



pennsylvania
DEPARTMENT OF TRANSPORTATION

Transportation Planning & Research Program SPR-PL (53)

July 1, 2018-June 30, 2020

In cooperation with the
U.S. Department of Transportation
and Pennsylvania's Planning Partners

TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
INTRODUCTION.....	7
OFFICE OF THE DEPUTY SECRETARY FOR PLANNING.....	9
BUREAU OF PLANNING AND RESEARCH.....	11
CENTER FOR PROGRAM DEVELOPMENT AND MANAGEMENT.....	14
OFFICE OF PUBLIC-PRIVATE TRANSPORTATION PARTNERSHIPS	16
TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM FUNDING SUMMARY YEAR ONE.....	18
TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM FUNDING SUMMARY YEAR TWO.....	19
ADMINISTRATION.....	21
ADMINISTRATION/MANAGEMENT/STAFF SUPPORT.....	23
TRANSPORTATION PLANNING	25
TRAFFIC MONITORING SYSTEM.....	27
PERMANENT TRANSPORTATION DATA COLLECTION AND ANALYSIS SYSTEMS – ATR, CAVC, WIM.....	30
VIDEO LOG – LOCAL FEDERAL-AID ROAD SYSTEM.....	33
PERFORMANCE INFORMATION.....	35
FIELD OPERATIONS.....	38
GEOGRAPHIC INFORMATION.....	41
CARTOGRAPHIC SERVICES.....	43
GEOGRAPHIC INFORMATION SYSTEM.....	46
PLANNING & RESEARCH COMPUTER SUPPORT.....	49
RESEARCH	53
DIVISION OVERVIEW.....	55
RESEARCH PROGRAM MANAGEMENT.....	56
MUNICIPAL RESEARCH AND OUTREACH	70
PLANNING.....	75
METROPOLITAN PLANNING.....	77
<i>ADAMS</i>	80
<i>ALTOONA</i>	83
<i>CENTRE</i>	85
<i>ERIE</i>	88
<i>FRANKLIN</i>	91
<i>HARRISBURG</i>	94
<i>JOHNSTOWN</i>	97

<i>LACKAWANNA-LUZERNE</i>	99
<i>LANCASTER</i>	101
<i>LEBANON</i>	104
<i>LEHIGH VALLEY</i>	107
<i>NORTHEASTERN PENNSYLVANIA ALLIANCE</i>	110
<i>PHILADELPHIA/POTTSTOWN</i>	113
<i>PITTSBURGH/MONESSEN</i>	116
<i>READING</i>	119
<i>SEDA-COG</i>	122
<i>SHENANGO VALLEY</i>	123
<i>WILLIAMSPORT</i>	126
<i>YORK</i>	128
TRANSPORTATION MANAGEMENT ASSOCIATIONS	131
RURAL AREA TRANSPORTATION PLANNING PROGRAM	134
<i>NORTH CENTRAL PA REGIONAL PLANNING & DEVELOPMENT COMMISSION</i>	136
<i>NORTHERN TIER REGIONAL PLANNING & DEVELOPMENT COMMISSION</i>	140
<i>NORTHWEST PA REGIONAL PLANNING & DEVELOPMENT COMMISSION</i>	143
<i>SOUTHERN ALLEGHENIES PLANNING & DEVELOPMENT COMMISSION</i>	145
<i>WAYNE COUNTY</i>	148
STATEWIDE PLANNING	150
LONG RANGE TRANSPORTATION PLANNING	152
STATEWIDE TRANSPORTATION PROGRAM DEVELOPMENT AND MANAGEMENT	154
PENNSYLVANIA INFRASTRUCTURE BANK	157
LAND USE AND TRANSPORTATION PLANNING	158
SPR WORK PROGRAM DEVELOPMENT AND MANAGEMENT	161
FINANCIAL CONSULTING SECTION	164
ANNUAL PLANNING PARTNERS' MEETING AND OTHER TECHNICAL WORKSHOPS	166
PROJECT NEEDS STUDIES	168
CENSUS TRANSPORTATION PLANNING PRODUCTS	170
PROGRAM MANAGEMENT	172
PROGRAM MANAGEMENT COMMITTEE SUPPORT	174
ANNUAL PLAN MANAGEMENT	175
TRANSPORTATION ALTERNATIVES PROGRAM	178
SCENIC BYWAYS AND GREENWAYS PROGRAMS	181
TWELVE YEAR TRANSPORTATION PROGRAM SUPPORT	184
BRIDGE AND SPECIAL INITIATIVES PROGRAM	187

FEDERAL INITIATIVES	190
STATE TRANSPORTATION ADVISORY COMMITTEE	192
PROGRAM CENTER COMPUTER SUPPORT	194
AIR QUALITY	196
TRANSPORTATION PLANNING AND PROJECT DELIVERY	198
PENNDOT CONNECTS PLANNING STUDIES.....	201
PLANNING SUPPLEMENTS.....	204
YEAR ONE	206
YEAR TWO	216
ACRONYMS.....	226

EXECUTIVE SUMMARY

INTRODUCTION

The Fixing America's Surface Transportation Act (FAST Act) was signed into law on December 4, 2015. The bill funds surface transportation programs at over \$305 billion over federal fiscal years (FY) 2016 through 2020. This four-year bill authorizes a streamlined performance-based and multimodal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery. As in previous surface transportation legislations, planning and programming under FAST Act is critically important to making the best decisions for the future of transportation in Pennsylvania.

Through the 2018-20 Transportation Planning & Research (SPR) Work Program, the Office of Planning will implement the emphasis areas of FAST Act, continue the important planning processes established under MAP-21, ISTEA, TEA-21, and SAFETEA-LU and implement the Department's Strategic Focus Areas and Office of Planning's Goals as set forth in the Office of Planning's most recent Financial Plan/Budget and the Pennsylvania PA's Long Range Transportation Plan (LRTP) and Comprehensive Freight Movement Plan (CFMP) or (PA On Track.)

Through the SPR Work Program, the Office of Planning will continue to fund key business activities including various traffic monitoring and transportation data collection activities, maintaining and enhancing geographic information systems, transportation research activities, metropolitan and statewide planning, land use planning, annual plan/funds management, project management through our Multi-Modal Project Management System (MPMS), air quality planning, and Mobility Plan model development. Additionally, through the SPR Work Program, the Office of Planning will continue to pursue mobility planning, Project Implementation, and Linking Planning & the National Environmental Policy Act (NEPA) begun in the previous SPR Work Programs.

The 2018-20 Transportation Planning and Research Program will continue to build on the successes achieved under previous Work Programs. As a matter of course, we will amend/modify the SPR Work Program to address various priorities as identified over the year and for general financial management of the Work Program.

Discussion Regarding Indirect Costs and 23 CFR Part 420

23 CFR Part 420 Paragraphs (b) – (d) as originally written did not permit State Transportation Departments (State DOTs) to charge indirect costs (includes supervisory personnel and support staff who do not provide direct work on grant supported activities) to Title 23 U.S.C funded projects. This impacted all FHWA funded projects. However, FHWA did allow Planning & Research units to charge a share of these costs directly depending upon the degree of support provided to State Planning Work Programs. Federal Register Volume 67, No. 138 / Rules and Regulations rescinded Paragraphs (b) – (d), and replaced these with a new paragraph (b) that now allows for State DOTs to charge indirect costs. However, in accordance with 2 CFR part 200, all costs charged to Federal Grants must be treated consistently. Thus, a state must have an Indirect Cost Proposal/Cost Allocation Plan in place and approved by FHWA in order to charge any indirect costs. Otherwise, no indirect costs may be charged to any FHWA Grants. Since the Department does not have an Indirect Cost Proposal/Cost Allocation Plan in place at this time, 100% State funds will be used to pay for costs that do not directly support SPR Work Program activities. The Office of Planning's approved 2018-19 and 2019-20 budgets will include sufficient state funds to address indirect costs as well as to match federal funds as required.

Please note that the majority of the Planning Partners currently charge indirect costs as they are billing the Department and will continue to do so for the foreseeable future. In accordance with 2 CFR part 200, the Department will undertake the review and approval of indirect cost allocation plans (ICAPs) for those areas in which the Department has cognizant agency responsibility. For other areas in which the Department does not have cognizant agency responsibility, the Department will work with the Planning Agency and/or FHWA to ensure those areas are meeting 2 CFR part 200.

OFFICE OF THE DEPUTY SECRETARY FOR PLANNING

The primary mission of the Office of Planning is to anticipate the future and support decision-making. The ways in which the Office of Planning accomplishes this mission are by:

- Aligning transportation programs with financial resources.
- Prioritizing transportation investments that strengthen communities.
- Ensuring timeliness, quality and compliance in project and service delivery.
- Educate the public on the costs and benefits of alternative ways to meet community mobility needs.
- Partnering with our Planning Partners, local governments and other stakeholders to coordinate transportation and land use decision making.
- Building an action-oriented workforce with a culture of trust, teamwork and innovation.
- Enhancing quality of data and embracing transparency, accountability and visibility.
- Strengthening our relationship with FHWA, Planning Partners, other shareholders, and the public.

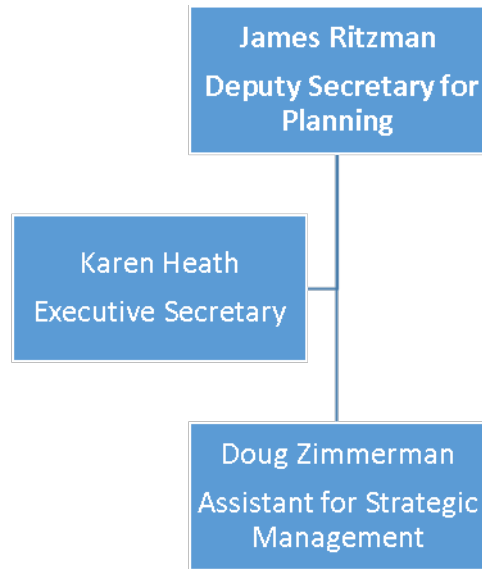
The organization consists of the Office of the Deputy Secretary for Planning, the Center for Program Development and Management, the Bureau of Planning and Research and the Bureau of Public/Private Partnerships (P3). The figure on the next page shows the organizational structure of the Office of Planning.

The Deputy Secretary for Planning exercises management and policy control over all functions assigned to the Office of Planning and provides overall direction for the Deputy's Office, the Bureau of Planning and Research, the Center for Program Development and Management and the Bureau of Public/Private Partnerships (P3). The Deputy Secretary is a member of the Department's Executive Staff, and participates in a wide range of policy-oriented activities throughout the Department.

The Deputy Secretary's Office supports the Department's strategic management process. The structure of the office includes an Assistant for Strategic Management, who coordinates the Department's budgetary planning process, and supports the Department's involvement in regional and national strategic planning initiatives.

The Department's involvement in the policy-setting activities of national and regional transportation associations is also coordinated through the Deputy Secretary's Office. An aggressive federal legislative initiatives program is conducted to shape national transportation policy and programs. An important aspect of this effort is liaison with the Governor's Office and the government relations firm which represents Pennsylvania in Washington, D.C., to develop and pursue an agenda of federal legislative initiatives and to work with the Pennsylvania Congressional Delegation on key transportation issues. This effort will be funded with 100% State Funds

OFFICE OF THE DEPUTY SECRETARY FOR PLANNING



Responsibilities

- Office of Planning Direction
- Strategic Planning and Management
- Financial Plan/Budget Guidance
- Federal Initiatives
- National/Regional Transportation Association Support

BUREAU OF PLANNING AND RESEARCH

The Bureau of Planning and Research is responsible for the development, management, and implementation of the Department's research and local technical assistance programs, outreach to municipalities, transportation systems information, highway travel data collection and performance statistics, cartographic products, including all official transportation system maps, and Geographic Information System (GIS) development.

The Bureau's organizational structure includes a Director's Office and three Divisions: Transportation Planning, Geographic Information, and Research.

The Transportation Planning Division is responsible for all highway travel information including the collection, analysis and reporting of traffic volumes, vehicle classification (automobile and commercial vehicles), and truck weight. Traffic information services include project level traffic analysis, highway traffic trend development, and services associated with traffic oriented business location decisions. The Transportation Planning Division is also responsible for the Department's Highway Performance Monitoring System (HPMS). The division serves as the Department's source of highway and travel statistics. The division also has responsibility for Pennsylvania's National Highway System and highway functional classification activities, municipal road mileage, state road turnback program, budget development, funds management, contract management, and procurement processes.

The Geographic Information Division supports all levels of decision-making in the Department by producing automated maps and graphics, which visually display transportation facilities and systems and related geographic information. The division conducts an ongoing base-mapping program and provides support services, which involve the preparation of special maps, (i.e. roadway and bridge deficiencies) and graphics depicting specific themes for studies, analyses, reports and presentations. The division is responsible for a variety of priority mapping products such as the Tourism and Transportation Map, Official Turnpike Map, Highway Construction Advisory, and the Truckers Guide. The Division is also responsible for the development and management of the PennDOT GIS, as well as all Bureau systems administration initiatives, including management and maintenance of a Storage Area Network (SAN) and remote support of GIS activities throughout the Department. The Division involves customers through a GIS Users Group (PennDOT- GIS users) and a GIS Planning Partners Work Group (Metropolitan Planning Organization (MPO) and Rural Planning Organization (RPO) GIS users).

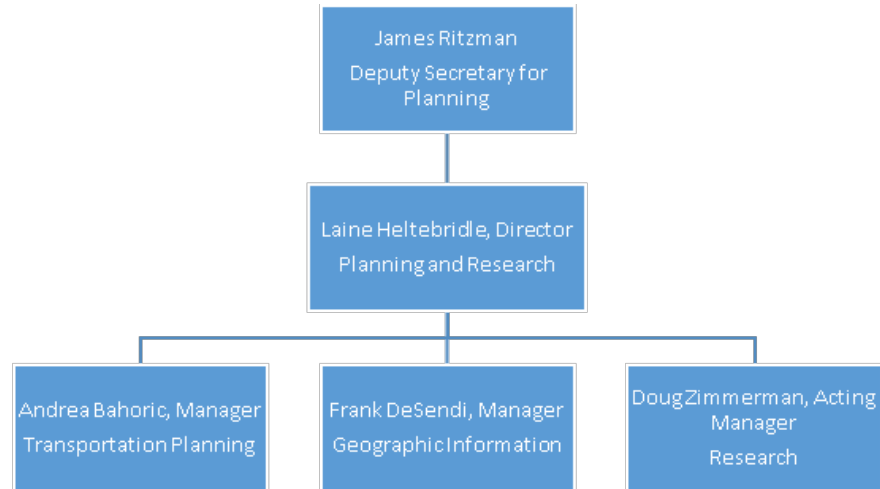
The Research Division staff is responsible for developing and managing the strategically focused and fiscally constrained PennDOT Research Program. The Research Division uses the Department of General Services' Master Agreements with the University of Pittsburgh as well as Intergovernmental Agreements. The purpose of these agreements is to augment the contracting capabilities of the Research Division in order to secure the expertise of faculty at the universities on contract. Through the execution of work orders, the Research

Division is able to contract directly with university faculty to address critical research needs of the Department.

The major functions of this division are program development and management, contract development and fiscal management, and the transportation library. An ongoing initiative in the Research Program includes the conduct of the Research and Innovation Implementation process. The goal of this process is to ensure that the implementation of research results occurs for all PennDOT Research projects. The Research Division is also continuing its long tradition of national leadership through active involvement in the Transportation Research Board (TRB) committees and the National Cooperative Highway Research Program (NCHRP) panels. Also, staff members work very closely with the American Association of State Highway Transportation Officials (AASHTO) research committees. The division also administers the Local Technical Assistance Program (LTAP), stressing transportation technology transfer between the Department and local municipalities.

The Research Division is responsible for managing the Local Technical Assistance Program (LTAP) and the Approved Products for Low Volume Roads contract. LTAP stresses transportation technology transfer between the Department and local municipalities. PennDOT LTAP involves the MPOs and RPOs in delivering training for local municipal governments. The Approved Products for Low Volume Roads contract requires the vendor to review and test new products that are approved for testing by the New Products Selection Committee. The vendor also reviews products already approved in the Publication 447, *Approved Products for Low Volume Local Roads*, to ensure timely and appropriate specifications are in place for municipalities. Ongoing coordination with the District Municipal Services representatives and the LTAP program provides technology transfer of newly approved products to municipalities. This section is also responsible for providing information impacting municipalities to the District Municipal Services representatives and for coordinating meetings of the Department's Municipal Advisory Committee.

BUREAU OF PLANNING AND RESEARCH



Transportation Planning

- Highway Performance Monitoring System
- Functional Classification Management
- National Highway System Management
- Urbanized Boundary Updates
- Highway Statistics
- Data Collection Programs
- State Road Traffic Volumes
- Municipally Owned Traffic Volumes
- Vehicle Classification
- Truck Weight
- Traffic Information Services
- LTPP Support
- Budget Development and Funds Management
- Contract Management
- Procurement
- Processes
- Municipal Mileage Additions
- Local Road Surveys
- Highway Transfer Program

Geographic Information

- IT Management
- Bureau IT Initiatives and Support
- Client-server Enhancement/Support
- GIS Transportation Databases
- Department-wide GIS Initiatives
- GIS Data Sharing Partnerships
- Tourism and Transportation Map.
- Official Turnpike Map
- Special Corridor/Event Maps
- Statewide, District, County, Borough, and Township Maps
- Truckers Guide/Map
- GIS Users Group
- GIS Planning Partners Work Group

Research

- IDEA Process
- Program Development & Management
- Project Management
- Contract Development
- IGA Contract Management
- Fiscal Management
- Research & Innovation Implementation Management
- Pooled Fund Program Management
- PennDOT Library
- National Programs Coordination: TRB, NCHRP, AASHTO
- STIC
- New Product Evaluation Program
- Dirt and Gravel Road Program
- PennDOT Connects Municipal Training

CENTER FOR PROGRAM DEVELOPMENT AND MANAGEMENT

The Center for Program Development and Management is responsible for developing and managing the Commonwealth's Twelve Year Program for highways and bridges, mass transit systems, airports and rail freight. The Center also coordinates with county and regional agencies on transportation long range planning and short range programming (Transportation Improvement Program/Statewide Transportation Improvement Program) issues. All of the Department's program development and management activities are consolidated in the Center, and a key function of the Center is to support the Department's Program Management Committee (PMC).

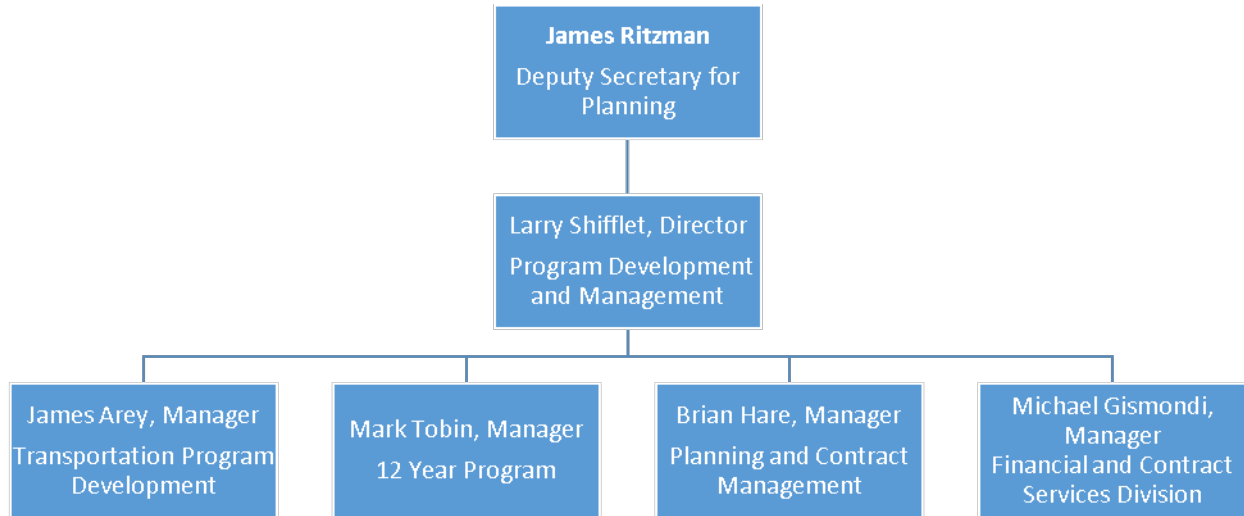
The Transportation Program Development Division is responsible for programming for all modes of transportation, for liaison with its 24 planning partners (MPOs, RPOs, and an Independent County), for developing long range plans and short range programs, for addressing project-specific issues, for providing PMC support and for liaison with the Governor's Action Team, congressional delegation and others.

The Funding and Twelve Year Program Division is responsible for federal funds management (4232s), the obligation plan, the letting schedule, capital budget coordination, MPMS technical and user support, and the development and monitoring of the Twelve Year Program (TYP). The division is also responsible for addressing statewide modal issues and for staff support to the State Transportation Commission (STC) and the Transportation Advisory Committee (TAC).

The Planning and Contract Management Division is responsible for statewide planning, air quality planning/modeling, land use planning, Linking Planning and NEPA, administering the Pennsylvania Infrastructure Bank, undertaking statewide corridor planning, Greenways, Transportation Alternatives Program, coordination of the TMA Assistance Program, and providing staff support to Department management for AASHTO and other national and regional organizations.

The Financial and Contract Services Division is responsible for the administration of Planning (PL)/State Planning and Research (SPR)/Metropolitan Planning Program (MPP) funds, helping to manage all planning partners' contracts and various statewide open end agreements, development and management of the SPR Work Program, and development and management of the Office of Planning annual budget. The division is also responsible for providing support, oversight, and assistance to local governments regarding the use and reporting of various funding sources distributed by PennDOT, the allocation and payment of approximately \$500 million annually to municipalities and counties in the Commonwealth. Financial consultants in the Section perform monitoring reviews of annual reports submitted by local governments to ensure that the funds are being used in accordance with regulations.

CENTER FOR PROGRAM DEVELOPMENT AND MANAGEMENT



Transportation Program Development

- Program Management Committee Support
- Metropolitan and Rural Planning, Programming and Coordination
- Needs Studies
- Land Use Studies
- TIP Development
- Major Economic Development Projects in Metro & Rural Areas
- Project Management
- Liaison with Congressional Delegation
- Interstate Management Program
- Bridge Initiatives
- Local Data Collection

Funding and 12 Year Program

- Program Management Committee Support
- Multimodal Project Management System
- Information Technology
- Twelve Year Transportation Program Coordination
 - Highways
 - Bridges
 - Aviation
 - Rail
 - Public Transportation
 - Non-motorized
- Statewide Modal Issues
- Transportation Advisory Committee Support
- State Transportation Commission Support
- Funds Management
- Capital Budget Coordination
- Letting Schedule
- Obligation Plan

Planning and Contract Management

- Program Management Committee Support
- Statewide Long Range Planning
- Air Quality Planning and Modeling
- Pennsylvania Infrastructure Bank
- Greenways programs
- Transportation Alternatives Program
- Pennsylvania Byways
- Statewide Corridor Planning
- Transportation related Land Use Initiatives
- AASHTO/National Organizations Staff Support
- Federal Initiatives
- National/Regional Transportation Association Support
- Linking Planning and NEPA
- Statewide Modeling
- PennDOT Connects

Financial and Contract Services Division

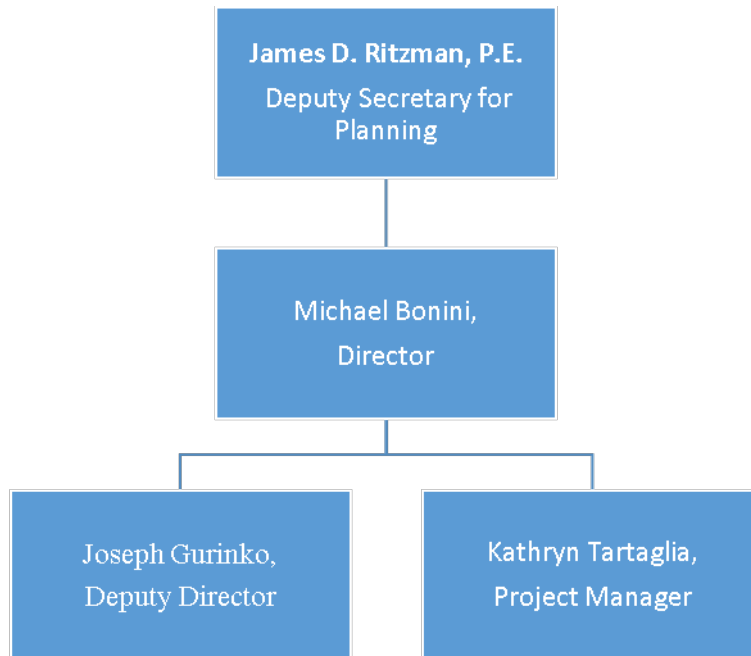
- FTA Grant Administration
- PL/SPR Program Administration
- SPR Work Program
- Monitoring Reports
- Financial Consulting & Technical Assistance
- Training – New Secretaries and Elected Officials
- Customer Service Index
- Local government tax funds management
- Financial analysis and management
- Liquid Fuels Payment Certification
- Budget Development and Management

OFFICE OF PUBLIC-PRIVATE TRANSPORTATION PARTNERSHIPS

The Office of Public-Private Transportation Partnerships (P3 Office) is responsible for evaluating, structuring and implementing partnership delivery solutions that are consistent with PennDOT's transportation goals. The P3 Office reports directly to the Deputy Secretary for Planning with access to all the expertise and resources of the Department of Transportation covering all modes, including multi-modal and intermodal solutions.

The P3 Office is responsible for overseeing all aspects of the program, from identifying, screening and prioritizing candidate P3 Projects for approval by the P3 Transportation Board to development, procurement, and contract management. This includes P3 program outreach and stakeholder coordination and reporting all program and project activities to the Secretary of Transportation and the P3 Transportation Board. Other duties of the P3 Office include: participation in P3 and associated industry organizations; working collaboratively with internal stakeholders within PennDOT; assisting with the management of projects, staff and consultants engaged to assist the P3 Office; evaluating private sector recommendations for P3 initiatives; advancing the Commonwealth's objectives to promote economic development, sound land use, and effective long-range transportation planning through the implementation of P3 projects; managing projects and P3 initiatives in a manner that is consistent with Act 88 of 2012 and the P3 Implementation Manual & Guidelines; evaluating "best practices" utilized by other states and jurisdictions; providing recommendations for modernization and process improvements; assimilating objectives of Department and interagency programs related to the P3 program; and representing the Department, the Secretary and the Deputy Secretary for Planning on task forces, boards, committees, and commissions.

OFFICE OF PUBLIC-PRIVATE TRANSPORTATION PARTNERSHIPS



P3 Office Duties

- Candidate project identification and screening
- Program outreach and stakeholder coordination
- P3 Transportation Board management and administration
- Procurement and contract management (commercial close of P3 projects)
- Adherence to Act 88 of 2012 and the P3 Implementation Manual & Guidelines

**TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM FUNDING
SUMMARY YEAR ONE
SPR-PL (53)
JULY 1, 2018 THRU JUNE 30, 2019**

ESTIMATED 2018-20 PROGRAM COSTS	SPR ¹			SPR ²		PL ¹		NON-PLANNING FUNDS			TOTAL FUNDS	
	(L/H/Q-55)		FTA/CPG	(L/H/Q-56)		(L/H/Q45)		FTA/CPG	STATE	100%		LOCAL/ OTHER FUNDS ³
	80% FEDERAL	100% FEDERAL	80% FEDERAL	80% FEDERAL	100% FEDERAL	80% FEDERAL	100% FEDERAL	80% FEDERAL	MATCH	STATE		
I. ADMINISTRATION	0	0	0	0		0			0	2,196,297		2,196,297
II. TRANSPORTATION PLANNING	2,423,312	2,525,000		0					418,328			5,366,640
III. GEOGRAPHIC INFORMATION	3,064,815	2,711,000	0						578,708	13,249		6,367,772
IV. RESEARCH	0	0	0	3,613,700	5,600,320				903,425	477,000	372,864	10,967,309
V. PLANNING	4,972,279	2,204,000	1,169,421	0	0	13,725,450	630,000	4,526,850	3,268,677		11,796,261	42,292,938
VI. PROGRAM MANAGEMENT	1,780,400	7,253,872	101,356			0	0		813,701	402,625	25,340	10,377,294
GRAND TOTAL	12,240,806	14,693,872	1,270,777	3,613,700	5,600,320	13,725,450	630,000	4,526,850	5,982,839	3,089,171	12,194,465	77,568,250

Notes: 1 \$12,240,806 of 80/20 SPR funds, \$14,693,872 SPR/Toll funds, \$13,725,450, of 80/20 PL funds, and \$630,000 of PL/Toll funds were obligated on June 28, 2018 for MPO and RPO contracts. **2** Does not include SPR Research Funds that are obligated outside the SPR Work Program. **3** Local/other includes local, other federal, and other state funds outside the Office of Planning.

