



With 2023 Interim Update, April 2023

Appendix E. 2023 Interim Update

Introduction

Overview of the Region

This Regional Operations Plan (ROP) has been developed to cover the Southwestern Pennsylvania Commission (SPC) Region. SPC covers the southwestern portion of Pennsylvania, an area that includes 10 counties. This region has a population of 2.6 million and encompasses 7,112 square miles. The SPC region includes PennDOT Engineering Districts 11 and 12, as well as 3 counties from District 10 (Armstrong, Butler, and Indiana) and is centered around the Regional Traffic Management Center (RTMC) located in Bridgeville, PA. The transportation network within the SPC region consists of 25,000 linear miles, over 6,600 bridges, and 6 tunnels.

The region's terrain is defined mostly by the Allegheny Plateaus. The Allegheny Plateaus produce deep valleys and steep hillsides in the region. The steep slopes and rolling topography cause most of the population to be concentrated throughout the river valley communities. Nearly 78% of the region's population lives in the 15% of the land area that is classified as urban.

The City of Pittsburgh, located within this region, is home to many tourist attractions, conventions, and events which draw thousands of visitors to the area. The influx of tourists and visitors creates additional challenges for traffic management.

Background

This ROP has been compiled based on guidance from the *TSMO Guidebook, Part I: Planning*, a PennDOT document developed in 2018 which describes how to implement the statewide approach to Transportation Systems Management and Operations (TSMO). TSMO is a set of integrated strategies used to increase the reliability and mobility of existing roadway infrastructure without adding capacity. This is accomplished primarily in three ways: Incorporating state of the art intelligent systems, improving management of incidents and events, and encouraging modal shift.

This addendum provides an interim update to the 2019 Regional Operations Plan for Southwestern Pennsylvania, including the status of existing projects, a discussion of emerging trends related to traffic operations, and identification of new ROP projects, which have been proposed during the update process.

Update Process

A virtual kick off meeting was held on November 2, 2022. This was an introduction meeting with steering committee members, and they were updated on the process, schedule, and expectations for the interim update. The first of two in-person stakeholder meetings took place at the Southwestern Pennsylvania Commission's conference room on December 13, 2022. The first stakeholder outreach meeting was used to confirm existing project or study status and gain

an understanding into new traffic operation's needs. A final stakeholder meeting was held on March 6, 2023.

This process does not supplant the extensive stakeholder outreach and data analysis completed during the 2019 ROP development. New projects identified within this update process should be considered alongside, and not in place of, previously confirmed projects when funding opportunities arise.

Status of Existing ROP Projects

In the 2019 Regional Operations Plan for Southwestern Pennsylvania, 44 projects were identified, ranging from intelligent transportation systems (ITS) and Freeway and Arterial Operations to incident management and Multimodal Connectivity. Traveler Information was also a key component of the ROP. A number of multimodal projects were also identified, including improvements to transit operations and bicycle infrastructure that are anticipated to improve overall operations through encouraging mode shift and equitable transportation system for all users. These projects take a holistic approach, maximizing existing capacity of parallel routes and emphasizing multimodal approaches to congestion management. Projects were prioritized based on stakeholder input and discussions into "High Priority" and "Normal Priority" groups. A table is attached, which shows the status of each of these previously documented projects. Status updates fall into the following categories shown in **Table 1**.

A number of ROP projects have progressed in the region, including a few which have moved into the construction phase. These projects include PA-Route 8 Traffic Signal Improvements in Butler County, PA-28 Freeway Service Patrol in Allegheny County, and US 22 Corridor ITS/Signal Improvements in Indiana County. A number of projects have seen partial progress of varying degrees. This includes partial progress of the Bates Street Interchange Improvements in Allegheny County and Western RTMC Upgrade.

There are a few major projects that are currently under design: I-79 ICM (District 12) in Washington County, South Hills Village Smart Parking in Allegheny County, and I-376 Corridor ITS in Beaver County. See page 10 for a full list of previously documented projects.

TABLE 1: PROJECT STATUS DEFINITIONS

Project Status	Definition
Documented	Project has been included in the ROP.
Programmed	Project has been included in a planning document, such as a Transportation Improvement Program (TIP), Twelve Year Program (TYP), or Long-Range Transportation Plan (LRTP) and/or another a funding source has been secured. Specific funding sources are noted were applicable.
Partial Progress	Progress has been made on some component of the project. The “Notes” column provides more detail. For example, a project that might have included both traffic signal improvements and ITS devices could have seen the signal work progressed but not the ITS devices, or vice versa.
In Design	Project is currently in design.
In Construction	Project is currently in construction.
Complete	Project has been completed.

Status of Studies and Initiatives

In addition to the projects, there were a total of 20 studies and initiatives that were identified in the previous ROP, two of which were classified as High Priority. These ranged from Freight Management studies to Multimodal Connectivity studies. While specific projects could be determined for many of the issues and needs, others need further study to best determine the correct mitigation to improve operations.

A few of the studies in the region have progressed and two were completed. Completed studies include the US 40 Road Safety Audit in Fayette County and the SR 8 Corridor Operations Planning Study in Allegheny County and Butler County. A table is attached, which shows the status of each of these previously documented studies. Status updates fall into the following categories shown in **Table 2**. See page 12 for a full list of previously documented studies and initiatives.

TABLE 2: STUDY STATUS DEFINITIONS

Project Status Choices	Definitions
Documented	Project included in the ROP.
Planned	Study is planned for the future
In Progress	Progress has been made on some component of the project/study. See Notes column for more detail.
Completed	Study is completed

Emerging Trends

The stakeholder engagement process was also used to discuss noteworthy regional, industry, and technology-related trends in the region which could impact transportation operations. This discussion included general trends like:

- Funding challenges – Transportation agencies throughout the country are grappling with growing gaps in transportation funding, brought on by reduced gas tax funds, as well as other factors. PennDOT is currently conducting the PennDOT Pathways Planning and Environmental Linkages (PEL) Study which is evaluating the near-term and long-term revenue options and strategies to mitigate this issue and ensure the Commonwealth’s highways and bridges are maintained in a state of good repair. One outcome of this process could include an increased focus on TSMO projects – prioritizing more efficient usage of existing capacity could decrease funding needs and ensure available funds are spent on projects that maximize potential benefits to safety and mobility.
- Future of work – As the region shifts into a post-pandemic “new normal,” some degree of long-term reduction in peak hour travel is anticipated. Given that capacity-adding projects are generally warranted through analysis of future peak periods, these changes should also result in an increased focus on TSMO solutions which produce improvements within the existing transportation network.

The discussions also included specific planned developments and other location-specific activities, as discussed below.

Southwestern Pennsylvania: The Pennsylvania Turnpike Commission Southern Beltway officially opened in 2022. This new, 13-mile cashless tolling facility serves as a connection to the Pittsburgh International Airport and I-376 to I-79 in Washington County. In addition to the Southern Beltway, the Pennsylvania Turnpike Commission plans to extend the current Mon Fayette Expressway 14 miles north to PA Route 51 in Jefferson Hills to the Parkway East, I-376 East in Monroeville. This project will complete the 68-mile system allowing continuous travel from West Virginia to an interchange with the Parkway East in Monroeville.

The Pittsburgh International Airport is constructing a new \$1.4 billion, 811,000 square foot terminal, which is scheduled to open in 2025. In addition to the new terminal, there is 4,000 acres of developable land around the Pittsburgh International Airport including 30 million square feet of building space. Clinton Commerce Park, Cherrington Commerce Center, Industry Drive, and Airside Business Park have already seen significant investment and development.

The new 340-acre Shell Ethane Cracker plant located in Beaver County, just north of the Pittsburgh International Airport, opened in 2022. Because of this new petrochemical complex,

the region may experience possible new drilling activities and the development of other ancillary businesses.

There are several other anticipated development areas regionwide including the I-79 Corridor in Washington County, State Routes 19 and 228 in Butler County, and the Hazelwood Green Site located in the City of Pittsburgh (the site is a 178-acre site with the potential for 7.9 million sq feet of development).

