1, 4, 5, 6, 7, 9
	Ensure that major activity centers are designed to accommodate a range of transportation modes.	1, 4, 5, 6, 10
	Increase the region's global and national competitiveness by improving and enhancing regional freight infrastructure.	1, 4, 5, 6, 7, 10
	Support the Reading Regional Airport Authority in strengthening the use of the airport for both business and commercial aviation activities.	1, 4, 6, 8, 10
	Support the efforts of the Schuylkill River Passenger Rail Authority to reestablish passenger rail service between Reading and Philadelphia.	1, 4, 5, 6, 10
	Provide multiple modes of convenient transportation to tourist destinations.	1, 4, 6, 10
	Coordinate with the agricultural community to identify and address obstructions to the movement of equipment and products.	1, 2, 6, 7
	Coordinate with appropriate agencies to review, update as needed, and implement recommendations identified in the EPFA Regional Freight Plan.	1, 4, 6, 7
Goal 4	**Give travelers a variety of well–designed transportation choices that are in good condition.**	4, 5, 6, 7, 10
Objectives	Promote coordinated regional bicycle and pedestrian facilities, transit, and rail routes.	4, 6
	When designing roadways, include bicycle and pedestrian accommodations and transit stops where applicable and feasible.	4, 5, 6
	Support Transportation Demand Management (TDM) programs such as ridesharing, using public transportation, walking, biking, or working from home.	5, 7
Goal 5	**Enhance the County transportation system to address environmental impacts.**	2, 3, 5, 8, 9
Objectives	Identify transportation system assets that are vulnerable to natural hazards and continue coordination with appropriate agencies to develop protection and recovery strategies through hazard mitigation planning.	2, 3, 5, 9
	Maintain the County's Air Quality attainment status for fine particulates and improve the marginal nonattainment status for Ozone.	5, 9
	Work closely with federal, state, municipal, and private entities to implement alternatives fuels use (i.e. electric, natural gas) throughout our region.	4, 5, 6, 7,
	Collaborate with local, regional, state and federal organizations and agencies to prevent, minimize, or mitigate potential negative environmental and social impacts from planned projects.	1, 5, 7, 9
	Assist in identification of potential environmental issues by maintaining and providing geographic information system data layers in a readily accessible format.	5, 9
	Work with PennDOT to implement stormwater best management practices and mitigation strategies on transportation projects.	5, 9

Project Prioritization And Performance Measures

RATS does not use a scoring system to prioritize but instead employs a qualitative approach in selecting projects. We expect these projects to make positive, substantive progress towards meeting this plan's performance measures. These guidelines indicate the types of projects RATS will fund. RATS applies the guidelines and considers potential impacts to land use and the natural and built environments, and consistency with the Berks County Comprehensive Plan and PennDOT plans and operations.

These generalized statements address the various programmatic areas found in this plan. More specific details related to the established Performance Measures and examples of relevant selected projects follows.

Proposed safety projects are evaluated using current PennDOT safety data and comparing crash data against statewide crash data for roads with similar characteristics and against current PennDOT District 5-0 safety concerns and projects. The RATS Annual Traffic Safety Report is used to identify potential safety projects in conjunction with PennDOT's Highway Safety Network Screening which identifies high excess cost crash locations. Highest priority is given to crash locations with a high frequency of crashes and that have high excess costs, as a result of analyzing crash severity, reportable crashes, predicted crashes, and several other factors. These locations are generally good candidates for safety improvements and will help meet the Performance Measure Targets for safety.

Proposed congestion mitigation projects must be located in a corridor identified in the current RATS Congestion Management Process (CMP). If there are several projects that match that criteria, projects are prioritized by crash data that is provided by PennDOT. The project that has the higher frequency and severity of crashes receives priority.

Proposed air quality projects that want to use Congestion Mitigation/Air Quality (CMAQ) funds must go through an air quality test showing that emissions of ozone, PM2.5 or NOx are reduced as a result of the implementation of that project. Priority is given to projects that help meet Performance Measure Targets.

Maintenance projects are proposed and prioritized by PennDOT District 5-0. RATS defers to PennDOT's expertise on life cycle costing and maintenance cycles. Priority is given to maintaining adequate pavement conditions on the National Highway System (NHS) network and projects that support meeting Performance Measure Targets.

Proposed bridge projects must have a sufficiency rating below 80 in order to be eligible for rehabilitation and below 50 in order to be eligible for replacement. Highest priority is given to poor bridges on the NHS followed by all other poor bridges. RATS Annual Pavement and Bridge Condition Report is used to identify potential projects in conjunction with PennDOT's expertise and bridge data and help meet Performance Measure Targets.

Proposed projects of types that do not fit any of the above categories are evaluated against the goals and performance measures of this LRTP and the specific requirements of the funding program. Those goals and performance measures are consistent with the Berks County Comprehensive Plan.

Projects must comply with 1) the transportation goals and advance the performance measures in the RATS 2027-2050 Long Range Transportation Plan and 2) the Berks County Comprehensive Plan. Highest priority shall be assigned to:

- Projects essential for safety, maintenance of the transportation system, and/or congestion relief.
- Projects that upgrade unsafe roads and intersections, rehabilitate or replace deficient bridges, and upgrade existing highways that are deficient.
- Capacity improvements will be considered if they serve regional traffic and freight movements and:
    - Are located in areas designated for existing development, designated growth, or future growth in the Berks County Comprehensive Plan and;
    - Identified as a congested corridor by the RATS CMP or;
    - Identified as a roadway with higher crash frequencies or;
    - Program-specific improvements cannot provide satisfactory operations.

Transportation Performance Management

The Bipartisan Infrastructure Law (BIL) continues the requirements established in Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act for performance management. These requirements aim to promote the most efficient investment of Federal transportation funds. Performance-based planning ensures that the Pennsylvania Department of Transportation (PennDOT) and the Metropolitan Planning Organizations (MPOs) collectively invest Federal transportation funds efficiently towards achieving national goals. In Pennsylvania, the Rural Planning Organizations (RPOs) follow the same requirements as MPOs.

Transportation Performance Management (TPM) is a strategic approach that uses data to make investment and policy decisions to achieve national performance goals. 23 USC 150(b) outlines the national performance goal areas for the Federal-aid program. This statute requires the Federal Highway Administration (FHWA) to establish specific performance measures for the system that address these national goal areas. The regulations for the national performance management measures are found in 23 CFR 490.

National Goal Areas	
Safety	▪ To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
Infrastructure Condition	▪ To maintain the highway infrastructure asset system in a state of good repair
Congestion Reduction	▪ To achieve a significant reduction in congestion on the National Highway System
System Reliability	▪ To improve the efficiency of the surface transportation system
Freight Movement and Economic Vitality	▪ To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
Environmental Sustainability	▪ To enhance the performance of the transportation system while protecting and enhancing the natural environment
Reduced Project Delivery Delays	▪ To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

Performance Based Planning and Programming

Pennsylvania continues to follow a Performance Based Planning and Programming (PBPP) process, with a focus on collaboration between PennDOT, FHWA, and MPOs/RPOs at the county and regional levels. These activities are carried out as part of a cooperative, continuing, and comprehensive (3C) planning process which guides the development of many PBPP documents, including:

- Statewide and Regional Long Range Transportation Plans (LRTPs)
- Twelve-Year Transportation Program (TYP)
- State Transportation Improvement Program (STIP)
- Regional Transportation Improvement Programs (TIPs)
- Transportation Asset Management Plan (TAMP)
- Transit Asset Management (TAM) Plans
- Public Transportation Agency Safety Plans (PTASP)
- Pennsylvania Strategic Highway Safety Plan (SHSP)
- Comprehensive Freight Movement Plan (CFMP)
- Congestion Mitigation and Air Quality (CMAQ) Performance Plan(s)
- Congestion Management Process (CMP)
- Regional Operations Plans (ROPs)

The above documents in combination with data resources including PennDOT's bridge and pavement management systems, crash databases, historical travel time archives, and the CMAQ public access system provide the resources to monitor federal performance measures and evaluate needs across the state. Based on these resources, PennDOT and MPOs/RPOs have worked together to 1) create data driven procedures that are based on principles of asset management, safety improvement, congestion reduction, and improved air quality, 2) make investment decisions based on these processes, and 3) work to set targets that are predicted to be achieved from the programmed projects. Aligning goals and performance objectives across national (FHWA), state (PennDOT), and regions (MPOs/RPOs) provide a common framework for decision-making.



PennDOT, in cooperation with the MPOs/RPOs, has developed written provisions for how they will cooperatively develop, and share information related to the key elements of the PBPP process including the selection and reporting of performance targets. These PBPP written provisions are provided in the TIP and LRTP Appendix document. In addition, PennDOT has updated their Financial Guidance to be consistent with the PBPP provisions. The Financial Guidance provides the near-term revenues that support the STIP and is also provided in the TIP and LRTP Appendix document.

Evaluating 2027–2030 TIP Performance

The Federal Fiscal Year (FFY) 2027-2030 Transportation Improvement Program (TIP) supports the goal areas established in PennDOT's current long range transportation plan (Pennsylvania 2045). These include safety, mobility, equity, resilience, performance and resources. The goals are aligned with the national goal areas and federal performance measures and guide PennDOT and the Reading MPO in addressing transportation priorities.

The following sections provide an overview of the federal performance measures. Since asset management, reliability and CMAQ targets have not yet been set for the 2026-2029 performance period, the current project selection process for the FY 2027 to 2029 TIP is highlighted and related to meeting future targets. Over the 4-year TIP, nearly 85% of the total funding is associated with highway and bridge reconstruction, preservation, and restoration projects. However, these projects are also anticipated to provide significant improvements to highway safety and traffic reliability for both passenger and freight travel. Through these performance measures, PennDOT and the MPO will continue to track performance outcomes and program impacts on meeting the transportation goals and targets. Decision support tools including transportation data and project-level prioritization methods will be continually developed and enhanced to meet PennDOT and MPO needs. Dashboards and other reporting tools will be maintained to track and communicate performance to the public and decision-makers.



Safety Performance Measures (PM1)

Background

The FHWA rules for the *National Performance Management Measures: Highway Safety Improvement Program* (Safety PM) and *Highway Safety Improvement Program* (HSIP) were published in the Federal Register (81 FR 13881 and 81 FR 13722) on March 15, 2016, and became effective on April 14, 2016. These rules established five safety performance measures (commonly known as PM1). The current regulations are found at 23 CFR 490 Subpart B and 23 CFR 924. Targets for the safety measures are established on an annual basis.

Data Source

Data for the fatality-related measures are taken from the Fatality Analysis Reporting System (FARS) and data for the serious injury-related measures are taken from the State motor vehicle crash database. The Vehicle Miles of Travel (VMT) are derived from the Highway Performance Monitoring System (HPMS).

2026 Safety Measures and Targets (Statewide)

Measure	Baseline (2020-2024)	Target (2022-2026)
Number of fatalities	1,174.8	**1,140.4**
Rate of fatalities per 100 million VMT	1.216	**1.176**
Number of serious injuries	4,746.2	**4,722.0**
Rate of serious injuries per 100 million VMT	4.914	**4.870**
Number of non-motorized fatalities & serious injuries	864.6	**944.0**

Methods for Developing Targets

An analysis of Pennsylvania's historic safety trends was utilized as the basis for PennDOT and MPO/RPO coordination on the State's safety targets. The targets listed above are based on a 2% annual reduction for fatalities and maintaining levels for suspected serious injuries, which was derived from the actions listed in the Strategic Highway Safety Plan (SHSP), crash data analysis and the desire to support the national initiative Toward Zero Deaths.

Progress Towards Target Achievement and Reporting:

PennDOT and the Reading MPO continue efforts to ensure the TIP and Long Range Transportation Plan (LRTP) are developed and managed to support progress toward the achievement of the statewide safety targets. At this time, only the Delaware Valley Regional Planning Commission (DVRPC) has elected to establish their own regional safety targets. All other MPOs/RPOs have adopted the statewide targets.

PennDOT's Strategic Highway Safety Plan (SHSP) serves as a blueprint to reduce fatalities and serious injuries on Pennsylvania roadways and targets 18 Safety Focus Areas (SFAs) that have the most influence on improving highway safety throughout the state. Within the SHSP, PennDOT identifies 3 key emphasis areas to improve safety – impaired driving, lane departure crashes, and pedestrian safety. The SHSP is anticipated to be updated in 2026.

2022 SHSP Safety Focus Areas			
Lane Departure Crashes	Speed & Aggressive Driving	Seat Belt Usage	Impaired Driving
Intersection Safety	Mature Driver Safety	Local Road Safety	Motorcycle Safety
Pedestrian Safety	Bicycle Safety	Commercial Vehicle Safety	Young & Inexperienced Drivers
Distracted Driving	Traffic Records Data	Work Zone Safety	Transportation Systems Management & Operations
Emergency Medical Services	Vehicle-Train Crashes		

Pursuant to 23 CFR 490.211(c)(2), a State Department of Transportation (DOT) has met or made significant progress toward meeting its safety performance targets when at least 4 out of 5 safety performance targets established under 23 CFR 490.209(a) have been met or the actual outcome is better than the baseline performance for the year prior to the establishment of the target. Preliminary data indicates that Pennsylvania did not meet the statewide targets and is subject to the provisions of 23 United States Code § 148 (i). This requires the Department to submit an implementation plan that identifies gaps, develops strategies, action steps and best practices, and included a financial and performance review of all HSIP funded projects. This plan is due by June 30, 2026. In addition, the Department is required to obligate in Federal Fiscal Year (FFY) 2027 an amount equal to the FFY 2023 HSIP apportionment.

The FHWA has established certain special rules for HSIP under 23 U.S.C. 148(g). Among them is the Vulnerable Road User Safety special rule created by IIJA-BIL 23 U.S.C. 148(g)(3). This new special rule provides that the total annual fatalities of vulnerable road users in a state represents not less than 15% of the total annual crash fatalities in the state. Additional guidance on the Vulnerable Road Users Safety special rule was released by FHWA on February 2, 2022.

For Pennsylvania's 2024 targets, the Federal Highway Administration (FHWA) will report this determination by March 31, 2026.

As part of the Highway Safety Improvement Program Implementation Plan, the Department identified gaps and best practices to support further reducing serious injuries and fatalities. The following opportunities were identified as ways to assist with meeting future targets: (1) appropriate project selection, (2) expanding local road safety in HSIP, (3) assessing programs that support non-motorized safety, (4) expanding use of systemic safety projects, (5) improved project tracking for evaluation purposes and (6) project prioritization for greater effectiveness.

PennDOT continues to provide feedback on statewide and MPO-specific progress towards target achievement. The progress helps regional MPOs understand the impacts of their past safety investments and can guide future planning goals and strategy assessments.

Evaluation of TIP for Target Achievement:

The following will ensure that planned projects in the TIP will help to achieve a significant reduction of traffic fatalities and serious injuries on all public roads:

- PennDOT receives federal funding for its Highway Safety Improvement Program (HSIP). The 2027-2030 STIP includes $536 million of HSIP funding. The Department distributes over 60% of this funding to its regions based on fatalities, serious injuries, and reportable crashes. In addition, a portion of the HSIP funding is reserved for various statewide safety initiatives.
- All projects utilizing HSIP funds are evaluated based on a Benefit/Cost (B/C) analysis, Highway Safety Manual (HSM) analysis, fatal and injury crashes, application of systemic improvements, improvements on high-risk rural roads, and deliverability. A data-driven safety analysis, generated through an HSM analysis is required as part of PennDOT's HSIP application process. Performing this analysis early in the planning process for all projects will help ensure projects selected for inclusion in the STIP will support the fatality and serious injury reductions goals established under PM1.
- The process for selecting safety projects for inclusion in the TIP begins with the Network Screening Evaluation that the Department has performed on a statewide basis. Selecting locations with an excess crash frequency greater than zero from this network screening is key to identifying locations with a high potential to improve safety. This evaluation has been mapped and is included in PennDOT's OneMap to ease use by PennDOT's partners. At the current time, this is not all inclusive for every road in Pennsylvania. Locations not currently evaluated may be considered by performing the same type of excess crash frequency evaluation the Department utilizes. Once this analysis has been performed, the data is used by the Engineering Districts and planning partners to assist MPO/RPO's in evaluating different factors to address the safety concern.
- PennDOT continues to improve on the methods to perceive, define and analyze safety. This includes integration of Regionalized Safety Performance Functions (SPFs) that have been used to support network screening of over 20,000 locations.
- PennDOT continues to identify new strategies to improve safety performance. PennDOT is actively participating in FHWA's Every Day Counts round 7 (EDC-7) to identify opportunities to improve pedestrian safety as well as reduce rural roadway departures. These new strategies are to be incorporated into future updates to the SHSP.
- Safety continues to be a project prioritization criterion used for selecting other TIP highway and bridge restoration or reconstruction projects. Many restoration or reconstruction projects also provide important safety benefits.

- PennDOT continues to evaluate procedures to help in assessing how the TIP supports the achievement of the safety targets. As HSIP projects progress to the engineering and design phases Highway Safety Manual (HSM) predictive analyses are completed for the project in accordance with PennDOT Publication 638. The HSM methods are the best available state of practice in safety analysis and provides quantitative ways to measure and make safety decisions related to safety performance. PennDOT will continue to identify ways to expand the application of HSM analyses to support more detailed assessments of how the STIP is supporting achievement of the safety targets.

The following HSIP-funded TIP projects, using $13.58 million in HSIP funding and associated matching funds, often in combination with other state and federal funds, were developed in cooperation between PennDOT and the Reading MPO:

MPMS#	Project	Description and Location
123448	RATS High Friction Surface 2027	This project involves application of a high friction surface treatment to various identified locations within Berks County.
79467	SR 12 / Elizabeth Avenue	Project involves shoulder widening, removal of a narrow bridge, installation of a hybrid roundabout at Elizabeth Avenue and a traffic signal with realignment and a southbound left turn lane on PA 12 at Skyline Drive in Alsace Township.
123625	SR 183 and Old 22 Intersection	This project involves intersection improvements at the currently unsignalized intersection of SR 183, SR 4040 (Old Route 22) and SR 4018 near Strausstown in Upper Tulpehocken Township.
61972	US 222 Widening	Widening of US Route 222 from Schaeffer Road to the Kutztown Bypass in Richmond, Maidencreek and Maxatawny Townships. The highway will be widened to four lanes, a median barrier will be installed and roundabouts at Pleasant Hills Road and Richmond Road.
105963	Route 662 and Oley Turnpike Intersection	Construct a roundabout at the intersection of PA 662 (Memorial Highway) and SR 2020 (Oley Turnpike Road) in Oley Township.
117603	State Hill Road – SR 222 SB to Norfolk Southern RR	Improvements to State Hill Road (SR 3023) with the addition of a roundabout at US 222 Southbound ramps and addition of a roundabout combining the US 222 Northbound ramps with Spring Street in Wyomissing Borough.

The following non-HSIP funded projects also support the achievement of the safety targets:

MPMS#	Project	Description and Location
123604	TSMO Antiquated DMS Replacement	This project involves the installation of Dynamic Message Signs at various locations along I-78 in Berks County to advise motorists and improve safety.
110318	SR 12 Alsace Manor Intersection Improvements	The safety project improvements along State Route 12 (Pricetown Road) include utility relocations, shoulder widening and adding a center two-way left turn lane between the non-signalized intersection of Antietam Road (SR 2029) and Mount Laurel Road (SR 1004) including the intersection of SR 12 and Woodside Avenue, and installing a traffic signal at Antietam Road in Alsace Township, Berks County.
97258	SR 61 Median Barrier – Perry/ Windsor	This project involves the installation of a median barrier and pavement markings on State Route 61 anticipated to be from Zion's Church Road to 4th Street in conjunction with the SR 61 Restoration phase 2B (MPMS #10867) in Perry and Windsor Townships and Hamburg Borough, Berks County.
10815	SR 73 and Friedensburg Road (SR 2023)	This project is for intersection improvements to reconfigure and improve traffic flow at SR 73 (Memorial Highway) and SR 2023 (Friedensburg Road) in Oley Township, Berks County.
109222	SR 73 and 1005 Intersection Improvement	This project involves safety improvements to the intersection of State Route 73 (Lake Shore Drive) and State Route 1005 (Maidencreek Road) to address the skewed "T" intersection.
91658	TOC Operator-Berks	This project funds an operator working in the Traffic Operations Center in District 5-0. The operator monitors cameras, message boards and radio systems along I-78, I-176, US Route 222, and US Route 422 in Berks County.
120974	SR 183 / Shartlesville Road Intersection	This project involves signalization with left and right turn lanes to provide intersection control at the intersection of Bernville Road (State Route 183) and Shartlesville Road (State Route 4011), installation of a roundabout at the Bernville Road (State Route 183) and North Heidelberg Road (State Route 3033) intersection, and installation of a Two-Way Center Left Turn Lane from Washington Street to 2nd Street, in Jefferson Township, Penn Township, and the Borough of Bernville, Berks County.
90569	SR 222 and Long Lane Intersection Improvements	This project involves the construction of a roundabout on US Route 222 and Long Lane (State Route 1024) to improve safety and reduce congestion in Maxatawny Township, Berks County.
110008	222 Auxiliary Lane – Wyomissing "Hard Shoulder"	This project involves the addition of an auxiliary lane along US Route 222 Southbound between the Berkshire Boulevard overpass and Paper Mill Road Interchange in Wyomissing Borough, Berks County. The project also includes concrete patching, asphalt overlay (including portions of the associated ramps), preventative maintenance to the bridge spanning Crossing Drive in both directions (superstructure and substructure repairs), retaining wall rehabilitation work, and overhead sign upgrades.
94900	Freeway Service Patrol	This project funds the freeway service patrol on US Route 422, US Route 222 and PA 12 in the urban area in Berks County.
105954	State Hill Road from Colony Drive to SR 222 SB Ramps	Corridor safety improvements along State Route 3023 (State Hill Road) between the State Route 222 southbound on-ramp and Colony Drive in Wyomissing Borough. Improvements to be considered include widening, access management, roundabout(s), traffic signal updates and coordination.
123589	BPN – 4 Guide Rail Upgrades – 2027	This is funding set aside to address BPN-4 Guide Rail Upgrades – 2027 at various locations in Berks County.

Pavement/Bridge Performance Measures (PM2)

Background

The FHWA rule for the National Performance Management Measures; Assessing Pavement and Bridge Condition for the National Highway Performance Program (82 FR 5886) became effective on February 17, 2017. This rule established six measures related to the condition of the infrastructure on the National Highway System (NHS). The measures are commonly known as PM2. The current regulations are found at 23 CFR 490.Targets are established for these measures as part of a four-year performance period. This STIP includes projects that will impact future performance periods based on when projects are constructed or completed.

Data Source

Data for the pavement and bridge measures are based on information maintained in PennDOT's Roadway Management System (RMS) and Bridge Management System (BMS). The VMT are derived from the Highway Performance Monitoring System (HPMS).

2022–2025 Pavement Performance Measure Targets (Statewide)

Measure	Baseline 2021	2-year Target 2023	4-year Target 2025
% of Interstate pavements in Good condition	*68.8%*	*69.0%*	*65.0%*
% of Interstate pavements in Poor condition	*0.4%*	*2.0%*	*2.0%*
% of non-Interstate NHS pavements in Good condition	*37.2%*	*31.0%*	*29.0%*
% of non-Interstate NHS pavements in Poor condition	*1.5%*	*6.0%*	*6.5%*

Bridge Performance Measure Targets (Statewide)

Measure	Baseline 2021	2-year Target 2023	4-year Target 2025
% of NHS bridges by deck area in Good condition	*27.5%*	*28.0%*	*28.0%*
% of NHS bridges by deck area in Poor condition	*4.4%*	*7.5%*	*TBD*

Methods for Developing Targets

Pennsylvania's pavement and bridge targets were established by PennDOT in February 2023. The targets were developed through extensive coordination with a Transportation Asset Management Plan (TAMP) steering committee and workshops with MPOs/RPOs and FHWA's Pennsylvania Division. The targets are consistent with PennDOT's asset management objectives of maintaining the system at the desired state of good repair, managing to lowest life cycle costs (LLCC), and achieving national and state transportation goals.[1] Targets were calculated based on general system degradation (deterioration curves) offset by improvements expected from delivery of the projects in the STIP along with planned state funded maintenance projects.