AVAILABLE FEDERAL PLANNING FUNDS FOR FY 18-20 PROGRAM	SPR Part 1	SPR Part 2	PL	FTA/CPG
EST. UNOBLIGATED BALANCE AS OF 08/01/2018	53,988,578	14,910,453	1,310,700	1,327,778
ESTIMATED APPORTIONMENT 08/01/2018	25,601,059	8,533,687	13,391,246	5,266,184
Total	79,589,637	23,444,140	14,701,946	6,593,962

**TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM FUNDING
SUMMARY YEAR TWO**

SPR-PL (53)

JULY 1, 2019 THRU JUNE 30, 2020

ESTIMATED 2018-20 PROGRAM COSTS	SPR			SPR ¹		PL			NON-PLANNING FUNDS			TOTAL FUNDS
	(L/H/Q-55)		FTA/CPG	(L/H/Q-56)		(L/H/Q45)		FTA/CPG	STATE	100%	LOCAL/ OTHER FUNDS ²	
	80%	100%	80%	80%	100%	80%	100%	80%	MATCH	STATE		
	FEDERAL	FEDERAL	FEDERAL	FEDERAL	FEDERAL	FEDERAL	FEDERAL	FEDERAL				
I. ADMINISTRATION	0	0	0	0		0			0	2,243,277		2,243,277
II. TRANSPORTATION PLANNING	2,541,160	2,175,000							447,790			5,163,950
III. GEOGRAPHIC INFORMATION	2,982,099	2,511,000	0						591,330	15,703		6,100,132
IV. RESEARCH			0	3,152,130	2,000,000				788,032	477,000	369,910	6,787,072
V. PLANNING	5,587,766	1,762,000	1,081,318	0	0	13,723,050	600,000	4,011,850	3,481,747		9,376,541	39,624,272
VI. PROGRAM MANAGEMENT	3,098,543	6,361,435	105,286			0	0		759,138	403,705	26,321	10,754,428
GRAND TOTAL	14,209,568	12,809,435	1,186,604	3,152,130	2,000,000	13,723,050	600,000	4,011,850	6,068,037	3,139,685	9,772,772	70,673,131

ADMINISTRATION

ADMINISTRATION/MANAGEMENT/STAFF SUPPORT

Objective

There are many activities performed by the Department of Transportation that are necessary to ensure the efficient operation of the Commonwealth's and the FHWA's transportation planning program. These activities include personnel management and supervision responsibilities, general training, secretarial support, computer and database system support such as the Integrated Enterprise System (IES), quality initiatives, general procurement of office supplies and other activities that are designed to support the mission of the Department. However, none of these activities may be attributed to any one particular federally supported activity included in this work program. Therefore, we will not request federal reimbursement of these costs.

Background

Although Federal regulations allow states to capture these indirect costs through an approved indirect cost allocation plan, the Department has chosen not to prepare an indirect cost allocation plan as it relates to FHWA funds. These activities will be funded entirely by state funds.

Responsible Manager: James Ritzman	Project Manager: Larry Shifflet Laine Heltebridle Michael Bonini Division Managers
Work Order Number(s): 5000-219, 5100-219, 5200-219 (100% State)	

YEAR ONE

Total Project Cost: \$ 394,700	Total Person Years: 15.68
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Participants	Federal	State	Other	Total
	SPR	MLF	Local	
Deputy's Office	0	437,125	0	437,125
Planning & Research	0	555,000	0	555,000
Program Center	0	809,472	0	809,472
P3	0	394,700	0	394,700
Total	0	2,196,297	0	2,196,297

YEAR TWO

Total Project Cost: \$	402,600	Total Person Years: 15.58
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Participants	Federal	State	Other	Total
	SPR	MLF	Local	
Deputy's Office	0	446,625	0	446,625
Planning & Research	0	566,940	0	566,940
Program Center	0	827,112	0	827,112
P3	0	402,600	0	402,600
Total	0	2,243,277	0	2,243,277

Activities/Performance Measures

❖ **Program Center**

- The Performance of Administrative/Management/Staff Support is not being reported since there are no Federal funds being used or requested.

TRANSPORTATION PLANNING

TRAFFIC MONITORING SYSTEM

Objective

Manage and implement enhancements to the Department's Traffic Monitoring System (TMS). Provide highway traffic information as a customer service. Provide existing and projected traffic volumes for planning purposes, for application in the location and design phases of transportation projects, to support the Department's various management systems and programs, and to monitor system performance for traffic engineering analysis for highway and bridge program development. Of key significance is the provision of traffic information to economic development interests to evaluate the impact of traffic on existing or proposed facilities.

Responsible Manager: Andrea Bahoric	Project Manager: Jeremy Freeland
Work Order Number(s): 80103 8 9 TMS - Department/Central Office 80113 8 9 TMS - Consultant	

YEAR ONE

Total Project Cost: \$ 1,867,930	Total Person Years: 6.7
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Participants	Federal	State		Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	330,344	0	82,586	0	412,930
District	64,000	0	16,000	0	80,000
Consultant	0	1,375,000	0	0	1,375,000
Total	394,344	1,375,000	98,586	0	1,867,930

* Included in the funding is \$1,175,000 for Outsourced Traffic Counts

YEAR TWO

Total Project Cost: \$	1,976,770	Total Person Years: 7.1
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Participants	Federal	State		Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	406,416	0	101,604	0	508,020
District	75,000	0	18,750	0	93,750
Consultant	0	1,375,000	0	0	1,375,000
Total	481,416	1,375,000	120,354	0	1,976,770

* Included in the funding is \$1,175,000 for Outsourced Traffic Counts.

Activities/Products/Performance Measures

❖ **Bureau of Planning and Research Staff
Traffic Information Services**

- Produce the Annual Statewide Traffic Volume Map by 9/30 of each year.
- Update 67 county traffic volume maps each calendar year.
- Provide program updates and training at an annual traffic monitoring workshop or webinar by 3/1 of each year, cost permitting.
- Provide traffic information to businesses, developers, agencies, and individuals within two weeks of request.

Traffic Analysis

- Analyze and process traffic data within one week of receiving data during the traffic count season.
- Track and upload traffic counts from the Traffic Data Upload System (TDUS) on a weekly basis.

Traffic Monitoring System

- Maintain and operate web applications through the Traffic Data System (TDS) Portal: Traffic Monitoring System (TMS) and Traffic Volume Map (TVM) application.
- Maintain and operate Reports and Statistical Analysis applications for traffic factoring purposes.
- Maintain and enhance the Roadway Management System (RMS) traffic database.
- Generate annual statewide traffic count program including municipally owned road and ramp counts by 2/27 of each year to comply with FHWA HPMS.
- Complete a traffic count program performance assessment by 1/30 of each year.
- Implement purchase orders to complete traffic counts for the local traffic collection program using PennDOT Statewide Traffic Engineering Data Count Services Contract by 3/1 of each year.

- Implement purchase orders to complete traffic counts for the statewide program using PennDOT Statewide Traffic Engineering Data Count Services Contract by 7/1 of each year.
- Maintain a traffic classification count sampling distribution program based on the Traffic Monitoring Guide (TMG) guidelines.
- Maintain/monitor our internet/intranet applications: Traffic Data System (TDS), Traffic Information Repository (TIRe), Traffic Volume Map (TVM) postings, and Traffic Data Upload System (TDUS).

❖ **District Staff**

- Provide direct traffic data collection services which include submitting weekly TDUS processed traffic counts for the count locations provided by BPR staff prior to each traffic counting season.
- Collect all traffic counts by the Thursday before Thanksgiving of each calendar year and submit data by the first Friday in December of each calendar year.
- Attend one Traffic Workshop, if applicable.

❖ **Consultant**

- Provide direct traffic data collection services which include submitting weekly TDUS processed traffic counts according to the scope of work for the awarded locations.
- Provide global positioning system (GPS) coordinates for each count location.
- Provide monthly Summary reports.
- Provide monthly schedules.
- Provide weekly schedules.
- Provide photographs of each count set.
- Collect all traffic counts by the Thursday before Thanksgiving of each calendar year and submit data by the first Friday in December of each calendar year.

PERMANENT TRANSPORTATION DATA COLLECTION AND ANALYSIS SYSTEMS – ATR, CAVC, WIM

Objective

Provide quality traffic data for the Department’s decision support systems through a systematic data collection program. Traffic data collection activities support program development; project level needs analysis, and a Traffic Monitoring System. Traffic data is a key component to many Department business functions including planning, program development, traffic engineering, highway design, safety, and maintenance.

Data collected provides information on truck weights, vehicle classification, and the factors necessary to adjust all raw traffic counts through seasonal/daily/hourly variations in automobile and truck traffic. Automatic traffic data collection activities also provide traffic loading data to FHWA in support of Long Term Pavement Performance (LTPP) program initiatives to establish improved new pavement designs and reconstruction strategies that will lead to better performing and more cost-effective pavements.

Responsible Manager:	Andrea Bahoric	Project Manager:	Jeremy Freeland Joni Sharp
Work Order Number(s):	80203 8 9 TDC - Department/Central Office 80213 8 9 TDC - Consultant		

YEAR ONE

Total Project Cost: \$	2,134,905	Total Person Years: 5.85
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Participants	Federal	State		Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	467,924	0	116,981	0	584,905
District	0	0	0	0	0
Consultant *	750,000	800,000	0	0	1,550,000
Total	1,217,924	800,000	116,981	0	2,134,905

*Included in the funding is \$50,000 for the Traffic Data System (TDS) maintenance, \$750,000 for WIM Maintenance and Repair.

YEAR TWO

Total Project Cost: \$	1,836,390	Total Person Years: 5.85
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Participants	Federal	State		Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	469,112	0	117,278	0	586,390
District	0	0	0	0	0
Consultant *	750,000	500,000	0	0	1,250,000
Total	1,219,112	500,000	117,278	0	1,836,390

* Included in the funding is \$50,000 for the Traffic Data System (TDS) maintenance, \$750,000 for WIM Maintenance and Repair.

Activities/Products/Performance Measures

❖ **Bureau of Planning and Research Staff**

Statewide Permanent Traffic Monitoring Program - ATR and CAVC

- Poll, verify, edit, analyze and report traffic flow information from our Permanent Traffic Monitoring Sites. (105 sites).
 - 27 Automatic Traffic Recorder (ATR) Sites
 - 77 Continuous Automatic Vehicle Classification(CAVC) Sites
- Report volume and classification data monthly to FHWA through the Travel Monitoring Analysis System (TMAS) for use in various reports including the Travel Trends Report.
- Provide permanent traffic monitoring system status by the first week of January of each year for generation of traffic growth factors.
- Provide traffic information to businesses, developers, agencies, and individuals within two weeks of the request.
- Provide site status to the Field Operations Section through the Field Operations Management (FOM) system to ensure optimum data quality.
- Maintain and operate Data Polling Module (DPM) and Continuous Data Analysis System (CoDAS).

Statewide Weigh-in-Motion Program

- Poll, verify, edit, analyze and report traffic flow information from Weigh-in-Motion (WIM) sites monthly (24 sites)
- Submit calibration data and report WIM traffic information to FHWA quarterly from four Long Term Pavement Performance (LTPP) sites.
- Provide site status to the Field Operations Section or WIM Contractor through the Field Operations Management (FOM) system to ensure optimum data quality.
- Provide traffic information to businesses, developers, agencies, and individuals within two weeks of the request.

- Submit WIM data to FHWA monthly in accordance with the 23 CFR (Code of Federal Regulations) 500 Part B for Federal and State reporting requirements.
- Manage the WIM contract for the calibrations, maintenance, repair, and installation of planning WIM sites and the calibrations, maintenance and repair of the truck weight enforcement sites.
- Maintain and operate Data Polling Module (DPM) and Continuous Data Analysis System (CoDAS)
- Analyze and determine technology and equipment upgrades to existing traffic sites to provide both planning data and meet enforcement objectives.

Factor Development

- Produce yearly Pennsylvania Traffic Data Manual (PUB 601) by 9/30 of each year.
- Compile and assess changes to the growth pattern program, based on Roadway Management System (RMS) database, by 2/15 of each year.
- Develop estimates of annual growth factors by 1/31 of each year.
- Refresh "current" traffic estimates in the RMS (Global Update) by 2/1 of each year.
- Develop vehicle classification trends & seasonal variation factors using the Statistical Analysis application within the Traffic Data System (TDS) Portal.

❖ **District**

- No district activity

❖ **Consultants**

- Traffic Data System (TDS) Maintenance: Provide maintenance for the TDS until 7/31/2018.
- Weigh In Motion(WIM) Maintenance and Repair:
 - Complete annual maintenance of Planning WIM sites between March 15 and April 30.
 - Complete annual calibration of Planning WIM sites between September 15 and October 31.
 - Complete any Task Order Service Calls within 3 months of the accepted cost quote and prior to the scheduled calibration of the Planning WIM sites.
 - Complete new site installations and have the site fully functional within 3 months of the accepted quote.

VIDEO LOG – LOCAL FEDERAL-AID ROAD SYSTEM

Objective

The Highway Performance Monitoring System (HPMS) requires biennial collection of International Roughness Index (IRI) and Pavement Condition data on all Federal-Aid roadways, including locally owned roads on the Federal-Aid System. IRI has been collected on the Local Federal-Aid (LFA) roads in the past, however not routinely.

Collection of this information for HPMS reporting will provide a limited, interim dataset of municipal owned road conditions to support the department's efforts to validate the proper use of liquid fuels funding provided to the municipalities.

Similar to the video logging of all PennDOT owned roads, video images, IRI, and pavement condition data would be collected on approximately 3,700 miles of locally owned road which are on the Federal-Aid System. The video images of the local Federal-Aid roads would be added to the Intranet and Internet web sites currently maintained by the Bureau of Planning and Research and available to other PennDOT bureaus and district offices.

This data will be collected by utilizing the Bureau of Maintenance and Operations contract with Fugro Roadware.

Responsible Manager: Andrea Bahoric	Project Manager: Jeremy Freeland
Work Order Number(s): 80323 8 9 VID Consultant	

YEAR ONE

Total Project Cost: \$ 200,000	Total Person Years: 0
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Participants	Federal	State		Other	Total
	SPR	SPR/Toll	MLF	Local	
Planning & Research	0	0	0	0	0
District	0	0	0	0	0
Consultant *	0	200,000	0	0	200,000
Total	0	200,000	0	0	200,000

YEAR TWO

Total Project Cost: \$	250,000	Total Person Years: 0
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Participants	Federal	State		Other	Total
	SPR	SPR/Toll	MLF	Local	
Planning & Research	0	0	0	0	0
District	0	0	0	0	0
Consultant *	0	250,000	0	0	250,000
Total	0	250,000	0	0	250,000

Activities/Products/Performance Measures

❖ **Bureau of Planning and Research Staff**

- Work with Bureau of Maintenance and Operations (BOMO) to add money to allow contractor to video log local Federal-Aid road system. Receive video log images from the contractor to add the current Intranet and Internet video log sites.

❖ **District**

- No district activity

❖ **Consultant**

Panoramic Digital Image Collection:

- Includes a high-definition, single camera system with a minimum 90° field of view. The image capture resolution is 1920 x 1080 pixels. Images are collected at 4mmi intervals and delivered with a database that includes the county, route number, BPR defined segment and offset, latitude and longitude and the image filename.

Pavement Conditions:

- Condition data, including roughness (IRI), is collected, summarized and reported by pavement segment limits as defined by the BPR. The data is reported in accordance with PennDOT's Pub. 336, "Automated Pavement Condition Surveying Field Manual," and delivered in the formats defined by the Bureau of Maintenance and Operations.
- One half of the state's local Federal-Aid miles, roughly 1,850 miles, will be collected yearly for this project in conjunction with the existing Pennsylvania network routes in order to eliminate dead haul and to provide the most economic data collection solution.
- Processing of collected data will begin after regular network route work has been completed.

PERFORMANCE INFORMATION

Objective

Manage the Department's Highway Performance Monitoring System (HPMS). Develop and publish reports on mileage, travel, highway functional classification, and other system performance measures and characteristics. Oversee and coordinate HPMS activities conducted by our planning partner agencies. Manage Pennsylvania's National Highway System (NHS) and Federal-Aid Highway Data Programs. Manage the Departments Highway Transfer "Turnback" Program.

Responsible Manager:	Andrea Bahoric	Project Manager:	Jeremy Freeland
Work Order Number(s):	80303 8 9 PCO - Department/Central Office 80303 8 9 P01 thru P12 - Districts 80313 8 9 PIC - Consultant		

YEAR ONE

Total Project Cost: \$	493,720	Total Person Years: 9.1
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Participants	Federal	State		Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	277,776	0	69,444	0	347,220
District	77,200	0	19,300	0	96,500
Consultant *	0	50,000	0	0	50,000
Total	354,976	50,000	88,744	0	493,720

*Included in the funding is \$50,000 for the HPMS Console

YEAR TWO

Total Project Cost: \$	577,160	Total Person Years: 11
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Participants	Federal	State		Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	344,528	0	86,132	0	430,660
District	77,200	0	19,300	0	96,500
Consultant *	0	50,000	0	0	50,000
Total	421,728	50,000	105,432	0	577,160

*Included in the funding is \$50,000 for the HPMS Console

Activities/Products/Performance Measures

❖ Bureau of Planning and Research Staff: Highway Performance Monitoring System

- Manage planning partners' activities to ensure completion of data entry by 12/31 of each year.
- Prepare Annual Mileage Certification by 6/1 of each year.
- Administer an annual agency quality review audit program and report results by 12/31 of each year.
- Provide HPMS training through a statewide HPMS conference by 10/30, cost permitting.
- Submit specific HPMS data items to FHWA by 4/15 of each year
- Submit remainder of HPMS data items to FHWA by 6/15 of each year.

Performance Reporting

- Maintain an inventory of selected statistics for Bureau use.
- Provide transportation data for inclusion in the Annual Pennsylvania Statistical Abstract to the Pennsylvania State Data Center by 3/31 of each year.
- Publish Pennsylvania Highway Statistics (PUB 600) by 9/1 of each year.
- Compile and report highway statistics for the Department and as a public service, as required.

Highway Network Management

- Manage the functional classification system and local Federal-Aid databases.
- Manage the Strategic Highway Network (STRAHNET).
- Manage the National Highway System(NHS) activities in accordance with FHWA mandates.
- Manage Roadway Management System (RMS) Administrative Data.

Highway Transfer "Turnback" Program

- Manage potential turnbacks, abandonments, and vacations provided by district municipal representatives.
- Manage and update the State Highway Transfer Policies and Procedures Manual (PUB 310) by 4/1.
- Manage and Update the PennDOT Highway Transfer Turnback Program Brochure (PUB 663) by 4/1.
- Manage and maintain forms associated with the program including PR-990, PR-996, PR-997, PR-999T, PR-999TRC and PR-4226.

❖ District Staff:

- Verify and update roadway inventory and performance measures on Highway Performance Monitoring System (HPMS) sample sections on Interstates and any other sample sections as provided by BPR, in accordance with the HPMS Field Manual specifications.
 - Participate in annual HPMS Quality Reviews with BPR staff and MPO staff.
 - Update HPMS inventory data in the Roadway Management System before December 31.
 - Participate in annual HPMS Workshop.
- ❖ **Consultant:**
- Provide support for the HPMSAnalyst application for the annual FHWA HPMS data submittal for submittal years 2018 through 2020.

FIELD OPERATIONS

Objective

Implement maintenance enhancements to the Department's continuous automated traffic monitoring data system including ATR, CAVC, and WIM. Provide field operations staff with necessary safety procedures and equipment to ensure traffic data collection is completed according to PennDOT work rules and other applicable guidelines and installation practices. Provide quality assurance checks for District staff, planning partners, and count vendors to ensure all traffic data collection is completed in a safe manner and they follow traffic counting equipment installation practices.

Responsible Manager: Andrea Bahoric	Project Manager: Joni Sharp
Work Order Number(s): 80703 8 9 FLD - Department/Central Office 80713 8 9 FLD - Consultant (80/20% SPR/CPG) 80713 8 9 FLT - Consultant (100% SPR/TOLL)	

YEAR ONE

Total Project Cost: \$ 670,085	Total Person Years: 5.35
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Participants	Federal	State		Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research*	416,868	0	104,217	0	521,085
District	0	0	0	0	0
Consultant*	39,200	100,000	9,800	0	149,000
Total	456,068	100,000	114,017	0	670,085

*included in the funding, \$100,000 for CAVC/ATR/STIP Maintenance and Repair, \$36,000 for Traffic Equipment and Repair Shop Rent, \$10,000 for telephone (ATR/WIM/CAVC), \$3,000 for Electricity (ATR/WIM/CAVC).

YEAR TWO

Total Project Cost: \$	523,630	Total Person Years: 5.35
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Participants	Federal	State		Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research*	379,704	0	94,926	0	474,630
District	0	0	0	0	0
Consultant*	39,200	0	9,800	0	49,000
Total	418,904	0	104,726	0	523,630

*included in the funding, \$100,000 for CAVC/ATR/STIP Maintenance and Repair, \$36,000 for Traffic Equipment and Repair Shop Rent, \$10,000 for telephone (ATR/WIM/CAVC), \$3,000 for Electricity (ATR/WIM/CAVC).

Activities/Products/Performance Measures

❖ **Bureau of Planning and Research Staff
Statewide Traffic Data Collection Program**

- Provide limited technical support and training to our traffic counting partners (Districts, MPOs, and RPOs).
- Provide direct traffic data collection services which include submitting weekly TDUS processed traffic counts.

Permanent Transportation Data Collection and Analysis Systems – ATR, CAVC, WIM Support

- Maintain and service ATR Sites. (27 sites)
- Maintain and service CAVC Sites. (77 sites)
- Assist in maintaining and servicing WIM Sites. (24 sites)
- Provide inspection and certification for the maintenance, calibration, and repair of the BPR CAVC, ATR, and STIP sites.
- Provide support to the WIM Section for the inspection and certification for maintenance, calibration, and repair of the BPR WIM sites and truck weight enforcement sites.
- Manage ECMS Projects for CAVC, ATR, and STIP site repairs and upgrades.
- Provide special provisions, drawings, technical knowledge, and inspections for the installation of CAVC and STIP sites through PennDOT Engineering District maintenance and construction projects.
- Conduct and submit annual Site QAs (quality assurance testing) results utilizing Field Operations Management (FOM) system.
- Conduct and submit Reviews of the permanent sites utilizing Field Operations Management (FOM) system.
- Maintain and operate the web application through the Traffic Data System (TDS) Portal: Field Operations Management (FOM) system to track site issues.

Traffic Monitoring System Support

- Analyze and coordinate traffic site installations in District construction projects.
- Schedule and participate in the evaluation of new traffic data collection technologies.
- Manage Statewide Traffic Counter Equipment contract.
- Maintain the CEMIS equipment inventory. Ensure the accuracy of this inventory by conducting regular review of the CEMIS system.

❖ District

- No district activity

❖ Consultants

- As indicated through specific ECMS projects, the awarded vendor is responsible for the following:
 - Installation of Continuous Automatic Vehicle Classification (CAVC) site.
 - Repair of CAVC sites.
 - Conversion of Automatic Traffic Recorder (ATR) site or Short Term in Pavement (STIP) site to CAVC site.
 - Removal of STIP site.
- Payment of Traffic Equipment and Repair Shop rent.
- Payment of telephone and electricity bills for permanent traffic counting devices with cellular or landline telephone connections and/or AC power.

GEOGRAPHIC INFORMATION

CARTOGRAPHIC SERVICES

Objective

Prepare quality hard copy and web based maps and cartographic products for transportation planning, Pennsylvania citizens, tourists, and business interests. Prepare for publication: The Tourism and Transportation Map and related products. Prepare special products to support decision-making and to communicate information to other agencies and to the public. Prepare displays for studies, reports, and presentations that assist in identifying and prioritizing projects, enhance media events, attract tourism, and inform motorists. Create and maintain county, township, and borough maps for internal and external customers. Support the advancement of PennDOT's Strategic Goals.

Responsible Manager: Frank DeSendi	Project Manager: Mark Leitzell
Work Order Number(s): 80403 8 9 CRT - Department/Central Office	

Total Project Cost: \$ 198,077	Total Person Years: 1.77
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Participants	Federal		State	Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	147,863	0	36,965	0	184,828
Planning & Research (211)	0	0	13,249	0	13,249
Consultant	0	0	0	0	0
Total	147,863	0	50,214	0	198,077

Total Project Cost: \$	199,193	Total Person Years: 1.77
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Participants	Federal		State	Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	151,118	0	37,778	0	188,896
Planning & Research (211)	0	0	10,297	0	10,297
Consultant	0	0	0	0	0
Total	151,118	0	48,075	0	199,193

Activities/Products/Performance Measures

❖ Bureau of Planning and Research Staff General

- Develop budget recommendations by 8/31 for year each.

Tourism and Transportation Map

- Continually update the digital files, as information becomes available. Prepare digital files for publication as requested. Prepare electronic files for web publication. Review and comment on promotional panels submitted by others. Approve printing runs as required.

Truckers Publication

- Revise and maintain Pennsylvania STAA Book, Publication 411 and related products, upon request.

County Maps

- General Highway Series Maps - Edit, revise, and prepare for printing as required. Prepare electronic files for web publication.
- Traffic and State Route Maps – Update routinely for printing as required. Prepare electronic file for web publication.
- Print on demand as sales indicated.

Municipal Maps

- Complete new municipal maps to digital GHS series and update and revise as needed.
- Print on demand as sales indicated.

Special Maps and Projects

- Special Mapping Requests - Complete as requested.

- Special Projects - Complete as requested.

GIS

- Develop, update, and maintain digital files, and assist with production of GIS map products as requested.
- Share map related information with planning partners, and other public agencies, County EMS Coordinators, and private map companies.
- Use geospatial data and technology acquired from local sources and regional partners to remotely assist Municipal Services personnel with local road verification and maintain GIS/Cartography master files. Average 400 miles per month

❖ **District**

- No district activity

❖ **Consultants**

- No consultant activity

GEOGRAPHIC INFORMATION SYSTEM

Objective

The GIS Section designs, builds, and maintains applications and custom map products for a variety of PennDOT business functions. GIS also supports remote users in districts and counties bringing this decision support tool as close to the customer as possible. GIS will continue to deliver integrated geospatial data in easy to understand graphical and tabular methods that are timely and user friendly. Support the advancement of PennDOT's strategic goals.

Responsible Manager: Frank DeSendi	Project Manager: Patrick Kiely Joseph Piper
Work Order Number(s): 88503 8 9 GIS - Department/Central Office 88603 8 9 GIS - Consultant	

YEAR ONE

Total Project Cost: \$ 3,488,433	Total Person Years: 12.53
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Participants	Federal		State	Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	751,706	0	225,727	0	977,433
District	0	0	0	0	0
Consultant *	0	2,511,000	0	0	2,511,000
Total	751,706	2,511,000	225,727	0	3,488,433

*Funding includes \$2,511,000 for BPR application support.

YEAR TWO

Total Project Cost: \$	1,000,464	Total Person Years:	12.53
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Participants	Federal		State	Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	769,412	0	231,052	0	1,000,464
District	0	0	0	0	0
Consultant *	0	2,511,000	0	0	0
Total	769,412	0	231,052	0	1,000,464

*Funding includes \$2,511,000 for BPR application support.

Activities/Products/Performance Measures

❖ **Bureau of Planning and Research Staff**

- Participate in outreach/cooperative activities such as Geospatial Technology Steering Committee (GTSC), Arc Users' Group, MAGTUG, PA GeoBoard, NG911 Work Group, and PennDOT GIS Users Group.
- Manage/Maintain GIS-T application development processes and product creation activities including support for Transportation Planning Division initiatives.
- Support Districts, Department Bureaus, other state agencies, and planning partners in the use and deployment of GIS and the completion of special mapping and data projects as required.
- Maintain mechanisms (Internet) to share data with planning partners, local governments, and other state agencies.
- Assist with the delivery of data necessary to fulfill the requirements of PennDOT Connects and other Department initiatives as required.
- Continually share enhancements, upgrades, and technology tips with other users of GIS.
- Update line work/database linkages on a continuing basis including road networks and various boundaries.
- Support the Governor's Geospatial Initiatives.
- Continually enhance the functionality and usability of GIS products and reports by providing advice and value added feedback to customers.
- Support broader PennDOT IT initiatives, such as the Road Data Management System modernization initiative, APRAS Next Gen, and Business Intelligence.
- Maintain formal and informal communications with PennDOT's Program Center, Bureau of Business Solutions and Services, Bureau of Infrastructure and Operations, Bureau of Project Delivery, Bureau of Maintenance and Operations, the CIO's Office, and others engaged in information technology.