Pennsylvania Safety Transportation and Research Track ([PennSTART](#)), which will be located in Westmoreland County once completed, is a proposed state-of-the-art testing/research facility that will provide access to innovative technologies for testing, training, and development. This would include automated vehicle testing and development, traffic incident management, tolling, work zones, commercial vehicles, transit vehicles, and other emerging technology areas.

City of Pittsburgh: Opened in 2021, The I-579 Cap Urban Connector Project consisted of the construction of a new cap structure spanning over a portion of I-579 Crosstown Boulevard. The project provides a linkage from the old Civic Arena site to the Central Business District, and improves the safety of pedestrians and bicyclists, as well as provides a new and improved link to public transportation to the nearby Steel Plaza subway station. In 2021, encouraged by the new linkage, First National Bank broke ground on their new 26-story headquarters on the old Civic Arena site. There are also plans for a 288-space parking garage, entertainment venue, and two residential buildings.

Connected and Autonomous Vehicles (CAV) have the potential to significantly improve safety, enhance mobility and accessibility, reduce environmental load and promote economic growth in the region. In 2019, the City of Pittsburgh became the first city to put out objectives and expectations around testing of autonomous vehicles, known as the Pittsburgh [Principals](#). The City of Pittsburgh is also home to some of the nations top Universities including the University of Pittsburgh and Carnegie Mellon University. Because of these two things, the city has become a test bed for Autonomous Vehicle testing and investment. Also, since the 2019 ROP, PennDOT has developed policies regarding CAV and released Publication 950 *Automated Vehicle Testing Guidance* to further encourage development in this area. Lastly, the need for policy that will ensure AV technology is equitable and accessible should be well-thought-out so that economically disadvantaged populations are not excluded from the benefits.

Pittsburgh Regional Transit's proposed Downtown-Uptown-Oakland-East End BRT service plan calls for a core service operated across five bus routes that go east to Highland Park, Wilkinsburg, Braddock, and McKeesport. The BRT system will aim to deliver faster, more comfortable, and further cost effective services via dedicated lanes and more frequent operations.

New ROP Needs and Projects

During the stakeholder engagement process for this interim update, a number of new issues and needs were discussed. These locations were reviewed and, where applicable, new ROP projects have been drafted for consideration. These projects have not undergone the data-heavy prioritization process which was used during the major update in 2018. Therefore, these projects should be considered alongside, but not in lieu of, projects previously included.

In total, 50 new projects have been included in this interim ROP update. They are summarized on **Table 3**. The projects include additional ITS needs, Transit Improvements, traffic signal improvement corridors, multimodal connectivity, intersection improvements, and traveler information. Project summary sheets have also been included starting on page 13. Projects are numbered sequentially for referencing with “Interim Update” or “IU” project numbers, but no hierarchy should be assumed from the order given. No quantitative or qualitative prioritization was completed during this interim update. Prioritization can be revisited during a subsequent major ROP update.

TABLE 3: INTERIM UPDATE ROP PROJECT ADDITIONS

Project #	Project	Stakeholders	Planned Improvements
IU.01	Corridor R Homestead to McKeesport Transit Improvements	PRT, PennDOT 11-0	Study to look at Transit Improvements
IU.02	Corridor M and Corridor K Parkway North HOV Conversion Study	PRT, PennDOT 11-0, SPC	Study looking at transit improvements (Rapid transit connection via HOV with exclusive two-way transit facility).
IU.03	Corridor G East/Central Pittsburgh River to River Connection	PRT, PennDOT 11-0, City of Pittsburgh DOMI	Study to look at Transit Improvements
IU.04	Corridor D Library Line Best Use Study	PRT, SPC	Study looking at transit improvements (Evaluate the existing light rail infrastructure for better utilization)
IU.05	Corridor E East Busway Phased Extensions	PRT, Local Municipalities	Study to look at Transit Improvements
IU.06	Corridor H Allentown/Downtown LRT Best Use Study	PRT, SPC, City of Pittsburgh DOMI	Study looking at transit improvements (Best uses for existing Allentown light rail alignment and rail spur from Steel Plaza to Penn Station)

**Regional Operations Plan for
Southwestern Pennsylvania**

Project #	Project	Stakeholders	Planned Improvements
IU.07	Corridor F East Busway to Monroeville Rapid Transit	PRT, PennDOT 11-0	Study to look at Transit Improvements, Busway Extension to Monroeville
IU.08	Corridor J Allegheny Valley Rapid Transit	PRT, PennDOT 11-0	Study to look at Transit Improvements
IU.09	Corridor A Airport Corridor Rapid Transit	PRT, PennDOT 11-0	Study Transit Improvements, (Extend West Busway/transit to the Airport)
IU.10	I-79 Seneca Ramps- TSMO	PennDOT 10-0	Traffic Incident Management/Traveler Information
IU.11	SR 8/SR 4010 Intersection ITS	PennDOT 10-0	Freeway and Arterial Operations
IU.12	SR 4010/Harmony Intersection ITS	PennDOT 10-0	Traveler Information
IU.13	SR 85/SR 2001 Intersection ITS	PennDOT 10-0	Traveler Information
IU.14	SR 422/SR 403 Intersection ITS	PennDOT 10-0	Freeway and Arterial Operations
IU.15	SR 68 Jefferson and Cunningham St Signal Improvement - CMAQ	PennDOT 10-0	Traffic Signal Improvements
IU.16	US 22 Corridor ITS/Signal Improvements	PennDOT 10-0	Traffic Incident Management/Traveler Information
IU.17	US 22 Corridor ITS/Signal Improvements	PennDOT 10-0	Traffic Incident Management/Traveler Information
IU.18	I-80 & Applicable State Routes	PennDOT 10-0	Traffic Incident Management/Traveler Information
IU.19	I-79 & Applicable State Routes	PennDOT 10-0	Traffic Incident Management/Traveler Information
IU.20	I-79 ITS	PennDOT 10-0	Traffic Incident Management/Traveler Information
IU.21	North Fayette Trail Connector	North Fayette Township, PennDOT 11-0, Allegheny County, PRT	Multimodal Connectivity
IU.22	Completing the Loop	Riverlife, PennDOT 11-0, Allegheny County	Multimodal Connectivity

**Regional Operations Plan for
Southwestern Pennsylvania**

Project #	Project	Stakeholders	Planned Improvements
IU.23	Turtle Creek Connector Trail	Study corridor municipalities, PennDOT 11-0, Allegheny County, PRT	Multimodal Connectivity
IU.24	Verona/Oakmont/Plum/Penn Hills Trail	Municipalities, PennDOT 11-0, PRT	Multimodal Connectivity
IU.25	Three Rivers Heritage Trail - Allegheny Valley	Municipalities, PennDOT 11-0, PRT	Multimodal Connectivity
IU.26	Three Rivers Heritage Trail - Hazelwood to Carrie Furnace	Municipalities (Pittsburgh, Swissvale, and Rankin), PennDOT 11-0, PRT	Multimodal Connectivity
IU.27	Little Pine Creek Connector	Municipalities, PennDOT 11-0, PRT	Multimodal Connectivity
IU.28	Panhandle Trail Extension	Municipalities, PennDOT 11-0, PRT, Allegheny County	Multimodal Connectivity
IU.29	White Oak Park to South Park Connector	Municipalities, Montour Trail Council, Steel Valley Trail Council, PennDOT 11-0, Allegheny County	Multimodal Connectivity
IU.30	The Eastern Pittsburgh Multimodal Corridor Project	PennDOT 11-0, PRT, Allegheny County, SPC	ITS/Multimodal Connectivity/Transit Improvements
IU.31	Smart Spines - City of Pittsburgh	FHWA, City of Pittsburgh, PennDOT 11-0, PRT	Traffic Signal Improvements, ITS, Multimodal Connectivity
IU.32	US 22 (North Fayette & Robinson) ITS	PennDOT 11-0	Traveler Information
IU.33	US 22 at Northern Pike Intersection Improvement	PennDOT 11-0	Freeway and Arterial Operations
IU.34	PA 8 at Wildwood Road Intersection Improvement	PennDOT 11-0	Freeway and Arterial Operations
IU.35	PA 65 from I-79 to City of Pittsburgh	PennDOT 11-0	Traveler Information
IU.36	PA 51 from PA 88 to Turnpike	PennDOT 11-0	Traveler Information
IU. 37	SR 3069 West Liberty Ave to the Liberty Bridge intersection	PennDOT 11-0	Traveler Information/Freeway and Arterial Operations
IU.38	SR 51 and SR 151 Roundabout	PennDOT 11-0	Freeway and Arterial Operations
IU.39	Union Ave/Gass Rd/Highland Ave Roundabout	PennDOT 11-0	Freeway and Arterial Operations
IU.40	Route 19 Ross Twp Road Diet	PennDOT 11-0	Freeway and Arterial Operations
IU.41	SR 151 at Brodhead Road, a 5-legged intersection	PennDOT 11-0	Freeway and Arterial Operations