1 For more information on LLCC: https://www.pa.gov/content/dam/copapwp-pagov/en/penndot/documents/research-planning-innovation/asset-management/lowest-life-cycle-cost-infographic.pdf

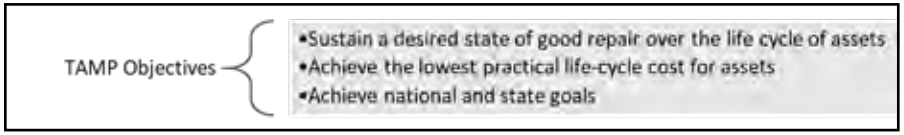
Progress Towards Target Achievement and Reporting:

At the mid-performance period, PennDOT has met the 2023 pavement and bridge targets for all measures except the "% of NHS bridges by deck area in Good condition". The timing of project completion likely caused the target to not be met, as more recent data has shown values that meet the target. Assessment of the 2025 targets will be made for the Full Performance Period Report due for submission to FHWA by October 1, 2026. The Baseline Performance Period report containing targets for the period from 2026-2029 will also be due for submission to FHWA by October 1, 2026. MPOs/RPOs will be responsible for adopting targets 180 days after the submission of the Baseline Performance Period report.

Improving Pennsylvania's pavement and bridges is a critical part of the strategic investment strategy for Pennsylvania's transportation network at the State and Federal level. Improving the condition and performance of transportation assets is another goal area of the 2045 Statewide LRTP. With limitations on available resources, the preservation of pavement and bridge assets using sound asset management practices is critical. Asset management is a key piece of FHWA's TPM program and is a vital force behind infrastructure performance.

Within its asset management framework, it was necessary for PennDOT to transition away from a "worst-first" programming methodology to a true overall risk-based prioritization and selection of projects for its system assets based on LLCC. "Worst-first" prioritization focuses work on the poorest condition assets at the expense of rehabilitation and preventative maintenance on other assets in better condition. PennDOT's revised strategy reflects its asset management motto and guiding principle: "The right treatment at the right time." This is reflective of Federal TAMP requirements that are centered on investing limited funding resources in the right place at the right time to produce the most cost-effective life cycle performance for a given investment.

PennDOT's TAMP formally defines its framework for asset management, which is a data-driven approach coupled with a risk-based methodology. It outlines the investment strategies for infrastructure condition targets and documents asset management objectives for addressing risk, maintaining the system at the desired state of good repair, managing to LLCC, and achieving national and state transportation goals. The TAMP is developed by the PennDOT Asset Management Division (AMD) in consultation with PennDOT Executive leadership, Center for Program Development and Management (CPDM), Bureau of Planning and Research (BPR), PennDOT Districts, the Pennsylvania Turnpike Commission (PTC), the MPOs/RPOs and FHWA.



With each program update, PennDOT has made substantial advances in its asset management tools and practices. A risk-based, data-driven approach to project selection helps ensure that the right projects are prioritized, and the transportation system is managed optimally to the lowest practical life-cycle cost. PennDOT's Pavement Asset Management System (PAMS) and Bridge Asset Management System (BAMS) are the foundations for this asset management approach. These systems forecast condition and investment needs by asset class using deterioration models and treatment matrices developed for PennDOT infrastructure and based on historical data. PennDOT has developed both predictive and deterministic models that support multi-objective decision-making based on current average work costs and estimated treatment lifespans. These models allow PennDOT to predict infrastructure investment needs

and future conditions under a range of scenarios.

As part of its asset management strategy, PennDOT strives to maintain as many highway and bridge assets as possible in a state of good repair. PennDOT defines its desired state of good repair as meeting the FHWA minimum condition thresholds for pavements and bridges: no more than 5 percent of NHS Interstate lane-miles shall be rated in poor condition, and no more than 10 percent of total NHS bridge deck area shall be rated as poor. However, the ability to achieve these condition thresholds is funding dependent.

PennDOT uses its PAMS and BAMS systems to assist with prioritizing preservation activities to extend asset life. This methodology allows PennDOT to manage assets to the lowest practical life-cycle cost and help it to make progress toward achieving its targets for asset condition and performance. Implementation of these improved asset management practices should be applied on all state and local networks.

Evaluation of TIP for Target Achievement:

The following has helped to ensure that planned projects in the TIP will help to maintain a desired state of good repair in bridge and pavement conditions for the Interstate and NHS roadways:

- Nearly 85% of PennDOT's TIP funding is directed to highway and bridge preservation, restoration, and reconstruction projects. Many of these projects are focused on our region's NHS roadways. PennDOT is responsible for programming projects on the Interstate system.
- Pennsylvania's investment strategy, reflected in the statewide 2027 Twelve Year Program (TYP) and 2027-2030 STIP, is the result of numerous strategic decisions on which projects to advance at what time. PennDOT continues to address the challenges of addressing local needs and priorities, while ensuring a decision framework is applied consistently across the state.
- In support of the TIP development, PennDOT, MPOs/RPOs, FHWA, and FTA jointly developed and approved General and Procedural Guidance and Transportation Program Financial Guidance documents.[2] The guidance, which is consistent with the TAMP, formalizes the process for Districts, MPOs/RPOs and other interested parties as they identify projects, perform a project technical evaluation, and reach consensus on their portion of the program.
- The General and Procedural Guidance also helps standardize the project prioritization process. The guidance is key to resolving issues between programming to lowest life-cycle cost, managing current infrastructure issues and risk mitigation. The resulting methodology allows data-driven, asset management-based decisions to be made with human input and insight based on field evaluations to achieve maximum performance of the available funds. The guidance document is revised for each STIP cycle as PennDOT's asset management tools and methods evolve and enhance its ability to program to lowest life cycle cost.
- PAMS and BAMS outputs are the basis for determining project programming to achieve LLCC. PennDOT Districts work with MPO/RPOs to generate the lists of recommended treatments by work type (such as highway resurfacing and bridge rehabilitation), based on LLCC and condition projections derived from PennDOT's PAMS and BAMS. PennDOT AMD provides any necessary support. For the 2027 Program Update, as PennDOT integrates PAMS and BAMS into the TIP and TYP development, AMD provides the PAMS and BAMS outputs for any District or MPO/RPO that requests them. Those areas that have the capability may produce their own outputs. PAMS and BAMS outputs define recommended treatments and forecasted conditions, but not necessarily complete project scopes and limits. These outputs serve as a guide to assist in the prioritization and selection of new projects to be considered for the program. Performance can be compared if projects are considered that do not align with PAMS and BAMS outputs.
- As part of the regional TIP development process mentioned above, the MPOs/RPOs and PennDOT Districts must document the differences between the PennDOT asset management system treatment and funding level recommendations and their selected projects as part of their TIP submissions. They must also document the coordination with the PennDOT District(s) and Central Office that occurred as part of this decision-making process. This information is used by PennDOT AMD to improve future asset management policy and procedures, sharing of information and tools, and system functionality.

Pavement projects appearing on the Reading MPO TIP and LRTP are developed in coordination with PennDOT. The Pavement Asset Management System (PAMS) is reviewed to identify candidate corridors and the required level of improvement. Projects can either be large scale capital projects funded with federal dollars and are listed in the TIP and LRTP or smaller scale pavement programs funded using state funds. Examples of these state programs include projects such as seal coating to preserve existing pavements or simple resurfacing projects through PennDOT's county maintenance applications (M89 Program). Pavement improvements also can be accomplished as a byproduct of projects addressing operational or safety issues as their primary focus.

2 The 2027 Financial Guidance can be found at: https://www.talkpatransportation.com/how-it-works/tip

The following pavement projects on the NHS and other major routes were developed in cooperation between PennDOT and the Reading MPO:

MPMS#	Project	Description and Location
96373	PA 61 Restoration – Phase 1	This project involves the highway restoration of State Route 61 from approximately 1700 feet south of Cabela Drive to the south end of the bridge over the Schuylkill River in Tilden Township, Berks County.
10328	PA 61 Restoration – Phase 2A	This project involves the highway restoration of PA 61 from 4th Street to the bridge over the Schuylkill River and State Street in Hamburg Borough.
10867	PA 61 Restoration – Phase 2B	This project involves the highway restoration of PA 61 and median barrier installation from Zions Church Road to the SR 61/4th Street intersection in Hamburg Borough, Windsor Township, and Perry Township. The 4th Street intersection will be reconfigured and Hawk Ridge Road will be extended to PA 61.
113825	Limekiln Road Resurface SR 562 to US 422 WB Ramps	This project provides for the resurfacing of Limekiln Road, State Route 2025, from State Route 562 (Boyertown Pike) to the US 422 westbound ramps in Amity Township.
123614, 123608, 123322, and123323	Berks High Volume Ralumac Microsurfacings	Projects involve Ralumac microsurfacings on high volume roads in various locations throughout Berks County.

Bridge projects appearing on the Reading MPO TIP and LRTP are developed in coordination with PennDOT. The Bridge Asset Management System (BAMS) is reviewed to identify candidate corridors and the required level of improvement. The bridge projects programmed in this TIP will make a major improvement to the MPO's overall bridge conditions.

The Reading MPO works closely with PennDOT to determine the most effective and efficient level of improvements to be implemented. In addition to those structures designated for major rehabilitation or replacement, the FFY 2027-2030 TIP contains four Bridge Preventative Maintenance packages, each containing several bridges, that are intended to provide repairs necessary to keep bridges currently designated as FAIR from becoming POOR. There is also a Box Culvert Bundle and the SR 4040 (Old Route 22) Bridge Bundle which addresses numerous smaller structures carrying highways over watercourses.

The following bridge projects on the NHS and other major routes were developed in cooperation between PennDOT and the Reading MPO:

MPMS#	Project	Description and Location
109894	SR 61 Bridge Rehabilitation	Project involves the rehabilitation of the PA 61 bridge over the Schuylkill River and SR 4028 (West State Street) in the Borough of Hamburg Borough and Tilden Township.
92070	Penn Avenue over Cacoosing Creek	Project involves the rehabilitation or replacement of US 422 over the Cacoosing Creek in Sinking Spring Borough.
10613	5th Street Bridge over NS RR	Project involves the rehabilitation or replacement of the Fifth Street (US 222-B) bridge over the Norfolk Southern Railroad in the City of Reading.
93626	5th Street Bridge over SR 12	Project involves the bridge rehabilitation / replacement of SR 2005 (5th Street) over SR 12 (Warren Street Bypass) in Muhlenberg Twp.
91995	Centre Avenue over Norfolk Southern RR	Project involves the rehabilitation or replacement of the bridge carrying Centre Avenue (SR 2087) over the Norfolk Southern Railroad in the City of Reading.
91976	PA 183 over Little Northkill and Trib. to Little Northkill Creeks	Project involves bridge rehabilitation / replacements of SR 183 (Bernville Road) over Little Northkill and a Trib. To Little Northkill Creek in Upper Tulpehocken Township.
91908	North Third Street over Tulpehocken Creek	Project involves the rehabilitation or replacement of the PA 419 (North Third Street) bridge over the Tulpehocken Creek in Marion and Heidelberg Townships.
110016	Lancaster Ave. over Swatara Creek	This project involves a bridge replacement on State Route 501 (Lancaster Ave.) over Swatara Creek in Bethel Township.

The TIP also addresses 16 more specific bridge repair or rehabilitation projects on lower order roadways and repairs to a further 15 bridges included as elements of highway improvement projects. Most significantly, the TIP contains the Final Design and initial year of construction phases for the proposed improvements to and reconstruction of the US 422 West Shore Bypass Phase 1, to be implemented beginning in FFY 2027. That project alone will replace a total of nine bridges with over 215,000 square feet of deck area. Subsequent phases of this reconstruction project will also include additional bridge replacements.

While not specifically included in the Reading MPO TIP, Interstate improvements carried out by PennDOT are currently conducting a major replacement/widening of the bridge carrying I-78 over Route 143 and Maiden Creek in Greenwich Township. It was included in a state-wide Major Bridge P3 (MBP3) project and is estimated to be completed in summer 2028. Also, as part of the Interstate TIP, design will begin for reconstruction of I-176 from SR 568 overpass to the SR 422 interchange in Berks County. The project will include reconstruction of the ramps at the Shillington Exit and the SR 422 ramps, as well as bridge reconstruction/ replacement, guiderail replacement, and Intelligent Transportation System (ITS) updates along the corridor.

In addition to PennDOT, the Pennsylvania Turnpike Commission (PTC) is also responsible for planning and programming improvements along its 565 miles of roadway statewide. The Pennsylvania Turnpike (I-76) passes through Caernarvon Township in southern Berks County and has an interchange (Morgantown Exit 298) with connections to I-176 and PA 10. The PTC is currently engaged in a major capital effort to improve the toll road. It has adopted a Capital Improvement program totaling $7.5 billion over a 10-year period to provide a better ride and increased mobility.

This plan includes a project to completely reconstruct the Turnpike between the Morgantown interchange to a point four miles to the east in Chester County. This project will include reconstruction of two bridges in Carnarvon Township carrying PA 23 (Main Street) and Twin Valley Road over the Turnpike and then widening the Turnpike to three lanes in each direction with improved shoulders. The total cost of these improvements is estimated to be about $35 million.

Additionally, the PTC is phasing in Open Road Tolling (ORT) that will eliminate the need for toll booths at interchanges. The PTC is currently removing the toll booths at the Morgantown interchange and will ultimately realign the roadway to provide for a smoother transition to and from PA 10 and I-176.

System Performance Measures (PM3)

Background

The FHWA final rule for the *National Performance Management Measures; Assessing Performance of the National Highway System, Freight Movement on the Interstate System, and Congestion Mitigation and Air Quality Improvement Program* (82 FR 5970) became effective on May 20, 2017. This rule established six measures related to transportation performance (commonly known as PM3). The current regulations are found at 23 CFR 490 Subparts E, F, G & H. Targets are established for these measures as part of a four-year performance period. This TIP includes projects that will impact future performance periods based on when projects are constructed or completed.

Data Source

The Regional Integrated Transportation Information System (RITIS) software platform is used to generate the travel time-based measures. Data from the American Community Survey (ACS) and FHWA's CMAQ annual reporting system are used for the non-SOV travel and emissions measures.

Travel Time and Annual Peak Hour Excessive Delay (PHED) Targets

Measure	Area	2-year Target 2023	4-year Target 2025
Interstate Reliability	*Statewide*	89.5%	89.5%
Non-Interstate Reliability		88.0%	88.0%
Truck Reliability Index		1.40	1.40
Annual Peak Hour Excessive Delay Hours Per Capita (Urbanized Area)	*Philadelphia*	15.2	15.1
	Pittsburgh	10.5	10.5
	Reading	6.5	6.5
	Allentown	8.4	8.4
	Harrisburg	9.1	9.1
	York	6.4	6.4
	Lancaster	3.7	3.7

Non–SOV Travel Measure Targets

Measure	Area	2-year Target 2023	4-year Target 2025
Percent Non-Single Occupant Vehicle Travel (Urbanized Area)	*Philadelphia*	30.0%	30.0%
	Pittsburgh	27.0%	27.0%
	Reading	20.2%	20.2%
	Allentown	18.6%	18.6%
	Harrisburg	20.2%	20.2%
	York	15.8%	15.8%
	Lancaster	21.9%	21.9%

CMAQ Emission Targets

Measure	Area	2-year Target 2023	4-year Target 2025
VOC Emissions (kg/day)	*Statewide*	18.000	36.000
NOx Emissions (kg/day)		392.000	785.000
PM2.5 Emissions (kg/day)		46.000	93.000
CO and PM10 Emissions (kg/day)		0.000	0.000

Progress Towards Target Achievement and Reporting:

At the mid-performance period, PennDOT has met the 2023 reliability and freight measure targets. Several regions have not met their 2023 targets for the PHED and On-road emission measures related to the CMAQ program. An assessment of the 2025 targets will be made for the Full Performance Period Report due for submission to FHWA by October 1, 2026.
PennDOT and the MPOs/RPOs work to ensure that the STIP, regional TIPs, and LRTP are crafted and managed to support the improvement of the reliability and Congestion Mitigation and Air Quality (CMAQ) performance measures. These efforts are further supported by auxiliary plans such as the Regional Operations Plans (ROPs), Congestion Management Processes (CMPs), and CMAQ Performance Plans.

For each biennial report, the Bureau of Operations (BOO) within PennDOT scrutinizes statewide reliability and delay data, examining it for overarching trends. Working in synergy, BOO and CPDM pool their efforts to construct statewide and regional performance summaries (in the form of tables or maps) to be shared with the MPOs/RPOs. These summaries may be enriched by supplemental data, such as insights on the root causes of congestion. Such detailed information helps MPOs/RPOs, in collaboration with each PennDOT District, to assess progress and pinpoint areas for capacity or traffic flow improvements in order to meet the established targets more effectively. These initiatives are coordinated with the LRTP, ROP, and CMP (where applicable) in each respective region.

Tracking performance trends also supports assessing the influence of completed investments on performance measures, provided that data is accessible pre- and post-project construction. These project impacts offer invaluable insights into the efficacy of historical funding, as well as potential benefits of future investments on traffic congestion and reliability.

Despite a significant portion of funding being allocated towards infrastructure repair and maintenance, PennDOT remains steadfast in its commitment to improve system mobility and enhance modal connections. PennDOT's LRTP lays out objectives aimed at fostering mobility across the transportation system, thereby steering investment decisions. Federal systems performance measures will be harnessed to evaluate future advancements in meeting these objectives and the associated targets.

MOBILITY

Strengthen transportation mobility to meet the increasingly dynamic needs of Pennsylvania residents, businesses, and visitors

- Continue to improve system efficiency and reliability.
- Continue to improve public transportation awareness, access, and services throughout Pennsylvania.
- Provide and prioritize multimodal transportation choices to meet user needs, expand mobility options, and increase multimodal system capacity and connectivity.
- Implement regional transportation, land use standards, and tools that result in improved multimodal coordination and complementary development.
- Adapt to changing travel demands, including those associated with e-commerce and post-COVID-19 pandemic changes.
- Work with private sector partners to establish data standards for mobility services and their applications (e.g., Uber and Lyft, carsharing services, bikeshares, etc.)

Evaluation of TIP for Target Achievement:

The following has helped to ensure that planned projects in the STIP will help to achieve an improvement in the system performance measures for the statewide interstate and NHS road system:

- PennDOT continues to emphasize their Transportation Systems Management and Operations (TSMO) initiatives to program low-cost technology solutions to optimize infrastructure performance. This has included the development of ROPs that integrate with the MPO CMP to identify STIP projects. A TSMO funding initiative was established in 2018 to further support these efforts. The 2027-2030 STIP includes over $483 million of funding dedicated to congestion relief projects.

- PennDOT has funded interstate projects to address regional bottlenecks. Mainline capacity increasing projects are limited to locations where they are needed most. These investments will provide significant improvements to mobility that support meeting the interstate and freight reliability targets.

- The statewide CMAQ program and Carbon Reduction Program (CRP) provides over $700 million in funding on the STIP for projects that benefit regional air quality or greenhouse gases. PennDOT has worked with Districts and MPO/RPOs to develop more robust CMAQ/CRP project selection procedures to maximize the air quality and carbon reduction benefits from these projects.

- Over $426 million is provided in the STIP for multimodal alternatives. This includes funding for transit operating costs, transit and rail infrastructure, support for regional carpooling and other bike and pedestrian infrastructure within the state. These projects provide opportunities to reduce vehicle miles of travel (VMT) and increase the percentage of non-single occupant vehicles.

- At this time, the potential impact of past and planned TIP investments on PM3 performance measures are still being evaluated. The timeline for project implementation often prevents an assessment of measurable results until a number of years after project completion. PennDOT continues to monitor the impact of recently completed projects on the reliability and delay measures. As more data is obtained, these insights will help PennDOT in evaluating potential project impacts in relation to other factors including incidents and weather on system reliability and delay.

The Reading MPO will receive approximately $17.5 million in CMAQ funding, $1.6 million in Carbon Reduction Program (CRP) funding and $3 million in Carbon Reduction Program-Urban (CRP-U) funding over the period FFY 2027-2030. The following projects using CMAQ funding were developed in cooperation between PennDOT and the Reading MPO using the MPO's CMAQ project selection process found in the LRTP and TIP Appendix document.

MPMS#	Project	Description and Location
69335	RATS BARTA Flex	This project consists of Highway and Bridge "flexed" CMAQ funds to SCTA to assist in the replacement of Fixed Route Electric Hybrid busses which have exceeded their service life in the BARTA service area.
86420	Berks Commuter Services	This project funds the Transportation Demand Management program in Berks County that is administered by CommutePA. By helping commuters find alternatives to driving alone such as public transit, car/van pooling, bicycles and walking, traffic congestion can be reduced and air quality and safety can be increased.
79467	SR 12 Elizabeth Avenue	Project involves shoulder widening, removal of a narrow bridge, installation of a hybrid roundabout at Elizabeth Avenue and a traffic signal with realignment and a southbound left turn lane on PA 12 at Skyline Drive in Alsace Township.
10815	SR 73 & Friedensburg Road (SR 2023)	Project involves intersection improvements to reconfigure and improve traffic flow at SR 73 (Memorial Highway) and SR 2023 (Friedensburg Road) in Oley Township.
90569	SR 222 and Long Lane (SR 1024) Intersection Improvements	Project involves the construction of a roundabout on US 222 at Long Lane (SR 1024) to improve safety and reduce congestion.
110075	SR 422 Ben Franklin Congested Corridor	This project involves the upgrade of 8 signalized intersections to be more traffic responsive to improve traffic flow between SR 2025 (Monocacy Creek Road) and River Bridge Road on SR 422 also known as Ben Franklin Highway in Amity Township, Berks County.
117603	State Hill Road – SR 222 SB to Norfolk Southern RR	The project involves improvements to State Hill Road (SR 3023) intersections with State Route 222 southbound ramps, State Route 222 northbound ramps and Spring Street/Granite Point Drive with addition of a roundabout at State Route 222 southbound and addition of a roundabout combining the State Route 222 northbound and Spring Street intersections in Wyomissing Borough.
117620	State Hill Road – Norfolk Southern RR to Penn Ave.	Project involves improvements to State Hill Road (SR 3023) with Penn Avenue (SR 3422) (US 422-B) intersection to improve safety and reduce congestion in Wyomissing Borough.

CRP and CRP-U funds were used to supplement the SR 12 Elizabeth Avenue, SR 422 Ben Franklin Congested Corridor, and State Hill Road – SR 222 Southbound to Norfolk Southern RR corridor projects.

In addition to the above, the following projects using non-CMAQ funding were also developed in cooperation between PennDOT and the Reading MPO to reduce congestion and improve safety.

MPMS#	Project	Description and Location
110318	SR 12 Alsace Manor Intersection Improvements	Project involves shoulder widening and the addition of a center two-way left turn lane between the non-signalized intersections of Antietam Road (SR 202() and Mount Laurel Road (SR 1004) including the intersection with Woodside Avenue in Alsace Township.
113325	Hamburg Traffic Improvements	This project will involve intersection and roadway improvements on State Street (SR 4028) and Fourth Street (SR 4035) within Hamburg Borough.
61972	US 222 Widening	Project involves widening US 222 to four lanes and installing a median barrier from Schaeffer Road in Maidencreek Township to the Kutztown Bypass in Richmond Township. Roundabouts will be constructed at US 222 intersections with Pleasant Hills Road and at Richmond Road.
114439	West Shore Bypass – Phase 1	This project involves highway reconstruction and widening to six lanes of US 422 (West Shore Bypass) from the Buttonwood Street Bridge overpass in West Reading through the Lancaster Avenue (US 222-B) interchange in the City of Reading. This includes the reconfiguration of both the Penn Avenue/Penn Street interchange and the Lancaster Avenue interchange and the reconstruction of the Bingaman Street bridge. The project also includes the reconstruction of the US 422 bridges over the Schuylkill River and Norfolk Southern RR just west of the I-176 interchange in Cumru Township including an improved ramp connection from I-176.
87688	SR 422 in Sinking Spring	Project involves re-alignment of intersections at US 422 (Penn Avenue) and PA 724 (Shillington Road) and SR 3055 (Mull Avenue) to reduce congestion in the Borough of Sinking Spring.