❖ **District**

- No district activity

❖ **Consultants**

- Support transportation planning and engineering processes through geospatial technologies.
- Provide a variety of geospatial expertise supporting planning, environmental screening, data collection, mobile workforce, federal data submissions, geospatial data sharing, visualization, analytics, maps, and reports.

PLANNING & RESEARCH COMPUTER SUPPORT

Objective

Computer support for GIS is critical to the success of PennDOT. Many automated information systems are managed directly by GIS and operating on its infrastructure, including but not limited to: PennShare, GIS-IQ, Maintenance IQ, PennDOT Connects, Cultural Resources (CRGIS), Crash Data Analysis (CDART), Video Log, internet Traffic Monitoring System, Project Management (PennDOT One Map), Road Conditions Reporting System (RCRS), Local Technical Assistance Program (LTAP), Traffic Data System (TDS), and the Bureau's automated procurement application. Computer expertise is provided for purchasing, installing, maintaining, and managing IT equipment and services for the Bureau and its customers. Support the advancement of PennDOT's strategic goals.

Responsible Manager: Frank DeSendi	Project Manager: Jeff Fennimore
Work Order Number(s): 86603 8 9 CMP - Department/Central Office 86613 8 9 CMP - Consultant 86613 8 9 CM2 - Consultant	

YEAR ONE

Total Project Cost: \$ 2,681,262	Total Person Years: 5.8
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Participants	Federal		State	Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	566,864	0	141,716	0	708,580
District	0	0	0	0	0
Consultant *	1,598,382	200,000	174,300	0	1,972,682
Total	2,165,246	200,000	316,016	0	2,681,262

* Funding includes \$578,600 for GIS Software/Database Software, \$200,000 for GIS/Cartography Hardware and \$1,156,082 for Intergraph Maintenance, Oracle Maintenance, and plotter maintenance.

YEAR TWO

Total Project Cost: \$	2,278,462	Total Person Years: 4.9
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Participants	Federal		State	Other	Total
	SPR/CPG	SPR/Toll	MLF	Local	
Planning & Research	508,304	0	127,076	0	635,380
District	0	0	0	0	0
Consultant *	1,468,782	0	174,300	0	1,643,082
Total	1,977,086	0	301,376	0	2,278,462

* Funding includes \$578,600 for GIS Software/Database Software, \$200,000 for GIS/Cartography Hardware and \$1,156,082 for Intergraph Maintenance, Oracle Maintenance, and plotter maintenance.

Activities/Products/Performance Measures

❖ **Bureau of Planning and Research Staff**

- Support the GIS Computer Network in the Office of Planning and utilized by other organizations.
- Monitor and maintain the system to support Bureau customers.
- Implement system requirements for processing efficiency, security, accounting, back-ups and file integrity.
- Maintain formal and informal communications with PennDOT' s Bureau of Business Solutions and Services, Bureau of Infrastructure and Operations, Bureau of Project Delivery, the CIO's Office, and others engaged in information technology.
- Provide computer support for the Bureau of Planning & Research, including all Bureau business areas, as required.
- Support GIS in District and County Offices, and Central Office, as well as the PA Historic and Museum Commission, as required.
- Maintain and enhance the Bureau's Intranet and Internet web sites.
- Coordinate all computer activities for the Bureau.
- Develop budget recommendations by 8/31 of each year.
- Acquire all hardware/software for the Bureau by 3/31 of each year.
- Equipment Installation by 6/30 of each year.
- Enhance and maintain the GIS Transportation database.
- Maintain Oracle Databases supporting multiple applications throughout the Department.
- Perform routine system back-ups and maintenance.
- Seek support for hardware.
- Update core GIS transportation information databases daily or weekly through ETL processes, as indicated.
- Assist with loading/processing of video log images to combination production Internet/Intranet server within three months of delivery, process files for display.

- Maintain statewide coverage of aerial photography and other raster graphics.
- Maintain off-site equipment to support bureau operations and customers in the event of an emergency in accordance with the Continuity of Operations Plan.

❖ **District**

- No district activity

❖ **Consultants**

- Purchase of GIS Software/Database Software, GIS/Cartography Hardware and Intergraph Maintenance, Oracle Maintenance, and plotter maintenance by the end of the State Fiscal Year each year.

RESEARCH

DIVISION OVERVIEW

PennDOT understands the importance of research, education and technology transfer activities as they relate to the transportation industry. PennDOT places a focus on research and innovation and realizes that the initial investment will pay great dividends in the future as research innovations drive change and/or business process improvements. For this reason, the Bureau of Planning and Research (BPR) Research Division manages and administers a customer-driven, applied Research Program focused on providing solutions to real-world transportation issues and challenges.

The mission of the PennDOT Research Program is to identify, develop and conduct strategically-focused research, education and technology transfer projects. The mission is achieved through a contract research program that emphasizes applied research, implementation, performance monitoring and technology transfer. The Research Division works closely with all of the functional areas of PennDOT to ensure that the right research projects are being conducted and that the results are being implemented through a systematic process.

The Research Division has developed an approach to identify, prioritize, select and manage needed research that engages senior executives and managers, as well as the subject matter experts located throughout the Department. This participation, input and support ensures that BPR is able to produce research results that are timely and critical. In addition, the Research Division is dedicated to ensuring that research results are also shared through planned, strategic actions with Department forces and with our local government partners through the PennDOT Research and Innovation Implementation, and the Local Technical Assistance Program (LTAP).

RESEARCH PROGRAM MANAGEMENT

Objective

The Research Program Management (RPM) section is responsible for the development and management of the annual PennDOT Research Program. The annual Research Program begins with submission of *Innovations Deserving Exploration and Analysis* (IDEA) forms that are submitted by PennDOT employees. The IDEA forms are reviewed, prioritized, and programmed in conjunction with the PennDOT executive staff. Potential research projects are included in an annual Research Program that is presented to the PennDOT Program Management Committee (PMC) for final approval.

There are several contracting mechanisms that exist for project initiation and include the following:

- Department of General Services (DGS) Master Agreement
 - Work order based projects where a principal investigator at a University has been identified and is uniquely qualified to perform the work and where projects support the academic mission of the university.
- PennDOT Intergovernmental Cooperative Agreement (IGA)
 - Work order based projects where a principal investigator at a University has been identified and is uniquely qualified to perform the work and where projects support the academic mission of the university.
- Requests for Proposals (RFP)
 - Competitively bid projects administered by the Bureau of Office Services.
- Engineering and Construction Management System (ECMS)
 - Competitively bid projects administered by the Bureau of Project Delivery.
- Department-wide Research Initiatives (DWR)
 - Use of existing consultant-based agreements initiated in various Bureaus throughout PennDOT.

The RPM section also manages the PennDOT research implementation process. The implementation process takes the results of successfully completed research projects and communicates, disseminates and transfers the knowledge and all project-related materials broadly throughout PennDOT and with partner organizations.

The RPM section manages PennDOT's participation in the Transportation Pooled Fund Program. Any PennDOT employee can request funding to participate in a pooled fund project. The pooled fund projects PennDOT chooses to participate in are funded by a combination of financial resources from PennDOT as well as other state departments of transportation and/or FHWA, in an effort to reduce the financial impact to any one entity and to achieve a common research goal.

Responsible Manager:	Vacant		Project Manager: Lisa Tarson
Work Order Number:	92003 8 9 RES		Central Office
	92013 8 9 RES		Consultant
	28503 8 9 VIL ¹	28503 8 9 VIT ¹¹	Consultant
	27083 8 9 PSU ²	27083 8 9 PST ¹²	Consultant
	24073 8 9 UPI ³	24073 8 9 UPT ¹³	Consultant
	27113 8 9 TEM ⁴	27113 8 9 TET ¹⁴	Consultant
	28203 8 9 CMU ⁵	28203 8 9 CMT ¹⁵	Consultant
	28303 8 9 UMD ⁶	28303 8 9 UMT ¹⁶	Consultant
	24013 8 9 DWR ⁷		Consultant
	28603 8 9 ECM ⁸		Consultant
	28703 8 9 JUN ⁹	28703 8 9 JUT ¹⁷	Consultant
	28803 8 9 PUR ¹⁰	28803 8 9 PUT ¹⁸	Consultant

YEAR ONE

Total Project Cost: \$	9,194,963	Total Person Years: 5.1
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Participants	Federal		State		Other	Total
	SPR	SPR/Toll Credit	MLF	100% MLF	Fed./State	
Dept. Force - Planning & Research	418,552	0	104,638	0	0	523,190
Research Consultant	2,075,563	5,600,320	518,890	477,000	0	8,671,773
Total	2,494,115	5,600,320	623,528	477,000	0	9,194,963

Notes: ¹ through ¹⁰ will be funded with SPR (80% Federal/20% State) funds and ¹¹ through ¹⁸ will be funded with 100% Federal (80% Federal/20% Tolls) funds.

¹ Work Orders through the Villanova University DGS Master Agreement, ² Work Orders through the Pennsylvania State University DGS Master Agreement, ³ Work Orders through the University of Pittsburgh DGS Master Agreement, ⁴ Work Orders through the Temple University DGS Master Agreement, ⁵ Work Orders through the Carnegie Mellon University Intergovernmental Cooperative Agreement, ⁶ Work Orders through the University of Maryland Intergovernmental Cooperative Agreement, ⁷ Department Wide Research Initiatives, ⁸ Projects initiated via Engineering Construction Management System, ⁹ Word Orders through the Juniata College DGS Master Agreement, ¹⁰ Word Orders through the Purdue University Intergovernmental Cooperative Agreement, ¹¹ Work Orders through the Villanova University DGS Master Agreement using 100% Federal Funds, ¹² Work Orders through the Pennsylvania State University DGS Master Agreement, ¹³ Work Orders through the University of Pittsburgh DGS Master Agreement, ¹⁴ Work Orders through the Temple University DGS Master Agreement, ¹⁵ Work Orders through the Carnegie Mellon University Intergovernmental Cooperative Agreement, ¹⁶ Work Orders through the University of Maryland Intergovernmental Cooperative Agreement, ¹⁷ Work Orders through

the Juniata College DGS Master Agreement, 18 Work Orders through the Purdue University Intergovernmental Agreement. ¹

**FUNDS OBLIGATED SEPARATELY FROM WORK PROGRAM*
(F.Y. 2018-2019)**

Participants	Federal	Total
	SPR	
Consultant-Pooled Fund Program ¹	\$500,000	\$500,000
National Academy of Sciences (NCHRP) ²	\$1,877,411	\$1,877,411
National Academy of Sciences (TRB) ³	\$260,889	\$260,889
Total	\$2,638,300	\$2,638,300

Notes: *Funds are 100% Federal and are obligated separately from Annual Work Program. 1. Transportation Pooled Fund Program. 2. National Cooperative Highway Research Program Support (NCHRP). 3. Transportation Research Board (TRB) Membership funds. (Please note that funding for the Transportation Pooled Fund projects and National Initiatives are not included in the request for new projects.)

YEAR TWO

Total Project Cost: \$	9,100,173	Total Person Years: 5.1
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Participants	Federal		State		Other	Total
	SPR	SPR/Toll Credit	MLF	100% MLF	Fed./State	
Dept. Force - Planning & Research	437,832	0	109,458	0	0	547,290
Research Consultant	2,075,563	5,600,320	400,000	477,000	0	8,552,883
Total	2,513,395	5,600,320	509,458	477,000	0	9,100,173

Notes: ¹ through ¹⁰ will be funded with SPR (80% Federal/20% State) funds and ¹¹ through ¹⁸ will be funded with 100% Federal (80% Federal/20% Tolls) funds.

¹ Work Orders through the Villanova University DGS Master Agreement, ² Work Orders through the Pennsylvania State University DGS Master Agreement, ³ Work Orders through the University of Pittsburgh DGS Master Agreement, ⁴ Work Orders through the Temple University DGS Master Agreement, ⁵ Work Orders through the Carnegie Mellon University Intergovernmental Cooperative Agreement, ⁶ Work Orders through the University of Maryland Intergovernmental Cooperative Agreement, ⁷ Department Wide Research Initiatives Cooperative Agreement, ⁶ Work Orders through the University of Maryland Intergovernmental Cooperative Agreement, ⁷ Department Wide Research Initiatives, ⁸ Projects initiated via Engineering Construction Management System, ⁹ Word Orders through the Juniata College DGS Master Agreement, ¹⁰ Word Orders through the Purdue University Intergovernmental Cooperative Agreement, ¹¹ Work Orders through the Villanova University DGS Master Agreement using 100% Federal Funds, ¹² Work Orders through the Pennsylvania State University DGS Master Agreement, ¹³ Work Orders through the University of Pittsburgh DGS Master Agreement, ¹⁴ Work Orders through the Temple University DGS Master Agreement, ¹⁵ Work Orders through the Carnegie Mellon University Intergovernmental Cooperative Agreement, ¹⁶ Work Orders through the University of Maryland Intergovernmental Cooperative Agreement, ¹⁷ Work Orders through the Juniata College DGS Master Agreement, ¹⁸ Work Orders through the Purdue University Intergovernmental Agreement.

FUNDS OBLIGATED SEPARATELY FROM WORK PROGRAM*
(F.Y. 2019-2020)

Participants	Federal	Total
	SPR	
Consultant-Pooled Fund Program ¹	\$500,000	\$500,000
National Academy of Sciences (NCHRP) ²	\$1,877,411	\$1,877,411
National Academy of Sciences (TRB) ³	\$260,889	\$260,889
Total	\$2,638,300	\$2,638,300

Notes: *Funds are 100% Federal and are obligated separately from Annual Work Program. 1. Transportation Pooled Fund Program. 2. National Cooperative Highway Research Program Support (NCHRP). 3. Transportation Research Board (TRB) Membership funds. (Please note that funding for the Transportation Pooled Fund projects and National Initiatives is not included in the request for new projects.)

Activities/Products/Performance Measures

❖ **Research Program Management Staff**

- Collect Research IDEA forms by 10/31 of each year.
- Coordinate proposed scopes of work with and seek SPR eligibility from FHWA.
- Present a recommended Research Program to PMC by 2/28 of each year.
- Submit research final reports to FHWA.
- Develop the Annual Research Program Activities report by 10/31 and provide to PA Division Office and post to Research Division website.
- Conduct Research Symposium with Universities in 2018 and develop a Research Road Map in concert with PennDOT's research needs and Universities' interests.
- Participate in a multi-state Peer Exchange during F.Y. 2019-2020.
- Manage Pooled Fund Program, see following chart for pooled fund projects listing.
- Possibly be a lead state for a pooled fund project
- Provide quarterly updates for Research Projects to PA Division Office.
- Provide quarterly updates for Pooled Fund Projects to PA Division Office.

Research Implementation

- Pre-Project Close-Out Meeting (Implementation Evaluation Occurs)

- The Project Manager (PM) for the research project meets with the Technical Advisor (TA) three months/90 days before the research project ends. At this meeting, the PM and the TA complete the Implementation Evaluation Form, which serves to determine if the research project has the potential for implementation.
- Post all research final reports on Research Division website within 30 days of project completion and announce project completion on PennDOT's Daily News Flash.
- Track all research project implementation to capture communication and deployment statuses and produce a quarterly report to PA Division Office.
- Coordinate and track work orders with contracted vendor for research project implementation. Progress meetings will occur at regular intervals to provide update on the status of the activities and review invoicing. Also, Special Purpose meetings will occur at regular intervals to discuss deliverables, review comments, etc.
- Implementation activities will always include two components:
 - Prepare a cost benefit analysis of the implementation project. This is a high-level assessment of the costs to conduct and implement research as compared to the benefits of implementation.
 - Create the communication plan and checklist for educating and informing internal and external parties about the implementation project.
- Other deliverables will vary depending upon the Implementation Action Plan and approved Scope of Work. Progress meetings and Special Purpose meetings will occur at regular intervals during this time to keep the Implementation Project Manager, Technical Advisor and/or Project Champion informed. Progress meetings will occur to provide update on the status of the activities and review invoicing. Special Purpose meetings will occur at key intervals to discuss deliverables, review comments, etc.
- Implementation After Action Review
 - Following the completion of all implementation activities, the Implementation Team will meet to conduct an After Action Review. The After Action Review will include a discussion about the process, evaluate outcomes, and review the cost benefit analysis.
 - Track and ensure deployment of implementable research and assess of the benefits the overall research program in achieving the system performance goals of PennDOT.

❖ **Consultants/Universities**

F.Y. 2018-2019 PLANNED RESEARCH PROGRAM PROJECTS: 100% Federal (80% Federal/20% Toll)					
	Project Title	Organization Supporting Project	Recommended Contracting Mechanism	Estimated Duration	Total Estimated Costs
1	Waterless Bridge Joint Cleaning	Bureau of Maintenance & Operations	DGS/PSU Master Agreement	7 Months	\$43,581.36
2	Optimizing Use of Crumb Rubber Modifier with Pennsylvania Asphalt Mixes	Bureau of Project Delivery		24 Months	\$128,947.47
3	Characterization of RAP Asphalt Binder Properties Using Impact Resonance Testing	Bureau of Project Delivery		18 Months	\$124,898.13
				Total	\$297,426.96
4	Corrosion Repair Strategies for Steel Bridges Using High Performance and Traditional Materials	Bureau of Project Delivery	DGS/Pitt Master Agreement	24 Months	\$275,000.00
5	Data Management Mining and Inference for Bridge Monitoring	Bureau of Project Delivery		42 Months	\$370,000.00
6	Reduction of Maintenance and/or Construction Work Zone Crashes and Other Injuries	District 11-0 and Bureau of Project Delivery		24 Months	\$150,000.00
7	JPCP Faulting Model Improvements for MEPDG	Bureau of Project Delivery		24 Months	\$300,000.00
				Total	\$1,095,000.00
8	Lightweight and Sustainable Materials in Engineered Fills	District 6-0	DGS/Temple Master Agreement	18 Months	\$145,279.96
9	Joint and Full Waveform Inversion to Improve Evaluation of Sinkholes and Karst Features	District 6-0		24 Months	\$221,570.10
				Total	\$366,850.06

	Project Title	Organization Supporting Project	Recommended Contracting Mechanism	Estimated Duration	Total Estimated Costs
10	Asphalt Performance Related Testing Protocol Evaluation for Pennsylvania	Bureau of Project Delivery	Competitive – RFP or Another	60 Months	\$500,000.00
12	Smart Green Corridor Innovation	Highway Admin – Executive Office		22 Months	\$125,000.00
13	Stream Restoration Municipal Partnership and Standards	Highway Admin – Executive Office		7 Months	\$500,000.00
				Total	\$1,475,000.00
TOTAL F.Y. 2018-2019 PLANNED RESEARCH PROGRAM PROJECTS: 100% Federal (80% Federal/20% Toll)					\$3,234,277.02

F.Y. 2018-2019 ACTIVE RESEARCH PROGRAM PROJECTS: SPR (80% Federal/20% State)					
	Project Title	Organization Supporting Project	Contracting Mechanism	Estimated Duration	Total Estimated Costs
1	Management Unit 3 Stream Surveys – Federally Listed Mussels in the Ohio Basin	District 1-0	ECMS	36 Months	\$591,052.88
				Total	\$591,052.88
TOTAL F.Y. 2018-2019 ACTIVE RESEARCH PROGRAM PROJECTS: SPR (80% Federal/20% State)					\$591,052.88

F.Y. 2017-2018 PLANNED RESEARCH PROGRAM PROJECTS: 100% Federal (80% Federal/20% Toll)					
	Project Title	Organization Supporting Project	Recommended Contracting Mechanism	Estimated Duration	Total Estimated Costs
1	Identification of Factors Controlling the Development of Subsidence Impacts Forecasting Methodology to the I-70 Alignment Over Longwall Mining of the Tunnel Ridge Mine, Washington County, Pennsylvania	District 12-0	DGS/Pitt Master Agreement	27 Months	\$516,348.30
2	Carbon Nanotubes Additives for Structural and Highway Concrete	District 1-0		18 Months	\$219,389.82
3	Superload Effect on Pavement Life	District 1-0		36 Months	\$598,839.22
4	Depth to Bedrock Seismic Measuring Device	District 1-0		18 Months	\$141,630.81
				Total	\$1,476,208.15
5	Electronic Construction Model Definition	Bureau of Project Delivery	DGS/Temple Master Agreement	12 Months	\$429,928.20
				Total	\$429,928.20
6	Evaluation of the Performance of High RAP/RAS Asphalt Pavements	District 12-0	Competitive – RFP or Another	36 Months	\$300,000.00
				Total	\$300,000.00
TOTAL F.Y. 2017-2018 PLANNED RESEARCH PROGRAM PROJECTS: 100% Federal (80% Federal/20% Toll)					\$2,206,136.35

F.Y. 2017-2018 ACTIVE RESEARCH PROGRAM PROJECTS: SPR (80% Federal/20% State)					
	Project Title	Organization Supporting Project	Recommended Contracting Mechanism	Estimated Duration	Total Costs
1	PA Flex Beam	District 1-0	ECMS	17 Months	\$248,964.77
2	PennSTART	Bureau of Maintenance & Operations		12 Months	\$64,000.00
				Total	\$312,964.77
3	Pennsylvania Traffic Records Integration Plan	Bureau of Maintenance & Operations	DGS/PSU Master Agreement	9 Months	\$50,000.00
				Total	\$50,000.00
TOTAL F.Y. 2017-2018 ACTIVE RESEARCH PROGRAM PROJECTS: SPR (80% Federal/20% State)					\$362,964.77

TOTAL F.Y. 2016-2017 PLANNED RESEARCH PROGRAM PROJECTS: 100% Federal (80% Federal/20% Tolls)					
	Project Title	Organization Supporting Project	Contracting Mechanism	Estimated Duration	Total Estimated Costs
1	Bridge Deck Joint Elimination	District 1-0	DGS/PSU Master Agreement	36 Months	\$159,907.72
				Total	\$159,907.72
TOTAL F.Y. 2016-2017 PLANNED RESEARCH PROGRAM PROJECTS: 100% Federal (80% Federal/20% Toll)					\$159,907.72

F.Y. 2016-2017 ACTIVE RESEARCH PROGRAM PROJECTS: SPR (80% Federal/20% State)					
	Project Title	Organization Supporting Project	Recommended Contracting Mechanism	Estimated Duration	Total Costs
1	Effect of Aggregate Compaction Using Excavator-Mounted Hydraulic Plate Compactors	Bureau of Construction & Materials	DGS/PSU Master Agreement	12 Months	\$115,281.68
				Total	\$115,281.68
2	Stormwater Analysis & Water Quality Assessment of Urban Areas	Bureau of Maintenance & Operations	DGS/Pitt Master Agreement	20 Months	\$195,112.00
3	Curb-Ramp Design & Construction Inspection System (CRDCIS)	District 11-0		20 Months	\$175,000.00
				Total	\$370,112.00
4	The Effect of Post-Consumer Recycled Asphalt Shingles (PCRAS) on Pavement Performance	District 2-0	ECMS	16 Months	\$199,770.50
5	Implementation Activities	Bureau of Planning & Research		46 Months	\$955,270.00
				Total	\$1,155,040.50
TOTAL F.Y. 2016-2017 ACTIVE RESEARCH PROGRAM PROJECTS: SPR (80% Federal/20% State)					\$1,640,434.18

F.Y. 2016-2017 COMPLETED RESEARCH PROGRAM PROJECTS: SPR (80% Federal/20% State)					
	Project Title	Organization Supporting Project	Contracting Mechanism	Duration	Total Costs
1	Evaluating Bicycle, Pedestrian, Transit & Economic Data Collection Needs & Measures of Effectiveness in PA	Center for Program Development & Management	DGS/Pitt Master Agreement	15 Months	\$134,959.77
2	Effect of Warm Mix Asphalt (WMA) Low Mixing and Compaction Temperatures on Recycled Asphalt Pavement (RAP) Binder Replacement	District 6-0	DGS/Temple Master Agreement	20 Months	\$224,500.00
3	Highway Incident Detection Timeline	Bureau of Maintenance & Operations	DGS/Temple Master Agreement	12 Months	\$115,000.00
4	Pilot a Solution to Fix Non-Compliant Rumble Strips for Bicycle Safety	Bureau of Maintenance & Operations	DGS/Villanova Master Agreement	5 Months	\$40,520.10
5	Joint Statewide Connected & Automated Vehicle Strategic Plan	Bureau of Maintenance & Operations	ECMS	12 Months	\$265,176.64
TOTAL F.Y. 2016-2017 COMPLETED RESEARCH PROGRAM PROJECTS SPENT:					
SPR (80% Federal/20% State)					\$780,156.51

PROPOSED F.Y. 2019-2020 Pooled Fund Program Commitments				
	Study Number	Study Title	Organization Supporting Project	Total Commitment Amount
1	TPF-5(377)	Enhanced Traffic Signal Performance Measures	Bureau of Maintenance and Operations	\$30,000
2	TPF-5(372)	Building Information Modeling (BIM) for Bridges & Structures	Bureau of Project Delivery	\$20,000
3	TPF-5(368)	Performance Engineered Concrete Paving Mixtures	Bureau of Project Delivery	\$15,000
4	TPF-5(354)	Improving the Quality of Highway Profile Measurement	Bureau of Maintenance and Operations	\$20,000
5	TPF-5(353)	Clear Roads Phase II	Bureau of Maintenance and Operations	\$25,000
6	TPF-5(343)	Roadside Safety Research or MASH Implementation	Bureau of Project Delivery	\$50,000
7	TPF-5(334)	Enhancement to the Intelligent Construction Data Management (Veta) and Implementation	Bureau of Project Delivery	\$25,000
	Study Number	Study Title	Organization Supporting Project	Total Commitment Amount
8	TPF-5(316)	Traffic Control Device (TCD) Consortium	Bureau of Maintenance and Operations	\$25,000
9	TPF-5(290)	Aurora Program	Bureau of Maintenance and Operations	\$25,000
10	TPF-5(206)	Research Program to Support Research, Development, Deployment of System Operations Application of Vehicle Infrastructure Integration (VII)	Bureau of Maintenance and Operations	\$50,000
			Total	\$285,000

Research Item revised September 2018. Amendment request to FHWA for the creation of new FPN at 100% federal.

MUNICIPAL RESEARCH AND OUTREACH

Objective

The Municipal Research and Outreach Unit's Annual Work Plans focus on initiatives that are core to the successful interaction between PennDOT and Pennsylvania's 2,560 municipalities. Those initiatives include:

- Local Technical Assistance Program;
- Municipal Outreach;
- New Product Evaluation Project;
- PennDOT Connects Municipal Outreach, Training, and Technical Assistance;
- Publication Administration;
- Transportation Library and Research Center.

LTAP

The PennDOT Local Technical Assistance Program (LTAP) is one of 58 LTAP centers across the nation (one in each state, Puerto Rico and seven regional centers serving American Indian tribal governments.) PennDOT LTAP is dedicated to transferring transportation technology through training, technical assistance, and other customer services to municipal elected officials and their staff. The LTAP program is designed to help Pennsylvania's municipalities, which maintain over 77,000 miles of roadways, make the best use of their roadway maintenance dollars. PennDOT LTAP provides technical information and proven technologies dealing with roadway maintenance and safety methods to meet the growing demands on municipal governments. PennDOT LTAP has provided technology transfer services to Pennsylvania's 2600 municipal governments since 1983.

On average, the PennDOT LTAP training and technology transfer programs train and assist nearly 6,000 municipal employees per year in effective and efficient maintenance procedures, essential safety practices, and infrastructure management processes. Historically, PennDOT LTAP has augmented this training with nearly 200 one-on-one technical assistance sessions and the dissemination of approximately 50,000 pieces of information highlighting practical technological advances.

Municipal Outreach

The Municipal Research and Outreach (MRO) Section primarily serves as the liaisons with:

- Other Commonwealth agencies;
- PennDOT organizations including the District Municipal Services Representatives staff, Bureau of Maintenance and Operations and the Bureau of Project Delivery;
- County and municipal associations;
- County and municipal governments;
- General public for the PennDOT Office Planning.

This includes the identification of needs and support for county and municipal governments by conducting research and outreach such as:

- Developing training;
- Implementing laws, regulations and policy;
- Facilitating assemblies;
- Decision-making;

through a coordinated effort on topics that affect transportation programs and operations.

NPEP

The New Product Evaluation Project (NPEP) examines new products and processes for use on lower volume local roads. Once examined and the specification requirements are approved they become eligible for Liquid Fuels Funds for use on municipal maintenance and construction projects.

PennDOT Connects Municipal Outreach, Training, and Technical Assistance

Implementation of the PennDOT Connects policy into PennDOT's program development and project delivery procedures requires collaboration meetings with Planning Partners and local governments to become a routine element. Collaboration will guarantee details unique to candidate communities are discussed for each project prior to developing project scopes and cost estimates.