**Regional Operations Plan for
Southwestern Pennsylvania**

Project #	Project	Stakeholders	Planned Improvements
IU.42	McKnight Rd at Seibert Rd Improvements	PennDOT 11-0	Freeway and Arterial Operations
IU.43	Lowries Run Rd/Rochester Road Roundabout	PennDOT 11-0	Freeway and Arterial Operations
IU.44	Sewickley Oakmont Road/US 19 Intersection Improvements	PennDOT 11-0	Freeway and Arterial Operations
IU.45	Mayview/Lesnett/Bank/Chartiers Avenue Intersection Improvement	PennDOT 11-0	Signal
IU.46	Parkway East Active Traffic Management (ATM)	PennDOT 11-0	Freeway and Arterial Operations
IU.47	I-376 Fort Pitt Tunnel Over Height Truck System	PennDOT 11-0	Traveler Information/Freeway and Arterial Operations
IU.48	I-70 Fiber Gaps	PennDOT 12-0	Fiber Optic Cable
IU.49	I-79 Fiber Gaps	PennDOT 12-0	Fiber Optic Cable
IU.50	District 12 CCTV	PennDOT 12-0	CCTV

Previous ROP Project Status

Project #	Project Name	PennDOT District(s)	Planning Partner	County	Project Location	Priority Area	Planned Improvements	Stakeholders	Estimated Cost (Capital)	Priority	Project Status	Funding Source	Notes
FA.01	Bates St. Interchange Improvements	11	SPC	Allegheny	I-376	Freeway and Arterial Operations	Interchange Improvements	PennDOT 11-0	10M+	High	Partial Progress	STIP – Surface transportation Prog-Flexible funds.	
FA.02	I-79 ICM (District 12)	12	SPC	Washington	I-79, US 19	Freeway and Arterial Operations	Integrated Corridor Management	PennDOT 12-0	2M- 10M	High	In Design	Capital and CMAQ	We are currently in design on the US 19 portion of this project. The US 19 project will include minor signal upgrades and the installation of an adaptive signal system on all traffic signals on US 19 from I-70 to the Allegheny County line.
FA.03	Campbells Run Queue Warning	11	SPC	Allegheny	I-376	Freeway and Arterial Operations	Queue Warning, DMS	PennDOT 11-0	<500k	Normal	Documented		ATMS can now build corridors for advanced queue warning systems using existing CMS. No project has been developed to add CMS boards for this purpose.
FA.04	Parkway North ICM	11	SPC	Allegheny	US 19	Freeway and Arterial Operations	Smart Parking, Traffic signal Improvements, Transit Improvements	PennDOT 11-0, PRT	2M- 10M	Normal	Documented		
FA.05	Veterans Bridge Junction Control	11	SPC	Allegheny	I-279, I-279	Freeway and Arterial Operations	Junction Control	PennDOT 11-0	500k-2M	Normal	Documented		Grant application not approved last round.
MC.01	South Hills Village Smart Parking	11	SPC	Allegheny	I-79, US 19	Multimodal Connectivity	Smart Parking, DMS	PennDOT 11-0, PRT	500k-2M	High	In Design	TSMO	Static sign was added. No ROW for CMS. Parking availability is funded using TSMO funds transferred from FHWA to FTA. PRT will have a better update on the project status.
MC.02	W. Carson St. Multimodal Improvements	11	SPC	Allegheny	W. Carson St.	Multimodal Connectivity	Transit Improvements	PennDOT 11-0, PRT	500k-2M	High	Documented		
MC.03	Penn Ave. Transit Improvements	11	SPC	Allegheny	Penn Ave.	Multimodal Connectivity	Transit Improvements	City of Pittsburgh, PRT	<500k	High	Documented		
MC.04	Centre Ave. Transit Improvements	11	SPC	Allegheny	Centre Ave.	Multimodal Connectivity	Transit Improvements	City of Pittsburgh, PRT	<500k	High	Documented		
MC.06	Carnegie Smart Parking	11	SPC	Allegheny	I-376	Multimodal Connectivity	Smart Parking, DMS	PennDOT 11-0, PRT	<500k	Normal	In Design	TSMO	Parking availability is funded using TSMO funds transferred from FHWA to FTA. PRT will have a better update on the project status.
MC.07	Wilkinsburg Smart Parking	11	SPC	Allegheny	I-376	Multimodal Connectivity	Smart Parking, DMS	PennDOT 11-0, PRT	<500k	Normal	In Design	TSMO	Parking availability is funded using TSMO funds transferred from FHWA to FTA. PRT will have a better update on the project status.
MC.08	Liberty Ave. Transit Improvements	11	SPC	Allegheny	Liberty Ave.	Multimodal Connectivity	Transit Improvements	City of Pittsburgh, PRT	<500k	High	Documented		
MC.09	Kennywood Blvd./Browns Hill Rd. Transit Improvements	11	SPC	Allegheny	Kennywood Blvd	Multimodal Connectivity	Transit Improvements	PennDOT 11-0, City of Pittsburgh, PRT	<500k	High	Documented		
MC.10	E. Carson St. Transit Improvements	11	SPC	Allegheny	Carson St.	Multimodal Connectivity	Transit Improvements	PennDOT 11-0, PRT	<500k	High	Documented		
MC.11	Second Ave. Transit Improvements	11	SPC	Allegheny	Second Ave.	Multimodal Connectivity	Transit Improvements	City of Pittsburgh, PRT	<500k	High	Documented		
MC.12	Healthy Ride (Pittsburgh Bike Share) E-Bike Deployment	11	SPC	Allegheny	various	Multimodal Connectivity	Bike Share	Pittsburgh Bike Share	<500k	Normal	Documented		
MC.13	"The Chute" to Eliza Furnace Trail Bike Connection	11	SPC	Allegheny	Eliza Furnace Trail	Multimodal Connectivity	Bike Improvements	City of Pittsburgh	<500k	Normal	Documented		
MC.14	Brady St. to Heritage Trail Bike Connection	11	SPC	Allegheny	Brady St.	Multimodal Connectivity	Bike Improvements	City of Pittsburgh	<500k	Normal	Documented		
MC.15	Butler St. Bike Connection	11	SPC	Allegheny	Butler St.	Multimodal Connectivity	Bike Improvements	City of Pittsburgh	<500k	Normal	Documented		
MC.16	PennAve. Bike Connection	11	SPC	Allegheny	Penn Ave.	Multimodal Connectivity	Bike Improvements	City of Pittsburgh	<500k	Normal	Documented		
MC.17	East Allegheny Ped/Bike Improvements	11	SPC	Allegheny	East Allegheny	Multimodal Connectivity	Pedestrian/Bike Improvements	City of Pittsburgh	<500k	Normal	Documented		
OT.01	Key Bank Pavilion Event Management & Signal Improvements	12	SPC	Washington	US 22	Operational Teamwork/Institutional Coordination	Traffic Signal Improvements, DMS	PennDOT 12-0, PennDOT 11-0	<500k	Normal	Documented		This project has not progressed very far yet. We believe that the Pavilion will need to get involved in the project to make it successful because there are some traffic flow improvements that need to be made on the site itself.
TI.01	Hogback Hill RWIS	10	SPC	Armstrong	PA 28	Traveler Information	RWIS	PennDOT 10-0	<500k	High	Documented		N/A
TI.02	US 22 Corridor ITS/Signal Improvements	10	SPC	Indiana	US 22	Traveler Information	CCTV, DMS	PennDOT 10-0	500k-2M	High	In Construction	100% Federal	ECMS# 114842. Construction phase is in 60-day test period for devices.
TI.03	US 422 Corridor ITS	10	SPC	various	US 422	Traveler Information	CCTV, DMS	PennDOT 10-0	2M- 10M	High	Documented		
TI.04	District 12-0 RWIS Expansion	12	SPC	various	US 30, US 40	Traveler Information	RWIS	PennDOT 12-0	<500k	High	Documented		We are currently exploring what type of procurement method could be used to get these devices installed.
TI.06	Western RTMC Upgrade	11	SPC	Allegheny	District 11-0	Traveler Information	RTMC Upgrade	PennDOT 11-0, PennDOT Central Office	2M- 10M	High	Partial Progress	TSMO	Concept of Operations and Systems Engineering/High Level Concepts being developed under an agreement currently.
TI.10	PA-28 ITS	10	SPC	Butler	PA 28	Traveler Information	CCTV, DMS	PennDOT 10-0	500k-2M	Normal	In Construction	100% Federal	ECMS# 114842. Construction phase is in 60-day test period for devices.
TI.11	US 22 Bridge De-Icing	10	SPC	Indiana	US 22	Traffic Incident Management	Bridge De-icing, RWIS, CCTV	PennDOT 10-0	500k-2M	Normal	Documented		
TI.12	I-376 Corridor ITS	11	SPC	various	I-376	Traveler Information	CCTV, DMS, RWIS	PennDOT 11-0	500k-2M	Normal	In Design	TSMO	TSMO funds and interstate funds approved for design and construction for Beaver County I-376 ITS expansion. Current let date is 6/8/2023.
TI.13	PA-8 Arterial ITS	11	SPC	Allegheny	PA 8	Traveler Information	CCTV, DMS	PennDOT 11-0	500k-2M	Normal	Documented		
TI.14	US 22 (Monroeville) Arterial ITS	11	SPC	Allegheny	US 22	Traveler Information	CCTV, DMS	PennDOT 11-0	500k-2M	Normal	In Design	TSMO	Fully designed and being let under a betterment, SR 2048-A14 on 1/12/2023. Construction planned to be completed by end of 2024.
TI.15	I-70/US 40 Detour ITS	12	SPC	various	US 40	Traveler Information	CCTV, DMS	PennDOT 12-0	500k-2M	Normal	Documented		Future TFI grants will be reviewed to see if funding can be secured for these projects.
TI.24	Butler County Fiber Ring Deployment	10	SPC	Butler	US 422, PA 8, PA 228	Traveler Information	Fiber Optic Cable	PennDOT 10-0	10M+	Normal	Documented		
TIM.01	Armstrong County Bridge De-Icing	10	SPC	Armstrong	PA 28, US 422	Traffic Incident Management	Bridge De-icing, RWIS, CCTV	PennDOT 10-0	500k-2M	High	Documented		
TIM.02	PA-28 Freeway Service Patrol	11	SPC	Allegheny	PA 28	Traffic Incident Management	Freeway Service Patrol	PennDOT 11-0	<500k	High	In Construction	TSMO	Contractor on our current FSP contract being tracked separately with the grant funding on SR 28.
TIM.03	PA-28 TIM Team	11	SPC	Allegheny	PA 28	Traffic Incident Management	TIM Team	PennDOT 11-0, SPC, Local Municipalities, Emergency Personnel	<500k	High	Documented		
TIM.05	I-79 Curve Warning	10	SPC	Butler	I-79	Traffic Incident Management	Dynamic Curve Warning	PennDOT 10-0	<500k	Normal	Documented		
TIM.06	US 30 Curve Warning	12	SPC	Westmoreland	US 30	Traffic Incident Management	Dynamic Curve Warning	PennDOT 12-0	<500k	Normal	Documented		We are currently exploring what type of system should be used for this project.
TS.01	Greensburg Operational Improvements	12	SPC	Westmoreland	US 30, US 199	Traffic Signals	Traffic Signal Improvements	PennDOT 12-0	500k-2M	High	Programmed	CMAQ	CMAQ grants have been awarded and design is to begin in 2023 for projects on US 30 and US 119 in the Greensburg area.
TS.02	PA-8 Traffic Signal Improvements	10	SPC	Butler	PA 8	Traffic Signals	Traffic Signal Improvements	PennDOT 10-0	500k-2M	Normal	In Construction	100% Federal	ECMS# 110454. Construction to be completed in 2023.

