



# ONWARD2050

Adams County Long Range Transportation Plan

Adams County, Pennsylvania

Adopted July 27, 2022





# ONWARD2050

Adams County Long Range Transportation Plan

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## Adams County Transportation Planning Organization

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This work was sponsored by the Pennsylvania Department of Transportation (PennDOT) and the Federal Highway Administration (FHWA).

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# CONTENTS

NON-DISCRIMINATION POLICY UNDER FEDERAL AND STATE LAWS	
TITLE VI POLICY STATEMENT	
TERMS & ACRONYMS	
CHAPTER 1 - INTRODUCTION .....	1
Transportation Planning: An Overview .....	1
Legislation Guiding Metropolitan Transportation Planning and Programming.....	1
The Transportation Planning Organization In Adams County .....	3
Responsibilities of ACTPO .....	3
CHAPTER 2 - PUBLIC ENGAGEMENT .....	5
Strategy .....	5
Outreach Techniques.....	6
Public Survey – Spreading the Word .....	7
Content .....	7
Public Comment Map .....	8
Overview of the Feedback.....	8
Who Submitted Surveys:.....	9
Overall Scenario Preference .....	10
Public Comment Map Summary.....	10
CHAPTER 3 - GOALS AND OBJECTIVES .....	11
Federal Planning Factors: .....	11
Pennsylvania 2045 Goals and Objectives.....	12
Adams County Goals And Objectives .....	14
CHAPTER 4 - LAND USE AND SOCIOECONOMIC TRENDS.....	15
Land Use.....	16

Policy and Growth.....	16
Agriculture .....	16
Socioeconomic Trends .....	19
Population & Housing .....	19
Employment.....	20
Modes of Commuting.....	21
Vehicle Ownership.....	21
CHAPTER 5 - THE TRANSPORTATION NETWORK .....	22
Roads.....	22
Functional Classification.....	24
Traffic Volumes .....	26
Bridges.....	28
Signals .....	30
Intelligent Transportation Systems.....	30
Electric Vehicles And Charging Infrastructure .....	31
Safety.....	32
Crash Statistics .....	32
Transit .....	34
rabbittransit .....	34
Commuter Services of Pennsylvania .....	35
Bicycle and Pedestrian Facilities .....	36
Congestion .....	37
Freight.....	38
Rail .....	40
Aviation .....	40

CHAPTER 6 – TRANSPORTATION PERFORMANCE MANAGEMENT .....	41
PM-1: Safety Performance Measures .....	42
PM-2: Pavement/ Bridge Performance Measures .....	46
PM-3: System Performance Measures .....	48
Transit Performance Measures .....	49
Transit Asset Management .....	49
Transit Safety .....	50
CHAPTER 7 – FUTURE STRATEGIES .....	51
Asset Management .....	52
Mobility, Access, and Reliability .....	54
Connectivity .....	54
Active Transportation (Bicycle/Pedestrian) .....	54
Transit .....	55
Modernization and Operation .....	59
Transportation System Operations and Management (Signals, Signs, ITS) .....	59
Transportation Demand Management.....	60
Alternative Fuels .....	60
Connected/ Autonomous Vehicles .....	61
Freight.....	61
Safety.....	65
Equity.....	67
CHAPTER 8 – FINANCIAL GUIDANCE .....	69
Overview .....	69
Funding Sources.....	69
Federal .....	70

State.....	70
Local.....	71
Other .....	71
Financial Plan .....	72
Step 1: Funding Scenario Methodology .....	72
Step 2: Future Allocation Breakdown .....	75
Step 3: Fiscal Constraint .....	79
CHAPTER 9 – PROJECT PRIORITIZATION.....	81
Asset Management Criteria .....	81
Pavement.....	81
Bridges .....	82
Safety Ranking Criteria .....	83
Mobility, Access, and Reliability Criteria .....	84
Connectivity .....	84
Active Transportation .....	84
Transit .....	84
Modernization and Operation Criteria .....	85
CHAPTER 10.....	86
ENVIRONMENTAL AND CULTURAL ANALYSIS.....	86
Environmental Factors.....	86
Protected Lands.....	86
Waterways.....	86
Hazards .....	88
Culture And History .....	91
Historic Resources.....	91

Tourism .....	91
Resource Impact Consideration .....	92
Federal Requirements.....	92
CHAPTER 11 - ENVIRONMENTAL JUSTICE ANALYSIS .....	94
Introduction .....	94
Core Elements Methodology.....	95
Identifying Minority and Low-Income Populations .....	95
Condition Assessment .....	99
Expanding the Analysis.....	111
CHAPTER 12 AIR QUALITY CONFORMITY .....	112
Executive Summary.....	112
Background.....	113
Transportation Conformity Process .....	113
National Ambient Air Quality Standards.....	113
ACTPO TIP and LRTP.....	113
Transportation Conformity Process.....	114
Transportation Conformity Requirements .....	114
Overview.....	114
Latest Planning Assumptions .....	115
Consultation Requirements .....	115
Fiscal Constraint .....	116
Conclusion .....	116
Regionally Significant Project List .....	117
APPENDIX.....	118
A. LRTP Development Timeline	
B. Virtual Public Involvement Policy	



- C. Public Engagement Documentation
  - C-1. Survey Results
  - C-2. Open-ended Comments
  - C-3. Identified Project Locations / Future Needs
- D. Population Projections by Municipality
- E. Transportation Performance Management
- F. On-Road Active Transportation and Safety Analysis
- G. YAMPO MTP Capital Improvements Plan
- H. Adams County 2023-2026 TIP/TYP
- I. Financial Guidance Charts
  - I-1. Actual and Target Expenditures Tables and Chart
  - I-2. ACTPO Funding Scenario Tables
  - I-3. Projected Funding Allocations by Category
- J. Ranking System Framework
- K. Listed and Eligible Historic Resources
- L. Statewide EJ Analysis Methodology
- M. Public Comment Period Documentation
- N. Air Quality Resolution for the ACTPO

## County of Adams

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The County of Adams is committed to compliance with the non-discrimination requirements of applicable civil rights policy. In accordance with Title VI of the Civil Rights Act, as amended, programs, plans, services, and activities are administered without regard to race, color, or national origin. In addition, the County of Adams prohibits discrimination based on age, sex, religious creed, disability, limited English proficiency (LEP), or low-income status under the Civil Rights Restoration Act of 1987, Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority and Low-Income Populations), the Americans with Disabilities Act, Executive Order 13166 (Improving Access to Services for Persons with Limited English Proficiency), the Pennsylvania Human Relations Act, or any other law affording protection from discrimination. Meeting locations are accessible to persons with disabilities, and, with advance notification, accommodations may be provided for those with special needs related to language, sight, or hearing.

Any person who believes he or she has been aggrieved by any unlawful discriminatory practice may file a complaint with the Adams County Office of Planning & Development.

To request more information on the County of Adams' civil rights program, the procedures to file a complaint, or to submit a request for accommodations, contact the Adams County Office of Planning & Development.

<b>Phone:</b>	717-337-9824	<b>Address:</b>	670 Old Harrisburg Rd, Suite 100 Gettysburg, PA 17325
<b>Email:</b>	rthaeler@adamscounty.us		
<b>Website:</b>	http://www.adamscounty.us/Dept/Planning/Pages/TitleVI.aspx		

A complainant may file a complaint directly to the following agencies:

<b>Pennsylvania Department of Transportation</b>	<b>Federal Highway Administration</b>	<b>Federal Transit Administration</b>	<b>U.S. Department of Justice</b>
<i>Bureau of Equal Opportunity</i>	<i>U.S. Department of Transportation Equal Opportunity Specialist</i>	<i>Office of Civil Rights</i>	<i>Office of Justice Programs</i>
P.O. Box 3251 Harrisburg, PA 17105-3251	PA Division Office 228 Walnut Street, Room 508 Harrisburg, PA 17101-1720	Title VI Program Coordinator East Building - 5th Floor 1200 New jersey Ave, SE Washington DC 20590	Office of Civil Rights 810 7th Street, NW Washington DC 20531
Phone: 800-468-4201	Phone: 717-221-3705	Phone: 202-366-8810	Phone: 202-307-0690 Phone (TDD): 202-307-2027
Email: penndoteoreports@pa.gov			

## Adams County Transportation Planning Organization (ACTPO) TITLE VI POLICY STATEMENT

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The Adams County Metropolitan Planning Organization (ACTPO) does not discriminate against individuals on the basis of race, color, or national origin in its services, programs or activities. Furthermore, ACTPO will not, directly or through contractual arrangements:

- Engage in intentional discrimination because of race, color, or national origin;
- Use criteria or methods of administration which have the effect of subjecting persons to discrimination because of their race, color, or national origin; or,
- Intimidate, threaten, coerce, or discriminate against any individual in retaliation for exercising a right or privilege.

All complaints that allege exclusion from participation in; denial of benefits or discrimination on the basis of race, color, or national origin shall be forwarded to the Adams County Title VI Compliance Officer for intake and disposition consistent with the ACTPO Title VI Complaint Process.

Complaints that a program, service, or activity of ACTPO should be submitted via mail or email to:

Robert Thaeler  
Principal Planner  
Adams County Office of Planning and Development  
670 Old Harrisburg Road, Suite 100  
Gettysburg, PA 17325  
(717) 337-9824  
[rthaeler@adamscounty.us](mailto:rthaeler@adamscounty.us)

**English**

ATTENTION: If you speak another language, language assistance is available to you FREE OF CHARGE. Call 717-337-9824 (TTY: 711)

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**Español**

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## Deutsche

ACHTUNG: Wenn Sie Deutsch sprechen, erhalten Sie kostenlose sprachliche Unterstützungsdienste. Telefonnummer 717-337-9824 (TTY: 711).

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## Italiano

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### ગુજરાતી

સુચના: જો તમે ગુજરાતી બોલતા હો, તો નિ:સુલ્ક ભાષા સહાય સેવાઓ તમારા માટે ઉપલબ્ધ છે. ફોન કરો 717-337-9824 (TTY: 711)

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### اردو

نوٹ: اگر آپ اردو بولتے ہیں، تو آپ مفت مدد حاصل کرسکتے ہیں. 9824-337-717 کو کال کریں (ٹی ٹی آئی: 711)

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### ਪੰਜਾਬੀ

ਨੋਟ: ਜੇ ਤੁਸੀਂ ਪੰਜਾਬੀ ਬੋਲਦੇ ਹੋ ਤਾਂ ਤੁਸੀਂ ਮੁਫਤ ਮਦਦ ਲੈ ਸਕਦੇ ਹੋ. ਕਾਲ 717-337-9824 (ਟੀ.ਟੀ.ਆਈ.: 711)

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### नेपाली

नोट: यदि तपाईं नेपाली बोल्नुहुन्छ भने, तपाईं नि:शुल्क मद्दत प्राप्त गर्न सक्नुहुनेछ। फोन 717-337-9824 (टीटीआई: 711)

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ຂ້ອນວະວັງ: ຖ້າທ່ານເວົ້າພາສາລາວ, ທ່ານຈະໄດ້ຮັບການຊ່ວຍເຫຼືອພຣີ. ໂທ 717-337-9824 (TTY: 711)

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### தமிழ்

கவனம்: நீங்கள் தமிழ் பேசினால், இலவச உதவி பெறலாம். அழைப்புக்கு 717-337-9824 (TTY: 711)

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### မြန်မာ

အာရုံစူးစိုက်မှု: သင်မြန်မာစကားပြောဆိုလျှင်, သင်အခမဲ့အကူအညီလက်ခံရယူနိုင်ပါသည်။ 717-337-9824 Call (TTY: 711)

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### කඹුරු

ආහ්වනය: ඔබ කඹුරු භාෂාවෙන් කතා කරන්නේ නම්, ඔබට නොමිලේ ආධාර ලබා දිය හැකිය. 717-337-9824 ට කඹුරු (TTY: 711)

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### **ລາວ**

ໂປດຊາບ: ຖ້າວ່າ ທ່ານເວົ້າພາສາ ລາວ, ການບໍລິການຊ່ວຍເຫຼືອດ້ານພາສາ, ໂດຍບໍ່ເສັຽຄ່າ, ແມ່ນມີພ້ອມໃຫ້ທ່ານ. ໂທ 717-337-9824 (TTY: 711)

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### **日本語**

注意事項：日本語を話される場合、無料の言語支援をご利用いただけます。717-337-9824 (TTY: 711)まで、お電話にてご連絡ください

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### **ગુજરાતી**

સુચના: જો તમે ગુજરાતી બોલતા હો, તો નિઃશુલ્ક ભાષા સહાય સેવાઓ તમારા માટે ઉપલબ્ધ છે. ફોન કરો 717-337-9824 (TTY: 711)



## TERMS & ACRONYMS

3C – Continuing, Comprehensive and Cooperative. Federal requirements for the transportation planning process.

185/183 – State funds. Can be utilized on bridge projects that have capital budget approval.

409 – PennDOT County Maintenance Office Funds from Act 89.

581 – State funds. Can be utilized on highway or bridge projects that have capital budget approval

AADT – Annual Average Daily Traffic

ACOPD – Adams County Office of Planning and Development. Staff of ACTPO.

ACTPO – Adams County Transportation Planning Organization

ACT 89 of 2013 – State transportation funding legislation.

ADA – Americans with Disabilities Act. A federal requirement.

ADTT – Average Daily Truck Traffic

AFC Program – Alternative Fuel Corridor program. A federal initiative to increase the availability of DC fast charging infrastructure along interstates and major routes across the country.

AV – Autonomous Vehicle

BAMS – Bridge Asset Management System.

BIL aka IJA (2022) - Bipartisan Infrastructure Legislation / Infrastructure Investment and Jobs Act

BPN – Business Plan Network. A hierarchy used by PennDOT for classifying roads.

BMS – Bridge Management System. A PennDOT data collection effort.

BOF – Bridge Off System. Federal Funds to be utilized on bridges that are not on the Federal Aid System and the bridge is greater than 20 feet.

CAA – Clean Air Act. A federal requirement.

CIP – Capital Improvement Program

CMAQ/CAQ – Congestion Management Air Quality Federal Funds utilized to implement projects to improve air quality.

CMP – Congestion Management Process

CPTA – Central Pennsylvania Transportation Authority

CV – Connected Vehicle

DCFC – DC Fast Charging. The highest level of electric vehicle charging.

DCNR – Department of Conservation and Natural Resources. A state agency.

DEP – Pennsylvania Department of Environmental Protection. A state agency.

DMS – Dynamic Message Sign. A type of Intelligent Transportation System (ITS) device.

DSRC – Dedicated Short-Range Communication

EA – Environmental Assessment

EIS – Environmental Impact Statement

EJ – Environmental Justice. A federal initiative.

EPA - United States Environmental Protection Agency

Equity - the quality of being fair and impartial.

Equity in Transportation - seeks fairness in mobility and accessibility to meet the needs of all community members

Executive Order 12898 – Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations (1994)

EV – Electric Vehicle

FAA – Federal Aviation Administration

FAST Act (2015) – Fixing America’s Surface Transportation.

FFY – Federal Fiscal Year (October 1 to September 30)

FHWA – Federal Highway Administration

FTA – Federal Transit Administration

Functional Classification - groups streets and highways into classes, or systems, according to the characteristics of the roadway and the level of service provided (local access, regional, and intra-regional).

GIS – Geographic Information System

HSIP – Highway Safety Improvement Program. Federal Funds directed towards projects that will implement measures to reduce or prevent fatalities and.

HOV – High Occupancy Vehicle

IRI – International Roughness Index. A road maintenance measure.

ISTEA (1991) – Intermodal Surface Transportation Efficiency Act of 1991

ITS – Intelligent Transportation Systems

LEP – Limited English Proficiency Plan

LOS – Level of Service

LRTP – Long Range Transportation Plan

LTAP – Local Technical Assistance Program

MAP-21 (2012) – Moving Ahead for Progress in the 21st Century.

MPMS – Multimodal Project Management System. A PennDOT project management effort.

MPO – Metropolitan Planning Organization.

MTF – Multimodal Transportation Fund. A state grant program established by Act 89.

NAAQS – National Ambient Air Quality Standards

NEPA – National Environmental Policy Act. A federal requirement.

NHPP – National Highway Performance Program. Federal funds directed towards the NHS for Bridge and Roadway Projects.

NHS – National Highway System

P3 – Public Private Partnership

PAMS – Pavement Asset Management System.

PBPP – Performance Based Planning and Programming.

PCIT – Pennsylvania Crash Information Tool. PennDOT’s public database for crash statistics.

PDO – Property Damage Only. A level of crash severity

PennDOT – Pennsylvania Department of Transportation. A state agency.

PM-1 – Federal performance measures for safety.

PM-2 – Federal performance measures for asset management.

PM-3 – Federal performance measures for system performance.

PPP – Public Participation Plan

RMS – Roadway Management System. A PennDOT data collection effort.

Road Segment - Individual sections of highways at specified length's

RPO – Rural Planning Organization

SAFETEA-LU (2005) – Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

SOV – Single Occupancy Vehicle

SRS – Safe Routes to School

SRTA – Susquehanna Regional Transportation Authority. The local governing board of rabbittransit and its shared ride programs.

SRTP – Susquehanna Regional Transportation Partnership. A multi-MPO governing body that funds PA Commuter Services.

STC – State Transportation Commission

STIP – Statewide Transportation Improvement Program

STP – Surface Transportation Program. Federal highway funds.

SXF – Special Federal Funds. Typical Earmarked funds.

TAM – Transit Asset Management

TAMP – Transportation Asset Management Plan.

TAP/TAU – Transportation Alternative Program- Federal Funds primarily focused on Bicycle and Pedestrian Improvements. TAU is

the TAP funding allocated to MPO's with a population greater than 200,000.

TDM – Transportation Demand Management

TEA-21 (1998) – Transportation Equity Act for the 21st Century

TIA – Traffic Impact Assessment

TIP – Transportation Improvement Program. A four-year plan for all transportation projects.

Title VI – Title VI of the Civil Rights Act of 1964. A federal requirement.

TSMO – Transportation Systems Management and Operations.

TTI – Travel Time Index

TYP – Twelve Year Program. Pennsylvania's official mid-range planning tool for transportation related projects.

UA – Urbanized Area. A Census Bureau designation of an area with a population of 50,000 or greater.

UPWP – Unified Planning Work Program

USDOT – United States Department of Transportation

Vision Zero - a strategy with a goal of eliminating all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all.

VMT – Vehicle Miles Traveled

VPI – Virtual Public Involvement

YOE – Year of Expenditure

YAMPO – York Area MPO.

# CHAPTER 1 - INTRODUCTION

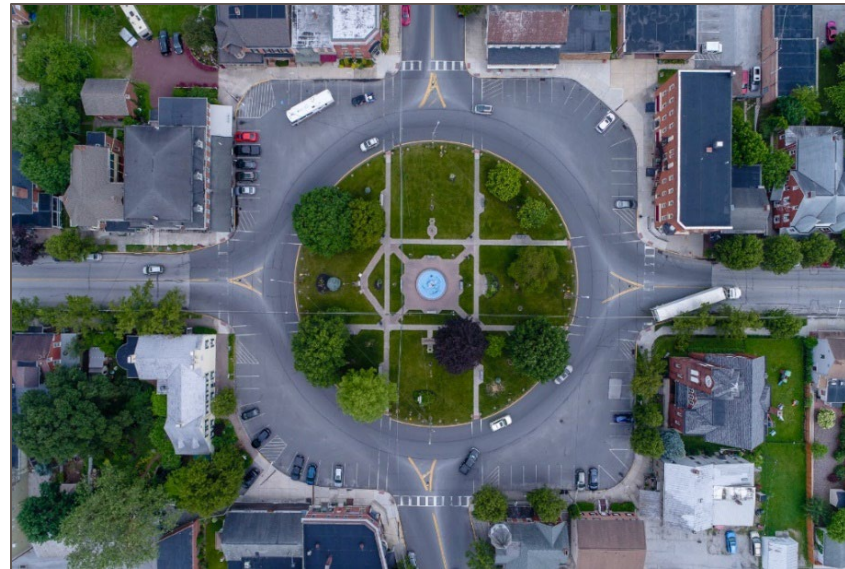
The transportation system plays an integral role in supporting the quality of life for the people living within, and traveling through, Adams County. The process of transportation planning and programming drives the continued pursuit toward an equitable, safe, and efficient multimodal transportation network that increases mobility and accessibility. ONWARD2050 examines the current transportation network and considers the impacts of various economic, environmental, technological, and social factors over the next 30 years. From the analysis, long-term goals are established that will guide the decision-making process toward meeting the projected transportation needs of the County.

## TRANSPORTATION PLANNING: AN OVERVIEW

Federal transportation legislation designates funding for a variety of transportation categories, including bridges, highways, safety and operations, public transit, demonstration projects, and discretionary programs. Recognizing the unique transportation needs of communities across the country, federal transportation legislation includes a flexible transportation planning process which allows regions to make local decisions concerning the prioritization of federally-available transportation funds.

## Legislation Guiding Metropolitan Transportation Planning and Programming

It is important to recognize the legislative background that has shaped the current transportation planning process. Throughout the history of transportation planning in the United States, priorities, and strategies for achieving the priorities, have evolved at the federal



level in order to continuously improve the broader transportation system. The following section provides a description of the milestone policies that have contributed to the framework that guides the modern transportation planning and programming process. Later sections of the plan will elaborate on the County's Transportation Planning Organization's methods and strategies for satisfying these specific requirements.

## FEDERAL LEGISLATION

**Title 23, United States Code – Highways:** Enacted in 1958, Title 23 of U.S. Code contains the general and permanent laws, as amended, pertaining to the overall highway system in the United States. Title 23 is divided into subparts, including chapters, sections, and subsections, all which relate to particular matters and subjects within the overall Highways title. For example, 23 USC 134 refers to the specific requirements of Metropolitan Transportation Planning.

**The Federal-Aid Highway Act of 1962:** Signed into law by President Kennedy, the formation of a Metropolitan Planning Organization (MPO) became a requirement for urbanized areas (UA's) with populations of 50,000 or greater. MPOs are responsible for carrying out the required transportation planning and programming process. This law also mandates that all planning activities be based on a continuing, comprehensive, and cooperative process ("3C planning process") approach, which remains at the forefront of all transportation planning and programming activities.

**Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991:** When ISTEA was signed into law by George H. W. Bush, it was considered revolutionary. It revamped the way transportation planning was traditionally conducted by emphasizing intermodal planning, rather than simply focusing on highway transportation. State and local agencies gained a larger role in the decision-making process of projects, and an initiative toward increased public involvement extended collaboration efforts. Funds were funneled toward newly developed programs that addressed the consequential issues of the transportation system, including congestion mitigation, air quality, and safety concerns.

**Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21):** At the time it was signed in 1998, TEA-21 allocated more funds toward the transportation system than ever before. Improving safety, protecting the environment and public health, rebuilding the country's highway and transit systems, promoting seat belt use and awareness, and expanding the provisions that make biking and walking a more viable option for travel were core priorities of the policy.

**Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU):** The Highway Safety Improvement Program (HSIP) was created under SAFETEA-LU when signed in 2005. This program provides funding specifically for transportation projects that make significant progress toward reducing fatalities and serious injuries on the highway system. Significant changes and requirements to the environmental review process when planning, designing, and constructing transportation projects were also implemented under the act.

**Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21):** Signed by President Barack Obama in 2012, MAP-21 brought yet another shift in the methodology used for transportation planning and programming. Performance-Based Planning and Programming (PBPP), a strategy based on performance and outcome data, became the primary approach to better inform investment decision-making. To implement the strategy, performance measures are established by the U.S Department of Transportation at the Federal level. States DOTs and local planning organizations must then establish performance targets that reflect the performance measures. MAP-21 also included provisions that worked to streamline the process of project delivery.

**Fixing America's Surface Transportation Act (FAST Act):** At the time of its signing by President Barack Obama in 2015, it was the first federal law in over a decade to provide "long-term" funding certainty for surface transportation. The FAST Act authorized \$305 billion in funding over fiscal years 2016-2020. Safety and project delivery continued to be a priority, and programs were developed specifically for freight projects.

**Bipartisan Infrastructure Bill (BIL):** BIL is the largest long-term investment in America's infrastructure and economy in history. It provides \$550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, mass transit, water infrastructure, resilience, and broadband. BIL created more than a dozen new highway programs, including funding for EV charging infrastructure and creates new opportunities for local governmental entities to compete directly for funding.

# THE TRANSPORTATION PLANNING ORGANIZATION IN ADAMS COUNTY

A transportation planning organization is a policy-making body with members representing government entities, transportation authorities, and other stakeholders. A geographic area with less than 50,000 people is designated as a Rural Planning Organizations (RPO). An area with a population of 50,000 or greater is considered an Urbanized Area (UA) by the Census Bureau, and so, is designated as a Metropolitan Planning Organization (MPO).

In Adams County, the designated transportation planning organization operates under the name of the Adams County Transportation Planning Organization (ACTPO). Formally initiated in 1999 as an RPO, the Adams County Transportation Planning Organization was re-designated as an MPO in 2013. It serves as the primary “planning partner” with PennDOT regarding the development, prioritization, and funding of future transportation plans and programs in Adams County. ACTPO must address specific regulatory requirements in order to receive federal funding for transportation planning activities. The 13-member board includes representatives from government agencies, transportation entities, and Adams County organizations representing industry, economic development, and human services. The Adams County Office of Planning and Development (ACOPD) serves as the staff to ACTPO and supports its role in transportation planning by providing analysis and technical support.

## Responsibilities of ACTPO

The Federal Highway Administration (FHWA) has identified six core functions of an MPO. These functions and ACTPO’S efforts to fulfill the requirements are detailed below.

### Establish a setting for effective decision making

ACTPO provides a fair, open, and impartial forum to facilitate collaboration related to planning efforts. Meetings are accessible to all interested parties and are regularly scheduled on a quarterly basis.

### Identify and evaluate transportation improvement options

Various transportation studies and analyses are utilized, along with planning methods, to inform the transportation system decision-making process. Priority projects are then identified, and the limited available funds are then applied appropriately.

Develop and update a LRTP for the metropolitan area covering a planning horizon of at least 20 years



As federally mandated, ACTPO updates the Long Range Transportation Plan (LRTP) every 5 years. The visions and goals, strategies, and

### Develop a TIP (Transportation Improvement Program)

The TIP is a fiscally constrained capital improvement program that includes the multimodal projects and programs to be federally funded over the next four years. Projects identified in the TIP must be derived from the LRTP to be eligible for federal funds. The list of prioritized projects and programs is developed in cooperation with PennDOT and public transit providers. The TIP includes applicable implementation schedules and identifies funding needs and mechanisms. The TIP is updated and approved by ACTPO every two years.

Identify performance measure targets and monitor whether implemented projects are achieving targets

## The LRTP Process

ONWARD2050, Adams County’s Long Range Transportation Plan (LRTP), is the overarching policy document that identifies the county’s long-term transportation needs and strategies for improving the transportation network relative to community development, economic growth, and trends related to land use and population.

Goals of the region are established by examining the current conditions and gathering input from stakeholders who use, and are affected by, the transportation network. Goals must also align with requirements set at the federal and state levels.

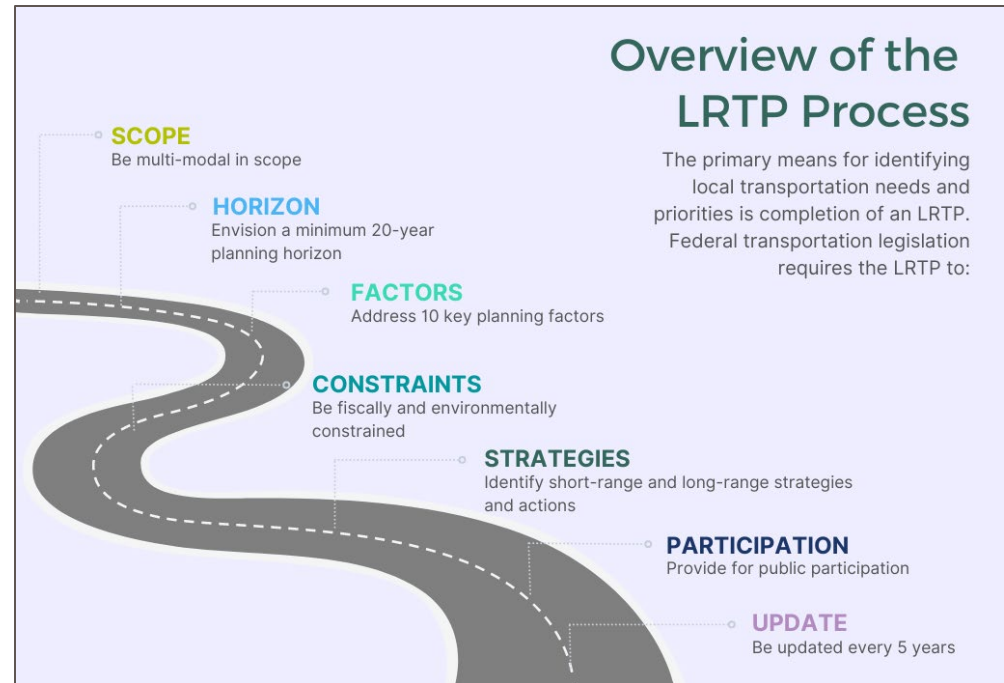
Ultimately, a list of projects is identified that will advance steady progress toward the system goals. In doing so, ONWARD2050 fulfills the federal transportation planning requirements for Adams

requirements are revisited with each update and amended as necessary to conform with current planning initiatives in the region.

MAP-21 mandated that performance-based planning and programming be implemented in order to inform the transportation decision-making process. ACTPO works closely with PennDOT to deploy this strategy.

### Involve the public

Public involvement is vital to all planning and programming conducted in Adams County. Effective, mindful decision-making regarding the transportation system can only occur when the input of the citizens and entities who use the system is considered throughout the entire process. The adopted Public Participation Plan outlines ACTPO’s goals, strategies, and methods for gathering public input related to transportation planning. Opportunities are provided throughout plan and program updates for interested parties to provide opinions, ask questions, and engage in general collaboration, such as public meetings.



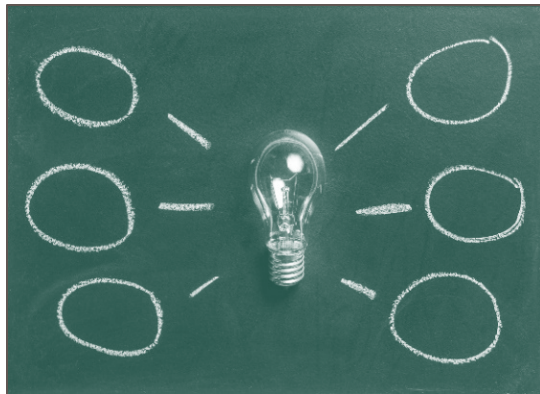
County and its Metropolitan Planning Organization, thus ensuring the county's continued eligibility for Federal transportation funding. The development timeline for ONWARD2050 is included in Appendix A.

## CHAPTER 2 - PUBLIC ENGAGEMENT

The process of public engagement is a crucial component of transportation planning, including during the development of the Long Range Transportation Plan. The process ensures that stakeholders have the opportunity to actively engage in matters concerning the transportation network. ACTPO is federally mandated to maintain a Public Participation Plan (PPP) that provides a framework for public outreach activities. Specifically, to facilitate a continuing, cooperative, and comprehensive (3C) planning approach, the document identifies communication methods used to notify the public of engagement opportunities, identifies stakeholders, specifies strategies for gathering public input, and provides an analysis of the socio-economic trends within the County. ACTPO's Public Participation Plan was actively updated alongside ONWARD2050. To view the most recent version of the Public Participation Plan, visit [ACTPO'S website](#).



## STRATEGY



Public input is a critical component when evaluating the functionality and efficiency of the transportation network. Engaging the community provides a means for establishing high-level priorities and identifying needed improvements. Users of the transportation system provide beneficial anecdotal feedback pertaining to mobility, connectivity, maintenance, and safety concerns. Emerging technology, shifting social norms and behaviors, and current events (e.g. global pandemics and natural disasters) may redirect public priorities and shift policy decisions from one plan update to the next. Ultimately, a vision for the transportation system in the future, that keeps pace with the changing region, evolves from information collected through public outreach efforts. An investment strategy that prioritizes projects is then developed to achieve that vision, while also considering reasonable projected funding levels, the federal requirement of Performance Based Planning and Programming (PBPP), and other requirements set by governmental agencies.



# Outreach Techniques

The following outreach techniques were used to gather public input for developing ONWARD2050. The feedback was then collectively analyzed and used to develop several elements of the plan.

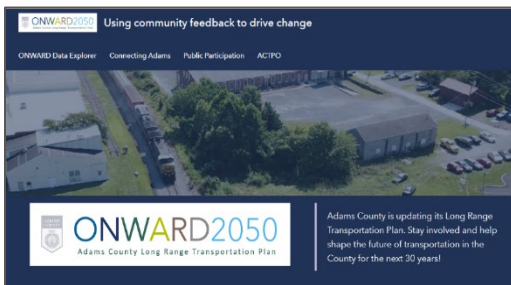
**Virtual Public Involvement:** The social disruptions caused by the COVID-19 pandemic exposed the need to provide alternate communication methods when meeting in the same physical location is not an option or when mobility barriers hinder one's ability to provide meaningful feedback. As a result, Virtual Public Involvement (VPI) strategies have been integrated into ACTPO's public engagement efforts related to transportation planning and programming activities. The draft policy that addresses VPI is included in Appendix B.

## LRTP SUBCOMMITTEE:

A subcommittee was organized to guide the development of ONWARD2050. Acting as a sounding board for staff considerations, the subcommittee provided suggestions and feedback throughout the plan development process. Members of the subcommittee included representatives of the ACTPO board, PennDOT, and FHWA.

## ONWARD2050 PROJECT WEBSITE:

A project website was created to present an overview of the development process of ONWARD2050. The interactive website allowed users to access the public survey and subsequent survey results, provide feedback using the public comment map, learn about the history



of Adams County's transportation system, explore interactive maps, and more. The ONWARD2050 project website will transition into a general Adams County transportation planning website, aligning with ACTPO's goal of providing easily-accessible transportation planning related information.

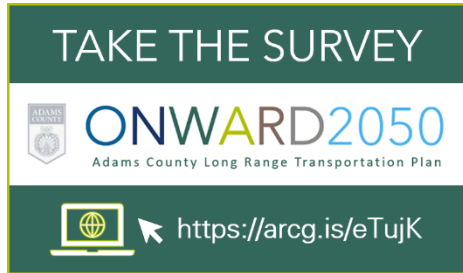
## MUNICIPAL ENGAGEMENT & PENNDOT CONNECTS

Municipal officials carry the responsibility of making local decisions for the townships and boroughs within Adams County. For matters related to the transportation network, familiarity with the road network, including state and local roads and bridges, is necessary for determining the best solutions for specific issues. ACTPO viewed direct outreach to municipal boards and councils as an opportunity to capture insight that may not have been received otherwise.

Engaging with municipalities during the planning process aligns with the PennDOT Connects initiative, PennDOT's planning policy designed to maximize the benefits of project investments to improve the efficiency of project delivery and avoid costly project delays, mistakes, and miscommunication. This process begins when projects are identified as part of the Long Range Transportation Plan and continues when projects are added to the Twelve Year Plan (TYP) and programmed on the Transportation Improvement Program (TIP). Early collaboration through in-person meetings and the PennDOT Connects Portal can help to ensure that the scope of work identified for individual projects considers local community needs and policies.



# PUBLIC SURVEY – SPREADING THE WORD



A public survey was launched in July 2021 to gather feedback related to the transportation system in Adams County. The survey was conveniently accessible through an interactive online platform. Hardcopies of the survey were also available to anyone who did not have access to a computer or mobile device, or those preferring to submit responses in paper form. Marketing materials utilizing a QR (Quick Response) code and web links were created to promote the survey throughout the community. Local organizations and municipalities shared the survey through websites, listservs, newsletters, and social media accounts. A news article was published on two separate occasions in the local newspaper, *Gettysburg Times*, to inform readers about the public engagement opportunity.

## Content

The public survey consisted of three parts:

### PART 1

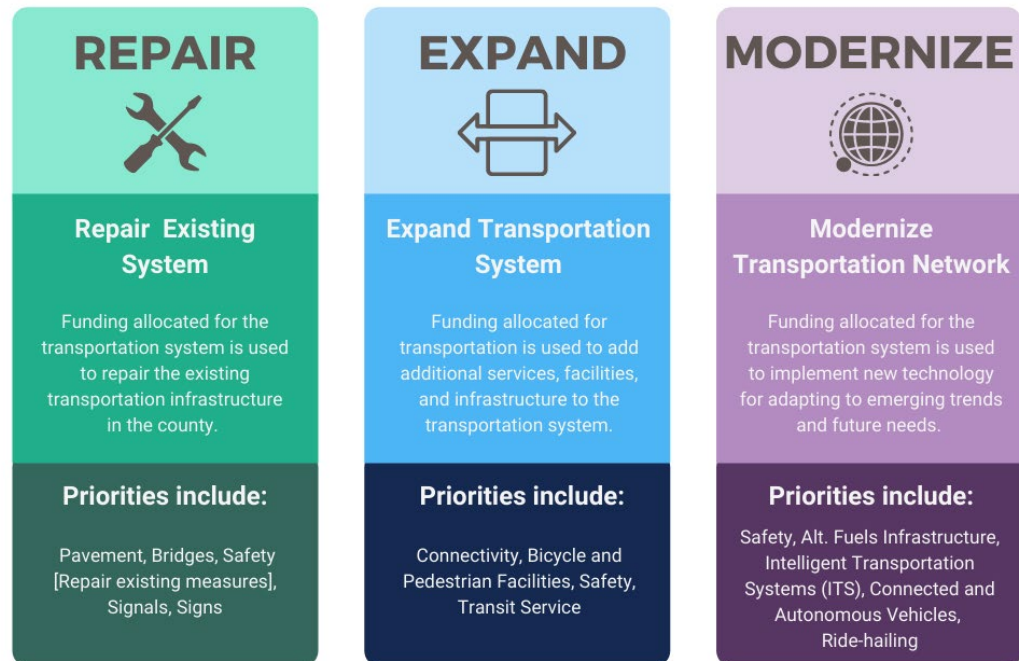
Three different scenarios were identified: Repair the existing system, expand the transportation system, and modernize the transportation system. Respondents were asked to rank the scenarios, and priorities within each scenario, based on their preferences.

### PART 2

Respondents were asked questions related to transportation system funding, current use of the transportation system, and emerging vehicle technologies.

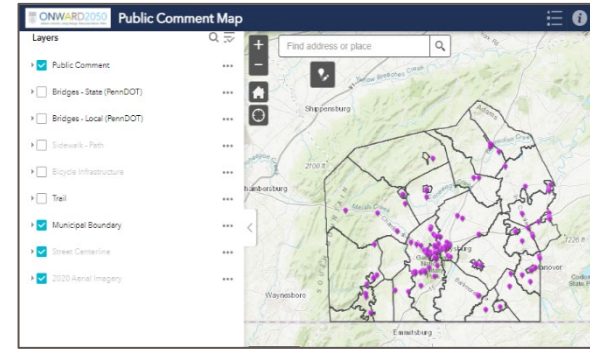
### PART 3

Part three of the survey was an open-ended question. This part allowed survey respondents to comment freely about the transportation network.