A key component of PennDOT Connects is local government training. A training strategy is necessary to raise awareness and understanding of PennDOT Connects, its value, and the basic framework for a partnership approach going forward for local government employees. This includes a review of the responsibilities of District Offices, Central Office, Planning Partners, and local governments. The training is also intended to manage the expectations of local governments, and encourage planning at the local level today to support opportunities for better projects in the future.

Objectives:

- To raise awareness and understanding of the Secretary's initiative, its value, and the basic framework for a partnership approach going forward;
- To obtain input and perspectives from participants, including success factors from their perspectives;
- To encourage local government champions to further promote the initiative;
- To identify additional networking opportunities to communicate the initiative broadly throughout the Commonwealth;
- To identify specific follow-up items and needs (e.g., training) from each outreach meeting;
- To implement a training program for municipal officials;
- To provide technical assistance to municipalities to implement the PennDOT Connects.

Publication Administration

PennDOT communicates policy and guidelines through a series of publications. The publications that directly affect counties and municipalities which the Municipal Research and Outreach Unit administer are:

- PUB 9: Policy and Procedure for the Administration of Liquid Fuels;
- PUB 221: Posting and Bonding Procedures for Municipal Highways;
- PUB 372: Pocket Guide for Road Construction and Maintenance;
- PUB 447: Approved Products for Lower Volume Local Roads;
- PUB 772: Office of Planning Brochure-Partnering with Local Governments

Legislation and policies need to be monitored and changes need to be communicated through these publications. Also, as new and innovative products for lower volume and local roads become available specification and suppliers need to be incorporated into PUB 447.

Transportation Library and Research Center

The MRO section also manages the Transportation Library and Research Center and coordinates and oversees PennDOT’s participation in national programs, including the National Cooperative Highway Research Program (NCHRP) and the Transportation Research Board (TRB).

Responsible Manager: Vacant	Project Manager: Brian Wall
Work Order Number: 98003 8 9 MRO 27213 8 9 RFP	Central Office Consultant

YEAR ONE

Total Project Cost:	\$ 1,772,346	Person Years: 4.3
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Participants	Federal		State			Other	Total
	SPR	SPR/Toll Credit	MLF	100% MLF	GF	Fed./State	
Planning and Research	106,670	0	26,668	0	222,864	0	356,202
Consultant	1,012,915	0	253,229	0	0	150,000	1,416,144
Total	1,119,585	0	279,897	0	222,864	150,000	1,772,346

YEAR TWO

Total Project Cost: \$	1,753,171	Person Years: 4.3
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Participants	Federal		State			Other	Total
	SPR	SPR/Toll Credit	MLF	100% MLF	GF	Fed./State	
Planning and Research	93,694	0	23,423	0	219,910	0	337,027
Consultant	1,012,915	0	253,229	0	0	150,000	1,416,144
Total	1,106,609	0	276,652	0	219,910	150,000	1,753,171

Activities/Products/Performance Measures

❖ **Bureau of Planning and Research Staff**

Local Technical Assistance Program Products

- Produce Progress Reports summarizing LTAP course schedules, locations, attendance, evaluations completed on a quarterly basis.
- Coordinate a maximum of two LTAP Advisory Committee meetings through the contract. This will include all logistics and on-site management of these meetings.
- Assist the contractor in developing materials for new training efforts and will insure that training meets all applicable PennDOT specifications.
- Develop and negotiate program priorities with top managers to ensure that local government training activities meet established PennDOT goals and objectives.
- Develop program schedules, project implementation strategies, funding plans, budgets and performance reporting for local government training initiatives.

PennDOT Connects Municipal Outreach, Training, and Technical Assistance (MOTTA)

- Schedule additional municipal outreach workshops as needed / track the # of attendees
- Schedule 18 Planning and Engineering 360 for Municipal Officials / track the # of attendees
- Coordinate up to 48 face to face, telephone, and; or research tech assists as provided by the MOTTA contract

Transportation Library and Research Center

- Complete all Library and Research Center material requests.
- Library statistics including Items Circulated, Books and Reports, Resources Reference, Lit Searches, and Titles Cataloged

❖ **Consultant**

- Provide quarterly updates for the LTAP trainings, technical assists, and newsletters.

PLANNING

METROPOLITAN PLANNING

The metropolitan transportation planning program has been established in 19 metropolitan areas to promote federal, state, and local transportation objectives. The program provides a forum where decision-makers identify issues/opportunities and make informed decisions regarding the programming and implementation of urban transportation projects and services that address these issues and opportunities. Key issues that will be addressed during the year include updating Long Range Transportation Plans, adopting TIPs and Air Quality conformity determinations where needed, continuing to integrate Congestion Management Program (CMP) Planning and Intermodal Management System (IMS) planning and Transportation Performance Management (TPM) into the planning and programming process.

Transportation Performance Management (TPM) is a strategic approach that uses data to make investment and policy decisions to achieve national performance goals. [23 CFR 490](#) outlines the national performance goals for the federal-aid program. It establishes the seven goal areas: safety, infrastructure condition, congestion reduction, system reliability, freight, environmental sustainability and reduced project delivery delay.

Other issues include assisting the Department with trend analyses, and cumulative and secondary impact assessments on major transportation projects. Additional key items to be considered are environmental justice mandates, smart growth initiatives and ensuring consistency between land use plans and transportation decisions as part of all ongoing long range planning and short range programming activities. Considerations that are central in considering all of these items is the focus on providing a safer environment for the traveling public, and enhancing personal mobility and the movement of goods.

The metropolitan planning program is guided by the Department's priority goals and objectives which are included in "Plan for a New Pennsylvania" and the "Mobility Plan", and are listed below along with their general ties to the MPO process. FAST Act and related USDOT guidance also provides a major focus for transportation planning in the MPO areas. Products/performance measures for each metropolitan area are listed on the area-specific pages that follow.

Products/Performance Measures

- Long Range Planning
 - Update plans by staging and prioritizing all major capital projects by 6/30/20, to be consistent with the "re-engineered" planning and programming process and meet all federal mandates, including compliance with the FAST Act.
- Safety Initiatives
 - Provide assistance in completion of all Safety Initiatives identified in the first four years of the Twelve Year Program. Implement approved safety and mobility projects.

- Use information from the Safety Management System (SMS) to include projects on the long range plan and TIP.
- Pursue safety conscious planning initiatives.
- Congestion Management, Intermodal Management and Mobility Enhancement
 - Develop and adopt a planning work program that addresses economic development, restoration, safety, and intermodal issues of the region.
 - Provide technical assistance to local governments in the implementation of private/public partnerships to finance economic development projects.
 - Satisfy the Department's and USDOT's mandates for the Congestion Management Program.
 - Satisfy the Department's recommendations for the Intermodal Management System.
 - Provide support for the other FAST Act Management and Monitoring Systems, especially PTMS and Traffic Monitoring System/Highway (TMS/H), as required.
- System Maintenance and Preservation
 - Finalize the update of the short range programs (FFY 2019 TIPs) and include the most needed restoration projects.
 - Amend/modify FFY 2019 TIP as required. Develop the FFY 2021 TIP as appropriate.
 - Provide condition and performance data on roadways and bridges that serve as a basis for identifying restoration needs (HPMS and TMS/H).
 - Update long range plans as necessary.
 - Complete traffic counts for HPMS and project development. Submit quarterly control counts within 30 days of the quarter in which they were taken, except for counts taken in the fall quarter, which are to be submitted prior to 12/31 of each year. All other assigned counts are to be submitted monthly: i.e. the last workday of the month in which the count was taken.
 - Develop information in support of highway functional classification and Federal-Aid requests; continue to update local road names and other information included on the Type 10 maps.
- Air Quality
 - Implement provisions of the Clean Air Act Amendments (CAAA) of 1990 for all non-attainment areas.
 - Supply data, as needed, to meet all CAAA requirements.
 - Develop strategies for meeting conformity requirements for long range plans and TIPs and for amendments to these documents.
 - Supply data, as needed, to develop the transportation portion of the State Implementation Plan.
 - All of the mandated air quality planning elements are prepared by the Department or the MPO and are provided to the non-attainment MPOs and RPOs for review, comment, and approval. In Philadelphia, coordination with adjacent states is also required.

- Continue to refine transportation and air quality planning and modeling expertise in Lehigh Valley, Reading, Harrisburg, Lancaster, Erie and York.
- Major Transportation Projects/Needs and Feasibility Studies
 - Complete ongoing Needs and Feasibility Studies. Provide data, as needed, to assist in the preparation of environmental documents.
 - Incorporate related work into ongoing and future environmental clearance documents.
 - Provide data and information for trend analyses and cumulative impact assessments on major transportation projects.
 - Monitor and participate in agency coordination meetings, as necessary.
- Technical Innovation
 - Review and assess current capabilities to determine the need for new and expanded technological applications (e.g., GIS) each year.
 - Assess the need for Intelligent Transportation Systems (ITS) through the regional long range plan each year.
 - Update Regional ITS Architectures as needed.
- Re-engineering the Planning and Programming Process
 - Pursue actions to become consistent with or maintain consistency with the fifteen guiding principles for all present and future planning and programming activities.
 - Continue to participate on statewide re-engineering work groups as appropriate.
 - Work with the Department to produce standard program products, to more fully automate/computerize all processes and to conduct program/project monitoring in real time through the sharing of data among all parties by way of the Multimodal Project Management System.
- Land Use Consistency
 - Work with municipal governments to ensure transportation planning and programming consistency with comprehensive plans and zoning ordinances.
- New Initiatives
 - As possible new federal and state initiatives (e.g., safety and security after 9/11/01, environmental stewardship and streamlining, further linkages between transportation and land use planning, asset management, linking planning and NEPA, and more) are brought forward, PennDOT and its planning partners will assist as appropriate with the required planning, programming and implementation efforts.

ADAMS

Responsible Manager: James Arey	Project Manager: Anthony Sansone
Work Order Number(s): 83503 8 9 ADC, 84103 8 9 CPG 83503 8 9 AD8 83513 8 9 ADM, 83513 8 9 ADT (Toll), 83513 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 292,396	Total Person Years: 0.48
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Participants	Federal					State		Other	Total
	SPR/CPG	SPR Toll Credit	PL/CPG	FTA/CPG	PL/Toll Credit	MLF	Other	Local	
Program Center	20,554		0	4,738	0	5,138	1,185	0	31,615
District	1,856		0	144	0	464	36	0	2,500
Planning Agency	151,125	5,000	0	51,500	0	20,000	0	30,656	258,281
Total	173,535	5,000	0	56,382	0	25,602	1,221	30,656	292,396

YEAR TWO

Total Project Cost: \$ 321,281	Total Person Years: 0.48
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Participants	Federal					State		Other	Total
	SPR/CPG	SPR Toll Credit	PL/CPG	FTA/CPG	PL/Toll Credit	MLF	Other	Local	
Program Center	34,560		0	13,840	0	8,640	3,460	0	60,500
District	1,856		0	144	0	464	36	0	2,500
Planning Agency	151,125	5,000	0	51,500	0	20,000	0	30,656	258,281
Total	187,541	5,000	0	65,484	0	29,104	3,496	30,656	321,281

Activities/Performance Measures

❖ Program Center Liaison

- Attend 4 quarterly Policy Board Committee Meetings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed.
Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with the District to prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)
- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
- Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to-the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)

- Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
- Coordinate all planning activities with District 8-0, as required. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 4 quarterly Policy Board Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- The Adams County MPO has identified several priority tasks that will be completed during the 2018-2020 UPWP. These include:
 - Continue to manage the transition from a Rural Planning Organization (RPO) to a Metropolitan Planning Organization (MPO). Efforts will focus on meeting state and federal transportation planning requirements for an MPO. Secondary tasks will include identifying areas where planning activities can be better coordinated on a regional basis with the York County MPO given the shared areas and network connections between the two counties.
 - Complete the Countywide Bicycle and Pedestrian Plan to identify potential policy changes and improvements necessary to improve the transportation network for bicyclists and pedestrians.

- Adopt and implement the 2019-2022 Transportation Improvement Program (TIP). This will also involve additional coordination with the York MPO as outlined above.
 - Adams County will work, in conjunction with the York MPO, towards an update of the Congestion Management Process (CMP) for Adams County.
 - Continue implementation of the Public Participation Plan and Title VI Civil Rights Act compliance.
- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.

ALTOONA

Responsible Manager: James Arey	Project Manager: Dean Roberts
Work Order Number(s): 81103 8 9 ALC, 81103 8 9 CPG 81103 8 9 AL9 81113 8 9 BCP, 81113 8 9 BCT (Toll Credit), 81113 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 319,696	Total Person Years: 0.5
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	31,218	0	0	7,554	0	7,804	945	0	47,521
District	6,760	0	0	600	0	1,540	150	0	9,050
Planning Agency	0	155,000	5,000	51,500	0	21,000	0	30,625	263,125
Total	37,978	155,000	5,000	59,654	0	30,344	1,095	30,625	319,696

YEAR TWO

Total Project Cost: \$ 329,295	Total Person Years: 0.5
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	33,661	0	0	7,915	0	8,415	1,979	0	51,970
District	4,960	0	0	2,400	0	1,240	600	0	9,200
Planning Agency	5,000	155,000	5,000	51,500	0	21,000	0	30,625	268,125
Total	43,621	155,000	5,000	61,815	0	30,655	2,579	30,625	329,295

Activities /Performance Measures

❖ Program Center Liaison

- Attend Planning Partners' Meetings and Technical Workshops as needed.
- Continue to attend scheduled joint Technical and Coordinating Committee Meetings for the Altoona MSA region.
- Administration/management of the FFY 2017 TIP /TYP, as needed. Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with District 9-0 to prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)

- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
- Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend scheduled Joint Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.
- Coordinate with PENNDOT District 9-0 and Central Office staff for the execution of the downtown circulation study.
- Continue to monitor and review the Long Range Plan for update by 2021.
- Continue to monitor and revise the current TIP and begin the development of the next TIP.
- Complete the transportation portion of Altoona's "Ahead of the Curve Altoona Housing Strategy & Downtown Investment Plan" by June 30, 2020.

CENTRE

Responsible Manager: James Arey	Project Manager: Frank Hampton
Work Order Number(s): 81203 8 9 CRC, 81103 8 9 CPG 81203 8 9 CR2 81213 8 9 CRP, 81213 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 385,183	Total Person Years: 0.85
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	31,677	0	0	7,419	0	7,919	1,855	0	48,870
District	15,200	0	0	1,600	0	3,800	400	0	21,000
Planning Agency	0	175,000	0	77,250	0	21,000	0	42,063	315,313
Total	46,877	175,000	0	86,269	0	32,719	2,255	42,063	385,183

YEAR TWO

Total Project Cost: \$ 421,413	Total Person Years: 0.85
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	49,424	0	0	18,656	0	12,356	4,664	0	85,100
District	15,200	0	0	1,600	0	3,800	400	0	21,000
Planning Agency	0	175,000	0	77,250	0	21,000	0	42,063	315,313
Total	64,624	175,000	0	97,506	0	37,156	5,064	42,063	421,413

Activities/Performance Measures

❖ Program Center Liaison

- Attend Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2) as schedule permits.
- Attend and represent PennDOT Office of Planning at various meetings, including planning sub-committees, where appropriate and as schedule permits. (Year 1 and 2)
- Coordinate all planning activities with FHWA, the MPO, and PennDOT Engineering District 2-0, as appropriate/required. (Year 1 and 2)
- Provide administration/management of the FFY 2017 TIP /TYP, as needed.

- Assist the MPO and PennDOT Engineering District 2-0 with the development, delivery and management of the FFY 2019 TIP/TYP.
- Work with the MPO and PennDOT Engineering District 2-0 staff to develop the draft FFY 2021 TIP/TYP biennial TIP after project costs and schedules/milestones are updated in MPMS. Coordinate with FHWA all TIP/TYP activities and share related products as they are developed.
- Work with the MPO and PennDOT Engineering District 2-0 staff to develop the next Long Range Transportation Plan (LRTP) update; which is due in September of 2020. Coordinate with FHWA all LRTP activities and share related products as they are developed.
- Coordinate with FHWA, MPO, and PennDOT Engineering District 2-0 staff on the establishment and implementation of transportation performance measures as related to-the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the MPO and PennDOT Engineering District 2-0 in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Assist PennDOT Engineering District 2-0 with the preparation and review of their Program Management Committee (PMC) items for submission before PMC, as needed to support TIP/TYP administration. (Year 1 and 2)
- Continue to assist the MPO with the development/maintenance of a local transportation project inventory for the region which includes locally owned bridges less than 20 feet in length and locally owned non-Federal-Aid roadways. Coordinate all inventory activities with FHWA and PennDOT Engineering District 2-0 to ensure uniform collection of data for these assets and to share related products as they are developed. (Year 1 and 2)
- Coordinate with the MPO and the PennDOT Financial and Contract Services division on the administration of the 2018-2020 UPWP, including review of UPWP Work Order invoices and modifications/amendments to Work Order Agreements. (Year 1 and 2)
- Coordinate with the MPO and the PennDOT Financial and Contract Services division on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with PennDOT Program Center representative, MPO, and FHWA staff regarding TIP modifications/amendments.
- Prepare draft Program Management Committee (PMC) items for review by Program Center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend Technical and Coordinating Committee Meetings for the MPO region as schedule permits. (Year 1 and 2)
- Work with FHWA, Program Center staff, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.

- Attend and represent PennDOT Engineering District 2-0 on various planning sub-committees. (Year 1 and 2) as schedule permits.
- Coordinate all PennDOT Connects activities within district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- Please see individual UPWP and quarterly invoice(s) for more detailed information regarding Planning Partner activities and deliverables.
- Provided below are priorities identified by the MPO for specific focus during the FY 2018-20 UPWP time frame:
 - Administration
 - Develop new Formation Agreement and Memorandum of Understanding with key stakeholders.
 - Prepare for, and participate in federal Planning Process Review conducted by FHWA and FTA.
 - PennDOT Connects
 - Participate in PennDOT Connects collaboration activities for initiating new projects and programs.
 - Long Range Transportation Planning
 - Prepare and adopt new LRTP by September 2020.
 - Programming
 - Develop and adopt new 2021-2024 Centre County TIP by June 30, 2020.
 - Public Transportation Planning
 - Complete public transportation planning activities.
 - Manage CATA's Alternative Service Models for Areas of Low Population Density study.
 - Bicycle and Pedestrian System
 - Plan and implement bicycle/pedestrian improvements.
 - Prepare information for renewal of Bicycle Friendly Community designation.
 - Monitor Key Projects
 - Participate in pre-construction and design activities for projects on the LRTP and TIP.
 - Participate in efforts to advance I-99/I-80 Interchanges and Route 322/144/45 Corridors projects.

ERIE

Responsible Manager: James Arey	Project Manager: Daniel Keane
Work Order Number(s): 81303 8 9 ERC, 81103 8 9 CPG 81303 8 9 ER1 81313 8 9 ECD, 81313 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 510,503	Total Person Years: 0.6
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	32,970	0	0	7,142	0	8,242	1,786	0	50,140
District	10,080	0	0	960	0	2,520	240	0	13,800
Planning Agency	0	280,000	0	77,250	0	41,000	0	48,313	446,563
Total	43,050	280,000	0	85,352	0	51,762	2,026	48,313	510,503

YEAR TWO

Total Project Cost: \$ 628,532	Total Person Years: 2.02
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	40,284	0	0	8,971	0	10,071	2,243	0	61,569
District	87,040	0	0	9,280	0	21,760	2,320	0	120,400
Planning Agency	0	280,000	0	77,250	0	41,000	0	48,313	446,563
Total	127,324	280,000	0	95,501	0	72,831	4,563	48,313	628,532

Activities/Performance Measures

❖ Program Center Liaison

- Attend eight quarterly Technical Advisory and eight quarterly Coordinating Committee meetings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed. Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with Districts to prepare/review CPDM & PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)

- Work with District staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
- Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the District and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
- Coordinate all planning activities with District 1-0, as required. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the District and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the District and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with PennDOT Central Office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Prepare CPDM/PMC items for review by Program Center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend eight quarterly Technical Advisory and eight quarterly Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with CPDM staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the District and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.
- Manage EMTA Transit Development Plan for fixed routes to be complete by January 30th, 2019.
- Participate in efforts to advance Bayfront Multimodal Improvements and Presque Isle Corridor Improvements.

- Plan and implement bicycle/pedestrian improvements and prepare information for submittal of Bicycle Friendly Community designations.

FRANKLIN

Responsible Manager: James Arey	Project Manager: Meribeth Raves
Work Order Number(s): 83603 8 9 FRC, 84103 8 9 CPG 83603 8 9 FR8 83613 8 9 FRN, 83613 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 321,438	Total Person Years: 0.7
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Participants	Federal					State		Other
	SPR/CPG	SPR Toll Credit	PL/CPG	PL/Toll Credit	CPG/FTA	MLF	Other	Local
Program Center	39,480		0	0	9,720	9,870	2,430	0
District	8,400		0	0	800	2,100	200	0
Planning Agency	147,250	0	0	0	51,500	20,000	0	29,688
Total	195,130	0	0	0	62,020	31,970	2,630	29,688

YEAR TWO

Total Project Cost: \$ 338,038	Total Person Years: 0.5
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Participants	Federal					State		Other
	SPR/CPG	SPR Toll Credit	PL/CPG	PL/Toll Credit	CPG/FTA	MLF	Other	Local
Program Center	43,704		0	0	18,776	10,926	4,694	0
District	8,400		0	0	800	2,100	200	0
Planning Agency	147,250	0	0	0	51,500	20,000	0	29,688
Total	199,354	0	0	0	71,076	33,026	4,894	29,688

Activities/Performance Measures

❖ Program Center Liaison

- Attend 4 quarterly Policy Board Meetings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed.
Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with the District to prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)
- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.

- Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
- Coordinate all planning activities with District 8-0, as required. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 4 quarterly Policy Board Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- The Franklin MPO has identified several priority tasks that will be completed during the 2018-2020 UPWP. These include:
 - Review and update of Public Participation Plan; review and adopt LEP; update website and public communications; and provide safety training in support of HPMS.
 - UPWP shall be approved prior to Year 1, and a Work Order Agreement issued; Progress Reports and Invoices submitted on a quarterly basis, at a minimum; and meeting minutes distributed on a quarterly basis, or as needed.
 - LRTP to be adopted in Year 1. One road safety audit completed or underway in Year 2.

- The update to the 2019 Transportation Improvement Program (TIP) anticipated to be completed by mid- 2018.
 - Supporting PennDOT Connects outreach/implementation will be a key priority that will be ongoing to attend meetings, coordination with PennDOT District and municipalities, and key stakeholder staffs.
 - The staff will participate as required in the Southcentral Regional Environmental Justice Study being managed by York County MPO.
- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.

HARRISBURG

Responsible Manager: James Arey	Project Manager: Adam Grimes
Work Order Number(s): 81403 8 9 HGC, 81103 8 9 CPG 81403 8 9 HG8 81413 8 9 TRI, 81413 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 1,202,415	Total Person Years: 0.48
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	23,226	0	0	5,706	0	5,806	1,427	0	36,165
District	5,480	0	0	520	0	1,370	130	0	7,500
Planning Agency	0	839,000	0	103,000	0	113,000	0	103,750	1,158,750
Total	28,706	839,000	0	109,226	0	120,176	1,557	103,750	1,202,415

YEAR TWO

Total Project Cost: \$ 1,215,440	Total Person Years: 0.48
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	60,323	0	0	29,981	0	15,081	7,495	0	112,880
District	5,480	0	0	520	0	12,680	130	0	18,810
Planning Agency	0	764,000	0	103,000	0	113,000	0	103,750	1,083,750
Total	65,803	764,000	0	133,501	0	140,761	7,625	103,750	1,215,440

Activities/Performance Measures

❖ Program Center Liaison

- Attend 5 bi-monthly Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed.
Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with the District to prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)

- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
- Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
- Coordinate all planning activities with District 8-0, as required. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 5 bi-monthly Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- The Harrisburg Area Transportation Study (HATS) MPO has identified several priority tasks that will be completed during the 2018-2020 UPWP. These include:
 - **Performance measures and targets** – coordination with PennDOT, CAT, and other appropriate agencies to standardize minimum data collection requirements for safety, congestion, freight, transit, and internal data management for HATS. More emphasis will be given in Year 1 to this task.

- **Implementation of priorities identified in the adopted RTP** – ongoing expansion of data to support environmental mitigation strategies and mobility needs, land use policies defined in the *Regional Growth Management Plan* (RGMP), periodic collaboration with the established workgroups, as well as participation in *PennDOT Connects* as it supports the RGMP, RTP and HATS program and project development process. Year 2 of this task will include development of the next TIP.
- **Collaboration with neighboring MPOs and PennDOT** on items of mutual interest – including benefits/burdens analysis and technology deployment assessment for dedicated short-range communication, exploration of traffic incident management (TIM) teams, and potential P3 opportunities. More emphasis will be given in Year 1 to this task.
- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.

JOHNSTOWN

Responsible Manager: James Arey	Project Manager: Dean Roberts
Work Order Number(s): 81503 8 9 JNC, 81103 8 9 CPG 81503 8 9 JN9 81513 8 9 CCP, 81513 8 9 CCT (Toll Credit), 8151	

YEAR ONE

Total Project Cost: \$ 370,845	Total Person Years: 0.38
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Participants	Federal					State		Other	
	SPR/CPG		PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local
Program Center	25,053		0	0	5,763	0	6,263	1,441	0
District	4,840		0	0	520	0	1,210	130	0
Planning Agency	0		205,000	5,000	51,500	0	31,000	0	33,125
Total	29,893		205,000	5,000	57,783	0	38,473	1,571	33,125

YEAR TWO

Total Project Cost: \$ 378,365	Total Person Years: 0.38
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Participants	Federal					State		Other	
	SPR/CPG	SPR/Toll Credit	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local
Program Center	26,154	0	0	0	6,038	0	6,538	1,510	0
District	5,480	0	0	0	520	0	1,370	130	0
Planning Agency	0	5,000	205,000	5,000	51,500	0	31,000	0	33,125
Total	31,634	5,000	205,000	5,000	58,058	0	38,908	1,640	33,125

Activities/Performance Measures

❖ Program Center Liaison

- Attend Planning Partners' Meetings and Technical Workshops as needed.
- Continue to attend quarterly Technical and Coordinating Committee Meetings for the Cambria MPO region.
- Administration/management of the FFY 2017 TIP /TYP, as needed.
Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with District 9-0 to prepare/review PMC items for inclusion into the PMC book and secure approval

- from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)
- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
 - Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
 - Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
 - Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
 - Work Order Agreements (Year 1 and 2)
 - Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 4 quarterly Joint Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.
- Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact
- Coordinate with the region's airport and transit authorities in accessing capital, operating, and funding needs and development of a Public Transit Human Services Coordination Plan.
- Coordinate regional bicycle and pedestrian plans and programs and safe routes to school initiatives.

LACKAWANNA-LUZERNE

Responsible Manager: James Arey	Project Manager: Dean Roberts
Work Order Number(s): 81603 8 9 LLC, 81103 8 9 CPG 81603 8 9 LL4 81613 8 9 LAC, 81623 8 9 LUZ, 81613 8 9 CPG, 81623 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 779,672	Total Person Years: 0.42
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	31,598	0	0	7,399	0	7,899	1,850	0	48,746
District	10,400	0	0	1,040	0	2,600	260	0	14,300
Planning Agency	0	475,450	0	97,850	0	70,000	0	73,326	716,626
Total	41,998	475,450	0	106,289	0	80,499	2,110	73,326	779,672

YEAR TWO

Total Project Cost: \$ 828,876	Total Person Years: 0.42
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	55,568	0	0	22,792	0	13,892	5,698	0	97,950
District	10,400	0	0	1,040	0	2,600	260	0	14,300
Planning Agency	0	475,450	0	97,850	0	70,000	0	73,326	716,626
Total	65,968	475,450	0	121,682	0	86,492	5,958	73,326	828,876

Activities /Performance Measures

❖ Program Center Liaison

- Attend Planning Partners' Meetings and Technical Workshops as needed.
- Continue to attend quarterly Technical and Coordinating Committee Meetings for the LLTS MPO region.
- Administration/management of the FFY 2017 TIP /TYP, as needed.
Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with District 4-0 to

- prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)
- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
- Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 4 quarterly Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.
- Continue to monitor and review the Long Range Plan for update.
- Continue to monitor and revise the current TIP and begin the development of the next TIP.
- Partner with the Northeastern Pennsylvania Alliance (NEPA) to assist with the Focus-81 Committee.