Project #	Project Name	PennDOT District(s)	Planning Partner	County	Project Location	Priority Area	Planned Improvements	Stakeholders	Estimated Cost (Capital)	Priority	Project Status	Funding Source	Notes
TS.07	East End Traffic Signal Improvements	11	SPC	Allegheny	PA 8, PA 380, PA 130	Traffic Signals	Traffic Signal Improvements	PennDOT 11-0	500k-2M	Normal	Documented		
TS.08	PA-51 DOT Signal Pilot	11	SPC	Allegheny	PA 51	Traffic Signals	Traffic Signal Improvements	PennDOT 11-0	<500k	Normal	Documented		SR 51 PennDOT ownership pilot is still being discussed as we've been learning from the Eastern side of the state on signal ownership considerations before we implement it.

Previous ROP Studies and Initiatives Status

Study	Priority Area	Stakeholders*	Notes
Downtown Pittsburgh Bridge Operations Study	Freeway and Arterial Operations	SPC, PennDOT 11-0, PRT	Study to improve operations in the vicinity of the Downtown river crossings.
Parkway West ICM Study	Freeway and Arterial Operations	PennDOT 11-0	Study conversion of shoulders for flex lane or transit lane use. Identify other ICM needs.
Regional ITS Strategic Plan	Traveler Information	SPC, PennDOT	In addition to ITS device projects identified in this plan, conduct a regionwide study to determine any other remaining ITS coverage gaps and prioritize for future projects.
Indiana University of Pennsylvania (IUP) Special Events Traffic Management Study	Operational Teamwork/ Institutional Coordination	IUP, PennDOT 10-0	Improve ingress/egress to events at Kovalchick Convention and Athletic Complex.
Operations Center/Traffic Management Center Coordination	Operational Teamwork/ Institutional Coordination	SPC, PennDOT, PA Turnpike Commission, PRT, Cranberry Township	Improve coordination between Western RTMC and PA Turnpike Traffic Operations Center, particularly for the I-76/I-376 loop, including incident management, construction detours, communications (fiber), device sharing, traveler information, and weather operations. Port Authority operations center and Cranberry Township TMC should also be included.
Person Trips Prioritization Study	Operational Teamwork/ Institutional Coordination	SPC	Determine feasibility of Roadway Tiering based on total person trips (including transit passengers, cyclists, etc.) instead of AADT.
Key Bank Pavilion Event Management Study	Operational Teamwork/ Institutional Coordination	Key Bank Pavilion, PennDOT 12-0	Improve ingress/egress to events at Key Bank Pavilion.
Birmingham Bridge Complete Street Study	Multimodal Connectivity	PennDOT 11-0	Improve safety of existing bike lanes. Consider protected bike lane infrastructure and possible vehicular lane reduction.
Existing Bike Trail Maintenance Initiative	Multimodal Connectivity	SPC	Initiative to ensure continued maintenance of bike trails throughout region.
Regional Park-n-Ride Expansion Study	Multimodal Connectivity	SPC	Study possibilities for expanding existing sites or providing additional sites (coordinate with upcoming Regional Transit Coordination Study).
Park-n-Bike Campaign/Expansion	Multimodal Connectivity	SPC	Initiative to encourage commuters to transfer to bicycles at established trailheads.
Potential Transit Lane Study	Multimodal Connectivity	SPC, PennDOT District 11-0, City of Pittsburgh DOMI, PRT	Study feasibility of other transit lane candidates not included in this report.
Wabash Tunnel Multimodal Use Study	Multimodal Connectivity	SPC, PennDOT District 11-0, City of Pittsburgh DOMI, PRT	Study of alternate uses for tunnel, including possibility of conversion for bike usage.
West End/South Hills Potential Trail Network Study	Multimodal Connectivity	SPC	Study to determine potential trail network utilizing underused or unused right-of-way.
PA-28 Active Traffic Management Study	Freeway and Arterial Operations	PennDOT 11-0	Study flex lanes and other Active Traffic Management strategies.
Parkway North HOV Conversion Study	Freeway and Arterial Operations	PennDOT 11-0, PRT	Consider converting existing HOV lanes in the median of the Parkway North (I-279) to a Port Authority Busway or other use.
US 40 Road Safety Audit	Freeway and Arterial Operations	SPC	Road Safety Audit on US 40, east of Uniontown to Somerset County line.
Route 8 Corridor Operations Planning Study	Freeway and Arterial Operations	SPC	Study to improve operations along Route 8 between Wildwood and Bakerstown.
Western RTMC Region Truck Parking Study	Freight Management	SPC, PennDOT Central Office	Determine needs and locations for possible expansion of truck parking. Study possibility of installing Truck Parking Management System. Consider potential public-private partnership opportunities with private truck stop facilities. Coordinate with planned PennDOT Truck Parking Study.
Western RTMC Region Winter Truck Restriction Impact Study	Freight Management	SPC, PennDOT Central Office	Study impact of winter truck restrictions on parallel corridors and determine best practices for future winter operations.