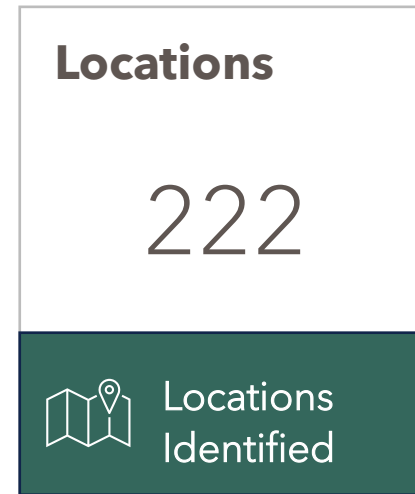
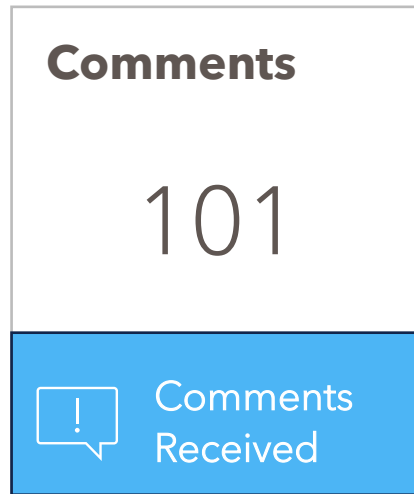
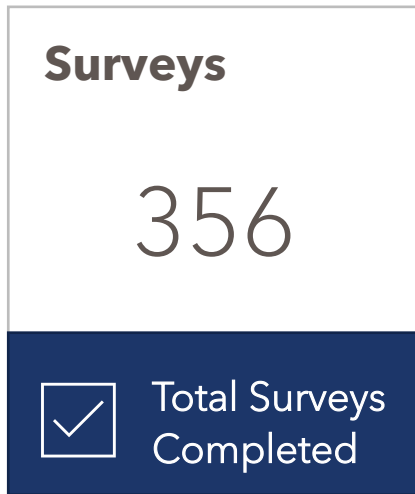
# Public Comment Map

A comment map was made available to the public to collect transportation-related concerns at specific locations within the county. To better understand who was providing input, respondents were asked to identify their tie to Adams County. Respondents were also asked to categorize their comment or concern into a broader transportation-related topic. The overwhelming majority of comments and concerns submitted through the public comment map related to safety issues.



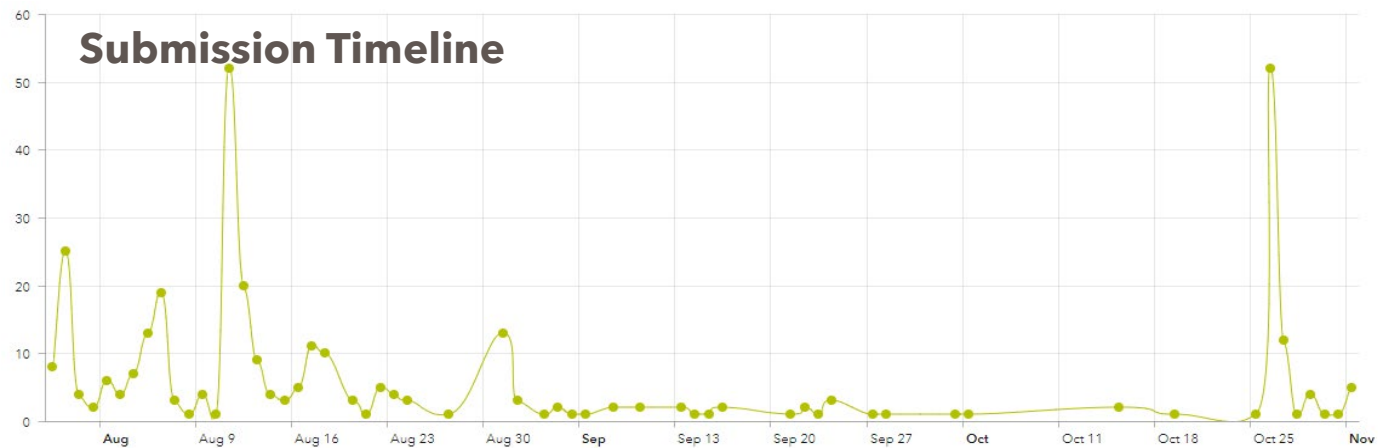
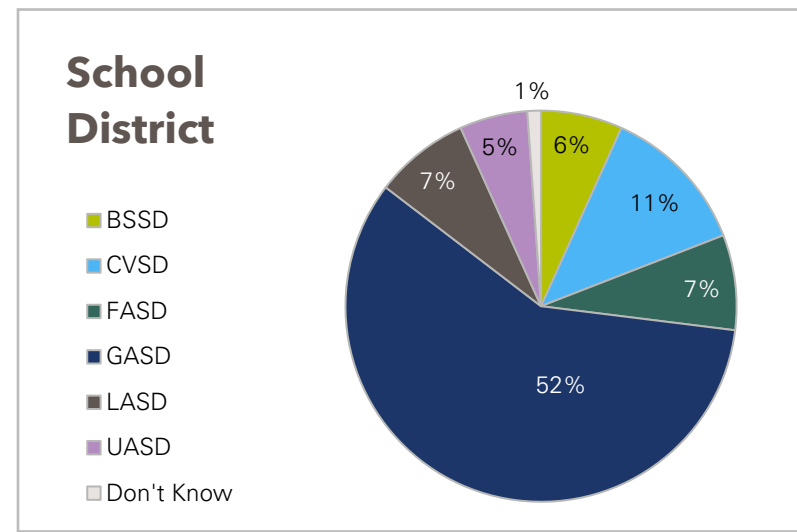
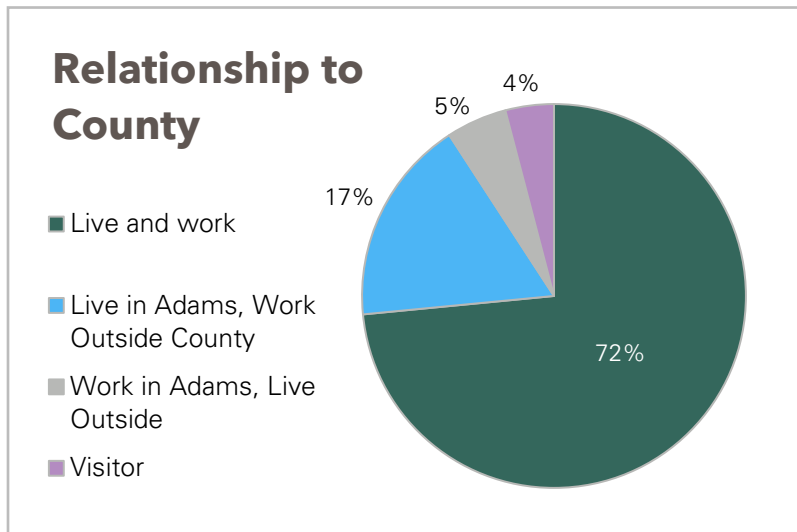
## Overview of the Feedback

The following is a general summary of the public survey. The complete survey, including a full list of responses, comments, and locations identified, may be found in Appendix C.



## Who Submitted Surveys:

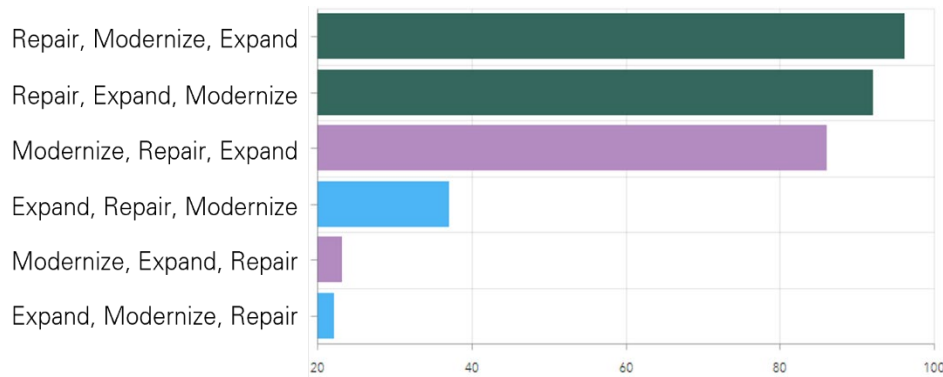
The majority of people who submitted a survey live and work (or are retired) in Adams County. Respondents who live in the County were asked which School District they reside in.



# Overall Scenario Preference

The three scenarios from Part 1 of the survey were ranked according to preference:

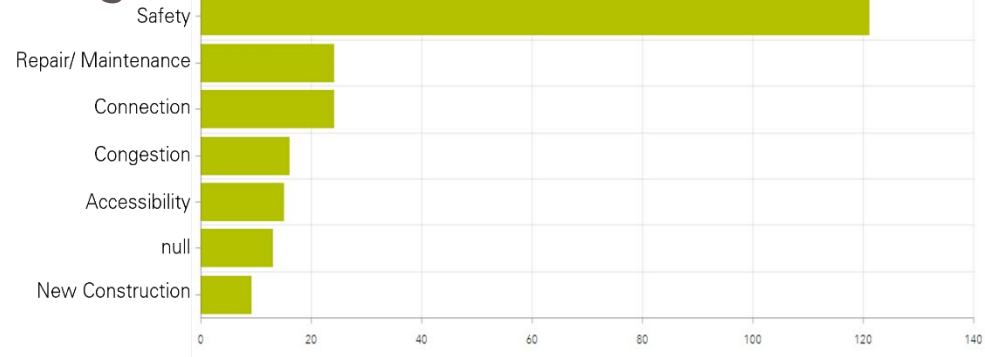
## Scenarios



# Public Comment Map Summary

A web application was available, through and independent of the survey, to collect the location of transportation-related concerns in the County. The public could identify specific places on a map and were asked a few questions about the location.

## Categories



# RECURRING PUBLIC FEEDBACK CONCERNS



- Expand safe bicycle and pedestrian connections where practicable throughout the county
- Repair and maintain the existing transportation network in the county
- Consider additional public transportation options to destinations within the county and surrounding regions
- Reduce congestion and improve the efficiency of the transportation network by evaluating traffic signal timing and coordination
- Address safety issues that contribute to crashes, especially speeding and unsafe driver actions
- Reduce truck traffic within boroughs and town centers
- Expand electric vehicle infrastructure within the county
- Engage local municipalities at all levels of project development, from planning to project delivery

"Public transportation needs to be prioritized..."

"Active transportation is extremely important, given health problems associated with our sedentary life style..."

"Please coordinate traffic lights around the square..."

"...Autonomous driving impacts are not too distant, and we want to anticipate what investments now could reap significant rewards down the road..."

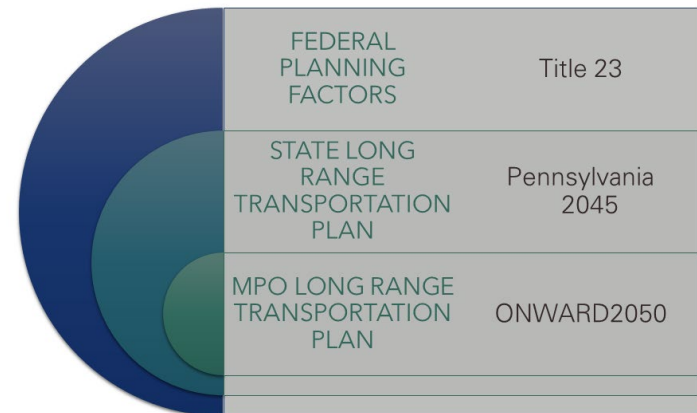
"I think electric charging stations are a priority for the future..."

"Fix the roads and the bridges and maintain what we've already got..."

"I found it very difficult to prioritize many of the questions on the survey... Many times they seemed all important..."

# CHAPTER 3 - GOALS AND OBJECTIVES

To ensure federal, state, and local entities are working toward a consistent vision for the transportation system, the LRTP should align with the ten federal planning factors, established under Title 23 of U.S. Code, and be consistent with the State Long Range Transportation Plan. Recognizing that the needs and characteristics of specific regions and communities are unique, the goals and objectives identified at the local level intend to address the broader emphasis areas identified at the federal and state level. Stakeholder input, the current state and functionality of the transportation system, and mandated planning requirements are factors considered when establishing local goals and objectives. Ultimately, these focus areas will direct the transportation planning process.



## FEDERAL PLANNING FACTORS:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
- Increase the safety of the transportation system for motorized and nonmotorized users
- Increase the security of the transportation system for motorized and nonmotorized users
- Increase the accessibility and mobility of people and for freight
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize the preservation of the existing transportation system
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impact of surface transportation
- Enhance travel and tourism

# PENNSYLVANIA 2045 GOALS AND OBJECTIVES

**SAFETY:** Enhance safety and security for both motorized and non-motorized modes throughout Pennsylvania’s transportation system

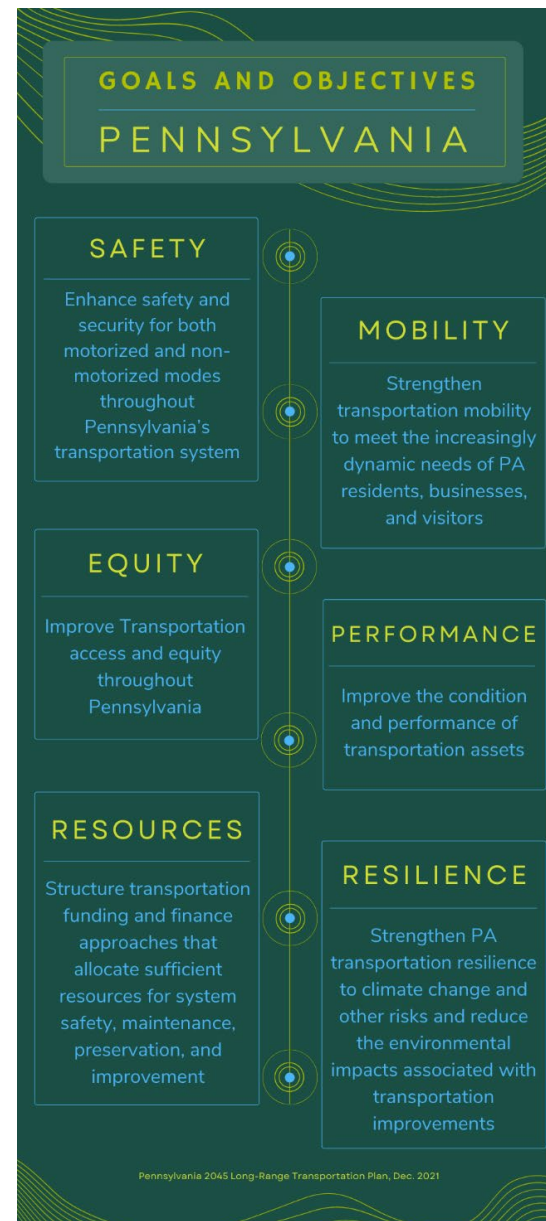
- Continue to promote behavioral change through existing educational initiatives with partners and stakeholders that encourage safe habits for users of all modes.
- Reduce the rate and frequency of fatal and serious injury crashes for all modes of travel.
- Expand the collection of transportation safety data and explore funding sources for safety and data analysis for use in systemwide planning, programming, project development, and project delivery.
- Strengthen security across transportation modes in collaboration with public and private stakeholders

**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.)

**EQUITY:** Improve Transportation access and equity throughout Pennsylvania

- Evaluate transportation equity issues and opportunities across Pennsylvania.
- Develop measurable goals and metrics for equitable transportation in collaboration with key stakeholder groups.



- Establish equity and access strategies in partnership with stakeholder organizations and groups that advance the identified measurable goals.
- Improve equity and accessibility through ADA improvements and modal choice. Develop education, awareness, and training initiatives that strengthen transportation professionals' knowledge and skills to effectively address equity issues and opportunities.
- Implement and support public transportation initiatives for affordability, reliability, and availability for the transit-dependent population.

**PERFORMANCE:** Improve the condition and performance of transportation assets.

- Leverage technology, operations enhancements, and skill building to improve transportation system efficiency.
- Continue to integrate enhanced asset management approaches and methods with project planning and programming.
- Enhance the availability and quality of real-time travel information, especially in emergency and inclement weather events and for construction/work zones.
- Expand and/or build upon existing technical assistance and education to local communities and MPOs/RPOs.
- Identify potential new public transportation performance measures including value-based, quality-of-life measures demonstrating the difference public transportation makes in the lives of people, including access to employment.

**RESILIENCE:** Strengthen Pennsylvania transportation resilience to climate change and other risks and reduce the environmental impacts associated with transportation improvements.

- Employ resiliency measures/actions to ensure long-term system stability.
- Evaluate projects for their expected climate change and resiliency impact and implications.
- Improve environmental stewardship during and before project construction.

**RESOURCES:** Structure transportation funding and finance approaches that allocate sufficient resources for system safety, maintenance, preservation, and improvement.

- Advance a multimodal and state-local funding strategy to ensure that resource levels are sufficient to meet transportation system needs.
- Adapt to and position for accelerating change (e.g., mainstreaming innovation, institutional adjustments, people skills, and knowledge management).
- Streamline planning and public involvement processes.
- Improve planning and analytical tools to adapt to changes impacting transportation, including the implementation of a data repository and information exchanges within PennDOT (between Bureaus/Divisions, between Central Office and Districts, etc.).



# ADAMS COUNTY GOALS AND OBJECTIVES

**SAFETY & SECURITY:** Improve Safety and Security for all Users.

- Reduce the number of crashes
- Increase safety for non-motorized users
- Increase collaboration with local municipalities regarding safety concerns and improvement options

**QUALITY OF LIFE:** Enhance Quality of Life through Investments in the Transportation Network.

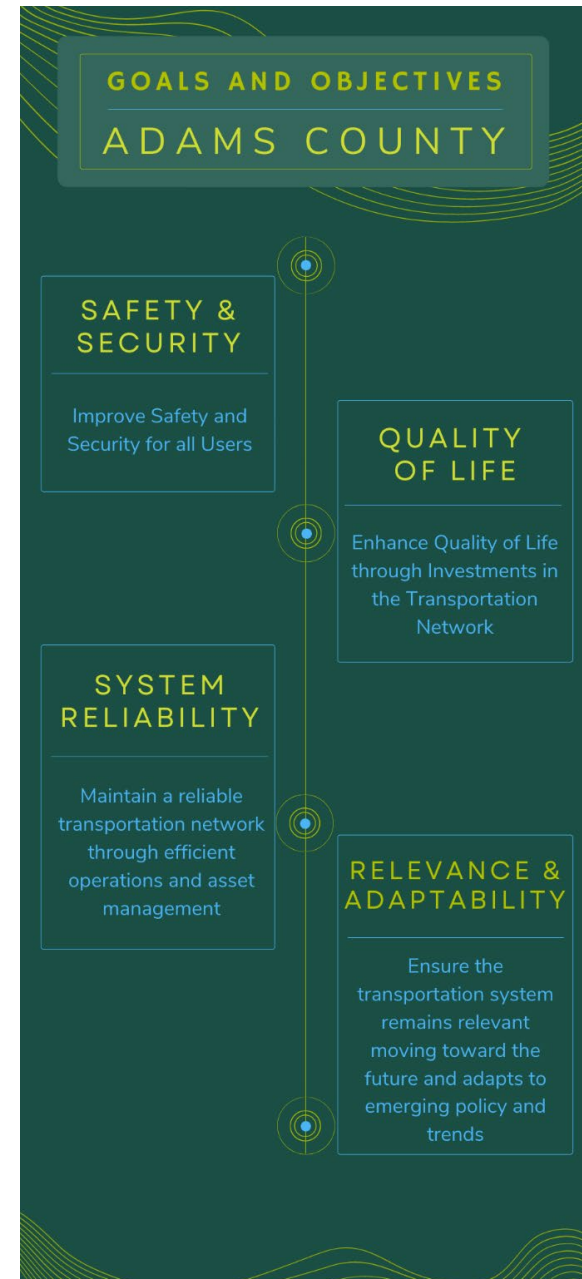
- Increase bicycle and pedestrian accessibility to vital destinations in the community, including schools, markets, tourist attractions and recreation, healthcare, and places of employment
- Expand public transportation options, where practicable, to increase accessibility and mobility throughout the region
- Mitigate negative impacts to natural, historic, and cultural resources
- Increase economic vitality through the efficient movement of people and goods

**SYSTEM RELIABILITY:** Maintain a reliable transportation network through efficient operations and asset management.

- Emphasize preservation and maintenance of the existing network
- Maximize efficiency of signal-controlled intersections and corridors
- Increase connectivity consistent with land use planning and future development
- Limit disruptions to the flow of people and goods on the transportation system

**RELEVANCE AND ADAPTABILITY:** Ensure the transportation system remains relevant moving toward the future and adapts to emerging policy and trends.

- Increase the availability of alternative fuel infrastructure
- Integrate emerging technology into the transportation system to support advances in vehicle technology
- Consider the needs of stakeholders at all levels during the transportation planning process



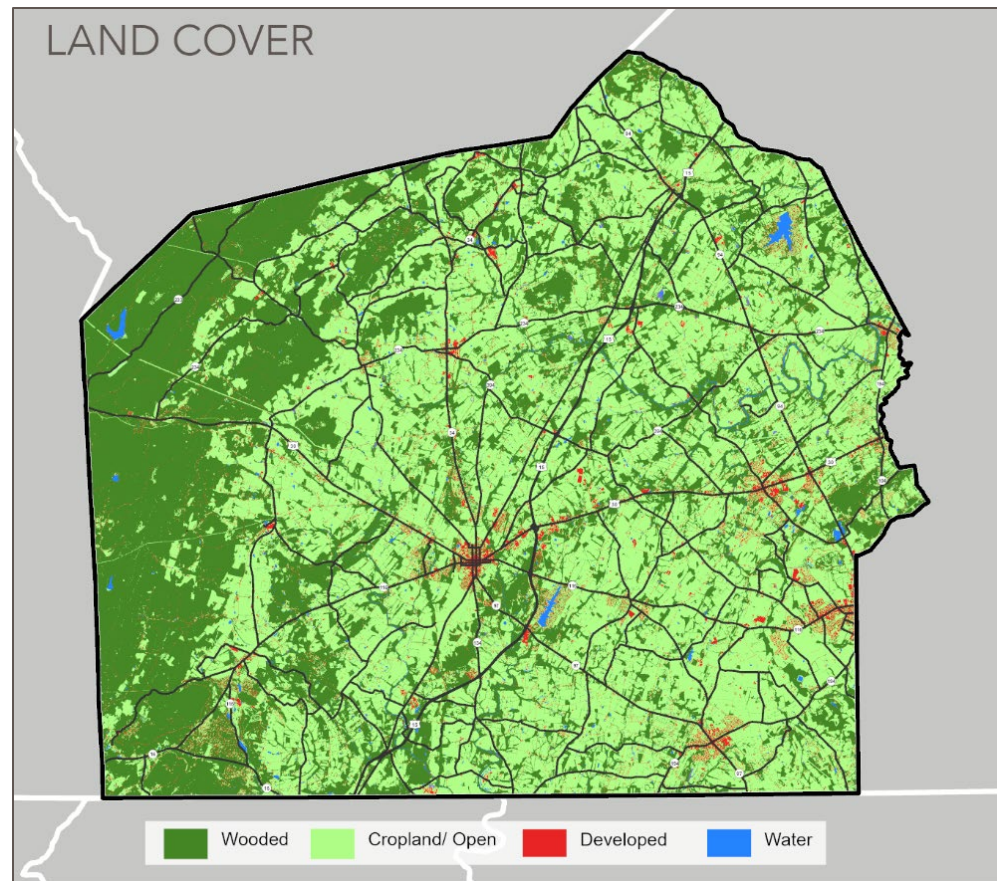
# CHAPTER 4 - LAND USE AND SOCIOECONOMIC TRENDS

Situated along the Mason-Dixon line in south-central Pennsylvania, Adams County is largely comprised of rural settings. Although not officially incorporated until 1800, the area has a rich history, most notably for events occurring during the American Civil War.

The north-west border of the county is edged with public forestland and mountainous terrain that extends to the south. Picturesque orchards provide transition between the mountains and the remaining landscape, which consists primarily of farmland and open-space dotted with areas of wooded tracts. The Land Cover map shows the areas of development within Adams County. Naturally, development is centered around incorporated places and smaller villages, and along major routes in the county

The transportation network plays a vital role in connecting the individual aspects that, collectively, create the culture of Adams County - from tourism, recreation, and agriculture to hubs of commerce, education, and development. These factors interrelate to subsequently influence economic development and the socioeconomic aspects of the region.

While it is important to maintain and achieve an efficient transportation network, it is equally important to examine and understand how changes in development patterns may affect the transportation network. This section highlights some of the major drivers that directly impact the social and physical development trends in Adams County.

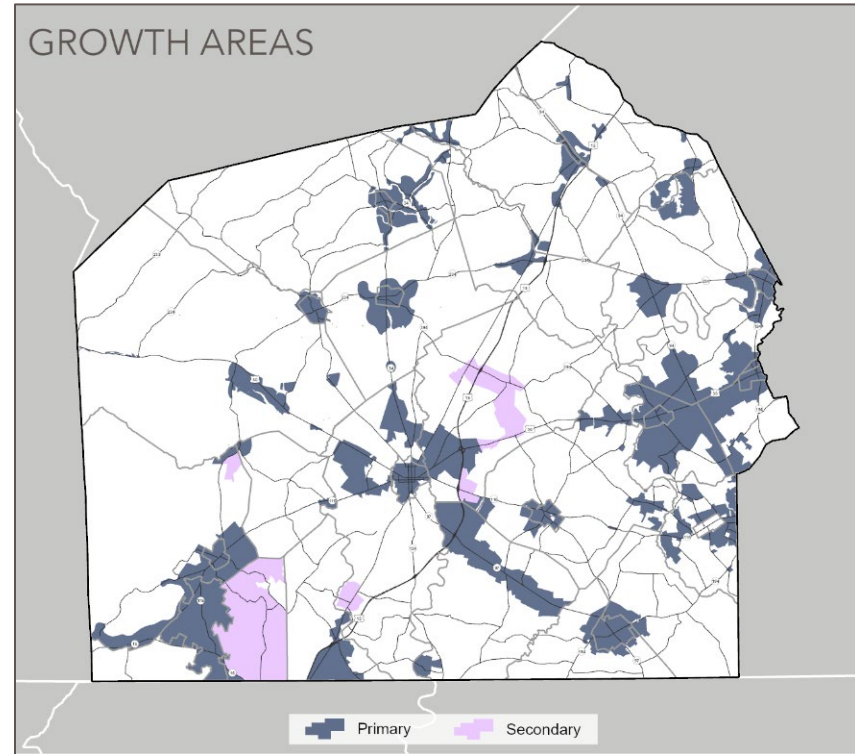


# LAND USE

## Policy and Growth

Comprehensive plans envision long-term public policy objectives and recommendations related to development and growth, open space and conservation, housing, utility infrastructure, and transportation. The County adopted its comprehensive plan in 1990 and most of the 34 municipalities in the county have adopted municipal or multi-municipal comprehensive plans, with the purpose of guiding future land use efforts. Utility availability and the transportation network are factors that municipalities consider when determining growth areas. The Growth Areas map is a composite of the areas designated for growth from adopted comprehensive plans.

Zoning is a planning tool utilized to regulate land use and implement the comprehensive plan. Uses that complement one another tend to be permitted in the same geographic areas, while uses that are incompatible tend to be segregated. Through zoning ordinances, growth in specific “zones” can be managed. In some cases, improvements to the transportation system may be a condition of proposed development.



# AGRICULTURE

Agriculture is a major component of Adams County’s economy and way-of-life. A combination of cropland, orchards, and pasture comprise the land area dedicated to agriculture in the county. The amount of land used for agriculture production is trending slightly downward; with land converted to other uses, primarily subdivided and sold for residential use. Adams County’s fruit belt is located in

the northwest corner of the county and extends to the south, along South Mountain. Well-draining soils, along with a unique climate system created by the proximity to South Mountain, make the area prime location for fruit bearing trees and shrubs. This unique area is a major driver of the economic significance of agriculture in the region, contributing an estimated \$580 million per year.

# AGRICULTURE IN ADAMS COUNTY



**1,146 Farms**  
-4% change since 2012



**166,227 Acres Farmed**  
-3% change since 2012



**\$207,566,000**  
Market Value of Products Sold

## TOP FOUR AG COMMODITIES



**Fruits  
Tree Nuts  
Berries**



**Poultry  
and  
Eggs**



**Grains  
Oilseeds  
Dry Beans  
Dry Peas**



**Milk  
from  
Cows**



**Standardbred Horse  
Breeding and Performance**  
Ranked 1st in World



**Apple Production**  
Ranked 1st in Pennsylvania  
Ranked 6th in USA

Source: 2017 Census of Ag

# SNAPSHOT OF ADAMS COUNTY



## RESIDENTS

### Total Population

 **103,852**  
+2,445 from 2010

### Median Age

 **44**  
+2.7 yrs from 2010

### Median Income

 **\$68,411**  
+ \$11,882 from 2010

## HOUSING

### Housing Units

 **43,007**  
+4,994 from 2010

### Avg Household Size

 **2.49**  
-0.04 from 2010

### Median Home Price

 **\$250,000**  
+26,000 from 2020

## WORK

### Transportation Mode

 **81%**  
Drove Alone

 **8.5%**  
Carpool

 **6.1%**  
Work From Home

 **3.5%**  
Walk/ Bike

0.9 Used public transit or other

### Mean Travel Time

  
**28.9**  
minutes

### Work in Adams County

  
**34%**  
in 2019

### Work Outside Adams

  
**66%**  
in 2019

Source: 2020 Census and American Community Survey, 2019 LEHD

# SOCIOECONOMIC TRENDS

To provide an understanding of the human context which the transportation network serves, the following transportation-related demographic information has been compiled to highlight significant data trends. Please note, due to the challenges affecting the collection of 2020 census data, namely COVID-19, projection figures and other related data will be revisited in the coming years as additional census information becomes available.

## Population & Housing

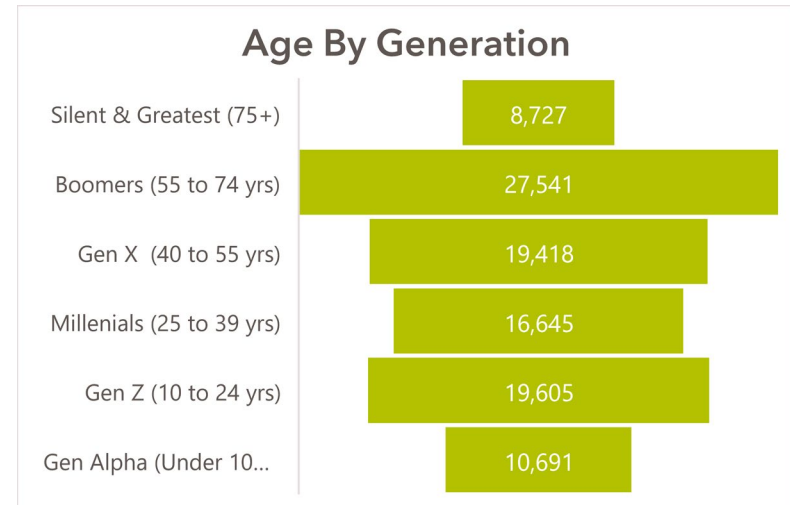
The population of Adams County has exhibited a generally linear growth pattern over the last several decades, but only a 2.4% increase between 2010 and 2020, according to the US Census Bureau. The decennial population from 2000 to 2020, as well as projections to 2050 by municipality may be found in Appendix D. In calculating Adams County population projections, ACOPD uses a combination of building permit data, proposed housing unit information, and population trends.

ADAMS COUNTY POPULATION		
2000	2010	2020
91,292	101,407	103,852
POPULATION PROJECTIONS		
2030	2040	2050
111,347	118,562	125,778

The number of housing units and the population in the County are directly related. Although the population only increased 2.4% during the past decade, there was a 12% increase in the number of housing units from 2010 to 2020. The average household size is also getting smaller, at 2.49 persons in 2020 compared to 2.78 persons in 1990.

As Adams County’s population grows, the age composition of its residents is also changing. In 2020, roughly 36% of the county’s population were over the age of 55, compared to 29% age 24 and under. Shifts in age composition may affect the need and demand for certain transportation services and the design of facilities within the community. In particular, the demand for public transportation may increase as the population ages.

The chart below depicts ages of Adams County residents by generation (2020). Definitions of generations are not universal, the following is based on the most widely cited in North America.



## Employment

Approximately 66% of working Adams County residents commute to employment locations outside of the County. York County is the destination for 21.5% of working residents, likely by way of the primary east-west routes of US-30, PA-234, and PA-116, and the north-south routes of PA-194 and PA-94. The other bordering counties, including Cumberland and Carroll and Frederick Counties in Maryland, employ a small percentage of Adams County’s workforce. US-15, a freeway, is a major connector to regions north and south of the county, while other principal and minor arterials carry commuters to specific locations both within and outside of the area. These primary routes also serve the 29,753 employees who work at locations within Adams County (2019). The average commute to work for Adams County workers is 28.9 minutes in 2020.

A portion of these workers are travelling to one of the County’s top employers. The following locations have consistently provided employment to many for years.

### Top 10 Employers

- Gettysburg College
- Wellspan Gettysburg Hospital
- Knouse Foods Cooperative
- Federal Government
- Dr. Pepper Snapple (Motts)
- Packaging Corporation of America
- County of Adams
- Pella
- Wellspan Medical Group
- Cross Keys Village

HOME DESTINATION Where Workers Live Who Are Employed in Adams County			WORK DESTINATION Where Workers are Employed Who Live in Adams County		
Top 5 Counties	Count	Share	Top 5 Counties	Count	Share
Adams County, PA	15,959	53.60%	Adams County, PA	15,959	33.70%
York County, PA	6,003	20.20%	York County, PA	10,192	21.50%
Franklin County, PA	1,553	5.20%	Cumberland Cty, PA	2,608	5.50%
Cumberland Cty, PA	1,160	3.90%	Carroll County, MD	2,401	5.10%
Carroll County, MD	549	1.80%	Frederick Cty, MD	2,196	4.60%
All Other Locations	4,529	15.20%	All Other Locations	13,993	29.60%



## Modes of Commuting

The Commuting Characteristics table shows the breakout of the preferred modes that workers use to commute to their employment locations. Commuting by Single Occupancy Vehicle (SOV\*) remains the primary mode of travel.

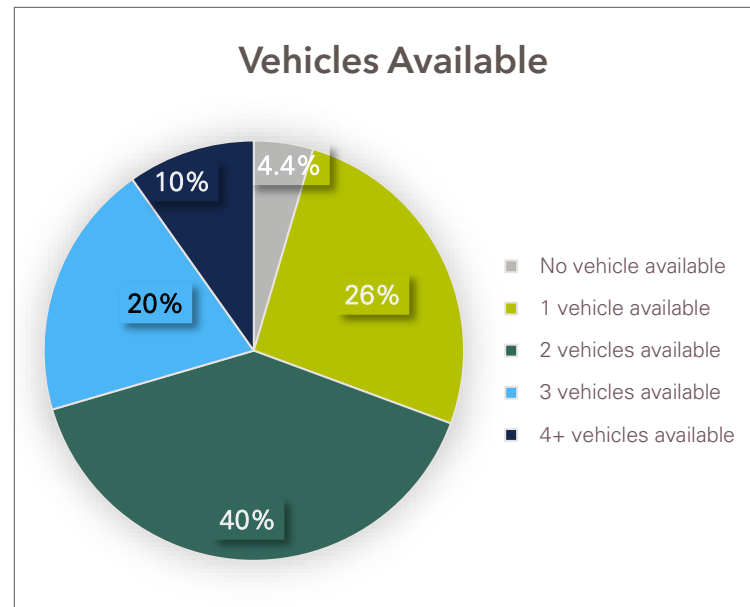
Although 2020 was the most recent data available at the time of plan adoption, an increase in employees who worked at home is expected in subsequent years, due to the COVID-19 pandemic. Whether this trend in at-home work is permanent is unclear, although it is anticipated that at least a small portion of the employees will continue to work remotely for the foreseeable future. This shift in commuting pattern could have greater implications on the transportation network which should be considered when planning and programming future projects, especially related to system operations and funding levels.

COMMUTING CHARACTERISTICS								
Year	Workers 16+	Mean Travel Time	SOV**	Carpool	Walk/Bike	Public Transit	Other	Work At Home
2010	50,770	27.2	81.8%	9.6%	4.2%	0.3%	0.8%	3.4%
2015	49,532	27.2	82.6%	8.1%	4.3%	0.4%	0.8%	3.7%
2020	49,787	28.9	81.0%	8.5%	3.5%	0.4%	0.5%	6.1%

\*\*Single Occupancy Vehicle

## Vehicle Ownership

Estimated vehicle ownership statistics within Adams County have remained fairly constant over the past decade. This data helps understand how people are traveling on a daily basis and how vehicle use is changing; trends that are considered during the transportation planning process. The chart displays the number of estimated vehicles available to households within Adams County (2020).





# CHAPTER 5 - THE TRANSPORTATION NETWORK

As Adams County developed through the 19<sup>th</sup> century, new roads were built to connect the county seat, Gettysburg, with the villages and agricultural areas surrounding it. Within a few decades, a development pattern linked by a unique transportation system began to emerge. A road pattern radiated outward from Gettysburg, each connected with farms and small villages. This pattern of “hubs and spokes” is still recognizable in the 21<sup>st</sup> century and represents one of the few examples of a settlement pattern associated with “central place theory” in Eastern North America. By 1863, a web of historic roads connected Gettysburg with two concentric sets of secondary towns. In addition, an early east-west railroad passed through the county seat. The outcomes of many events associated with the Civil War and Battle of Gettysburg were dramatically affected by the presence of this unique transportation network. This pattern continues to influence the strategic development of Adams County today.

It is necessary to recognize the state of the existing transportation network in Adams County in order to implement improvements. Chapter 5 explains, in further detail, the individual components that comprise the current transportation system.

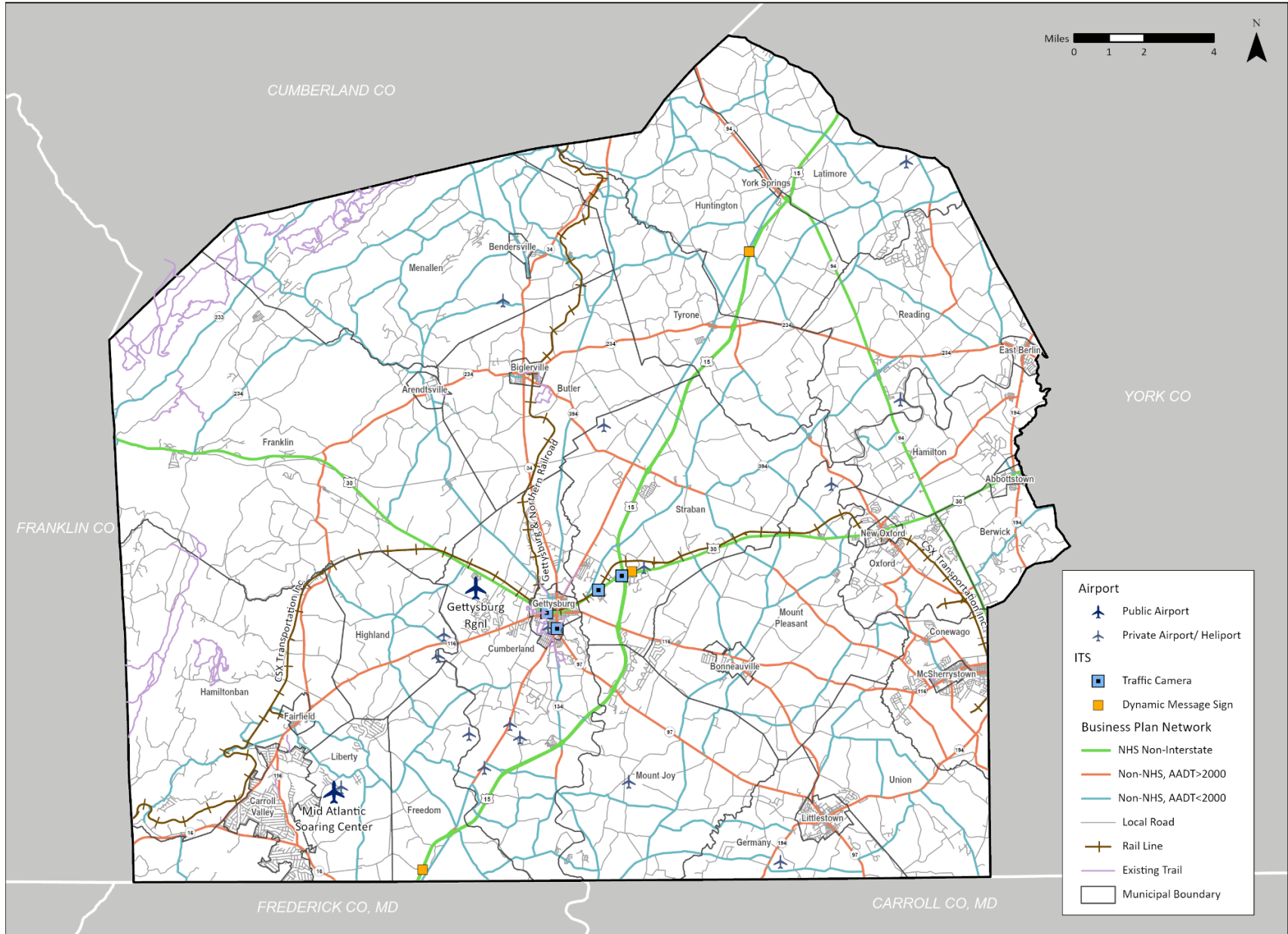
## ROADS

Residents, businesses, and visitors rely upon the roadway network for the vast majority of travel both around and to and from the county.