SOUTH CENTRAL TRANSIT AUTHORITY
FFY 2027–2030 TRANSIT TIP UPDATE
TRANSIT PERFORMANCE MEASURES NARRATIVE DOCUMENTATION
February 2026

Background on Transit Asset Management Plan

The final rule on metropolitan and statewide planning, published in the Federal Register on May 27, 2016, addressed changes to the metropolitan planning process stemming from the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation Act (FAST) and discussed Performance Based Planning and Programming (PBPP). As part of the implementation of the PBPP requirements, States, MPOs, and providers of public transportation must jointly agree upon and develop specific written provisions for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, and the reporting of performance targets, with the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the MPO region.

As a Tier II provider as defined under the Transit Asset Management (TAM) final rule, the South Central Transit Authority (SCTA) decided to develop and maintain its own Transit Asset Management Plan (TAMP). SCTA's TAMP 2025 update was adopted by its Board in June 2025, by the Lancaster MPO in October 2025 and by the Reading MPO in July 2025. The TAMP outlines the performance measures, targets, and implementation strategies SCTA will use to maintain its transit system assets. The TAMP also outlined the Authority's performance philosophy and policy, and covered performance management related to Rolling Stock, Facilities and Equipment used by SCTA in providing service.

The goal of the TAMP is for SCTA to reach and maintain a state of good repair for all of its capital assets through the Performance Based Planning and Programming process. Annually, a Performance Target is to be developed for the three Asset Classes the FTA has identified in its implementing guidelines. The expectation is that by achieving the annual Performance Targets SCTA will reach and maintain a state of good repair for the Asset Class identified.

Performance Targets

The TAM process requires SCTA to annually set performance measure targets and report performance against those targets. Required measures are:

- Rolling Stock – Percentage of revenue vehicles within a particular vehicle asset class past their Useful Life Benchmark (ULB) (age only)
- Facilities – Percentage of facilities that are below a 3 on the Transit Economic Recovery Model (TERM) Scale
- Equipment – Percentage of non-revenue, support-service and maintenance vehicles and equipment with a value of $50,000 or more past their ULB (age only)

SCTA's Performance Targets are authority-wide and reflect consideration of Rolling Stock, Facilities and Equipment supporting its Lancaster (RRTA) and Reading (BARTA) operations. It was decided to prepare authority-wide targets, since SCTA is required to report its National Transit Database (NTD) data as SCTA with the RRTA and BARTA operating information combined.

In addition, SCTA presents its Performance Targets for Rolling Stock in three separate groups: Fixed Route Buses/Directly Operated, Shared Ride Vehicles/Directly Operated and Shared Ride Vehicles/Purchased Transportation.

Annual performance measure targets are developed by SCTA for each asset class. The update of the performance targets is based on an annual inventory to provide a current picture of each asset, the prior year's performance and anticipated/obligated funding levels for the upcoming fiscal year available to advance the planned projects in each asset class.

The performance targets are approved by SCTA's Executive Director as the Plan's Accountable Executive. Coordination occurs with the Lancaster and Reading MPO's on the report and adoption of the performance targets by the SCTA Board and the MPO Boards.

Performance targets, and how those targets translate into project prioritization, is discussed in the TAMP. The SCTA TAMP is available on the SCTA website under the "About" tab at www.sctapa.com.

Public Transportation Agency Safety Plans

The FTA issued a final rule on Public Transportation Agency Safety Plans (PTASP), updated August 13, 2024. The PTASP final rule (49 C.F.R. Part 673) is meant to enhance safety by creating a framework for transit agencies to manage safety risks in their organization. It requires recipients of FTA funding to develop and implement safety plans that support the implementation of Safety Management Systems (SMS).

As part of the plan development process, performance targets must be established for the following areas:

1. **Fatalities,**
2. **Injuries,**
3. **Safety Events, and**
4. **System Reliability.**

SCTA developed its own PTASP in accordance with the final rule. SCTA's initial Safety Plan and Safety Performance Targets were adopted by the SCTA Board and the Berks and Lancaster MPO's in January 2020. As required by FTA guidelines, the Safety Plan is updated annually along with the preparation of the annual Safety Performance Targets. The updated Safety Plan and FY 2026 Performance Targets were adopted by the SCTA Board and the Berks MPO's in January 2026 and Lancaster County in February 2026.

Safety has always been a factor in SCTA's selection of capital projects to advance for funding in a fiscal year. The approved Safety Plan and its safety measures and targets will inform the prioritization of capital projects for advancement and the selection of projects for inclusion in the Transit TIP.

Development of FFY 2027–2030 Transit TIP

SCTA prepares a 20-year Long-Range Capital Improvement Program based on the Asset Inventory, Condition Assessment, and project based prioritization process described in SCTA's TAMP. The first four year years of the Long-Range Capital Improvement Program became the basis for identifying projects for inclusion in the proposed FFY 2027-2030 Transit TIP. As the TIP was being developed, consideration was given to the financial guidance provided for the development of the TIP; how the projects will contribute to achieving the performance targets in each asset class and maintain SCTA's Rolling Stock, Facilities and Equipment in a state-of-good- repair; and the impact the project will have on safety. The proposed FFY 2027-2030 Transit TIP does not reflect any increased funding SCTA will receive as part of the Infrastructure Investment and Jobs Act (IIJA). Additional projects will be programmed pending confirmation of the increased level of funding and the review and development of plans to invest the additional funds.

SCTA's Long-Range Capital Improvement Program also programs funding for the purchase of support and maintenance equipment. These projects include Computer Hardware/Software Upgrades (IT Equipment) and Purchase Shop/Maintenance Equipment. These projects are important to fund and advance in order to operate safely and efficiently and maintain the SCTA system in a state-of-good-repair.

Overall, the implementation of the proposed projects included in the FFY 2027-2030 Transportation Improvement Program are expected to assure SCTA achieves its goal of maintaining its Rolling Stock, Facilities and Equipment in a state-of-good-repair, achieve the current or higher Performance Targets in the future and address long-term operating and capital improvement needs.

Project And Financial Planning

In order to address the issues identified at the end of Chapter 3 and maintaining consistency with the Goals and Performance Measures, a specific set of projects and programs have been identified to be implemented during the period FFY 2027 through FFY 2050. The plan is divided into three intervals as follows:

Short-Term (Years 1-4): This segment is also referred to as the Transportation Improvement Program (TIP). It includes the highest priority projects for the region. Most projects on the TIP have advanced to at least the environmental assessment/ preliminary engineering state. Most are scheduled for construction during the four – year period. Projects must be on the TIP to receive federal funding.

Mid-Term (Years 5-12): Projects in this category are generally in the early stages of detailed study. Some but not all may have advanced to the environmental and engineering analysis stage. Most projects in this category will be in the Needs Analysis stage. In most cases, specific funding requirements for projects in this phase will be very preliminary. Projects in the short-term and mid-term project list constitute the Pennsylvania Twelve Year Transportation Program (TYP). Major capital projects must be on the Twelve Year Program to receive state funding.

Long-Term (Years 13+): These are projects that have been identified in the mid-term as extending beyond year 12. Projects on the long range plan will require substantial further analysis and funding commitments before they can move forward to the environmental assessment, preliminary design, final design and construction. These also include ongoing programs or practices expected to continue through this period. Finally, it includes line items within specific funding categories that will be drawn upon to fund both asset management and program driven projects as they are identified in subsequent LRTP and TIP updates.

Projects in the transportation plan are determined by various technical analyses of the Pennsylvania Department of Transportation (PennDOT), the South Central Transit Authority (SCTA) and the Berks County Planning Commission (BCPC) staff, serving as the technical staff for the Reading Area Transportation Study (RATS) committees. In addition, the plan recommends and supports numerous projects that have been brough to the attention of RATS by local municipalities and others. Typically, projects pass through a preliminary MPO screening process before they are placed on the plan. Exceptions to this process, such as Congressionally-mandated "earmarked" projects are also included. Normally major projects start on Candidate Project lists and then move through the mid- and short-range elements of the plan as more detailed studies and design elements are completed and funding needs, priorities and funding availability are reviewed. Smaller scaled projects may move directly to the mid- and short-range elements if they are developed from planning studies or program-specific line items.

Information from local municipalities and the public is valuable in identifying projects. In preparing this plan, the Berks County Planning Commission staff conducted public outreach efforts in late 2024 and early 2025 to meet with residents to review the vision, goals and objectives for this LRTP and identify current and potential issues and needs. Additionally, staff corresponded with the 72 municipalities in Berks County to request potential project recommendations. Outreach in developing this plan also included close coordination with the Pennsylvania State Transportation Commission's efforts in early 2025 to solicit priorities and project recommendations throughout the Commonwealth through an online process. This effort alone generated 165 local project recommendations. Responses were received requesting improvements to local and state bridges and intersection improvements, bicycle and pedestrian projects and transit projects. Many of these called for routine maintenance of roadways and bridges. The majority of responses received and requested improvements are already addressed by projects that are underway or currently programmed.

The Highway, Bridge, and Transit Project tables and Maps 36 through 42 show projects on the transportation plan. Maps 38 through 42 highlight the five planning regions.

Projects were classified into seven categories based on the funding used for their implementation. The highway program was broken down into four groups: Expressway Improvements; New/Expanded Facilities; Mobility, Congested Corridors, and ITS Projects; and Safety, Maintenance and Other Projects and Bridge Projects.

An additional highway category is the Interstate Management Program. This program is centrally managed by PennDOT. It sets aside annual funds to address statewide Interstate highway and bridge maintenance projects. The Interstate Management System will not address capacity adding projects or new Interstate Highway projects. These projects, if desired, must be contained and funded within a fiscally constrained regional LRTP and TIP.

Transit projects are illustrated in the SCTA/BARTA Capital Improvement Program.

Within each of those categories, projects are further broken down by the specific phase or phases of the project that are expected to occur within the specified planning period. These are identified as follows:

Study (S): The analysis of an area identified as having particular transportation deficiencies to document the extent of the problem (need) and identify a project or series of projects to correct that deficiency.

Preliminary Engineering (PE): This consists of environmental and engineering studies and public and agency involvement procedures related to the implementation of one or more of the study recommendations. As the project progresses into preliminary engineering, both project need and scope may be further developed, formally defined, and refined.

Final Engineering (F): This phase involves the development of detailed working drawings, specifications and estimates for approved transportation projects that allow the project to be bid and awarded to a contractor.

Utility Relocation (U): Depending on the scope and location of a project, it may become necessary to relocate public utilities such as sewer, water, gas, telephone or electric lines. This work needs to be coordinated with the appropriate utility and be completed either prior to or concurrent with actual construction.

Right of Way (R): Acquisition of property required to construct a project. PennDOT must have control of all right-of-way associated with a project prior to it going to construction.

Construction (C): The physical construction of the project extending from groundbreaking through the final acceptance by PennDOT.

Public Transit (PT): These projects relate to the provision of public transportation services.

Major Corridor Initiatives

RATS has initiated project programming efforts based on corridor studies for the US 222 North and US 422 West Shore Bypass corridors.

US 222 North Corridor:

A review of studies resulted in US 222 North being recommended as the highest priority for new capacity an safety improvements. The corridor had the least capacity to handle future growth due to its limited lanes (one through lane in each direction), had the least opportunity to accommodate this growth through interim improvements, and had the greatest potential for serious crashes due to the fact that there is no physical separation of opposing traffic. Following several years of reviewing costs and impacts of alternatives ranging from doing nothing through a new expressway on a new alignment, it was mutually agreed to focus improvements on a major upgrade to the existing highway. To date, improvements that have been completed along this corridor include the completed roundabout at PA 662 in Richmond Township, the widening and expansion of the US 222 intersections at PA 73 (signalized), Genesis Drive and Schaeffer Road (both roundabouts) in Maidencreek Township. Currently under construction is a roundabout at Long Lane in Maxatawny Township. The US 222 Widening project (MPMS# 61972) will include widening the highway to 4-lanes with median barriers between Schaeffer Road in Maidencreek Township and the Kutztown Bypass in Richmond Township, including roundabouts at Pleasant Hill Road and Richmond Road and is anticipated to let in late 2026. Planning for widening the highway from the Kutztown Bypass to the Lehigh County Line is initiated in the Mid-Range period. Construction phases for that section will be addressed in future plan updates.

US 422 West Shore Bypass:

The US 422 West Shore Bypass constitutes the most significant maintenance need facing the region. To address this concern, the MPO requested funding to conduct a study documenting the extent of need for the rehabilitation of the West Shore Bypass (SR 422) between PA 12 and Perkiomen Avenue (SR 2021) and development of an implementation plan for the correction of those deficiencies. The US 422 West Shore Bypass currently carries traffic ranging from 45,000 vehicles per day on the eastern side to nearly 80,000 vehicles per day on the western end. This highway serves as the principal arterial through the urban area and provides the primary regional access to the City of Reading. This highway was originally constructed in 1964 and there are some sections of original pavement while others have seen some overlay. Safety and capacity issues exist at each interchange. The section also contains 9 bridges in need of significant repairs or replacement. Three (3) of these are currently designated as being in Poor condition. Due to extremely limited options available for detour routes, two through lanes of traffic in each direction will need to be maintained during construction. Given the fragile condition of this highway and the need for a coordinated effort to make these highway and bridge improvements in a way that allows the community to continue to function, we requested coordination with our partners at PennDOT and the Federal Highway Administration to identify the scope of this project and the development of an implementation plan that minimizes the impact to Berks County.

The study phase was completed and identified over $650 million in improvements required to bring the corridor up to current design standards and to accommodate future traffic growth. Preliminary engineering was initiated for the portion of the corridor extending from SR 12 to just east of I-176. Based on financial considerations, this section will be broken into multiple construction phases. Final design and Right-of-Way acquisition for Phase 1, a section extending from Buttonwood Street to just west of I-176 is included in the Short-range period with reconstruction planned in the Mid-range period. Phase 2, extending from Buttonwood Street to PA 12 on the west end of the corridor, and including the reconstruction of the US 422 interchange with I-176 will continue through its design process in the Mid-range period with reconstruction anticipated to begin in the Mid-range period and extend into the Long-range period. The final section extending east to Perkiomen Avenue remains a candidate project at this time.

Bridge Initiatives

Beginning in early 2008, PennDOT launched a state-wide initiative. The ultimate goal of that program was to make a significant reduction in the number of poor bridges throughout Pennsylvania. An initial target was to repair or replace a minimum of 1000 poor bridges in Pennsylvania over a 3-year period. PennDOT has continued this focus on bridge repair and replacement by targeting significant resources at the program and in project development processes such as bridge bundling and bridge preventative maintenance programs. The IIJA expanded the emphasis on bridges at the Federal level with the inclusion of the Bridge Investment Program funding in addition to the formula programs. As well, PennDOT and the Reading MPO continue to work with local municipalities to improve eligible local-owned bridges.

Short–Range Program (2027–2030)

The Short-Range Program is the locally endorsed list of high priority highway and transit projects proposed for implementation with Federal assistance. The Federal and State governments designated RATS as the body responsible for preparing the Transportation Improvement Program (TIP) for Berks County. The Federal regulations require that a TIP shall: a) consist of improvements from the locally developed transportation plan; b) cover a period of no less than three years; c) indicate the area's priorities; d) include realistic estimates of the total costs and revenues for the program period; and 3) conform to air quality regulations. As such, the TIP will be updated at least twice during the short-range period. Both highway and transit projects proposed to be implemented with Federal assistance must be consistent with an approved LRTP and included in an approved TIP as a condition for federal review and approval. A defining characteristic of the TIP is that it must be constrained to the level of funding that can be reasonably expected to be available. PennDOT provides each MPO in Pennsylvania with specific guidance regarding available funding. Additional documentation on funding occurs later in this chapter.

Key Highway Projects – Short–Range (2027–2030)

US 222 North – Widening of US 222 from Maidencreek Township through Richmond Township to the Kutztown Bypass. Additional improvements programmed along US 222 include the construction of a roundabout at the intersection with Long Lane in Maxatawny Township.

US 422 West Shore Bypass Phase 1– Completion of utility relocations and start of construction for phased reconstruction and widening to 6-lanes extending from SR 12 to just east of I-176 including upgraded interchanges at North Wyomissing Boulevard, Penn Street/Penn Avenue (US 422-B), Lancaster Avenue (US 222-B) and I-176, replacement of all related structures including the Bingaman Street Bridge and improved bicycle and pedestrian facilities.

222 Auxiliary Lanes – Completion of utility relocations and construction of an additional auxiliary lane on US 222 southbound beginning where Berkshire Boulevard passes over US 222 to the Paper Mill Road exit. A northbound auxiliary lane on US 222 will be constructed from the entrance ramp of the State Hill Road interchange to the SR 422 eastbound exit ramp in the mid-range period.

Other Major Road and Bridge Projects – In addition to the above, the following projects are scheduled for completion in the short-range period: intersection and safety projects on PA 12 extending from Elizabeth Avenue in Alsace Township to Mount Laurel Avenue in Alsace Township; reconstruction of the intersection of US 422, PA 724 and Mull Avenue in Sinking Spring; and major highway and bridge restorations on PA 61 between Perry Township and the Schuylkill County line. Major bridge projects include: the replacement of the PA 419 bridge over the Tulpehocken Creek in Heidelberg and Marion Townships; preservation and repairs to several bridges along US 422 in the City of Reading, Cumru Township and Exeter Township; and replacement of the Bellevue Avenue bridge over the Reading Blue Mountain and Northern Railroads in Muhlenberg Township.

Key Transit Projects (Short Range)

Purchase of Transit Buses – Ongoing fleet upgrade. Transit buses are generally replaced on a 12-year cycle.

Purchase of Paratransit Vans – Ongoing replacement of paratransit vans on a 5-year cycle.

Mid–Range Program (2031–2038)

During the mid-range program, the TIP will be updated four times.

US 222 North – Construction will be completed on the widening project from Maidencreek Township through Richmond Township to the Kutztown Bypass.

US 422 West Shore Bypass – Construction will continue on Phase 1 of the reconstruction widening the highway to 6-lanes extending from the Buttonwood Street Bridge overpass to just east of SR 3222 (Lancaster Avenue) including upgraded interchanges at Penn Street/Penn Avenue (US 422-B) and Lancaster Avenue (US 222-B) and replacement of all related structures including the Bingaman Street Bridge and improved bicycle and pedestrian facilities. Two bridges immediately west of the I-176 interchange crossing over the Schuylkill River and NS Railroad will also be replaced and other bridges will be rehabilitated.

US 222 Auxiliary Lanes - A northbound auxiliary lane on US 222 will be constructed from the entrance ramp of the State Hill Road interchange to the SR 422 eastbound exit ramp.

SR 183 – Intersection improvements will be made along SR 183 at Old 22 in Upper Tulpehocken Township and at Shartlesville Road from 500 feet west of Solly Lane to 200 feet east of Beyerle Hill Road in Bernville Borough, Jefferson Township, and Penn Township.

Highway programs will focus on improving safety and maintaining existing facilities and based on reviews of the Highway Safety Improvement Program and Pavement Asset Management Program. Significant projects include: three phases of widening and safety improvements to the SR 3023 State Hill Road corridor extending from Colony Drive to Penn Avenue in the Borough of Wyomissing; and realignment of the intersection of SR 73 (Lake Shore Drive) and SR 1005 (Calcium Road) to address the skewed "T" intersection. Bridge projects and priorities will be selected on a two-year cycle in coordination with update of the TIP and will be drawn primarily from a review of PennDOT's Bridge Asset Management System. Certain local and poor bridges may also be added as funding and priorities dictate. Line items have been created in this period for categories to which specific projects will be assigned in future updates. These projects will be selected based on the asset management program and investment plan and consistency with the goals and performance measures of this plan.

Transit projects will be primarily scheduled replacements of transit buses based on a 12-year cycle and of paratransit vans based on a 5-year cycle as well as regular facility maintenance.

Long-Range Program (2039-2050)

During the long-range period of the plan, the TIP will be updated six times.

Major projects anticipated to occur in the long-term period are anticipated to be: the final phases of the US 422 West Shore Bypass reconstruction; construction of the section of US 222 North extending from the Kutztown Bypass to the Lehigh County Line; widening of SR 183 between US 222 and West Leesport Road in Bern Township; on-going county-wide pavement restoration, bridge rehabilitation and replacement based on the state's Transportation Asset Management Plan (TAMP) and local project recommendations; ongoing Transit fleet upgrades and maintenance of facilities.

Due to the current emphasis on bridge replacement and rehabilitation, specific bridge projects will not be listed in the long-range program. Bridge projects will be selected on a two-year cycle in coordination with the update of the Transportation Improvement Program and will be drawn primarily from PennDOT's inventory of poor bridges. Certain local and poor bridges may also be added as funding and priorities dictate. Line items have been created in this period for categories to which specific projects will be assigned in future updates. These projects will be selected based on the asset management program and investment plan and consistency with eh goals and performance measures of this plan.