IU.01: Corridor R Homestead to McKeesport Transit Improvements

PROJECT DESCRIPTION AND SCOPE: Transit Improvements, Browns Hill Rd./Hazelwood Ave. to Kennywood Blvd./Library St./Eighth Avenue (PA 837)

STAKEHOLDERS: PRT, PennDOT 11-0

ESTIMATED SCHEDULE: 3 years

ESTIMATED COSTS: \$47M - \$58M

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity

LEVEL OF EFFORT: High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: Improved Transit Time

BENEFITS: Improved transit flow and reduced congestion along an important arterial Browns Hill Rd./Hazelwood Ave. to Kennywood Blvd./Library St./Eighth Avenue (PA 837).

OTHER CONSIDERATIONS AND ISSUES: Coordination with the municipalities and PennDOT 11-0.

IU.02: Corridor M & K Parkway North HOV Conversion Study

PROJECT DESCRIPTION AND SCOPE: Rapid transit connection between the Downtown-North Shore areas and Ross Township via an exclusive two-way transit facility using the I-279 HOV lanes as a center-running transit facility and continued rapid or commuter-based transit service (depending on ridership projections) as far as north Cranberry Township in Butler County. Ross should be considered as a major transit hub in this study, with local service tie-ins to Corridor M.

STAKEHOLDERS: PRT, PennDOT 11-0, SPC

ESTIMATED SCHEDULE: 3 years

ESTIMATED COSTS: \$57M - \$68M/\$45M - \$54M

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity

LEVEL OF EFFORT: High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: Improved Transit Time and Expansion

BENEFITS: Improved transit flow between the Downtown-North Shore area to Ross Township.

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.03: Corridor G East/Central Pittsburgh River to River Connection

PROJECT DESCRIPTION AND SCOPE: A transit center in the Strip District at or near 21st Street could incorporate a new East Busway station and anchor a vertical connection to the Hill District. A Hill District transit center would tie together east-west bus routes and could offer micro-mobility connections to the rest of the neighborhood. In Oakland, connections to the Downtown-Uptown-Oakland-East End Bus Rapid Transit Project (currently in final design) and other transit lines will be critical to supporting connectivity and maximizing ridership. Linking with transit on Second Avenue and local connections in Hazelwood will support new development while enhancing access to employment, educational and training opportunities in the corridor. In Carrick and Overbrook, new direct connections will open new opportunities that have historically taken significant time to reach via transit. An Overbrook transit center could also eventually link to the Blue Line light rail and the overall South Hills transit network, providing additional connections to Oakland jobs for residents in the South Hills.

STAKEHOLDERS: PRT, PennDOT 11-0, City of Pittsburgh DOMI

ESTIMATED SCHEDULE: 10 years

Life Cycle: N/A

ESTIMATED COSTS: \$168M - \$218M

PROJECT TYPE: Multimodal Connectivity

LEVEL OF EFFORT: High

TECHNOLOGY COMPONENTS (if applicable): N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: Improved Transit Time and Expansion

BENEFITS: Improved transit flow, New facilities including a transit center, new east busway station, Hill District transit center, potential economic development opportunities

OTHER CONSIDERATIONS AND ISSUES: Cost

IU.04: Corridor D Library Line Best Use Study

PROJECT DESCRIPTION AND SCOPE: The goal of the study will be to evaluate the existing light rail infrastructure to determine if or how it can be better utilized. This could include changing service or mode of the line or focusing on the infrastructure in place and ways to partner with municipalities to improve its usage and overall connectivity.

STAKEHOLDERS: PRT, SPC

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: N/A

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity

LEVEL OF EFFORT: Medium

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Better utilization of existing light rail infrastructure

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.05: Corridor E East Busway Phased Extensions

PROJECT DESCRIPTION AND SCOPE: The recently completed BEN 2030 FUTURES: Braddock, East Pittsburgh, and North Braddock Joint Comprehensive Plan calls for expansion of rapid transit in these communities beyond the East Busway. Pre-2020 trip patterns show a high rate of travel between East Pittsburgh and McKeesport, which is approximately 10 minutes by car, but 40 minutes by transit. Long transit travel times between the City of Duquesne and East Pittsburgh inhibit residents of Duquesne from accessing jobs in the Turtle Creek Valley. Additional services at a transit center in East Pittsburgh, which is home to Keystone Commons, a major Mon Valley job center and key crossroads in several directions, are also proposed.

STAKEHOLDERS: PRT, Local Municipalities

ESTIMATED SCHEDULE: 10 years

ESTIMATED COSTS: \$121M - \$151M

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity

LEVEL OF EFFORT: High

TECHNOLOGY COMPONENTS (if applicable): N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: Improved Transit Time and Expansion

BENEFITS: Extend East busway to decrease transit trip time between East Pittsburgh and McKeesport.

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.06: Corridor H Allentown/Downtown LRT Best Use Study

PROJECT DESCRIPTION AND SCOPE: The PRT will conduct a study to investigate the best uses for the existing Allentown light rail alignment and the rail spur from Steel Plaza to Penn Station, both of which are physically operational but do not currently operate regularly scheduled service. Both assets require further study to determine what configuration of service and infrastructure would best serve riders in a way that is financially viable for the Authority. There are several issues to address such as how or if it would change bus service in the area and meet ADA law given that the system was built prior to passage of the Act and is currently inaccessible.

STAKEHOLDERS: PRT, SPC, City of Pittsburgh, DOMI

ESTIMATED SCHEDULE: 10 years

ESTIMATED COSTS: \$8M - \$10M

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity

LEVEL OF EFFORT: High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: Capacity upgrades

BENEFITS: Light rail service in Allentown and service between Steel Plaza and Penn Station.

OTHER CONSIDERATIONS AND ISSUES: Cost

IU.07: Corridor F East Busway to Monroeville Rapid Transit

PROJECT DESCRIPTION AND SCOPE: Completing a rapid transit connection from Downtown further east to Monroeville could involve dedicated facilities directly connecting to the East Busway at or near the Parkway East. This connection would involve bus-only ramps or bridges rising from the highway to Edgewood Avenue, and a new entrance to the East Busway.

STAKEHOLDERS: PRT, PennDOT 11-0

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: \$117M - \$141M

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity

LEVEL OF EFFORT: High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Bus Rapid Transit from downtown to Monroeville.

OTHER CONSIDERATIONS AND ISSUES: Cost

IU.08: Corridor J Allegheny Valley Rapid Transit

PROJECT DESCRIPTION AND SCOPE: Key elements of this project would emphasize maximizing connections to job centers, neighborhood centers, and major transit routes. The new line could serve commercial centers through the Strip District and Lawrenceville, Morningside, and the Pittsburgh Zoo, then continue on to the upper Allegheny Valley through Verona, Oakmont, and New Kensington. The Brilliant Branch line that begins in Aspinwall could directly link with the AVRR main line near Highland Park via the Brilliant Bridge and link to the East Busway in Larimer.