Except for modern Route 15 and modern Route 30 west of Gettysburg (essentially the Cashtown & McKnightstown “bypass”), most of the existing network reflects the historic, rural road system as it existed before the Civil War. This historic development pattern of the network poses challenges when planning for, and integrating, new roadway connections. Although local municipalities maintain the most miles of roadways in Adams County, the overwhelming majority of travel demand is placed on PennDOT roadways.

# TRANSPORTATION NETWORK



# Functional Classification

“Functional classification” groups streets and highways into classes, or systems, according to the characteristics of the roadway and the level of service provided (local access, regional, and intra-regional). A roadway’s functional classification is based upon daily traffic volumes, purpose, design characteristics, and location. It should be used as a general guide for roadway design and access control, along with measured traffic volumes, speed, and engineering factors. Not all roadways of the same functional classification designation will have the same design. Rapid population growth and traffic volume increases, along with land use changes, can influence the functionality of any roadway or intersection. The functional classification system includes the following hierarchy of roads:

**INTERSTATE HIGHWAYS:** The Interstate System consists of all presently designated freeway routes meeting the Interstate geometric and construction standards for future traffic. The Interstate System is the highest classification of arterial roads and streets and provides the highest level of mobility, at the highest speed, connecting large population centers for a long uninterrupted distance with limited access. There are no Interstate Highways in Adams County.

## **FREEWAYS/ EXPRESSWAYS/ OTHER**

**PRINCIPAL ARTERIALS:** This classification includes limited access freeways, multi-lane highways, and other important highways supplementing the Interstate System that connect, as directly as practicable, the nation’s principal urbanized areas, cities, and industrial centers; serve the national defense; and connect at suitable border points with routes of continental importance.

**MINOR ARTERIALS:** Minor arterials provide for a lower level of mobility than principal arterials while placing emphasis on access to land rather than to other arterial roadways. These roads typically provide

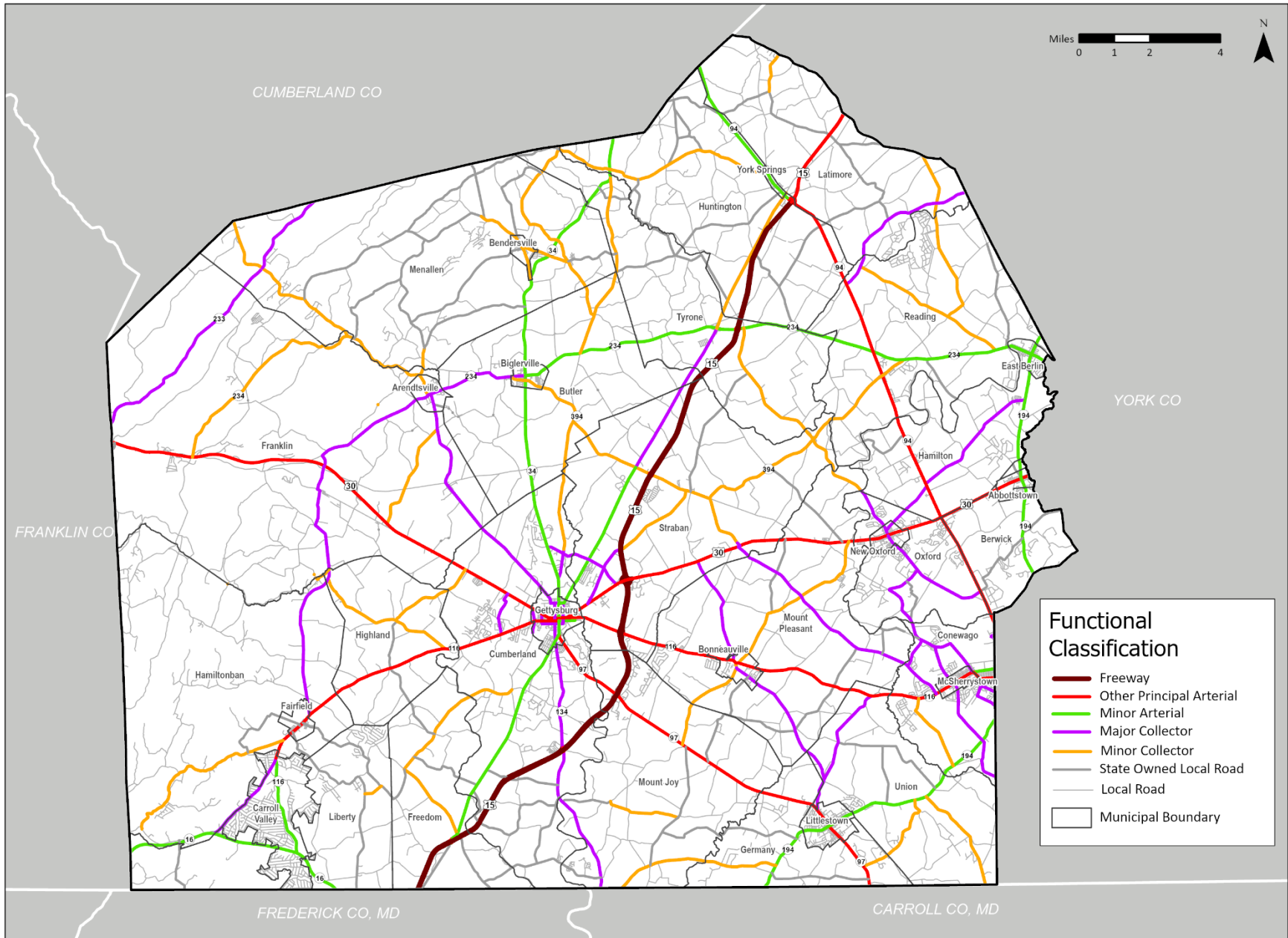
links to a collector roadway and connect small population centers to the overall arterial system.

**RURAL MAJOR COLLECTORS:** Major collector roadways provide land access and movement within residential neighborhoods, commercial and industrial areas, and agricultural areas. Major Collector roads provide service to specific areas and to and from other important traffic generators such as school and parks. They connect local roads and streets with arterials and provide less mobility than arterials at lower speeds and over a shorter distance.

**RURAL MINOR COLLECTORS:** Minor collector roadways serve remaining, smaller rural and urban traffic generators. These roads connect residents, businesses, and agricultural activities to major collector or arterial roads.

**LOCAL:** The local roads and streets provide a direct access to individual properties and land uses. They are not intended to accommodate through-traffic, and they are typically low volume roadways. Municipal owned and maintained roads and streets are typically included in this classification.

# FUNCTIONAL CLASSIFICATION

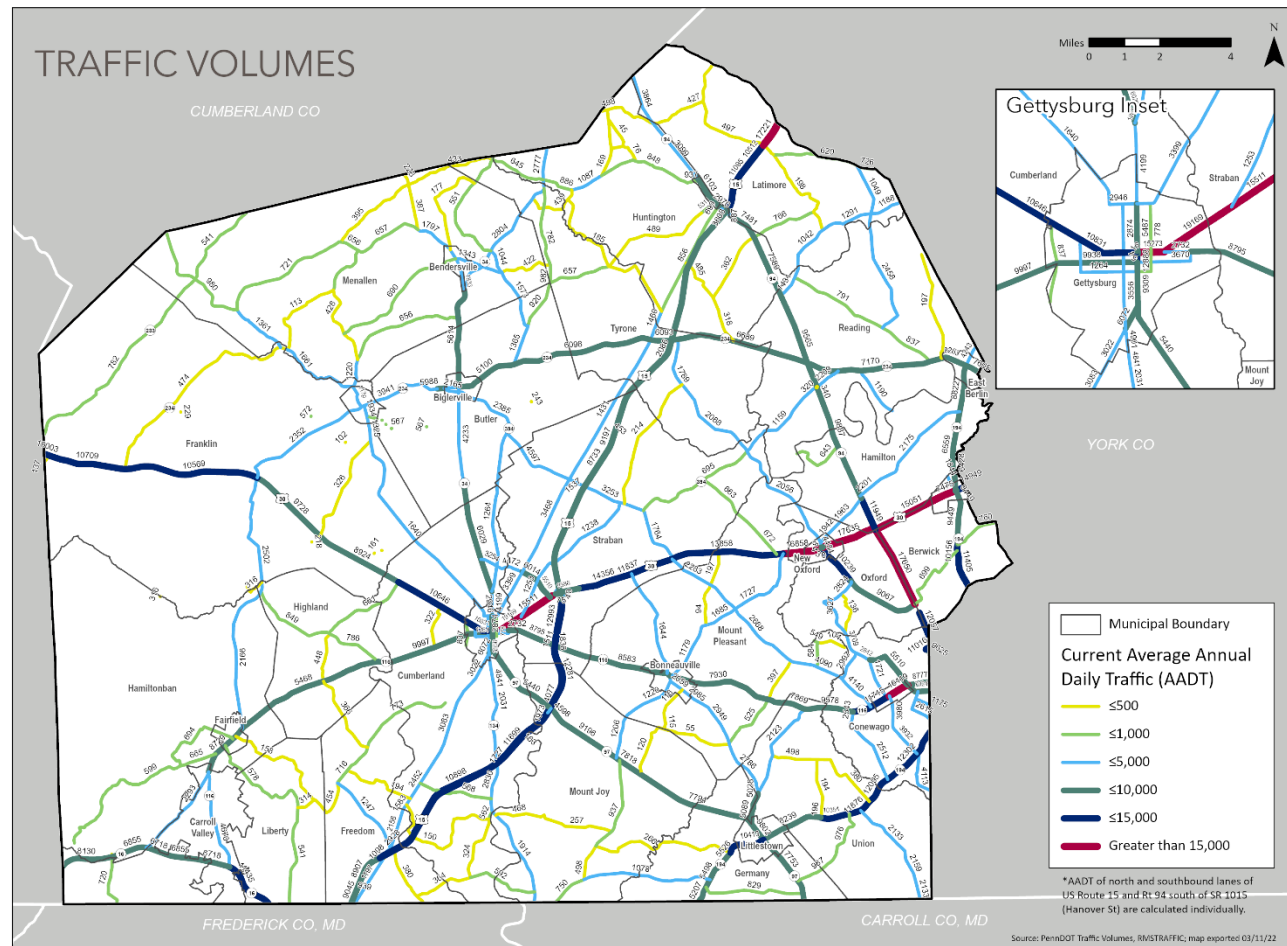


# Traffic Volumes

Traffic volumes carried by the major roadways within the county have generally exhibited a steady increase throughout the county as population increases and development expands. After the opening of the improved Route 15 and emergence of new residential and business developments in the 1990s, traffic volumes in the county began to increase rapidly and by the year 2000, County roads were often carrying twice the traffic volume levels seen in the 1970-1990s.

Since the early 2000's, traffic volumes have continued to rise, with some fluctuation, primarily due to local and regional growth in development and commerce.

It is important to note that the northbound and southbound lanes of US Route 15 are counted individually, as well as Rt 94 from the intersection of Hanover Street to the York County line.



The table on the following page reflects the slight growth and fluctuations in traffic volumes on selected road segments.

TRAFFIC VOLUMES OF SELECTED SEGMENTS						% Change 2002-2007	% Change 2007-2014	% Change 2014-2020
Roadway	2002	2007	2014	2019	2020*			
Route 30 east of Route 15	14,000	13,000	14,000	16,000	13,000	-7.14%	7.69%	-7.14%
Route 116 east of Route 15	8,200	8,900	6,600	7,600	7,600	8.54%	-25.84%	15.15%
Route 234 through Biglerville	4,600	4,200	4,200	5,500	4,600	-8.70%	0.00%	9.52%
Route 116 at Fairfield	7,600	7,900	7,400	–	7,700	3.95%	-6.33%	4.05%
Route 15 at Maryland line	19,000	17,000	16,000	18,000	16,000	-10.53%	-5.88%	0.00%
Route 97 north of Littlestown	8,300	8,600	8,900	6,900	8,700	3.61%	3.49%	-2.25%
Route 194 east of Littlestown	11,000	11,000	11,000	10,000	10,000	0.00%	0.00%	-9.09%
Route 94 south of Cross Keys	16,000	14,000	16,000	16,000	16,000	-12.50%	14.29%	0.00%
Route 30 west of Cashtown	7,600	7,700	9,500	8,800	9,300	1.32%	23.38%	-2.11%
Route 94 north of York Springs	3,900	3,800	3,500	5,500	3,500	-2.56%	-7.89%	0.00%
Route 194 between Abbottstown and East Berlin	5,800	6,800	6,100	8,000	6,000	17.24%	-10.29%	-1.64%
Route 15 at Route 30	18,000	23,000	22,000	–	22,000	27.78%	-4.35%	0.00%
Route 15 at Route 94	13,000	15,000	21,000	18,000	19,000	15.38%	40.00%	-9.52%
Route 394 west of Bus Route 15	2,400	2,600	2,300	3,500	3,600	8.33%	-11.54%	56.52%

\*COVID-19 likely had an impact on traffic volume data collected in 2020; ## - Negative change, ## - No change

## BRIDGES

The bridge system in Pennsylvania has two classes, state-owned bridges and municipal-owned bridges. PennDOT maintains state-owned bridges, as well as municipal-owned bridges, carrying local roads, that are 20 feet in length or greater. Bridges are regularly inspected and are determined to be in “Good”, “Fair”, or “Poor” condition based on the ratings of their overall components (some bridges consist of more components than others). Local bridges less than 20 feet are maintained by the local municipality.

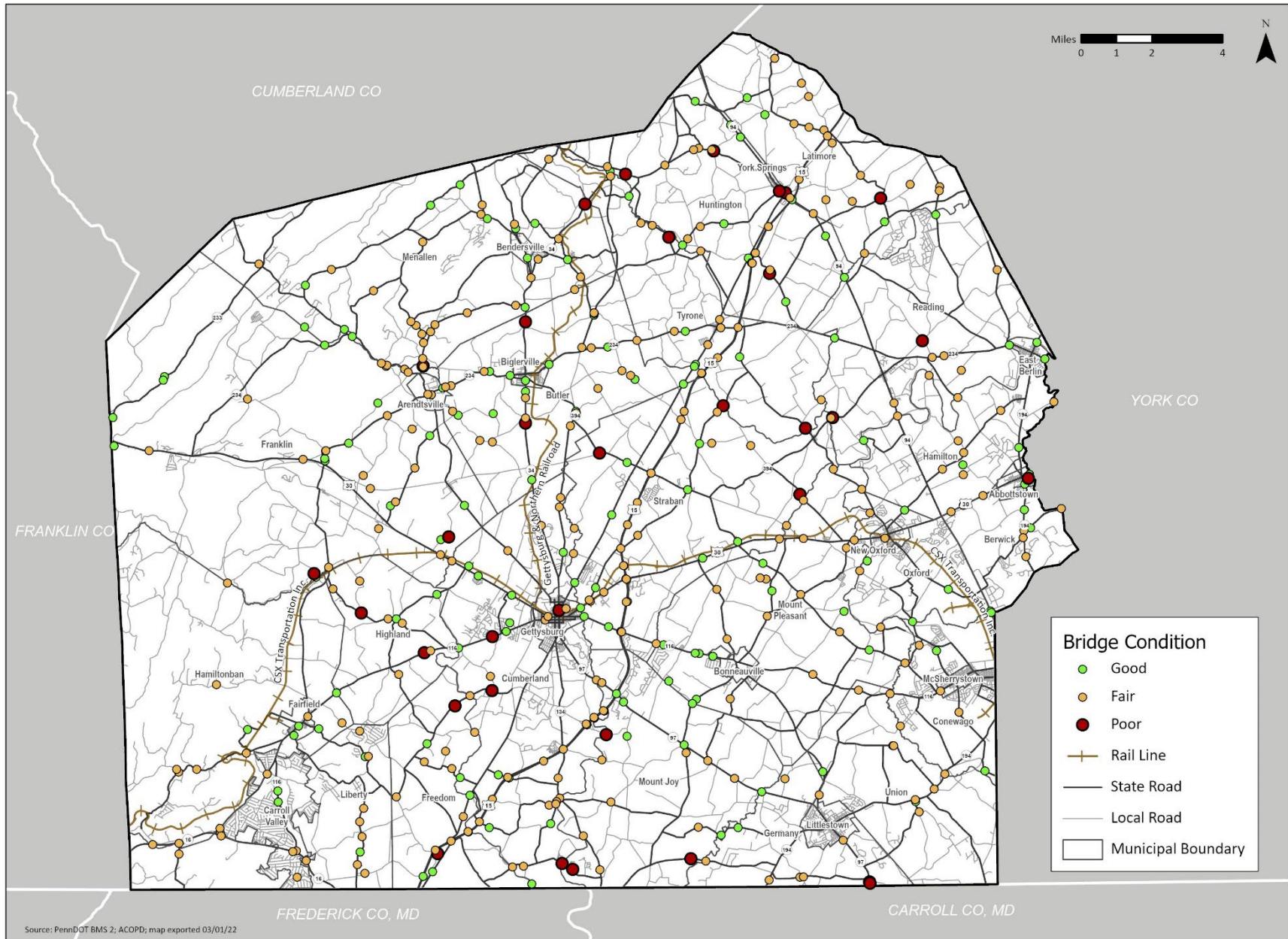
Most bridges in Adams County are constructed of concrete (either precast or poured in place) or steel (typically using an I-beam design). Some alternative designs/construction materials can be found on older, potentially historically significant bridges, including wood timbers, stone masonry and arch and truss designs.



Four bridges in Adams County are listed on the National Register of Historic Places. They are:

- Jacks Mountain Covered Bridge in Hamiltonban Township
- Heikes Covered Bridge in Tyrone and Huntington Townships
- Pondtown Mill Bridge in Latimore Township
- John’s Burnt Mill Bridge in Mt. Pleasant and Oxford Townships

# BRIDGE CONDITION





## SIGNALS

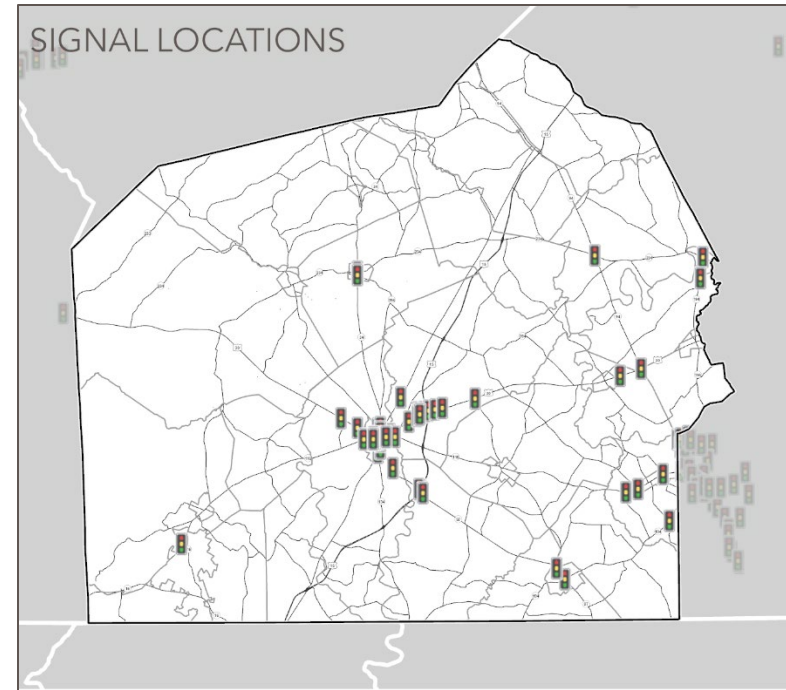
Within Adams County, most of the traffic signals are located in the central and eastern portions of the county, primarily within core communities along major roadway corridors. Regardless of whether a traffic signal is located on a state or local road, municipalities are responsible for the ownership, operation, and maintenance of traffic signals. PennDOT has oversight of all signals through the conditions of an issued traffic signal permit, which require completion of a signal warrant study to determine the necessity for signal-controlled locations.

## INTELLIGENT TRANSPORTATION SYSTEMS

Intelligent Transportation Systems (ITS) integrate technology and communications into the transportation network to increase mobility, safety, operational efficiency, and driver awareness. Closed Circuit Television (CCTV) cameras and Dynamic Message Signs (DMS) are ITS devices deployed in Adams County.

CCTV cameras provide real-time transportation network surveillance. Specific uses include, detecting and verifying incidents, assisting emergency responders, assessing traffic conditions, and monitoring environmental and weather conditions.

Dynamic Message Signs allow commuters to make informed route decisions by providing information related to the transportation network and active events in a region. Information may relate to road or lane closures, weather and road conditions, special events, and travel times. DMS are also used as a mechanism to disseminate public service announcements, such as planned road work in the area and AMBER/Silver alerts.



PennDOT has published guidelines for the design and deployment of ITS projects in their Publication 646, [Intelligent Transportation System Design Guide](#).

ITS DEVICES IN ADAMS COUNTY	
Traffic Cameras	Deployed
Baltimore St at Steinwehr Ave	2009
US 30 at West St	2009
US 30 at Natural Springs Rd	2009
US 15 at US 30	2009
Dynamic Message Signs	Deployed
US 30 West prior to US 15 Interchange	2008
US 15 South at Weirmans Mill Rd overpass	2008
US 15 North at Boyle Rd overpass	2008

# ELECTRIC VEHICLES AND CHARGING INFRASTRUCTURE

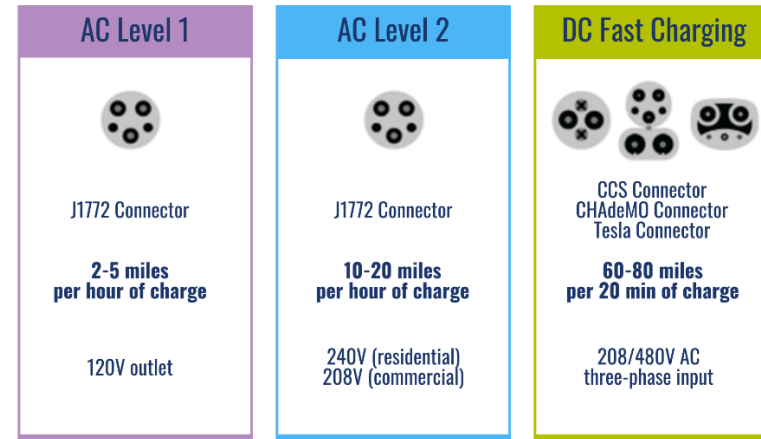
As electric vehicles (EVs) continue to evolve, they become more affordable for a larger portion of the population. In 2013 there were 6 electric vehicles (EVs) registered in Adams County, and by 2019 the number increased tenfold to 60. All commercially available EVs can charge using Level 1 and Level 2 charging equipment. Rapid charging is available with “DC fast charging” (DCFC) stations. There are three different types of DC fast charging systems and compatibility is dependent upon the type of charge port on the vehicle. Although most charging of EVs takes place at home, charging stations are being installed in both public and private places to accommodate alternative fueling needs outside of the home. Most charging stations in the county are classified as “level 2”.

PennDOT has worked to support the Federal Highway Administration’s Alternative Fuel Corridor (AFC) Program to increase the availability of DC fast charging (DCFC) infrastructure along interstates and major routes across the country. A corridor is marked as “pending” when DCFC public stations are separated by more than 50 miles and is marked as “ready” when those DCFC gaps are within 50 miles of one another. Locations must also be within five miles of the highway exits. As of April 2022, the portion of US Route 30 from the Adams-York County line to Gettysburg’s Lincoln Square is “ready” and from Lincoln Square to the Adams-Franklin County line is “pending”. Additionally, US Route 15 from the PA-MD line to the US-15/US-30 interchange is marked “ready”.

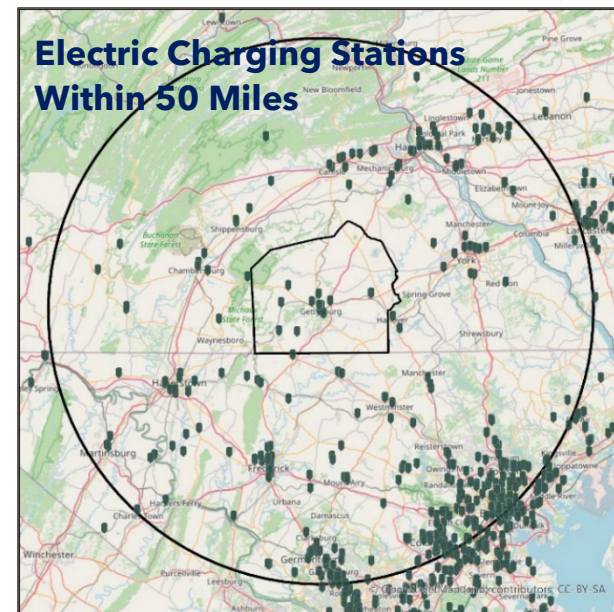
The map depicts the locations of electric charging stations and a circle indicating a 50 mile radius of Adams County. Stations are more concentrated in larger cities and populated areas, however, 519 locations are within the 50 mile radius of Adams County. Additional stations continue to become available and may be located through the

[U.S. Department of Energy’s Alternative Fuels Data Center](https://afdc.energy.gov), which contains an abundance of information on all types of alternative fuels.

## ELECTRIC VEHICLE CHARGING LEVELS

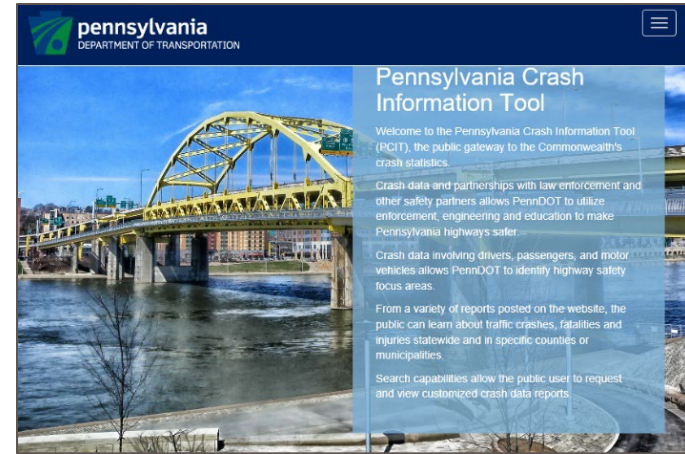


Source: <https://afdc.energy.gov>



# SAFETY

To assist in identifying trends in reportable crashes, PennDOT maintains a database of statistics to track a multitude of crash factors. This resource allows PennDOT and Planning Partners to identify locations with recurring safety issues and contributes to the planning process when considering potential safety improvements. The [Pennsylvania Crash Information Tool \(PCIT\)](#) is the public-facing crash statistic database. Through this site, the public has the opportunity to learn about traffic crashes, fatalities, and injuries statewide or in a specific county or municipality. It is important to note that the information available through the crash statistic database is primarily derived from incident reports provided by the Pennsylvania State Police. Information collected and documented by local law enforcement is not necessarily included in the database.



## Crash Statistics

Crash statistic trends across Adams County remained fairly consistent in terms of the number and character of reportable crashes from 2016 to 2020, much like it did in the previous five years from 2011 to 2015. The majority of crashes result in a severity level of “property damage only” (PDO).

The percentage of fatal crashes in 2017 was unusually low, 0.5%, relative to the total number of crashes when compared to other years in the 5-year block (2016-2020). In comparison with the overall state trends, crashes resulting in a fatality or serious injury have also remained fairly consistent over the analysis period, however the average number of total crashes has

ADAMS COUNTY CRASH STATISTICS										
Category	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total crashes	1,076	995	1,063	1,026	990	1,018	1,002	1,044	929	849
Fatal crashes	12	13	5	6	14	15	5	15	12	13
Injury crashes	486	444	489	452	394	402	426	424	415	335
PDO crashes	578	538	569	568	582	601	571	605	502	501
Traffic deaths	16	14	5	6	14	15	5	16	12	16
Pedestrian deaths	0	0	1	1	0	1	0	5	0	1
Bicycle deaths	0	0	1	0	1	1	0	0	0	0
Alcohol-related deaths	4	8	3	1	2	4	3	4	2	3
% seatbelt use in crashes	86%	85%	87%	86%	86%	88%	88%	87%	86%	86%

decreased slightly. From a high-level analysis, notable factors contributing to crashes in Adams County from years 2001-2020 include: speeding/ driving too fast for conditions, aggressive driving, distracted driving, and low illumination or dark conditions (PennDOT crash data).

CRASH SEVERITY LEVEL, PERCENTAGE OF TOTAL CRASHES										
	2016		2017		2018		2019		2020	
	Adams	PA	Adams	PA	Adams	PA	Adams	PA	Adams	PA
Fatal	1.5%	0.9%	0.5%	0.9%	1.4%	0.9%	1.3%	0.8%	1.5%	1.1%
Injury	39.5%	64.1%	42.5%	62.9%	40.6%	60.9%	44.7%	60.9%	39.5%	58.6%
PDO	59%	35%	57%	36%	58%	38%	54%	38%	59%	40.3%

# TRANSIT

## rabbittransit

The Susquehanna Regional Transportation Authority (SRTA), operating as rabbittransit in the region, provides public transit services throughout Adams County. Section 5307, Section 5339, and CMAQ Flex funds are federal funding sources that have been used to support transit services. The services offered include: Fixed Route Service, Paratransit (also referred to as Shared Ride), and Commuter Express. Although not offered in Adams County at the time this plan was adopted, Microtransit is an emerging mode of public transportation that is offered by rabbittransit in neighboring counties.

**Fixed Route:** Transit service using buses to provide service at designated bus stops along specific routes on set schedules.

**Shared Ride:** A demand-responsive, door-to-door service that provides consolidated trips between riders' origins and destinations. Different riders are grouped together depending on their travel times and locations. Shared-Ride transportation service is available to everyone who pays the fare or is eligible for reduced fare programs. Federal, state and county agencies have programs that discount or subsidize the cost of this service for the rider. All riders must register to access the service. To register online and see if you qualify for any of the programs, visit [FindMyRidePA](http://FindMyRidePA.com).

**Commuter Express:** A pre-determined transit route that operates along a major corridor connecting commuters to employment and commercial centers often during peak ("rush hour") times.

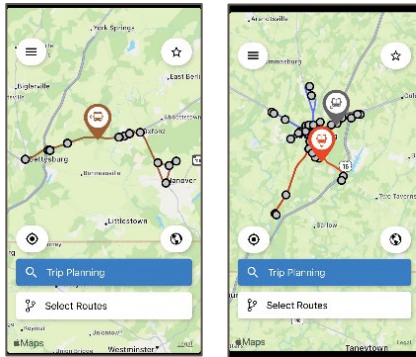
**Microtransit:** A zone-based, app-driven, on-demand public transit service that that can offer flexible routes and on-demand scheduling.

' COVID has a direct impact on ridership; \*CY2021 reflects ridership through June 2021 (6 months)

RABBITTRANSIT RIDERSHIP TRENDS							
	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020'	CY2021'*
<b>FIXED ROUTE SYSTEM</b>							
Lincoln Line	18608	16370	15191	17726	16712	8288	4566
Gray Line	41225	35094	36214	34070	30781	20113	9007
Blue Line	3587	3039	3340	4259	5453	3254	1677
Gettysburg-Hanover Connector	-	-	-	-	-	-	1205
Gold Line	14414	17484	18829	21757	18716	0	2147
<b>TOTAL</b>	<b>95,343</b>	<b>88,145</b>	<b>88,986</b>	<b>92,836</b>	<b>86,164</b>	<b>37,056</b>	<b>19,498</b>
<b>COMMUTER EXPRESS</b>							
15N EXPRESS	17509	16158	15412	15024	14502	5401	896
<b>TOTAL</b>	<b>17,509</b>	<b>16,158</b>	<b>15,412</b>	<b>15,024</b>	<b>14,502</b>	<b>5401</b>	<b>896</b>
<b>PARATRANSIT</b>							
Trips completed by County Residents	43,171	44,344	42,682	44,471	44,370	21,337	11,085
<b>TOTAL</b>	<b>43,171</b>	<b>44,344</b>	<b>42,682</b>	<b>44,471</b>	<b>44,370</b>	<b>21,337</b>	<b>11,085</b>

Convenient technology-based tools, accessible through mobile devices, allow riders to obtain real-time information, stay informed, and purchase digital tickets for services. This instant transfer of information from provider to rider increases the efficiency of the overall public transportation network.

MyStop App:



## Commuter Services of Pennsylvania

Commuter Services of Pennsylvania is a non-profit organization serving Adams, Berks, Cumberland, Dauphin, Franklin, Lancaster, Lebanon, Perry, and York Counties. The organization focuses on initiatives that aim to reduce traffic congestion and improve air quality by helping commuters find alternative travel modes to reach employment areas. Commuter Services arranges carpool and vanpool services for commuters, works with regional transit agencies to improve service, and assists employers in developing programs that can help reduce commuting travel, such as telework and flexible scheduling programs and commuter education programs. The Commuter Services program is funded through federal monies, including Congestion Mitigation and Air Quality (CMAQ) and Surface Transportation Program (STP) funds. Each participating MPO and RPO contributes funds to this operation based on population.



## BICYCLE AND PEDESTRIAN FACILITIES

Sidewalks are predominantly found along the main street networks within Boroughs and in neighborhood settings. Recognizing the benefits of pedestrian facilities, many municipalities have implemented standards dictating the installation of sidewalks in newly developed areas with the goal of connecting neighborhoods, commercial areas, and other points of interest, such as schools and parks. In some cases, side-paths have been installed for pedestrian and bicycle use.

A very limited number of bike lanes have been installed within Gettysburg Borough, along Steinwehr Avenue, and some additional roads now include “sharrows”, pavement markings indicating that a roadway is suitable for biking based on characteristics such as speed and traffic volume.

Progress continues on the Gettysburg Area Trail System, which links Gettysburg Borough to other municipalities, including Straban and

Cumberland Townships. Completed portions of the trail system include a segment of the North Gettysburg Trail to the Gettysburg High School and portions of the Gettysburg Inner Loop (GIL). A multi-organizational cooperative continues to guide this project through the development of planned phases.

In 2001, PennDOT designated six cross-state bicycle routes, referred to as the “BicyclePA” system. The six BicyclePA routes use existing public roads and some rail trails to guide advanced bicyclists through the state. Portions of four interconnected routes traverse Adams County, including Route S, Route S1, Route J2, and Route JS. Parks and other isolated trails throughout the county provide recreational opportunities for walking and biking, however, many of these areas lack connections to other locations. Opportunities to implement pedestrian and bicycle connections are continuously evaluated, however, limited funding proves to be a major barrier for delivering local projects.

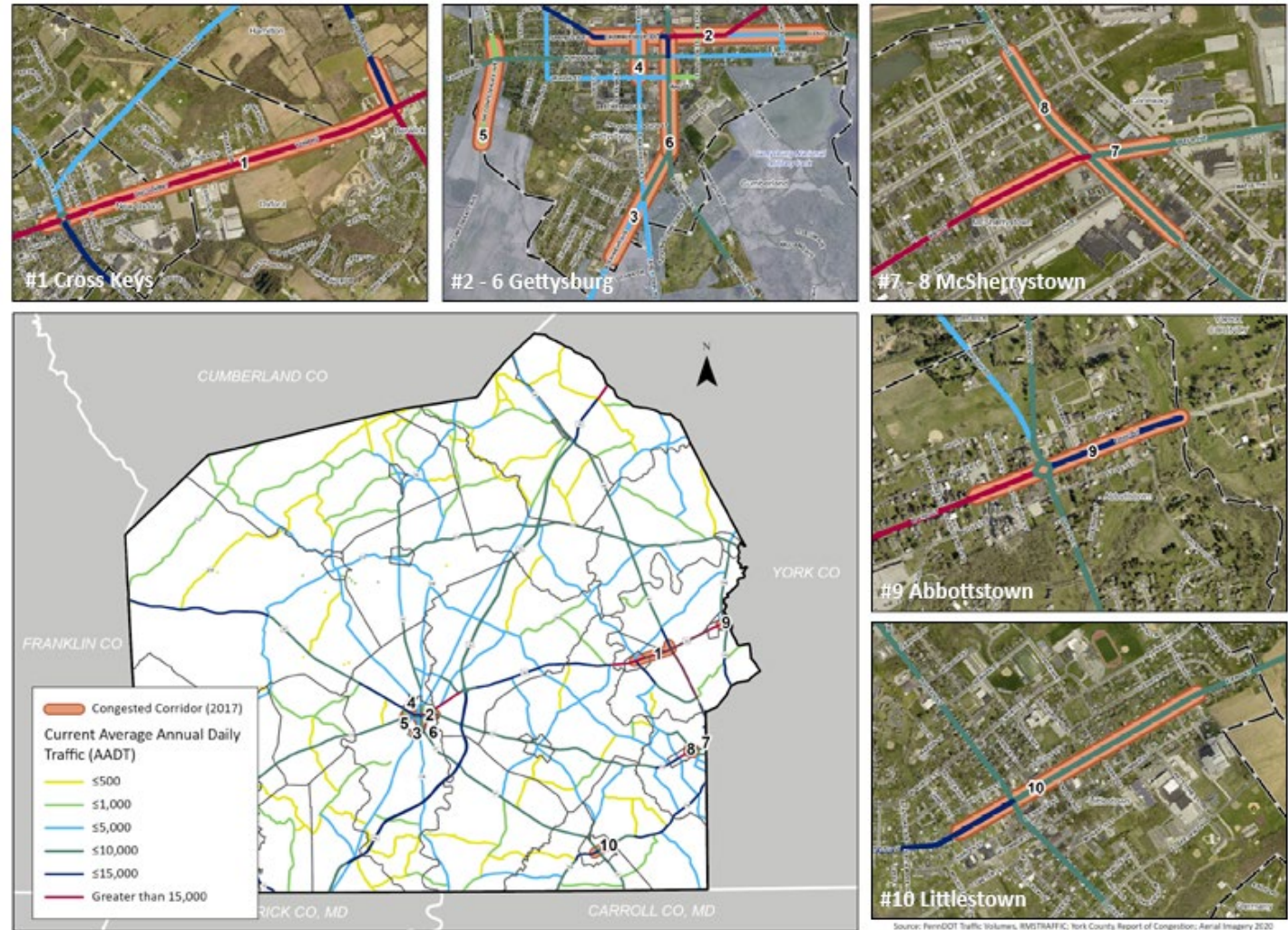


# CONGESTION

Congestion on the roadways negatively impacts safety conditions, air quality through emissions, and quality of life through loss of time. The *Adams County Report on Congestion: 2016*, prepared for ACTPO by the York County Planning Commission in 2017, identified the most congested roadways in Adams County.