HIGHWAY, BRIDGE AND TRANSIT PROJECTS

SHORT, MID AND LONG RANGE TRANSPORTATION PLANNING PERIODS
MARCH, 2026

EXPRESSWAY IMPROVEMENTS

Map #	Project Name	Municipality	Cost	Short Range 2027-2030	Mid-Range 2031-2038	Long-Range 2039-2050
110008	SR 222 SB Auxilary Lane *	Wyomissing	$12,991,500	UC		
114108	SR 222 Warren Street NB Auxiliary Lane	Wyomissing	$11,586,625		C	
114439	US 422 West Shore Bypass Phase 1 *	Reading, Cumru	$130,316,000	UC		
114439	US 422 West Shore Bypass Phase 1 *	Reading, Cumru	$299,550,000		C	
72814	US 422 West Shore Bypass Phase 2 *	Wyo, Reading, W Reading, Cumru, Exeter	$50,052,535		FURC	
72814	US 422 West Shore Bypass Phase 2 *	Wyo, Reading, W Reading, Cumru, Exeter	$273,661,000			C
	Future Expressway Maintenance (1)					PFURC
	* Includes Related Bridge Work	**SUBTOTAL**	**$778,157,660**			

S = Study P = Preliminary Engineering F = Final Engineering R = Right of Way U = Utility Relocation C = Construction PT = Public Transit
(1) Funding from Highway / Bridge Line Items as Necessary

NEW / EXPANDED FACILITIES

Map #	Project Name	Municipality	Cost	Short Range 2027–2030	Mid-Range 2031–2038	Long-Range 2039–2050
61972	US 222 Widening	Maidencreek, Maxatawny, Richmond	$53,062,171	C		
61972	US 222 Widening	Maidencreek, Maxatawny, Richmond	$3,711,843		C	
90569	SR 222 & Long Lane	Maxatawny	$51,500	C		
97234	US 222 Kutztown Bypass to Lehigh County Line	Maxatawny	$6,002,080		P	
97234	US 222 Kutztown Bypass to Lehigh County Line	Maxatawny				FURC
117721	SR 183 (Bernville Road) Lane Drop Hourglass Fix	Bern	$614,950		P	
117721	SR 183 (Bernville Road) Lane Drop Hourglass Fix	Bern				FURC
	* Includes Related Bridge Work	**SUBTOTAL**	**$63,422,544**			

S = Study P = Preliminary Engineering F = Final Engineering R = Right of Way U = Utility Relocation C = Construction PT = Public Transit

(1) Funding from Highway / Bridge Line Items as Necessary

MOBILITY, CONGESTED CORRIDORS AND ITS PROJECTS

Map #	Project Name	Municipality	Cost	Short Range 2027–2030	Mid-Range 2031–2038	Long-Range 2039–2050
10815	SR 73 & Friedensburg Road	Oley	$250,000	P		
10815	SR 73 & Friedensburg Road	Oley	$6,399,285		PFURC	
123604	I-78 Dynamic Message Sign Replacement	Tilden	$289,087	PFC		
87688	SR 422 in Sinking Spring	Sinking Spring	$4,615,430	UC		
110075	SR 422 Ben Franklin Congested Corridor	Amity	$4,120,000	C		
123619	SR 422 Ben Franklin Congested Cor. West	Amity, Exeter	$3,462,890		C	
113325	Hamburg Traffic Improvements	Hamburg	$1,915,135	FURC		
113325	Hamburg Traffic Improvements	Hamburg	$685,400		C	
69335	RATS BARTA Flex	N/A	$1,350,000	PT		
69335	RATS BARTA Flex	N/A	$7,200,000		PT	
69335	RATS BARTA Flex	N/A				PT
86420	Berks Commuter Services	Various	$1,220,150	C		
86420	Berks Commuter Services	Various	$2,595,167		C	
86420	Berks Commuter Services	Various				C
91658	TOC Operator-Berks	Various	$400,000	C		
91658	TOC Operator-Berks	Various	$800,000		C	
91658	TOC Operator-Berks	Various				C
94900	Freeway Service Patrol	Various	$991,093	C		
94900	Freeway Service Patrol	Various	$2,315,939		C	
94900	Freeway Service Patrol	Various				C
82791	CMAQ Reserve Line Item	Misc.	$369,466	PFURC		
82791	CMAQ Reserve Line Item	Misc.	$14,780,027		PFURC	
82791	CMAQ Reserve Line Item	Misc.				PFURC
	* Includes Related Bridge Work	**SUBTOTAL**	**$53,759,069**			

S = Study P = Preliminary Engineering F = Final Engineering R = Right of Way U = Utility Relocation C = Construction PT = Public Transit
(1) Funding from Highway / Bridge Line Items as Necessary

SAFETY, MAINTENANCE & OTHER PROJECTS

Map #	Project Name	Municipality	Cost	Short Range 2027–2030	Mid-Range 2031–2038	Long-Range 2039–2050
79467	SR 12 Elizabeth Avenue	Alsace	$13,802,000	C		
110318	SR 12 Alsace Manor Intersection	Alsace	$4,635,000	C		
96373	SR 61 Restoration Phase 1 *	Tilden	$64,375	C		
10328	SR 61 Restoration Phase 2A *	Hamburg	$51,500	C		
10867	SR 61 Restoration Phase 2B	Hamburg, Windsor, Perry	$14,053,045	UC		
10867	SR 61 Restoration Phase 2B	Hamburg, Windsor, Perry	$7,012,000		C	
97258	SR 61 Median Barrier	Perry, Windsor, Hamburg	$546,364	C		
109222	SR 73 and 1005 Intersection Improvement	Maidencreek	$173,880	FUR		
109222	SR 73 and 1005 Intersection Improvement	Maidencreek	$3,477,900		C	
123625	SR 183 and Old 22 Intersection	Upper Tulpehocken	$1,566,000	PFR		
123625	SR 183 and Old 22 Intersection	Upper Tulpehocken	$10,225,850		FURC	
120974	SR 183 and Shartlesville Road Intersection	Bernville, Jefferson, Penn	$1,592,025	PFR		
120974	SR 183 and Shartlesville Road Intersection	Bernville, Jefferson, Penn	$9,610,765		UC	
105963	SR 662 and Oley Turnpike Intersection	Oley	$4,676,411	UC		
110012	SR 724 Fence Barrier	Cumru	$1,738,950		C	
113821	SR 2025 Antietam Rd Resurface - SR 562 to Carsonia	Amity, Exeter, Oley, Alsace, and Lower Alsace	$1,194,100		C	
113825	SR 2025 Limekiln Road Resurface	Amity	$636,540	C		
105954	SR 3023 State Hill Rd - Colony Dr. to SR 222 SB Ramps	Wyomissing	$7,500,000	C		
105954	SR 3023 State Hill Rd - Colony Dr. to SR 222 SB Ramps	Wyomissing	$12,168,600		C	
117603	SR 3023 State Hill Road - SR 222 SB to NSRR	Wyomissing	$9,071,270	UC		
117603	SR 3023 State Hill Road - SR 222 SB to NSRR	Wyomissing	$2,059,000		C	
117620	SR 3023 State Hill Road -NSRR to Penn Ave.	Wyomissing	$2,133,980	FR		
117620	SR 3023 State Hill Road -NSRR to Penn Ave.	Wyomissing	$4,333,480		URC	

SAFETY, MAINTENANCE & OTHER PROJECTS

Map #	Project Name	Municipality	Cost	Short Range 2027–2030	Mid-Range 2031–2038	Long-Range 2039–2050
113841	SR 3055 (Mull Ave/Van Reed Road) Resurface	Sinking Spring, Spring	$1,976,208		C	
123322	Berks High Volume Ralumac Microsurfacings #3	Varioius	$2,500,000	C		
123323	Berks High Volume Ralumac Microsurfacings #4	Various	$2,500,000	C		
123608	Berks High Volume Ralumac Microsurfacings #5	Various	$2,500,000	C		
123614	Berks High Volume Ralumac Microsurfacings #6	Various	$2,500,000	C		
123447	RATS AWPM - 2027	Various	$800,000	C		
123447	RATS AWPM - 2027	Various	$400,000		C	
123448	High Friction Surface Treatments (Berks 2027)	Various	$800,000	C		
123448	High Friction Surface Treatments (Berks 2027)	Various	$400,000		C	
123589	BPN - 4 Guide Rail Upgrades - 2027	Various	$200,000	C		
123589	BPN - 4 Guide Rail Upgrades - 2027	Various	$400,000		C	
123589	BPN - 4 Guide Rail Upgrades - 2027	Various				C
82793	Alternative Transportation (TAP) Line Item	Various	$2,424,000	C		
82793	Alternative Transportation (TAP) Line Item	Various	$4,847,000		C	
82793	Alternative Transportation (TAP) Line Item	Various				C
82795	Safety Reserve Line Item - HSIP	Misc.	$208,319	PFURC		
82795	Safety Reserve Line Item - HSIP	Misc.	$10,795,150		PFURC	
82795	Safety Reserve Line Item - HSIP	Misc.				PFURC
82796	Urban Reserve Line Item	Misc.	$2,664	PFURC		
82796	Urban Reserve Line Item	Misc.	$13,478,533		PFURC	
82796	Urban Reserve Line Item	Misc.				PFURC
83081	Delivery Consultant Assistance (Bridges)	Misc.	$900,000	P		
83081	Delivery Consultant Assistance (Highways)	Misc.	$4,600,000		P	
83081	Delivery Consultant Assistance (Highways)	Misc.	$12,000,000			P

SAFETY, MAINTENANCE & OTHER PROJECTS

Map #	Project Name	Municipality	Cost	Short Range 2027–2030	Mid–Range 2031–2038	Long–Range 2039–2050
89056	Transportation Alternative Project Mgmt	Misc.	$100,000	P		
89056	Transportation Alternative Project Mgmt	Misc.			P	
89056	Transportation Alternative Project Mgmt	Misc.				P
95399	Environmental Impacts Resolution Line Item	Various	$812,000	P		
95399	Environmental Impacts Resolution Line Item	Various	$1,015,000		P	
95399	Environmental Impacts Resolution Line Item	Various				P
97417	Construction Assistance (State)	Various	$200,000	C		
97417	Construction Assistance (State)	Various	$400,000		C	
97417	Construction Assistance (State)	Various				C
97838	Construction Assistance (Federal)	Various	$200,000	C		
97838	Construction Assistance (Federal)	Various	$400,000		C	
97838	Construction Assistance (Federal)	Various				C
102189	RATS Highway and Bridge Reserve Line Item	Misc.	$3,197,759	C		
102189	RATS Highway and Bridge Reserve Line Item	Misc.	$130,322,393		C	
102189	RATS Highway and Bridge Reserve Line Item	Misc.				C
102763	RATS Traffic Review Assistance	Misc.	$200,000	P		
102763	RATS Traffic Review Assistance	Misc.	$400,000		P	
102763	RATS Traffic Review Assistance	Misc.				P
116907	Geotech In-House Assistance	Misc.	$200,000	P		
116907	Geotech In-House Assistance	Misc.	$400,000		P	
116907	Geotech In-House Assistance	Misc.				P
	* Includes Related Bridge Work	**SUBTOTAL**	**$314,402,061**			

S = Study P = Preliminary Engineering F = Final Engineering R = Right of Way U = Utility Relocation C = Construction PT = Public Transit

(1) Funding from Highway / Bridge Line Items as Necessary

BRIDGE PROJECTS

Map #	Project Name	Municipality	Cost	Short Range 2027–2030	Mid-Range 2031–2038	Long-Range 2039–2050
109894	SR 61 Bridge Rehabilitation	Tilden, Hamburg	$51,500	C		
114408	SR 143 over Unnamed trib to Maiden Creek	Albany	$553,455	P		
114408	SR 143 over Unnamed trib to Maiden Creek	Albany	$671,975		FURC	
91976	SR 183 over Little Northkill Creek & Trib to Little Northkill	Upper Tulpehocken	$2,925,509	FURC		
91908	SR 419 North Third Street over Tulpehocken Creek	Heidelberg	$7,840,610	C		
110014	SR 419 Rehrersburg Road over Trib Mill Creek	Tulpehocken	$2,308,000	URC		
92070	SR 422 Penn Avenue over Cacoosing Creek	Sinking Spring	$3,862,500	C		
110016	SR 501 Lancaster Ave over Swatara Creek	Bethel	$1,216,670	UC		
10826	SR 1003 Ontelaunee (Lake) Bridge (Removal)	Miadencreek	$715,135	PRC		
10826	SR 1003 Ontelaunee (Lake) Bridge (Removal)	Miadencreek	$519,525		C	
85643	SR 1015 Donat Road over Stoney Run	Albany	$10,300	C		
117724	SR 1024 Long Lane over Mill Creek	Maxatawny	$2,276,875	FURC		
116478	SR 1029 Smoketown Road over Little Sacony Creek	Rockland	$2,351,500	C		
10613	SR 2005 5th Street Bridge over NS RR	Reading	$1,581,400	FURC		
10613	SR 2005 5th Street Bridge over NS RR	Reading	$8,379,000		C	
93626	SR 2005 5th St Bridge over PA Route 12	Muhlenberg	$2,121,919	PC		
93626	SR 2005 5th St Bridge over PA Route 12	Muhlenberg	$1,590,082		C	
10527	SR 2016 Bellevue Avenue over RBM&N RR	Muhlenberg	$8,203,965	C		
10751	SR 2045 Funk Road over Trib to Ironstone Creek	Colebrookdale	$1,754,135	UC		
91995	SR 2087 Centre Avenue over Norfolk Southern RR	Reading	$3,615,535	FURC		
91995	SR 2087 Centre Avenue over Norfolk Southern RR	Reading	$8,755,000	C		
94290	SR 3037 Charming Forge over Mill Race Creek	Marion	$1,295,655	UC		
117725	SR 4005 over Meck Creek	Bethel	$1,612,570	UC		
117726	SR 4028 (Old Route 22) over Maiden Creek Tributary	Greenwich	$1,561,652	FUC		
117726	SR 4028 (Old Route 22) over Maiden Creek Tributary	Greenwich	$2,688,435		C	
110013	SR 4040 (Old Route 22) Bridge Bundle	Bethel, Upper Tulpehocken	$5,677,360	C		

BRIDGE PROJECTS

Map #	Project Name	Municipality	Cost	Short Range 2027–2030	Mid-Range 2031–2038	Long-Range 2039–2050
110189	SR 4040 Old Route 22 Over Birch Creek	Upper Tulpehocken	$41,200	U		
110191	SR 4040 over Birch Creek	Upper Tulpehocken	$41,200	U		
110192	SR 4040 over Trib Birch Creek	Upper Tulpehocken	$41,200	U		
110193	SR 4040 over Mollhead Creek	Upper Tulpehocken	$41,200	U		
110194	SR 4040 over Trib Mollhead Creek	Upper Tulpehocken	$41,200	U		
111811	SR 4040 over Northkill Creek	Upper Bern	$41,200	U		
110078	SR 4040 (Old Route 22) over Trib to Northkill Creek	Upper Tulpehocken	$2,781,000	C		
110011	Berks Box Culvert Bundle	Misc.	$10,300	C		
114392	Berks Box Culvert Bundle #2	Various	$1,724,580	PF		
114392	Berks Box Culvert Bundle #2	Various	$2,086,740		C	
114378	RATS Bridge Preservation #9	Various	$10,300	C		
114485	RATS Bridge Preservation #10	Various	$10,300	C		
114489	RATS Bridge Preservation #11	Various	$12,360,000	C		
120990	RATS Bridge Preservation #12	Various	$4,062,000	PC		
120990	RATS Bridge Preservation #12	Various	$2,906,200		C	
10727	Dwight Street Bridge	Spring	$797,950	FUR		
10727	Dwight Street Bridge	Spring	$7,379,400		C	
10774	Parkview Road Bridge	St. Lawrence	$2,134,107	PFURC		
10774	Parkview Road Bridge	St. Lawrence	$1,126,000		C	
56728	Pigeon Creek Bridge	Shoemakersville	$521,920		P	
110088	High Boulevard Bridge	Cumru	$652,394	PFR		
110088	High Boulevard Bridge	Cumru	$2,400,141		UC	
110079	Penn Street over Maiden Creek (Removal)	Lenhartsville	$1,589,350	PFURC		
10730	Old River Road Bridge	Robeson	$634,995	FUR		
10730	Old River Road Bridge	Robeson	$3,188,075		C	
103908	Swamp Creek Road Bridge	Colebrookdale	$800,000	C		

BRIDGE PROJECTS

Map #	Project Name	Municipality	Cost	Short Range 2027–2030	Mid-Range 2031–2038	Long-Range 2039–2050
123129	Levengood Road Bridge over Manatawny Creek	Amity	$800,000	C		
103882	Eagle Road Bridge over Moselem Creek	Richmond	$1,850,000	C		
120995	Municipal Bridge Line Item	Various	$5,500,000	C		
120995	Municipal Bridge Line Item	Various	$2,941,109		C	
80070	RATS Bridge Review/Management	Misc.	$200,000	P		
80070	RATS Bridge Review/Management	Misc.	$400,000		P	
80070	RATS Bridge Review/Management	Misc.	$550,000			P
		SUBTOTAL	**$133,804,323**			

S = Study P = Preliminary Engineering F = Final Engineering R = Right of Way U = Utility Relocation C = Construction PT = Public Transit
(1) Funding from Highway / Bridge Line Items as Necessary

INTERSTATE MANAGEMENT PROGRAM (FROM STATEWIDE PROGRAM)

Map #	Project Name	Municipality	Cost	Short Range 2027–2030	Mid-Range 2031–2038	Long-Range 2039–2050
112345	I-176 Break and Seat SR 568 to SR 422*	Cumru, Robeson	$740,313	PFUR		
112345	I-176 Break and Seat SR 568 to SR 422*	Cumru, Robeson			C	
	* Includes Related Bridge Work	**SUBTOTAL**	**$740,313**			

S = Study P = Preliminary Engineering F = Final Engineering R = Right of Way U = Utility Relocation C = Construction PT = Public Transit

BERKS AREA REGIONAL TRANSIT AUTHORITY
STATE OF GOOD REPAIR
LONG RANGE CAPITAL IMPROVEMENT PROGRAM
2025-2050

FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL	PROJECTED FEDERAL FUNDING
2025	REPLACEMENT 3 2015 BUSES - HYBRIDS	$1,905,600	$461,155	$15,364	$2,382,000	
	REPLACE BOBCAT-2010	$32,000	$7,744	$258	$40,000	
	REPLACE/UPGRADE AVL SYSTEM	$800,000	$193,600	$6,450	$1,000,000	
	REPLACE /UPGRADE TELEHONE SYSTEM	$40,000	$9,680	$323	$50,000	
	REPLACE/UPGRADE MAINT. SOFTWARE	$120,000	$29,040	$968	$150,000	
	REPLACE/UPGRADE DISPLAY PANELS	$80,000	$19,360	$645	$100,000	
	COMPUTER HARDWARE/SOFTWARE	$56,000	$13,552	$452	$70,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$3,397,848**	**$822,279**	**$27,395**	**$4,247,310**	**$5,686,000**
2026	REPLACE 16-2021 - PARATRANSIT VANS	$1,600,000	$387,200	$12,900	$2,000,000	
	REPLACE TWO VENTRACS -2016	$64,000	$15,488	$516	$80,000	
	REPLACE JACK STANDS (14) -2011	$20,000	$4,840	$161	$25,000	
	MOBILE TICKETING UPGRADES	$320,000	$77,440	$2,580	$400,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$2,368,248**	**$573,116**	**$19,094**	**$2,960,310**	**$5,686,000**
2027	REPLACE 8-2022 - PARATRANSIT VANS	$800,000	$193,600	$6,450	$1,000,000	
	REPLACEMENT 6 2016 BUSES - HYBRIDS	$3,600,000	$871,200	$29,025	$4,500,000	
	COMPUTER HARDWARE/SOFTWARE	$80,000	$19,360	$645	$100,000	
	SERVICE VEHICLE REPLACEMENT	$200,000	$48,400	$1,613	$250,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$5,044,248**	**$1,220,708**	**$40,669**	**$6,305,310**	**$5,686,000**
2028	REPLACE 7-2023 - PARATRANSIT VANS	$700,000	$169,400	$5,644	$875,000	X
	REPLACE 23-2024 - PARATRANSIT VANS	$2,300,000	$556,600	$18,544	$2,875,000	X
	REPLACE FAREBOX SYSTEM	$800,000	$193,600	$6,450	$1,000,000	X
	TDP UPDATE	$98,800	$23,910	$797	$123,500	X
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	X
	TOTAL	**$4,263,048**	**$1,031,658**	**$34,371**	**$5,328,810**	**$5,686,000**

FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL	PROJECTED FEDERAL FUNDING
2029	REPLACE 17 2019 BUSES HYBRIDS	$10,200,000	$2,468,400	$82,238	$12,750,000	
	REPLACE 17 2019 BUSES HYBRIDS	$10,200,000	$2,468,400	$82,238	$12,750,000	
	REPLACE TWO COPIERS	$40,000	$9,680	$323	$50,000	
	REPLACE 1 2021 -SUPERVISORY VEHICLE	$32,000	$7,744	$258	$40,000	
	COMPUTER HARDWARE/SOFTWARE	$80,000	$19,360	$645	$100,000	
	MOBILE TICKETING UPGRADES	$400,000	$96,800	$3,225	$500,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$11,116,248**	**$2,690,132**	**$89,625**	**$13,895,310**	**$5,686,000**
2030	REPLACE 8-2027 - PARATRANSIT VANS	$800,000	$193,600	$6,450	$1,000,000	
	REPLACE 6 2020 BUSES HYBRIDS	$3,600,000	$871,200	$29,025	$4,500,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	$364,248	X	X	X	X	
	TOTAL	**$4,764,248**	**$1,152,948**	**$38,412**	**$5,955,310**	**$5,686,000**
2031	REPLACE 17 2019 BUSES HYBRIDS	$10,200,000	$2,468,400	$82,238	$12,750,000	
	REPLACE TWO COPIERS	$40,000	$9,680	$323	$50,000	
	REPLACE 1 2021 -SUPERVISORY VEHICLE	$32,000	$7,744	$258	$40,000	
	COMPUTER HARDWARE/SOFTWARE	$80,000	$19,360	$645	$100,000	
	MOBILE TICKETING UPGRADES	$400,000	$96,800	$3,225	$500,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$11,116,248**	**$2,690,132**	**$89,625**	**$13,895,310**	**$5,686,000**
2032	REPLACE 8-2027 - PARATRANSIT VANS	$800,000	$193,600	$6,450	$1,000,000	
	REPLACE 6 2020 BUSES HYBRIDS	$3,600,000	$871,200	$29,025	$4,500,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$4,764,248**	**$1,152,948**	**$38,412**	**$5,955,310**	**$5,686,000**

FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL	PROJECTED FEDERAL FUNDING
2033	REPLACE 7-2028 & 4 2029 - PARATRANSIT VANS	$1,100,000	$266,200	$8,869	$1,375,000	
	REPLACE 4 2021 BUSES HYBRIDS	$2,400,000	$580,800	$19,350	$3,000,000	
	COMPUTER HARDWARE/SOFTWARE	$40,000	$9,680	$323	$50,000	
	REPLACE PORTABLE LIFTS	$120,000	$29,040	$968	$150,000	
	REPLACE BUS TIRE CAROUSEL -2018	$36,000	$8,712	$290	$45,000	
	REPLACE VAN TIRE CAROUSEL-2018	$28,000	$6,776	$226	$35,000	
	TDP UPDATE	$104,000	$25,168	$839	$130,000	
	PURCHASE (20) BUS SHELTERS	$240,000	$58,080	$1,935	$300,000	
	RADIO SYSTEM UPGRADES	$200,000	$48,400	$1,613	$250,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$4,632,248**	**$1,121,004**	**$37,347**	**$5,790,310**	**$5,686,000**
2034	REPLACE 19-2029 - PARATRANSIT VANS	$1,900,000	$459,800	$15,319	$2,375,000	
	REPLACE 5 2022 BUSES HYBRIDS	$3,000,000	$726,000	$24,188	$3,750,000	
	REPLACE 1 2024 -SUPERVISORY VEHICLE	$28,000	$6,776	$226	$35,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$5,292,248**	**$1,280,724**	**$42,669**	**$6,615,310**	**$5,686,000**
2035	REPLACE/UPGRADE AVL SYSTEM	$800,000	$193,600	$6,450	$1,000,000	
	REPLACE 4 2023 BUSES HYBRIDS	$2,400,000	$580,800	$19,350	$3,000,000	
	UPGRADE SECURITY SYSTEM	$200,000	$48,400	$1,613	$250,000	
	COMPUTER HARDWARE/SOFTWARE	$40,000	$9,680	$323	$50,000	
	REPLACE/UPGRADE FIRE ALARM BTC	$200,000	$48,400	$1,613	$250,000	
	REPLACE WASTE OIL BURNERS	$120,000	$29,040	$968	$150,000	
	UPGRADE TELEHONE SYSTEM	$40,000	$9,680	$323	$50,000	
	UPGRADE MAINT SOFTWARE	$40,000	$9,680	$323	$50,000	
	UPGRADE FINANCE SOFTWARE	$40,000	$9,680	$323	$50,000	
	FRANKLIN STREET STATION UPGRADES	$400,000	$96,800	$3,225	$500,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$4,748,248**	**$1,149,076**	**$38,283**	**$5,935,310**	**$5,686,000**

FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL	PROJECTED FEDERAL FUNDING
2036	REPLACE 16-2031 - PARATRANSIT VANS	$1,600,000	$387,200	$12,900	$2,000,000	
	COMPUTER HARDWARE/SOFTWARE	$40,000	$9,680	$323	$50,000	
	REPLACE 4-POST LIFT	$80,000	$19,360	$645	$100,000	
	MOBILE TICKETING UPGRADES	$480,000	$116,160	$3,870	$600,000	
	REPLACE TWO FLOOR SWEEPERS	$48,000	$11,616	$387	$60,000	
	REPLACE TWO FLOOR SCRUBBERS	$48,000	$11,616	$387	$60,000	
	REPLACE TWO VENTRACS BTC-OPS	$72,000	$17,424	$581	$90,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$2,732,248**	**$661,204**	**$22,029**	**$3,415,310**	**$5,686,000**
2037	REPLACE 8-2032 - PARATRANSIT VANS	$800,000	$193,600	$6,450	$1,000,000	
	REPLACE BUS WASH	$160,000	$38,720	$1,290	$200,000	
	COMPUTER HARDWARE/SOFTWARE	$32,000	$7,744	$258	$40,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$1,356,248**	**$328,212**	**$10,935**	**$1,695,310**	**$5,686,000**
2038	REPLACE 7-2033 - PARATRANSIT VANS	$700,000	$169,400	$5,644	$875,000	
	UPGRADE AVL SYSTEM	$800,000	$193,600	$6,450	$1,000,000	
	REPLACE BUS VACCUM	$140,000	$33,880	$1,129	$175,000	
	TDP UPDATE	$112,000	$27,104	$903	$140,000	
	OPS CENTER UPGRADES	$400,000	$96,800	$3,225	$500,000	
	REPLACE EMERGENCY GENERATOR OPS	$80,000	$19,360	$645	$100,000	
	REPLACE DISPLAY PANELS BTC	$80,000	$19,360	$645	$100,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$2,676,248**	**$647,652**	**$21,577**	**$3,345,310**	**$5,686,000**