STAKEHOLDERS: PRT, PennDOT 11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$231M - \$298M

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity

LEVEL OF EFFORT: High

TECHNOLOGY COMPONENTS (if applicable): N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Connect job centers and commercial centers from New Kensington to Pittsburgh's CBD via Allegheny Valley RR. Would also connect Aspinwall via Brilliant Branch.

OTHER CONSIDERATIONS AND ISSUES: Cost

IU.09: Corridor A Airport Corridor Rapid Transit

PROJECT DESCRIPTION AND SCOPE: This proposed project will enable faster service to the airport by extending the rapid service currently serving the West Busway well beyond the current terminus in Carnegie Borough. It would extend Port Authority's West Busway (which connects riders Downtown to Carnegie via an exclusive transit right-of-way) in two places.

STAKEHOLDERS: PRT, PennDOT 11-0

ESTIMATED SCHEDULE: 10 years

ESTIMATED COSTS: \$274M - \$325M

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity

LEVEL OF EFFORT: High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Faster service from downtown to airport

OTHER CONSIDERATIONS AND ISSUES: Cost

IU.10: I-79 Seneca Ramps - TSMO

PROJECT DESCRIPTION AND SCOPE: Currently started FD Phase. Construction to begin in 2024 and be completed same year, possibly extend into 2025. ECMS# 116661

STAKEHOLDERS: PennDOT 10-0

ESTIMATED SCHEDULE: 3 years

ESTIMATED COSTS: \$500k - \$700k

Life Cycle: N/A

PROJECT TYPE: ITS

LEVEL OF EFFORT: Medium

TECHNOLOGY COMPONENTS *(if applicable)*: Dual DMS, CCTV Camera, and Queue Detection.

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Interstate situational awareness, safety improvements with Dual DMS, CCTV Camera and queue detection.

OTHER CONSIDERATIONS AND ISSUES: Project currently in-design. CON Funds are 50% State & 50% Federal.

IU.11: SR 8/SR 4010 Intersection ITS

PROJECT DESCRIPTION AND SCOPE: Currently started FD Phase. Construction to begin in 2024 and be completed same year, possibly extend into 2025. MPMS# 117903

STAKEHOLDERS: PennDOT 10-0

ESTIMATED SCHEDULE: 3 years

ESTIMATED COSTS: \$185k

Life Cycle: N/A

PROJECT TYPE: ITS

LEVEL OF EFFORT: Medium

TECHNOLOGY COMPONENTS *(if applicable)*: LED bordered signing

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Replacing Flashing Warning Device in-place and adding additional LED bordered signing to improve safety at intersection.

OTHER CONSIDERATIONS AND ISSUES: Project currently in-design. CON Funds are 100% Federal.

IU.12: SR 4010/Harmony Intersection ITS

PROJECT DESCRIPTION AND SCOPE: Currently started FD Phase. Construction to begin in 2024 and be completed same year, possibly extend into 2025. CON Funds are 100% Federal. MPMS# 117905

STAKEHOLDERS: PennDOT 10-0

ESTIMATED SCHEDULE: 3 years

ESTIMATED COSTS: \$40k - \$85k

Life Cycle: N/A

PROJECT TYPE: ITS

LEVEL OF EFFORT: Medium

TECHNOLOGY COMPONENTS *(if applicable):* LED bordered signing

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Adding additional LED bordered signing to improve safety at intersection.

OTHER CONSIDERATIONS AND ISSUES: Project currently in-design. CON funds are 100% Federal.

IU.13: SR 85/SR 2001 Intersection ITS

PROJECT DESCRIPTION AND SCOPE: Currently started FD Phase. Construction to begin in 2024 and be completed same year, possibly extend into 2025. CON Funds are 100% Federal. MPMS# 117907

STAKEHOLDERS: PRT, PennDOT 11-0

ESTIMATED SCHEDULE: 3 years

ESTIMATED COSTS: \$40k - \$85k

Life Cycle: N/A

PROJECT TYPE: ITS

LEVEL OF EFFORT: Medium

TECHNOLOGY COMPONENTS *(if applicable):* LED bordered signing

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Adding additional LED bordered signing to improve safety at intersection.

OTHER CONSIDERATIONS AND ISSUES: Project currently in-design. CON Funds are 100% Federal.

IU.14: US 422/SR 403 Intersection ITS

PROJECT DESCRIPTION AND SCOPE: Currently started FD Phase. Construction to begin in 2024 and be completed same year, possibly extend into 2025. CON Funds are 100% Federal. MPMS# 117909

STAKEHOLDERS: PennDOT 10-0

ESTIMATED SCHEDULE: 3 years

ESTIMATED COSTS: \$185k

Life Cycle: N/A

PROJECT TYPE: ITS

LEVEL OF EFFORT: Medium

TECHNOLOGY COMPONENTS *(if applicable)*: Flashing Warning Signs, LED bordered signing.

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Replacing Flashing Warning Device in-place and adding additional LED bordered signing to improve safety at intersection.

OTHER CONSIDERATIONS AND ISSUES: Project currently in-design. CON Funds are 100% Federal.

IU.15: SR 68 Jeff and Cunningham Street Signal Improvements

PROJECT DESCRIPTION AND SCOPE: Replacing nine (9) existing traffic signals and retiming corridors. MPMS# 117264

STAKEHOLDERS: PennDOT 10-0

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: \$3.3M CMAQ

Life Cycle: N/A

PROJECT TYPE: Signal

LEVEL OF EFFORT: Medium

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Replacing nine (9) existing traffic signals and retiming corridors.

OTHER CONSIDERATIONS AND ISSUES: Currently starting PE Phase. CON Funds are 80% Federal & 20% State.

IU.16: US 22 Corridor ITS/Signal Improvements

PROJECT DESCRIPTION AND SCOPE: Need to install fiber along corridor and to connect ITS & signals.

STAKEHOLDERS: PennDOT 10-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$1M - \$4M

Life Cycle: N/A

PROJECT TYPE: Traffic Incident Management/Traveler Information **LEVEL OF EFFORT:** Medium

TECHNOLOGY COMPONENTS *(if applicable):* Fiber Optic Cable

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: US 22 Corridor ITS/Signal Improvements

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.17: US 22 Corridor ITS/Signal Improvements

PROJECT DESCRIPTION AND SCOPE: SR 22 DMS & CCTV Cameras out towards SR 119 in Southwestern Indiana.

STAKEHOLDERS: PennDOT 10-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$500k – \$2M

Life Cycle: N/A

PROJECT TYPE: Traffic Incident Management/Traveler Information **LEVEL OF EFFORT:** Medium

TECHNOLOGY COMPONENTS *(if applicable):* CCTV, DMS

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: US 22 Corridor ITS/Signal Improvements

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.18: I-80 & Applicable State Routes

PROJECT DESCRIPTION AND SCOPE: Need to update Color Coded Detour signing and information. Interstates & other State Routes.

STAKEHOLDERS: PennDOT 10-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: <\$500k

Life Cycle: N/A

PROJECT TYPE: Traffic Incident Management/Traveler Information **LEVEL OF EFFORT:** Medium

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Update Color Coded Detours

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.19: I-79 & Applicable State Routes

PROJECT DESCRIPTION AND SCOPE: Need to update Color Coded Detour signing and information. Interstates & other State Routes.

STAKEHOLDERS: PennDOT 10-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: <\$500k

Life Cycle: N/A

PROJECT TYPE: Traffic Incident Management/Traveler Information **LEVEL OF EFFORT:** Medium

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Update Color Coded Detours

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.20: I-79 ITS

PROJECT DESCRIPTION AND SCOPE: We still have a lot of gaps in DMS and CCTV along I-79 through our district.