Average speed data was obtained from TomTom for three different dataset years: 2012, 2014, and 2016. The Travel Time Index (TTI), the comparison between the travel conditions in the peak period to free-flow conditions, was then determined for road segments in PennDOT's Roadway Management System (RMS). Segments with a TTI of 1.5 or higher are considered congested. Although not a comprehensive study of congestion, the report provides a basis for analyzing and addressing congestion in the County.

## TOP TEN CONGESTED SEGMENTS

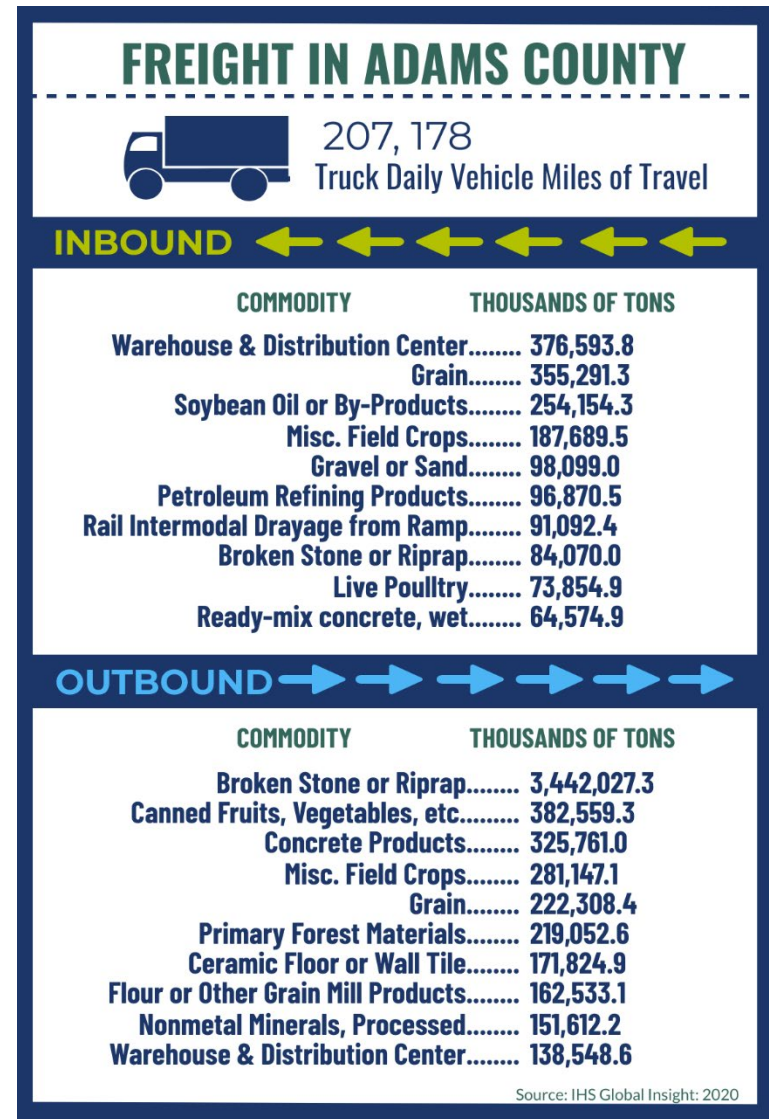




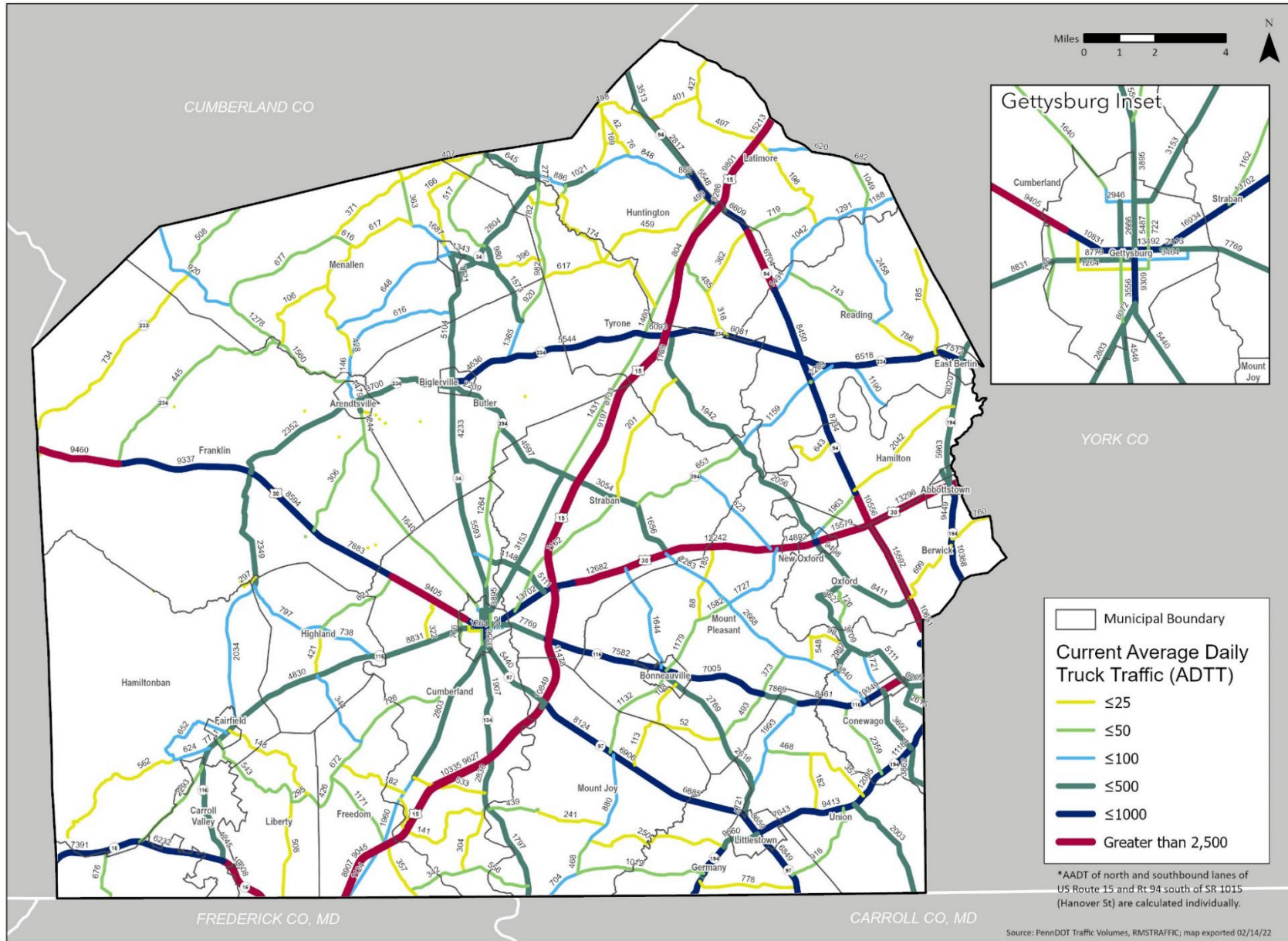
# FREIGHT

In Adams County, the movement of goods occurs by truck and rail freight. US-15, US-30, and PA-94 carry the most truck traffic in the county. These routes serve to connect to lower volume routes for local deliveries and to carry “through” trips; trips that originate outside the county and are destined for locations outside of the county.

Naturally, local truck volumes are higher in industrial areas, particularly the southeast quadrant and the north and central portions of the county. The map depicting Average Daily Truck Traffic Volumes is shown on the next page.



# TRUCK TRAFFIC



## RAIL



Adams County is served by two freight rail service providers. CSX Transportation provides rail freight service over the “Hanover Subdivision Line” which connects Baltimore, Maryland with Hagerstown, Maryland. The Pennsylvania portion of this line extends 54 miles from the Maryland state line in Franklin County, through Gettysburg and Hanover before crossing back into Maryland. The Adams County portion extends 35.2 miles,

entering north of Route 16 and running through Gettysburg and New Oxford before exiting just north of McSherrystown. Based on a 2021 inventory by the US Department of Transportation’s (USDOT) Federal Railroad Administration (FRA), there were approximately 54 at-grade highway-rail intersections in Adams County.

Major customers located within Adams County that utilize the Hanover Subdivision Line include, UTZ, Vulcan Materials, Morton Buildings, Dal-Tile, Knouse Foods, Specialty Granules, Cargill, and AgCom. Recent improvements to the line include rail tie replacement and road crossing and surfacing maintenance. Future demand for freight service along this line is expected to hold steady.

The Gettysburg and Northern (GET) Railway, operated by Pioneer Lines of Greenwood Village, Colorado, is a 27 mile short-line track that connects CSX-Transportation and Norfolk Southern. Six freight stations are located along this line, including Gettysburg, Biglerville, Aspers, Gardners, Upper Mill, and Mount Holly Springs.

The GET freight operation transports approximately 2,300 rail cars annually amounting to 6.4 million tons of cargo. Customers served along the line include International Paper in Biglerville, Campbell’s food processing and Premier Chemicals in Aspers, and Vitro Glass Industries in Cumberland County. Pioneer Lines expects the demand for freight services to increase slightly in the short-term.

## AVIATION

The largest aviation facility in the county, the Gettysburg Regional Airport (W05) is located in Cumberland Township just outside of Gettysburg Borough. The airport is owned and operated by the Susquehanna Area Regional Airport Authority (SARAA), which also owns and operates other regional airport facilities including the Harrisburg International Airport. The facility is classified as a general service airport with approximately 10,000 annual operations, with 10 based aircraft. The airport has one asphalt runway approximately 3,100 feet in length. Primary activities occurring at the airport include local pilot/aircraft operations, flight training, aircraft maintenance and repair, self-service fueling, and hangar storage. Proposed projects on the 2021 Five Year Plan for the Gettysburg Regional Airport, submitted to the Federal Aviation Administration by SARAA, include construction of an aircraft parking apron and acquiring easements to remove obstructions.

The Mid-Atlantic Soaring Center Airport (W73) is classified as a general service airport with an asphalt runway approximately 2,700 feet in length and two turf runways. The airport is located in Liberty Township about two miles south of Fairfield. Operations at the airport are exclusively for private recreational flying.

Several other privately-owned aviation facilities exist within the county. Operations at these facilities include, medical transportation, private business activities, and personal recreational use.

# CHAPTER 6 - TRANSPORTATION PERFORMANCE MANAGEMENT

Under federal transportation planning requirements, most recently continued with the passing of the Bipartisan Infrastructure Law (BIL), state DOTs, MPOs and RPOs, and public transportation providers must utilize a Transportation Performance Management (TPM) strategy. TPM is an ongoing, data-driven approach that uses system information to inform investment and policy decisions related to the transportation network.

Performance Based Planning and Programming (PBPP) is the application of processes that agencies use to achieve TPM, including establishing performance measures and reasonable performance targets for each measure. Ultimately, PBPP aims to efficiently allocate resources to maximize return on investment and achieve desired performance outcomes. A chart reflecting the six elements of TPM and the high-level PBPP processes involved in achieving successful TPM is included in Appendix E.



## Transportation Performance Management

**Focusing on Performance for Safe, Reliable Journeys**

The Federal Highway Administration defines Transportation Performance Management (TPM) as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals.



### Investment Decisions

Using goals, measures, and data to make better informed decisions about how to invest transportation funding.



### Aimed at a Better Performing Transportation System

Setting targets, developing plans, reporting results, and being accountable for performance.



### For Connected and Productive Communities

Focusing on the efficient delivery of goods and safe, reliable journeys to work, to school, to shopping, to community activities.

Source: FHWA

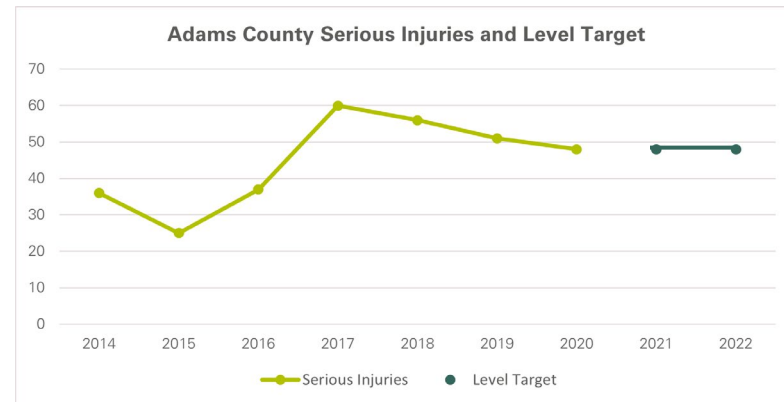
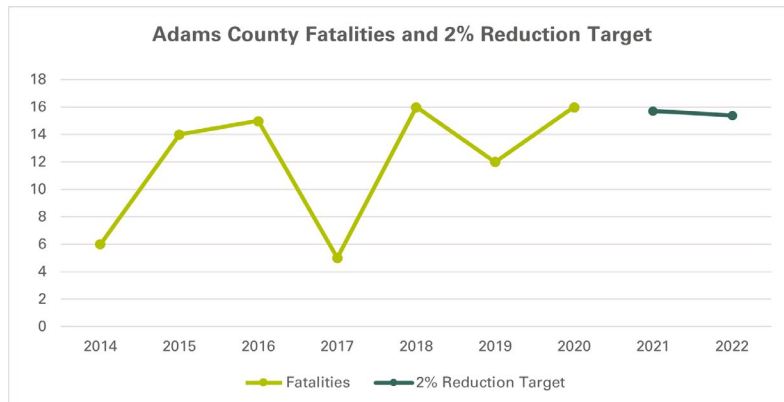
# PM-1: SAFETY PERFORMANCE MEASURES

Federal regulation established five performance measures to assess safety on the transportation network. Performance targets are established on an annual basis for each performance measure. To determine whether a state has made significant progress toward meeting safety targets, at least 4 out of the 5 safety performance targets must be either met or the actual outcome for the target must be better than baseline performance. Although MPOs and RPOs have the option to set unique performance targets for their region, ACTPO

has formally agreed to support the performance targets established by PennDOT since 2018.

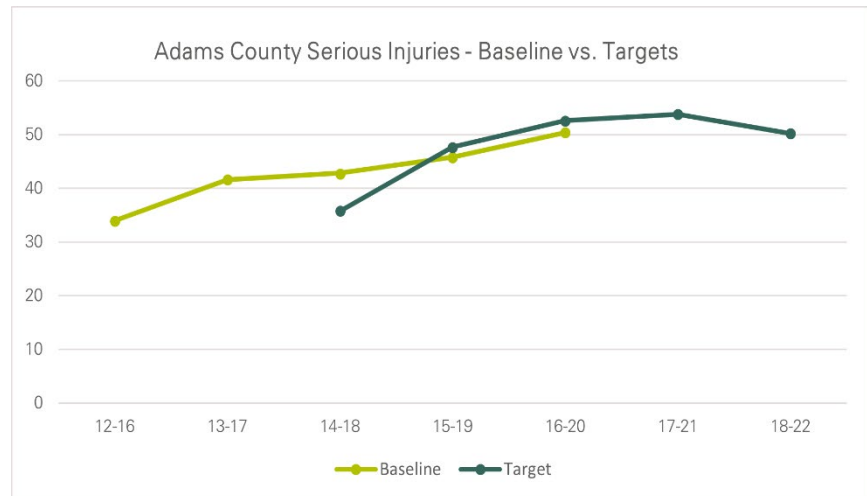
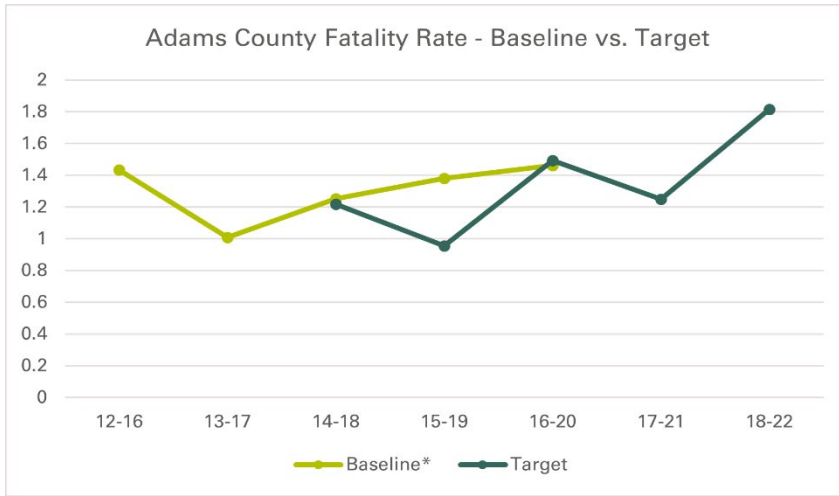
In an effort to achieve the established targets, safety projects are planned and programmed in Adams County, in collaboration with PennDOT, to support the goal of improving safety and reducing fatalities and serious injuries. The following charts and graphs display Adams County's data and targets for supporting PM-1.

TOTAL FATALITIES, SERIOUS INJURIES, AND TARGET									
ADAMS COUNTY FATALITIES AND 2% REDUCTION TARGET									
	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fatalities	6	14	15	5	16	12	16		
2% Reduction Target								15.7	15.4
ADAMS COUNTY SERIOUS INJURIES AND LEVEL TARGET									
Serious Injuries	36	25	37	60	56	51	48		
Level Target								48.0	48.0



FATALITIES AND SERIOUS INJURIES – BASELINE VS. TARGET							
ADAMS COUNTY FATALITIES							
	12-16	13-17	14-18	15-19	16-20	17-21	18-22
Baseline*	12.8	9	11.2	12.4	12.8		
Target			10.8	8.7	13.5	11.3	15
ADAMS COUNTY SERIOUS INJURIES							
Baseline*	34	41.6	42.8	45.8	50.4		
Target			35.8	47.7	52.6	53.8	50.2

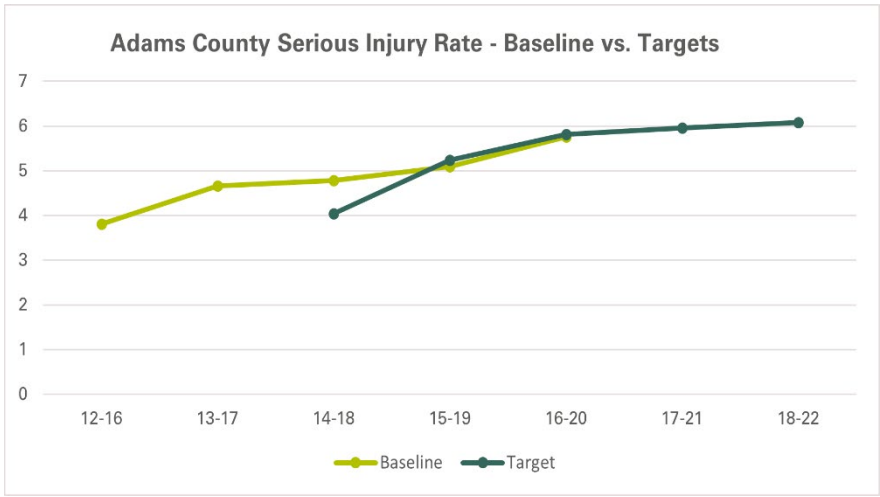
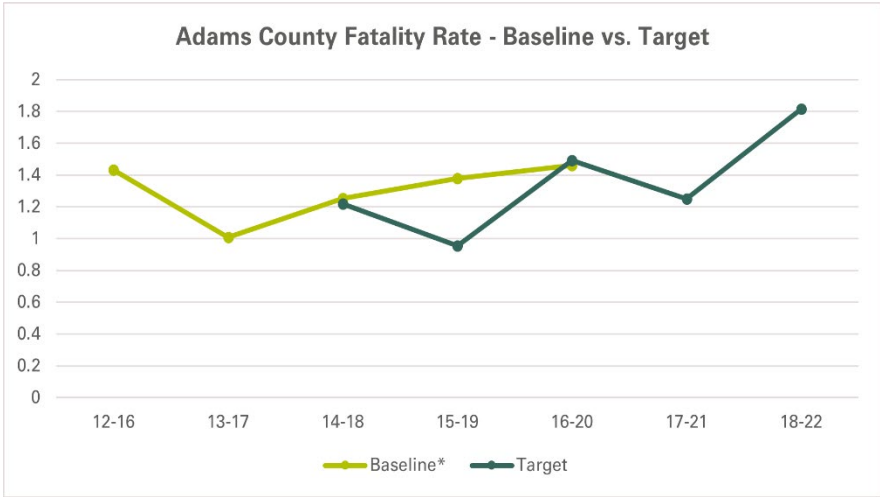
\*Baseline = 5-Year Rolling Average



FATALITY AND SERIOUS INJURY RATE – BASELINE VS. TARGET							
ADAMS COUNTY FATALITY RATE** - BASELINE VS. TARGET							
	12-16	13-17	14-18	15-19	16-20	17-21	18-22
Baseline*	1.433	1.008	1.253	1.38	1.461		
Target			1.218	0.956	1.492	1.25	1.816
ADAMS COUNTY SERIOUS INJURY RATE** - BASELINE VS. TARGET							
Baseline*	3.805	4.659	4.787	5.098	5.754		
Target			4.044	5.242	5.812	5.953	6.079

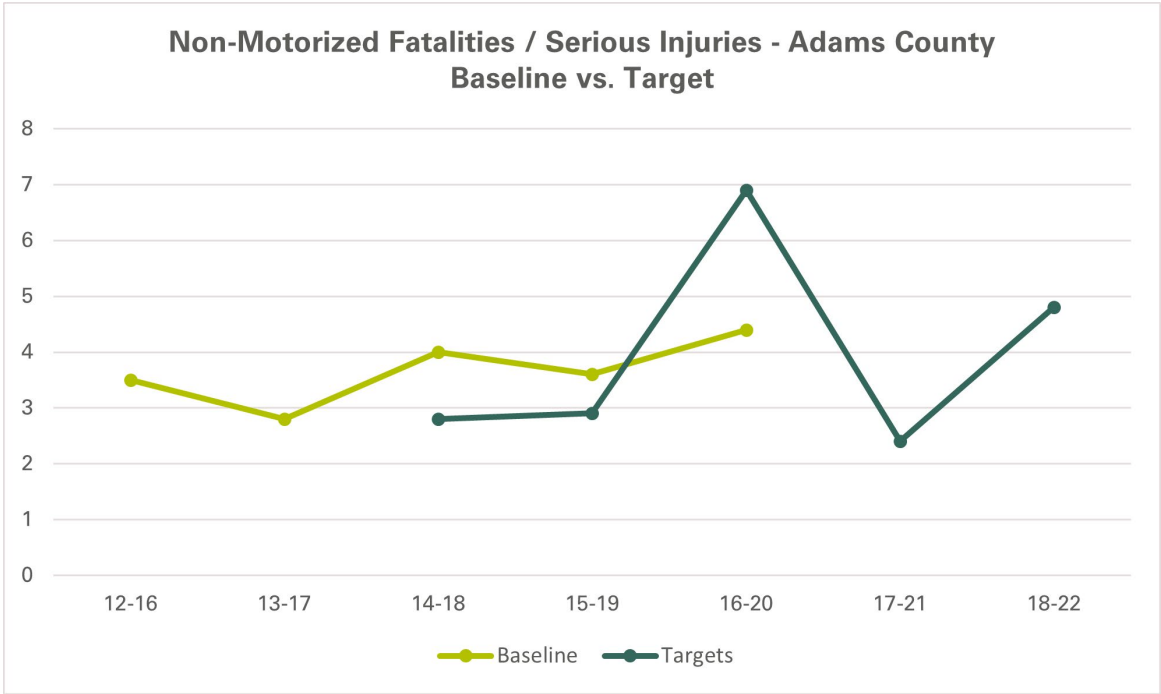
\* Baseline = 5-Year Rolling Average

\*\* Fatality/Serious Injury rate based on number of fatalities/serious injuries per 100 million vehicle miles traveled (VMT)



NON-MOTORIZED FATALITIES / SERIOUS INJURIES							
	12-16	13-17	14-18	15-19	16-20	17-21	18-22
Baseline*	3.5	2.8	4	3.6	4.4		
Target			2.8	2.9	6.9	2.4	4.8

\* Baseline = 5-Year Rolling Average



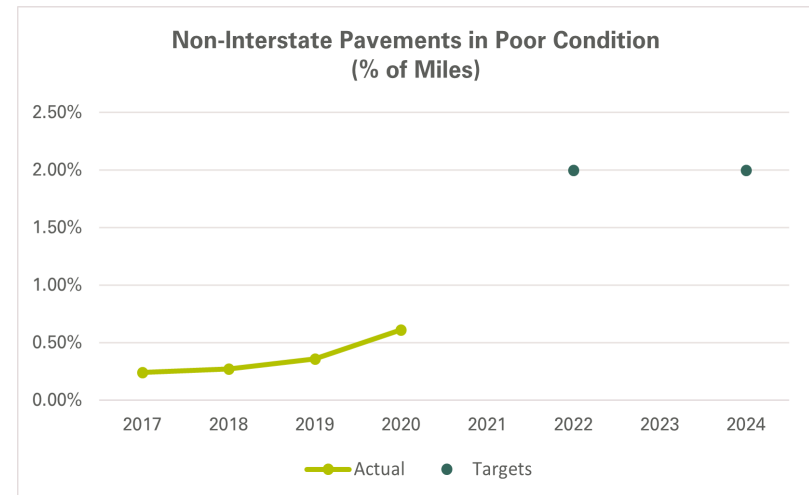
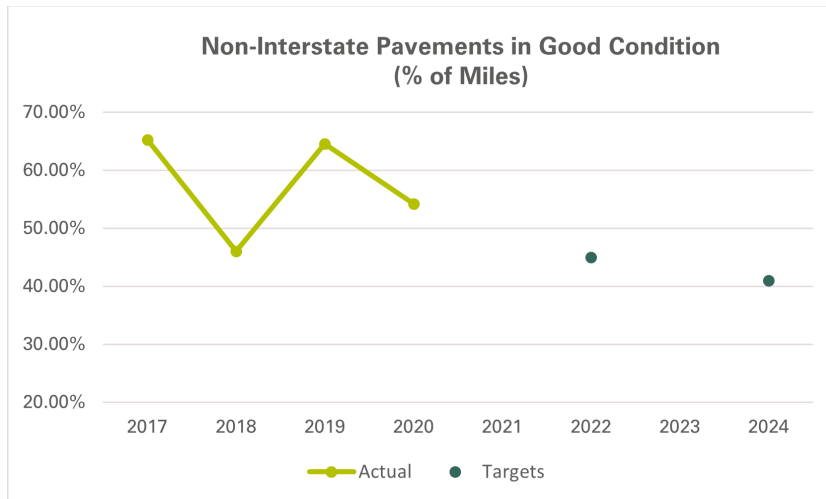


## PM-2: PAVEMENT/ BRIDGE PERFORMANCE MEASURES

Six national infrastructure performance measures assess the condition of pavement and bridge assets on the National Highway System (NHS). Targets are established by State DOT's biennially for these measures as part of a four-year performance period. MPO's establish 4-year targets by supporting the State's target or by establishing their own targets. Adams County has agreed to support PennDOT's targets since 2018. The purpose is to ensure that Federal-

aid fund investments help achieve the goals of the State's asset management plan. The charts and graphs display Adams County's performance baselines and targets for PM-2. Targets for the upcoming performance period, 2022 through 2025, will be established in October 2022. No data is presented for performance measures specifically related to interstates, as there are no interstates located within Adams County.

ADAMS COUNTY NON-INTERSTATE PAVEMENT CONDITION PERCENTAGE								
NON-INTERSTATE PAVEMENTS IN GOOD CONDITION (%)								
	2017	2018	2019	2020	2021	2022	2023	2024
Actual	65.23%	46.00%	64.55%	54.21%				
Targets						45%		41%
NON-INTERSTATE PAVEMENTS IN POOR CONDITION (%)								
	2017	2018	2019	2020	2021	2022	2023	2024
Actual	0.24%	0.27%	0.36%	0.61%				
Targets						2%		2%



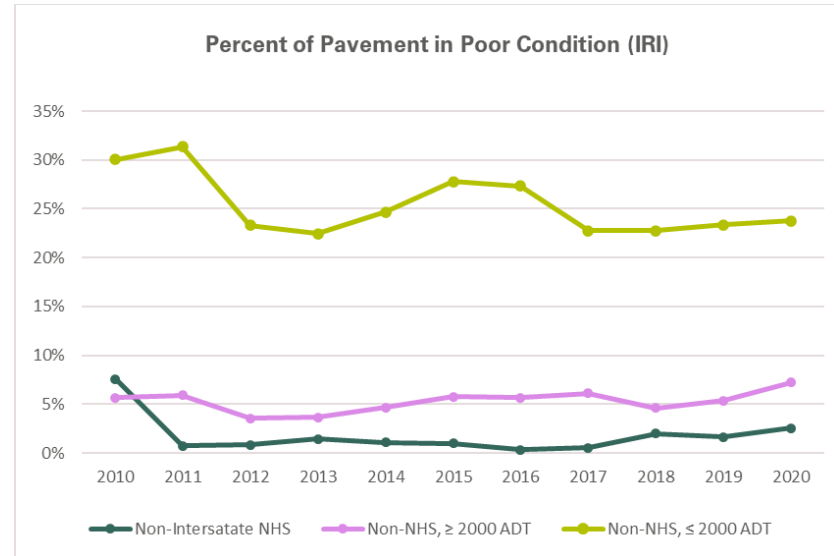
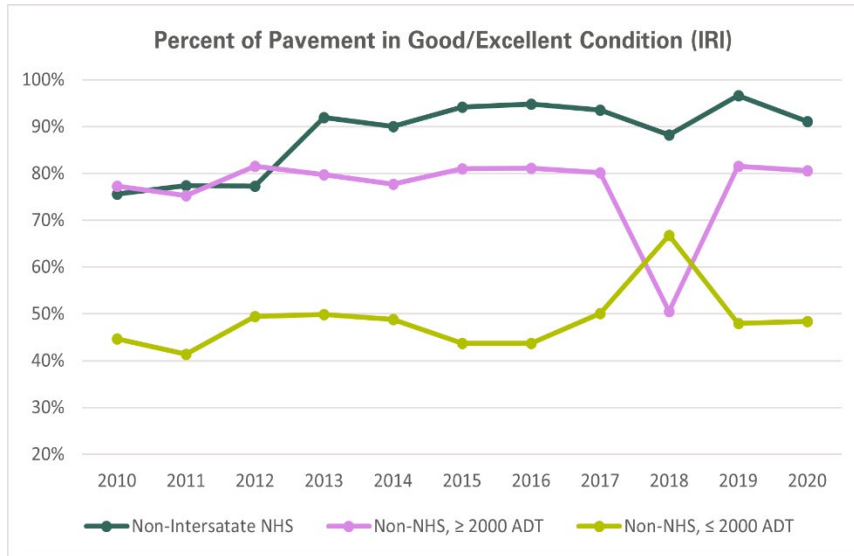
## ADAMS COUNTY PAVEMENT CONDITIONS

### PERCENT OF PAVEMENT IN GOOD/EXCELLENT CONDITION (IRI)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Non-Intersatate NHS	75.56%	77.45%	77.30%	92.00%	90.02%	94.15%	94.81%	93.54%	88.23%	96.68%	91.13%
Non-NHS, ≥ 2000 ADT	77.27%	75.27%	81.54%	79.78%	77.76%	81.04%	81.16%	80.15%	50.58%	81.53%	80.58%
Non-NHS, ≤ 2000 ADT	44.70%	41.43%	49.42%	49.85%	48.80%	43.71%	43.77%	50.13%	66.76%	47.98%	48.43%

PERCENT OF PAVEMENT IN POOR CONDITION (IRI)											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Non-Intersatate NHS	7.55%	0.73%	0.83%	1.43%	1.10%	0.98%	0.32%	0.55%	1.99%	1.62%	2.52%
Non-NHS, ≥ 2000 ADT	5.68%	5.90%	3.54%	3.63%	4.65%	5.78%	5.65%	6.11%	4.61%	5.34%	7.22%
Non-NHS, ≤ 2000 ADT	30.05%	31.37%	23.31%	22.47%	24.67%	27.79%	27.35%	22.78%	22.76%	23.34%	23.75%



## PM-3: SYSTEM PERFORMANCE MEASURES

Six national performance measures were established through federal rulemaking that assess system performance, freight movement, and congestion mitigation and air quality as it relates to the transportation network. Like PM-2, targets are established by State DOT's biennially for these measures as part of a four-year performance period. MPO values are available for review and information purposes to evaluate

how the region is contributing to statewide target achievement. The chart below displays the baselines and targets that are applicable to Adams County for PM-3. Statewide targets for the second performance period, 2022 – 2025, will be established in October 2022.

		INTERSTATE RELIABILITY					NON-INTERSTATE RELIABILITY					TRUCK TRAVEL TIME RELIABILITY INDEX				
		2017 Baseline	2018	2019	2020	2021*	2017 Baseline	2018	2019	2020	2021*	2017 Baseline	2018	2019	2020	2021*
Statewide Total		89.8%	89.6%	89.9%	96.2%	93.8%	87.4%	88.2%	88.4%	92.6%	94.1%	1.34	1.39	1.36	1.23	1.3
Statewide Target		<b>89.5%</b> <i>2 &amp; 4-Year Target</i>					<b>87.4%</b> <i>4-Year Target</i>					<b>1.4</b> <i>2 &amp; 4-Year Target</i>				
<i>Targets only Apply to Statewide Total - MPO Numbers Provided for Information Purposes Only</i>																
Adams County		<i>Not Applicable</i>					86.2%	89.8%	93.4%	95.8%	92.3%	<i>Not Applicable</i>				

\* Note 2021 values were not finalized as of adoption date

# TRANSIT PERFORMANCE MEASURES

## Transit Asset Management

In July 2016, FTA issued a final rule (TAM Rule) requiring transit agencies to maintain and document minimum Transit Asset Management (TAM) standards, policies, procedures, and performance targets. The TAM rule divides transit agencies into two categories (Tier I and II) based on size and mode. The TAM process requires agencies to annually set performance measure targets and report performance against those targets.

In January 2022, the Susquehanna Regional Transportation Authority (SRTA) was formed. The responsibilities of the assets of the Cumberland-Dauphin-Harrisburg Transit Authority (aka CAT) and the Central Pennsylvania Transportation Authority (CPTA) have been contractually assigned to SRTA. Formerly, CAT was a Tier II agency and part of the PennDOT Tier II Agency Group Plan. CPTA was a Tier I agency. The SRTA is categorized as a Tier I agency, and the new TAM Plan for the combined assets now under SRTA is in the final stages of development. The SRTA will follow the same procedures followed by the CPTA with annual evaluation of current performance and target updates as needed. The data shown below was gathered during the development of the new SRTA TAM Plan. The FY2020-21 targets are estimated from both CAT and CPTA asset data.

The SRTA is a regional transportation authority with an 11-county service area, including Adams County. The Performance Measure targets presented for both the TAM and safety are combined targets for the SRTA as a whole.

TRANSIT ASSET MANAGEMENT TARGETS (SRTA)				
Performance Measure	Asset Class	FY2020-21 Target	Current Performance	FY 2021-22 Target
<b>ROLLING STOCK (REVENUE VEHICLES)</b>				
<b>Age</b> % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Over-the-Road Bus (BR)	0%	0%	0%
	Bus (BU)	21.4%	2%	2%
	Articulated Bus (AB)	N/A	0%	0%
	Trolleybus (TR)	0%	N/A	N/A
	Cutaways (CU)	0.5%	30%	30%
	Van (VN)	0%	19%	19%
	Minivan (MV)	7.9%	68%	68%
<b>EQUIPMENT (NON-REVENUE VEHICLES)</b>				
<b>Age</b> % of non-revenue/service vehicles within a particular asset class that have met or exceeded their ULB	Maintenance Equipment	0%	0%	0%
	Automobiles	37%	21%	21%
<b>FACILITIES</b>				
<b>Condition</b> % of facilities with a condition rating below 3.0 on the FTA TERM scale	Administrative / Maintenance Facilities	0%	0%	0%
	Passenger Facilities	0%	50%	50%
	Parking Facilities	0%	0%	0%

## Transit Safety

In addition to the Transit Asset Management Performance, FTA issued a final rule on Public Transportation Agency Safety Plans (PTASP), effective July 19, 2019. 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:

- Fatalities
- Injuries
- Safety Events
- System Reliability

The SRTA completed an update to the PTASP in January 2022, combining the former CAT and CPTA PTASPs.

SAFETY TARGETS		
Measure	Mode of Service	
	Fixed Route Bus Routes	Non-Fixed Route Bus Modes
Fatalities (annual reported events)	0	0
Fatalities (per 100k VRM)	0	0
Injuries (annual reported events)	7	9
Injuries (per 100k VRM)	0.39	0.18
Safety Events (annual reported events)	6	10
Safety Events (per 100k VRM)	0.34	0.21
System Reliability Events (per 100k VRM)	9.75	0.99

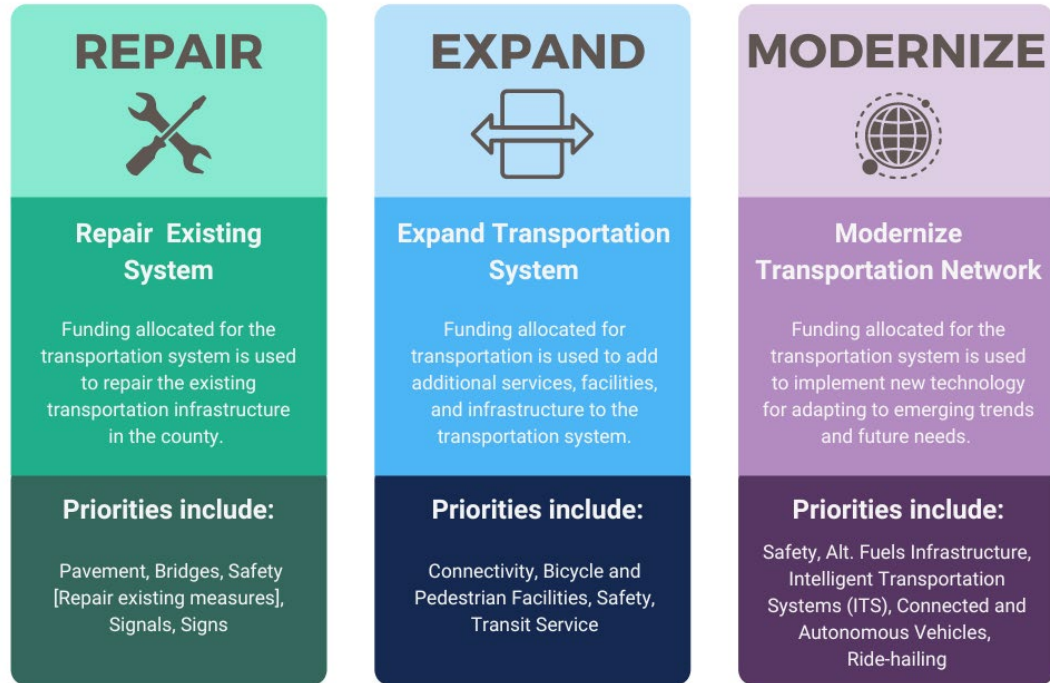
# CHAPTER 7 - FUTURE STRATEGIES

A Long Range Transportation Plan (LRTP) identifies policies, strategies, and action items needed to guide future funding and implementation decisions. In order to help guide these decisions, three future scenarios to prioritize program investments were developed and presented through the public engagement efforts.