LANCASTER

Responsible Manager: James Arey	Project Manager: Meribeth Raves
Work Order Number(s): 81703 8 9 LAC, 81103 8 9 CPG 81703 8 9 LA8 81713 8 9 LAN, 81713 8 9 LAT (Toll Credit), 81713 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 929,275	Total Person Years: 0.5
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	25,936	0	0	5,684	0	6,484	1,421	0	39,525
District	6,200	0	0	600	0	1,550	150	0	8,500
Planning Agency	0	594,000	10,000	103,000	0	82,000	0	92,250	881,250
Total	32,136	594,000	10,000	109,284	0	90,034	1,571	92,250	929,275

YEAR TWO

Total Project Cost: \$ 1,032,230	Total Person Years: 0.4
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	89,012	0	0	21,452	0	22,252	9,764	0	142,480
District	6,200	0	0	600	0	1,550	150	0	8,500
Planning Agency	0	594,000	10,000	103,000	0	82,000	0	92,250	881,250
Total	95,212	594,000	10,000	125,052	0	105,802	9,914	92,250	1,032,230

Activities/Performance Measures

❖ Program Center Liaison

- Attend 12 monthly Technical Committee Meetings and 5 bi-monthly Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed. Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with the District to prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)
- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.

- Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
- Coordinate all planning activities with District 8-0, as required. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 12 monthly Technical Committee Meetings and 5 bi-monthly Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- The Lancaster MPO has identified several priority tasks that will be completed during the 2018-2020 UPWP. These include:
 - Strategic update of the Long-Range Transportation Plan with emphasis on linkage with the county's new Integrated Comprehensive Plan, *places 2040 (June 2020)*.
 - Review and update of the Public Participation Plan together with the Environmental Justice Analysis and Limited English Proficiency Plan (*concurrent with LRTP adoption*).
 - Update of the Congestion Management Process (*October 2019*).

- Adoption of the 2021-2024 Transportation Improvement Program (*June 2020*).
- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.

LEBANON

Responsible Manager: James Arey	Project Manager: Anthony Sansone
Work Order Number(s): 82503 8 9 LBC, 84103 8 9 CPG 82503 8 9 LB8 82513 8 9 LEB, 82513 8 9 LET (Toll Credit), 82513 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 325,030 Total Person Years: 0.6
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Participants	Federal						State		Other	Total
	SPR/CPG	SPR/TOLL CREDIT	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	31,476		0		7,568	0	7,868	1,893	0	48,805
District	2,280		0	0	200	0	570	50	0	3,100
Planning Agency	155,000	15,000	0	0	51,500	0	21,000	0	30,625	273,125
Total	188,756	15,000	0	0	59,268	0	29,438	1,943	30,625	325,030

YEAR TWO

Total Project Cost: \$ 326,755 Total Person Years: 0.6
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Participants	Federal						State		Other	Total
	SPR/CPG	SPR TOLL	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	32,579		0	0	7,845	0	8,145	1,961	0	50,530
District	2,280		0	0	200	0	570	50	0	3,100
Planning Agency	155,000	15,000	0	0	51,500	0	21,000	0	30,625	273,125
Total	189,859	15,000	0	0	59,545	0	29,715	2,011	30,625	326,755

Activities/Performance Measures

❖ Program Center Liaison

- Attend 6 bi-monthly Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed.
Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with District to prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)

- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
- Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
- Coordinate all planning activities with District 8-0, as required. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 6 bi-monthly Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- The Lebanon MPO has identified several priority tasks that will be completed during the 2018-2020 UPWP. These include:
 - The update to the 2019 Transportation Improvement Program (TIP) anticipated to be completed by mid- 2018.
 - The update of the LEBCO MPO LRTP (Long Range Transportation Plan) anticipated to be adopted by June 16th, 2020.

- Supporting PennDOT Connects outreach/implementation will be a key priority that will be ongoing to attend meetings, coordination with PennDOT District and municipalities, and key stakeholder staffs.
 - The MPO Staff will have a high priority working with the Lebanon Valley Rails to Trails (LVRT) staff to advance Phases 6a, 6b, 6c, 7, 9b, 9C, and 10 which encompasses very important sections of the regional trail and additional priorities.
 - The staff will participate as required in the Southcentral Regional Environmental Justice Study being managed by York County MPO.
- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.

LEHIGH VALLEY

Responsible Manager: James Arey	Project Manager: Raymond Green
Work Order Number(s): 82103 8 9 LVC, 81103 8 9 CPG 82103 8 9 LV5 82113 8 9 LEH, 82113 8 9 CPG, 82113 8 9 LHT	

YEAR ONE

Total Project Cost: \$ 1,174,185	Total Person Years: 0.75
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	17,926	0	0	4,182	0	4,482	1,045	0	27,635
District	26,320	0	0	3,920	0	6,580	980	0	37,800
Planning Agency	0	764,000	25,000	103,000	0	113,000	0	103,750	1,108,750
Total	44,246	764,000	25,000	111,102	0	124,062	2,025	103,750	1,174,185

YEAR TWO

Total Project Cost: \$ 1,390,440	Total Person Years: 0.5
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	121,930	0	0	73,182	0	30,482	18,296	0	243,890
District	26,320	0	0	3,920	0	6,580	980	0	37,800
Planning Agency	0	764,000	25,000	103,000	0	113,000	0	103,750	1,108,750
Total	148,250	764,000	25,000	180,102	0	150,062	19,276	103,750	1,390,440

Activities/Performance Measures

❖ Program Center Liaison

- Attend/ Chair 12 monthly Technical Committee meetings and attend 6 bi-monthly Coordinating Committee meetings each year for the Metropolitan Planning Organization (MPO). (Year 1 and 2)
- Attend and represent the Pennsylvania Department of Transportation (PennDOT) at additional meetings, including planning sub-committees, Freight Advisory Committees and PennDOT Connects meetings, where appropriate. (Year 1 and 2)
- Coordinate all planning activities with District 5-0, as needed. (Year 1 and 2)

- Modify the Federal Fiscal Year (FFY) 2017 Transportation Improvement Program (TIP) / Twelve-Year Program (TYP), as necessary. (Year 1 and 2)
- Work with District 5-0 and the MPO on the development of the FFY 2019 TIP/TYP. Modify the 2019 regional TIP/TYP as needed after adoption by the MPO, approval by PennDOT as part of the 2019 State Transportation Improvement Program (STIP), and approval by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). (Year 1 and 2)
- Begin the process of developing the Draft FFY 2021 TIP/TYP. (Year 2)
- Work with District 5-0 to prepare/review Program Management Committee (PMC) items for inclusion in the PMC book and review and approval by the Committee at its monthly meeting. These written requests support TIP/TYP administration and program updating during the FFY. (Year 1 and 2)
- Coordinate with PENNDOT, FHWA, FTA, and the MPO region on the establishment and implementation of transportation performance measures as related to-the development and management of both the TIP/TYP and the Long-Range Transportation Plan (LRTP). (Year 1 and 2)
- Assist/support District 5-0 and the MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Coordinate with District 5-0 and the MPO on the administration of the 2018-2020 Unified Planning Work Program (UPWP). Assist the Financial and Contract Services Division in the review and approval of UPWP Work Order invoices and coordinate with the MPO regarding UPWP changes and budget revisions that impact the Work Order agreements. (Year 1 and 2)
- Coordinate with District 5-0 and the MPO on the development of the FFY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District 5-0 Staff**

- Coordinate with Central Office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Submit fiscal constraint charts to the Program Center for processing in the Multimodal Project Management System (MPMS). (Year 1 and 2)
- Prepare PMC items for review by Program Center staff as needed to support the administration of the TIP/TYP. (Year 1 and 2)
- Work with the MPO and Central Office on the development of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. (Year 1 and 2)
- Attend 12 monthly Technical Committee meetings, 6 bi-monthly Coordinating Committee meetings each year for the MPO region. (Year 1 and 2)
- Attend and represent PennDOT at additional meetings, including planning sub-committees, Freight Advisory Committee and PennDOT Connects meetings, as needed. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the District and work closely with the MPO and local municipalities. (Year 1 and 2)

❖ **Planning Partner:**

- The merger of the *Lehigh Valley Regional Comprehensive Plan* with the *MOVELV: Regional Long Range Plan* and the new 2019-2045 plan's adoption. This includes the development and adoption of Performance Measures to meet FAST Act requirements and strengthening of the transportation-land use connection. LRTP due date is October 23, 2019.
- Implementing the PennDOT Connects process with PennDOT and support of additional educational efforts, such as the Local Technical Assistance Program and Lehigh Valley Government Academy.
- Implement the 2019-2022 Transportation Improvement Program (TIP) and prepare the 2021-2024 TIP Update.
- Participation in the joint Federal Highway Administration and Federal Transit Administration Certification Review. Final Report is due July 16, 2020.
- Coordination with neighboring MPOs to address "Mega-Regional" needs.
- Please see individual UPWP and quarterly invoice(s) for more detailed information regarding Planning Partner activities and deliverables

NORTHEASTERN PENNSYLVANIA ALLIANCE

Responsible Manager: James Arey	Project Manager: Raymond Green
Work Order Number(s): 83703 8 9 NPC, 84103 8 9 CPG 83703 8 9 NP 83713 8 9 NPA, 83713 8 9 NPT (Toll), 83713 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 808,513	Total Person Years: 1.01
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Participants	Federal					State		Other	Total
	SPR/CPG	SPR TOLL	PL/CPG	PL/Toll Credit	CPG/FTA	MLF	Other	Local	
Program Center	30,176		0	0	7,144	7,544	1,786	0	46,650
District	29,384		0	0	2,856	7,346	714	0	40,300
Planning Agency	464,000	45,000	0	0	77,250	72,000	0	63,313	721,563
Total	523,560	45,000	0	0	87,250	86,890	2,500	63,313	808,513

YEAR TWO

Total Project Cost: \$ 925,363	Total Person Years: 2.5
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Participants	Federal					State		Other	Total
	SPR/CPG	SPR TOLL	PL/CPG	PL/Toll Credit	CPG/FTA	MLF	Other	Local	
Program Center	31,552		0	0	7,488	7,888	1,872	0	48,800
District	112,800		0	0	11,200	28,200	2,800	0	155,000
Planning Agency	464,000	45,000	0	0	77,250	72,000	0	63,313	721,563
Total	608,352	45,000	0	0	95,938	108,088	4,672	63,313	925,363

Activities/Performance Measures

❖ Program Center Liaison

- Attend 12 monthly Technical Committee meetings and 6 bi-monthly Board meetings each year for the Metropolitan Planning Organization (MPO). (Year 1 and 2)
- Attend and represent the Pennsylvania Department of Transportation (PennDOT) at additional meetings, including planning sub-committees and PennDOT Connects meetings, where appropriate. (Year 1 and 2)
- Coordinate all planning activities with District 4-0 and 5-0, as needed. (Year 1 and 2)

- Modify the Federal Fiscal Year (FFY) 2017 Transportation Improvement Program (TIP) / Twelve-Year Program (TYP), as necessary. (Year 1 and 2)
- Work with District 4-0, 5-0 and the MPO on the development of the FFY 2019 TIP/TYP. Modify the 2019 regional TIP/TYP as needed after adoption by the MPO, approval by PennDOT as part of the 2019 State Transportation Improvement Program (STIP), and approval by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). (Year 1 and 2)
- Begin the process of developing the Draft FFY 2021 TIP/TYP. (Year 2)
- Work with District 4-0 and 5-0 to prepare/review Program Management Committee (PMC) items for inclusion in the PMC book and review and approval by the Committee at its monthly meeting. These written requests support TIP/TYP administration and program updating during the FFY. (Year 1 and 2)
- Coordinate with PENNDOT, FHWA, FTA, and the MPO region on the establishment and implementation of transportation performance measures as related to-the development and management of both the TIP/TYP and the Long-Range Transportation Plan (LRTP). (Year 1 and 2)
- Assist/support District 4-0, 5-0 and the MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Coordinate with District 4-0, 5-0 and the MPO on the administration of the 2018-2020 Unified Planning Work Program (UPWP). Assist the Financial and Contract Services Division in the review and approval of UPWP Work Order invoices and coordinate with the MPO regarding UPWP changes and budget revisions that impact the Work Order agreements. (Year 1 and 2)
- Coordinate with District 4-0, 5-0 and the MPO on the development of the FFY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District 4-0 and 5-0 Staff**

- Coordinate with Central Office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Submit financial constraint charts to the Program Center for processing in the Multimodal Project Management System (MPMS). (Year 1 and 2)
- Prepare PMC items for review by Program Center staff as needed to support the administration of the TIP/TYP. (Year 1 and 2)
- Work with the MPO and Central Office on the development of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. (Year 1 and 2)
- Attend 12 monthly Technical Committee meetings and 6 bi-monthly Coordinating Committee meetings each year for the MPO region. (Year 1 and 2)
- Attend and represent PennDOT at additional meetings, including planning sub-committees and PennDOT Connects meetings, as needed. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the District and work closely with the MPO and local municipalities. (Year 1 and 2)

❖ **Planning Partner:**

- Approve modifications to the FFY 2017 TIP as initiated by District 5-0 and processed by Central Office. Work with District 4-0 , 5-0 and Central Office on the development of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. (Year 1 and 2)
- Integrate PennDOT Connects into the planning and programming process. (Year 1 and 2)
- Participate in local/regional forums to assess the need and appropriateness of ITS activities and recommend implementation strategies through the LRTP and TIP. (Year 1 and 2)
- Please see individual UPWP and quarterly invoice(s) for more detailed information regarding Planning Partner activities and deliverables

PHILADELPHIA/POTTSTOWN

Responsible Manager: James Arey	Project Manager: James Mosca
Work Order Number(s): 82303 8 9 PHC, 81103 8 9 CPG 82303 8 9 PH6 82313 8 9 DVR, 82313 8 9 DVT (Toll Credit), 82313 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 15,752,288	Total Person Years: 2.05
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Participants	Federal						State		Other	Total
	SPR/CPG	SPR/Toll Credit	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	96,451	0	0	0	23,213	0	24,113	5,803	0	149,580
District	52,640	0	0	0	5,440	0	13,160	1,360	0	72,600
Planning Agency*	160,000		4,610,000	30,000	2,775,000	4,995,300	1,094,225	322,000	1,543,583	15,530,108
Total	309,091	0	4,610,000	30,000	2,803,653	4,995,300	1,131,498	329,163	1,543,583	15,752,288

YEAR TWO

Total Project Cost: \$ 12,606,351	Total Person Years: 2.05
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Participants	Federal						State		Other	Total
	SPR/CPG	SPR/Toll Credit	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	148,905	0	0	0	56,327	0	37,227	14,081	0	256,540
District	52,640	0	0	0	5,440	0	13,160	1,360	0	72,600
Planning Agency	0	30,000	4,670,000	0	2,060,000	3,069,300	1,060,225	322,000	1,065,686	12,277,211
Total	201,545	30,000	4,670,000	0	2,121,767	3,069,300	1,110,612	337,441	1,065,686	12,606,351

Activities/Performance Measures

❖ Program Center Liaison

- Attend Planning Partners' Meetings and Technical Workshops (year 1 and 2).
- Attend Regional Transportation Committee and Board Meetings for the MPO region (year 1 and 2).
- Attend additional meetings, including planning sub-committees and PennDOT Connects meetings, where appropriate (year 1 and 2).
- Coordinate planning and programming activities with District 6-0, as needed (year 1 and 2).
- Modify the 2017 Transportation Improvement Program (TIP) / Twelve-Year Program (TYP), as necessary (year 1).
- Work with District 6-0 and the MPO on the development of the FFY 2019 TIP/TYP (year 1). Modify the 2019 regional TIP/TYP as needed after adoption by the MPO, approval by PennDOT as part of the 2019 Statewide Transportation Improvement Program (STIP), and approval by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) (year 1 and 2).
- Begin the process of developing the Draft FFY 2021 TIP/TYP (year 2).
- Work with District 6-0 to prepare/review Program Management Committee (PMC) items for inclusion in the PMC book and review and approval by the Committee at its monthly meeting (year 1 and 2).
- Coordinate with FHWA, FTA, and the MPO region on the establishment and implementation of transportation performance measures as related to-the development and management of both the TIP/TYP and the Long-Range Transportation Plan (LRTP) (year 1 and 2).
- Assist/support District 6-0 and the MPO in the PennDOT Connects planning and programming process (year 1 and 2).
- Coordinate with District 6-0 and the MPO on the administration of the Unified Planning Work Program (UPWP). Assist the Financial and Contract Services Division in the review and approval of UPWP Work Order invoices and coordinate with the MPO regarding UPWP changes and budget revisions that impact the Work Order agreements (year 1 and 2).
- Coordinate with District 6-0 and the MPO on the development of the UPWP for the next update cycle (year 2).

❖ District Staff

- Coordinate with Central Office, FHWA, and MPO staff regarding TIP modifications/amendments. Submit fiscal constraint charts to the Program Center for review and processing in the Multimodal Project Management System (MPMS) (year 1 and 2).
- Prepare PMC items and Program Center Information Items for review by Program Center staff as needed to support the administration of the TIP/TYP (year 1 and 2).

- Work with the MPO and Central Office on the final development and approval of the FFY 2019 TIP/TYP (year 1). Begin the process for development of the Draft FFY 2021 TIP/TYP (year 2).
- Attend Planning Partners' Meetings and Technical Workshops (year 1 and 2).
- Attend Regional Transportation Committee and Board Meetings for the MPO region (year 1 and 2).
- Attend additional meetings, including planning sub-committees and PennDOT Connects meetings, where appropriate (year 1 and 2).
- Support PennDOT Connects activities within the District and work closely with the consultant, MPO and local municipalities as needed (year 1 and 2).

❖ **Planning Partner:**

- Approve modifications to the 2017 Program TIP/TYP as initiated by District 6-0 and processed by Central Office. Work with District 6-0 and Central Office on the development/finalization of the 2019 Program TIP/TYP (year 1). Begin the process for development of the Draft 2021 Program TIP/TYP (year 2).
- Continue to integrate and implement the CMP and ITS and participate in local/regional forums to assess the need and appropriateness of ITS activities and recommend implementation strategies through the LRTP and TIP (year 1 and 2).
- Coordinate with PennDOT, FHWA, and FTA on the development and implementation of transportation performance measures for both the LRTP and TIP (year 1 and 2).
- Continue to integrate PennDOT Connects into the planning and programming process (year 1 and 2).
- Please see individual UPWP and quarterly invoice(s) for more detailed information regarding Planning Partner activities and deliverables.

PITTSBURGH/MONESSEN

Responsible Manager: James Arey	Project Manager: Kevin McCullough
Work Order Number(s): 82403 8 9 PCO, 81103 8 9 CPG 82403 8 9 P10, P11, P12 82413 8 9 SPC, 82413 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 7,081,933	Total Person Years: 2.325
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Participants	Federal						State		Other	Total
	SPR/CPG	SPR Toll Credit	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	113,975		0	0	24,595	0	28,495	6,148	0	173,213
District	92,400		0	0	9,600	0	23,100	2,400	0	127,500
Planning Agency		250,000	4,095,000	0	978,500	90,000	587,000	0	780,720	6,781,220
Total	206,375		4,095,000	0	1,012,695	90,000	638,595	8,548	780,720	7,081,933

YEAR TWO

Total Project Cost: \$ 6,927,025	Total Person Years: 2.175
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Participants	Federal						State		Other	Total
	SPR/CPG	SPR Toll Credit	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	159,190		0	0	56,898	0	39,798	10,024	0	265,910
District	92,400		0	0	9,600	0	23,100	2,400	0	127,500
Planning Agency	0		4,095,000	0	978,500	90,000	587,000	0	783,115	6,533,615
Total	251,590		4,095,000	0	1,044,998	90,000	649,898	12,424	783,115	6,927,025

Activities/Performance Measures

❖ Program Center Liaison

- Attend monthly Transportation Technical Committee meetings for the MPO region. (Year 1 and 2)
- As a member of the Commission, participate in regularly scheduled meetings of the SPC Commission. As an alternate, attend and participate in Board/Executive Committee and Regional Planning Advisory Committee meetings. (Year 1 and 2)
- Attend Planning Partners' Meetings, participate in Planning Partners' Conference Calls and Technical Workshops. (Year 1 and 2)

- Administration/management of the FFY 2017 TIP /TYP, as needed. Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with Districts to prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)
- Work with District staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
- Coordinate with PennDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the District and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
- Coordinate all planning activities with Districts 10-0, 11-0 and 12-0, as required. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the District and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements. (Year 1 and 2)
- Coordinate with the District and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with PennDOT Central Office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Prepare PMC items for review by CPDM staff as needed to support the TIP's/TYP's administration. (Year 1 and 2)
- Attend monthly Transportation Technical Committee meetings for the MPO region. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Work with CPDM staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Coordinate all PennDOT Connects activities within the District and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- Top Priorities include:

- Long Range Plan Update (Adopt in June 2019)
- TIP Development and Management
- PennDOT Connects/Linking Planning and NEPA Integration
- Implementation of Certification Review Findings from 2017
- Multi-Modal Transportation Planning
- Transportation Operations and Safety
- Transportation Data Systems and Modeling
- Please see individual UPWP and monthly invoice(s) for detailed information regarding Planning Partner activities and deliverables.

READING

Responsible Manager: James Arey	Project Manager: Eugene Porochniak
Work Order Number(s): 83103 8 9 RDC, 81103 8 9 CPG 83103 8 9 RD5 83113 8 9 BER, 83113 8 9 CPG, 83113 8 9 BET (Toll Credit)	

YEAR ONE

Total Project Cost: \$ 733,055	Total Person Years: 1.3
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	42,987	0	0	10,297	0	10,747	2,574	0	66,605
District	25,640	0	0	2,520	0	6,410	630	0	35,200
Planning Agency	0	390,000	15,000	103,000	0	62,000	0	61,250	631,250
Total	68,627	390,000	15,000	115,817	0	79,157	3,204	61,250	733,055

YEAR TWO

Total Project Cost: \$ 755,370	Total Person Years: 1.55
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	44,981	0	0	10,795	0	11,245	2,699	0	69,720
District	39,600	0	0	3,920	0	9,900	980	0	54,400
Planning Agency	0	390,000	15,000	103,000	0	62,000	0	61,250	631,250
Total	84,581	390,000	15,000	117,715	0	83,145	3,679	61,250	755,370

Activities/Performance Measures

❖ Program Center Liaison

- Attend 11 monthly Technical Committee meetings, 5 bi-monthly Coordinating Committee meetings, and 1 joint Technical and Coordinating Committee Meeting each year for the Metropolitan Planning Organization (MPO). (Year 1 and 2)
- Attend and represent the Pennsylvania Department of Transportation (PennDOT) at additional meetings, including planning sub-committees and PennDOT Connects meetings, where appropriate. (Year 1 and 2)
- Coordinate all planning activities with District 5-0, as needed. (Year 1 and 2)

- Modify the Federal Fiscal Year (FFY) 2017 Transportation Improvement Program (TIP) / Twelve-Year Program (TYP), as necessary. (Year 1 and 2)
- Work with District 5-0 and the MPO on the development of the FFY 2019 TIP/TYP. Modify the 2019 regional TIP/TYP as needed after adoption by the MPO, approval by PennDOT as part of the 2019 State Transportation Improvement Program (STIP), and approval by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). (Year 1 and 2)
- Begin the process of developing the Draft FFY 2021 TIP/TYP. (Year 2)
- Work with District 5-0 to prepare/review Program Management Committee (PMC) items for inclusion in the PMC book and review and approval by the Committee at its monthly meeting. These written requests support TIP/TYP administration and program updating during the FFY. (Year 1 and 2)
- Coordinate with PENNDOT, FHWA, FTA, and the MPO region on the establishment and implementation of transportation performance measures as related to-the development and management of both the TIP/TYP and the Long-Range Transportation Plan (LRTP). (Year 1 and 2)
- Assist/support District 5-0 and the MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Coordinate with District 5-0 and the MPO on the administration of the 2018-2020 Unified Planning Work Program (UPWP). Assist the Financial and Contract Services Division in the review and approval of UPWP Work Order invoices and coordinate with the MPO regarding UPWP changes and budget revisions that impact the Work Order agreements. (Year 1 and 2)
- Coordinate with District 5-0 and the MPO on the development of the FFY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District 5-0 Staff**

- Coordinate with Central Office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Submit financial constraint charts to the Program Center for processing in the Multimodal Project Management System (MPMS). (Year 1 and 2)
- Prepare PMC items for review by Program Center staff as needed to support the administration of the TIP/TYP. (Year 1 and 2)
- Work with the MPO and Central Office on the development of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. (Year 1 and 2)
- Attend 11 monthly Technical Committee meetings, 5 bi-monthly Coordinating Committee meetings, and 1 joint Technical and Coordinating Committee Meeting each year for the MPO region. (Year 1 and 2)
- Attend and represent PennDOT at additional meetings, including planning sub-committees and PennDOT Connects meetings, as needed. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the District and work closely with the MPO and local municipalities. (Year 1 and 2)

❖ **Planning Partner:**

Approve modifications to the 2017 Program TIP/TYP as initiated by District 5-0 and processed by Central Office. Work with District 5-0 and Central Office on the development/finalization of the 2019 Program TIP/TYP (Year 1). Begin the process of developing the Draft 2021 Program TIP/TYP (Year 2).

- Continue to integrate PennDOT Connects into the planning and programming process (Year 1 and 2).
- Coordinate with PennDOT and FHWA on the development and implementation of transportation performance measures for both the TIP and LRTP (Year 1 and 2).
- Continue to monitor and review the Long Range Plan for update.
- Continue to monitor and revise the current TIP and begin the development of the next TIP
- Please see individual UPWP and quarterly invoice(s) for more detailed information regarding Planning Partner activities and deliverables.

SEDA-COG

Responsible Manager: James Arey	Project Manager: Carey Mullins
Work Order Number(s): 83803 8 9 SDC, 84103 8 9 CPG 83803 8 9 SDD 83813 8 9 SDA, 83813 8 9 SDT (Toll), 83813 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 789,913	Total Person Years: 0.95
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Participants	Federal					State		Other	Total
	SPR/CPG	SPR/Toll Credit	PL/CPG	PL/Toll Credit	CPG/FTA	MLF	Other	Local	
Program Center	30,816		0	0	7,304	7,704	1,826	0	47,650
District	22,400		0	0	2,160	5,600	540	0	30,700
Planning Agency	464,000	35,000	0	0	77,250	72,000	0	63,313	711,563
Total	517,216	35,000	0	0	86,714	85,304	2,366	63,313	789,913

YEAR TWO

Total Project Cost: \$ 792,063	Total Person Years: 0.95
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Participants	Federal					State		Other	Total
	SPR/CPG	SPR/Toll Credit	PL/CPG	PL/Toll Credit	CPG/FTA	MLF	Other	Local	
Program Center	32,192		0		7,648	8,048	1,912	0	49,800
District	22,400		0	0	2,160	5,600	540	0	30,700
Planning Agency	464,000	35,000	0	0	77,250	72,000	0	63,313	711,563
Total	518,592	35,000	0	0	87,058	85,648	2,452	63,313	792,063

Activities/Performance Measures

❖ Program Center Liaison

- Attend 6 bi-monthly joint Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed. Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with Districts to prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)
- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.

- Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
- Coordinate all planning activities with Districts 2-0 and 3-0, as required. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 6 bi-monthly joint Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.
- Continue to monitor and review the Long Range Plan for update.
- Continue to monitor and revise the current TIP and begin the development of the next TIP.
- Complete the Danville Area Traffic Study by 6/30/2020.

SHENANGO VALLEY

Responsible Manager:	James Arey	Project Manager:	Daniel Keane
Work Order Number(s):	83203 8 9 SVC, 81103 8 9 CPG 83203 8 9 SV1 83213 8 9 MCP, 83213 8 9 CPG		

YEAR ONE

Total Project Cost: \$	330,933	Total Person Years: 0.505
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	37,348	0	0	8,538	0	9,338	2,134	0	57,358
District	4,912	0	0	448	0	1,228	112	0	6,700
Planning Agency	0	162,000	0	51,500	0	24,498	0	28,877	266,875
Total	42,260	162,000	0	60,486	0	35,064	2,246	28,877	330,933

YEAR TWO

Total Project Cost: \$	470,475	Total Person Years: 2.075
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	41,696	0		9,624	0	10,424	2,406	0	64,150
District	89,064	0	0	9,896	0	22,266	2,474	0	123,700
Planning Agency	0	174,600	0	51,500	0	26,403	0	30,122	282,625
Total	130,760	174,600	0	71,020	0	59,093	4,880	30,122	470,475

Activities/Performance Measures

❖ **Program Center Liaison**

- Attend eight quarterly Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Attend Technical Committee Meetings as needed for STU/TAP Project Rankings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed. Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with Districts to prepare/review PMC items for inclusion into the PMC book and secure approval

- from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)
- Work with District staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
 - Coordinate with PennDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
 - Assist/Support the District and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
 - Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
 - Coordinate all planning activities with District 1-0, as required. (Year 1 and 2)
 - Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
 - Coordinate with the District and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
 - Coordinate with the District and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with PennDOT Central Office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Prepare PMC items for review by Program Center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend eight quarterly Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with Program Center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the District and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.
- Complete the Borough of Greenville Pedestrian Circulation Study by 6/30/2020.
- Continue to monitor and revise the current TIP and begin the development of the next TIP.