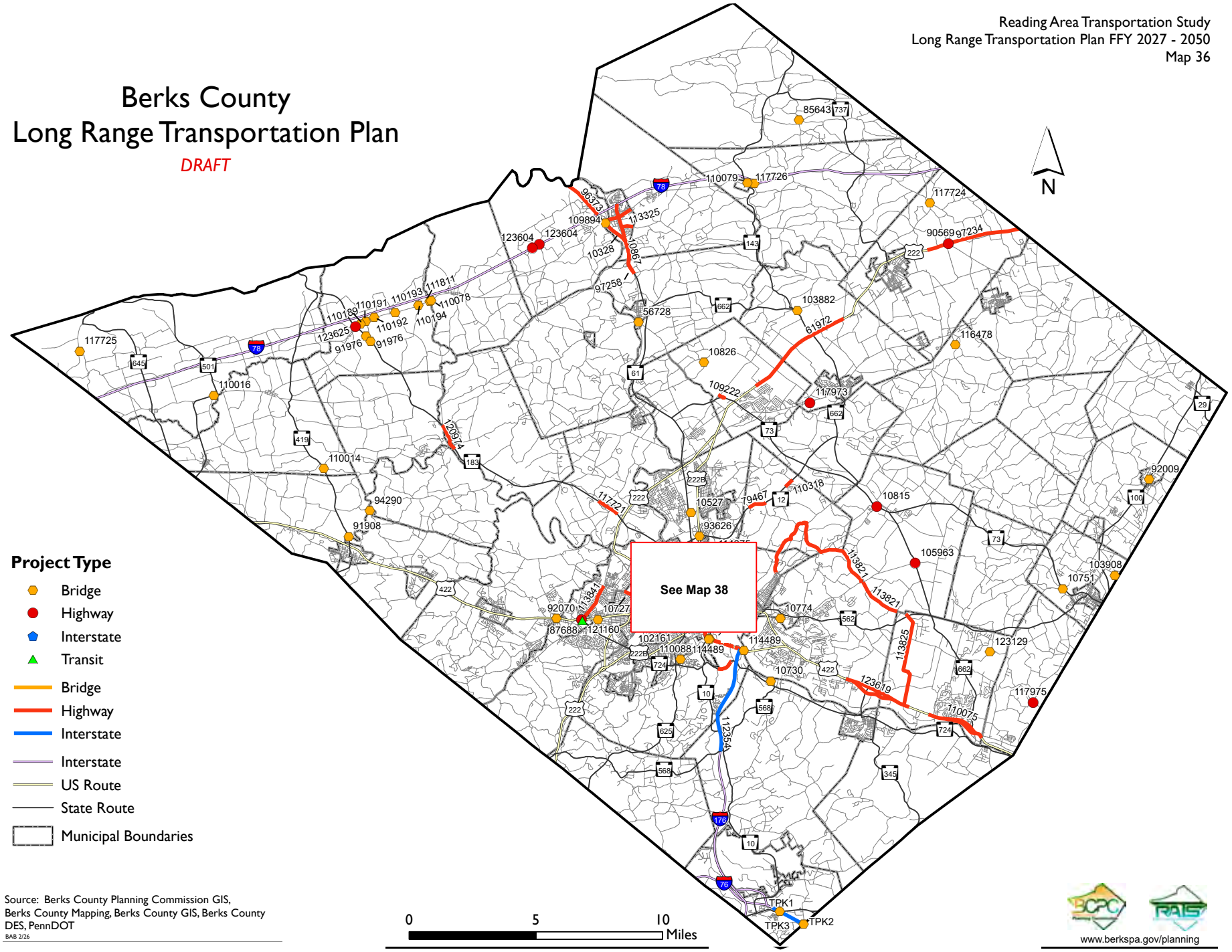
FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL	PROJECTED FEDERAL FUNDING
2039	REPLACE 23-2034 - PARATRANSIT VANS	$2,300,000	$556,600	$18,544	$2,875,000	
	REPLACE 2 2030 -SUPERVISORY VEHICLE	$88,000	$21,296	$710	$110,000	
	REPLACE 1 2030 -MAINTENANCE VEHICLE	$64,000	$15,488	$516	$80,000	
	REPLACE FARE COLLECTION SYSTEM	$1,040,000	$251,680	$8,385	$1,300,000	
	REPLACE SALT SPREADER	$32,000	$7,744	$258	$40,000	
	UPGRADE FLUID DISPENSING SYSTEM	$100,000	$24,200	$806	$125,000	
	COMPUTER HARDWARE/SOFTWARE	$100,000	$24,200	$806	$125,000	
	REPLACE/UPGRADE FUEL SOFTWARE	$120,000	$29,040	$968	$150,000	
	REPLACE PARKING EQUIPMENT	$160,000	$38,720	$1,290	$200,000	
	UPGRADE TELEHONE SYSTEM	$40,000	$9,680	$323	$50,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$4,408,248**	**$1,066,796**	**$5,510,310**	**$5,510,310**	**$5,686,000**
2040	REPLACE 2 2030 -SUPERVISORY VEHICLE	$88,000	$21,296	$710	$110,000	
	REPLACE 1 2030 -MAINTENANCE VEHICLE	$64,000	$15,488	$516	$80,000	
	REPLACE 7 2028 BUSES HYBRIDS	$4,200,000	$1,016,400	$33,863	$5,250,000	
	COMPUTER HARDWARE/SOFTWARE	$32,000	$7,744	$258	$40,000	
	UPGRADE MAINT SOFTWARE	$40,000	$9,680	$323	$50,000	
	UPGRADE FINANCE SOFTWARE	$40,000	$9,680	$323	$50,000	
	ADA SERVICE	$364,248	$88,148	$2,937	455,310	
	TOTAL	**$4,864,248**	**$1,177,148**	**$39,218**	**$6,080,310**	**$5,686,000**
2041	REPLACE 216-2036 - PARATRANSIT VANS	$1,600,000	$387,200	$12,900	$2,000,000	
	REPLACE 8-2037 - PARATRANSIT VANS	$800,000	$193,600	$6,450	$1,000,000	
	REPLACE TWO COPIERS	$48,000	$11,616	$387	$60,000	
	MOBILE TICKETING UPGRADES	$480,000	$116,160	$3,870	$600,000	
	COMPUTER HARDWARE/SOFTWARE	$80,000	$19,360	$645	$100,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$3,372,248**	**$816,084**	**$27,189**	**$4,215,310**	**$5,686,000**

FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL	PROJECTED FEDERAL FUNDING
2042	REPLACE 7-2038 - PARATRANSIT VANS	$700,000	$169,400	$5,644	$875,000	
	REPLACE 7 2028 BUSES HYBRIDS	$4,200,000	$1,016,400	$33,863	$5,250,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$4,564,248**	**$1,104,548**	**$36,799**	**$5,705,310**	**$5,686,000**
2043	REPLACE 17 2028 BUSES HYBRIDS	$10,200,000	$2,468,400	$82,238	$12,750,000	
	REPLACE EMERGENCY GEN - BTC	$100,000	$24,200	$806	$125,000	
	TDP UPDATE	$120,000	$29,040	$968	$150,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$10,784,248**	**$2,609,788**	**$86,948**	**$13,480,310**	**$5,686,000**
2044	REPLACE 23-2039 - PARATRANSIT VANS	$2,300,000	$556,600	$18,544	$2,875,000	
	REPLACE 4 2028 BUSES HYBRIDS	$2,400,000	$580,800	$19,350	$3,000,000	
	REPLACE PORTABLE LIFTS	$48,000	$11,616	$387	$60,000	
	REPLACE SCISSOR LIFT	$24,000	$5,808	$194	$30,000	
	REPLACE DISPLAY PANELS	$80,000	$19,360	$645	$100,000	
	COMPUTER HARDWARE/SOFTWARE	$32,000	$7,744	$258	$40,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$5,248,248**	**$1,270,076**	**$42,314**	**$6,560,310**	**$5,686,000**
2045	REPLACE 2 2028 4 2033 BUSES HYBRIDS	$3,600,000	$871,200	$29,025	$4,500,000	
	REPLACE/UPGRADE AVL SYSTEM	$800,000	$193,600	$6,450	$1,000,000	
	UPGRADE RADIO COMMUNICATIONS	$280,000	$67,760	$2,258	$350,000	
	UPGRADE TELEHONE SYSTEM	$40,000	$9,680	$323	$50,000	
	UPGRADE MAINT SOFTWARE	$40,000	$9,680	$323	$50,000	
	UPGRADE FINANCE SOFTWARE	$40,000	$9,680	$323	$50,000	
	REPLACE TWO VENTRACS	$80,000	$19,360	$645	$100,000	
	COMPUTER HARDWARE/SOFTWARE	$32,000	$7,744	$258	$40,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$5,276,248**	**$1,276,852**	**$42,540**	**$6,595,310**	**$5,686,000**
2046	REPLACE 16-2041 - PARATRANSIT VANS	$1,600,000	$387,200	$12,900	$2,000,000	
	REPLACE 5 2034 BUSES HYBRIDS	$2,912,000	$704,704	$23,478	$3,640,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$4,876,248**	**$1,180,052**	**$39,315**	**$6,095,310**	**$5,686,000**

FISCAL YEAR	CAPITAL NEEDS	FEDERAL	STATE	LOCAL	TOTAL	PROJECTED FEDERAL FUNDING
2047	REPLACE 8-2036 - PARATRANSIT VANS	$800,000	$193,600	$6,450	$1,000,000	
	REPLACE 4 2033 BUSES HYBRIDS	$2,400,000	$580,800	$19,350	$3,000,000	
	REPLACE TWO COPIERS	$48,000	$11,616	$387	$60,000	
	MOBILE TICKETING UPGRADES	$1,040,000	$251,680	$8,385	$1,300,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$4,652,248**	**$1,125,844**	**$37,509**	**$5,815,310**	**$5,686,000**
2048	REPLACE 7-2037 - PARATRANSIT VANS	$700,000	$169,400	$5,644	$875,000	
	COMPUTER HARDWARE/SOFTWARE	$32,000	$7,744	$258	$40,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$1,096,248**	**$265,292**	**$8,838**	**$1,370,310**	**$5,686,000**
2049	REPLACE 23-2038 - PARATRANSIT VANS	$2,300,000	$556,600	$18,544	$2,875,000	
	REPLACE EMERGENCY GEN - BTC	$100,000	$24,200	$806	$125,000	
	TDP UPDATE	$120,000	$29,040	$968	$150,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$2,884,248**	**$697,988**	**$23,254**	**$3,605,310**	**$5,686,000**
2050	REPLACE 6 2032 BUSES HYBRIDS	$3,600,000	$871,200	$29,025	$4,500,000	
	REPLACE PORTABLE LIFTS	$48,000	$11,616	$387	$60,000	
	REPLACE SCISSOR LIFT	$24,000	$5,808	$194	$30,000	
	COMPUTER HARDWARE/SOFTWARE	$32,000	$7,744	$258	$40,000	
	ADA SERVICE	$364,248	$88,148	$2,937	$455,310	
	TOTAL	**$4,068,248**	**$984,516**	**$32,800**	**$5,085,310**	**$5,686,000**

Berks County
Long Range Transportation Plan

DRAFT



Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT

BAB 2/26

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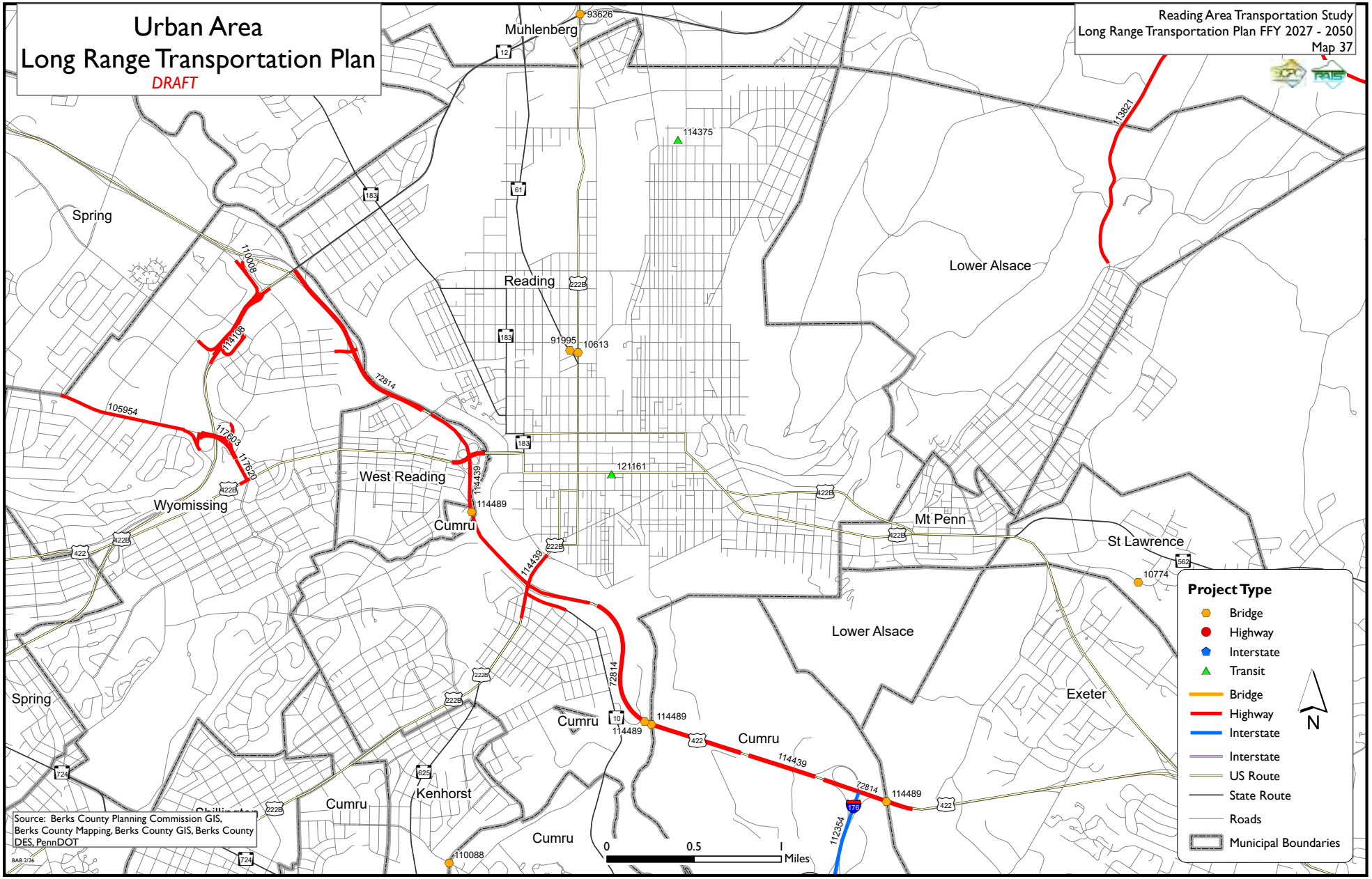
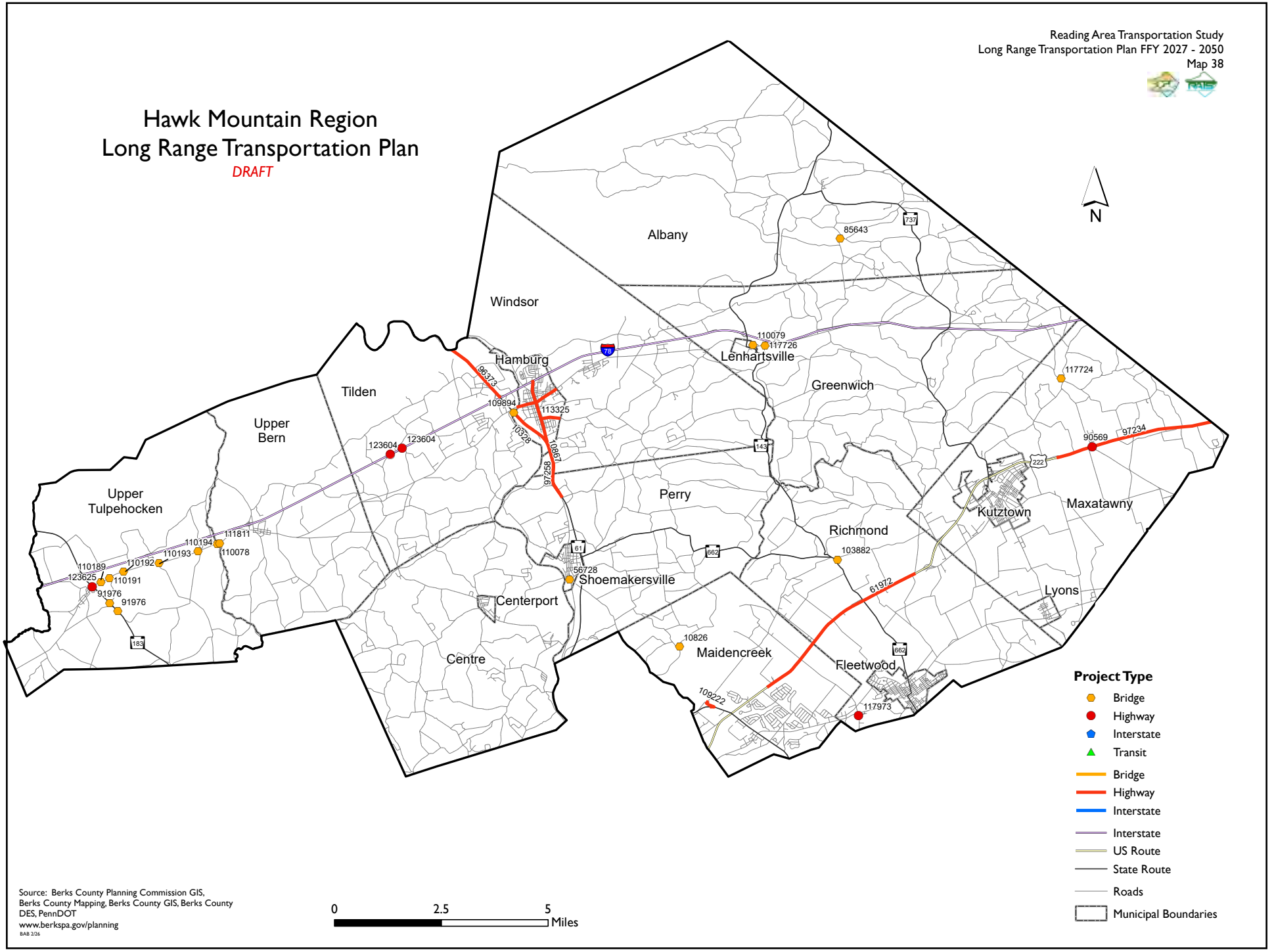

Urban Area
Long Range Transportation Plan
DRAFT
Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 37
Muhlenberg
Spring
Reading
Lower Alsace
West Reading
Wyomissing
Cumru
Mt Penn
St Lawrence
Exeter
Kenhorst
93626
114375
91995
10613
121161
10774
110088
110008
114108
72814
105954
117603
117620
114439
114489
113821
112354
Project Type
Bridge
Highway
Interstate
Transit
Bridge
Highway
Interstate
Interstate
US Route
State Route
Roads
Municipal Boundaries
N
0
0.5
1
Miles
Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT


Reading Area Transportation Study
Long Range Transportation Plan FFY 2027 - 2050
Map 38
Hawk Mountain Region
Long Range Transportation Plan
DRAFT
N
Albany
Windsor
Hamburg
Lenhartsville
Greenwich
Tilden
Upper Bern
Upper Tulpehocken
Perry
Richmond
Kutztown
Maxatawny
Lyons
Shoemakersville
Centerport
Centre
Maidencreek
Fleetwood
85643
110079
117726
117724
96373
109894
113325
10328
10867
97258
123604
123604
90569
97234
111811
110194
110193
110078
110189
110192
123625
110191
91976
91976
56728
103882
61972
10826
109222
117973
Project Type
Bridge
Highway
Interstate
Transit
Bridge
Highway
Interstate
Interstate
US Route
State Route
Roads
Municipal Boundaries
0
2.5
5
Miles
Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT
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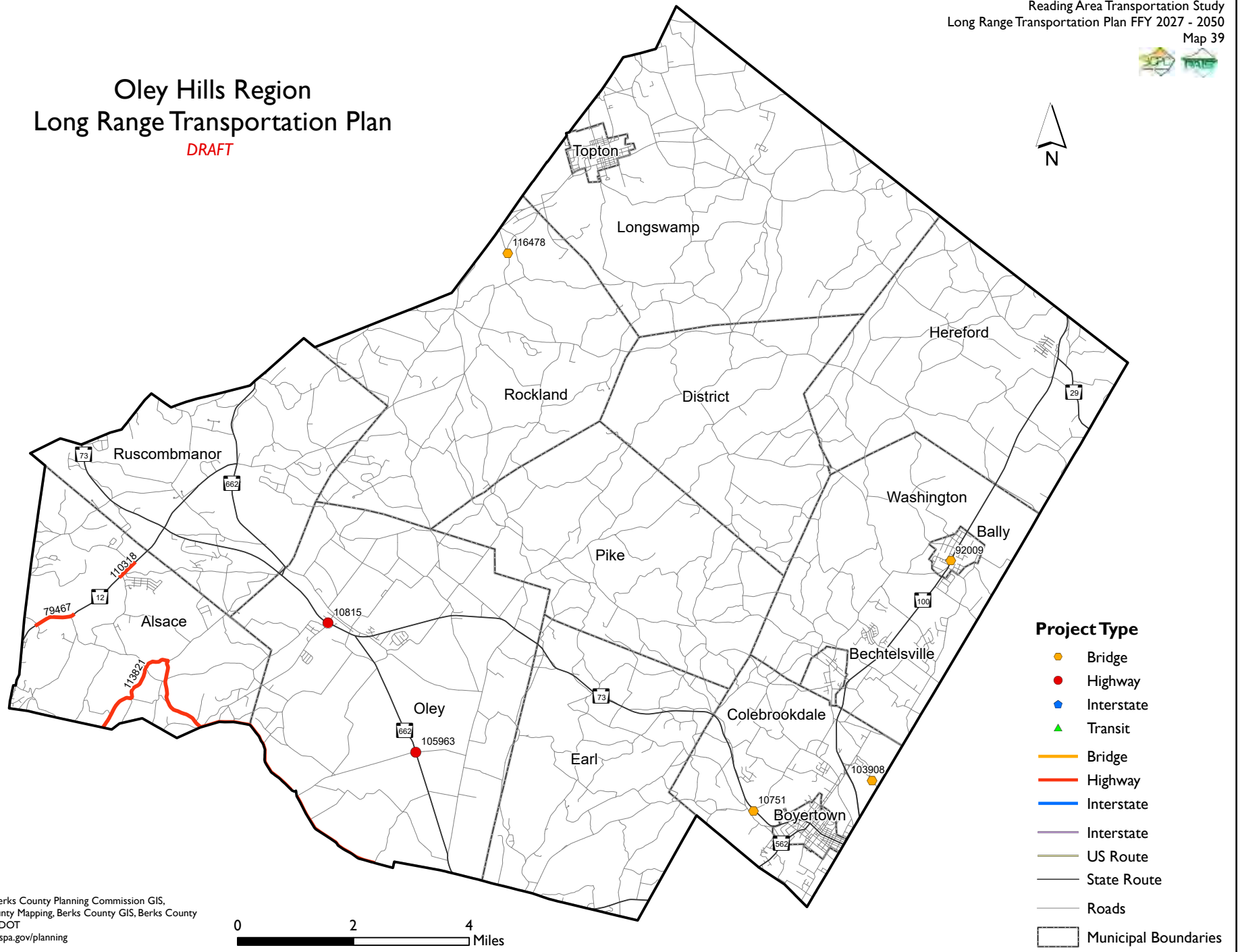
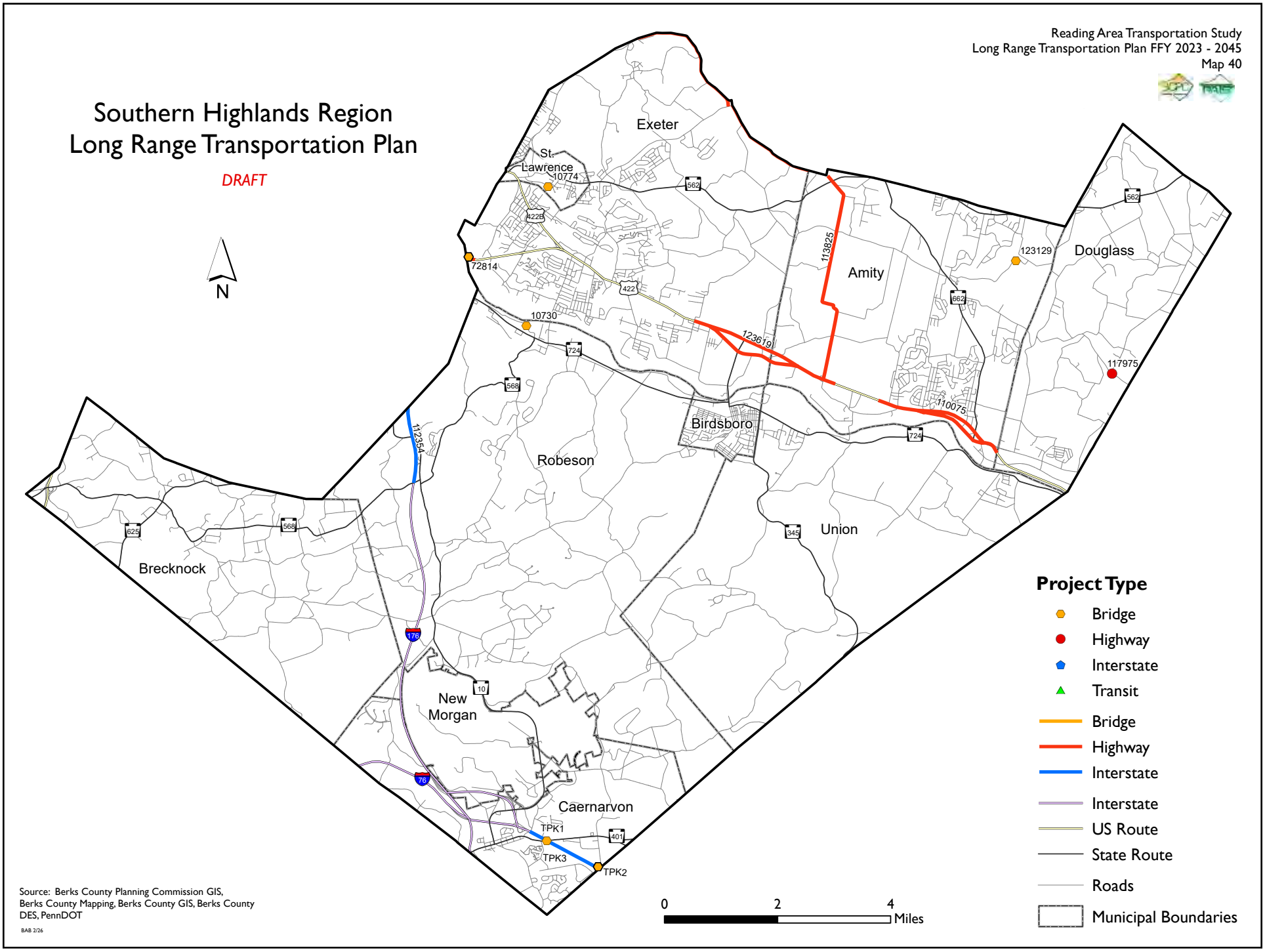
BAB 2/26

