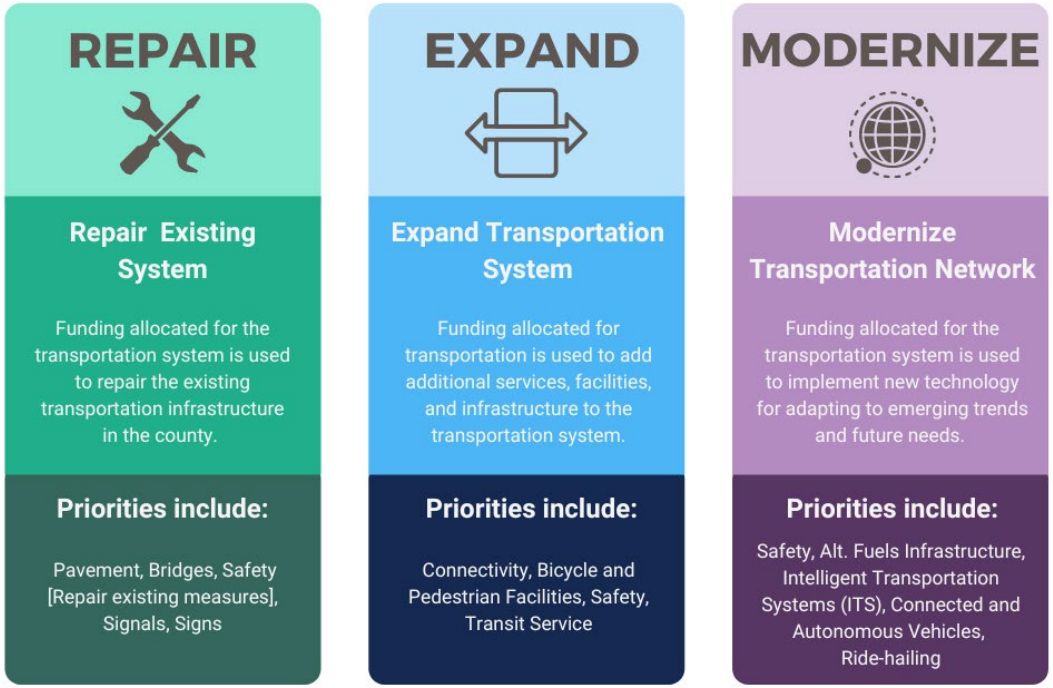
CHAPTER 7 – FUTURE STRATEGIES

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.

Asset Management

Overall

ACTION ITEM	TYPE	LEAD	SUPPPORT	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	SUPPPORT	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	SUPPPORT	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	SUPPPORT	PRIORITY
Evaluate sign needs during all maintenance projects. 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: - Avoid sign clutter that makes important information difficult to identify, - Maintain proper sign retro-reflectivity to ensure proper visibility in all conditions, and - Promote signage that uses age-friendly design techniques.	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	SUPPPORT	PRIORITY
Promote access management strategies and design techniques in transportation improvements and subdivision and land development projects.	Policy/ Public Engagement	ACTPO	PennDOT	High
Connect the Spokes 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	Policy/ Project	ACTPO, Municipalities	PennDOT, Private Sector	High
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. Municipalities should consider incorporating the following policy recommendations that promote a pedestrian-based environment instead of a car-based one in future planning efforts: - Narrower streets - Full pedestrian facilities and bike lanes - Elimination of cul-de-sacs in favor of full through streets, a grid-network for example - Required street connections between adjacent developments - Implement traffic calming measures into neighborhood street designs	Project/ Analysis	Municipalities, ACOPD, ACTPO	PennDOT	Ongoing
Prioritize projects that address new connectivity needs while simultaneously addressing other transportation issues, such as asset management, safety, etc.	Policy/ Project	ACTPO	PennDOT, FHWA	High
Focus new network capacity additions that improve quality of life and quality of experience for residents, visitors and transportation system users.	Policy	ACTPO	PennDOT	Medium

Active Transportation (Bicycle/ Pedestrian)

ACTION ITEM	TYPE	LEAD	SUPPPORT	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
Incorporate active transportation friendly designs into all road and bridge projects, particularly in urbanized areas and designated growth areas. 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
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. 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
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. 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
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 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
Work with transit providers, employers, and businesses to improve pedestrian and bicycling infrastructure and accommodations at, in, or near transit, employment, and commerce destinations.	Policy/ Project	ACTPO, ACOPD	PennDOT, SRTA, Bicycle and Pedestrian Advocates	Low

Mobility, Access, and Reliability

Transit

ACTION ITEM	TYPE	LEAD	SUPPPORT	PRIORITY
Identify gaps in public transportation access and coordinate with transit, businesses, and social service organizations on feasible, cost-effective solutions. 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
Promote express bus service between Adams County and surrounding urban centers, including Harrisburg, York, Frederick and Chambersburg.	Policy/Public Engagement	ACTPO	SRTA, Adams Economic Alliance	High
Use Microtransit as a tool to evaluate the viability of potential new transit service routes in Adams County.	Project	ACTPO	PennDOT	Medium
Develop an updated Coordinated Transit Human Services Transportation Plan.	Planning/ Policy/ Analysis	ACTPO	SRTA, PennDOT	Medium
Promote transit use as safety measure to reduce crash rates and crash severity.	Policy/ Public Engagement	ACTPO, ACOPD, Municipalities	SRTA, PennDOT, FTA, FHWA	Medium
Identify locations where additional park and ride lots would increase transit access.	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.