WILLIAMSPORT

Responsible Manager: James Arey	Project Manager: Carey Mullins
Work Order Number(s): 83303 8 9 WPC, 81103 8 9 CPG 83303 8 9 WP3 83313 8 9 LCP, 83313 8 9 LCT (Toll Credit), 83313 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 330,155	Total Person Years: 0.52
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	30,652	0	0	7,212	0	7,662	1,804	0	47,330
District	7,088	0	0	672	0	1,772	168	0	9,700
Planning Agency	0	155,000	15,000	51,500	0	21,000	0	30,625	273,125
Total	37,740	155,000	15,000	59,384	0	30,434	1,972	30,625	330,155

YEAR TWO

Total Project Cost: \$ 332,117	Total Person Years: 0.52
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	32,014	0	0	7,554	0	8,004	1,888	0	49,460
District	7,088	0	0	672	0	1,604	168	0	9,532
Planning Agency	0	155,000	15,000	51,500	0	21,000	0	30,625	273,125
Total	39,102	155,000	15,000	59,726	0	30,608	2,056	30,625	332,117

Activities/Performance Measures

❖ Program Center Liaison

- Attend 8 quarterly Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed.
Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with Districts to prepare/review PMC items for inclusion into the PMC book and secure approval

- from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)
- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
 - Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
 - Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
 - Coordinate all planning activities with District 3-0 , as required. (Year 1 and 2)
 - Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
 - Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
 - Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 8 quarterly Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.
- Complete the CSVT Land use / Transportation Impact Special Study by 6/30/2020.
- Continue to monitor and revise the current TIP and begin the development of the next TIP.

YORK

Responsible Manager: James Arey	Project Manager: Adam Grimes
Work Order Number(s): 83403 8 9 YKC, 81103 8 9 CPG 83403 8 9 YK8 83413 8 9 YCP, 83413 8 9 YCT (Toll Credit), 83413 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 695,025	Total Person Years: 0.52
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	31,872	0	0	7,628	0	7,968	1,907	0	49,375
District	3,240	0	0	280	0	810	70	0	4,400
Planning Agency	0	390,000	25,000	103,000	0	62,000	0	61,250	641,250
Total	35,112	390,000	25,000	110,908	0	70,778	1,977	61,250	695,025

YEAR TWO

Total Project Cost: \$ 736,330	Total Person Years: 0.52
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Participants	Federal					State		Other	Total
	SPR/CPG	PL/CPG	PL/Toll Credit	FTA/CPG	PE	MLF	Other	Local	
Program Center	51,908	0	0	20,636	0	12,976	5,160	0	90,680
District	3,240	0	0	280	0	810	70	0	4,400
Planning Agency	0	390,000	25,000	103,000	0	62,000	0	61,250	641,250
Total	55,148	390,000	25,000	123,916	0	75,786	5,230	61,250	736,330

Activities/Performance Measures

❖ Program Center Liaison

- Attend 5 bi-monthly Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed. Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with the District to

prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)

- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
- Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
- Coordinate all planning activities with District 8-0, as required. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 5 bi-monthly Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- The York MPO has identified several priority tasks that will be completed during the 2018-2020 UPWP. These include:
 - The development and adoption of the 2019-2045 Long Range Transportation Plan. This includes the development and adoption of Performance Measures to meet FAST-ACT requirements.

- Developing the PennDOT Connects process with PennDOT in preparation for the 2021 TIP Update.
- Participation in the Federal Highway and Federal Transit Certification Review. Work items underlined are recommendations from the 2016 review.
- Coordination with neighboring MPOs to produce similar analysis on large data sets – EJ Benefits and Burdens Analysis; District 8-0 Congestion Management Process and Highway Safety Improvement Program taskforce; and participation in the Dedicated Short Range Communication Study.
- Participation in statewide efforts to provide continuity to the MPO/RPO planning processes across the state.
- Analysis of the freight generation within the I-83 Corridor and the projected capacity available within the corridor based on the existing zoning.
- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.

TRANSPORTATION MANAGEMENT ASSOCIATIONS

Objective

Transportation Management Associations (TMAs) can be effective agents for promoting and implementing transportation demand management strategies for reducing congestion and facilitating compliance with the Clean Air Act Amendments of 1990. Through TMAs, the Department hopes to maximize the efficiency at which the current transportation system is being used.

The Transportation Management Association Assistance Program was established to promote compliance with the Clean Air Act Amendments of 1990 (CAAA). Initially, the main focus of the program was on employer trip reduction, a federal mandate of the CAAA. When trip reduction was made voluntary, the program was re-oriented towards congestion reduction activities. A key congestion reduction activity of the program is to work with local employers to promote transportation demand management (TDM) strategies. TDM strategies are things employees may do to reduce dependency on single occupant vehicles (SOVs). Key strategies include: carpooling and/or vanpooling, riding transit, telecommuting, biking or walking to work, and adopting staggered work hours.

Since the TMA program's beginning in the early 1990s, another key function of the TMAs that has developed over time is as a liaison organization between government and the private sector. Local businesses can work with their TMA to become educated about needed transportation products and services and learn the process for working with government agencies to get highway and transit projects programmed and implemented.

Background

The TMAs are funded with federal Congestion Mitigation and Air Quality (CMAQ) funds. These funds are prioritized and programmed through the Metropolitan Planning Organizations, and are limited to ozone and PM non-attainment and maintenance areas. We currently fund 6 TMAs in the Philadelphia area and 3 in the Pittsburgh area. Each Pittsburgh TMA is receiving \$160,000 from the MPO and each Philadelphia TMA is receiving \$179,600 from the MPO in CMAQ funds per year for their base work program that must be matched by 20% in private/local funds. PennDOT TMA support staff is funded with SPR/MLF

Responsible Manager:	Brian Hare	Project Manager:	Mike Baker
Work Order Number(s):	88703 8 9 TMA		

YEAR ONE

Total Project Cost: \$ 1,868,360	Total Person Years: 0.88
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Participants	Federal		State		Other	Total
	SPR	PE	MLF	Other	Local	
Program Center	93,088	0	23,272	0	0	116,360
Planning Agency	0	1,401,600	0	0	350,400	1,752,000
Total	93,088	1,401,600	23,272	0	350,400	1,868,360

YEAR TWO

Total Project Cost: \$ 1,911,100	Total Person Years: 0.88
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Participants	Federal		State		Other	Total
	SPR	PE	MLF	Other	Local	
Program Center	127,280	0	31,820	0	0	159,100
Planning Agency	0	1,401,600	0	0	350,400	1,752,000
Total	127,280	1,401,600	31,820	0	350,400	1,911,100

Activities/Performance Measures

❖ **Program Center Liaison**

- Manage the development of TMA Work Programs to ensure alignment with CMAQ requirements.
- Collaborate with TMAs in the development and delivery of a TMA Annual Meeting.
- Participate in TMA Board meetings, as requested, to monitor past and planned activities of the TMAs.

❖ **Planning Partner**

- Coordinate with Program Center and District Office staff in the development of TMA Work Programs to ensure alignment with CMAQ requirements.
- Participate in TMA Board meetings, as requested, to monitor past and planned activities of the TMAs.
- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.

RURAL AREA TRANSPORTATION PLANNING PROGRAM

The establishment of an ongoing rural transportation planning program is important to ensure that the Department's priority goals and objectives are implemented in those regions of the state not included in the MPO process. Issues that should be addressed in the rural program include transportation projects that support economic development and the identification and advancement of projects that provide for the maintenance and restoration of the transportation infrastructure and a safer travel environment for personal mobility and goods movement. This program will also be coordinated with the next federal surface transportation act to ensure that statewide transportation planning mandates are met.

The Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act include performance management requirements. Performance-based planning will ensure that the Pennsylvania Department of Transportation (PennDOT) and the Metropolitan Planning Organizations (MPOs) collectively invest Federal transportation funds efficiently towards achieving national goals. In Pennsylvania, the Rural Planning Organizations (RPOs) follow the same requirements as MPOs.

Transportation Performance Management (TPM) is strategic approach that uses data to make investment and policy decisions to achieve national performance goals. [23 CFR 490](#) outlines the national performance goals for the federal-aid program. It establishes the seven goal areas: safety, infrastructure condition, congestion reduction, system reliability, freight, environmental sustainability and reduced project delivery delay.

As proposed, the rural transportation program allows RPOs that are not affiliated with a metropolitan county or regional agency, along with the Department, to identify, coordinate and program transportation projects and prepare regional and local transportation plans. This objective has been accomplished by creating a rural transportation planning program which is implemented through the development of annual work programs.

Products/Performance Measures

- Continue to integrate and implement the CMP and ITS.
- Based upon USDOT guidance, the Work Programs will include activities to satisfy the FAST Act mandates, especially statewide transportation planning and programming, including the rural portions of the FFY 2017 STIP and development of the FFY 2019 update. Begin the process for development of the Draft FFY 2021 TIP.
- Enhance regional economic development potential through project planning activities, as required.
- Technological Innovations
 - Review and assess current capabilities to determine the need for new and expanded technological applications (e.g., GIS) each year.

- Assess the need for Intelligent Transportation Systems (ITS) through the Regional Long Range Plans each year.
 - Update Regional ITS Architectures as needed.
- Complete environmental justice requirements, as a part of the public involvement activities for long range planning and short range programming.
- Participate in environmental streamlining and stewardship initiatives.
- Conduct Needs Studies as appropriate.
- Assist the Department with trend analyses and cumulative and secondary impact assessments on major transportation projects.
- Assist with Reengineering the Planning and Programming Process
 - Pursue actions to become consistent or maintain consistency with the fifteen guiding principles for all present and future planning and programming activities.
 - Continue to participate on statewide reengineering work groups as appropriate.
 - Work with the Department to produce standard program products, to more fully automate/computerize all processes and to conduct program/project monitoring in real time through the sharing of data among all parties by way of the Multimodal Project Management System.
- Federal Planning and Programming Rulemaking
 - Incorporate all new requirements into the rural and statewide planning processes in Pennsylvania, including the February 14, 2003 rulemaking that pertains to consultation with non-metropolitan local officials.
- Land Use Consistency
 - Work with municipal governments to ensure transportation planning and programming consistency with comprehensive plans and zoning ordinances.

NORTH CENTRAL PA REGIONAL PLANNING & DEVELOPMENT COMMISSION

Responsible Manager: James Arey	Project Manager: Frank Hampton
Work Order Number(s): 84103 8 9 RCO, 84103 8 9 CPG 84103 8 9 R02, R10 84113 8 9 NCL, 84113 8 9 NCT (Toll Credit), 84113 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 893,468	Total Person Years: 1.01
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Participants	Federal			State		Other	Total
	SPR/CPG	SPR/FTA/CPG	SPR/Toll Credit	MLF	Other	Local	
Program Center	23,706	5,098	0	5,927	1,274	0	36,005
District	33,456	3,264	0	8,364	816	0	45,900
Planning Agency	376,000	245,250	35,000	27,000	0	128,313	811,563
Total	433,162	253,612	35,000	41,291	2,090	128,313	893,468

YEAR TWO

Total Project Cost: \$ 893,468	Total Person Years: 1.01
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Participants	Federal			State		Other	Total
	SPR/CPG	SPR/FTA/CPG	SPR/Toll Credit	MLF	Other	Local	
Program Center	24,435	5,669	0	6,109	1,417	0	37,630
District	26,688	2,592	0	6,672	648	0	36,600
Planning Agency	216,000	77,250	35,000	27,000	0	46,313	401,563
Total	267,123	85,511	35,000	39,781	2,065	46,313	475,793

Activities/Performance Measures

❖ Program Center Liaison

- Attend Technical and Coordinating Committee Meetings for the RPO region. (Year 1 and 2) as schedule permits.
- Attend and represent PennDOT Office of Planning at various meetings, including planning sub-committees, where appropriate and as schedule permits. (Year 1 and 2)
- Coordinate all planning activities with FHWA, the RPO, and PennDOT Engineering Districts 2-0 and 10-0, as appropriate/required. (Year 1 and 2)

- Provide administration/management of the FFY 2017 TIP /TYP, as needed.
- Assist the RPO and PennDOT Engineering Districts 2-0 and 10-0 with the development, delivery and management of the FFY 2019 TIP/TYP.
- Work with the RPO and PennDOT Engineering Districts 2-0 and 10-0 staff to develop the draft FFY 2021 TIP/TYP biennial TIP after project costs and schedules/milestones are updated in MPMS. Coordinate with FHWA all TIP/TYP activities and share related products as they are developed.
- Continue to work with the RPO and PennDOT Engineering Districts 2-0 and 10-0 staff to develop the next Long Range Transportation Plan (LRTP) update; which is due in the Spring of 2023. Coordinate with FHWA all LRTP activities and share related products as they are developed.
- Coordinate with FHWA, RPO, and PennDOT Engineering Districts 2-0 and 10-0 staff on the establishment and implementation of transportation performance measures as related to-the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the RPO and PennDOT Engineering Districts 2-0 and 10-0 in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Assist PennDOT Engineering District 2-0 and 10-0 with the preparation and review of their Program Management Committee (PMC) items for submission before PMC, as needed to support TIP/TYP administration. (Year 1 and 2)
- Continue to assist the RPO with the development/maintenance of a local transportation project inventory for the region which includes locally owned bridges less than 20 feet in length and locally owned non-Federal-Aid roadways. Coordinate all inventory activities with FHWA and PennDOT Engineering Districts 2-0 and 10-0 to ensure uniform collection of data for these assets and to share related products as they are developed. (Year 1 and 2)
- Coordinate with the RPO and the PennDOT Financial and Contract Services division on the administration of the 2018-2020 UPWP, including review of UPWP Work Order invoices and modifications/amendments to Work Order Agreements. (Year 1 and 2)
- Coordinate with the RPO and the PennDOT Financial and Contract Services division on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with PennDOT Program Center representative, RPO, and FHWA staff regarding TIP modifications/amendments.
- Prepare draft Program Management Committee (PMC) items for review by Program Center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend Technical and Coordinating Committee Meetings for the RPO region as schedule permits. (Year 1 and 2)
- Work with FHWA, Program Center staff, and the RPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.

- Attend and represent PennDOT Engineering District on various planning sub-committees. (Year 1 and 2) as schedule permits.
- Coordinate all PennDOT Connects activities within district and RPO. (Year 1 and 2)

❖ **Planning Partner:**

- Provided below are priorities identified by the RPO for specific focus during the FY 2018-20 UPWP time frame:
 - **Work Program Administration:** The RPO will ensure regional coordination by preparing the annual work program, monthly progress reports, provide technical assistance and by administering the regional highway planning program and transit planning program. The RPO will continue to identify funding sources through PennDOT and those programs affiliated with North Central for transportation-related projects, including but not limited to the Appalachian Regional Commission (ARC) Access Roads, Economic Development Administration (EDA), Department of Community and Economic Development (DCED), Department of Conservation and Natural Resources (DCNR), Conservation District's Dirt and Gravel Road Program.
 - **Performance Based Planning and Asset Management:** The RPO will prioritize all major capital projects in accordance with the guiding principles for planning and programming as well as National Performance Measures.
 - **Transportation Improvement Program:** The RPO will continue to update the regional Transportation Improvement Program (TIP) and monitor for consistency with the Long Range Transportation Plan (LRTP) to be included in the Commonwealth's Long Range Transportation Plan. We will also continue to support the identification and development of candidate transportation projects by each county through the new PennDOT Connects initiative.
 - **Public Participation & Outreach:** The RPO will ensure regional coordination on transportation issues; provide technical assistance and training to increase implementation opportunities; and encourage local and agency actions that help to implement federal and state policy and program initiatives such as development activities through the new PennDOT Connects Initiative.
 - **GIS, Data Development and Analysis:** The RPO will coordinate, maintain and continue to enhance a region-wide GIS network among our regional stakeholders and other intersected parties to enable efficient and consistent analysis and dissemination of data related to regional community and regional planning. This includes coordination of U.S. Census data, mapping and asset management support for local development and other supporting

state, regional and local planning activities to include data portals and visualization.

- **Addressing Access to Transportation:** The RPO will continue to support our Human Service Coordination Plan by working with those groups and initiatives that will improve the overall transportation infrastructure within our region and by enhancing transportation connections to transportation facilities to provide broader connections for areas such as access to good jobs, housing, educational facilities, medical facilities, and community and economic development. We will also continue to evaluate the state of accessibility and mobility for disadvantaged populations, with a focus on safety, transit, and alternative modes of transportation to include ride sharing/hailing opportunities.
- **Corridor and Freight Planning:** The RPO will continue to support and place a stronger focus on mobility planning for our multi-modal Core Transportation System that will include freight movements and other innovative approaches to further connect link land use, transportation and economic development. We will assess the current state of truck and rail freight system operations and identify ways to effectively prioritize and address future freight congestion issues, key regional bottlenecks, infrastructure deficiencies, potential technologies to increase flow and safety, and rural land use requirements and policies.
- **Community and Economic Development Coordination:** The RPO will ensure a diverse and competitive regional economy by coordinating regional transportation, land use, and economic development planning and by continuing to offer technical assistance for those interested in land ownership, environmental research, HOP reviews, DCED PREP, etc.
- **LTAP:** The RPO will continue to serve as the local planning partner for PennDOT's Local Technical Assistance Program (LTAP). The LTAP program is designed to help Pennsylvania's municipalities, make the best use of their roadway maintenance dollars.
- Please see individual UPWP and quarterly invoice(s) for more detailed information regarding Planning Partner activities and deliverables.

NORTHERN TIER REGIONAL PLANNING & DEVELOPMENT COMMISSION

Responsible Manager: James Arey	Project Manager: Carey Mullins
Work Order Number(s): 84103 8 9 RCO, 84103 8 9 CPG 84103 8 9 R03, R04 84123 8 9 NTR, 84123, 8 9 CPG, 84123 8 9 NTT (Toll Credit)	

YEAR ONE

Total Project Cost: \$ 391,725	Total Person Years: 0.43
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Participants	Federal			State		Other	Total
	SPR/CPG	SPR/FTA/CPG	SPR/Toll Credit	MLF	Other	Local	
Program Center	17,600	3,960	0	4,400	990	0	26,950
District	9,456	864	0	2,364	216	0	12,900
Planning Agency	206,000	51,500	30,000	26,000	0	38,375	351,875
Total	233,056	56,324	30,000	32,764	1,206	38,375	391,725

YEAR TWO

Total Project Cost: \$ 407,395	Total Person Years: 0.65
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Participants	Federal			State		Other	Total
	SPR/CPG	SPR/FTA/CPG	SPR/Toll Credit	MLF	Other	Local	
Program Center	18,349	4,147	0	4,587	1,037	0	28,120
District	20,000	1,920	0	5,000	480	0	27,400
Planning Agency	206,000	51,500	30,000	26,000	0	38,375	351,875
Total	244,349	57,567	30,000	35,587	1,517	38,375	407,395

Activities/Performance Measures

❖ Program Center Liaison

- Attend 6 bi-monthly joint Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed.
Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with Districts to

- prepare/review PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)
- Work with district staff, FHWA, and the MPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
 - Coordinate with PENNDOT, FHWA, FTA, and MPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
 - Assist/Support the district and MPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
 - Coordinate all planning activities with Districts 3-0 and 4-0, as required. (Year 1 and 2)
 - Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
 - Coordinate with the district and the MPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
 - Coordinate with the district and MPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with central office, FHWA, and MPO/RPO staff regarding TIP modifications/amendments. Prepare PMC items for review by program center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend 6 bi-monthly joint Technical and Coordinating Committee Meetings for the MPO region. (Year 1 and 2)
- Work with program center staff, FHWA, and the MPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within district and MPO. (Year 1 and 2)

❖ **Planning Partner:**

- Education of local officials on the PennDOT Connects initiative and PennDOT One Map
- Inventory of traffic signals and bike/pedestrian facilities
- Participate in flood resiliency initiatives

- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.

NORTHWEST PA REGIONAL PLANNING & DEVELOPMENT COMMISSION

Responsible Manager: James Arey	Project Manager: Sharkey
Work Order Number(s): 84103 8 9 RCO, 84103 8 9 CPG 84103 8 9 R01, R10 84133 8 9 NWT, 84133 8 9 NOT (Toll Credit), 84133 8 9 CPG	

YEAR ONE

Total Project Cost: \$ 471,048	Total Person Years: 0.83
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Participants	Federal			State		Other	Total
	SPR/CPG	SPR/FTA/CPG	SPR/Toll Credit	MLF	Other	Local	
Program Center	36,615	8,653	0	9,153	2,164	0	56,585
District	9,456	864	0	2,364	216	0	12,900
Planning Agency	216,000	77,250	35,000	27,000	0	46,313	401,563
Total	262,071	86,767	35,000	38,517	2,380	46,313	471,048

YEAR TWO

Total Project Cost: \$ 609,203	Total Person Years: 2.84
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Participants	Federal			State		Other	Total
	SPR/CPG	SPR/FTA/CPG	SPR/Toll Credit	MLF	Other	Local	
Program Center	44,394	10,598	0	11,098	2,650	0	68,740
District	101,088	10,032	0	25,272	2,508	0	138,900
Planning Agency	216,000	77,250	35,000	27,000	0	46,313	401,563
Total	361,482	97,880	35,000	63,370	5,158	46,313	609,203

Activities/Performance Measures

❖ Program Center Liaison

- Attend eight quarterly joint Technical Advisory Committee Meetings for the RPO region. (Year 1 and 2)
- Administration/management of the FFY 2017 TIP /TYP, as needed. Development and management of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. Work with Districts to prepare/review CPDM and PMC items for inclusion into the PMC book and secure approval from the committee, as needed to support TIP/TYP administration. (Year 1 and 2)

- Work with District staff, FHWA, and the RPO to develop draft biennial TIP after project costs and schedules/milestones are updated in MPMS.
- Coordinate with PennDOT, FHWA, FTA, and RPO region on the establishment and implementation of transportation performance measures as related to the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the District and RPO in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Continue development of a local transportation project inventory for the region which includes locally owned bridges less than 20 ft. in length and locally owned non-Federal-Aid roadways. Work with the Department to ensure uniform collection of data for these assets. (Year 1-Fall/Winter 2018.)
- Coordinate all planning activities with Districts 1-0 and 10-0, as required. (Year 1 and 2)
- Attend and represent PennDOT at various meetings, including planning sub-committees, where appropriate. (Year 1 and 2)
- Coordinate with the District and the RPO on the administration of the 2018-2020 UPWP, including review and approval of UPWP Work Order invoices. Also, coordinate with PennDOT's Financial and Contract Services Division as UPWP changes impact Work Order Agreements (Year 1 and 2)
- Coordinate with the District and RPO on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with PennDOT Central Office, FHWA, and RPO staff regarding TIP modifications/amendments. Prepare CPDM and PMC items for review by Program Center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend eight quarterly joint Technical Advisory Committee Meetings for the RPO region. (Year 1 and 2)
- Work with Program Center staff, FHWA, and the RPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.
- Attend and represent PennDOT on various planning sub-committees. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the District and RPO. (Year 1 and 2)

❖ **Planning Partner:**

- Continue to monitor and review the Long Range Plan for update.
- Continue to monitor and revise the current TIP and begin the development of the next TIP
- Please see individual UPWP and quarterly invoice(s) for detailed information regarding Planning Partner activities and deliverables.

SOUTHERN ALLEGHENIES PLANNING & DEVELOPMENT COMMISSION

Responsible Manager: James Arey	Project Manager: Frank Hampton
Work Order Number(s): 84103 8 9 RCO, 84103 8 9 CPG 84103 8 9 R09 84143 8 9 SOA, 84143 8 9 CPG, 84143 8 9 SOT (Toll Credit)	

YEAR ONE

Total Project Cost: \$ 405,565	Total Person Years: 0.46
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Participants	Federal			State		Other	Total
	SPR/CPG	SPR/FTA/CPG	SPR/Toll Credit	MLF	Other	Local	
Program Center	29,049	6,863		7,263	1,715	0	44,890
District	2,800	240	0	700	60	0	3,800
Planning Agency	206,000	51,500	35,000	26,000	0	38,375	356,875
Total	237,849	58,603	35,000	33,963	1,775	38,375	405,565

YEAR TWO

Total Project Cost: \$ 407,625	Total Person Years: 0.46
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Participants	Federal			State		Other	Total
	SPR/CPG	SPR/FTA/CPG	SPR/Toll Credit	MLF	Other	Local	
Program Center	30,048	7,512	0	7,512	1,878	0	46,950
District	2,800	240	0	700	60	0	3,800
Planning Agency	206,000	51,500	35,000	26,000	0	38,375	356,875
Total	238,848	59,252	35,000	34,212	1,938	38,375	407,625

Activities/Performance Measures

❖ Program Center Liaison

- Attend Technical and Coordinating Committee Meetings for the RPO region. (Year 1 and 2) as schedule permits.
- Attend and represent PennDOT Office of Planning at various meetings, including planning sub-committees, where appropriate and as schedule permits. (Year 1 and 2)
- Coordinate all planning activities with FHWA, the RPO, and PennDOT Engineering District 9-0, as appropriate/required. (Year 1 and 2)

- Provide administration/management of the FFY 2017 TIP /TYP, as needed.
- Assist the RPO and PennDOT Engineering District 9-0 with the development, delivery and management of the FFY 2019 TIP/TYP.
- Work with the RPO and PennDOT Engineering District 9-0 staff to develop the draft FFY 2021 TIP/TYP biennial TIP after project costs and schedules/milestones are updated in MPMS. Coordinate with FHWA all TIP/TYP activities and share related products as they are developed.
- Continue to work with the RPO and PennDOT Engineering District 9-0 staff to develop the next Long Range Transportation Plan (LRTP) update; which is due November of 2022. Coordinate with FHWA all LRTP activities and share related products as they are developed.
- Coordinate with FHWA, RPO, and PennDOT Engineering District 9-0 staff on the establishment and implementation of transportation performance measures as related to-the development and management of both the LRTP and TIP/TYP. (Year 1 and 2)
- Assist/Support the RPO and PennDOT Engineering District 9-0 in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Assist PennDOT Engineering District 9-0 with the preparation and review of their Program Management Committee (PMC) items for submission before PMC, as needed to support TIP/TYP administration. (Year 1 and 2)
- Continue to assist the RPO with the development/maintenance of a local transportation project inventory for the region which includes locally owned bridges less than 20 feet in length and locally owned non-Federal-Aid roadways. Coordinate all inventory activities with FHWA and PennDOT Engineering District 9-0 to ensure uniform collection of data for these assets and to share related products as they are developed. (Year 1 and 2)
- Coordinate with the RPO and the PennDOT Financial and Contract Services division on the administration of the 2018-2020 UPWP, including review of UPWP Work Order invoices and modifications/amendments to Work Order Agreements. (Year 1 and 2)
- Coordinate with the RPO and the PennDOT Financial and Contract Services division on the development of the FY 2020-2022 UPWP for the next update cycle. (Year 2)

❖ **District Staff**

- Coordinate with PennDOT Program Center representative, RPO, and FHWA staff regarding TIP modifications/amendments.
- Prepare draft Program Management Committee (PMC) items for review by Program Center staff as needed to support the TIP's/TYP's administration (Year 1 and 2)
- Attend Technical and Coordinating Committee Meetings for the RPO region as schedule permits. (Year 1 and 2)
- Work with FHWA, Program Center staff, and the RPO to develop draft biennial TIPs after project costs and schedules/milestones are updated in MPMS.

- Attend and represent PennDOT Engineering District 9-0 on various planning sub-committees. (Year 1 and 2) as schedule permits.
- Coordinate all PennDOT Connects activities within district and RPO. (Year 1 and 2)

❖ **Planning Partner:**

- Provided below are priorities identified by the MPO for specific focus during the FY 2018-20 UPWP time frame:
 - Land Use/Transportation Linkages/Economic Development/Modernization
 - Plans and Programs
 - Planning Tools and Techniques
 - Traffic Data
 - Public Involvement and Outreach
 - Administrative
- The special planning studies to be implemented include:
 - Local Technical Assistance Program
 - Public Transit – Human Services Transportation Planning
- Please see individual UPWP and quarterly invoice(s) for more detailed information regarding Planning Partner activities and deliverables.