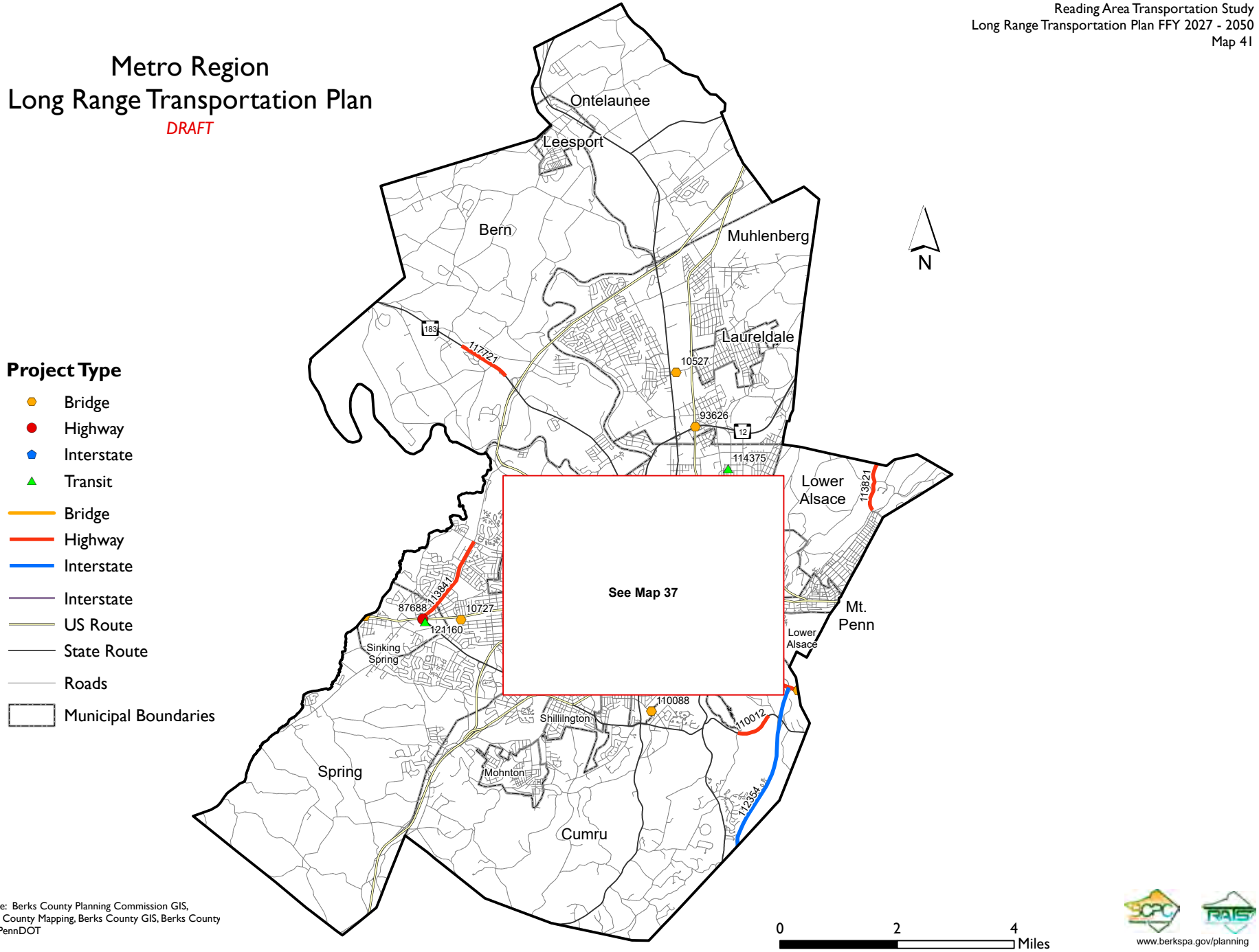
Oley Hills Region
Long Range Transportation Plan
DRAFT

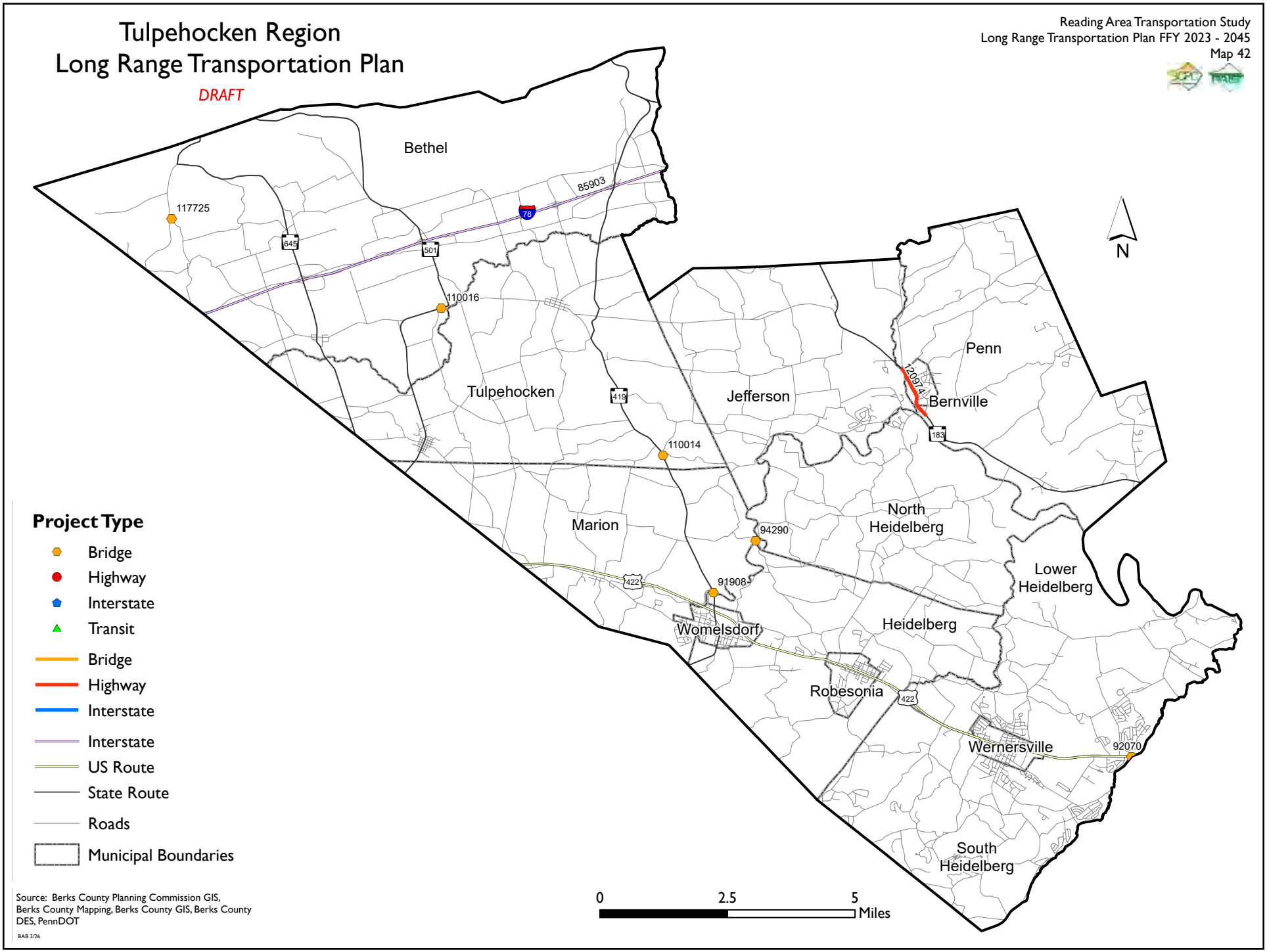



Reading Area Transportation Study
Long Range Transportation Plan FFY 2023 - 2045
Map 40
Southern Highlands Region
Long Range Transportation Plan
DRAFT
N
Exeter
St. Lawrence
10774
72814
10730
Amity
Douglass
123129
Birdsboro
Robeson
Union
Brecknock
New Morgan
Caernarvon
TPK1
TPK2
TPK3
113825
123619
110075
112354
117975
Project Type
Bridge
Highway
Interstate
Transit
Bridge
Highway
Interstate
Interstate
US Route
State Route
Roads
Municipal Boundaries
0
2
4
Miles
Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT
BAB 2/26

Metro Region
Long Range Transportation Plan

DRAFT




Tulpehocken Region
Long Range Transportation Plan
DRAFT
Reading Area Transportation Study
Long Range Transportation Plan FFY 2023 - 2045
Map 42
Bethel
Tulpehocken
Marion
Jefferson
Penn
Bernville
North Heidelberg
Lower Heidelberg
Heidelberg
Womelsdorf
Robesonia
Wernersville
South Heidelberg
117725
110016
110014
94290
91908
92070
120974
85903
78
645
501
419
422
183
N
Project Type
Bridge
Highway
Interstate
Transit
Bridge
Highway
Interstate
Interstate
US Route
State Route
Roads
Municipal Boundaries
Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT
BAB 2/26
0
2.5
5
Miles

Financial Plan

Federal planning regulations require that a transportation plan "include a financial plan that demonstrates the consistency of proposed transportation investments with already available and projected sources of revenue." Cost and revenue projections are to reflect the existing situation and historical trends. The LRTP should be in accord with projections of future revenues.

The following sections document our methods for projecting future revenues, calculating future costs and reconciling the plan with projections of future revenues. Before proceeding, a few comments on the uncertainties of this process are in order. The process involves the calculation of costs and revenues over a twenty-plus year period. On the cost side, the estimates for the Mid- and Long-Range periods are made without the kind of engineering detail that is required for precise cost data. Secondly, costs reflect future rates of inflation that can only be estimated.

On the revenue side, estimates are based on projections of future revenues from federal and state funding legislation that only extends over the initial period of this plan. Our only guide for such action is past history. It is known that federal funding is the single greatest factor in financing transportation infrastructure. Traditionally, it accounted for approximately 75% of such revenues. Federal funding was nearly flat over the past several years as Congress redefined the role that it plays in financing infrastructure. The FAST Act, while ensuring five years of funding stability, provided only a nominal growth in funding and expired during the prior program. The approval of the IIJA in November 0f 2022 has provided a significant boost to overall federal funding for all types of transportation programs. Changes in federal regulations have blurred the lines between the use of federal dollars for highways and bridges. The federal split used in developing this plan is assumed to be 60% for highways and 40% for bridges. At time this plan was written, the IIJA has not be reauthorized, nor has new federal transportation funding legislation been approved.

Likewise, future revenues depend on money raised by the state from gas taxes, motor license feeds, registrations, etc. These rates depend on future actions of the state legislature that we cannot predict. Legislative action by Pennsylvania, in the form of Act 89 of 2013, created a significant boost in state funding. This, combined with the flat federal levels has shifted the funding splits to approximately 60% federal and 40% state. Despite this gain, state funding levels peaked during the prior program and began to contract as resources were diverted to other programs and gas consumption and the resulting tax revenues went down to a combination of negative economic conditions brought on by COVID and the expansion of the use of hybrid and alternative fueled vehicles. The growth of the IIJA federal funds will also place pressure on the state to generate sufficient local match to receive the full benefits of those new dollars. Additionally, a state revenue stream based on payments from the Pennsylvania Turnpike to PennDOT used to support public transportation is coming to an end and state legislators are being pressed to find suitable sources of replacement revenue.

Local revenues account for the remaining 2% of transportation infrastructure costs. It is assumed that the local share of costs will remain at roughly the same proportion to federal and state revenues.

A more detailed discussion of the funding programs may be found in the TIP and LRTP Appendix document.

Future Revenues

The following table shows projections of future revenues by time period and category.

TRANSPORTATION PLAN ESTIMATED FUNDING SUMMARY ($000)

Element	Short Range (2027-2030)	Mid Range (2031-2038)	Long Range (2039-2050)	Total
Highway Funds	$281,075	$492,587	$451,502	$1,225,163
Bridge Funds	$99,377	$196,985	$295,420	$591,782
Transit Funds	$82,944	$159,368	$244,394	$486,706
Total Funds	$463,396	$848,940	$991,316	$2,303,651

Short Range (2027–2030)

It is estimated that a total of $463,396 will be available to Berks County over the period extending from FFY 2027 through FFY 2030 for all transportation projects and programs covered under this plan. All federal, state, and local funding anticipated in this period is included. The federal highway and bridge figures are based on a prorated share of Pennsylvania's allocations as included in the IIJA. The federal transit figures are also based on allocations to the Reading MPO (RATS) as included in the IIJA. The state contribution for both highway and transit is based on Act 89 of 2013.

Highway and Bridge Funding

Highway and bridge funding includes all federal and state capital funds anticipated for the four-year period covered by this program. The IIJA legislation included funding for the federal fiscal years 2022 through 2026. As such, Federal funding levels are based on the Act which has not been reauthorized, nor has new Federal transportation funding legislation been established as of the writing of this plan. Therefore, funding levels throughout this document are considered flat based on the final fiscal year of funding authorized by IIJA.

The distribution of federal funds from the state to the MPO follows previous formulas and policy decisions. Specifically, it continues to assume the practice of programming to the authorization level rather than the lower obligation level. Funding formulas have been revised to reflect the provisions of the IIJA.

The Interstate Management Program is run on a statewide basis. The proportion of the NHPP Funds that these miles/bridges represent, including the appropriate state match, will be programmed centrally by PennDOT in consultation with MPOs/RPOs. The priority for these funds will be for system preservation. Any capacity adding projects will be advanced through coordination with the MPO/RPO.

Discontinued for a number of years, additional highway and bridge funds have once again become available through a federal "earmarking" process. The Reading MPO received no earmarks during the initial cycle of this program but will continue to pursue funding in subsequent rounds. If a project received special funding allocations that were part of federal transportation legislation, or if dollars are allocated to a project from any of the Pennsylvania Secretary of Transportation's discretionary "spike" funds, those funds are considered

"earmarked" to that project until either its completion or abandonment. Earmarked funds are funds that are over and above an area's formula allocation. For the purpose of this plan, only existing earmarks will be assumed.

Local and private funding may also be used to match state and federal funding and is considered additional funding. Private funding is only included in the program where currently committed.

The ultimate decisions regarding the distribution of "spike" and other discretionary funding are made by the Secretary of Transportation. For the purpose of this Plan, these funds are only included where currently committed.

Transit

Funding for transit improvements in Pennsylvania comes from a combination of federal, state and local sources. Similar to Highways and Bridges, federal Transit funding also comes from the IIJA. Federal funding levels used in the Short Range use those funds allocated to the Reading MPO (RATS) in the IIJA.

State funding is provided through the Public Transportation Trust Fund. In addition, state capital budget funding is released annually for capital improvements. As previously mentioned, a total of $20 million per year of the state's federal highway money is flexed to transit agencies for their projects as part of an agreement between the Commonwealth and the transit community during the enactment of Act 3. Federal funding is based on guaranteed authorizations only. An additional source of capital funding available to SCTA for use in the BARTA service area is a flex of the annual CMAQ highway funds as agreed to by RATS. SCTA has not requested CMAQ funding during the first two years of the proposed Short Range period but will resume receiving those funds during the last two years of the short range period and into the Mid-Range period.

As with the highway program transit funding may also include specific earmarked and discretionary dollars that are over and above the region's allocation. For the purpose of this plan, only existing earmarks and discretionary funding is included in this period.

Mid–Range (2031–2038) and Long–Range (2039–2050)

Revenues for the Mid-Range years are projected to be approximately $849 million and approximately $991 million for the Long-Range years. These figures are substantially larger than the short-range period because they cover eight and twelve year periods, respectively, rather than the four years in the short range. Additionally, the vast majority of the PennDOT "spike" funding for the US 422 and US 222 corridor projects fall in the short-range and mid-range periods. The Reading MPO will continue to rely on further allocations from these or other sources beyond our formula allocations to complete construction of these important corridors.

The following methods were used in calculating future revenues of the Mid- and Long-Range periods.

Since the IIJA expires at the end of FFY 2026, Federal funding to Pennsylvania was assumed to increase by zero (0) percent per year from that point forward. State funds were also assumed to remain flat. This is the most conservative approach available at this time.

The Berks County share of all revenues was assumed to remain consistent with the allocation levels in the final year of the current TIP. The funding splits across programs are assumed to remain at their current levels.

The following table provides a detailed breakdown of the projected funding for each year of the plan.

PROJECTED READING MPO TRANSPORTATION FUNDING BY YEAR ($000)

READING MPO	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
HIGHWAY AND BRIDGE																								
Federal - NHPP (0.60)	6,790	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135
Federal - STP (0.60)	3,313	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305	3,305
State Highway	10,781	10,656	11,575	12,359	12,358	12,358	12,358	12,357	12,355	12,354	12,352	12,351	12,351	12,351	12,351	12,351	12,351	12,351	12,351	12,351	12,351	12,351	12,351	12,351
Federal - Urban (STU)	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488	6,488
Federal - Safety (HSIP)	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365	3,365
Federal - CMAQ	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375
Less RATS BARTA Flex	450	900	0	0	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900
Federal - CMAQ Total	3,925	3,475	4,375	4,375	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475
Federal - STP Set-Aside TAU	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606
Federal - Carbon Reduction (CRP)	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401
Federal - Carbon Reduction (CRPU)	761	761	761	761	761	761	761	761	761	761	761	761	761	761	761	761	761	761	761	761	761	761	761	761
Federal - Highway Freight*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal - PROTECT*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total Hwy	36,430	35,192	37,011	37,795	36,894	36,894	36,894	36,893	36,891	36,890	36,888	36,887	36,887	36,887	36,887	36,887	36,887	36,887	36,887	36,887	36,887	36,887	36,887	36,887
Local Hwy (2%)	729	704	740	756	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738
Highway Earmarks/ Discretionary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Highway Spike	11,717	40,000	40,000	40,000	46,310	30,000	35,000	35,000	11,310	11,310	11,310	11,310	0	0	0	0	0	0	0	0	0	0	0	0
Private / Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Highway	**48,875**	**75,896**	**77,752**	**78,551**	**83,942**	**67,632**	**72,632**	**72,631**	**48,939**	**48,938**	**48,936**	**48,935**	**37,625**	**37,625**	**37,625**	**37,625**	**37,625**	**37,625**	**37,625**	**37,625**	**37,625**	**37,625**	**37,625**	**37,625**
Federal Bridge - NHPP (0.40)	4,527	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090
Federal Bridge - STP (0.40)	2,208	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204	2,204
Federal Bridge - BOF	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080
Federal Bridge - BRIP	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405	7,405
State Bridge	6,660	6,502	6,344	6,366	6,365	6,364	6,364	6,363	6,362	6,360	6,359	6,357	6,357	6,357	6,357	6,357	6,357	6,357	6,357	6,357	6,357	6,357	6,357	6,357
Subtotal - Bridges	24,880	24,281	24,123	24,145	24,144	24,143	24,143	24,142	24,141	24,139	24,138	24,136	24,136	24,136	24,136	24,136	24,136	24,136	24,136	24,136	24,136	24,136	24,136	24,136
Local Bridge (2%)	498	486	482	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483
Bridge Earmarks/ Discretionary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bridge Spike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total - Bridges	**25,378**	**24,766**	**24,605**	**24,627**	**24,626**	**24,625**	**24,625**	**24,624**	**24,623**	**24,621**	**24,620**	**24,618**	**24,618**	**24,618**	**24,618**	**24,618**	**24,618**	**24,618**	**24,618**	**24,618**	**24,618**	**24,618**	**24,618**	**24,618**
Total Highway & Bridge	**74,253**	**100,662**	**102,357**	**103,179**	**108,569**	**92,258**	**97,258**	**97,256**	**73,563**	**73,560**	**73,557**	**73,553**	**62,243**	**62,243**	**62,243**	**62,243**	**62,243**	**62,243**	**62,243**	**62,243**	**62,243**	**62,243**	**62,243**	**62,243**

PROJECTED READING MPO TRANSPORTATION FUNDING BY YEAR (CONT.) ($000)

READING MPO	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
TRANSIT																								
Federal Transit																								
FTA Formula - 5307	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728	3,728
FTA- 5310	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282
FTA- 5539	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425
Plus RATS BARTA Flex	0	0	0	0	450	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900
Federal Total	**4,435**	**4,435**	**4,435**	**4,435**	**4,885**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**	**5,335**
State Transit																								
Operating Assistance	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069	12,188	12,188	12,188	12,188	12,188
Shared Ride	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	2,629	1,665	1,665	1,665	1,665	1,665
State Total	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**12,698**	**13,853**	**13,853**	**13,853**	**13,853**	**13,853**
Local Transit																								
Local Operating	469	493	517	543	570	599	629	660	693	728	764	802	842	884	929	975	1,024	1,075	1,129	1,208	1,268	1,332	1,398	1,468
Local Capital	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	40	40	40	40	40
Local Total	**493**	**517**	**541**	**567**	**594**	**623**	**653**	**684**	**717**	**752**	**788**	**826**	**866**	**908**	**953**	**999**	**1,048**	**1,099**	**1,153**	**1,248**	**1,308**	**1,372**	**1,438**	**1,508**
Total Transit	**17,626**	**17,650**	**17,674**	**17,700**	**18,177**	**18,656**	**18,685**	**18,717**	**18,750**	**18,785**	**18,821**	**18,859**	**18,899**	**18,941**	**18,986**	**19,032**	**19,081**	**19,132**	**19,186**	**20,435**	**20,496**	**20,559**	**20,626**	**20,696**

Reading Regional Airport Capital Improvement Plan

The Reading Regional Airport receives capital funding from the Federal and State governments which require a local match. The airport can also apply for Federal and State discretionary funding to implement its capital improvement plan. Local funding comes primarily from airport operations. The following table includes the Capital Improvement Plan for the period FFY 2025 through FFY 2039.