**Repair Existing System** – In this scenario, funds will be allocated to repair the existing transportation infrastructure, including pavement, bridges, traffic signals and signage, as well as repair or replace existing safety measures.

**Expand Transportation System** – In this scenario, funds will be allocated to add additional services, facilities, and infrastructure to the transportation system in the county, including bicycle and pedestrian facilities, transit service, new road connections and installation of new safety measures.

**Modernize the Transportation System** – In this scenario, funds will be allocated to implement new technology and adapting to emerging trends and future needs, including alternative fuels infrastructure, connected and autonomous vehicle technology, freight, Intelligent Transportation System (ITS) and other new safety technologies.



The public outreach survey sought input on these scenarios as well as specific elements of the transportation system within each scenario. Using responses from the survey and other engagement efforts the policies, strategies and action items identified below were developed to reflect the priorities for future implementation.


The policies, strategies, and action items identified here are broken into five categories based on the original three scenarios. Many items listed can affect multiple aspects of the transportation system. In the interest of space, items will only be listed in one area. However, future implementation actions will need to ensure that decisions are made in a manner that will promote projects that address multiple areas to avoid creating inefficient silos in decision making.

# ASSET MANAGEMENT (aka Repair Existing System)

Regular investment in maintaining roadway pavement and bridge components is needed to reduce the frequency of large, one-time investments in roadway reconstruction projects and bridge rehabilitation or replacement projects. In the past, focus has been on addressing needs on NHS roads (US 15, US 30, PA 94) and arterial roads as the top priorities. This policy has been consistent with the adopted asset management performance measures. However, it overlooks assets that serve the bulk of Adams County. A balanced approach is needed that will ensure higher classifications roads providing regional mobility access are maintained while

simultaneously addressing lower classification roads providing local mobility access.

Therefore, Adams County will continue to work collaboratively with PennDOT District 8-0 to fund and plan for asset management activities to meet statewide and local Performance Measure (PM-2) targets. Maintenance, rehabilitation, and/or replacement activities on road and bridge assets that provide the highest level of mobility and efficiency of travel from a Statewide to Regional to Countywide order of significance will be given priority.

 <h2>Asset Management</h2>				
Overall				
ACTION ITEM	TYPE	LEAD	SUPPOT	PRIORITY
Adopt and monitor compliance with federal and state asset management performance measures.	Policy	ACTPO	PennDOT, FHWA, FTA	Ongoing
Establish asset management performance measures for non-National Highway System (NHS) roads and bridges, including local bridges.	Policy	ACTPO	PennDOT, FHWA, FTA	Ongoing
Identify corridors where future reconstruction/resurfacing projects may contain local utility infrastructure so potential upgrades/maintenance can be done prior to the reconstruction/resurfacing work.	Project/ Analysis	ACTPO	PennDOT, Municipalities	Ongoing



# Asset Management

## Pavement

ACTION ITEM	TYPE	LEAD	SUPPORT	PRIORITY
Prioritize pavement maintenance activities that focus on road segments that are in the poorest condition, carry the heaviest volumes and are located on higher classification roads (Minor Arterial and higher).	Policy/ Project	ACTPO	PennDOT	High
Increase pavement life cycle extension maintenance activity on road segments located on lower classification roads (Major Collector and lower).	Policy/ Project	ACTPO	PennDOT	Medium

## Bridges

ACTION ITEM	TYPE	LEAD	SUPPORT	PRIORITY
Prioritize state bridge maintenance activities that focus on bridges that are in the poorest condition or located on higher classification roads.	Policy/ Project	ACTPO	PennDOT	High
Prioritize local bridge maintenance activities that focus on municipal bridges in the poorest condition.	Policy/ Project	ACTPO	PennDOT	High

## Signs

ACTION ITEM	TYPE	LEAD	SUPPORT	PRIORITY
<b>Evaluate sign needs during all maintenance projects.</b>  Road signage is still an important tool to communicate navigational and regulatory information to drivers. All road signage in Adams County should comply with the following principles: <ul style="list-style-type: none"> <li>- Avoid sign clutter that makes important information difficult to identify,</li> <li>- Maintain proper sign retro-reflectivity to ensure proper visibility in all conditions, and</li> <li>- Promote signage that uses age-friendly design techniques.</li> </ul>	Policy/ Project	Municipalities, ACTPO	PennDOT	Low



# MOBILITY, ACCESS, AND RELIABILITY

(aka Expand Transportation System)

A reliable transportation network is vital to the health, vitality, and security of a community. The network also needs to provide mobility for people and goods as well as ensure all members of the community, regardless of means or ability, can access a variety of transportation modes.

## Connectivity

Many transportation networks were originally designed for a pre-automobile era. Adding modern transportation modes onto a system designed for different times has led to a variety of problems for many areas. Congestion, its causes, effects and solutions, is often the most visible result of this imbalance. While congestion has many causes, the effects and solutions are often the primary focus of public discussion about transportation. In Adams County, the effects are often expressed in quality of life or quality of experience impacts such as noise, pollution, safety, and excessive truck traffic. However, solutions often get boiled down to one idea, additional capacity.

In transportation terms, capacity projects often evoke visions of new roads and bypasses. However, a continuing, comprehensive, and cooperative planning process must consider a variety of solutions, both physical and policy oriented, that include create the strongest possible transportation network at the most efficient cost possible. This means pursuing improvements that focus on adding new components of all modes to Adams County's transportation network. This could include new transit connections, additional active transportation facilities, implementation of access management strategies and targeted network expansions.

As was common practice in many areas, street networks in older developments in Adams County are characterized by wide, car

dominated streets, cul-de-sacs and an absence of pedestrian facilities. Over time, this pattern has created congestion from a lack of connectivity and excessive maintenance costs for snow removal and annual maintenance.

## Active Transportation (Bicycle/Pedestrian)

Active transportation can be defined as the transportation of people or goods through non-motorized, often self-propelled activities. The best-known examples are walking and bicycling but also can include running, skating, scooters, etc.

While often overlooked in the traditional planning process, active transportation modes are an important part of a comprehensive transportation system. Providing a safe, efficient, and convenient route for non-motorized transportation can improve a community's economic development, access to jobs and transit. Active



transportation facilities that connect key destinations like schools, parks, town centers and important community facilities should be prioritized.

Additionally, many residents view walking and bicycling as unsafe due to heavy traffic and a scarcity of sidewalks, crosswalks, and bicycle facilities. Creating more opportunities for people to incorporate physical activity into their daily routine, whether recreation-based or daily transportation-based, can improve public health by reducing physical inactivity. It would also expand access to transportation networks for people without access to cars. By ensuring these connections are made and maintained, mobility for users of all modes, ages and abilities can be accommodated.

Level of Stress analysis estimates the level of stress felt by active transportation users based on a combination of speed limit, lane count, and shoulder width on Adams County roads. Adams County has developed an *On-Road Active Transportation and Safety Analysis tool*, included in Appendix F, to assess stress levels throughout the county's transportation system and identify gaps in the active transportation network.

## Transit

There are three existing types of transit service in Adams County. While there is some overlap in user bases between the different types, each one generally serves a particular population. These include:

**Commuter Express:** A pre-determined transit route that operates along a major corridor connecting commuters to employment and commercial centers, often during peak ("rush hour") times.

**Fixed-Route:** Transit that operates a predetermined route, with designated stops, according to a predetermined schedule.

**Shared Ride (Paratransit):** A demand-response service that provides trips between a rider's origin and destination that are not well served by scheduled route bus service. Trips must be scheduled in advance and the service operates during limited hours.

Microtransit is an on-demand service that provides trips between a rider's origin and destination, often within a pre-determined "zone" and often to serve as a "last mile" connector to fixed-route service. It also can adjust to shifting ridership trends quicker than traditional fixed-route lines, essentially serving as a real-world feasibility study.

The public outreach survey generated numerous responses and suggestions for new or expanded transit connections both internal and external to Adams County. Commuter express and fixed-route transit services were especially popular suggestions. However, recent ridership data indicates that the public supports transit connections as an option to be available if needed rather than as a service to be used regularly. Essentially, there is a broad base of support for the idea of transit service, but not a lot of support to actually use transit service.

This presents an enormous financial challenge for transit providers since transit operation is heavily based on ridership and fare-box revenues. This is especially challenging when attempting to connect rural areas to urban/town centers. Additionally, transit providers must consider the adopted asset management and safety transit performance measures when considering specific operation decisions. Ultimately, the real challenge when it comes to developing and promoting transit is: **How do you know who will actually use it?**



# Mobility, Access, and Reliability

## Connectivity

ACTION ITEM	TYPE	LEAD	SUPPORT	PRIORITY
<p>Promote access management strategies and design techniques in transportation improvements and subdivision and land development projects.</p>	Policy/ Public Engagement	ACTPO	PennDOT	High
<p><b>Connect the Spokes</b>            Adams County's unique "hub and spokes" roadway design ultimately focuses all traffic through choke points in historic borough and village setting. A series of new road connections between the existing "spokes" should be pursued as a way to expand the road network and provide alternative routes around congested areas. The primary focus for implementation of this recommendation should be through public private partnerships</p>	Policy/ Project	ACTPO, Municipalities	PennDOT, Private Sector	High
<p><b>Promote street network designs that focus on connectivity between adjacent nodes of the transportation network as a way to reduce trips on the arterial and collector network.</b>            Municipalities should consider incorporating the following policy recommendations that promote a pedestrian-based environment instead of a car-based one in future planning efforts:</p> <ul style="list-style-type: none"> <li>- Narrower streets</li> <li>- Full pedestrian facilities and bike lanes</li> <li>- Elimination of cul-de-sacs in favor of full through streets, a grid-network for example</li> <li>- Required street connections between adjacent developments</li> <li>- Implement traffic calming measures into neighborhood street designs</li> </ul>	Project/ Analysis	Municipalities, ACO PD, ACTPO	PennDOT	Ongoing
<p><b>Prioritize projects that address new connectivity needs while simultaneously addressing other transportation issues, such as asset management, safety, etc.</b></p>	Policy/ Project	ACTPO	PennDOT, FHWA	High
<p><b>Focus new network capacity additions that improve quality of life and quality of experience for residents, visitors and transportation system users.</b></p>	Policy	ACTPO	PennDOT	Medium

## Active Transportation (Bicycle/ Pedestrian)

ACTION ITEM	TYPE	LEAD	SUPPORT	PRIORITY
Establish a methodology to maintain the countywide GIS inventory of sidewalks, trails, and bicycle facilities. Work with PennDOT to establish consistent data standards and attributes to facilitate a state-wide inventory of bicycle and pedestrian infrastructure.	Policy	ACOPD	PennDOT, Bicycle/ Pedestrian Advocates	High
Continue to refine and develop the On-Road Active Transportation and Safety Analysis tool to identify the level of stress felt by pedestrians and bicyclists along roads throughout Adams County, identify locations to prioritize safety improvements, and identify gaps in the active transportation network.	Planning/ Policy/ Analysis	ACOPD, ACTPO	PennDOT, Bicycle and Pedestrian Advocates	High
<b>Incorporate active transportation friendly designs into all road and bridge projects, particularly in urbanized areas and designated growth areas.</b> This should include bike lanes and other bike infrastructure to facilitate biking on busier streets and additional or improved sidewalks to make streets more walkable.	Policy/ Project	ACTPO	PennDOT	High
<b>Identify and prioritize new connections and existing gaps in the active transportation network. Work with PennDOT, municipalities, developers, non-profit organizations, and bicycle/pedestrian advocates to address those gaps.</b> Multi-use, off-road connections designed for all forms of active transportation should be prioritized as the safest option for users. On-road facilities such as bicycle lanes, wider shoulders, crosswalks, signage and other safety designs should be pursued as well.	Planning/ Policy/ Analysis/ Project	ACTPO	PennDOT	High
<b>Require Active Transportation friendly designs in all new development, including narrower street widths, complete pedestrian facilities, designated bicycle lanes, off-road trails, and elimination of cul-de-sacs in favor of full through streets.</b> Development designs should incorporate and contribute to an active transportation network that allows for safe and connected navigation. This should be an expected component of all new development.	Policy/ Project/ Public Engagement	Municipalities	PennDOT, ACOPD	Medium
<b>Evaluate and relocate, if necessary, existing Bicycle PA routes. Make designated Bicycle PA Routes in Adams County more bicycle friendly through regular maintenance projects and improve bicycle level of service</b> On-road facilities such as bicycle lanes, wider shoulders, crosswalks, signage and other safety designs should be considered.	Policy/ Project	ACTPO, Bicycle Advocates	PennDOT	Low
<b>Work with transit providers, employers, and businesses to improve pedestrian and bicycling infrastructure and accommodations at, in, or near transit, employment, and commerce destinations.</b>	Policy/ Project	ACTPO, ACOPD	PennDOT, SRTA, Bicycle and Pedestrian Advocates	Low



## Mobility, Access, and Reliability

### Transit

ACTION ITEM	TYPE	LEAD	SUPPORT	PRIORITY
<b>Identify gaps in public transportation access and coordinate with transit, businesses, and social service organizations on feasible, cost-effective solutions.</b>				
Identify potential transit service areas based on technical and equity analyses, particularly in areas within designated growth areas. Work with rabbittransit and other transit/ridesharing partners to identify gaps. Increased focus should be placed on areas where residents and commuters are lacking non-single-occupancy vehicle (SOV) access to mobility hubs, employment centers, and essential services. Incorporating Transit Propensity Analysis, which uses factors that mirror equity/environmental justice categories into future transit planning efforts could help identify gaps as well.				
Planning/ Policy/Analysis/ Project	ACTPO	PennDOT, Community Partners, Social Service Agencies	High	
<b>Promote express bus service between Adams County and surrounding urban centers, including Harrisburg, York, Frederick and Chambersburg.</b>				
Policy/Public Engagement	ACTPO	SRTA, Adams Economic Alliance	High	
<b>Use Microtransit as a tool to evaluate the viability of potential new transit service routes in Adams County.</b>				
Project	ACTPO	PennDOT	Medium	
<b>Develop an updated Coordinated Transit Human Services Transportation Plan.</b>				
Planning/ Policy/ Analysis	ACTPO	SRTA, PennDOT	Medium	
<b>Promote transit use as safety measure to reduce crash rates and crash severity.</b>				
Policy/ Public Engagement	ACTPO, ACOPD, Municipalities	SRTA, PennDOT, FTA, FHWA	Medium	
<b>Identify locations where additional park and ride lots would increase transit access.</b>				
Project	ACTPO	SRTA, PennDOT, FTA	Low	

# MODERNIZATION AND OPERATION

(aka Modernize the Transportation System)







Many components of the transportation network in Pennsylvania can trace its origins back over century. Regular maintenance and repair are needed to keep it in good condition. While maintenance activities are done regularly on the physical road surfaces and bridge components, the components that help the system operate and function often get overlooked. Regular upgrades to communications networks, signal systems, signage, etc. as well as incorporation of

newly developed technologies must be done to improve the user experiences and make roads safer, more efficient, and less congested. While more technology components such as intelligent transportation systems (ITS), connected or autonomous vehicles and alternative fuels change rapidly, the following policies will help set the direction for addressing these improvements, regardless of the pace of technological change

## Transportation System Operations and Management (Signals, Signs, ITS)

Transportation systems management and operations (TSMO) refers to multimodal transportation strategies to maximize the efficiency, safety, and utility of existing and planned transportation infrastructure. Typical TSMO strategies include management and coordination of things such as:

- Traffic incident
- Traffic signals
- Freeways/expressways
- Freight
- Work zones
- Traveler communications
- Special events, and
- Weather.

TSMO Solution	Causes of Congestion					
	Recurring Congestion		Unplanned Events		Planned Events	
	Bottlenecks 	Poor Signal Timing 	Traffic Incidents 	Inclement Weather 	Work Zones 	Special Events 
Bridge De-icing				X		
Closed Circuit TV Cameras (CCTV)	X		X	X	X	X
Dynamic Curve Warning			X	X		
Dynamic Message Signs (DMS)	X		X	X	X	X
Dynamic Rerouting	X		X		X	X
Flex Lanes	X		X		X	X
Freeway Service Patrols			X		X	X
Integrated Corridor Management	X	X	X	X	X	X
Junction Control	X		X		X	X
Managed Lanes	X					
Queue Warning	X		X		X	X
Ramp Metering	X		X			X
Road Weather Info. Systems (RWIS)				X		
Smart Corridor Initiatives	X	X	X	X	X	X
TIM Teams			X			X
Traffic Incident Detection			X			
Traffic Management Center	X	X	X	X	X	X
Traffic Signal Enhancements		X				
Transit Signal Priority		X				
Traveler Information	X		X	X	X	X
Variable Speed Displays	X		X	X	X	

These strategies can be very beneficial to all areas, urban, suburban and rural alike. Although suburban and rural areas may not experience the daily congestion levels of urban areas, they do experience delays often caused by limited route alternatives, crashes, construction, bad weather, and seasonal/special events. This is of particular importance to Adams County given its “hub and spokes” transportation network and major tourism generators.

These strategies can often be quickly implemented at relatively low cost with the goal of getting maximum performance out of existing facilities. This shift towards system operations and efficiency focuses on improvements that address issues affecting users and system performance more immediately than construction projects can. The benefits to TSMO strategies include:

- Improved quality of life
- Smoother and more reliable traffic flow
- Improved safety
- Reduced congestion
- Less wasted fuel
- Cleaner air
- Increased economic vitality
- More efficient use of resources (facilities, funding)

Recently, TSMO initiatives have gained momentum due to a realization that a shift towards a well-rounded, comprehensive approach is required to meet a growing demand on transportation resources. TSMO strategies should not be viewed as competing with other infrastructure investments, but as a viable option to supporting the management and operation of the transportation system in an efficient, cost-effective manner.

## Transportation Demand Management

Transportation Demand Management (TDM) serves a complimentary role to physical infrastructure. TDM’s primary goal is to help people use the transportation system more efficiently by improving access

and mobility to support economic growth and make alternate travel choices easier to use.

TDM typically uses a range of information sharing, encouragement and incentives provided by local or regional organizations to help people know about and use all their transportation options to optimize all modes in the system. This often involves both traditional and innovative technology-based services to help people use transit, ridesharing, walking, biking, and telework.

Benefits to the transportation system include improved air quality, shifting travel demand to off-peak traffic periods and reduced fuel consumption. Benefits to users include greater flexibility in time of travel, reduced transportation costs, greater travel time reliability and lower impact on the environment.

## Alternative Fuels

Since the 2017 LRTP, the number alternative fuel vehicles registered in Adams County has increased by 57%. The bulk of that increase has been in electric, hybrid and flex fuel vehicles. Minor increases in propane and natural gas vehicles occurred as well, most likely in larger, fleet usage vehicles such as buses.

The Federal Highway Administration has designated national plug-in electric vehicle (EV) charging and hydrogen, propane, and natural-gas-fueling corridors in strategic locations along major highways to improve the mobility of alternative fuel vehicles. To date, more than 1,800 miles of roads in Pennsylvania have been designated as alternative fuels corridors for at least one fuel type. Portions of two road corridors along Route 30 and US Route 15 in Adams County have been designated as Electric Vehicle Corridors.

These Federal and State level EV planning efforts have been focused on addressing charging gaps along Interstates. However, Adams County’s location between the Harrisburg region and the

Baltimore/Washington/Northern Virginia regions coupled with the presence of a rural, non-Interstate corridor like US 15, plus the presence of prominent tourism venues makes Adams County an ideal location to address EV charging infrastructure.

While the focus on EV infrastructure is consistent with the direction the automotive industry is moving, other fueling infrastructure should be considered as well, including, biodiesel, hydrogen/fuel cell, natural gas (both liquid and compressed) and propane to address the needs of all users of the transportation network.

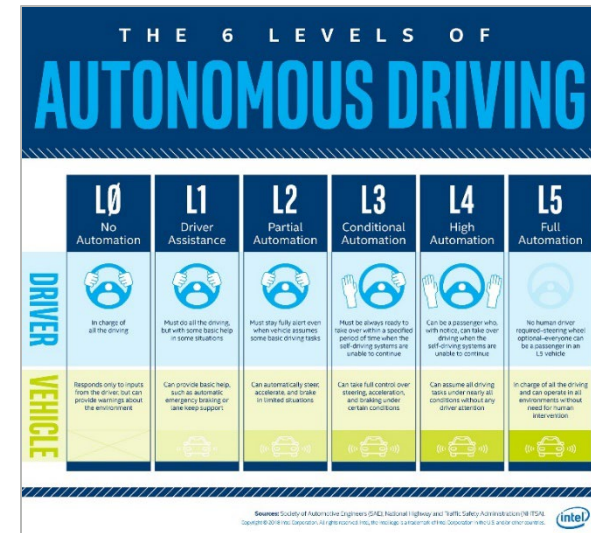
## Connected/ Autonomous Vehicles

The emergence of new technologies will continue to impact and change the physical aspects of the nation’s transportation network and operations. These impacts have the potential to be wide range such as traffic patterns, land use, travel volumes, and roadway design. The most recent technology to emerge is Connected and Automated and Autonomous Vehicles. These can be described as:

- Connected Vehicles use two-way short- to medium-range wireless communications, known as Dedicated Short-Range Communication (DSRC), to interface with other vehicles and roadside infrastructure;
- Automated Vehicles have one or more functions (such as steering, acceleration, or braking) that operate independently of a human driver (i.e., “automatically”);
- Autonomous Vehicles can operate without any connections or communications with other vehicles or roadside instrumentation (i.e., “autonomously” from roadside infrastructure).

Understanding how each vehicle type functions is critical as each will have different impacts. A connected vehicle future is very different from an autonomous vehicle future in terms of the range of capabilities and benefits that can be achieved with connected over autonomous vehicles. Federal and state policy-makers generally agree that the greatest benefits will come from connected rather than

autonomous vehicles because connected vehicles enable full integration between vehicles and infrastructure, thus realizing the maximum potential safety, efficiency, and reliability improvements.



## Freight

Personal and freight mobility and economic competitiveness are two Federal planning factors intended to address how the transportation system impact the economy in Adams County. Freight traffic has long been a challenge for Adams County’s “hub and spokes” roadway network. Balancing the freight needs of major economic sectors such as agriculture, food processing and construction materials with the quality of life and quality of experience needs of residents and visitors continues to be a challenge. Moving forward, information on freight connections should be used to identify and evaluate freight needs and strategies and to prioritize transportation investments. This information should be shared with stakeholders in discussions regarding our county’s transportation system, freight corridors, safety, and first- and last- mile connections to important freight facilities.





## Modernization and Operation

### Transportation Systems Management and Operation (TSMO)

ACTION ITEM	TYPE	LEAD	SUPPPORT	PRIORITY
Incorporate TSMO strategies in all future projects.	Policy/ Project	ACTPO	PennDOT	Ongoing
Identify areas where new or upgraded communications networks are needed along key corridors to support TSMO strategies as well as other data service needs.	Planning/ Analysis	PennDOT	ACTPO, Municipalities, Community Partners	High
Explore cooperative and coordinated management of traffic signals through upgraded signal technology such as adaptive or coordinated signal networks to reduce travel time and delay.	Policy/ Project	ACTPO	PennDOT, Municipalities	Medium
<p>Pursue the formation of Traffic Incident Management (TIM) teams for major corridors in Adams County.</p> <p>TIM teams work to reduce the time it takes to detect, respond to, and clear incidents as well as manage the flow of traffic around an incident until it is cleared.</p>	Project, Public Engagement	Municipalities, Emergency Responders	ACDES, ACTPO, PennDOT	Medium
<b>Implement new, and upgrade existing, Intelligent Transportation System (ITS) infrastructure as needs and new technology warrant.</b>	Strategy	PennDOT	ACTPO, Municipalities, Community Partners	Low



## Modernization and Operation

### Transportation Demand Management (TDM)

ACTION ITEM	TYPE	LEAD	SUPPPORT	PRIORITY
<b>Promote Transportation Demand Management (TDM) strategies that fit Adams County.</b>				
TDM activities in Adams County are currently provided in partnership with the Commuter Services of Pennsylvania program. Commuter Services works with both commuters and employers to promote carpooling, vanpooling, transit, biking, walking and telework, flexible scheduling and other employer-based policies and incentives. Continued implementation of these and other similar strategies should be pursued.				
Policy/Project/Public Engagement		SRTP, PA Commuter Services	ACTPO, Community partners	High

### Alternative Fuels

ACTION ITEM	TYPE	LEAD	SUPPPORT	PRIORITY
<b>Promote the installation of alternative fuels infrastructure for a range of fuel types along designated Alternative Fuels Corridors.</b>				
Policy/ Public Engagement		ACTPO	PennDOT	High
<b>Pursue installation of Level 2 and higher EV charging infrastructure at the corridor level to address long-range and interregional travel charging need. Promote installation of Level 2 and faster EV charging infrastructure at the community and site level to address local travel needs.</b>				
	Project	ACTPO, ACOPD	PennDOT, Municipalities, Community Partners, Private Sector	High
<b>Seek Alternative Fuels Corridors designations on all NHS roads.</b>				
	Policy/Planning	ACTPO	PennDOT, FHWA	Medium



# Modernization and Operation

## Connected and Autonomous Vehicles

ACTION ITEM	TYPE	LEAD	SUPPPORT	PRIORITY
<p><b>Monitor the development, progress, and deployment of connected/autonomous vehicle (CA/AV) technologies, such as DSRC, and incorporate into projects when appropriate. Evaluate ways to use CA/AV technologies to address data connectivity in underserved areas of the County.</b></p> <p>The data and communications technology needed to build out a robust CV and AV transportation network could serve a dual role by providing data connectivity into rural areas currently not served or under-served by high-speed internet service.</p>				
	Policy/Project	ACTPO	PennDOT, Broadband Groups and Providers	Low

## Freight

ACTION ITEM	TYPE	LEAD	SUPPPORT	PRIORITY
<p><b>Conduct an analysis of freight movements in Adams County.</b></p> <p>This analysis should inventory freight generators, determine significant local freight corridors, and identify transportation system improvements that would address the impacts of freight movement in Adams County.</p>				
	Planning/Analysis	ACTPO, ACOPD	PennDOT, Adams Economic Alliance, Trucking Co Group, like Teamsters	High
<p><b>Assess potential transportation system improvements that support freight movements from local industry sectors such as agriculture, fruit and food processing, and construction materials.</b></p> <p>This analysis should inventory freight generators, determine significant local freight corridors, and identify transportation system improvements that would address the impacts of freight movement in Adams County.</p>				
	Planning/Analysis	ACTPO	PennDOT	Medium
<p><b>Identify transportation system improvements that will address the impacts of freight movements on quality of life for residents and quality of experience for visitors.</b></p>				
	Policy/Planning/Analysis/Project	ACTPO	PennDOT	Medium
<p><b>Examine the need for designated truck parking areas in proximity to major truck traffic generators or freight corridors within Adams County.</b></p>				
	Planning/Analysis	ACTPO	PennDOT	Low

## SAFETY

Safety is consistently identified as the biggest concern raised in every discussion about the transportation network in Adams County. This is born out in the public outreach survey results which identified safety as one of top priorities across all three scenarios. In fact, it often seems like every discussion about a transportation related issue starts with the phrase “this is the worst intersection in the County”.

Across the nation, many state DOTs and MPOs have adopted official policy positions related to the Vision Zero, a strategy with a goal of eliminating all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. While Vision Zero has been a success in many areas, notably in Europe, it has not seen as much success in the US for a variety of reasons. One main reason is the focus on resulting outcomes of a crash (fatality, serious injury, etc.) rather than the underlying reasons causing the crash (driver errors, speed, weather, etc.). By adjusting how crash data is analyzed and safety projects are identified, the hope is that crash rates can be reduced and overall safety improved through a focus on causes instead of outcomes.

Some of the youngest users of the county’s transportation system can be found walking, riding a bicycle, or riding a bus to and from school. Traffic congestion, speeding, and driver inattentiveness coupled with the inexperience of school-aged children can create hazardous conditions. Opportunities to improve school zone safety should be emphasized over time. These issues can be addressed through standalone projects. However, it may be more practical or efficient to incorporate aspects of these improvements into more broadly scoped projects, such as land development plans, corridor improvements, streetscaping initiatives or traffic signal improvement programs.



## Safety

ACTION ITEM	TYPE	LEAD	SUPPORT	PRIORITY
Adopt and monitor compliance with federal and state safety performance measures.				
	Policy	ACTPO	PennDOT, FHWA/FTA	Ongoing
<p><b>Develop Adams County specific Safety Performance Factors to supplement adopted federal and state safety performance measures. Use these Factors to help prioritize future safety projects.</b></p> <p>Federal and State policies promote a focus on reducing fatalities and serious injuries, such as Vision Zero. However, focusing on the outcome of crashes overlooks the underlying causes. Targeting the factors that cause crashes will lead to future safety improvements that are focused on improvements that shift driver behavior. Such factors include, driver error, speeding, weather conditions and time of day, as well as mode of transportation.</p>				
	Planning/ Analysis	PennDOT	ACTPO, Municipalities, Community Partners	High
Identify and prioritize potential projects that would address multiple transportation needs with one improvement, particularly projects that would improve safety conditions and asset management or system expansion.				
	Policy/ Project	ACTPO	PennDOT	High
<p><b>Improve safety measures around at-grade railroad crossings. Promote the installation of two-quadrant and four-quadrant gates at at-grade crossings.</b></p> <p>Future planning efforts should incorporate local knowledge about site planning and traffic patterns to improve safety at the county's highway-rail crossings.</p>				
	Project	ACTPO	PennDOT	Medium
Pursue the establishment of Quiet Zones around rail lines passing through urban cores in Adams County.				
	Policy/ Public Engagement	ACTPO	PennDOT	Medium
Encourage highway design standards that use lower design speeds to promote safer conditions for all transportation modes.				
	Policy/ Public Engagement	ACTPO	PennDOT	Medium

Safety				
ACTION ITEM	TYPE	LEAD	SUPPORT	PRIORITY
Increase enforcement activities along high crash corridors.				
	Policy/Project/Public Engagement	ACTPO	PennDOT, Local & State Law Enforcement	Medium
Increase driver education outreach, particularly for younger and older drivers.				
	Policy/Project/Public Engagement	ACTPO	PennDOT, School Districts, ACOFA	Medium
Work with school districts to identify safety concerns in school zones.				
	Policy/Project/Public Engagement	ACTPO	School Districts, PennDOT	Medium

## EQUITY

Equity is a principle that goes beyond the impact to individuals, addressing how policies, institutions, and infrastructure of a region can promote the fair treatment, and encourage success and prosperity of all persons. Participation in the decision and public input process by all population groups is important to developing a fully integrated and equitable process.

Most of the equity analysis in ONWARD2050 involves minorities and low-income populations. These two individual characteristics are captured under the Federal requirement of Environmental Justice. The 1994 Presidential Executive Order directs federal agencies to – identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law.

## Equity

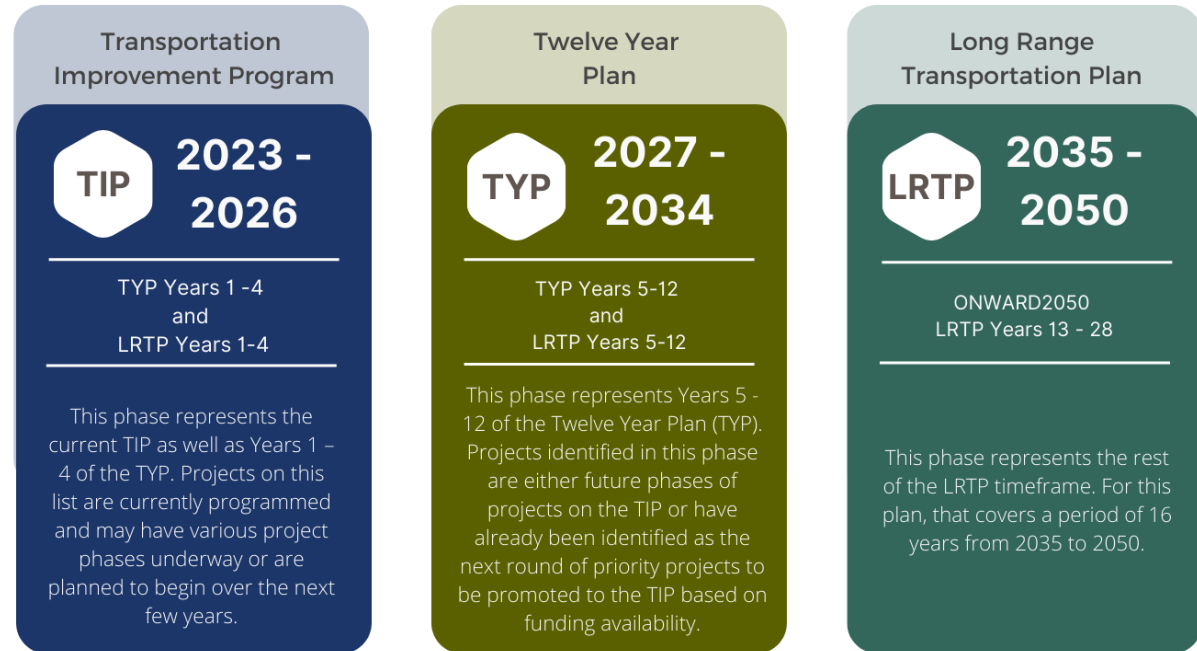
ACTION ITEM	TYPE	LEAD	SUPPORT	PRIORITY
<p><b>Develop a public dashboard to identify potentially disadvantaged areas in Adams County, including Environmental Justice and Title VI of the Civil Rights Act populations.</b></p> <p>This tool would serve as a resource for ACTPO staff, partner agencies and residents. Additionally, the data and analysis from this tool should be incorporated into ACTPO’s decision-making process for future project selection.</p>				
Planning/ Analysis/ Public Engagement		ACOPD, ACTPO	PennDOT, FHWA, FTA	High
<p><b>Develop a method to Monitor all adopted performance measures for disproportionate impacts in minority and low-income areas.</b></p>				
Policy/ Public Engagement		ACTPO	PennDOT	Ongoing
<p><b>Incorporate equity analysis into all transportation modes.</b></p> <p>Work with community stakeholders to identify barriers to transportation within the populations they represent and how ACTPO can improve outreach, education and participation with all population groups. Identify and prioritize potential improvements that can increase equity for multiple population groups.</p>				
Policy/ Planning/Public Engagement		ACTPO	PennDOT, FHWA, Community Partners	Ongoing
<p><b>Consider the personal and public health implications of transportation projects.</b></p> <p>Consider the impact that transportation projects may have on increasing access for active transportation options (walking and bicycling) and on reducing air pollution that can lead to projects that improve personal and public health.</p>				
Policy/ Planning/Public Engagement		ACTPO	PennDOT, Community Partners	Ongoing

# CHAPTER 8 - FINANCIAL GUIDANCE

## OVERVIEW

With the policies, strategies and action items needed to guide future funding and implementation decisions identified, the next key component of ONWARD2050 is the financial plan. This plan demonstrates the level of projected funding for Adams County over the length of the plan. The financial plan also provides an illustration of how each of the respective levels of government have a role in the provision of funding and implementation of highway, transit, and other modes. It also demonstrates that the priorities of the LRTP can be implemented while assuring that fiscal constraint is achieved. This assessment involves identifying current and/or projected funding levels across three different phases.

## Funding Phases



## FUNDING SOURCES

Transportation funding typically comes from one of three sources, Federal funds, State Funds or Local Funds. Occasionally, projects are

identified and programmed with private sector funding via the *Public and Private Partnerships (P3) for Transportation Act (Act 88 of 2012)*. However, *P3* projects are typically identified, programmed, and implemented at a statewide or regional level.



## Federal

Federal funds are typically provided through multi-year infrastructure bills authorized by Congress.

There have been six such bills since 1991:

- Intermodal Surface Transportation Efficiency Act (ISTEA) – 1991-1997
- Transportation Equity Act for the 21st Century (TEA-21) – 1998-2003
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) – 2005-2009
- Moving Ahead for Progress in the 21st Century Act (MAP-21) – 2012-2013
- Fixing America's Surface Transportation Act (FAST Act) – 2016-2021
- Infrastructure Investment and Jobs Act (BIL) – 2022-2026

While the exact source of funding varies from bill to bill, the primary source is the federal gas tax. These funds are usually provided to State DOTs and MPOs through a variety of funding categories, each

## State

State funds for transportation are primarily sourced from the state gas tax, with significantly smaller portions coming from driver and vehicle fees. Unlike federal funds, which typically require reauthorization from Congress every 5-6 years, state funding is largely allocated through the annual state budgeting process. However, since 2000 Pennsylvania has passed Act 44 of 2007 and Act 89 of 2013 which increased the level of state transportation funds. While state transportation funds can come from several different programs, the most common sources for ACTPO's TIP/TYP/LRTP are from the following categories:

covering a specific area of the transportation network. ACTPO typically receives direct allocations from four categories of federal funds:

- National Highway Performance Program (NHPP) – Funds for facilities located on the National Highway System (NHS)
  - Surface Transportation Block Grant Program (STP) – Funds for projects that preserve and improve the conditions and performance on any Federal-Aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.
  - Highway Safety Improvement Program (HSIP) – Funds with the purpose of achieving a reduction in fatalities and serious injuries on all public roads, including local public roads.
  - Off-System Bridge (BOF) – Funds for bridges that are located off the Federal-Aid Network and are at least 20 feet in length. These funds can be used for bridge replacement, rehabilitation, and maintenance projects.
- 
- Bridge Funds (Appropriation 183/185) – Funds used for the rehabilitation, reconstruction, and replacement of state and/or local bridges.
  - Highway Funds (Appropriation 581) – Funds used for highway projects on the State highway system.
  - Maintenance Funds (Appropriation 409) – These funds are maintenance funds allocated to PennDOT County Maintenance Offices. Projects using these funds are selected by PennDOT and, in Adams County, are usually oriented towards pavement resurfacing work.

## Local

Local funds typically include county or municipal funds that are being used as the local matching share for a project, typically a local bridge. Occasionally, this may also include private funds that are

## Other

In the past Adams County (either ACTPO or a municipality) has received funding from federal or state sources that now fall outside the normal TIP/ LRTP process. In some cases, policy changes at the federal or state level means that Adams County is either no longer eligible to use these funds or must compete for them on a statewide competitive basis. Federal funds that fall under this category include:

- Transportation Alternatives Set-Aside (TA) Program – These funds can be used for projects to build pedestrian and bicycle facilities, create safe routes to school, preserve historic transportation structures, provide environmental mitigation, and develop multi-use trails. Projects in Adams County are eligible for these funds available from a Statewide competitive pot.
- Congestion Mitigation Air Quality (CMAQ) – Funding designed to reduce traffic congestion and improve air quality, particularly in areas of the country that do not attain national air quality standards. Adams County is no longer eligible to receive CMAQ funds.

part of a statewide competitive grant funding program such as the Transportation Alternatives (TA) or Multimodal Transportation Fund (MTF) programs.

At the State level, the following sources of statewide competitive funding are available for eligible projects:

- Multimodal Transportation Fund (MTF) – A competitive funding program that provides financial assistance to municipalities, councils of governments, businesses, economic development organizations, public transportation agencies, rail freight, passenger rail, and ports to improve transportation assets that enhance communities, pedestrian safety, and transit revitalization. Funding is available from both PennDOT and the Department of Community and Economic Development (DCED)
- PennDOT Automated Red Light Enforcement Program (ARLE) – A program that provides opportunities to improve safety and reduce congestion. Eligible projects are wide ranging when considering highway safety or mobility.
- Green Light – Go – A competitive state grant program designed to improve the mobility, safety, efficiency, and operation of existing traffic signals located in the Commonwealth of Pennsylvania.