STAKEHOLDERS: PennDOT 10-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$500k - \$1M

Life Cycle: N/A

PROJECT TYPE: Traffic Incident Management/Traveler Information **LEVEL OF EFFORT:** Medium

TECHNOLOGY COMPONENTS *(if applicable):* DMS & CCTV Cameras

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: DMS & CCTV Cameras

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.21: North Fayette Trail Connector

PROJECT DESCRIPTION AND SCOPE: Connect from the Pointe at North Fayette to the Montour Trail, Pittsburgh Technical College, and Settlers Cabin Park/Pittsburgh Botanical Garden.

STAKEHOLDERS: North Fayette Township, PennDOT 11-0, Allegheny County, PRT

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: \$3M

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: On-road and road-adjacent bicycle accommodations.

OTHER CONSIDERATIONS AND ISSUES: Project Status: In Design

IU. 22: Completing the Loop

PROJECT DESCRIPTION AND SCOPE: Will connect to trail and park systems on either side of the bridge. Riverlife is leading the effort.

STAKEHOLDERS: Riverlife, PennDOT 11-0, Allegheny County

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: N/A

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity **LEVEL OF EFFORT:** Medium

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Bicycle and pedestrian improvements to the West End Bridge.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Partial Progress

IU.23: Turtle Creek Connector Trail

PROJECT DESCRIPTION AND SCOPE: Trail to connect to the Great Allegheny Passage via the Hot Metal Bridge in Rankin to the Westmoreland Heritage Trail in Trafford.

STAKEHOLDERS: Study Corridor Municipalities, PennDOT 11-0, Allegheny County, PRT

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: N/A

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity **LEVEL OF EFFORT:** Medium

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: On-road/road adjacent bicycle accommodations and shared use paths.

OTHER CONSIDERATIONS AND ISSUES: Project Status: In Design

IU.24: VOPP Trail

PROJECT DESCRIPTION AND SCOPE: On-road bicycle accommodations and shared use paths

STAKEHOLDERS: Verona, Oakmont, Penn Hills, Plum Borough, PennDOT 11-0, PRT

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: N/A

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: On-road bicycle accommodations and shared use paths.

OTHER CONSIDERATIONS AND ISSUES: Project Status: In Design

IU.25: Three Rivers Heritage Trail – Allegheny Valley

PROJECT DESCRIPTION AND SCOPE: On road bicycle accommodations and shared use paths from Millvale to Freeport. Design segments include Shaler Township, O'Hara, Harmar, Springdale Township, East Deer Township.

STAKEHOLDERS: Municipalities, PennDOT 11-0, PRT

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: N/A

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: On-road and road-adjacent bicycle accommodations.

OTHER CONSIDERATIONS AND ISSUES: Project Status: In Design

IU: 26: Three Rivers Heritage Trail – Hazelwood to Carrie Furnace

PROJECT DESCRIPTION AND SCOPE: On-road bicycle accommodations and shared use paths. Hazelwood to Rankin Borough.

STAKEHOLDERS: Pittsburgh, Swissvale, Rankin, PennDOT 11-0, PRT

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: N/A

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: On-road bicycle accommodations and shared use paths.

OTHER CONSIDERATIONS AND ISSUES: Project Status: In Design

IU.27: Little Pine Creek Connector

PROJECT DESCRIPTION AND SCOPE: Extends from Kiwanis Park in Shaler along the west bank of Little Pine Creek to Etna's new riverfront park.

STAKEHOLDERS: Shaler, Etna, PennDOT 11-0, PRT

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: N/A

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: On-road and road-adjacent bicycle accommodations.

OTHER CONSIDERATIONS AND ISSUES: Project Status: In Design

IU. 28: Panhandle Trail Extension

PROJECT DESCRIPTION AND SCOPE: Extends from the terminus of the Panhandle Trail at Walkers Mill to the Carnegie West Busway Station.

STAKEHOLDERS: Carnegie, Scott Township, Collier Township, PennDOT 11-0, PRT, Allegheny County

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: N/A

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Rail-with-trail or rail-to-trail.

OTHER CONSIDERATIONS AND ISSUES: Project Status: In Design

IU: 29: White Oak Park to South Park Connector

PROJECT DESCRIPTION AND SCOPE: Effort underway to plan the corridor to connect these two County parks.

STAKEHOLDERS: Municipalities, Montour Trail Council, Steel Valley Trail Council, PennDOT 11-0, PRT, Allegheny County

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: N/A

Life Cycle: N/A

PROJECT TYPE: Multimodal Connectivity **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS (if applicable): N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: On-road bicycle accommodations and shared use paths

OTHER CONSIDERATIONS AND ISSUES: Project Status: Partial Progress

IU.30: The Eastern Pittsburgh Multimodal Corridor Project

PROJECT DESCRIPTION AND SCOPE: The Eastern Pittsburgh Multimodal Corridor (EPMC) Project streamlines travel within these facilities through infrastructure improvements, capital investments, and Active Traffic Management (ATM), among other innovative practices. I-376 Parkway East is the primary route between Downtown Pittsburgh and the PA Turnpike, and is the country's fifth most congested interstate section. Due to physical constraints, an information-driven approach and technological improvements are necessary to improve conditions. \$48.5m towards ATM system: dynamic message boards, variable speed limit systems, wrong way vehicle detection, queue warnings. \$39m for Flood Mitigation on I-376 Westbound Bath tub. \$9m for Arterial Traffic Management to improve incident response and congestion. \$1.2m for sidewalks and pedestrian improvements on Business 22. \$46.5m for hard shoulder running with new ramp to Busway. \$23m for East Busway paving, drainage, and retaining walls. \$23m for Penn Avenue (Wilkinsburg) Bridge Replacement, with set-aside for other bridges. \$13m in Slope Protection and Stabilization. \$10.5m towards Battery Electric Buses and Charging Infrastructure.

STAKEHOLDERS: PennDOT 11-0, PRT, Allegheny County, SPC

ESTIMATED SCHEDULE: 3-5 years

ESTIMATED COSTS: \$213.2M

Life Cycle: N/A

PROJECT TYPE: ITS/Multimodal Connectivity **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS (if applicable): ATM system, DMS, VSL, Wrong Way Detection.

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Reduced congestion and crashes on Parkway East, Flood Mitigation, increased active mobility, increased transit efficiency, reduced emissions.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.31: Smart Spines – City of Pittsburgh

PROJECT DESCRIPTION AND SCOPE: Advanced traffic signal system along 8 corridors, multi-modal advanced signal systems, TMC in the City.

STAKEHOLDERS: FHWA, City of Pittsburgh, PennDOT 11-0, PRT

ESTIMATED SCHEDULE: 5 years

ESTIMATED COSTS: \$29M

Life Cycle: N/A

PROJECT TYPE: Traffic Signal Improvements, ITS, Multimodal Connectivity **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* TMC, CCTV, Video detection feeds.

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: This project seeks to leverage existing and emerging technologies to create a multi-modal advanced signal system which will be able to detect several different roadway users and prioritize their movements based on corridor context and real-time traffic patterns. The Smart Spines project will consist of the following eight corridors and will be divided into two separate phases: Fifth Ave/Washington Blvd, Forbes Ave, Bigelow Blvd, Centre Ave, Second Ave, Saw Mille Run Blvd, West Liberty Ave, and Penn Ave.

OTHER CONSIDERATIONS AND ISSUES: Project Status: In Design. Funding 38% Federal, 38% City, and 24% State.

IU.32: US 22 (North Fayette & Robinson) ITS

PROJECT DESCRIPTION AND SCOPE: Install CCTV cameras and DMS along US 22 through North Fayette and Robinson Townships.