While the Reading MPO has limited involvement in the allocation of these funds, we have included this table in acknowledgement of the Reading Regional Airport's important role in Berks County's transportation system and to document the approved slate of projects for reference in consideration of current and future grant application cycles.

FEDERAL AVIATION ADMINISTRATION
CAPITAL IMPROVEMENT PLAN SPREADSHEET
HARRISBURG AIRPORTS DISTRICT OFFICE

LOCID	KRDG	Airport		Reading Regional Airport			State	Local	
FY	Description/phase	Work Code	NPR	AIP Entitlement	FEDERAL Discretionary	BIL Entitlements	BOA/State	RRAA MATCH	TOTAL
2025				**$150,000**	**$1,105,500**	**$402,300**	**$4,704,600**	**$4,629,600**	**$10,992,000**
WIP	Taxiway G Demolition and Construct Taxiway C Extension - Phase I, Design	CA TW EX	78	$0	$0	$222,300	$12,350	$12,350	**$247,000**
WIP	Rehabilitate North Taxilane - Phase II, Construction	RE TW IM	78	$150,000	$610,500	$0	$42,250	$42,250	**$845,000**
WIP	Construct MALSF / MALSR - Phase I Design	SP OT IN	74	$0	$495,000	$0	$27,500	$27,500	**$550,000**
WIP	Construct Hangar Infrastructure - Phase 1, Design (West Apron Area)	OT RV HG	27	$0	$0	$180,000	$10,000	$10,000	**$200,000**
WIP	Construct Hangar (24,000) (TA Issued 07/08/22)	ST BD MS	41	$0	$0	$0	$3,000,000	$3,000,000	**$6,000,000**
WIP	Construct Hangar (15,000)	ST BD MS	41	$0	$0	$0	$1,500,000	$1,500,000	**$3,000,000**
WIP	Acquire Airfield Maintenace Equipment (Skid Loader with brushhog)	ST EQ MS	27	$0	$0	$0	$112,500	$37,500	**$150,000**
2026				**$150,000**	**$905,700**	**$1,694,000**	**$1,381,150**	**$356,150**	**$4,487,000**
	East Apron Rehabilitation - Phase 1, Design	RE AP IM	71	$0	$0	$180,000	$10,000	$10,000	**$200,000**
	Taxiway G Demolition and Construct Taxiway C Extension - Phase II, Construction	CA TW EX	78	$150,000	$905,700	$0	$58,650	$58,650	**$1,173,000**
	Construct Hangar Infrastructure - Phase 2, Construction (West Apron Area)	OT RV HG	27	$0	$0	$1,514,000	$75,000	$75,000	**$1,664,000**
	Rehabilitate Aviation Fuel Facility			$0	$0	$0	$900,000	$100,000	**$1,000,000**
	Multi-Functional Wheel Loader w/ attachments	ST EQ MS	27	$0	$0	$0	$337,500	$112,500	**$450,000**
2027				**$150,000**	**$1,065,000**	**$0**	**$855,000**	**$355,000**	**$2,425,000**
	East Apron Rehabilitation - Phase II, Construction	RE AP IM	71	$150,000	$1,065,000	$0	$67,500	$67,500	**$1,350,000**
	East Apron Expansion - Phase III, Construction	CA AP EX	70	$0	$0	$0	$750,000	$250,000	**$1,000,000**
	Acquire Airfield Maintenace Equipment (Mowing Equipment)	ST EQ MS	27	$0	$0	$0	$37,500	$37,500	**$75,000**
2028				**$150,000**	**$264,560**	**$0**	**$23,031**	**$23,031**	**$460,622**
	Rehabilitate Runway 13-31 Pavement - Phase I, Design	RE RW IM	83	$150,000	$114,960	$0	$14,720	$14,720	**$294,400**
	Rehabilitate Runway 13-31 Lighting - Phase I, Design	RE RW LI	83	$0	$149,600	$0	$8,311	$8,311	**$166,222**
2029				**$150,000**	**$2,900,000**	**$0**	**$152,500**	**$152,500**	**$3,355,000**
	Rehabilitate Runway 13-31 Pavement- Phase II, Construction	RE RW IM	83	$150,000	$2,900,000	$0	$152,500	$152,500	**$3,355,000**
2030				**$150,000**	**$2,900,000**	**$0**	**$152,500**	**$152,500**	**$3,355,000**
	Rehabilitate Runway 13-31 Pavement- Phase III, Construction	RE RW LI	83	$150,000	$2,900,000	$0	$152,500	$152,500	**$3,355,000**

FEDERAL AVIATION ADMINISTRATION
CAPITAL IMPROVEMENT PLAN SPREADSHEET
HARRISBURG AIRPORTS DISTRICT OFFICE

LOCID	KRDG	Airport		Reading Regional Airport			State	Local	
FY	Description/phase	Work Code	NPR	AIP Entitlement	FEDERAL Discretionary	BIL Entitlements	BOA/State	RRAA MATCH	TOTAL
2031				**$150,000**	**$257,500**	**$0**	**$80,375**	**$80,375**	**$568,250**
	Terminal Road Rehabilitation - Phase 1, Design	RE AR IM	50	$0	$0	$0	$60,000	$60,000	**$120,000**
	Rehabilitate Runway 13-31 Lighting - Phase IV, Construction	RE RW LI	83	$150,000	$257,500	$0	$20,375	$20,375	**$448,250**
2032				**$150,000**	**$840,000**	**$0**	**$912,250**	**$340,750**	**$2,243,000**
	EMAS Replacement - Phase I, Design	RC RW SF	89	$0	$270,000	$0	$15,000	$15,000	**$300,000**
	Acquire ARFF Vehicle	SA EQ RF	91	$150,000	$570,000	$0	$40,000	$40,000	**$800,000**
	Terminal Road Rehabilitation - Phase II, Construction	RE AR IM	50	$0	$0	$0	$857,250	$285,750	**$1,143,000**
2033				**$150,000**	**$5,070,000**	**$0**	**$330,000**	**$510,000**	**$6,060,000**
	EMAS Replacement - Phase II, Construction	RC RW SF	89	$150,000	$4,350,000		$250,000	$250,000	**$5,000,000**
	Acquire Snow Removal Equipment	ST EQ SN	79	$0	$720,000	$0	$20,000	$200,000	**$940,000**
2034				**$0**	**$0**	**$0**	**$60,000**	**$60,000**	**$120,000**
	EMAS Replacement - Phase III, Construction	RC RW SF	89	$150,000	$4,350,000		$250,000	$250,000	**$5,000,000**
	Expand Terminal Parking Lot - Phase I, Design	OT OT PA	29	$0	$0	$0	$60,000	$60,000	**$120,000**
2035				**$150,000**	**$990,000**	**$0**	**$552,500**	**$552,500**	**$2,245,000**
	Construct Taxiway A Extension/Demo Taxiway J - Phase I, Design	CA TW CO	79	$0	$190,000	$0	$5,000	$5,000	**$200,000**
	Acquire Snow Removal Equipment	RC EQ SN	85	$150,000	$800,000	$0	$47,500	$47,500	**$1,045,000**
	Expand Terminal Parking Lot - Phase II, Construction	OT OT PA	29	$0	$0	$0	$500,000	$500,000	**$1,000,000**

Legend

FAA/AIP
FAA BIL/AIG
BOA/PennDOT

FEDERAL AVIATION ADMINISTRATION
CAPITAL IMPROVEMENT PLAN SPREADSHEET
HARRISBURG AIRPORTS DISTRICT OFFICE

LOCID	Airport						State	State	
FY	Description/phase	Work Code	NPR	AIP Entitlement	FEDERAL Discretionary	BIL Entitlements	BOA/State	RRAA MATCH	**TOTAL**
2036				**$900,000**	**$5,562,000**	**$1,800,000**	**$583,000**	**$85,000**	**$8,930,000**
	Taxiway B Rehabilitation - Phase I, Design	RE TW IM	78	$150,000	$30,000	$0	$10,000	$10,000	**$200,000**
	Taxiway B Rehabilitation - Phase II, Construction	RE TW IM	78	$150,000	$1,800,000	$0	$200,000		**$2,150,000**
	Construct Taxiway A Extension/Demo Taxiway J - Phase II, Construction	CA TW CO	79	$150,000	$1,350,000	$0	$75,000	$75,000	**$1,650,000**
	Construct Taxiway C West Extension - Phase I, Design	CA TW CO	79	$150,000	$75,000	$0	$25,000		**$250,000**
	Construct T-Hangar Taxiways - Phase I, Design	CA TW CO	79	$150,000	$32,700	$0	$20,300		**$203,000**
	Taxiway D Rehabilitation - Phase I, Design	RE TW IM	78	$150,000	$180,000	$0	$20,000		**$350,000**
	Taxiway D Rehabilitation - Phase II, Construction	RE TW IM	78	$0	$1,800,000	$0	$200,000		**$2,000,000**
	Obstruction Removal - Phase IIA, Short Environmental Assessment	SA OT OB	58	$0	$294,300	$1,800,000	$32,700		**$2,127,000**
2037				**$300,000**	**$7,084,050**	**$0**	**$3,749,450**	**$3,499,450**	**$11,133,500**
	Construct Taxiway C West Extension - Phase II, Construction	CA TW CO	79	$150,000	$2,100,000	$0	$250,000		**$2,500,000**
	Construct T-Hangar Taxiways - Phase II, Construction	CA TW CO	79	$150,000	$1,029,000	$0	$131,000		**$1,310,000**
	Obstruction Removal - Phase IIB, Property Access, and Land/Easement Acquisition Services	SA OT OB	58	$0	$1,298,250	$0	$144,250		**$1,442,500**
	Obstruction Removal, Phase III - Easement Acquisition	SA OT OB	58	$0	$1,477,800	$0	$164,200		**$1,642,000**
	Construct T-Hangars (Capital Budget)	ST BD MS	41	$0	$0	$0	$2,929,000		**$2,929,000**
	South Taxilane Apron Area Rehabilitation - Phase I, Design	RE AP IM	71	$0	$1,179,000	$0	$131,000		**$1,310,000**
2038				**$241,500**	**$924,990**	**$0**	**$329,610**	**$194,610**	**$1,496,100**
	Rehabilitate Runway 18-36 Lighting - Phase II, Construction	RE RW LI	83	$241,500	$113,100	$0	$39,400		**$394,000**
	Obstruction Removal, Phase IV - Design and Bidding	SA OT OB	58	$0	$496,890	$0	$55,210		**$552,100**
	South Taxilane Apron Area Rehabilitation - Phase II, Construction	RE AP IM	71	$0	$315,000	$0	$35,000		**$350,000**
	Construct Airfield Maintenance Building - Phase I, Design	ST BD MS	41	$0	$0	$0	$200,000		**$200,000**
2039				**$0**	**$5,631,210**	**$0**	**$1,625,690**	**$1,675,690**	**$7,256,900**
	Rehabilitate Runway 18-36 Lighting - Phase II, Construction	RE RW LI	83	$0	$354,600	$0	$39,400		**$394,000**
	Obstruction Removal - Phase V, Construction	SA OT OB	58	$0	$5,096,610	$0	$566,290		**$5,662,900**
	Prepare Airport Safety Management System (SMS)	PL MA MS	64	$0	$180,000	$0	$20,000		**$200,000**
	Construct Airfield Maintenance Building - Phase II, Construction	ST BD MS	41	$0	$0	$0	$1,000,000		**$1,000,000**

Future Costs

This plan uses a number of techniques for projecting future project costs. All costs included in the short and mid-range are based on current cost estimates adjusted by 3% per year to account for year of expenditure.

For projects included in the long-range part of the plan, estimated costs from completed studies were used where available. All costs in the long-range section of the plan were calculated at present value and then inflated at a rate of 3% per year compounded. Since it is impossible to predict the actual year within the long range plan in which a project will be completed, inflation rates were applied up to the mid-year within the time frame. This calculated to an inflation factor for the long-range projects of 1.7024 (3% inflation compounded and averaged over the 12-year period). As such, projects constructed in the first half of the range will probably be less costly than projected while those in the latter half will be more expensive.

In the Highway, Bridge, and Transit Projects table, "line items" appear within the projects lists. Each line item is discussed below. Where special cost estimating procedures have been used, it is noted.

- Future Expressway Maintenance – This item is set aside for major restoration project(s) on non-Interstate, limited access highways.
- Congestion Mitigation Program (CMAQ) Line Item – Projects will be based on recommendations from future updates of the Congestion Management Process (CMP) developed in accordance with the federal planning requirements.
- RATS Safety Line Item – Projects will be developed from safety studies conducted in accordance with the federal planning requirements and funded under the HSIP.
- Urban Line Item – Under and agreement between RATS and the Berks County Industrial Development Authority (BCIDA), these funds will be identified for use in support of regional economic development projects to be identified by the BCIDA. In the even that there are no pending projects, these funds may be reallocated to other federal-aid eligible projects to avoid their lapsing.
- RATS Transportation Alternatives Program Line Item – This item is intended to fund future projects developed through the Transportation Alternatives Program. Funds listed match those available under the Transportation Alternative Program over the life of this plan.
- Bridge Preventative Maintenance (PM) – This item sets aside funding for bridge work that does not involve a complete rehabilitation or replacement.
- Future Bridge Projects – This line item is intended to be used for bridge repairs that have not yet been identified in the bridge program.

Future Updates and Plan Implementation

Federal regulations require compliant LRTPs to be updated on a four-year cycle and must fully comply with all planning provisions. Based on these factors, this LRTP must be updated again by July 2030 for the FFY 2031 program. Subsequent updates would then follow in four-year intervals or less.

It is important to note that once the plan is adopted, it is not a static document. As mentioned above, this plan must be regularly updated. During full updates, project schedules, costs and priorities will be reviewed and may change. In addition, supplements to this plan may be produced in the interim years. The supplements will report on pertinent information relating to plan assumptions, socio-economic and development issues, project status, and newly identified needs. References have been made throughout this document to ongoing planning efforts to identify projects to be funded by resources placed in the reserve line items. As needs are identified in the future, project priorities could be revisited as well. Significant changes in funding assumptions could also spark revisions to the plan.

Implementation steps for projects contained in the LRTP have been standardized on a statewide basis. Projects must either be specifically identified in the LRTP or generated from a program supported by the LRTP and move up to the MPO and State Transportation Improvement Programs as their priority increases. The project must also be included in the State Transportation Commission's Twelve-Year Program. Each project must follow PennDOT's project development process. This process includes documenting project needs, identifying alternatives, evaluating alternatives against projects needs, assessing impacts to the built and natural environment and selecting the best alternative. As projects go through this process, some will drop out for a variety of reasons such as impacts being too great, lack of community support, or simply lack of funding. As successful projects meet these requirements, the funding for the project must be placed in the TIP, which serves as the local capital plan for transportation projects.

Inclusion of a project on either the LRTP or the TIP is not a commitment of funds, an obligation of funds, or a grant of funds. The time frame shown is the "best estimate" at the time of the plan development. Projects quite often cannot maintain the schedule included in the plan and need to be readjusted in later plan updates. Unforeseen problems may arise, such as engineering obstacles, environmental permit conflicts, a change in priorities, and additional financial constraints. These problems can slow a project, cause it to be postponed, or even dropped from further consideration.

Unfunded Projects

The Unfunded Projects table contains an extensive list of projects that have not been explicitly included in this plan. These serve as a basis for determining unfunded highway and transit capital needs. Some can be funded in future TIPs using the line item reserves. At the present time, many would remain unfunded but are used to help determine future needs to address the vision, goals and objectives of this plan. Inclusion on this list does not constitute a formal element of this plan. Projects on this list, by their very nature, do not fall under the financial constraint requirements. Additionally, these projects have not been evaluated for consistency with national air quality standards or budgets. As any of these projects move from this list to the formal plan, consistency with all federal and state requirements must be determined. All costs indicated are estimates in 2026 dollars. The actual cost of these studies or projects will be dependent on their placement in any future plan update.

UNFUNDED HIGHWAY, BRIDGE AND TRANSIT PROJECTS

(ALL COSTS ARE ESTIMATES IN FFY 2026 DOLLARS) FEBRUARY, 2026

INTERSTATE AND EXPRESSWAY IMPROVEMENTS		
PROJECT NAME	**MUNICIPALITY**	**Estimated Cost**
Interstate 78 / Grimes Interchange Closure	Bethel	$13,400,000
Interstate 78 / Midway Rd Interchange Upgrade	Bethel	$13,500,000
Interstate 78 / PA 419 Interchange Upgrade	Bethel	$13,500,000
Interstate 78 / PA 183 Interchange Upgrade	Upper Tulpehocken	$13,500,000
Interstate 78 Shartlesville Interchange Upgrade	Upper Bern	$13,500,000
Interstate 176 / PA 724 Interchange Reconstruction	Cumru	$20,300,000
US 422 West Shore Bypass Upgrade	Exeter	$63,400,000
PA 12 / PA 61 Interchange Upgrade	Muhlenberg	$105,600,000
PA 12 / River Road Interchange Upgrade	Reading	$65,000,000
	SUBTOTAL	**$321,700,000**

NEW / EXPANDED FACILITIES		
PROJECT NAME	**MUNICIPALITY**	**Estimated Cost**
PA 61 Widening (Tuckerton to SR 12)	Muhlenberg	$50,000,000
US 422 East Reconfiguration	Amity	$47,100,000
Crosstown Connector SR 422 to SR 562	Exeter	$27,000,000
	SUBTOTAL	**$124,100,000**

SAFETY PROJECTS		
PROJECT NAME	**MUNICIPALITY**	**Estimated Cost**
PA 12 @ PA 662	Ruscombmanor	$4,800,000
PA 183 Safety Improvements (SR 4016 to I-78)	Jefferson, Upper Tulpehocken	$13,600,000
PA 419 Safety Improvements (SR 422 to I-78)	Heidelberg, Marion, Tulpehocken, Bethel	$10,800,000
PA 562 Safety Improvements (SR 2021 to SR 73)	St. Lawr., Exeter, Amity, Earl, Douglass	$35,700,000
PA 568 Safety Improvements (SR 724 to SR 10)	Robeson	$11,500,000
PA 662 Safety Improvements (US 422 to SR 562)	Amity	$16,200,000
PA 662 Safety Improvements (US 222 to SR 61)	Richmond, Perry	$21,500,000
PA 724 Safety Improvements (SR 345 to Chester Co.)	Birdsboro, Union	$19,300,000
PA 737 Safety Improvements (US 222 to I-78)	Kutztown, Maxatawny, Greenwich	$27,000,000
SR 2033 Safety Improvements (US 422 to SR 562)	Exeter	$20,200,000
SR 3222 Lancaster Avenue	Reading	$7,500,000
	SUBTOTAL	**$188,100,000**

UNFUNDED HIGHWAY, BRIDGE AND TRANSIT PROJECTS
(ALL COSTS ARE ESTIMATES IN FFY 2026 DOLLARS)
FEBRUARY, 2026

MOBILITY, CONGESTED CORRIDORS AND ITS PROJECTS		
PROJECT NAME	**MUNICIPALITY**	**ESTIMATED COST**
PA 23 Corridor Study (Chester Co. to Lancaster Co.)	Caernarvon	$1,450,000
PA 23 Corridor Implementation	Caernarvon	$19,000,000
PA 100 Corridor Study (Montgomery Co. to Lehigh Co.)	Colebrookdale, Washington, Bally, Hereford	$2,150,000
PA 100 Corridor Implementation	Colebrookdale, Washington, Bally, Hereford	$61,050,000
Rural ITS Coverage	Various	$4,600,000
SR 1010 Corridor	Ontelaunee to Topton	$30,300,000
SR 2011 (Heisters Lane) Widen to 4-lanes	Reading	$24,200,000
SR 2016 (Bellevue Ave) Widening - PA 61 to Mall Drive	Muhlenberg	$8,100,000
SR 3023 (State Hill Rd) Widening	Spring	$9,100,000
SR 3055 (Van Reed Road) @ Dwight Street	Spring	$4,600,000
	SUBTOTAL	**$164,550,000**
BRIDGE PROJECTS		
PROJECT NAME	**MUNICIPALITY**	**ESTIMATED COST**
New Bridge on Krick Lane over NS RR	South Heidelberg	$10,700,000
All Unprogrammed SD State Bridges	Various	TBD
All Unprogrammed SD Local Bridges >20'	Various	TBD
	SUBTOTAL	**$10,700,000**
TRANSIT PROJECTS		
PROJECT NAME	**MUNICIPALITY**	**ESTIMATED COST**
Passenger Rail Service	Reading to Pottstown	TBD
	SUBTOTAL	
	TOTAL	**$809,150,000**

TRAVEL DEMAND MODELING

Since 1997, the Berks County Planning Commission has been using a computerized Travel Demand Forecasting Model (the model). The model estimates roadway volumes based on inputs including demographic forecasts and expected changes to the transportation roadway network. Outputs from the model are then used as inputs to the U. S. Environmental Protection Agency's (USEPA) 5th generation Motor Vehicle Emissions Simulator (MOVES5) air quality model. As an area with air quality concerns addressed by the 1990 Clean Air Act Amendments, Berks County must use these tools to ensure that future roadway projects do not further degrade air quality.

The travel demand model follows the basic "four-step" travel demand forecasting process and uses the Cube BASE (TP+) software platform. The model consists of 673 Traffic Analysis Zones (TAZ's), approximately 16,000 links, and approximately 9,000 nodes. The network contains attributes such as distance, number of lanes, area type, facility type, free flow speed, capacity of the lane, and location of traffic signals. TAZ attributes include household population, households, employment, school enrollments, and economic information.

The regional travel model was updated and validated in 2015 and again in early 2025. The updates included enhancing the network and zone structure and validating the model to a 2023 base year. Using the projected traffic volume data from the model, conditions were evaluated for all applicable future analysis years. All significant air quality projects from the TIP and LRTP were coded into the travel demand model.

Transit data was also generated as part of the travel demand model. Existing fixed transit routes and their associated attributes (i.e., stops, headways, fares, and speeds) are included within a transit subroutine. Ridership estimates generated by this subroutine are fed back into the model stream as part of the overall network processing.

Traffic forecasts were projected based on the socioeconomic and land use data projections developed by Berks County Planning Commission. This data includes total population, households, and employment. The travel model network and assigned traffic volumes are further processed to prepare the traffic inputs needed to run the MOVES5 emission model. The results from the MOVES5 emission model are used to ensure that planned roadway projects help the area attain air quality goals.

Air Quality Conformity

The Clean Air Act Amendments of 1990 (CAAA) mandate improvements in the nation's air quality. The CAAA directs the U.S. Environmental Protection Agency (EPA) to implement regulations that will provide for reductions in pollutant emissions. The Berks County area was originally designated under the CAAA as a moderate non-attainment area for ground level ozone. Ozone is a secondary pollutant, which means that it is not emitted directly into the atmosphere but, rather, is created by the reaction of several pollutants in the presence of sunlight. Oxides of Nitrogen (NOx) and Volatile Organic Compounds (VOC's) are the two precursor pollutants that take part in that reaction. Ground level ozone is an eye and lung irritant that has been shown to cause difficulties in the elderly, very young, and those with weakened respiratory systems.

1997 and 2008 8–hour Ozone NAAQS

The EPA published the 1997 8-hour ozone National Ambient Air Quality Standards (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). As of July 20, 2013, Berks County no longer needs to demonstrate conformity to the 1997 8-hour ozone NAAQS. However, future PA State Implementation Plan (SIP) revisions must address EPA's anti-backsliding requirements.

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. Berks County was designated as a marginal nonattainment area under the 2008 8-hour ozone NAAQS, effective July 20, 2012 (77 FR 30088).

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).

Under the Clean Air Act, the EPA administrator is required to make all attainment designations within two years after a final rule revising the NAAQS is published. However, the deadline for EPA to issue designations for the 2015 NAAQS for ozone passed on October 1, 2017. Once designations are final, transportation conformity would be required within 12 months for any areas designated nonattainment under the standard.