# FINANCIAL PLAN

The financial plan component for ONWARD2050 has three steps. **Step 1** involves the development of a methodology and scenarios to

funds will be allocated towards various components of the transportation network in future years of the LRTP. Finally, **Step 3**

**Year of Expenditure Method**

Traditionally recognized way for LRTP funding to be projected. It involves using the funding levels for each funding category of the current TYP and applying an anticipated rate of inflation, known as Year of Expenditure (YOE), of 3% per year from Year 13 through the target year of the LRTP.

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**Pros:** Consistent, reliable and repeatable formula

**Cons:** Assumes steady and consistent decision-making on funding sources at the state and federal level

**Historical TIP Expenditures Method**

Takes a more real-world approach to projecting future LRTP funding. It involves calculating the average allocation and expenditure data over a specific timeframe from past Adams County TIP's, then applying that average across the entire time frame of the LRTP.

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**Pros:** Uses actual historical expenditure data on projects within Adams County instead of policy assumptions

**Cons:** Assumes past expenditures will continue at the same rate in the future

project future transportation funding level for Adams County through 2050. **Step 2** is the process of prioritizing how those projected

demonstrates how the LRTP will be fiscally constrained within the projections done in Steps 1 and 2.

## Step 1: Funding Scenario Methodology

As part of Step 1, Adams County developed two methodologies to project future funding levels.

Next, seven different financial projection scenarios were developed. Three scenarios used the Year of Expenditure Method and four used the Historical TIP Expenditures Method.

Year of Expenditure Method Scenarios

- 2023-2034 TYP Allocation (pre-Bipartisan Infrastructure Law)
- 2023-2034 TYP Allocation (post-Bipartisan Infrastructure Law)
- 2023-2026 TIP Allocation

Historical TIP Expenditures Method Scenarios

- 1999 – 2021 (ACTPO’s full time as an RPO/MPO)
- 2005 – 2021 (SAFETEA-LU and on)
- 2008 – 2021 (Act 44 and on)
- 2014 – 2021 (Act 89 and on)

These seven scenarios were then narrowed down to a final three representing a Low/ Mid/ High range of potential funding.

LOW-RANGE	MID-RANGE	HIGH-RANGE
2023-2034 TYP Allocation (pre-Bipartisan Infrastructure Law)	1999 – 2021 Historical TIP Expenditures (ACTPO’s full time as an RPO/MPO)	2023-2034 TYP Allocation (post-Bipartisan Infrastructure Law)

## PROJECTING FUTURE REVENUES

The specific financial projections for each scenario are broken down into three separate components that combine to cover the entire LRTP timeline.

These include:

- TIP (2023-2026) – Based on the adopted 2023 – 2026 Adams County TIP, which also serves as Year 1 through 4 of the TYP. The 2023-2026 Adams County TIP & TYP are included in Appendix H.
- TYP (2027 to 2034) – Based on the 2nd four years and 3rd four years of the 2023-2026 TIP, which also serve as Years 5 through 12 of the LRTP.
- LRTP (2035 to 2050) – Projected using the funding scenarios described earlier.

PLAN PHASE	LOW-RANGE (\$000S)	MID-RANGE (\$000S)	HIGH-RANGE (\$000S)
TIP (2023 – 2026)	\$56,495	\$56,495	\$56,495
TYP (2027 – 2034)	\$78,049	\$78,049	\$78,049
LRTP (2035 – 2050)	\$177,636	\$217,229	\$265,728
<b>Total</b>	<b>\$312,180</b>	<b>\$351,773</b>	<b>\$400,272</b>

After carefully reviewing each of the options, the **Mid-Range scenario**, based on 1999–2021 Historical TIP Expenditures, was selected as the preferred financial projection for ONWARD2050. As a result, the allocation of future funding and prioritization of projects will be fiscally constrained within the projected Mid-Range option of **\$351,773,000**.

## 409 MAINTENANCE FUNDS

Additionally, a projection was done for State 409 Maintenance Funds in Adams County over the entire LRTP timeline. While these funds are not controlled or programmed by ACTPO, these funds to impact Adams County’s required Federal Performance Measures targets, particularly the pavement and bridge condition focused PM-2 targets.

Based on 409 funds expenditure data from 2014-2022 provided by PennDOT, Adams County 409 Maintenance Funds are projected as follows over the lifespan of the LRTP. Note that this projection was based solely on projects that were 100% located within Adams County. Projects using 409 Funds that were part of a District 8-wide project were not included when projecting these funds.

409 MAINTENANCE FUNDS (\$000S)	
Years Covered by LRTP	28
Average Funds per Year	\$2,054
<b>Projected 409 Funds</b>	<b>\$57,512</b>

## TRANSIT

Since at least 2011, with the merger of the Adams County Transit Authority and the York County Transportation Authority (also known as rabbittransit) to form the York Adams Transportation Authority (YATA), all transit funding has been administered through the Transportation Improvement Program (TIP) and long range transportation plan financial planning document of the York Area Metropolitan Planning Organization (YAMPO).

YATA eventually grew to become the Central Pennsylvania Transportation Authority (CPTA) with a 10-county service area, including Adams County. The YAMPO TIP and long range plan continue to be the administrative channel for all transit funding for the entire service area. The 2023-2026 YAMPO Transit TIP has the transit funding, along with the required documentation for the CPTA service area, and YAMPO’s GOYORK 2045 MTP (June 2021), along with the accompanying Capital Improvement Plan (CIP), is the long range planning document for the CPTA. The 2023-2026 Transit TIP and Transit Project Narrative, along with the YAMPO GOYORK 2045 MTP CIP are included as Appendix G.

The CPTA actively coordinates with all five planning partners and actively participates as voting members on the technical and/or policy boards of all five metropolitan planning organizations in the CPTA service area. If requested, copies of the entire Transit TIP document collection were given to planning partners to be included with their 2023-2026 TIP packets.



## Step 2: Future Allocation Breakdown

Step 2 of the Financial Plan involved prioritizing how the projected future revenues will be allocated towards various components of the transportation network in future years. A key component of this step in the planning process was the public outreach survey. This survey was designed in a way that the results could be used to prioritize future improvement scenarios.

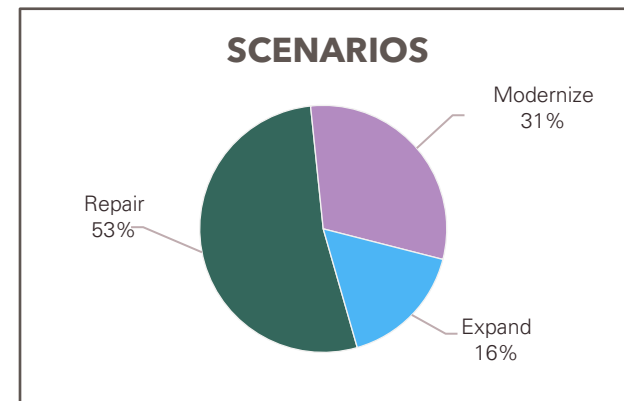
The three previously identified scenarios:

- Repair Existing System – In this scenario, funds will be allocated to repair the existing transportation infrastructure, including pavement, bridges, traffic signals and signage, as well as repair or replace existing safety measures.
- Expand Transportation System – In this scenario, funds will be allocated to add additional services, facilities, and infrastructure to the transportation system in the county, including bicycle and pedestrian facilities, transit service, new road connections and installation of new safety measures.
- Modernize the Transportation System – In this scenario, funds will be allocated to implement new technology and adapting to emerging trends and future needs, including alternative fuels infrastructure, connected and autonomous vehicle technology, freight, Intelligent Transportation System (ITS) and other new safety technologies.

Respondents were asked to rank the scenarios, as well as prioritize specific elements of the transportation network within each scenario, based on their preferences. The responses to specific survey questions were then used to develop an allocation breakdown for the projected level of future LRTP funding. This involved three steps.

### ORDER THE SCENARIOS

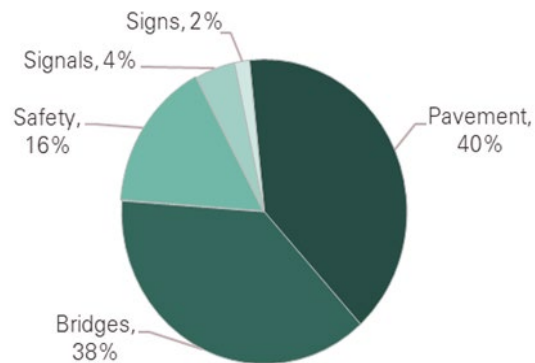
First, the preferred order of the three improvement scenarios was identified. The percentage of responses ranking each scenario the #1 priority was used to allocate future revenues into three separate funding pots, based on the three scenarios: Repair, Modernize, and Expand.



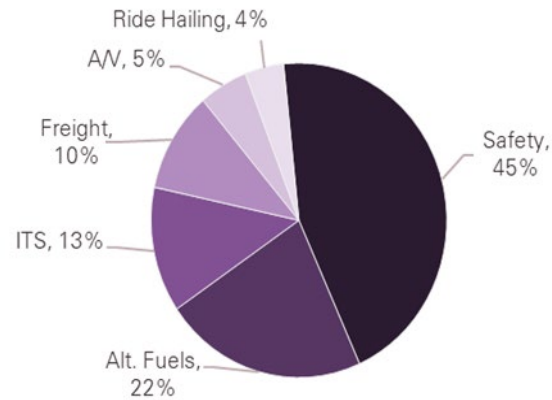
## PRIORITIZE ELEMENTS OF THE NETWORK

Second, the survey results prioritizing specific elements of the transportation network within each improvement scenario were applied to the overall projected funding for each of the Repair, Modernize, Expand scenarios. This step further separated the projected ONWARD2050 funding from three funding pots into fifteen different system components. Detailed funding charts are in Appendix I.

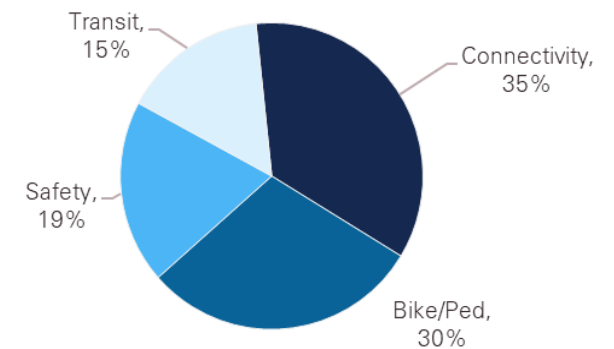
**SCENARIO PRIORITIES: REPAIR**



**SCENARIO PRIORITIES: MODERNIZE**



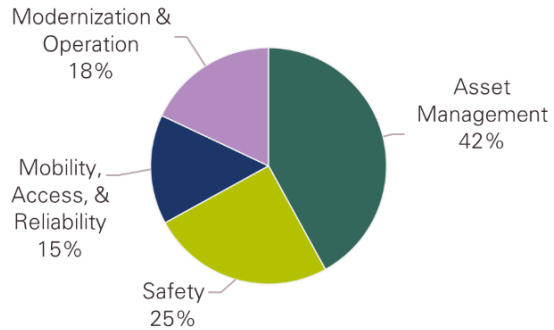
**SCENARIO PRIORITIES: EXPAND**



## CONSOLIDATE THE CATEGORIES

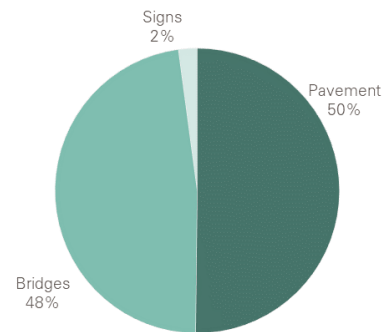
Finally, those fifteen different elements were consolidated into four categories: Asset Management; Safety; Mobility, Access and Reliability and; Modernization and Operation based on the Future Strategies identified in Chapter 7. The original fifteen system components were also further consolidated into twelve funding classes within those four overall categories.

### ALLOCATION BREAKDOWN

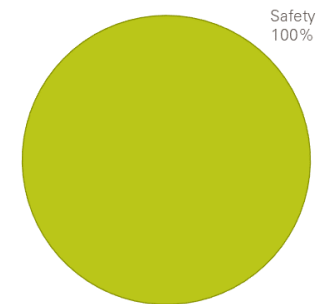


ALLOCATION BREAKDOWN	
Funding Classes	% Overall Allocation
Safety	25%
Pavement	21%
Bridges	20%
Alternative Fuels	7%
Connectivity	6%
Active Transportation (Bike/ Ped)	5%
ITS	4%
Transit	4%
Freight/Rail	3%
Connected/ Autonomous Vehicles	2%
Signals	2%
Signs	1%

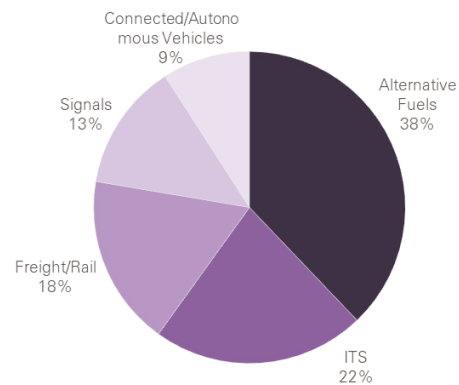
### ASSET MANAGEMENT



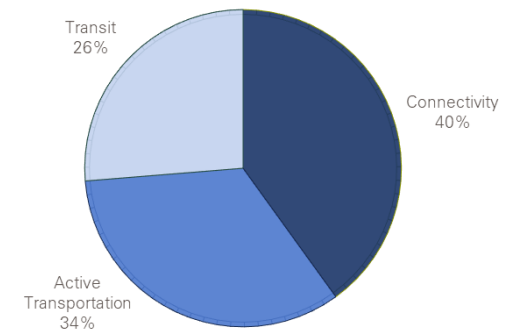
### SAFETY



### MODERNIZATION AND OPERATION



### MOBILITY, ACCESS AND RELIABILITY





## Step 3: Fiscal Constraint

The third and final step of the LRTP financial plan is demonstrating that implementation can be accomplished while being fiscally constrained within the projections of Step 1 and the sector allocation breakdowns of Step 2.

The TIP (Years 1-4 of the LRTP) is required to be fiscally constrained based on financial guidance provided by PennDOT using the currently available figures from Federal and State funding sources. The TYP (Years 5-12 of the LRTP) are also constrained based on similar guidance. These years (1 through 12) are where specific funds are allocated to projects and represent the culmination of the LRTP to TIP to construction implementation process.

However, in Year 13 and beyond of the LRTP, fiscal resources are based more on projections than currently available figures from those Federal and State funding sources. Further, the constantly changing nature of the transportation system makes assigning projected, potential resources to possible projects nothing more than an educated guess.

Further, the full range of transportation needs in Adams County cannot be addressed through a single plan or implementation strategy and ONWARD2050 does not try to do so. Rather it provides a framework to align short-term implementation decisions with long-range priorities and performance measure targets that improve pavement and bridge conditions, address safety concerns and support the safe and efficient movement of people and goods.

The overall needs of the transportation network far exceed to projected revenues. The Cost Projections chart shows that under ideal circumstances asset management costs alone would exceed \$1.8 billion through 2050. Given that disparity, the LRTP needs to establish methods to prioritize projects from across a range of modes and network components to maintain some balance. Otherwise, focusing too heavily on one component of the network risks seeing multiple other components fall behind.

**Fiscal constraint** – Ensuring that the cost of LRTP investments do not exceed the reasonably expected funding projected to be available.

COST PROJECTIONS			
HIGHWAYS			
Concrete	High Level B.	Low Level B.	Total
\$13,664,555	\$503,769,983	\$362,782,964	\$880,217,502
STATE BRIDGES			
Poor	Fair	Good	Total
\$143,288,394	\$305,538,431	\$72,433,052	\$521,259,877
LOCAL BRIDGES			
Poor	Fair	Good	Total
\$17,356,113	\$69,299,353	4,696,042	\$91,351,508
PROJECTED CONSTRUCTION COSTS			
Per Year		Overall	
\$53,315,317		\$1,492,828,887	
PROJECTED PRE-CONSTRUCTION COSTS			
Per Year		Overall	
\$13,328,829		\$373,207,222	
PROJECTED TOTAL COSTS			
Per Year		Overall	
\$66,644,147		\$1,866,036,109	

ONWARD2050 achieves this balance between transportation network needs and financial reality by not attempting to assign specific amounts to specific projects in a specific year of the LRTP

beyond those years covered by the TIP and TYP. Instead, a two part process has been developed to guide future project prioritization decisions:

## PROJECT PRIORITIZATION CRITERIA

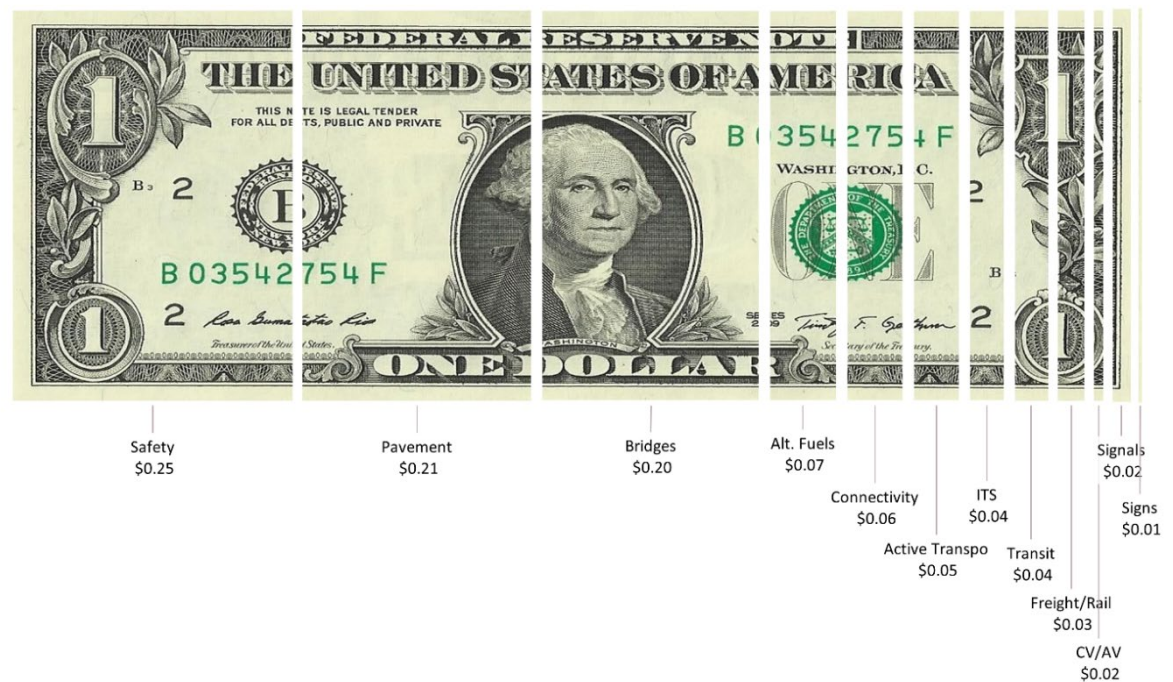
Ranking criteria, as detailed in Chapter 9, for Pavement, Bridges, Safety, Connectivity, Active Transportation, Transit, and Modernization and Operations have been developed to help identify candidate projects that meet long-term priorities and adopted performance measure targets, while also addressing multiple network components.

## ALLOCATION PRIORITIES

Rather than assign specific amounts to specific projects in a specific year, ONWARD0250 establishes broad overall allocation targets for future projects being promoted from the LRTP to the TYP/TIP. These allocation priority targets were developed from the methodology used in Step 2: Future Allocation Breakdown section above.

The targets are presented in terms of what portion of every dollar of transportation funding should be spent on specific areas of the transportation network.

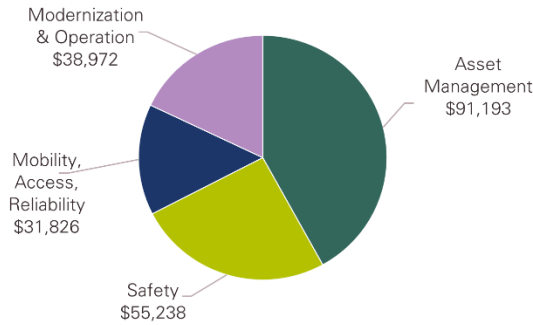
Ultimately, fiscal constraint is achieved through the development of the TIP/TYP. The allocation targets will be used as a guide for ensuring that TIP/TYP projects are allocated according to these targets. This does not mean that viable, high priority projects will be held back because programming would exceed those allocation targets. There will be funding and project development cycles where certain components of the system are moving faster than others. However, the long-term goal is that future transportation system investments amounts mirror these targets over the lifespan of the LRTP.



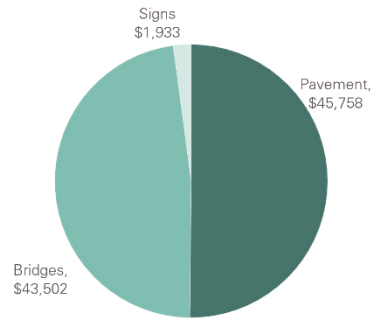
## L RTP (2035 – 2050) ALLOCATION BREAKDOWN

The TIP (2023-2026) and TYP portions of ONWARD2050 are already fiscally constrained, at \$56,495,000 and \$78,049,000 respectively, through their adoption processes. The future revenues for the L RTP portion (2035-2050) are projected at \$217,229,000, or \$13.577M per year. As noted previously, these funds are not assigned to specific projects. ONWARD2050 establishes broad overall allocation targets for future projects being promoted from the L RTP to the TYP/TIP. The previous page depicts a breakdown of these targets as a portion of each dollar received. In order to demonstrate fiscal constraint for the L RTP years, the projected 2035-2050 allocation target of \$217,229 would breakdown as follows:

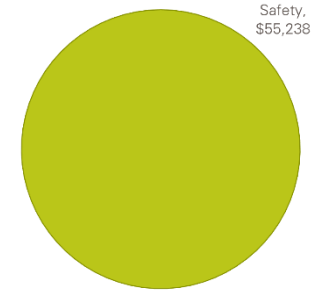
### ALLOCATION BREAKDOWN



### ASSET MANAGEMENT



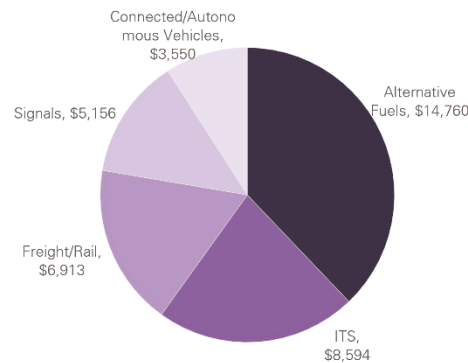
### SAFETY



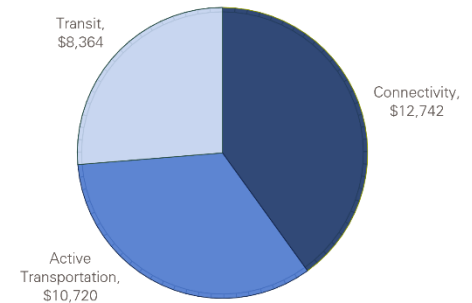
### L RTP ALLOCATION BREAKDOWN

Funding Classes	Target Allocation (\$000s)
Safety	\$55,238
Pavement	\$45,758
Bridges	\$43,502
Alternative Fuels	\$14,760
Connectivity	\$12,742
Active Transportation (Bike/ Ped)	\$10,720
ITS	\$8,594
Transit	\$8,364
Freight/Rail	\$6,913
Connected/ Autonomous Vehicles	\$3,550
Signals	\$5,156
Signs	\$1,933

### MODERNIZATION AND OPERATION



### MOBILITY, ACCESS AND RELIABILITY



# CHAPTER 9 - PROJECT PRIORITIZATION

With the LRTP's future strategies identified, and its financial plan in place, the final key component is creating a project prioritization process. These processes need to implement the LRTP's identified future strategies while following the fiscal constraints of its financial plan as well as meeting all performance measures, both current and future.

As in previous sections, the public outreach survey results have been used to develop project prioritization systems for identifying Pavement, Bridge, Safety, Mobility, Access and Reliability, and Management and Operations projects for programming onto the TIP.

The challenging part of the prioritization process will be deciding how to prioritize top candidate projects from different areas over others (a road segment vs. a bridge). While funding constraints and/or

restrictions will often influence that decision, other factors such as meeting adopted performance measures, will need to be considered. Identifying projects that improve multiple areas of the transportation network at the same time, thereby avoiding the creation of inefficient silos in decision making and expenditures, should be given top priority as well.

The following priority ranking systems will be used to identify candidate projects in various sectors of the transportation network. ACTPO will need to coordinate with PennDOT to compare Adams County priorities with PennDOT priorities during the TIP development process. The criteria were developed based on the responses received from specific questions of the public outreach survey. Additional details related to the ranking system framework are in Appendix J.

## ASSET MANAGEMENT CRITERIA Pavement

The following criteria and weighting will provide a way to identify pavement segments that address State and local needs. The following breakdown was developed based on the responses to Question #2 of the public outreach survey.

- Overall Condition (30%)
- Overall Pavement Index (OPI) Score (25%)
- Average Daily Traffic Volumes (15%)
- Average Daily Truck Percentage (15%)
- PennDOT Business Plan Network (5%)
- Functional Classification (5%)
- PennDOT Pavement Asset Management System (PAMS) Status (5%)
- Out-of-Cycle Status (5%)



# Bridges

Adams County has 361 State-owned and 81 locally-owned bridges. Much of the focus has been on bridges in poor (formerly structurally deficient) condition. The following criteria and weighting will provide a way to identify State-owned and locally owned bridges that address State and local needs. The following breakdown was developed based on the responses to Question #3 of the public outreach survey.

## STATE BRIDGES

- Structural Components (30%)
- Overall Condition (10%)
- Sufficiency Rating (10%)
- Average Daily Traffic Volumes (10%)
- Average Daily Truck Percentage (10%)
- PennDOT Business Plan Network (10%)
- Functional Classification (5%)
- PennDOT Risk Assessment Score (5%)
- Posted/Closed Status (5%)
- Deck Area (5%)
- Length (5%)

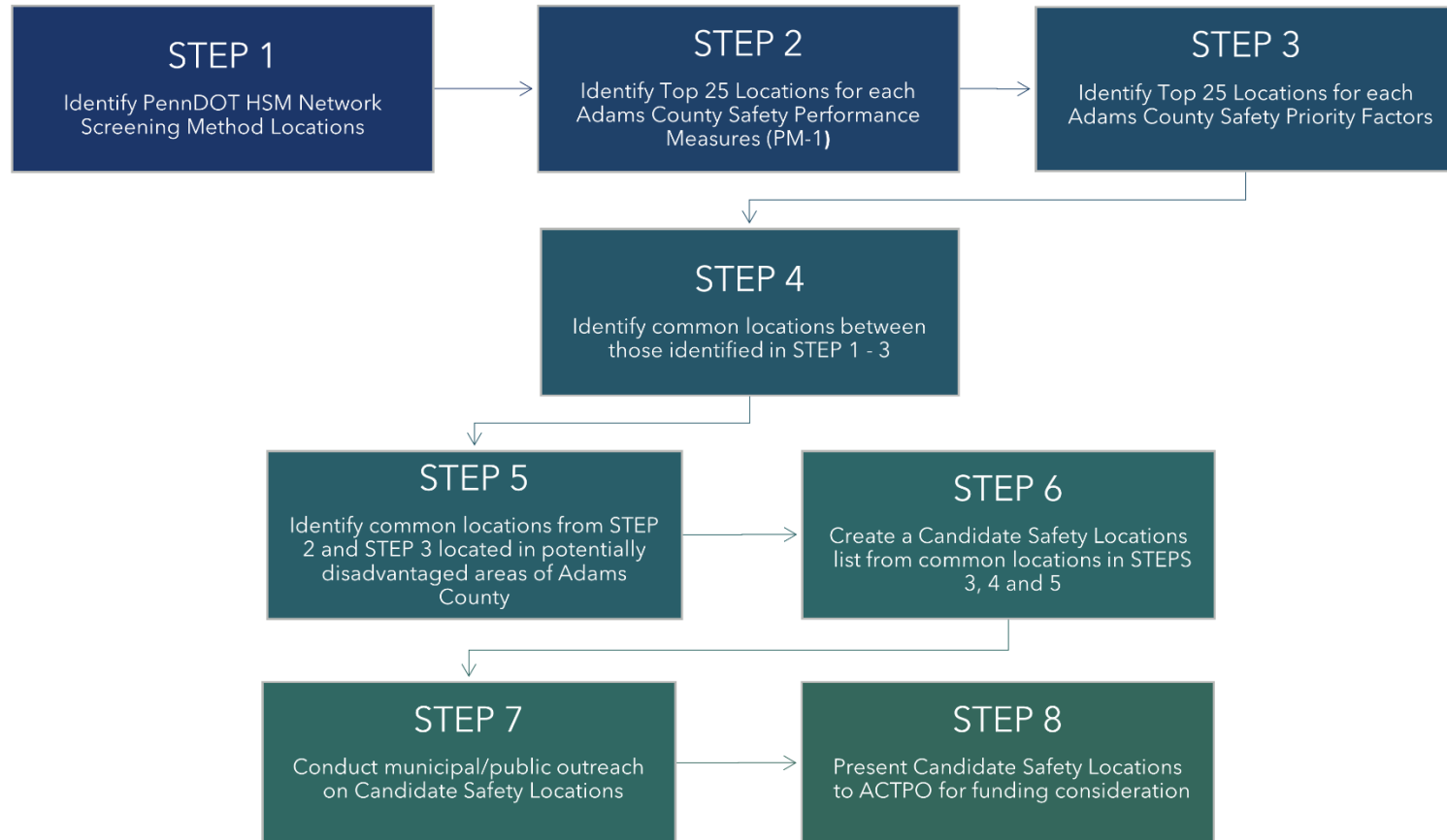
## LOCAL BRIDGES

- Structural Components (30%)
- Overall Condition (10%)
- Sufficiency Rating (10%)
- Average Daily Traffic Volumes (20%)
- PennDOT Risk Assessment Score (10%)
- Posted/Closed Status (10%)
- Deck Area (10%)



# SAFETY RANKING CRITERIA

The pavement and bridge priority ranking systems focused on identifying specific data sets and assigning weighting values to create a numerical ranking score. However, a different approach has been used for prioritizing safety locations. As with pavement and bridges, the following criteria was developed based on the responses to Question #11 of the public outreach survey.



# MOBILITY, ACCESS, AND RELIABILITY CRITERIA

Similar to the Safety Ranking criteria, this ranking system is based more on identifying candidate locations than on assigning a numerical score based on various weighted criteria. The goal is to identify candidate projects that can be incorporated into a larger maintenance and/or improvement project, thereby addressing multiple needs at the same time. The following criteria were developed based on the responses to Questions #4, #5 and #6 of the public outreach survey.

## Connectivity

The criteria should be considered when prioritizing projects creating new network connections:

1. Addresses mobility, access, system reliability or congestion needs while also improving another transportation performance measure, such as asset management, safety, etc. at the same time.
2. Provides new connections for multiple transportation modes.
3. Makes a connection between two or more “spokes” of the Adams County road network regardless of mode.
4. Reduces or distributes traffic away from arterial and collector roads.

## Active Transportation

The criteria should be considered when prioritizing active transportation projects:

1. Addresses an identified gap in the active transportation network (on-road or off-road), particularly gaps between key

destinations like schools, parks, town centers and important community facilities.

2. Reduces the level of stress designation for a specific corridor per the Adams County Active Transportation Safety Analysis tool.
3. Located in a potentially disadvantaged area of Adams County.
4. Increases safety on a designated State Bicycle Route.
5. Provides a connection to a regional trail network.
6. Improves non-motorized access to transit stops and routes.

## Transit

The criteria should be considered when prioritizing transit projects:

1. Provides service to an identified gap in public transportation access between locations within Adams County.
2. Provides new or expanded service between Adams County and surrounding, regional urban centers.
3. Improves access to transit stops and routes.
4. Decreases transit vehicle travel times.
5. Reduce Vehicle Miles Traveled (VMT)

# MODERNIZATION AND OPERATION CRITERIA

Similar to the safety ranking criteria, this ranking system is based more on identifying candidate locations than on assigning a numerical score based on various weighted criteria. The goal is to identify candidate projects that can be incorporated into a larger maintenance and/or improvement project, thereby addressing multiple needs at the same time or receive ACTPO support for Federal, State or private grant funds. The following criteria were developed based on the responses to Question #7 of the public outreach survey:

1. Addresses gaps along designated Alternative Fuels Corridors.
2. Addresses gaps in data and communications networks.
3. Promotes strategies to reduce VMT through shifting transportation modes.
4. Improves traffic signal operation efficiency and coordination.
5. Improves non-recurring congestion through traffic incident management improvements.
6. Adds or upgrades Intelligent Transportation System (ITS) infrastructure.





# CHAPTER 10

## ENVIRONMENTAL AND CULTURAL ANALYSIS

Recognizing that transportation infrastructure is intertwined with the natural environment, impacts to environmental resources need to be considered when planning for, and implementing, transportation improvement projects. In turn, considering the impacts of hazards, including weather events, can help ensure the transportation system remains resilient and operational. An effort to avoid, or mitigate, negative impacts to cultural resources is also a priority during the early stages of planning and programming. This section identifies sensitive resources within the county and the special federal regulations that apply when proposing impactful activities.

### ENVIRONMENTAL FACTORS

#### Protected Lands

Various programs in the county, including the Adams County Agricultural Land Preservation Program, The Land Conservancy of Adams County, and municipal preservation programs, administer efforts to keep prime agricultural land in production. The land is protected in perpetuity, meaning that regardless of ownership change, agricultural production must remain the primary use. Additionally, agricultural land, even when not preserved through an easement, is recognized as a vital resource that contributes both aesthetic and economic benefits to the county.



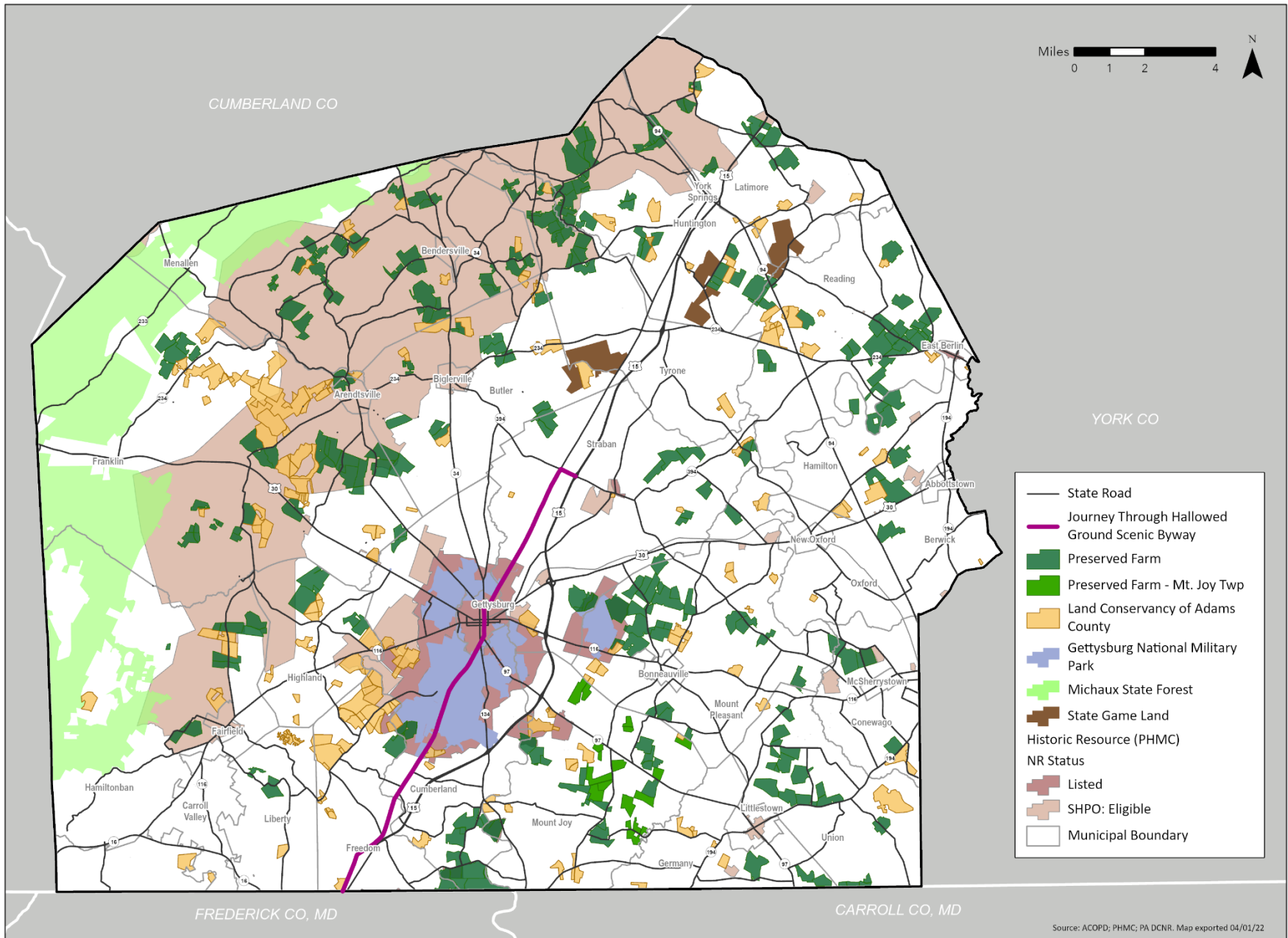
In addition to preserved agricultural lands, other lands in Adams County are protected under various agencies and programs. These areas include state game lands, Michaux State Forest, Gettysburg National Military Park, National Register Listed and Eligible Historic Districts, and the Journey Through Hallowed Ground Scenic Byway.

#### Waterways

Adams County has a large network of waterways, mostly comprised of streams, tributaries, and wetlands. The region is located in both the Susquehanna River watershed and the Potomac River watershed. Conewago Creek is the largest creek in the county and drains nearly all of the land area within the Susquehanna River watershed. Toms Creek, Middle Creek, and Rock Creek are tributaries that flow into the Monocacy River (in Maryland); which drain the land located within the Potomac River watershed. Smaller streams throughout the county feed these major streams and tributaries. The flow pattern of the hydrology network is an important factor when considering future land and infrastructure development.

Wetlands are a vital resource and serve several important functions in the larger hydrology system. They help control flooding, improve

# PROTECTED LANDS



water quality, and provide habitat to a wide range of plant and animal life. The U.S. Fish and Wildlife Service has identified and inventoried the wetlands in Adams County. Hundreds of small farm ponds across the region also qualify as wetlands. Disturbance to wetlands should be avoided, and any development activity should include plans to mitigate and minimize harmful impacts.

## Hazards

The Adams County Hazard Mitigation Plan was updated in 2020 and was approved by the Pennsylvania Emergency Management Agency (PEMA) and the Federal Emergency Management Agency (FEMA). This plan evaluates hazardous threats to the county's population, infrastructure, and natural and cultural resources, and proposes strategies to mitigate and minimize resulting damage. Threats are categorized as "highest", "high", "medium", "low", and "lowest" risk, as determined by a hazard index ranking methodology. In this section, hazards that have the potential to adversely affect the transportation system are outlined, based on information from the Adams County Hazard Mitigation Plan. Additionally, it is important that these hazards are considered when proposing development in an area that may require an expansion or augmentation to the transportation system in Adams County.