STAKEHOLDERS: PennDOT 11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$500k - \$2M

Life Cycle: N/A

PROJECT TYPE: Traveler Information **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* Traveler Information, CCTV, DMS

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Upgraded signage for travelers on US 22 through North Fayette and Robinson

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.33: US 22 at Northern Pike Intersection Improvements

PROJECT DESCRIPTION AND SCOPE: The project is to consist of roadway and intersection improvements on US 22 (William Penn Highway) at SR 2054 (Northern Pike) and Alpine Village Drive/SR 286 (Golden Mile Hwy) to address existing traffic congestion and safety issues.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$3.5M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Currently SR 2054 (Northern Pike) intersects with SR 22 at a signalized intersection just 515 feet from where Alpine Village Drive/SR 286 (Golden Mile Hwy) also intersects with SR 22 at a signalized intersection. SR 22 is 4 four lanes wide with back-to-back left turn bays that frequently are insufficient for the demand. The demand is due to the missing direct connection between Northern Pike and SR 286 (Golden Mile Hwy). This causes the left through lanes to be blocked causing SR 22 to be minimized to 1 thru lane in either direction during peak hours regularly.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.34: SR 8 at Wildwood Road Intersection Improvements

PROJECT DESCRIPTION AND SCOPE: The project is to consist of roadway and intersection improvements on SR 8 (William Flinn Highway) at SR 4070 (Wildwood Road) to address existing traffic congestion and safety issues.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$6.1M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: The vertical geometry on the west approach of Wildwood Road limits sight distance which has contributed to near crashes for westbound left turns. Both approaches of SR 4070 (Wildwood Road) will be widened from a shared single lane approach for all movements (L-T-R) to an exclusive left turn lane (L) and shared through right turn lane (L-R). Creation of the exclusive left turn lanes will enable protected left turn phasing to improve levels of service, reduce congestion and idling, and reduce crashes with left turns being performed without conflicting traffic.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.35: SR 65 from I-79 to City of Pittsburgh

PROJECT DESCRIPTION AND SCOPE: Install CCTV cameras and DMS along SR 65.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$500k - \$2M

Life Cycle: N/A

PROJECT TYPE: Traveler Information **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS (*if applicable*): Traveler Information, CCTV, DMS

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Traffic flow improvements on SR 65 from I-79 to City of Pittsburgh.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.36: SR 51 from SR 88 to Turnpike

PROJECT DESCRIPTION AND SCOPE: Install CCTV cameras and DMS along SR 51.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$500k - \$2M

Life Cycle: N/A

PROJECT TYPE: Traveler Information **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* Traveler Information, CCTV, DMS

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Traffic flow improvements on SR 51 from SR 88 to Turnpike.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.37: SR 3069 West Liberty Avenue to the Liberty Bridge Intersection

PROJECT DESCRIPTION AND SCOPE: Install CCTV cameras and DMS along SR 3069 along with traffic operational upgrades along the corridor.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$500k - \$2M

Life Cycle: N/A

PROJECT TYPE: Traveler Information/Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* Traveler information, CCTV, DMS

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Traffic flow improvements along West Liberty Avenue within the City of Pittsburgh to the North Portal of the Liberty Tunnel.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.38: SR 51 and SR 151 Roundabout

PROJECT DESCRIPTION AND SCOPE: Reconstruction intersection into a roundabout.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$500k - \$2M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Traffic flow improvements at SR 51 and SR 151 Intersection.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.39: Union Avenue/Gass Road/Highland Avenue Roundabout

PROJECT DESCRIPTION AND SCOPE: Reconstruction intersection into a roundabout.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$2M - \$5M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Traffic flow improvements at Union Avenue/Gass Road/Highland Avenue Roundabout.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.40: US 19 Ross Township

PROJECT DESCRIPTION AND SCOPE: Road Diet - Reduce 4 lanes to 3 lanes, signal upgrades.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$500k - \$2M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Traffic flow improvements along US 19 in Ross Township.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.41: SR 151 at Brodhead Road, A 5-Legged Intersection

PROJECT DESCRIPTION AND SCOPE: SR 151 at Brodhead Road Intersection Improvements.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$2M - \$10M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Intersection improvements at SR 151 and Brodhead Road.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.42: McKnight Road at Seibert Road Improvements

PROJECT DESCRIPTION AND SCOPE: McKnight Rd at Seibert Rd Intersection Improvements.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$500k - \$2M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Intersection improvements at McKnight Road and Seibert Road.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.43: Lowries Run Road/Rochester Road Roundabout

PROJECT DESCRIPTION AND SCOPE: Reconstruction intersection into a roundabout.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$2M - \$5M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS (if applicable): N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Intersection Improvements.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.44: Sewickley Oakmont Road/US 19 Intersection Improvements

PROJECT DESCRIPTION AND SCOPE: Sewickley Oakmont Road/US 19 Intersection Improvements.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$3M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Intersection Improvements

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.45: Mayview/Lesnett/Bank/Chartiers Avenue Intersection Improvements

PROJECT DESCRIPTION AND SCOPE: Mayview/Lesnett/Bank/Chartiers Avenue Intersection Improvements, signalization.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$2M - \$5M

Life Cycle: N/A

PROJECT TYPE: Signal **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* N/A

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Intersection Improvements and Signal Upgrades

OTHER CONSIDERATIONS AND ISSUES: Project Status: Documented

IU.4.6: Parkway East Active Traffic Management (ATM)

PROJECT DESCRIPTION AND SCOPE: Active Traffic Management through the use of ITS infrastructure.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: >\$54M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* ITS Devices

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Operational Improvements using ITS Infrastructure.

OTHER CONSIDERATIONS AND ISSUES: Project Status: Partial Progress

IU.47: I-376 For Pitt Tunnel Over Height Truck System

PROJECT DESCRIPTION AND SCOPE: The location is on I-376 EB between Greentree interchange and the Ft Pitt Tunnel. The planned improvements are LCS, DMS, Traffic flow improvements, traffic signal mainly for over height truck detection entering the Ft Pitt Tunnel. Install DMS and upgraded Lane Control Signs for traveler information that an overheight truck is approaching the Ft. Pitt Tunnel. The traffic signal stops traffic to allow the overheight truck to be routed to SR 19/51 towards the West End Circle using ramps.

STAKEHOLDERS: PennDOT D11-0

ESTIMATED SCHEDULE: N/A

ESTIMATED COSTS: \$2.5M

Life Cycle: N/A

PROJECT TYPE: Freeway and Arterial Operations **LEVEL OF EFFORT:** High

TECHNOLOGY COMPONENTS *(if applicable):* ITS Devices, DMS, Lane Control

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: A secondary benefit is for restricting lanes due to temporary work zones from construction and typical maintenance work along with tunnel closures due to planned work or incidents.

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.48: I-70 Fiber Gaps

PROJECT DESCRIPTION AND SCOPE: Eliminate any segments of the ITS network along mainline I-70 that still operate with wireless radios and replace them with fiber optic cable

STAKEHOLDERS: PennDOT D12-0

ESTIMATED SCHEDULE: 2 years

ESTIMATED COSTS: \$2.0M

Life Cycle: N/A

PROJECT TYPE: ITS

LEVEL OF EFFORT: Medium

TECHNOLOGY COMPONENTS *(if applicable):* Fiber Optic Cable

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Reliability of the network, possible use of the improved network to enhance rural broadband initiative in certain areas.

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.49: I-79 Fiber Gaps

PROJECT DESCRIPTION AND SCOPE: Eliminate any segments of the ITS network along mainline I-79 that still operate with wireless radios and replace them with fiber optic cable

STAKEHOLDERS: PennDOT D12-0

ESTIMATED SCHEDULE: 2 years

ESTIMATED COSTS: \$1.5M

Life Cycle: N/A

PROJECT TYPE: ITS

LEVEL OF EFFORT: Medium

TECHNOLOGY COMPONENTS *(if applicable):* Fiber Optic Cable

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Reliability of the network, possible use of the improved network to enhance rural broadband initiative in certain areas

OTHER CONSIDERATIONS AND ISSUES: N/A

IU.50: District 12 CCTV

PROJECT DESCRIPTION AND SCOPE: Due to limitations in the ITS system, only a handful of cameras were possible. However, the network has been improved and can handle additional cameras. This project will add cameras to any interchange that does not currently have one. There will be 33 cameras in total

STAKEHOLDERS: PennDOT D12-0

ESTIMATED SCHEDULE: 2 years

ESTIMATED COSTS: \$4M

Life Cycle: N/A

PROJECT TYPE: ITS

LEVEL OF EFFORT: Medium

TECHNOLOGY COMPONENTS *(if applicable):* CCTV

PREREQUISITES AND DEPENDENCIES: N/A

PERFORMANCE MEASURES: N/A

BENEFITS: Improved situational awareness.

OTHER CONSIDERATIONS AND ISSUES: N/A