1997 Annual PM2.5 and 2006 24–hour PM2.5 Standards

The EPA published the 1997 annual PM2.5 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 PM2.5 concentrations (for designated monitoring sites within an area) exceed 15.0 micrograms per cubic meter (µg/m3). Berks County was designated as a nonattainment area under the 1997 annual PM2.5 NAAQS, effective April 5, 2005 (70 FR 944). PM2.5, otherwise known as 'fine particulates', come from a variety of sources such as tire wear and brake dust. These particles are absorbed directly into the blood stream through the lungs and can cause a variety of health problems.

The EPA published the 2006 24-hour PM2.5 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 µg/m3 (62 FR 38652) to 35 µg/m^3 and retained the 1997 annual PM2.5 NAAQS of 15 µg/m^3. An area is in nonattainment of the 2006 24-hour PM2.5 NAAQS if the 98th percentile of the annual 24-hour concentrations, averaged over three years, is greater than 35 µg/m3. Berks County was designated as attainment under the 2006 24-hour PM2.5 NAAQS, effective December 14, 2009 (74 FR 58688). A redesignation request and maintenance plan applicable to the 1997 annual PM2.5 NAAQS was approved by EPA and effective December 22, 2014 (79 FR 76251). The maintenance plan includes 2017 and 2025 PM2.5 and NOX motor vehicle emission budgets (MVEBs) for transportation conformity purposes.

Since the last conformity determination was completed, 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 PM2.5 NAAQS in areas that have always been designated as attainment and in maintenance of that NAAQS. After revocation, areas no longer must expend resources on CAA air quality planning and conformity determination requirements associated with the 1997 annual PM2.5 NAAQS.

2012 Annual PM2.5 and 2006 24–hour PM2.5 Standards

The EPA published the 2012 annual PM2.5 NAAQS on January 15, 2013, (78 FR 3086), with an effective date of March 18, 2013. The EPA revised the annual PM2.5 NAAQS by strengthening the standard from 15 µg/m3 to 12 µg/m3. An area is in nonattainment of this standard if the 3-year average of the annual mean PM2.5 concentrations for designated monitoring sites in an area is greater than 12.0 µg/m3. On December 18, 2014, EPA issued final designations for the standard that were revised on April 7, 2015 (80 FR 18535). Berks County is designated in attainment of the standard and, as such, no longer must perform emission testing for fine particulates.

ANALYSIS RESULTS

Transportation conformity analyses of the TIP and LRTP has been completed for Berks County. The analyses were performed according to the requirements of the Federal transportation conformity rule at 40 CFR Part 93, Subpart A. The analyses used 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

There are currently no approved SIP Motor Vehicle Emissions Budgets (MVEBs) for Berks County under 2008 8-hour ozone NAAQS. However, the County has an approved SIP revision establishing MVEBs under the 1997 8-hour ozone NAAQS. The MVEBs were originally approved on January 14, 2008 (73 FR 2162) and subsequently revised on March 31, 2014 (79 FR 17875). As required, the latest revised budgets are used for the ozone conformity test. The ozone conformity analysis has been conducted to evaluate emissions in comparison to the applicable ozone MVEBs summarized in **Exhibit 9**.

EXHIBIT 9: 8-HOUR OZONE MOTOR VEHICLE EMISSION BUDGETS		
VOC	13.1	7.5
NOX	29.0	14.9

Analysis Years

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

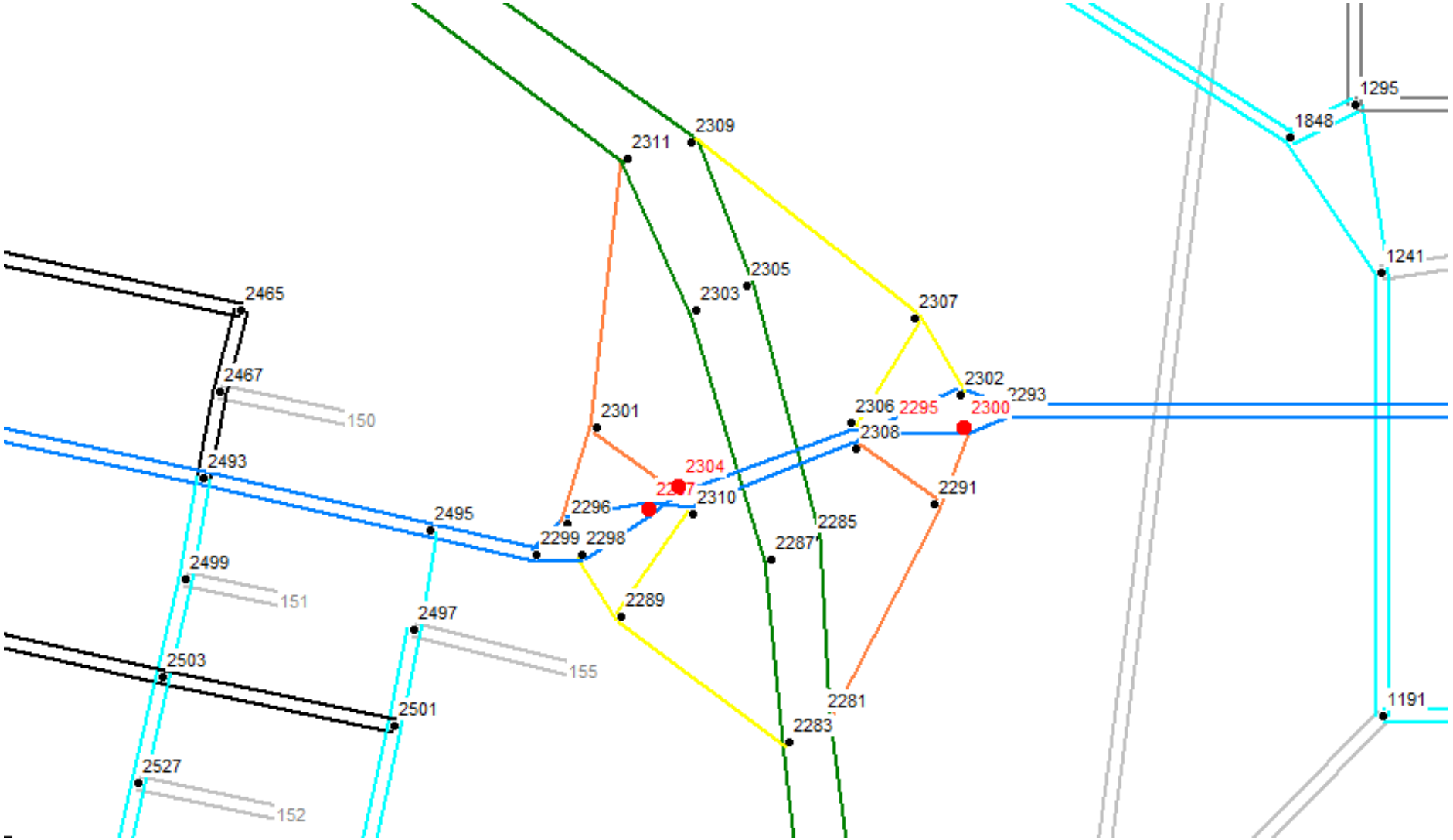
- A near-term year, one to five years in the future.
- The MPO's horizon year for long range planning.
- All established MVEB years (if in the future).
- Attainment year of the standard if within timeframe of the conformity analysis.
- An intermediate year or years such that if there are two years in 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 10 provides the analysis years used for this conformity analysis.

Analysis Year	Description
2030	Near Term (TIP) Year
2040	Interim Year
2050	LRTP Horizon Year

Regionally Significant Highway Projects

For the purposes of conformity analysis, model highway networks are created for each analysis year. Regionally significant projects from the TIP were coded onto the networks. Detailed assessments were only performed for those new projects which may have a significant effect on emissions in accordance with 40 CFR Parts 51 and 93. Only those projects which would increase capacity or significantly impact vehicular speeds were considered. Projects such as bridge replacements and roadway restoration projects, which constitute most of the TIP, 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.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Analysis Results

An emissions analysis has been completed for the 2008 8-hour ozone NAAQS. **Exhibit 11** summarizes the Berks County ozone emission results for a summer weekday in each analysis year. All years are lower than the applicable conformity budgets established in the regional maintenance plan for the 1997 ozone NAAQS. A detailed emission summary is also provided in **Attachment B**. Example MOVES importer (XML) and run specification (MRS) files are provided in **Attachment C.**

THE FOLLOWING TABLE: OZONE EMISSION ANALYSIS RESULTS AND CONFORMITY TEST (SUMMER WEEKDAY)

Pollutant	2018 MVEB (tons/day)	2030 (tons/day)	2040 (tons/day)	2050 (tons/day)
VOC	7.5	2.01	1.45	1.38
NOX	14.9	3.40	1.99	2.04
Conformity Result	n/a	PASS	PASS	PASS

CONFORMITY DETERMINATION

Financial Constraint

The planning regulations, Sections 450.324(f)(11) and 450.326(j), require the TIP and LRTP to be financially constrained while the existing transportation system is being adequately operated and maintained. Only projects for which construction and operating funds that are reasonably expected to be available are included. The RATS MPO, 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 Berks County and has compared the cost with the estimated revenues and maintenance needs of the new roads over the same period. The TIP and LRTP has been determined to be financially constrained.

Public Participation

The TIP and LRTP will address the public participation requirements as well as the comment and response requirements according to the procedures established in compliance with 23 CFR Part 450, RATS Public Participation Plan, and Pennsylvania's Conformity SIP. The draft documents will be made available for a 30-day public review and comment period.

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 RATS MPO TIP and LRTP 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 RATS MPO and its partners in meeting the regional air quality goals, while maintaining and building an effective transportation system.

LRTP AMENDMENT PROCEDURE

RATS may find it necessary to revise the LRTP other than at the 4-year update cycle. Should this need occur, we will follow the procedure laid out in this section as well as the guidance provided by PennDOT and the FHWA. It should be noted that RATS retains the authority to bypass this procedure and amend the LRTP as necessary to comply with the administrative requirements of either the federal or state government

Administrative Modifications

An administrative modification is a minor revision to the LRTP. It includes minor changes to project/phase costs, funding sources of previously included projects, or project/phase initiation dates. It does not require public review and comment or re-demonstrating air quality conformity or fiscal constraint. Examples of these include but are not limited to:

- Design Concept or Scope Changes: A minor change in the project equal to or less than 10% of the total project/phase costs.
- Project or Project Phase Initiation Date: Adding a new phase or changing the timing of a listed project to move it from one time band to another, if that movement would not result in a required air quality conformity determination.

Should it be determined that an administrative modification is needed, information regarding the need for modification should be presented to both RATS committees for review and determination. If the change satisfies the definition of an administrative modification, RATS will notify PennDOT and FHWA representatives and direct RATS staff to process the change. If the plan changes are above the thresholds for a modification, the proposed change will follow procedures for a Plan Amendment.

Plan Amendments

An amendment is a major revision to the LRTP. Actions that could warrant an Amendment include (but are not limited to):

- Adding new project where no phases of the project are listed
- A change in any project that affects its Air Quality significance
- Deleting projects from the plan
- Significant changes to project costs (greater than 10% of the project or phase cost), start dates (which may require an updated air quality conformity determination), or design concepts and scopes (eg., changing project termini, changing the number of traffic through lanes) for existing projects.

An amendment requires public review and comment and the re-demonstration of fiscal constraint and air quality conformity. Should an amendment be requested, information regarding the proposed change should be presented to RATS for initial review. RATS staff will review supporting documentation and convene the RATS Technical Committee to evaluate the impact of the change and supporting documentation. The Technical Committee will provide their findings and recommendations to the RATS Coordinating Committee for action. Plan Amendments will follow the procedures as outlined in the MPO's *Public Participation Plan* in effect at the current time.
In addition, plan amendments will:

- Require an update to the revenue and cost estimates supporting the plan to use an inflation rate(s) to reflect year of expenditure dollars, based on reasonable financial principles and information. These estimates must demonstrate that the change preserves the financial feasibility of the plan.
- Provide a purpose and need for the change. This should include supporting data and analysis.
- Determine if a proposed project is Air Quality (AQ) significant. The proposed project will be submitted to the PA Interagency Consultation Group (ICG) for that determination and, if so determined to be AQ significant, perform the required travel demand and air quality conformity modeling and prepare the requisite *Air Quality Conformity Report*.
- Follow a public involvement period consistent with the *RATS Public Participation Plan*. This includes review of the full draft proposal and the *Air Quality Conformity Report* (if required), followed by a 30-day public input period. Staff will review and respond to any comments received, and then the amendment will be adopted by a recorded majority vote of the RATS Coordinating Committee at a publicly advertised meeting.

Copies of the amended LRTP and *Air Quality Conformity Report* (if required) will be distributed in accordance with any applicable requirements that may be contained in the RATS *Public Participation Plan* policies in effect at that time. Although the LRTP does not require approval by the FHWA, FTA, USEPA, or PennDOT, these agencies are involved in the development of the Plan and amendments and will be provided an opportunity to comment on all proposed amendments. Should the amendment require an updated air quality conformity determination, it **does** require review and approval by FHWA, FTA, and USEPA. The final adopted LRTP Amendment, Air Quality Conformity Report (if required), and Air Quality Resolution (if required) will be forwarded to PennDOT for concurrence and subsequent advancement to FHWA, FTA, and USEPA.

PUBLIC PARTICIPATION

RATS supports and encourages active public participation throughout the transportation planning process. Our public participation policy, updated in 2023, ensures that specific opportunities exist for the public to offer input and provide feedback as active participants in the decision-making process. Public participation takes many forms, and RATS uses a wide range of methods and media to enhance the public's participation in the process.

As part of the FFY 2027-2050 Long Range Transportation Plan, RATS took a number of steps to ensure consideration of the public's views, including using the public participation plan, developing and contacting a comprehensive listing of stakeholders, utilizing a variety of methods to involve the public, and considering public comments in developing the list of transportation projects. The overall goal of the LRTP is to develop plans and strategies that promote an efficient and effective transportation system for Berks County.

The MPO's Public Participation Plan Update (2023) contains specific and explicit procedures that RATS will use to identify, seek out and engage all populations, including minorities and below poverty populations. The foundation for these efforts is stated in Title VI of the Civil Rights Act of 1964:

> "No person in the United States shall, on the basis of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program receiving Federal financial assistance." – Title VI of the Civil Rights Act of 1964 (43 U.S.C. 2000)

RATS uses its data collection and analysis capabilities to support participation efforts and help ensure meaningful access to its public participation opportunities. RATS carefully analyzes the relationship between the region's populations and its regional investments, plans and programs. Geographic analysis assists RATS to identify demographic communities and target outreach to these areas. Specifically, RATS will use its geographic analysis of target outreach areas to ensure that public meetings are held at accessible locations within these communities, and to identify, where they exist, organizations that target these communities and disseminate information to them to help reach these communities.

The Public Participation Plan Update (2023) procedures for the development of the Long Range Transportation Plan, Transportation Improvement Program and Air Quality Conformity Analysis are provided here.

The Regional Long Range Transportation Plan (LRTP)

The regional LRTP is a long range (20+ years) strategy and capital improvement program developed to guide the effective investment of public funds in multi-modal transportation facilities in the context of the regional vision. The regional plan provides the context from which the region's Transportation Improvement Program (TIP), a short- range capital improvement program for implementing transportation projects, is drawn. The LRTP is updated every four years in consultation with interested parties.

RATS' early and ongoing public participation process in developing the LRTP will follow these steps:

- Step 1: Public Participation Surveys, through the internet and targeted mailing, will be used to gather initial input (when update cycles correspond, this can occur in concert with the TIP update). When available, staff will also use input gathered as part of any of PennDOT's public input processes.
- Step 2: At the same time, Public Officials Surveys sent to local officials and the legislative delegation, will be used to gather governmental input.
- Step 3: Initial input, including at least one (1) Public Meeting/Workshop, will be compiled, and used in the design of the next phase of outreach and participation, such as workshops and other public meetings. This Public Meeting/Workshop may be held in conjunction with a regularly scheduled RATS MPO Technical or Coordinating Committee meeting.
- Step 4: Ongoing input will be used to develop draft regional plan materials in consultation with interested parties.
- Step 5: Draft regional plan materials will be presented for review and comment by the public and interested parties using the Public Review and Comment procedures for a 30-day public comment period. Draft materials will be made available during the 30-day public comment period on the BCPC website at https://www.berkspa.gov/departments/planning-commission, BCPC offices, BARTA's offices, and PennDOT District 5-0's offices, and local libraries. Information on where and how to access public comment documents will be included in the Public Notice with information to be included that details how to access documents electronically or in printed form. Vital draft regional plan documents will be made available in Spanish and alternative formats on request in accordance with the procedures for accommodating Limited English Proficient persons and persons with disabilities contained in this *Public Participation Plan*. During this stage, two (2) Public Meetings will be held. These generally include one during the day in a hybrid format that includes both in-person and electronic access in a downtown Reading location, and a second meeting held in the evening in a rural location that is generally in-person only. Staff strives to accommodate requests for presentations at other meetings.
- Step 6: All comments received will be considered and the response to comments will be documented and provided to the Board prior to taking action on the draft regional plan materials.
- Step 7: The Board takes formal action on the regional plan.
- Step 8: A Public Participation Report for the regional plan will be developed. The Report will document all comments received and the response to comments and will also document all public participation and outreach activities. This Report may take the form of a Chapter or Appendix in the LRTP.

- Step 9: Adopted final regional plan materials will be made available on the BCPC website at https://www.berkspa.gov/departments/planning-commission/transportation-reading-mpo, BCPC's offices, BARTA's offices, and PennDOT District 5-0's offices. Vital regional plan documents will be made available in Spanish and alternative formats on request in accordance with the procedures for accommodating Limited English Proficient persons and persons with disabilities contained in this *Public Participation Plan*. Information will be included that details how to access documents electronically or in printed form.

The Transportation Improvement Program (TIP)

The regional Transportation Improvement Program (TIP) identifies the region's highest priority transportation projects, develops a multi-year program of implementation, and identifies available federal and non-federal funding sources for the identified projects. The TIP covers a four-year period of investment and is updated every two years through a cooperative effort of local, state and federal agencies including participation by the general public and consultation with interested parties. Transportation projects included on the TIP are to be consistent with the regional LRTP. The entire range of projects included in the TIP must conform to federal air quality standards.

RATS early and ongoing public participation process in developing the TIP will follow these steps:

- Step 1: Public Participation Surveys, through the internet and targeted mailing, will be used to gather initial input. When update cycles correspond, this can occur in concert with the regional LRTP update and/or any PennDOT public input processes.
- Step 2: At the same time Public Officials Surveys sent to local officials and the legislative delegation, will be used to gather governmental input.
- Step 3: Initial input will be compiled and used in the design of the next phase of outreach and participation, such as workshops and other public meetings.
- Step 4: Ongoing input will be used to develop draft TIP materials in consultation with interested parties.
- Step 5: Draft TIP materials, including the Air Quality Conformity Report, Air Quality Resolution, and Community Demographic Assessment, will be presented for review and comment by the public and interested parties using the Public Review and Comment procedures for a 30-day public comment period. Draft materials will be made available during the 30-day public comment period on the BCPC website at https://www.berkspa.gov/departments/planning-commission, BCPC's offices, BARTA's offices, PennDOT district 5-0's offices, and local libraries. Information on where and how to access public comment documents will be included in the Public Notice with information included that details how to access documents electronically or in printed form. Vital draft regional plan documents will be made available in Spanish and alternative formats on request in accordance with the procedures for accommodating Limited English Proficient persons and persons with disabilities contained in this *Public Participation Plan*. Information will be included that details how to access documents electronically or in printed form. During this stage, two (2) Public Meetings will be held. These generally include one during the day in a hybrid format that includes both in-person and electronic access in a downtown Reading location, and a second meeting held in the evening in a rural location that is generally in-person only. Staff strives to accommodate requests for presentations at other meetings.
- Step 6: All comments received will be considered and the response to comments will be documented and provided to the Board prior to taking action on the draft TIP materials.
- Step 7: The Board takes formal action on the TIP and the associated Air Quality Conformity documents and Community Demographic Assessment.
- Step 8: A Public Participation Report for the TIP will be developed. The Report will document all comments received and the response to comments and will also document all public participation and outreach activities.
- Step 9: Adopted final regional plan materials will be made available on the BCPC website at https://www.berkspa.gov/departments/planning/transportation-reading-mpo, BCPC's offices, BARTA's offices, and PennDOT District 5-0's offices. Vital regional plan documents will be made available in Spanish and alternative formats on request in accordance with the procedures for accommodating Limited English Proficient persons and persons with disabilities contain in this *Public Participation Plan*. Information will be included that details how to access documents electronically or in printed form.

Air Quality Conformity Determination Report

The *Air Quality Conformity Determination* report is a companion document to the regional LRTP and the TIP. The *Air Quality Conformity Determination* report documents the process used by RATS for making the transportation-related conformity determination for the regional LRTP and TIP for ground-level ozone. The Conformity Determination is required by the federal Clean Air Act. RATS conformity finding is based on criteria and procedures in EPA's Transportation Conformity Rule (40 CFR Part 93) and satisfies all applicable conformity requirements.

The *Air Quality Conformity Determination* report is developed as part of the regional LRTP or TIP update, in which case public participation and public comment procedures for the regional LRTP or TIP update will be followed as described in Sections 10.4 and 10.5, respectively of RATS *Public Participation Plan*. The *Air Quality Conformity Determination* report is also updated as required by certain amendments to the TIP or regional LRTP, in which case public participation and comment procedures for major amendments to the regional LRTP or TIP will be followed as described in Section 10.6 of the RATS *Public Participation Plan*.

READING AREA TRANSPORTATION STUDY

March, 2026

COORDINATING COMMITTEE

PennDOT District 5-0	**Mr. Chris Kufro, District Executive (Chair)** **Ms. Jennifer Ruth, Planning & Program Manager***
PennDOT Central Office	**Mr. Ray Green, Division Chief, Center for Program Development and Management.** **Mr. Nick Raio, Trans. Planning Specialist Supervisor ***
Berks County Commissioners	**Mr. Michael Rivera, Commissioner**
Berks County Planning Commission	**Mr. Thomas McKeon, Board Member (Vice Chair)** **Mr. Alan Piper, Transportation Planner III (MPO Secretary)***
City of Reading	**Ms. Donna Reed, Council Member** **Mr. O. Chris Miller, Council Member***
Berks County Boroughs	**Mr. Brian Hoffa, Borough Council Member (Sinking Spring Borough)**
Berks County 1st Class Townships	**Ms. Lisha Rowe, Township Commissioner (Cumru Township)**
Berks County 2nd Class Townships	**Mr. Arthur "Ray" Lambert, Township Supervisor (Upper Bern Township)**
South Central Transit Authority / Berks Area Regional Transportation Authority	**Mr. Greg Downing, Executive Director** **Mr. Keith Boatman, Assoc. Director of Capital Projects/Planning**
Reading Regional Airport Authority	**Mr. Dante Santoni, Jr., Board Member**

TECHNICAL COMMITTEE

PennDOT District 5-0	**Mr. Scott Vottero, District Executive for Design (Chair)** **Mr. Michael Donchez, Transportation Planning Specialist***
PennDOT Central Office	**Ms. Nyomi Nonnemaker, Trans. Planning Specialist (Vice Chair)** **Mr. Nick Raio, Trans. Planning Specialist Supervisor ***
Berks County Planning Commission	**Mr. Alan Piper, Transportation Planner III (MPO Secretary)** **Ms. Amanda Timochenko, Transportation Planner II***
Berks County Planning Commission	**Mr. Michael Golembiewski, Transportation Modeler** **Ms. Amanda Timochenko, Transportation Planner II***
City of Reading	**Mr. Donald Edwards, Reading City Engineer**
City of Reading	**Mr. Kyle Zeiber, Department of Public Works**
South Central Transit Authority / Berks Area Regional Transportation Authority	**Mr. Keith Boatman, Assoc. Director of Capital Projects/Planning** **Ms. Lauri Ahlskog, Manager of Transit Planning & Compliance***
Reading Regional Airport Authority	**Mr. Zackary Tempesco, Airport Manager**

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FFY 2027-2050
LONG RANGE TRANSPORTATION PLAN