WAYNE COUNTY

Responsible Manager: James Arey	Project Manager: Raymond Green
Work Order Number(s): 84103 8 9 RCO, 84103 8 9 CPG	

YEAR ONE

Total Project Cost: \$7,360	Total Person Years: 0.1
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Participants	Federal			State		Other	Total
	SPR/CPG	PL/CPG	SPR/Toll Credit	MLF	Other	Local	
Program Center	5,715	1,429		1,429	357	0	8,930
District	0	0	0	0	0	0	0
Planning Agency	0	0	0	0	0	0	0
Total	5,715	1,429	0	1,429	357	0	8,930

YEAR TWO

Total Project Cost: \$7,360	Total Person Years: 0.1
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Participants	Federal			State		Other	Total
	SPR/CPG	PL/CPG	SPR/Toll Credit	MLF	Other	Local	
Program Center	5,990	1,498	0	1,498	374	0	9,360
District	0	0	0	0	0	0	0
Planning Agency	0	0	0	0	0	0	0
Total	5,990	1,498	0	1,498	374	0	9,360

Activities/Performance Measures

❖ Program Center Liaison

- Attend and represent the Pennsylvania Department of Transportation (PennDOT) at PennDOT Connects meetings, where appropriate. (Year 1 and 2)
- Coordinate all planning activities with District 4-0, as needed. (Year 1 and 2)
- Modify the Federal Fiscal Year (FFY) 2017 Transportation Improvement Program (TIP) / Twelve-Year Program (TYP), as necessary. (Year 1 and 2)
- Work with District 4-0 and the Wayne County Independent on the development of the FFY 2019 TIP/TYP. Modify the 2019 regional TIP/TYP as needed after

adoption by the Department, approval by PennDOT as part of the 2019 State Transportation Improvement Program (STIP), and approval by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). (Year 1 and 2)

- Begin the process of developing the Draft FFY 2021 TIP/TYP. (Year 2)
- Work with District 4-0 to prepare/review Program Management Committee (PMC) items for inclusion in the PMC book and review and approval by the Committee at its monthly meeting. These written requests support TIP/TYP administration and program updating during the FFY. (Year 1 and 2)
- Assist/support District 4-0 in the PennDOT Connects planning and programming process. (Year 1 and 2)

❖ **District 4-0 Staff**

- Coordinate with Central Office and FHWA staff regarding TIP modifications/amendments. Submit financial constraint charts to the Program Center for processing in the Multimodal Project Management System (MPMS). (Year 1 and 2)
- Prepare PMC items for review by Program Center staff as needed to support the administration of the TIP/TYP. (Year 1 and 2)
- Work with the Wayne County Independent and Central Office on the development of the FFY 2019 TIP/TYP. Begin the process for development of the Draft FFY 2021 TIP/TYP. (Year 1 and 2)
- Attend and represent PennDOT at additional meetings, including planning sub-committees and PennDOT Connects meetings, as needed. (Year 1 and 2)
- Coordinate all PennDOT Connects activities within the District and work closely with the MPO and local municipalities. (Year 1 and 2)

❖ **Planning Partner (Independent):**

- None

STATEWIDE PLANNING

LONG RANGE TRANSPORTATION PLANNING

Objective

Support statewide and regional long-range transportation planning initiatives through continual outreach and education to the Pennsylvania Department of Transportation (PennDOT), Metropolitan Planning Organizations, Rural Planning Organizations, other planning organizations and the general public.

Background

Statewide and metropolitan transportation planning processes are governed by Federal law and applicable state laws if Federal highway or transit funds are used for transportation investment. The Pennsylvania Department of Transportation (PennDOT) is committed to developing more effective long range transportation plans, transportation planning products, and training designed to assist Pennsylvania planners in meeting Federal and state requirements.

Responsible Manager: Brian Hare	Project Manager: Michael Rimer
Work Order Number(s):	
22803 8 9 LRP	22813 8 9 LRP

YEAR ONE

Total Project Cost: \$	474,360	Total Person Years: 1.13
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA	PE	MLF	GF	Local	
Program Center	101,088	0	0	0	25,272	0	0	126,360
District	0	0	0	0	0	0	0	0
Consultant	0	348,000	0	0	0	0	0	348,000
Total	101,088	348,000	0	0	25,272	0	0	474,360

YEAR TWO

Total Project Cost: \$	628,508	Total Person Years: 1.13
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA	PE	MLF	GF	Local	
Program Center	205,206	0	0	0	51,302	0	0	256,508
District	0	0	0	0	0	0	0	0
Consultant	0	372,000	0	0	0	0	0	372,000
Total	205,206	372,000	0	0	51,302	0	0	628,508

Activities/Performance Measures

❖ **Program Center Staff**

- Support continuing, comprehensive and collaborative statewide and regional long range transportation planning that is consistent with the federal initiatives.
- Support continuing, comprehensive and collaborative statewide and regional long range transportation planning with a focus on local government collaboration to address community visions and enhance community vitality in planning.
- Support implementation of transportation planning processes identified in Federal law, regulations and guidance.
- Maintain, update, and implement a multimodal statewide long range transportation plan.
- Maintain, update, and implement a comprehensive freight movement plan.
- Expand the focus and profile of public transportation and multimodal travel as part of collaborative planning.
- Promote and support the use of the PA Travel Demand Model and other available analytical tools with interested PennDOT, Metropolitan Planning Organizations, Rural Planning Organizations and other planning organizations technical staff.
- Planning Web Page Development/Update

❖ **District Staff**

- No district activity.

❖ **Consultant**

- Coordinate with the Bureau of Equal Opportunity on Title VI/EJ Compliance Reviews.
- Update and implement the 2010 Public Participation Plan.
- Update and implement the LRTP Guidance document.

STATEWIDE TRANSPORTATION PROGRAM DEVELOPMENT AND MANAGEMENT

Objective

In compliance with all applicable State and Federal requirements, the Pennsylvania Department of Transportation (PennDOT), in cooperation with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA) and its planning partners at the county and regional levels, develop and manage the Statewide Transportation Improvement Program (STIP). The STIP is approved by FHWA and FTA.

The STIP includes federal, state, local and private funding resources over a four-year period for Highway/Bridge and Transit capital improvements. The STIP consists of a list of prioritized projects/project phases identified for funding by federal fiscal year. The STIP includes Transportation Improvement Programs (TIPs) as adopted by each planning partner, Metropolitan Planning Organizations (MPOs) and Rural Planning Organizations (RPOs) as well as the centrally managed Interstate Management (IM) TIP and the Statewide (STWD) Items TIP.

The STIP is updated biennially by PennDOT and the planning partners, utilizing a comprehensive planning and programming process. The comprehensive process ensures openness, participation and partnerships. The process includes coordination on air quality conformity determinations, public comment information, and other supporting documentation.

Federal Transportation Performance Measures (TPM) and Performance Based Planning and Programming (PBPP) requirements are being addressed in the FFY 2019-2022 STIP and will be fully incorporated into the FFY 2021-2024 STIP.

The STIP includes several statewide projects and programs that are developed and managed centrally by PennDOT in coordination with appropriate internal and external partners. The IM and STWD Items TIPs are managed by the Center for Program Development and Management (CPDM). CPDM also manages the Highway Safety Improvement Program (HSIP), Rail-Highway Grade Crossing Safety (RRX), Secretary's Discretionary (SPIKE) funds and other Federal Discretionary Programs,. The centralized management and coordination of these programs is an essential aspect of Statewide Planning and will continue as required.

The same processes and coordination utilized for the current FFY 2017-2020 STIP are being utilized to develop the FFY 2019-2022 STIP and will be utilized to develop the FFY 2021-2024 STIP.

The statewide transportation planning process will continue to evolve as federal programs and regulations are implemented.

Responsible Manager: James Arey	Project Manager: Kristin Mulkerin
Work Order Number(s): 84303 8 9 STW 84313 8 9 STW/SPR	

YEAR ONE

Total Project Cost: \$ 1,605,112	Total Person Years: 3.98
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	304,586	0	0	0	76,146	0	0	380,732
District	0	0	0	0	0	0	0	0
Consultant	200,000	500,000	200,000	200,000	49,380	0	75,000	1,224,380
Total	504,586	500,000	200,000	200,000	125,526	0	75,000	1,605,112

YEAR TWO

Total Project Cost: \$ 1,622,714	Total Person Years: 3.98
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	318,667	0	0	0	79,667	0	0	398,334
District	0	0	0	0	0	0	0	0
Consultant	200,000	500,000	200,000	200,000	49,380	0	75,000	1,224,380
Total	518,667	500,000	200,000	200,000	129,047	0	75,000	1,622,714

Activities/Performance Measures

❖ **Program Center Liaisons**

- Manage all programs and projects of a statewide nature.
 - Administration/management of FFY 2017 STIP/IM TIP/STWD Items TIP/TYP as needed. (Year 1)
 - Development/administration/management of the FFY 2019 STIP/IM TIP/STWD Items TIP/TYP. (Year 1 and 2)
 - Begin the development of the draft FFY 2021 STIP/IM TIP/STWD Items TIP/TYP. (Year 1 and 2)
- Coordinate the management of statewide programs and projects with appropriate internal and external partners such as FHWA, FTA, PennDOT

Executive staff, PennDOT's Program Management Committee (PMC), PennDOT's District staff, MPOs/RPOs, Governor's Policy Office, etc., as needed. (Year 1 and 2)

- Work with partners to prepare and/or review PMC items for inclusion into the PMC book, and secure PMC approval, as needed to support STIP/TIP/TYP administration/management. (Year 1 and 2)
- Work with the Interstate Steering Committee (ISC) and partners to develop draft biennial Interstate Management IM TIP/TYP. (Year 1 and 2)
- Work with partners to develop draft biennial HSIP and RRX Program for inclusion in STIP/Regional TIPs/TYP. (Year 1 and 2)
- Ensure that all draft TIPs developed and approved by MPOs/RPOs follow necessary Federal Regulations and are submitted to PennDOT by dates identified in the Program Development schedule. (Year 1 and 2)
- Submit the draft STIP to FHWA/FTA for approval by dates identified in the Program Development schedule. (Year 1)
- Coordinate with PennDOT, FHWA, FTA, MPOs and RPOs staff on the establishment and implementation of transportation performance measures as related to the development and management of the STIP/TIP/TYP. (Year 1 and 2)
- Assist/Support the PennDOT Districts, MPOs and RPOs in the PennDOT Connects planning and programming process. (Year 1 and 2)
- Initiate other required statewide planning efforts as outlined in executive orders or in federal planning rules and regulations, as needed. (Year 1 and 2)

❖ **District Staff**

No district activity.

❖ **Consultants**

- Decision Lens software will be implemented to provide/improve project prioritization. The software will serve as a tool to support collaboration, coordination and transportation performance management/performance based planning and programming. (Year 1 and 2)

PENNSYLVANIA INFRASTRUCTURE BANK

Objective

Because of the ever-increasing cost of transportation improvements and the continuing need for safe and efficient transportation facilities and services, the Commonwealth created the Pennsylvania Infrastructure Bank as an innovative financing mechanism. To meet this challenge, the Pennsylvania Department of Transportation established the Pennsylvania Infrastructure Bank (PIB) as an innovative means of financing highway, bridge, transit, and rail freight and aviation projects. The PIB is a program that offers loans to a wide variety of transportation providers including local governments, transportation authorities, economic development agencies, private developers, etc. The PIB represents an important ongoing strategy for maximizing the purchasing power of federal, state, local and private transportation funds.

Responsible Manager: Brian Hare	Project Manager: Hugh McGowan
Work Order Number(s): 84323 8 9 PIB 84323 8 9 PBC	

YEAR ONE

Total Project Cost: \$	184,816	Total Person Years: 1.37
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	107,853	0	0	0	26,963	0	0	134,816
District	0	0	0	0	0	0	0	0
Consultant	0	50,000	0	0	0	0	0	50,000
Total	107,853	50,000	0	0	26,963	0	0	184,816

YEAR TWO

Total Project Cost: \$	191,070	Total Person Years: 1.37
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	112,856	0	0	0	28,214	0	0	141,070
District	0	0	0	0	0	0	0	0
Consultant	0	50,000	0	0	0	0	0	50,000
Total	112,856	50,000	0	0	28,214	0	0	191,070

Activities/Performance Measures

❖ **Program Center**

- Draft, negotiate and execute loan agreements and other documentation for each approved loan.
- Monitor existing loan agreements to ensure timely payments and that the contract provisions are followed.
- On an annual basis, utilize at least \$30 million per year set aside for the PIB program.
- Work with IT/consultant team to update the automation of the PIB process.
- Give PIB presentations/trainings to various audiences on the PIB program throughout the state.
- Update the copy of the statewide map which shows the locations of every PIB project.
- Continually market the program to further increase the bank's use.
- Update the MOU between PennDOT and DCED regarding the electronic single application (ESA).

❖ **District Staff**

- No district activity.

❖ **Consultant**

- Assist with the ongoing activities of the Pennsylvania Infrastructure Bank including program reviews, marketing material, annual reports, loan application review including credit analysis and other loan activities.

LAND USE AND TRANSPORTATION PLANNING

Objective

Advance the Pennsylvania Department of Transportation (PennDOT) land use and transportation initiatives by providing support to municipal, regional and state stakeholders, developing and integrating policy and guidance, and delivering training.

Background

The integration of land use and transportation planning among municipal, regional, and state stakeholders can lead to a better quality of life for all Pennsylvanians. This requires a common understanding of evolving financial, environmental, technological, and community contexts when approaching transportation challenges. There result of this understanding leads to:

- better allocation of financial resources that address local, regional, and statewide priorities
- consistent expectations between project proponents, communities, and entities that evaluate and fund projects
- optimal accommodations for all modes
- context sensitivity in the planning and design of projects
- decreased re-work in preliminary engineering and final design phases of the project

Responsible Manager:	Brian Hare	Project Manager: Michael Rimer
Work Order Number(s):	84353 8 9 LUD 84353 8 9 LUC	

YEAR ONE

Total Project Cost: \$	793,731	Total Person Years: 0.68
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	54,985	0	0	0	13,746	0	0	68,731
District	0	0	0	0	0	0	0	0
Consultant	100,000	400,000	100,000	100,000	0	0	25,000	725,000
Total	154,985	400,000	100,000	100,000	13,746	0	25,000	793,731

YEAR TWO

Total Project Cost: \$	798,311	Total Person Years: 0.68
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	58,649	0	0	0	14,662	0	0	73,311
District	0	0	0	0	0	0	0	0
Consultant	100,000	400,000	100,000	100,000	0	0	25,000	725,000
Total	158,649	400,000	100,000	100,000	14,662	0	25,000	798,311

Activities/Performance Measures

❖ **Program Center Staff**

- Assist PennDOT, the Governor’s Office, the General Assembly, planning organizations and other state agencies on all appropriate land use and transportation related matters.
- Develop PennDOT Connects and other related Land Use/Transportation Planning information resources to educate stakeholders (e.g. MPO/RPO Staff/Boards, legislators, etc.).
- Support the planning, program development and project delivery process including PennDOT Connects.
- Provide guidance and training to PennDOT, planning organizations, municipal officials and others regarding various matters such as access management, traffic impact fees, official map, connectivity and the transportation element of comprehensive plans.

❖ **District Staff**

- No district activity.

❖ **Consultant/Planning Partner**

- Support the planning, program development and project delivery process including PennDOT Connects.
- Develop guidance and training for PennDOT, planning organizations, municipal officials and others to promote a better understanding of the land use and transportation linkage such as model ordinances, Transportation Revitalization Investment District (TRID), site design, parking and zoning overlays, etc.
- Provide guidance and training to PennDOT, planning organizations, municipal officials and others regarding various matters such as access management, traffic impact fees, official map, connectivity and the transportation element of comprehensive plans

SPR WORK PROGRAM DEVELOPMENT AND MANAGEMENT

Objective

Development of the SPR Work Program begins early in the even calendar years as the planning partners compile their Unified Planning Work Programs (UPWPs) which outline their planned uses for PL/SPR funds for the next two State Fiscal Years (SFY) that begin on July 1. Simultaneously, PennDOT begins to identify its planned uses that will be funded by SPR funds for the upcoming two-year period. Funding levels are predetermined by the Office of Planning's annual Financial Plan/Budget. Every two years, in May, PennDOT submits a draft SPR Work Program that includes all SPR and PL activities to FHWA. By June 30, FHWA has granted approval and PennDOT and Planning Partners begin work on the SPR Work Program and individual UPWPs.

Background

Working with all stakeholders in the planning program, PennDOT cooperatively interacts with others to determine SPR Work Program priorities for the upcoming two state fiscal years. These stakeholders include others within PennDOT, rural planning partners, FHWA, Federal Transit Administration (FTA) and other potential partners. These priorities are aligned with PennDOT's approved budget to ensure the fiscal integrity of the planning program. Planning partner work priorities are the result of the individual UPWPs that were approved by each planning partner.

The SPR Work Program includes a comprehensive list of individual planning projects and estimates the allowable costs for each project. For instance, costs such as personnel, travel, supplies, consultant support and other direct costs are allowable if the particular costs are associated with the project, are reasonable and necessary to complete the objectives of the project. These allowable costs are outlined in *23 CFR, Subchapter E, Part 420, Subpart A, 420.113*.

Responsible Manager: Michael Gismondi	Project Manager: Karen Russell
Work Order Number(s): 22903 8 9 UPW	

YEAR ONE

Total Project Cost: \$ 226,345	Total Person Years: 2.05
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	181,076	0	0	0	45,269	0	0	226,345
District	0	0	0	0	0	0	0	0
Consultant	0	0	0	0	0	0	0	0
Total	181,076	0	0	0	45,269	0	0	226,345

YEAR TWO

Total Project Cost: \$ 236,480	Total Person Years: 2.05
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	189,184	0	0	0	47,296	0	0	236,480
District	0	0	0	0	0	0	0	0
Consultant	0	0	0	0	0	0	0	0
Total	189,184	0	0	0	47,296	0	0	236,480

Activities/Performance Measures

❖ **Program Center Liaison**

- Monitor project charges against the FY 2018-19 Transportation Planning and Research Work Program and request FHWA approval of any necessary budget adjustments. (Year 1)
- Monitor project charges against the FY 2019-20 Transportation Planning and Research Work Program and request FHWA approval of any necessary budget adjustments. (Year 2)
- Complete preliminary FY 2020-22 work program budget estimates as basis for State budget request by 9/15 of each year. (Years 1 and 2)
- Issue FY 2020-22 planning guidelines to MPOs, RPOs, and Independent County by 10/30/19. (Year 2)
- Issue FY 2020-22 work program instructions and schedule by 2/28/20. (Year 2)

- Conduct internal planning managers meeting to review draft FY 2020-22 SPR Work Program by 04/04/20. (Year 2)
- Complete final draft meeting for mailing to reviewing agencies by 5/11/20. (Year 2)
- Hold pre-program meeting with FHWA by 5/23/20. (Year 2)
- Request FHWA program authorization by 6/01/20. (Year 2)
- Receive FHWA program authorization by 6/15/20. (Year 2)
- Submit 6-month and year-end Transportation Planning & Research Work Program Performance Reports to FHWA by the end of the month following the reporting period. (Years 1 and 2)
- Coordinate project funding eligibility with FHWA as appropriate. (Years 1 and 2)
- Close-out open SPR Work Programs as appropriate. (Years 1 and 2)
- Oversee Program Center contract management duties in PennDOT's Engineering and Construction Management System (ECMS) including, establishing new agreements and work orders, agreement and work order supplements/amendments, agreement and work order close outs, and invoicing. (Years 1 and 2)
- Review and help coordinate the development of the planning partner's Indirect Cost Allocation Plans (ICAP).
- Support activities to re-engineer the UPWP/SPR Work Program review and approval process.
- Process invoices in timely manner and provide necessary training when needed.

❖ **District Staff**

- No district activity.

❖ **Planning Partner/Consultant**

- No consultant activity.

FINANCIAL CONSULTING SECTION

Objective

The Financial Consulting Section is responsible for providing support, oversight, and assistance to municipalities regarding the use and reporting of various funding sources distributed by PennDOT. The Section is responsible for the allocation and payment of approximately \$600 million annually to municipalities and counties in the Commonwealth. This amount consists of payments for Liquid Fuels Tax Funds, Turnback, bridge allocations authorized by Act 44 of 2007 and Act 89 of 2013, Marcellus Shale Impact Fees for use on structurally deficient bridges, and optional County Fee For Local Use. An annual certification process is administered by Section staff to ensure eligibility among recipients. Financial consultants in the Section perform monitoring reviews of annual reports submitted by municipalities to ensure that the funds are being used in accordance with regulations.

Responsible Manager: Michael Gismondi	Project Manager: Kristen Sims
Work Order Number(s):	

YEAR ONE

Total Project Cost: \$	800,695	Total Person Years: 9.55
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	0	0	0	0	0	800,695	0	800,695
District	0	0	0	0	0	0	0	0
Consultant	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	800,695	0	800,695

YEAR TWO

Total Project Cost: \$	856,805	Total Person Years: 9.55
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	0	0	0	0	0	856,805	0	856,805
District	0	0	0	0	0	0	0	0
Consultant	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	856,805	0	856,805

Activities/Performance Measures

❖ **PennDOT Program Center**

- Monitoring reports
- Financial consulting and technical assistance
- Training for new secretaries and elected officials
- Funds management
- Municipal Liquid Fuels payment certification
- Allocation and payments to municipalities and counties in the Commonwealth.
- Oversees/manages the FHWA 536 Report process, which collects/summarizes municipal and county government expenditures on locally owned roads and bridges.

ANNUAL PLANNING PARTNERS' MEETING AND OTHER TECHNICAL WORKSHOPS

Objective

Conduct annual fall Planning Partners' Meeting and various Planning Partners' Technical Workshops as needed.

Background

The annual meeting is held in the fall of each calendar year (October or November) to share information and to make important decisions within the transportation community; PennDOT, FHWA, FTA, State Transportation Commission, MPOs, RPOs, Independent County, Pennsylvania Turnpike Commission and others. The technical workshops are conducted on an ad hoc basis and are held to keep the re-engineered transportation planning and programming process working well for all parties.

Responsible Manager:	Brian Hare	Project Manager:	Ellen Sweeny
Work Order Number(s):	23103 8 9 PPM 23113 8 9 PPM		

YEAR ONE

Total Project Cost: \$	69,330	Total Person Years: 0.1
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	15,464	0	0	0	3,866	0	0	19,330
District	0	0	0	0	0	0	0	0
Consultant	40,000	0	0	0	10,000	0	0	50,000
Total	55,464	0	0	0	13,866	0	0	69,330

YEAR TWO

Total Project Cost: \$	67,840	Total Person Years: 0.1
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	PL	PL/Toll	MLF	GF	Local	
Program Center	14,272	0	0	0	3,568	0	0	17,840
District	0	0	0	0	0	0	0	0
Consultant	40,000	0	0	0	10,000	0	0	50,000
Total	54,272	0	0	0	13,568	0	0	67,840

Activities/Performance Measures

❖ **Program Center Liaison**

- Coordinate logistics for the annual Planning Partners' Meeting each year, as permitted. (Years 1 and 2)
- Coordinate logistics for other Planning Partners' Technical Workshops as necessary. (Years 1 and 2)

❖ **District Staff**

- No district activity.

❖ **Consultant**

- Vendor(s) may be acquired for but not limited to lodging, conference rooms, and catering for the planning partner's meeting as necessary.

PROJECT NEEDS STUDIES

Objective

A Needs Study Handbook was developed to provide guidance on the methodologies, process, and techniques for preparing Needs Studies. Training sessions have also been conducted for District Personnel, planning partners, resource and regulatory agencies, and consultants. The Center for Program Development and Management manages a statewide open-ended contract to assist with project needs studies and other planning activities. The Program Center will monitor and manage the overall agreements and will be responsible for oversight and execution of work orders, study scopes, and studies that may be done on behalf of MPOs, RPOs, and Independent County. Project Needs Studies can also be done by a Planning Partner or District Office, if sufficient staff resources are available. This work must be done so that these planning products support NEPA/Project Development. The open end consultants may also be involved to develop a standard format for needs studies so that the end products are consistent statewide and with the PennDOT Connects initiative.

Responsible Manager:	Brian Hare	Project Manager: Michael Rimer
Work Order Number(s):	88533 8 9 PRJ 88833 8 9 PR0	

YEAR ONE

Total Project Cost: \$	700,000	Total Person Years: 0
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Participants	Federal					State	Total
	SPR/CPG	SPR/Toll	PL/CPG	PL/Toll	PE	MLF	
Program Center	0	0	0	0	0	0	0
District	0	0	0	0	0	0	0
Consultant	0	200,000	136,000	200,000	130,000	34,000	700,000
Total	0	200,000	136,000	200,000	130,000	34,000	700,000

YEAR TWO

Total Project Cost: \$ 700,000	Total Person Years: 0
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Participants	Federal					State	Total
	SPR/CPG	SPR/Toll	PL/CPG	PL/Toll	PE	MLF	
Program Center	0	0	0	0	0	0	0
District	0	0	0	0	0	0	0
Consultant	0	200,000	136,000	200,000	130,000	34,000	700,000
Total	0	200,000	136,000	200,000	130,000	34,000	700,000

Activities/Performance Measures

❖ **Program Center Liaison**

- Initiate individual Needs Studies or other activities (for example, corridor studies or long range plan updates) for the Department, MPOs, RPOs, and Independent County on a required basis.

❖ **District Staff**

- No district activity.

❖ **Consultant**

- Initiate individual Needs Studies or other activities (for example, corridor studies or long range plan updates) for the Department, MPOs, RPOs, and Independent County on a required basis.

CENSUS TRANSPORTATION PLANNING PRODUCTS

Objective

To address census transportation data needs, AASHTO's Standing Committee on Planning Census Data recommends a new five-year Census Transportation Planning Products (CTPP) effort be initiated beginning in 2020. Thus, the Department intends to partner with other State Departments of Transportation on this effort to support the development of special census products and data tabulations for transportation.

Responsible Manager: Laine Heltebridle	Project Manager: Laine Heltebridle
Work Order Number(s): 25913 8 9 CTP	

YEAR ONE

Total Project Cost:	221,000	Total Person Years:	0
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Participants	Federal					State	Total
	SPR/CPG	SPR/Toll	PL/CPG	PL/Toll	PE	MLF	
Planning & Research		221,000	0	0	0	0	221,000
District	0	0	0	0	0	0	0
Consultant*		0	0	0	0	0	0
Total	0	221,000	0	0	0	0	221,000

* 100% SPR, FHWA will waive state/local match when using SPR Funds

YEAR ONE

Total Project Cost:	\$0	Total Person Years:	0
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Participants	Federal					State	Total
	SPR/CPG	SPR/Toll	PL/CPG	PL/Toll	PE	MLF	
Planning & Research	0	0	0	0	0	0	0
District	0	0	0	0	0	0	0
Consultant*		0	0	0	0	0	0
Total	0	0	0	0	0	0	0

* 100% SPR, FHWA will waive state/local match when using SPR Funds

Activities/Performance Measures

❖ Bureau of Planning and Research Staff

- Partner with other State DOT's by forwarding payment of SPR funds to AASHTO

❖ District Staff

- No district activity.

❖ Consultant

- No consultant activity.

PROGRAM MANAGEMENT

PROGRAM MANAGEMENT COMMITTEE SUPPORT

Objective

The Program Management Committee (PMC) is the central decision-making body for transportation improvement projects within the Pennsylvania Department of Transportation. The Center for Program Development and Management is the Department's conduit for all program development and management activities, and serves as the clearinghouse for all program actions brought before the PMC. The PMC establishes program levels for all of the Commonwealth's transportation programs – Highway and Bridge, and the modal programs for aviation, rail, transit, and waterways. The programs are continually reconciled to consider changing requirements necessary to meet the identified objectives of the Commonwealth, as well as local and regional interests.

The Center for Program Development & Management (CPDM) works closely with Highway Administration's Bureau of Project Delivery to establish yearly letting goals and provides monthly status reports to the PMC for calendar year activities. In addition, reports on Accrued Unbilled Cost and Inactive Obligations for identified projects are provided to PMC to support decision-making and provide oversight for transportation programs and projects.

Activities/Performance Measures

❖ Program Center

- Support the Program Management Committee.
- Finalize the list of agenda items one week prior to meetings.
- Email PMC agenda books two business days prior to meetings.
- Enter PMC actions in the MPMS system within 2 working days of the PMC meeting.

Note: Budget for this work has been distributed among the regional planning and programming items.

ANNUAL PLAN MANAGEMENT

Objective

The careful monitoring and control of federal funds enables the Department to manage its transportation program in a manner which supports achievement of priority goals and objectives. The Transportation Improvement Plan and direction from the program management process provide the focus for this critical activity, which involves scrutinizing and approval of various documents and measures, reviewing federal legislation, preparing funding reports and providing guidance on Federal Regulations to various customers.