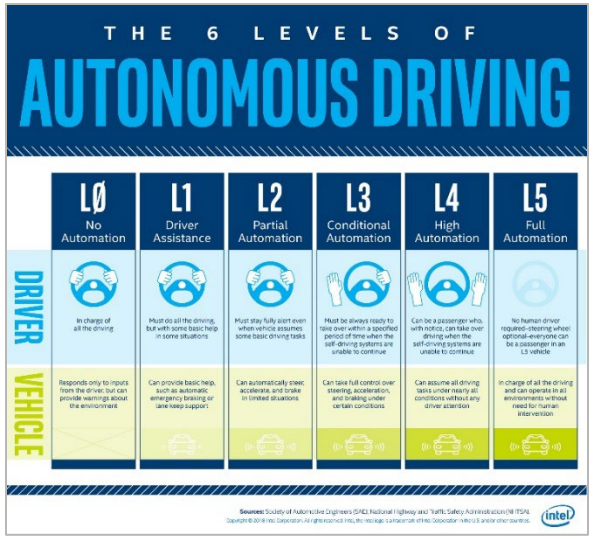
While the focus on EV infrastructure is consistent with the direction the automotive industry is moving, other fueling infrastructure should be considered as well, including, biodiesel, hydrogen/fuel cell, natural gas (both liquid and compressed) and propane to address the needs of all users of the transportation 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
Pursue the formation of Traffic Incident Management (TIM) teams for major corridors in Adams County. 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.	Project, Public Engagement	Municipalities, Emergency Responders	ACDES, ACTPO, PennDOT	Medium
Implement new, and upgrade existing, Intelligent Transportation System (ITS) infrastructure as needs and new technology warrant.	Strategy	PennDOT	ACTPO, Municipalities, Community Partners	Low

Modernization and Operation

Transportation Demand Management (TDM)

ACTION ITEM	TYPE	LEAD	SUPPPORT	PRIORITY
Promote Transportation Demand Management (TDM) strategies that fit Adams County. 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
Promote the installation of alternative fuels infrastructure for a range of fuel types along designated Alternative Fuels Corridors.	Policy/ Public Engagement	ACTPO	PennDOT	High
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.	Project	ACTPO, ACOPD	PennDOT, Municipalities, Community Partners, Private Sector	High
Seek Alternative Fuels Corridors designations on all NHS roads.	Policy/Planning	ACTPO	PennDOT, FHWA	Medium

Modernization and Operation

Connected and Autonomous Vehicles

ACTION ITEM	TYPE	LEAD	SUPPPORT	PRIORITY
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. 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.	Policy/Project	ACTPO	PennDOT, Broadband Groups and Providers	Low

Freight

ACTION ITEM	TYPE	LEAD	SUPPPORT	PRIORITY
Conduct an analysis of freight movements in Adams County. 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.	Planning/Analysis	ACTPO, ACOPD	PennDOT, Adams Economic Alliance, Trucking Co Group, like Teamsters	High
Assess potential transportation system improvements that support freight movements from local industry sectors such as agriculture, fruit and food processing, and construction materials. 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.	Planning/Analysis	ACTPO	PennDOT	Medium
Identify transportation system improvements that will address the impacts of freight movements on quality of life for residents and quality of experience for visitors.	Policy/Planning/Analysis/Project	ACTPO	PennDOT	Medium
Examine the need for designated truck parking areas in proximity to major truck traffic generators or freight corridors within Adams County.	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. If 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 have 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 though 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	SUPPPORT	PRIORITY
Adopt and monitor compliance with federal and state safety performance measures.	Policy	ACTPO	PennDOT, FHWA/FTA	Ongoing
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. 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.	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
Improve safety measures around at-grade railroad crossings. Promote the installation of two-quadrant and four-quadrant gates at at-grade crossings. Future planning efforts should incorporate local knowledge about site planning and traffic patterns to improve safety at the county's highway-rail crossings.	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	SUPPPORT	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	SUPPPORT	PRIORITY
Develop a public dashboard to identify potentially disadvantaged areas in Adams County, including Environmental Justice and Title VI of the Civil Rights Act populations. 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.	Planning/ Analysis/ Public Engagement	ACOPD, ACTPO	PennDOT, FHWA, FTA	High
Develop a method to Monitor all adopted performance measures for disproportionate impacts in minority and low-income areas.	Policy/ Public Engagement	ACTPO	PennDOT	Ongoing
Incorporate equity analysis into all transportation modes. 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.	Policy/ Planning/Public Engagement	ACTPO	PennDOT, FHWA, Community Partners	Ongoing
Consider the personal and public health implications of transportation projects. 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.	Policy/ Planning/Public Engagement	ACTPO	PennDOT, Community Partners	Ongoing