### FLOODING

Flooding is the most frequent and costly hazard in the state of Pennsylvania. Excessive precipitation in a localized area is the main cause of flooding, however, other factors such as hydrology, weather patterns, stream and river topography, buffers, impervious surfaces, and soil conditions contribute to the severity of flooding events. Although flooding events most often occur between the months of March and September, they can happen at any time. There have been 26 flash flood events in Adams County in the years occurring between 1996-2019. Direct damage to infrastructure and other human built structures is a primary effect of flooding. Flooding may also cause

secondary effects to the transportation system, such as disruptions to mobility and accessibility, which may interfere with the movement of people and goods. The map labeled "Environmental Constraints" displays the flood hazard zones in Adams County. The Adams County Hazard Mitigation Plan notes that the region can expect to experience one flooding event in any given year and categorizes flooding overall as a "medium" risk.



### WINTER WEATHER

Adams County is susceptible to winter weather that may include snow, sleet, ice, and freezing rain. The severity and duration of winter weather events in the county vary greatly. Between the years of 1996 and 2019, there were 62 winter storm events in Adams County for an average of 2.7 events per year. Impacts to the transportation system are a major concern of winter weather. Travel conditions become less safe as visibility and road conditions deteriorate during winter weather events. In severe weather, road closures may occur that affect mobility and accessibility for impacted communities. To alleviate hazardous conditions, design and maintenance considerations, such

as “daylighting” and “anti-icing” may be implemented, before winter weather events occur. State and local road crews use a combination of equipment, resources, and strategies to maintain transportation infrastructure during winter weather events. Winter weather, and the subsequent efforts to maintain road conditions during winter weather events, may also impact the overall integrity of road and pavement conditions. As a result of winter weather, potholes and other costly damage to roadways (for example, damage resulting from the freeze-and-thaw process), may require additional maintenance and remediation. Winter weather events are categorized as “medium” risk according to the **Adams County Hazard Mitigation Plan**, with events likely to continue each year.

## HAZARDOUS MATERIAL

In the county, 64 hazardous material incidents have occurred during air, highway, and rail transport between 1994 and 2019. Ninety-two percent of these incidents occurred during highway transport, 6.25% occurred during air transport, and 1.5% occurred on a railway. The most common reported materials involved in hazardous incidents were class 3 (flammable liquids) and class 8 (corrosive materials) materials. Hazardous material incidents pose a threat to human life, the environment, and critical infrastructure. Other factors may exacerbate the threatening effects of hazardous materials, such as, weather conditions, terrain, and human negligence. Response and remediation efforts are dictated by the nature and severity of the hazardous incident. PennDOT Publication 911, **All-Hazards Incident Management Manual**, provides guidance for responding to all types of incidents and events, including hazardous materials incidents. The **Adams County Hazard Mitigation Plan** categorizes hazardous material incidents as a “medium” risk.

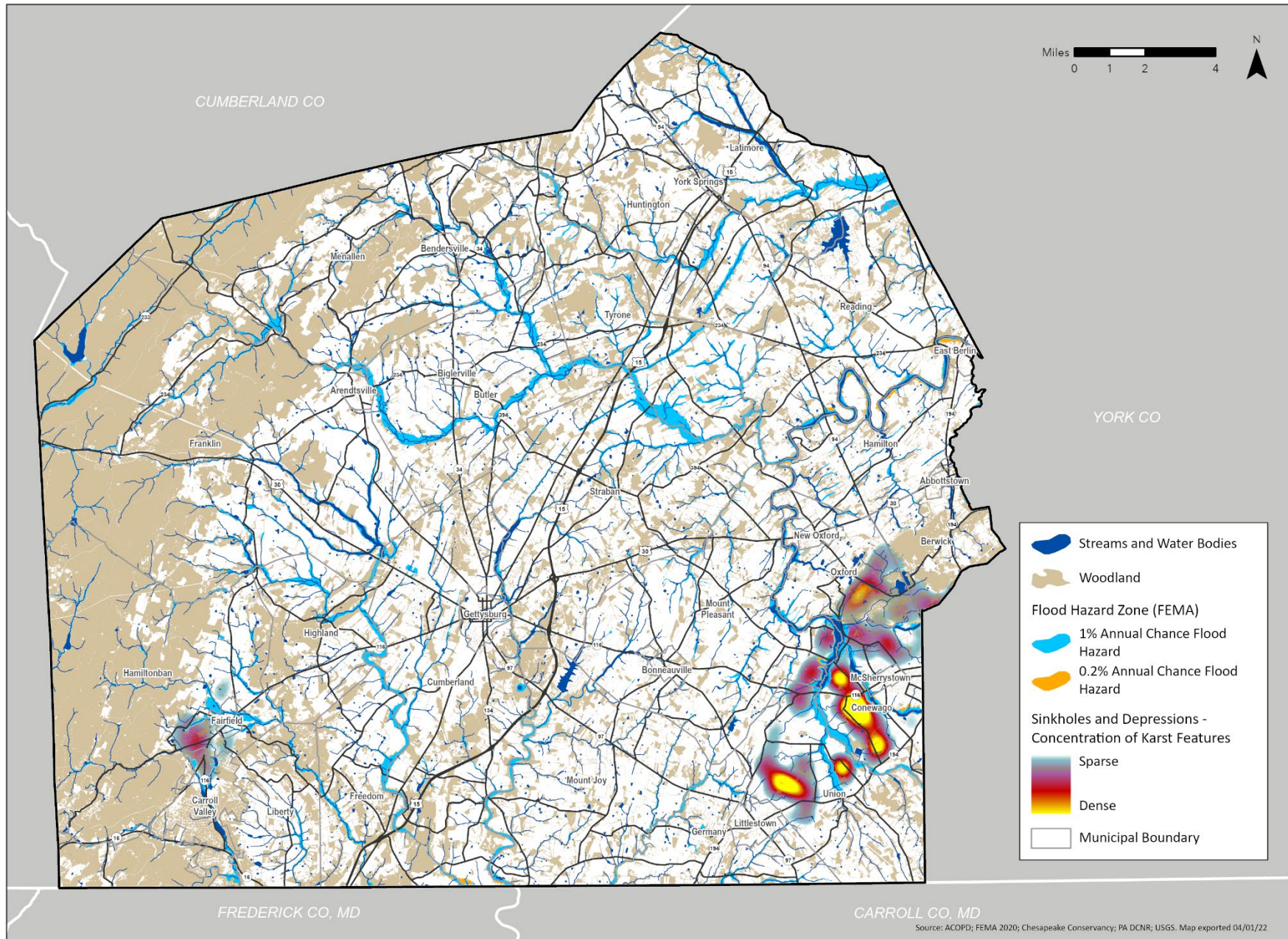
## KARST TOPOGRAPHY

Karst topography describes a landscape that contains characteristic structures such as sinkholes, linear depressions, and caves. In



addition to natural processes, human activity such as water, natural gas, and oil extraction can cause these characteristic formations. Sinkholes and areas of subsidence can vary in shape, proximity to development, and the period of time over which they occur. Events can result in minor elevation changes or deep, gaping holes in the earth’s surface. Events can cause significant damage in populated areas, particularly to underground utility systems, transportation systems, property, and structures. Municipalities may minimize the potential for sinkhole development through proper maintenance and updating of water utility lines and with the implementation of design standards. Zoning laws can also regulate development within areas with karst topography. Overall, the **Adams County Hazard Mitigation Plan** categorizes sinkholes as a “low” risk, however, repairs to damaged infrastructure resulting from sinkholes could be costly depending on severity.

# ENVIRONMENTAL CONSTRAINTS



## CULTURE AND HISTORY

The history of Adams County remains an influential factor on the county's culture and is a driving force behind the tourism industry. There is an abundance of historic resources and landmarks throughout the county that signify influential places, people, and events.

### Historic Resources

The Pennsylvania State Historic Preservation Office (SHPO) is responsible for nominating historical places for the National Register of Historic Places, a national program administered by the National Park Service. Currently, Adams County has 30 historic places listed on the National Register and 60 places are eligible to become listed. A full list of registered and eligible resources is included in the Appendix K. Many of these resources represent historically significant architectural and engineering achievements, were a factor in significant developments or events, or have the potential to provide insight regarding a past way-of-life. Educational institutions, manufacturing sites, and agricultural structures that contributed to the early development of the region can be observed throughout the county. In addition, several historic bridges exemplifying early transportation infrastructure are still in use and remain part of the transportation system.

### Tourism

People are drawn from all over to experience the vibrant sense of history in Adams County and visit the many attractions situated within local communities. Visible throughout the county, tourism, including agri-tourism, is a major driver of economic development in the region. Approximately 3.7 million people visit Adams County each year (Gettysburg Chamber). According to the 2019 "Economic Impact of Travel & Tourism in Pennsylvania" analysis prepared for the PA

Department of Community and Economic Development, visitors directly spent \$7,507,000, supporting 5,392 jobs.

**National Scenic Byway:** The portion of US Route 15 that runs from the Maryland state line to Gettysburg was designated as part of the National Scenic Byway - Journey Through Hallowed Ground. Stretching from Gettysburg to Monticello, VA for a distance of 179 miles, this special designation highlights important sites associated with the Revolutionary War, the Civil War and the Underground Railroad, and the homes of nine U.S. Presidents. In Pennsylvania, US Route 15 connects the downtown historic district of Gettysburg to the Gettysburg National Military Park, the site where Abraham Lincoln delivered his famous Gettysburg Address and the Eisenhower Farm, where President Eisenhower retreated and entertained foreign dignitaries during and after his presidency.



# RESOURCE IMPACT CONSIDERATION

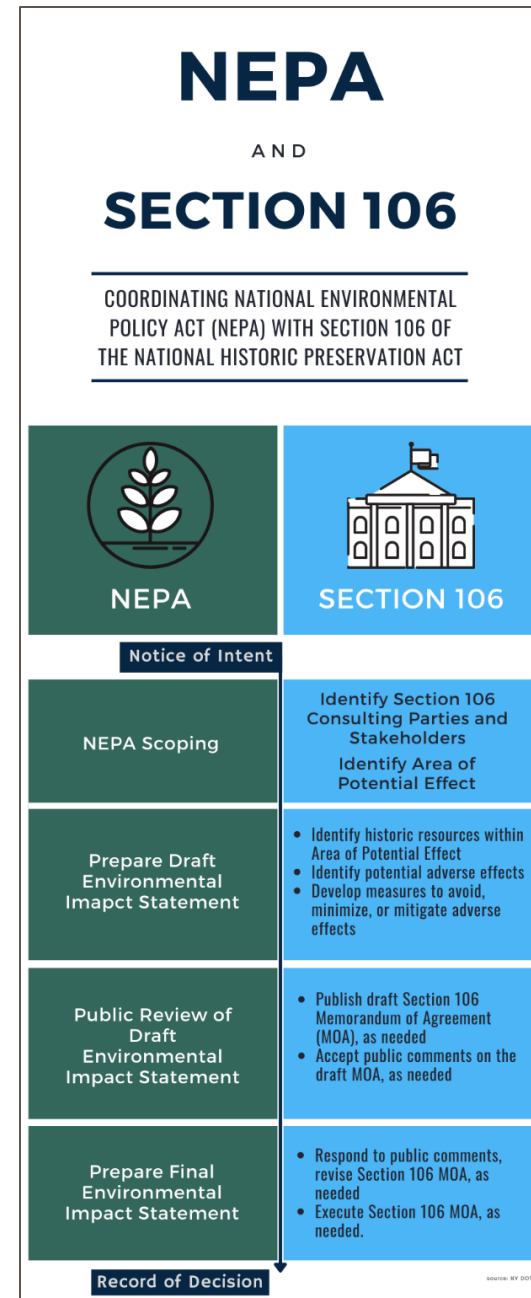
## Federal Requirements

Section 4(f) of the Department of Transportation Act of 1966, simply referred to as “Section 4(f)”, provides preservation considerations to any significant publicly owned park, recreation area, wildlife or waterfowl refuge, or any significant historic site. The term “historic site” includes prehistoric and historic districts, sites, buildings,

structures or objects listed in, or eligible for, the National Register of Historic Places. Agencies within the Department of Transportation cannot approve the use of these lands for projects, unless there is no feasible and prudent alternative, and planning occurs to mitigate and minimize harm to the property.

The National Environmental Policy Act of 1969 (NEPA) requires an evaluation and consideration of the environmental effects of proposed actions prior to the commitment of Federal funds or regulatory approvals. Avoidance, minimization, or mitigation of potentially adverse impacts of a proposed project to the environment are considered during the evaluation. NEPA requires that project planning and delivery processes address the following six elements:

- Define the project's purpose and need so as to identify what the project/proposal is intended to accomplish. Purpose and need drives the process for alternatives consideration, influences the environmental analysis, and ultimately the alternative selection.
- Alternative analysis to consider a range of reasonable alternatives to the proposed project, based on the purpose and needs.
- Consideration of appropriate impact mitigation: avoidance, minimization, and compensation.
- Interagency participation: coordination and consultation. PennDOT utilizes a monthly agency coordination meeting as a way to meet this element.
- Public involvement including opportunities to participate and comment.
- Documentation and disclosure: Environmental Documentation is either an Environmental Impact Statement, Environmental Assessment, or Categorical Exclusion Section 106 of the National Historic Preservation Act of 1966 outlines rules for federal undertakings and the effects of those undertakings on historic resources that are eligible for or listed on the National Register of Historic Places. Undertakings include any project, activity, or program that is either funded, permitted, licensed, or approved by a federal agency.



The Land & Water Conservation Fund (LWCF) Act of 1965 established a federal program to assist states and local governments with establishing publicly accessible recreation facilities. The program is intended to ensure there is vast network of high-quality recreational areas, and that these areas remain maintained. Section (6)(f) of the LWCF affords protections to these federal investments. While the statute is flexible, it discourages conversion of these lands to other uses. In some cases, however, projects may proceed if they are deemed to be consistent with regional comprehensive recreational plans, and approval is granted by the government agencies. The table below lists parks and recreational areas in Adams County that were developed using LWCF fund.

MUNICIPALITY	LOCATION	SCOPE OF PROJECT
Gettysburg Borough	Recreation Park - Long Lane	Renovations to park play equipment, walkways, parking, landscaping, and other site improvements
	Recreation Park - Long Lane	Renovations including a tot lot, tennis courts, parking and sign improvements, and other site improvements
	School Park - Lefever Street	Development of tennis, basketball, and shuffleboard courts with support facilities
Littlestown Borough	Littlestown Community Park	Rehabilitation of community pool, including ADA access and other renovations
McSherrystown Borough	McSherrystown Borough Playground & McSherrystown Borough Park	Improvements to sites, including signage, tot lots, recreational infrastructure, and sports areas
Hamiltonban Township	Fairfield Area School Districts	Development of Tennis Courts
Latimore Township	Arboretum Park	Acquisition of roughly 51 acres of land for both active and passive recreation

## Agency Coordination Meeting (ACM)

An overview of ONWARD2050 was presented at Agency Coordination Meeting (ACM). The purpose of the ACM is to develop transportation projects in an environmentally responsible manner through open and effective communication between and among the FHWA, state and federal resource agencies, PennDOT, and other transportation providers. Meetings generally consist of general project presentations, field views, or workshops to discuss specific project and resource issues. The presentation of ONWARD2050 focused on the environmental and cultural resources and constraints specific to Adams County and potential mitigation efforts to avoid or reduce negative impacts during project planning and implementation. A summary of the feedback received during the ACM Meeting is included in Appendix M.





# CHAPTER 11 - ENVIRONMENTAL JUSTICE ANALYSIS

## INTRODUCTION

The public involvement efforts for the Department of Transportation are guided by several federal mandates to ensure nondiscrimination in federally funded activities. These mandates are designed so that planning and public involvement activities are conducted equitably and in consideration of all citizens, regardless of race, nationality, sex, age, ability, language spoken, or economic status. These mandates include:

### TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

Title VI of the Civil Rights Act states that "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefit of, or be subjected to discrimination under any program or activity receiving federal financial assistance." PennDOT and its partners are committed to providing open and inclusive access to the transportation decision-making process for all persons, regardless of race, color or national origin.

### EXECUTIVE ORDER ON ENVIRONMENTAL JUSTICE (Executive Order 12898 February 11, 1994)

Environmental Justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. PennDOT and its partners are committed to providing opportunities for full and fair participation by minority and low-

income communities in the transportation decision-making process.

### AMERICANS WITH DISABILITIES ACT (ADA)

The Americans with Disabilities Act of 1990 stipulates involving persons with disabilities in the development and improvement of services. Sites of public involvement activities as well as the information presented must be accessible to persons with disabilities. PennDOT and its partners are committed to providing full access to public involvement programs and information for persons with disabilities. All public meetings are held in ADA-accessible locations. With advance notice, special provisions can be made for hearing-impaired or visually-impaired participants.

### EXECUTIVE ORDER ON LIMITED ENGLISH PROFICIENCY (Executive Order 13166)

"Improving Access to Services for Persons with Limited English Proficiency," was signed on August 11, 2000. Recipients of federal funding "are required to take reasonable steps to ensure meaningful access to programs and activities by LEP person." PennDOT and its partners will make special arrangements for the provision of interpretative services upon request.

## CORE ELEMENTS METHODOLOGY

Federal Highway Administration (FHWA) recently introduced the Environmental Justice Core Elements Methodology to ensure an MPO/RPO can meaningfully assess the benefits and burdens of plans and programs. PennDOT and the ACTPO are committed to following the Core Elements approach, which includes:

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

The EJ process should be comprehensive and continuous with each task informing and cycling back to influence the next step. By integrating the Core Elements into the planning process, as supported by FHWA, federal agencies are better equipped to carry out the investment strategy and project selection processes.

Further, the EJ Analysis was conducted based on the Statewide Environmental Justice Analysis Methodology, which was modeled after the South Central Pennsylvania Unified Environmental Justice Process and Methodology. The Statewide Environmental Justice Analysis Methodology established to conduct the analysis is included in the Appendix L. ACTPO will continue to evaluate the EJ process to ensure that a complete analysis is continuously considering the needs of traditionally underserved populations during the transportation planning process.

## Identifying Minority and Low-Income Populations

The identification of minority and low-income populations is essential to establishing effective strategies for engaging them in the transportation planning process. When meaningful opportunities for interaction are established, the transportation planning process can effectively draw upon the perspectives of communities to identify existing transportation needs, localized deficiencies, and the demand for transportation services. Mapping of these populations not only provides a baseline for assessing impacts of the transportation investment program, but also aids in the development of an effective public involvement program.

- **Minority population** is defined as any readily identifiable group of Black, Hispanic, Asian American, American Indian, and Alaskan Native who live in geographic proximity and who would be similarly affected by a proposed FHWA program, policy, or activity.
- **Low-income population** is defined as any readily identifiable group of persons at or below the Department of Health and Human Services poverty guidelines who live in a geographic proximity and would be similarly affected by a proposed FHWA program, policy, or activity.

The tables on the following page display the profile of low-income and minority populations and the low-income population by race/ethnicity within Adams County. These statistics are based on the 2015-2019 American Community Survey (ACS) 5-Year Estimates, the most recent dataset available at the time the Analysis was conducted.

The concentrations of minority and low-income populations are mapped by 2019 Census Block Group, based on the ratio of minority/ low-income percentage to county average minority/ low income percentage.

ADAMS COUNTY Minority and Low-Income Profile		
Demographic Indicator	County Population	County Percentage
Total	102,470	100%
White alone	91,377	89%
<b>Minority</b>	11,265	11%
<b>Race Alone, Non-Hispanic</b>		
Black or African American alone	1,298	1%
American Indian and Alaska Native	123	0%
Asian alone	635	1%
Native Hawaiian and Other Pacific Islander	0	0%
Some other race	2,604	3%
Two or more races	2,264	2%
Hispanic	6,916	7%
Low-Income Households	2,815	7%
<b>Low-Income Population</b>	7,622	7%
<b>Other Potentially Disadvantaged Populations</b>		
Limited English Proficiency (LEP) Households	547	
Persons with a Disability	13,856	14%
Housing Units with No Computer	4,830	12%
Housing Units with No Internet Access	7,067	18%
Carless Households	1,796	5%

Source: 2015-2019 ACS 5-Year Estimates

\*Note: Discrepancies may result from the use of various ACS 2015-2019 5-Year Estimate data tables.

LOW-INCOME POPULATION BY RACE/ ETHNICITY		
<b>White</b>	Total:	91,377
	Low-Income	6,205
	% Low-Income	6.79%
<b>Black</b>	Total:	1,298
	Low-Income	259
	% Low-Income	19.95%
<b>American Indian</b>	Total:	123
	Low-Income	0
	% Low-Income	0.00%
<b>Asian</b>	Total:	635
	Low-Income	33
	% Low-Income	5.29%
<b>Native Hawaiian</b>	Total:	0
	Low-Income	0
	% Low-Income	0.00%
<b>Some Other Race</b>	Total:	2,604
	Low-Income	730
	% Low-Income	28.03%
<b>Two or More</b>	Total:	2,264
	Low-Income	395
	% Low-Income	17.45%
<b>Hispanic</b>	Total:	6,916
	Low-Income	1,310
	% Low-Income	18.94%

# CONCENTRATIONS OF MINORITY POPULATIONS

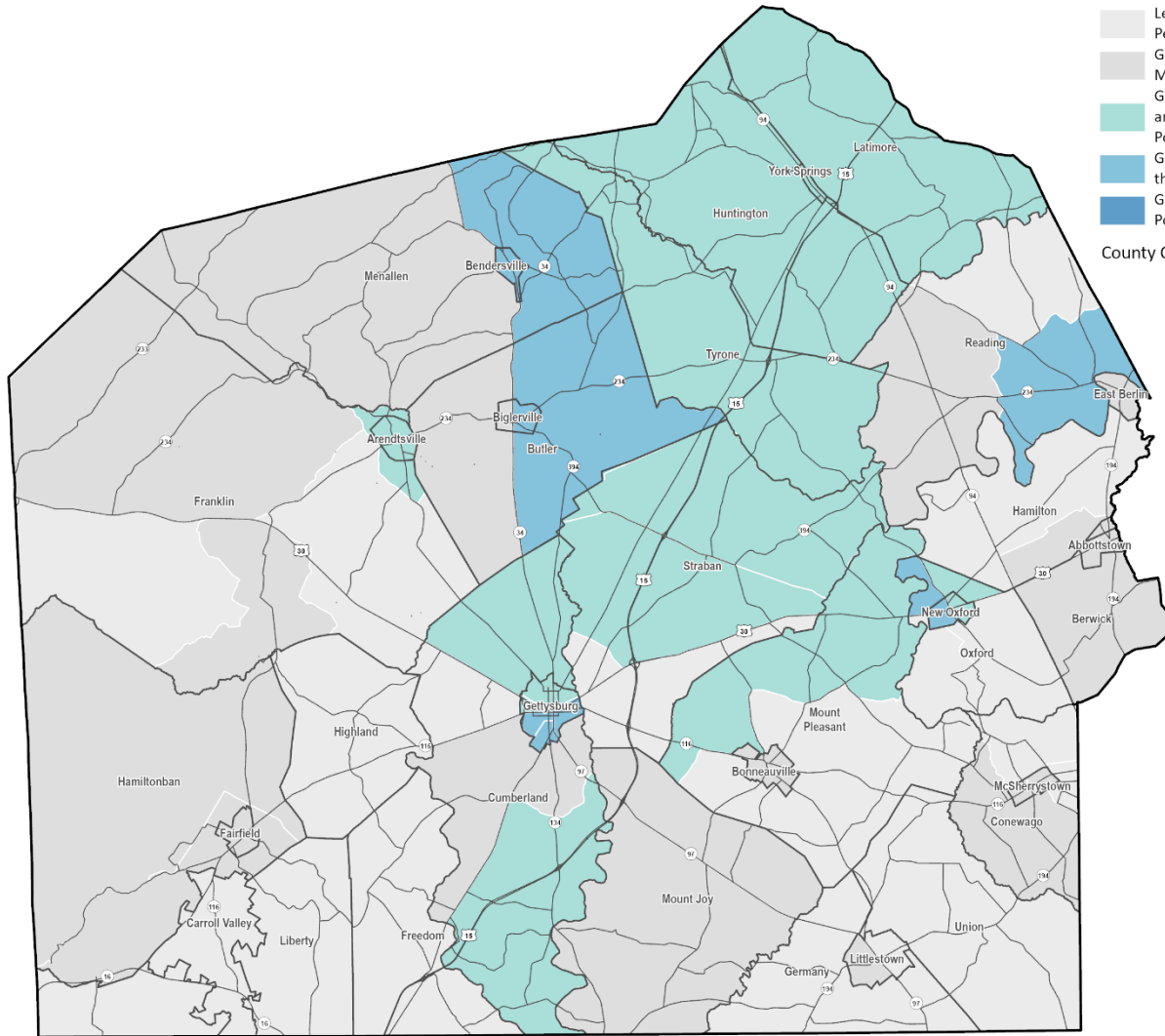
## ADAMS COUNTY

### Census Block Groups, 2019

Ratio of Minority Population Percentage in Census Block Group to County Minority Population Percentage

- Less than or equal to half County Minority Population Percentage
- Greater than half and less than or equal to County Minority Population Percentage
- Greater than County Minority Population Percentage and less than or equal to twice the County Minority Population Percentage
- Greater than twice and less than or equal to four times the County Minority Population Percentage
- Greater than four times the County Minority Population Percentage

County Overall Minority Population Percentage: 11%



State Route

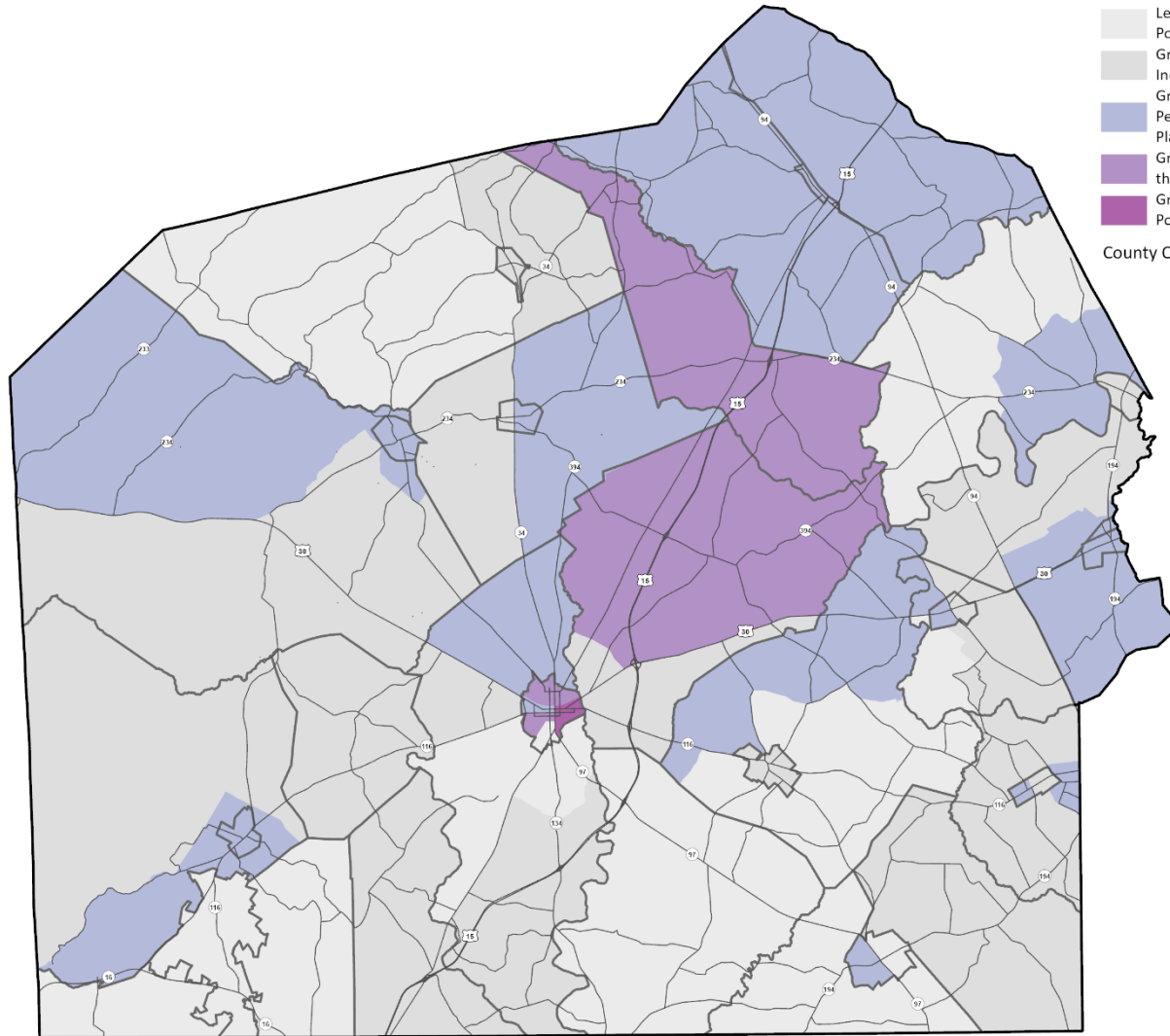
Municipal Boundary



Source: PennDOT; US Census Bureau, American Community Survey 2015-2019 5-Year Estimates; ACOPD  
Map exported 02/16/2022

# CONCENTRATIONS OF LOW INCOME POPULATIONS

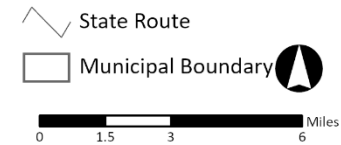
## ADAMS COUNTY



Census Block Groups, 2019  
Ratio of Low Income Population Percentage in Census Block Group to County Low Income Population Percentage

- Less than or equal to half County Low Income Population Percentage
- Greater than half and less than or equal to County Low Income Population Percentage
- Greater than County Low Income Population Percentage and less than or equal to twice the Planning Partner Low Income Population Percentage
- Greater than twice and less than or equal to four times the County Low Income Population Percentage
- Greater than four times the County Low Income Population Percentage

County Overall Minority Population Percentage: 11%



Source: PennDOT; US Census Bureau, American Community Survey 2015-2019 5-Year Estimates; ACOPD  
Map exported 02/16/2022

## CONDITION ASSESSMENT

In order to meaningfully analyze benefits and adverse effects of the transportation program, the MPO has examined the existing conditions of transportation assets throughout the region and safety performance measures among the minority and low-income populations. These data assessments allow the MPO to track changes in crashes, poor condition bridges, and poor pavement mileage in the region and identify safety gaps and distribution disparities between minority and low-income populations.

The following tables and maps depict the distribution of poor bridges and pavement miles compared to the minority and low-income populations in Adams County. Current asset and condition information was pulled from [PennDOTs Spatial Data Portal](#). [OPEN/ DATA](#). Please note that the GIS open Data Portal is constantly updated with the most recent available information, so discrepancies may occur based on the timing of when data was extracted. Table data is also sourced from the 2015-2019 ACS, 5-Year Estimates. Discrepancies may result from the use and comparison of data from various tables.

### BRIDGES

Based on the available data, 47.92% of poor condition bridges are located within block groups with higher than average minority populations, and 44.9% are located within block groups with higher than average low-income populations.

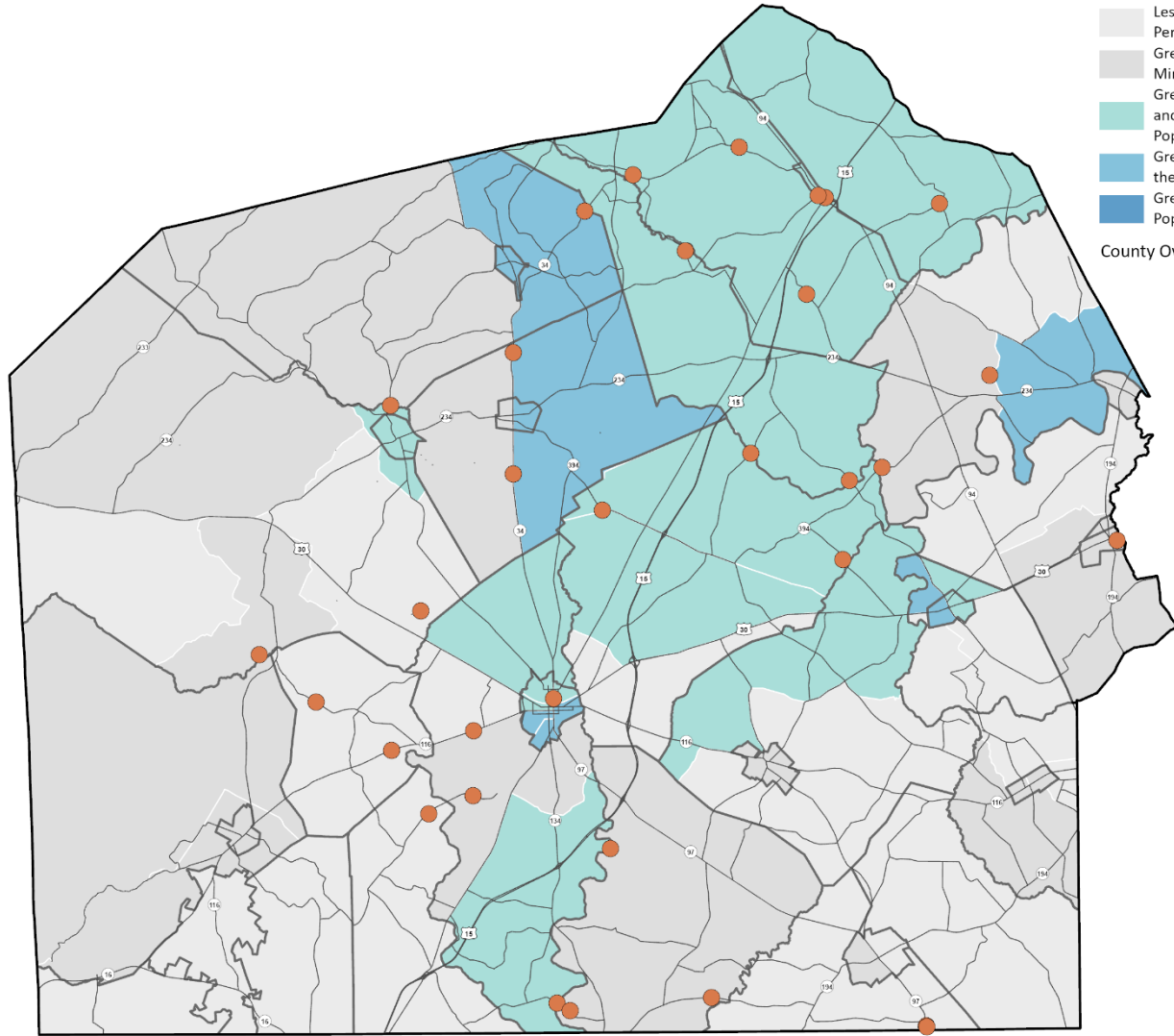


POOR CONDITION BRIDGES AND MINORITY POPULATIONS						
Population/Asset	Percent Minority Population Intervals					Total
	Less than or equal to half County Minority Population %	Greater than half and less than or equal to County Minority Population %	Greater than County Minority Population % and less than or equal to 2x Cty Minority Pop %	Greater than 2x and less than or equal to 4x County Minority Population %	Greater than 4x the County Minority Population %	
Poor Condition Bridge Count	12	13	12	11	0	48
% of Bridges in Poor Condition	25.00%	27.08%	25.00%	22.92%	0.00%	100%
Total Population	33,738	29,497	24,455	14,780	0	102,470
Total Population (in %)	32.90%	28.80%	23.90%	14.40%	0.00%	100%
Minority Population	1,204	2,486	3,691	3,884	0	11,265
Minority Population (in %)	10.69%	22.07%	32.77%	34.48%	0.00%	11%

POOR CONDITION BRIDGES AND LOW-INCOME POPULATIONS						
Population/Asset	Percent Low-Income Population Intervals					Total
	Less than or equal to half County Low-Income Population %	Greater than half and less than or equal to County Low-Income Population %	Greater than Cty Low-Income Population % and less than or equal to 2x Cty Low-Income Pop %	Greater than 2x and less than or equal to 4x County Low-Income Population %	Greater than 4x the County Low-Income Population %	
Poor Condition Bridge Count	13	14	13	9	0	49
% of Bridges in Poor Condition	26.53%	28.57%	26.53%	18.37%	0.00%	100%
Total Population	25,035	34,351	30,857	6,967	1,091	98,301
Total Population (in %)	25.47%	34.94%	31.39%	7.09%	1.11%	100%
Low-Income Population	450	1,971	3,346	1,439	416	7,622
Low-Income Population (in %)	5.90%	25.86%	43.90%	18.88%	5.46%	7.8%

# CONCENTRATIONS OF MINORITY POPULATIONS

## ADAMS COUNTY



Census Block Groups, 2019  
 Ratio of Minority Population Percentage in Census Block Group to County Minority Population Percentage

- Less than or equal to half County Minority Population Percentage
- Greater than half and less than or equal to County Minority Population Percentage
- Greater than County Minority Population Percentage and less than or equal to twice the County Minority Population Percentage
- Greater than twice and less than or equal to four times the County Minority Population Percentage
- Greater than four times the County Minority Population Percentage

County Overall Minority Population Percentage: 11%

### BRIDGE CONDITION

- Poor Condition Bridge
- State Route
- Municipal Boundary

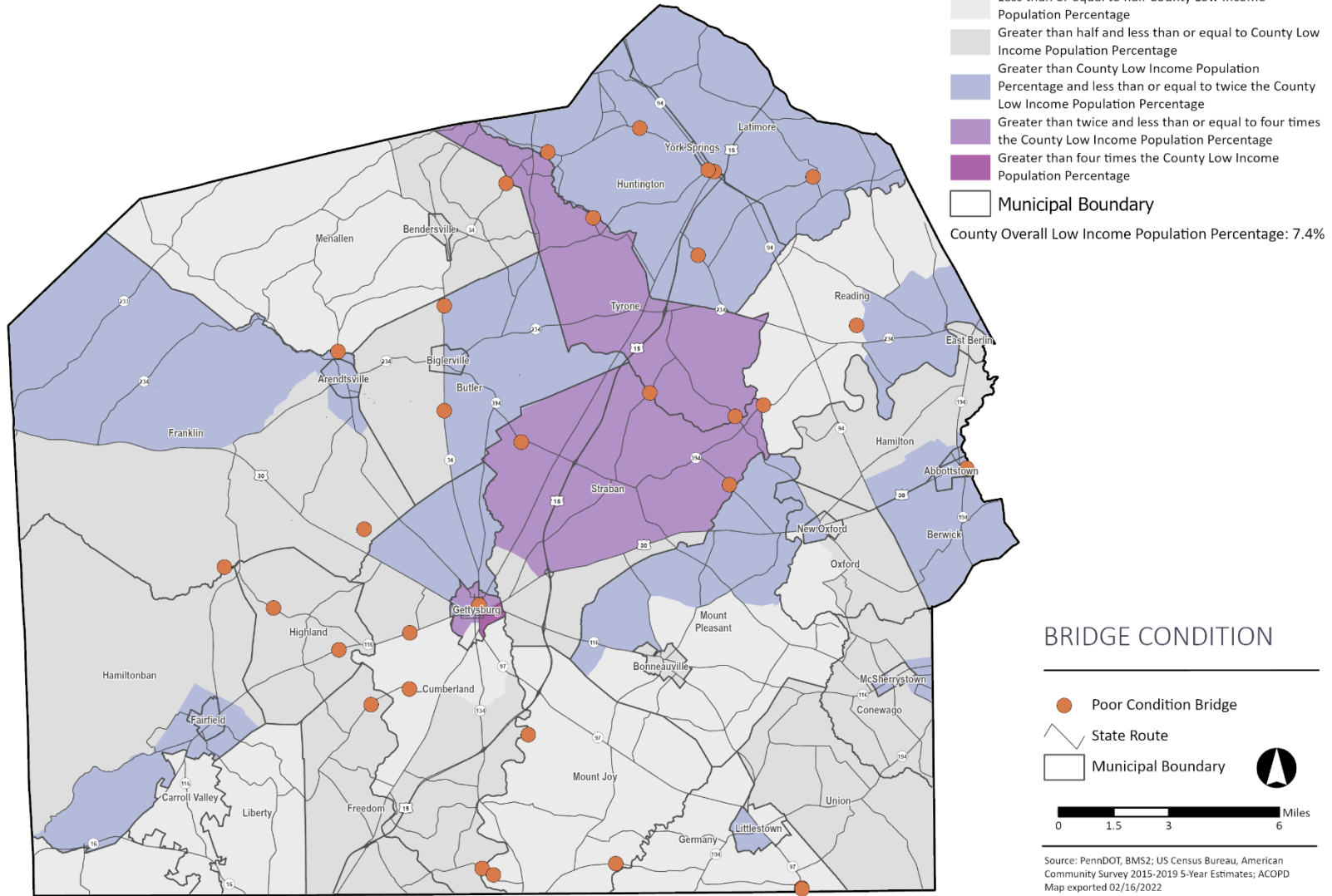
0 1.5 3 6 Miles

Source: PennDOT, BMS2; US Census Bureau, American Community Survey 2015-2019 5-Year Estimates; ACOPD  
 Map exported 02/16/2022



# CONCENTRATIONS OF LOW INCOME POPULATIONS

## ADAMS COUNTY



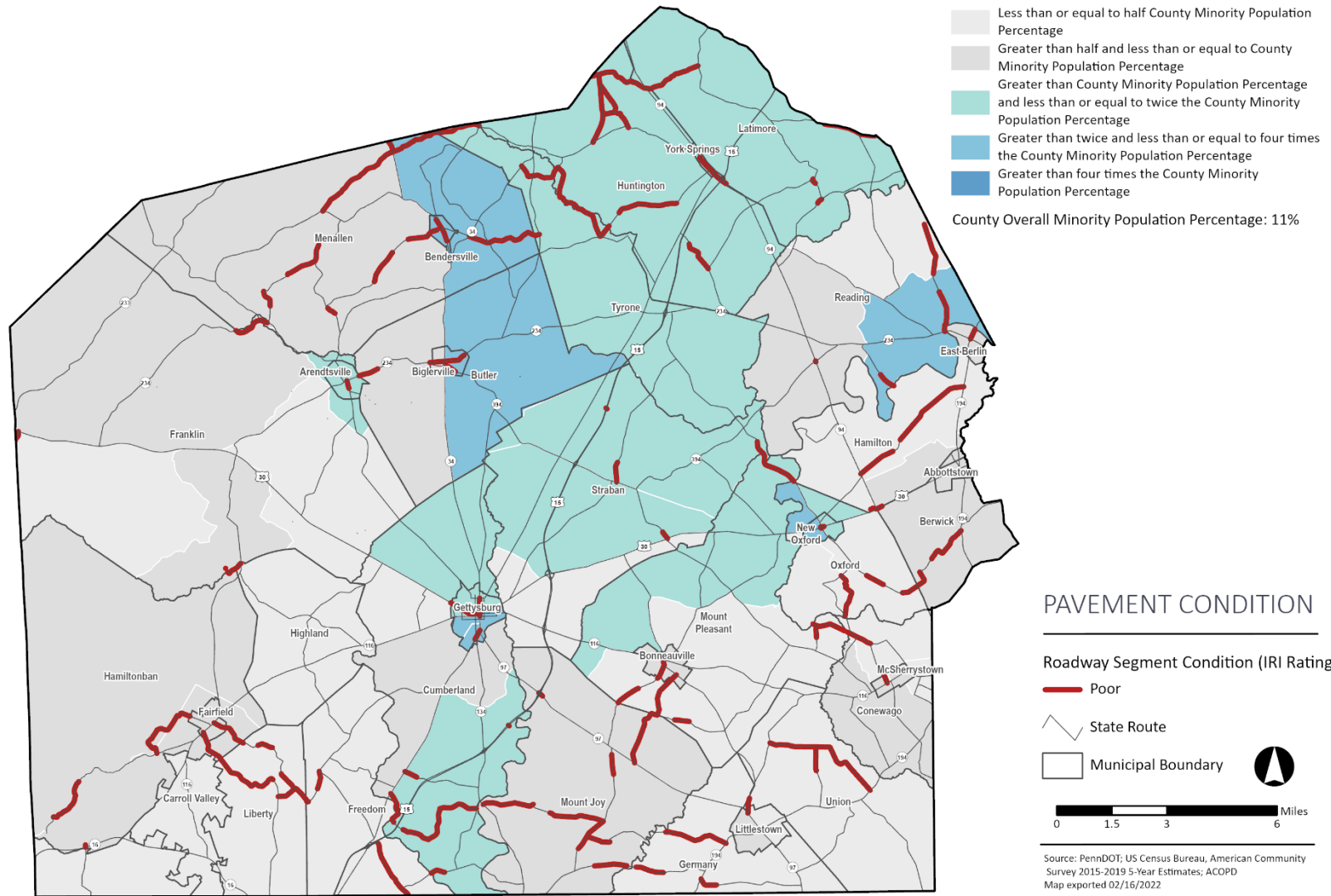
## PAVEMENT

Based on the available condition data for pavement miles, 60.21% of poor condition pavement miles are located within block groups with higher than average minority populations, and 60% are located within block groups with higher than average low-income populations.

POOR CONDITION PAVEMENT AND MINORITY POPULATIONS						
Population/Asset	Percent Minority Population Intervals					Total
	Less than or equal to half County Minority Population %	Greater than half and less than or equal to Cty Minority Pop %	Greater than Cty Minority Pop% and less than or equal to 2x Cty Minority Pop %	Greater than 2x and less than or equal to 4x Cty Minority Pop %	Greater than 4x the County Minority Population %	
Poor Pavement Miles	2.68	1.04	3.6	2.03	0	9.35
Percentage	28.66%	11.12%	38.50%	21.71%	0%	100%
Total Population	33,738	29,497	24,455	14,780	0	102,470
Total Population (in %)	32.90%	28.80%	23.90%	14.40%	0%	100%
Minority Population	1,204	2,486	3,691	3,884	0	11,265
Minority Population (in %)	3.60%	8.40%	15.10%	26.30%	0%	11%
POOR CONDITION PAVEMENT AND LOW-INCOME POPULATIONS						
Population/Asset	Percent Low-Income Population Intervals					Total
	Less than or equal to half County Minority Population %	Greater than half and less than or equal to Cty Minority Pop %	Greater than Cty Minority Pop% and less than or equal to 2x Cty Minority Pop %	Greater than 2x and less than or equal to 4x Cty Minority Pop %	Greater than 4x the County Minority Population %	
Poor Pavement Miles	2	2	4	1	1	10
Percentage	20.00%	20.00%	40.00%	10.00%	10.00%	100%
Total Population	25,035	34,351	30,857	6,967	1,091	98,301
Total Population (in %)	25.47%	34.94%	31.39%	7.09%	1.11%	100%
Minority Population	450	1,971	3,346	1,439	416	7,622
Minority Population (in %)	5.90%	25.86%	43.90%	18.88%	5.46%	7.8%

# CONCENTRATIONS OF MINORITY POPULATIONS

## ADAMS COUNTY



# CONCENTRATIONS OF LOW INCOME POPULATIONS

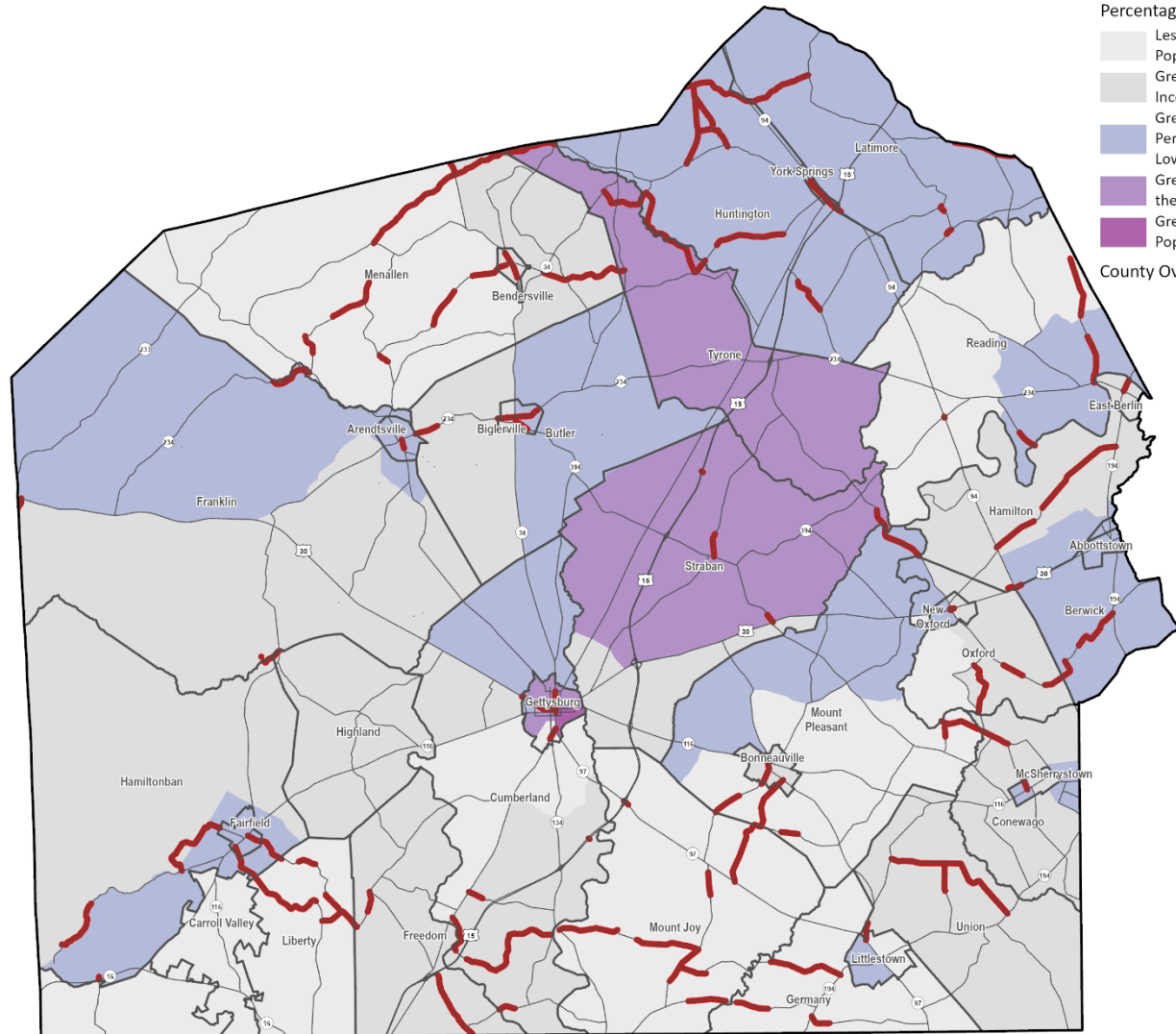
## ADAMS COUNTY

Census Block Groups, 2019

Ratio of Low Income Population Percentage in Census Block Group to County Low Income Population Percentage

- Less than or equal to half County Low Income Population Percentage
- Greater than half and less than or equal to County Low Income Population Percentage
- Greater than County Low Income Population Percentage and less than or equal to twice the County Low Income Population Percentage
- Greater than twice and less than or equal to four times the County Low Income Population Percentage
- Greater than four times the County Low Income Population Percentage

County Overall Low Income Population Percentage: 7.4%



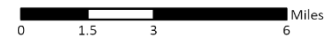
### PAVEMENT CONDITION

Roadway Segment Condition (IRI Rating)

— Poor

— State Route

Municipal Boundary



Source: PennDOT, BMS2; US Census Bureau, American Community Survey 2015-2019 5-Year Estimates; ACOPD  
Map exported 02/16/2022

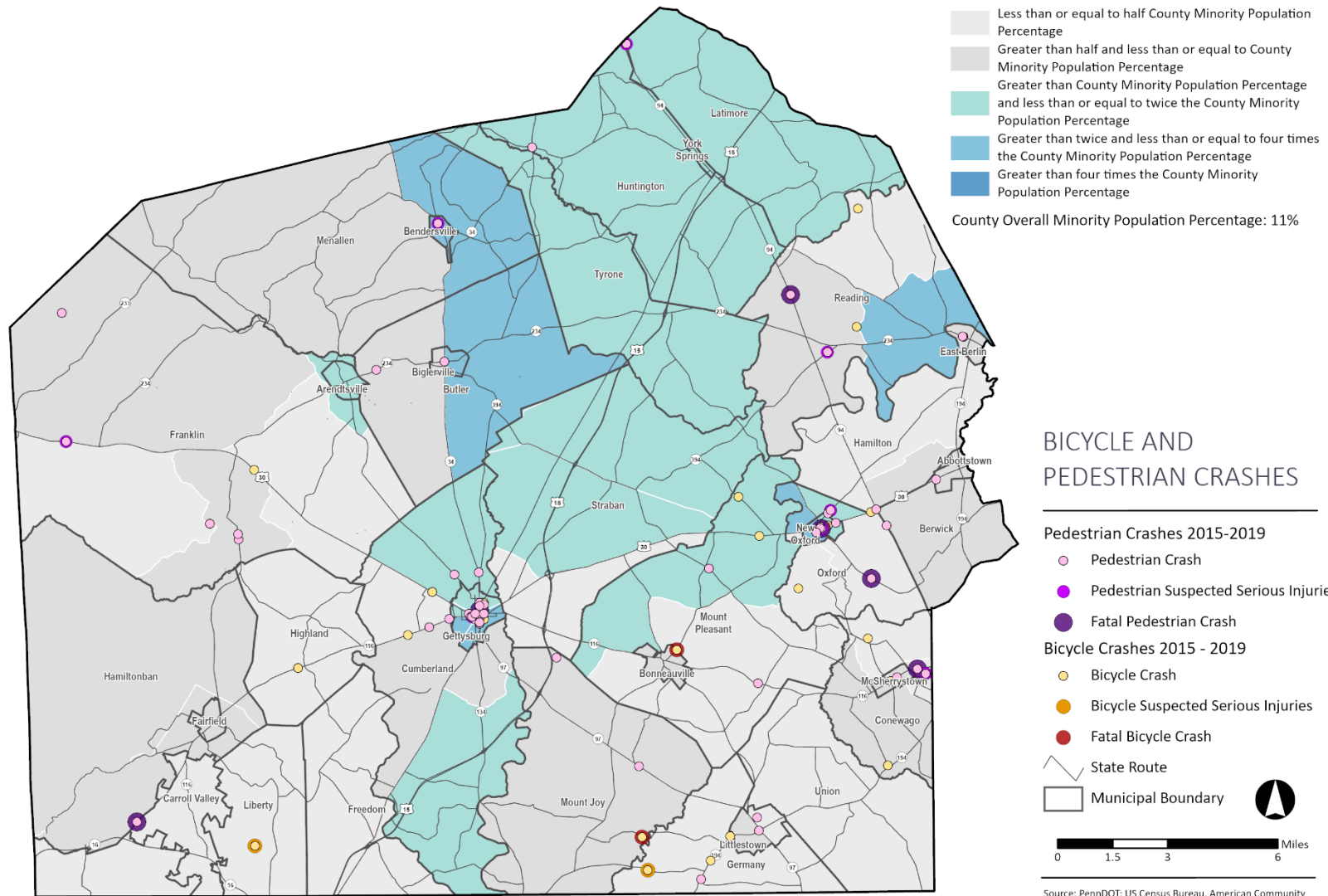
## CRASHES

Similarly, the tables below show the number and percentage of bicycle and pedestrian-related crashes in Adams County from 2015-2019. Of the total crashes, 56 percent of crashes occur in high minority block groups while 55 percent of crashes occur in high low-income block groups.

BICYCLE AND PEDESTRIAN CRASHES AND MINORITY POPULATIONS						
Population/Asset	Percent Minority Population Intervals					Total
	Less than or equal to half County Minority Population %	Greater than half and less than or equal to Cty Minority Pop %	Greater than Cty Minority Pop% and less than or equal to 2x Cty Minority Pop %	Greater than 2x and less than or equal to 4x Cty Minority Pop %	Greater than 4x the County Minority Population %	
Bike and Ped Crashes	24	27	39	25	0	115
Percentage	20.87%	23.48%	33.91%	21.74%	0.00%	100%
Total Population	33,738	29,497	24,455	14,780	0	102,470
Total Population (in %)	32.90%	28.80%	23.90%	14.40%	0.00%	100%
Minority Population	1,204	2,486	3,691	3,884	0	11,265
Minority Population (in %)	10.69%	22.07%	32.77%	34.48%	0.00%	11%
BICYCLE AND PEDESTRIAN CRASHES AND LOW-INCOME POPULATIONS						
Population/Asset	Percent Low-Income Population Intervals					Total
	Less than or equal to half County Minority Population %	Greater than half and less than or equal to Cty Minority Pop %	Greater than Cty Minority Pop% and less than or equal to 2x Cty Minority Pop %	Greater than 2x and less than or equal to 4x Cty Minority Pop %	Greater than 4x the County Minority Population %	
Bike and Ped Crashes	21	35	40	17	11	124
Percentage	16.94%	28.23%	32.26%	13.71%	8.87%	100%
Total Population	25,035	34,351	30,857	6,967	1,091	98,301
Total Population (in %)	25.47%	34.94%	31.39%	7.09%	1.11%	100%
Minority Population	450	1,971	3,346	1,439	416	11,265
Minority Population (in %)	0.46%	2.01%	3.40%	1.46%	0.42%	7.8%

# CONCENTRATIONS OF MINORITY POPULATIONS

## ADAMS COUNTY



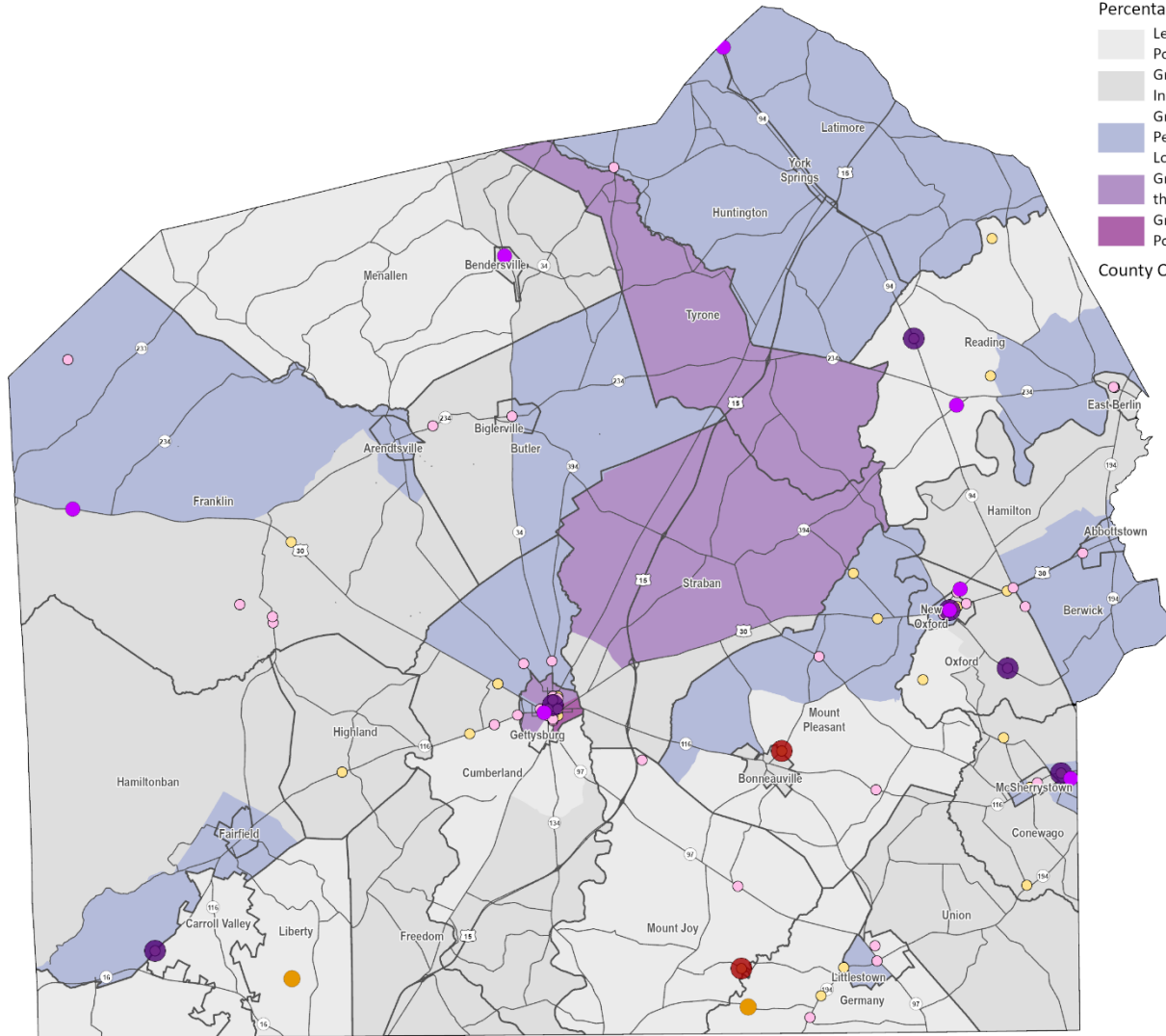
# CONCENTRATIONS OF LOW INCOME POPULATIONS

## ADAMS COUNTY

Census Block Groups, 2019  
 Ratio of Low Income Population Percentage in Census Block Group to County Low Income Population Percentage

- Less than or equal to half County Low Income Population Percentage
- Greater than half and less than or equal to County Low Income Population Percentage
- Greater than County Low Income Population Percentage and less than or equal to twice the County Low Income Population Percentage
- Greater than twice and less than or equal to four times the County Low Income Population Percentage
- Greater than four times the County Low Income Population Percentage

County Overall Low Income Population Percentage: 7.4%



## BICYCLE AND PEDESTRIAN CRASHES

**Pedestrian Crashes 2015-2019**

- Pedestrian Crash
- Pedestrian Suspected Serious Injuries
- Fatal Pedestrian Crash

**Bicycle Crashes 2015 - 2019**

- Bicycle Crash
- Bicycle Suspected Serious Injuries
- Fatal Bicycle Crash

State Route  
 Municipal Boundary

0 1.5 3 6 Miles

Source: PennDOT; US Census Bureau, American Community Survey 2015-2019 5-Year Estimates; ACOFD

## BENEFITS & BURDENS: 2023-2026 TRANSPORTATION IMPROVEMENT PROGRAM

The Adams County MPO reviewed transportation projects located in areas that were determined to be “high minority” or “high low-income.” “High minority”, for the purpose of this analysis, refers to Census block groups that have a concentration of minority persons that is greater than or equal to the county average of 11 percent. “High Low-Income” refers to Census block groups that have a concentration of low-income persons that is greater than or equal to the county average of 7.4 percent.

When evaluating the potential benefit or burden of a project, it should be noted that each type of project has a unique set of impacts and will affect individual populations differently. For example, maintenance projects tend to cause the least amount of impact on the population since they typically involve highway resurfacing or repaving work on existing roadways. Although these projects can cause delayed travel time and transit service, traffic detours, and work zone noise and debris, the projects are typically shorter in duration and result in improvements to the functionality of the roadway network by providing smoother driving surfaces and new roadway markings. While most bridge projects are identified as either a rehabilitation or replacement, both types of projects can lend itself to significant traffic detours, traffic delay, and noise. However, the benefits of these types of improvements result in safer bridge structures, improved roadway conditions and updated signage.

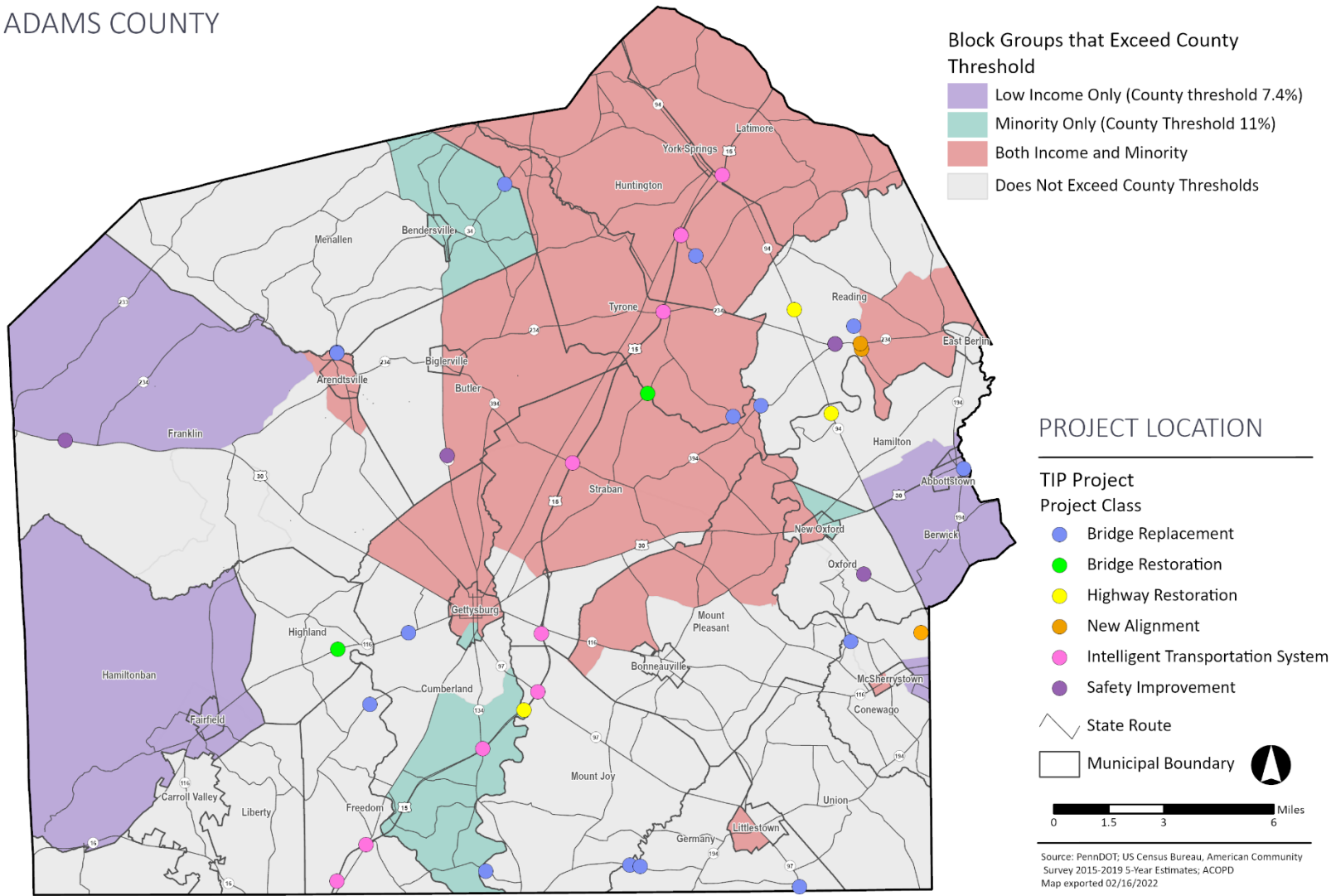
Capacity projects, which can involve the addition of new lanes to existing roadways, new roadways to the existing network, or at times the realignment of intersections or interchanges, in an effort to provide for more traffic mobility. Special attention needs to be made when planning capacity projects, especially to low-income and minority populations. Not only can these projects result in right-of-way acquisitions to account for the additional capacity, but also construction impacts are normally more severe due to longer construction periods, travel pattern shifts, and delayed travel times among others. The consequences of the completion of capacity projects can involve the loss of property, increased traffic volumes, and decreased air quality, while other benefits can include improved transit service time, decreased travel delay, and safer roadway conditions which will result in improved quality of life for all residents and users of the roadway system.

Of the locatable 24 projects on the 2023-2026 Adams County TIP, 13 projects are located in both high minority and high low-income block groups, two projects are located in a high low-income block group, and four projects are located in a high minority block group. The map *Project Locations in Relation to Census Block Groups That Exceed County Thresholds* illustrates the geographic proximity between different 2023-2026 TIP projects and high minority and high in poverty areas. ACTPO will continue to conduct Benefits and Burdens Analysis for forthcoming Transportation Improvement Programs, which are updated every two years.



# PROJECT LOCATIONS IN RELATION TO CENSUS BLOCK GROUPS THAT EXCEED COUNTY THRESHOLDS

## ADAMS COUNTY



## EXPANDING THE ANALYSIS

Identifying where disadvantaged and traditionally underserved populations are in proximity to vital destinations and daily necessities is key to addressing disparities and promoting equity, the idea of being fair to all persons regardless of individual situations. Although “low-income” and “minority” are primary identifiers of potentially underserved populations, they are not the only factors that may create barriers for an individual or group. Other factors, some a direct relation to low-income or minority albeit, may impose limitations not experienced by the general population. Further, a combination of factors, when considered together, may exacerbate limitations or barriers.

A more extensive Equity Analysis that identifies a broader range of factors that affect one’s quality of life may expose disadvantages that may not be obvious otherwise. The resulting comprehensive analysis may then be used to conduct a deeper equity analysis and inform multiple programs and disciplines, including transportation planning and programming and the public engagement process that coincides. By monitoring these factors through a GIS-based model, the analysis can be conducted using the most recent datasets available.

Additional factors to consider in the Equity Analysis include:

- LEP (Limited English Proficiency)
- Disability
- Age 65+
- Access to a Computer
- Access to High-Speed Internet
- Vehicle Ownership
- Access to Public Transportation
- Proximity to Sidewalks
- Proximity to Parks and Open Space
- Proximity to School
- Proximity to a Grocery Store

Additionally, further consideration should be given to the methods used to engage traditionally underserved populations. It is recognized that there may not be a “one size fits all” approach to outreach, and specific populations should be consulted so that the most effective strategies are deployed during the public engagement process.

# CHAPTER 12 AIR QUALITY CONFORMITY

## Transportation Conformity Determination Report

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1997 Ozone NAAQS

### EXECUTIVE SUMMARY

As part of its transportation planning process, the Adams County Transportation Planning Organization (ACTPO) completed the transportation conformity process for the 2023-2026 Transportation Improvement Program (TIP) and the Onward2050 Long Range Transportation Plan (LRTP). This report documents that the TIP and LRTP meet the federal transportation conformity requirements in 40 CFR Part 93.

Clean Air Act (CAA) section 176(c) (42 U.S.C. 7506(c)) requires that federally funded or approved highway and transit activities are consistent with (“conform to”) the purpose of the State Implementation Plan (SIP). Conformity to the purpose of the SIP means that transportation activities will not cause or contribute to new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS or any interim milestones. EPA’s transportation conformity rules establish the criteria and procedures for determining whether metropolitan transportation plans, transportation improvement programs (TIPs), and federally supported highway and transit projects conform to the SIP.

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

This conformity determination was completed consistent with CAA requirements, existing associated regulations at 40 CFR Parts 51.390 and 93, and the *South Coast II* decision, according to EPA’s *Transportation Conformity Guidance for the South Coast II Court Decision* issued on November 29, 201

## BACKGROUND

### Transportation Conformity Process

The concept of transportation conformity was introduced in the CAA of 1977, which included a provision to ensure that transportation investments conform to a State Implementation Plan (SIP) for meeting the Federal air quality standards. Conformity requirements were made substantially more rigorous in the CAA Amendments of 1990. The transportation conformity regulations that detail implementation of the CAA requirements were first issued in November 1993 and have been amended several times. The regulations establish the criteria and procedures for transportation agencies to demonstrate that air pollutant emissions from metropolitan transportation plans, transportation improvement programs and projects are consistent with (“conform to”) the State’s air quality goals in the SIP. This document has been prepared for State and local officials who are involved in decision making on transportation investments.

Transportation conformity is required under CAA Section 176(c) to ensure that Federally-supported transportation activities are consistent with (“conform to”) the purpose of a State’s SIP. Transportation conformity establishes the framework for improving air quality to protect public health and the environment. Conformity to the purpose of the SIP means Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funding and approvals are given to highway and transit activities that will not cause new air quality violations, worsen existing air quality violations, or delay timely attainment of the relevant air quality standard, or any interim milestone.

### National Ambient Air Quality Standards

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

Adams County is currently designated as a maintenance area under the 1997 8-hour ozone NAAQS. The county is in attainment of the 2008 and 2015 8-hour ozone, 2006 24-hour PM<sub>2.5</sub> and 2012 annual PM<sub>2.5</sub> NAAQS. Transportation conformity requires nonattainment and maintenance areas to demonstrate that all future transportation projects will not prevent an area from reaching its air quality attainment goals.

### ACTPO TIP AND LRTP

MPOs and Rural Planning Organizations (RPOs) each develop a TIP at the local level, which reflects the first four years of the Pennsylvania Department of Transportation (PennDOT) Twelve Year Program (TYP). The Statewide Transportation Improvement Program (STIP) covers the entire state and includes the individual TIPs representing each Planning Partner. Federal Law requires TIPs to be updated at least every four years. Pennsylvania’s MPOs and RPOs update their TIPs every two years during the TYP update process.

The Long Range Transportation Plan (LRTP) serves as the official transportation plan for a metropolitan area. The LRTP documents the current and future transportation demand and identifies long-term improvements and projects to meet those needs. The Adams County LRTP guides decision-making about transportation improvements in the county. The planning factors specified in federal regulations provide the framework for developing an LRTP. In addition, PennDOT provides guidance to help MPOs prepare LRTPs, and local policies and plans play a role in LRTP development to ensure transportation investments address current and future needs.

The February 16, 2018, *South Coast vs. EPA* Court decision did not vacate EPA's revocation of the 1997 ozone standard and the decision does not change the area's attainment status. Therefore, while such areas might be required to meet conformity requirements as part of anti-backsliding controls, such areas are not considered nonattainment or maintenance areas under the Transportation Planning Rule (23 CFR 450.104). Such areas continue to complete 5-year plan update cycles as described in 23 CFR 450.324(c). The 5-year metropolitan transportation plan update cycle continues to apply from the date of the most recent MPO metropolitan transportation plan adoption (not the most recent FHWA/FTA conformity determination). While these areas have a 5-year plan cycle for transportation planning purposes, as a result of the court decision they must still meet the 4-year frequency requirements for conformity determinations on TIPs and LRTPs as required by 40 CFR 93.104.

The listing of the regional significant projects that are funded in the TIP and LRTP within Adams County may be found on page 129. Regionally significant projects include transportation projects (other than exempt projects as defined under 40 CFR 93.126-127) that are on a facility which serves regional transportation needs.

## TRANSPORTATION CONFORMITY PROCESS

Per the court's decision in *South Coast II*, beginning February 16, 2019, a transportation conformity determination for the 1997 ozone NAAQS will be needed in 1997 ozone NAAQS nonattainment and maintenance areas identified by EPA<sup>1</sup> for certain transportation activities, including updated or amended TIPs and LRTPs. Once US DOT makes its 1997 ozone NAAQS conformity determination, conformity will be required no less frequently than every four years. This conformity determination report will address transportation conformity for the ACTPO 2023-2026 TIP and 2050 LRTP.

## TRANSPORTATION CONFORMITY REQUIREMENTS

### Overview

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<sup>1</sup> The areas identified can be found in EPA's "Transportation Conformity Guidance for the South Coast II Court Decision, EPA-420-B-18-050, available on the web at: [www.epa.gov/state-and-local-transportation/policy-and-technical-guidance-state-and-local-transportation](http://www.epa.gov/state-and-local-transportation/policy-and-technical-guidance-state-and-local-transportation).

On November 29, 2018, EPA issued **Transportation Conformity Guidance for the South Coast II Court Decision**<sup>2</sup> (EPA-420-B-18-050, November 2018) that addresses how transportation conformity determinations can be made in areas that were nonattainment or maintenance for the 1997 ozone NAAQS when the 1997 ozone NAAQS was revoked but were designated attainment for the 2008 ozone NAAQS in EPA's original designations for this NAAQS (May 21, 2012).

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

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

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

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

## LATEST PLANNING ASSUMPTIONS

The use of latest planning assumptions in 40 CFR 93.110 of the conformity rule generally applies to a regional emissions analysis. In the 1997 ozone NAAQS areas, the use of latest planning assumptions requirement applies to assumptions about transportation control measures (TCMs) in an approved SIP. However, the Adams County SIP maintenance plan does not include any TCMs.

## CONSULTATION REQUIREMENTS

The consultation requirements in 40 CFR 93.112 were addressed both for interagency consultation and public consultation.

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<sup>2</sup> Available from [Policy and Technical Guidance for State and Local Transportation | US EPA](#)

As required by the federal transportation conformity rule, the conformity process includes a significant level of cooperative interaction among federal, state, and local agencies. For this air quality conformity analysis, interagency consultation was conducted as required by the Pennsylvania Conformity SIP. This included conference call(s) or meeting(s) of the Pennsylvania Transportation-Air Quality Work Group (including the Pennsylvania Department of Transportation (PennDOT), DEP, EPA, FHWA, FTA and representatives from larger MPOs within the state).

Meeting and conference calls were conducted on October 28, 2021 and January 27, 2022 to review all planning assumptions and to discuss the template and content for transportation conformity analyses in 1997 ozone orphan areas.

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

## FISCAL CONSTRAINT

The planning regulations, Sections 450.324(f)(11) and 450.326(j), require the transportation plan to be financially constrained while the existing transportation system is being adequately operated and maintained. Only projects for which construction and operating funds are reasonably expected to be available are included. The ACTPO, 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 the region and have compared the cost with the estimated revenues and maintenance needs of the new roads over the same period. The ACTPO TIP and LRTP has been determined to be financially constrained.

## CONCLUSION

The conformity determination process completed for the ACTPO TIP and LRTP demonstrates that these planning documents meet the Clean Air Act and Transportation Conformity rule requirements for the 1997 ozone NAAQS.

# REGIONALLY SIGNIFICANT PROJECT LIST

REGIONALLY SIGNIFICANT PROJECT LIST	
Project Name	Description
<b>FY 2023-2026 Highway-Bridge TIP</b>	
Eisenhower Drive Extension (MPMS 58137)	This project consists of extending the Eisenhower Drive through Conewago Township, from where it currently ends at High Street to Hanover Road (SR 0116) west of McSherrystown. Potential improvements include new alignment alternatives, partial new alignment alternatives, as well as options to improve the existing roadway network. These changes aim to address the falling level of service (LOS), as well as improve safety within the study area.
<b>2050 Long Range Transportation Plan</b>	
US15-US30 Interchange Improvement (MPMS 58136)	This project consists of improving the interchange at US Route 15 & US Route 30 in Straban Township, Adams County.



# APPENDIX

- A. LRTP Development Timeline
- B. Virtual Public Involvement Policy
- C. Public Engagement Documentation
  - C-1. Survey Results
  - C-2. Open-Ended Comments
  - C-3. Identified Project Locations / Future Needs
- D. Population Projections by Municipality
- E. Transportation Performance Management
- F. On-Road Active Transportation and Safety Analysis
- G. YAMPO MTP Capital Improvements Plan
- H. Adams County 2023-2026 TIP/TY
- I. Financial Guidance Charts
  - I-1. Actual and Target Expenditures Tables and Chart
  - I-2. ACTPO Funding Scenario Tables
  - I-3. Projected Funding Allocations by Category
- J. Ranking System Framework
- K. Listed and Eligible Historic Resources
- L. Statewide EJ Analysis Methodology
- M. Public Comment Period Documentation
- N. Air Quality Resolution for the ACTPO