Responsible Manager: Mark Tobin	Project Manager: Rob Mulkerin
Work Order Number(s): 86203 8 9 APM	

YEAR ONE

Total Project Cost: \$ 358,180	Total Person Years: 4
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PE	MLF	GF	Local	
Program Center	286,544	0	0	0	71,636	0	0	358,180
District	0	0	0	0	0	0	0	0
Consultant	0	0	0	0	0	0	0	0
Total	286,544	0	0	0	71,636	0	0	358,180

YEAR TWO

Total Project Cost: \$	472,860	Total Person Years: 4
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PE	MLF	GF	Local	
Program Center	378,288	0	0	0	94,572	0	0	472,860
District	0	0	0	0	0	0	0	0
Consultant	0	0	0	0	0	0	0	0
Total	378,288	0	0	0	94,572	0	0	472,860

Activities / Performance Measures

❖ **Program Center Liaisons**

- Assists in the development and management of the Department's Twelve Year Program.
 - Assure the Department is positioned to secure the maximum amount of additional obligation authority in the August Redistribution.
 - Manage annual Close-out process to assure minimal lapse in funds or authority.
 - Provide quarterly obligation reports to Department Staff, FHWA and Planning Partners.
 - Review and approve federal authorization requests within two days of receipt based on conformance with Department priorities, Federal regulations, consistency with the Obligation Plan, availability of Federal funds and obligation authority, and estimated let date.
 - Monitor and manage Advance Construct levels in order to ensure proper cash flow, minimize Accrued Unbilled Costs and project inactivity and to ensure sufficient distribution of fund obligations to the planning regions.
- Review and approve project reimbursement agreements, work orders, etc., within two days of receipt based on conformance with Department authorizations, priorities and available funds.
- Manage Department Letting Schedule.
 - Monitor the Department's letting goal with respect to the calendar year let schedule and actual lettings. Provide monthly progress reports to PMC and, as needed, to others.
 - Establish the CY Letting Schedule as directed by PMC and Executive Staff.
 - Prepare a low bid analysis within one day after each letting.
- Provide status reports on Accrued Unbilled Costs to the Program Management Committee on a monthly basis and to District Executives on a bi-monthly basis including a listing of top ten projects in each District. Dashboards are updated on the

first Monday of each month. Weekly, interim updates of these reports are downloaded from SAP, reviewed and posted for District monitoring.

- Monitor and manage Inactive Obligations with quarterly reviews of individual projects while providing progress reports to PMC and District Executives. Dashboards are updated by the first Monday of each quarter.
- Provide guidance, training, requests for information and other assistance to Department Staff, District Offices, FHWA, Comptroller Operations and the Auditor General regarding federal funds and regulations, department priorities and policies and other initiatives.
- Provide informational reports and briefings for Executive and Program Center Staff, District Offices and FHWA as needed.
- Provide staff support to bi-annual Financial Guidance Work Group including assembling and updating formula data and monetary amounts.
- Provide support, information, coordination and monitoring to assist in project close-outs, paybacks and final vouchers.
- Coordinate requests and maintenance of records for federal fund transfers to the Federal Rail Administration, Federal Transit Administration and other federal agencies including transfers to other states for Pooled Fund Projects.
- Develop scenarios, preparation of proposals for PMC and the calculation of funding types and amounts in response to the rescission of Federal funding.
- Maintain files and statistics regarding the Department's time extension requests and approvals on projects that have exceeded or will soon exceed 10 years in Preliminary Engineering and Final Design.
- Provide legislative reviews for Program Center Management, Executive Staff and PMC.
- Act as statewide coordinator for the Appalachian Regional Commission (ARC) Local Access Road program. Compose administration letters for ARC and provide guidance to District Offices, Central Office staff and the Department of Community and Economic Development.
- Provide updates of earmark obligation balance reports for District, Program Center and FHWA personnel.

❖ **District Staff:**

- No district activity.

❖ **Planning Partner:**

- No planning partner activity.

TRANSPORTATION ALTERNATIVES PROGRAM

Background

PennDOT recognizes the need for a balanced and diverse transportation system throughout the Commonwealth. The Transportation Enhancements (TE), Safe Routes to School (SRTS) and the Transportation Alternatives Program (TAP) have been catalysts for improving bicycle and pedestrian access and enhancing safety. Between 1991 and 2016, PennDOT has invested nearly \$450 million through the TE, TAP, and SRTS programs.

- The SRTS programs were introduced in SAFETEA-LU to encourage children to walk and bicycle to school safely, reducing dependence on fossil fuels and increasing active transportation for children.
- The TAP combines formerly separate programs, including Recreational Trails, Transportation Enhancements, Safe Routes to School and Scenic Byways. As a result, SRTS and Byways no longer have dedicated funding under MAP-21, but certain projects and activities related to the programs remain eligible and compete against other TAP projects.

Objectives

Expedite delivery of TAP projects

TAP projects are locally sponsored and involve consultants with varying degrees of expertise with the requirements associated with federal funds. While the projects themselves may be pretty straight forward, sponsors may encounter problems when acquiring right-of way, complying with environmental requirements, attaining necessary permits, establishing with local maintenance and ownership agreements, etc.

Given the unique nature of TAP projects and our expectation that projects are delivered within two years, it's advantageous to have an experienced, multi-disciplinary consultant available to help project sponsors and their consultants move through the delivery process.

Having an experienced consultant help serves a twofold purpose:

1. Expedites project delivery for selected TAP projects
2. Educates and assists consultants with less experience, increasing the number of firms familiar with the PennDOT process

School Walkability Assessments

Continue one of the most popular offerings provided by Pennsylvania’s Safe Routes to School Resource Center, which was previously managed by the Pennsylvania State Association of Township Supervisors (PSATS).

- 25 walkability assessments each year
- Provide a resource for schools to evaluate their current or planned student walking routes
- Identify hazards and other impediments
- Provide a Final Report to the school
 - Summarize findings
 - Suggest solutions
 - Provide cost estimates for various improvements
- Consider ways to implement projects
 - Provide SRTS funding
 - Project bundling

Responsible Manager:	Michael Baker	Project Manager: Chris Metka
Work Order Number(s):	28103 8 9 TAP 28113 8 9 TAP	

YEAR ONE

Total Project Cost: \$	517,150	Total Person Years: 1.25
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	93,720	0	0	0	23,430	0	0	117,150
District	0	0	0	0	0	0	0	0
Consultant	0	400,000	0	0	0	0	0	400,000
Total	93,720	400,000	0	0	23,430	0	0	517,150

YEAR TWO

Total Project Cost: \$	537,975	Total Person Years: 1.25
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	97,580	0	0	0	24,395	0	0	121,975
District	0	0	0	0	0	0	0	0
Consultant	15,200	400,000	0	0	800	0	0	416,000
Total	112,780	400,000	0	0	25,195	0	0	537,975

Activities/Performance Measures

❖ **Program Center**

- Project Delivery - Expedite delivery of TA Set-Aside projects
 - Number of projects
 - Dollar value of projects delivered
 - Number of firms that learn the PennDOT process
- Walkability Audits
 - Number of walkability audits conducted
 - Post walkability audit survey results
 - Number of improvements implemented
 - SRTS funds obligated

❖ **District Staff**

- No district activity.

❖ **Consultant**

- Provide technical support for the development and management of Transportation Alternatives Program funded projects and programs.

SCENIC BYWAYS AND GREENWAYS PROGRAMS

Objective

To develop and monitor Pennsylvania's State Scenic Byways, Recreational Trails, Greenways Program and coordinate all PennDOT activities associated with the National Scenic Byways Program.

Scenic Byways

The Scenic Byways program supports communities and local governments in achieving byway designations and to assist with local efforts to maintain byway resource qualities, to protect and preserve visual impacts, to educate residents and visitors, to promote tourism and to enhance economic development potential throughout the Commonwealth. Federal funding will be competitive under FHWA's Fixing America's Surface Transportation Act, (FAST Act), Transportation Alternatives Program (TAP). Project categories that are Byway eligible under TAP include: Construction of Turnouts, Overlooks and Viewing Areas, Historic Preservation and Rehabilitation of Historic Transportation Facilities (related to a byway), Bicycle and Pedestrian Facilities.

Recreational Trails Program- FHWA

The Recreational Trails Program (RTP), under FHWA, provides funds for all kinds of recreational trail uses, such as pedestrian uses (hiking, running, wheelchair use), bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles. PennDOT collaborates with DCNR on the program through an MOU. DCNR has its own procedures to solicit projects from project sponsors, and to select projects for funding, in response to recreational trail needs within the State. PennDOT serves as the fiscal entity in programming the RTP on the TYP/STIP, entering the projects into MPMS, processing a 4232 and reimbursing DCNR. Federal Funding is under FHWA's Moving Ahead for Progress in the 21st Century (MAP-21), Transportation Alternatives program (TAP) The RTP is a Federal-aid assistance program to help the States provide and maintain recreational trails for both motorized and non-motorized recreational trail use.

Greenways

Greenways, PennDOT's role has shifted to performing implementation of its specific greenways activities as contained in the Plan. We will, however, continue to support implementation of the Greenways Plan on a statewide basis by financially participating with the Department of Conservation and Natural Resources in this endeavor.

Responsible Manager:	Michael Baker	Project Manager: Jackie Koons-Felion
Work Order Number(s):	80303 8 9 BYW 80313 8 9 BYW	

YEAR ONE

Total Project Cost: \$	121,550	Total Person Years: 0.3
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	37,240	0	0	0	9,310	0	0	46,550
District	0	0	0	0	0	0	0	0
Consultant	0	75,000	0	0	0	0	0	75,000
Total	37,240	75,000	0	0	9,310	0	0	121,550

YEAR TWO

Total Project Cost: \$	122,450	Total Person Years: 0.3
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	37,960	0	0	0	9,490	0	0	47,450
District	0	0	0	0	0	0	0	0
Consultant	0	75,000	0	0	0	0	0	75,000
Total	37,960	75,000	0	0	9,490	0	0	122,450

Activities/Performance Measures

❖ **Program Center Liaison**

- Continuously monitor and manage the development of Byways projects on the TYP/STIP.
- Provide various reports to PMC.
- Coordinate byway nomination requests for participation in both the PA Byways Program and the National Scenic Byways Program.
- Make presentations to local groups on Byways opportunities available through the Byways Programs and other state and federal funding programs.
- Continuously monitor and manage the Recreational Trails Projects (RTP) on the TYP/STIP.
- Coordinate environmental reviews on each RTP with Bureau of Project Delivery.

- Continuously monitor and manage RTP unspent balances in accordance with FHWA's Financial Integrity and Evaluation (FIRE) Program.
- Work with the appropriate bureaus within PennDOT to ensure compliance with the greenways action plan.
- Continue to work with DCNR to implement Pennsylvania's Greenways Plan.
- Develop a strategic plan for the Federal PA Byways Program to support statewide management of PA Byways.

❖ **District Staff**

- No district activity.

❖ **Consultant**

- Provide technical support for the development and management of Byways funded projects and programs.

TWELVE YEAR TRANSPORTATION PROGRAM SUPPORT

Objective

The Twelve Year Transportation Program (as required by Act 120 of Pennsylvania State Law and its amendments) targets the Commonwealth's improvement efforts in all major transportation modes: highways and bridges, and various multi-modal aspects of transportation such as aviation, rail and transit. Transportation projects that focus on improving safety and enhancing mobility for moving goods and people, preserving the existing system while exploring opportunities for adding new capacity, and collaborating with our transportation partners to ensure we are holding ourselves accountable are keys to achieving the Department's goals and objectives.

The continued thrust in FFYs 2018-2020 will be the incorporation of the FAST Act requirements in the continuous update of the Program; this includes the tie-in of planning requirements and performance measures for Transportation Plans, TIPs, and the STIP. This program features the incorporation of several action items for the State Transportation Commission (STC) which include the continuation of the Transportation Performance Report, the TYP Public Involvement Initiative, etc. This program also involves the preparation of comprehensive information packages for key Department staff, the State Transportation Commission (STC), and elected state and federal legislators and officials. These information packages facilitate and communicate the development of a transportation system responsive to the needs of the Commonwealth, monitors progress on key programs and projects, and aids in resolving outstanding Transportation Program issues. Staff and support services are also provided to the STC and other Program Center functions to prepare improvement programs which maintain and enhance the existing transportation system.

Responsible Manager:	Mark Tobin	Project Manager:	Jessica Clark
Work Order Number(s):	85103 8 9 TYP 85113 8 9 TYP/STC		

YEAR ONE

Total Project Cost: \$	624,740	Total Person Years: 2.84
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	158,436	0	101,356	0	39,608	25,340	0	324,740
District	0	0	0	0	0	0	0	0
Consultant	250,000	0	0	0	50,000	0	0	300,000
Total	408,436	0	101,356	0	89,608	25,340	0	624,740

YEAR TWO

Total Project Cost: \$	965,370	Total Person Years: 2.84
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	427,010	0	105,286	0	106,753	26,321	0	665,370
District	0	0	0	0	0	0	0	0
Consultant	250,000	0	0	0	50,000	0	0	300,000
Total	677,010	0	105,286	0	156,753	26,321	0	965,370

Activities/Performance Measures

❖ **Program Center Liaison**

- Prepare the update to the Twelve Year Program for adoption by the STC on a two year cycle
- Continue to refine the modernized public input process in the development of the TYP update.
- Prepare and distribute agenda and supporting information to the Commissioners one week prior to scheduled meetings.
- Provide staff support to the STC for their quarterly meetings.
- Incorporate Program Management Committee (PMC) project actions in the STC quarterly meeting agendas for Commission action.
- Provide other miscellaneous support for STC initiatives such as the development of the Transportation Performance Report.

- Develop various program status reports on the Transportation Program. Reports on the status of the Bridge Program, Interstate & Expressway Program, Highway Restoration Program and others are to be provided as needed to the PMC/STC for their information and possible action.
- Prepare and compile a recommended SFY 2019-2020 Capital Budget for submission to the Governor's Office of the Budget by October 2018.
- Prepare and compile lists of bridge and highway project requiring Capital Budget itemization to the General Assembly as requested.
- In coordination with the State Transportation Advisory Committee (TAC), prepare the fourth edition of the Transportation Performance Report to be finalized within the January/February 2019 timeframe.

❖ **District Staff**

- No district activity.

❖ **Consultant Services**

- Serve as the lead Consultant Group and provide assistance to the Program Center and the STC in the development of the TYP update.
- Provide technical assistance in administering and improving Twelve Year Program Outreach activities.
- Provide technical assistance for the maintenance of www.talkpatransportation.com

BRIDGE AND SPECIAL INITIATIVES PROGRAM

Objective

Given the critical condition of bridges across the state, there has been an increased need to more closely manage the planning and programming aspects of the state and local bridge program. As a part of this program, the Department will ensure that programmed bridge projects are based upon the Bridge Risk Assessment. These projects are included on the Statewide Transportation Improvement Program (STIP), Twelve-Year Program (TYP) and appropriate local Transportation Improvement Program (TIP), if applicable. Along with these project the expanded effort to include local needs into the programmed projects is being extensively documented in the PennDOT Connects effort. This will allow for the good planning and design of transportation infrastructure to meet the needs of the region and the state.

Other initiatives that arise will require an enhanced level of coordination including but not limited to support ACT 89 progress tracking, visualization, and reporting. New responsibilities include attending and monitoring the monthly letting and progress reports for each MPO/RPO region, Independent County, and each district. Training and implementation of Oracle Endeca. This section will be used for other initiatives, as needed.

There will also be a need to show transparency and share information with our Planning Partners and the public through PennDOT projects website and TIP visualization, enhancements to PennDOT One Map, and the management, development, and implementation of ARC GIS.com for the Commonwealth. This section will be responsible for planning and mapping data elements to fulfill the reporting requirements in the Decade of Investment (DOI) initiative. Other initiatives will include supporting the Local Data Collection project with assisting in GIS coordination, general database and application development, and mobile device technical support.

Responsible Manager:	James Arey	Project Manager: Matthew Long
Work Order Number(s):	27703 8 9 BNI 27713 8 9 BNI	

YEAR ONE

Total Project Cost: \$	844,849	Total Person Years: 3.88
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	289,390	0	0	0	72,348	0	0	361,738
District	0	0	0	0	0	0	0	0
Consultant	0	483,111	0	0	0	0	0	483,111
Total	289,390	483,111	0	0	72,348	0	0	844,849

YEAR TWO

Total Project Cost: \$	844,849	Total Person Years: 3.88
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	302,631	0	0	0	75,658	0	0	378,289
District	0	0	0	0	0	0	0	0
Consultant	0	486,435	0	0	0	0	0	486,435
Total	302,631	486,435	0	0	75,658	0	0	864,724

Activities/Products/Performance Measures

❖ **Program Center Liaison**

- Provide Deputy Secretaries/Bureau Directors with reports containing information relating to The Transportation Improvement Program and other initiative projects.
- Be the point of contact for the PennDOT Connects system for District and MPO/RPO staff to document the extensive pre-project planning for environmental and local transportation system needs.

- Monitor maintenance of the PennDOT Project websites such as TIP visualization, Act 89 Progress, and the Construction website for department-wide uses for all modes of transportation.
- Monitor and train District and MPO/RPO staff on the expand PennDOT One Map as a platform for other bureaus to utilize the advantages of GIS capabilities.
- Manage the Local Data Collection project of local roads and bridges, as well as develop new collection system.
- Manage other mobile applications that are developed at the request of the Office of Planning to improve the current workflow that exists here at PennDOT.
- Implement ARC GIS.com and promote GIS for planning.
- Renewal of Endeca software and consultant support for development.
- Develop Program Center reports and TIP development tools.

❖ **District Staff**

- No district activity.

❖ **Consultant Services**

- Develop source code for the creation, enhancements, and maintenance of the PennDOT Connects system.
- Develop the code for the creation, enhancements, and maintenance of the PennDOT Project Websites such as TIP Visualization, Act 89 Progress, Construction website, and PennDOT One Map that not only department staff but constituents of Pennsylvania utilize.
- Modernization of the current mobile Local Data Collection System with new technology and workflows to replace antiquated equipment and processes.
- Provide support for the training and advancement of GIS in the District offices and in the MPO/RPO regional offices.

FEDERAL INITIATIVES

Objective

Federal transportation programs have traditionally set the direction for state and local transportation initiatives. Therefore, it is in Pennsylvania's best interest to influence the shape of federal programs so that a maximum return of federal funds to the Commonwealth is realized under a program structure which affords sufficient flexibility to address key statewide, regional and local transportation issues.

Achieving the dual objectives of maximizing federal funding under a flexible program structure requires careful coordination and focused effort. This involves a strategic approach toward working with the Pennsylvania Congressional Delegation, national and regional transportation associations, transportation interest groups and other states on those issues of primary importance to the Commonwealth's transportation program.

Responsible Manager:	Brian Hare	Project Manager: Mike Baker
Work Order Number(s):	92103 8 9 FED 92113 8 9 FED	

YEAR ONE

Total Project Cost: \$	102,625	Total Person Years: 0.31
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	0	0	0	0	52,625	0	0	52,625
District	0	0	0	0	0	0	0	0
Consultant	0	0	0	0	50,000	0	0	50,000
Total	0	0	0	0	102,625	0	0	102,625

YEAR TWO

Total Project Cost: \$	103,705	Total Person Years: 0.31
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	0	0	0	0	53,705	0	0	53,705
District	0	0	0	0	0	0	0	0
Consultant	0	0	0	0	50,000	0	0	50,000
Total	0	0	0	0	103,705	0	0	103,705

Activities/Performance Measures

❖ **PennDOT Program Center**

- Analyze finance, policy and legislative issues impacting the Department’s transportation programs, and advise and support senior management in addressing these issues.
- Coordinate federal initiatives, review pending legislation, track implementation of the FAST Act and identify and address issues demanding attention.
- Provide briefings and staff support for the Department’s involvement in national and regional transportation associations, including AASHTO, NASTO, the National Governor’s Association (NGA), and the Coalition of Northeast Governors (CONEG).
- Support the PA Secretary of Transportation, the Deputy Secretary for Planning, and other Department Executive staff with their AASHTO/NASTO responsibilities.
- Consultant cost associated with this item is for support activities for various AASHTO Committees and the NASTO Air Quality, Energy and Climate Change Committee.

❖ **District**

- No district activity.

❖ **Planning Partner**

- No planning partner activity.

❖ **Consultant**

- Consultant cost associated with this item is for support activities for various AASHTO Committees and the NASTO Air Quality, Energy and Climate Change Committee.

STATE TRANSPORTATION ADVISORY COMMITTEE

Objective

The Transportation Advisory Committee (TAC) initiatives and studies help provide direction and advice to the State Transportation Commission (STC) and the Department of Transportation on a variety of current transportation issues deemed pertinent by the Department. Support for various TAC studies and initiatives are provided via a five year open end consulting contract, managed by the Department of Transportation. Staff support is also provided to the TAC and to special TAC task forces in development of work plans and other materials necessary to undertake consultant studies or to directly undertake in-house studies. Assistance is also provided to the TAC Chairman in development of meeting agendas and related materials.

Responsible Manager:	Mark Tobin	Project Manager: Jessica Clark
Work Order Number(s):	86403 8 9 TAC 86413 8 9 TAC	

YEAR ONE

Total Project Cost: \$	438,020	Total Person Years: 1.55
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	110,416	0	0	0	27,604	0	0	138,020
District	0	0	0	0	0	0	0	0
Consultant	0	0	0	0	300,000	0	0	300,000
Total	110,416	0	0	0	327,604	0	0	438,020

YEAR TWO

Total Project Cost: \$	444,455	Total Person Years: 1.55
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	115,564	0	0	0	28,891	0	0	144,455
District	0	0	0	0	0	0	0	0
Consultant	0	0	0	0	300,000	0	0	300,000
Total	115,564	0	0	0	328,891	0	0	444,455

Activities/Products/Performance Measures

❖ **Program Center Liaison**

- Manage the five year open end consultant agreement available to TAC for the exploration of current transportation studies to aid in the Department's goals and objectives.
- Prepare and distribute agenda and supporting information to the TAC one week prior to scheduled meetings.
- Oversee the effective communication and coordination initiative of the TAC to align with the State Transportation Commission (STC).

❖ **District Staff**

- No district activity.

❖ **Consultant Services**

- Serve as the lead to the Consultant Group and provide assistance to TAC task forces investigating identified issues.
- Research and analyze data, documents, etc. as directed by the TAC on relevant Transportation study topics.
- Present study updates and finalized documents for TAC and STC approval during scheduled business meetings.

PROGRAM CENTER COMPUTER SUPPORT

Objective

Automated information systems and reporting capabilities are critical to the decision-making process and to the achievement of priority goals and objectives. The Program Center continues to enhance all functionality of the Multi-modal Project Management System (MPMS). Better, more informed decision making and Program monitoring are the targeted results. The results continue to be communicated in a timelier manner and more effectively with all partners via improvements such as MPMS on the web and an enhanced federal authorization process.

The basic MPMS continues to require performance support and enhancement now that it is part of our Program culture. A more sophisticated access (web based internet access) by Planning Partners including the FHWA and others will be addressed and improved. As users of the MPMS become more sophisticated, the better MPMS will be as a tool. This requires additional investments in the MPMS with additional operational enhancements and training for all users.

Responsible Manager:	Mark Tobin	Project Manager: Kent Smithmyer
Work Order Number(s):	86503 8 9 CMP 86513 8 9 CMP	

YEAR ONE

Total Project Cost: \$	1,278,529	Total Person Years: 3.21
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	283,014	0	0	0	70,754	0	0	353,768
District	0	0	0	0	0	0	0	0
Consultant	0	924,761	0	0	0	0	0	924,761
Total	283,014	924,761	0	0	70,754	0	0	1,278,529

YEAR TWO

Total Project Cost: \$	1,607,575	Total Person Years: 3.21
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	726,060	0	0	0	181,515	0	0	907,575
District	0	0	0	0	0	0	0	0
Consultant	0	700,000	0	0	0	0	0	700,000
Total	726,060	700,000	0	0	181,515	0	0	1,607,575

Activities/Performance Measures

❖ **Program Center/Consultant I.T. Staff**

- Prepare reports to assist program managers, general MPMS users and to fulfill special requests for data inquiry.
- Prepare special computer reports to assist the Twelve Year Program division manager and staff.
- Oversee the continuing enhanced integration of MPMS with other Department management systems.
- Manage and administer the Office of Planning's personal computer systems efforts as it relates to the enhancement of the operation of the Multi-modal Project Management System.
- Provide the needed expertise to monitor the 2017 Transportation Program and the 2019 Transportation Program as it is developed and becomes an approved program.
- Continue to direct the MPMS consultant to provide support for and operational enhancements to the MPMS.
- Continue development of MPMS data to be presented on the World Wide Web (internet).
- Continue to upgrade needed software and licenses for MPMS maintenance and systems integration.
- Improve data integrity and develop performance measures with this data.
- Evaluate opportunities to improve system architecture for increased functionality as Department standards change.
- Continue to enhance the new MPMS Federal Funds interface with FMIS based on funds management unit needs and requirements.
- Explore making more of MPMS accessible via mobile applications. 4232 module is now mobile accessible.
- Build more screen customization into MPMS based on user preferences.

AIR QUALITY

Objective

The two key activities of this task are as follows: (1) the coordination of clean air and climate planning activities (including extreme weather vulnerability issues) within the Department and with various national and regional organizations and (2) ensuring that the Department, MPOs, RPOs, and Independent County and provide input as needed to assist the Department of Environmental Protection in production of the required State Implementation Plans (SIPs). Also, analysis of the air quality and climate regulations and guidelines that are issued as a result of the 1990 Clean Air Act Amendments or any pending Energy Bills or through transportation reauthorization for their impact on PennDOT and the Commonwealth is an ongoing effort. The Department, in partnership with Department of Environmental Protection (DEP), MPOs, and RPOs, will undertake all required activities to comply with regulations and guidelines promulgated and/or forthcoming from Environmental Protection Agency (EPA)/Department of Transportation (DOT).

Responsible Manager: Brian Hare	Project Manager: Mike Baker
Work Order Number(s): 88103 8 9 AQD 88203 8 9 AQC (SPR) 88103 8 9 EWV (Extreme Weather Vulnerability)	

YEAR ONE

Total Project Cost: \$ 2,111,000	Total Person Years: 0.72
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	88,800	0	0	0	22,200	0	0	111,000
District	0	0	0	0	0	0	0	0
Consultant	0	2,000,000	0	0	0	0	0	2,000,000
Total	88,800	2,000,000	0	0	22,200	0	0	2,111,000

YEAR TWO

Total Project Cost: \$	2,114,475	Total Person Years: 0.72
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	91,580	0	0	0	22,895	0	0	114,475
District	0	0	0	0	0	0	0	0
Consultant	0	2,000,000	0	0	0	0	0	2,000,000
Total	91,580	2,000,000	0	0	22,895	0	0	2,114,475

Activities/Performance Measures

❖ **Program Center Liaison**

- Assure the Annual CMAQ Report is prepared and submitted to the FHWA Division Office by mid-February each year.
- Coordinate the FY 2019 STIP conformity determinations for all ozone and particulate matter nonattainment and maintenance areas.
- Implement the P3 Performance Measures per FHWA rulemaking.
- Serve as an air quality liaison between PennDOT and other federal/state agencies.

❖ **District Staff**

- No district activity.

❖ **Consultant**

- Provide technical assistance to PennDOT (district and central office), planning partners, transit agencies and other federal/state agencies regarding the air quality improvement process.
- Assist the State Department of Environmental Protection with correcting any State Implementation Plan deficiencies.

TRANSPORTATION PLANNING AND PROJECT DELIVERY

Background

The Department continues to critically evaluate how we plan, program, develop, and implement our highway and bridge projects. An ongoing major initiative has been the development and implementation of the PennDOT Connects process.

The SPR-funded portion of this initiative will focus on planning, program development, and program management activities. Those activities associated with project design, right-of-way acquisition, and construction will be funded with other federal and state funds.

Objectives

The Department will continue to work with Central Office, Districts, MPOs, RPOs, Independent County, resource agency staff, transit operators, and local governments to develop and implement specific actions required to fully integrate and enhance the PennDOT Connects process throughout the planning, program development, and project delivery processes. The Department's project development process combines aspects of planning and environmental analysis to provide more information, both resource and technical, about projects to enable better scopes, costs and schedules to be developed prior to projects being added to the TIP. Working with the Resource Agencies to simplify the coordination process of resources impacted by projects is an important aspect of the process. Opportunities for improved coordination include increased access to resource data during the pre-TIP planning phases of project delivery, creation or expansion of programmatic agreements, policies, procedures, etc., and reducing paperwork while maintaining quality. Additional opportunities to streamline and improve procedures will continue with the passage of the FAST Act and as new federal and state policies and regulations are approved. The PennDOT Connects initiative will continue to be managed through a combination of internal staff oversight and consultant assistance.

Responsible Manager: Larry Shifflet	Project Manager: Brian Hare
Work Order Number(s): 22603 8 9 PRJ 22603 8 9 P01 thru P12 - Districts 22613 8 9 PRJ	

YEAR ONE

Total Project Cost: \$ 1,977,972	Total Person Years: 2.11
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	1,267	0	0	0	317	0	0	1,584
District	76,230	0	0	0	19,058	0	0	95,288
Consultant	0	1,500,000	0	0	381,100	0	0	1,881,100
Total	77,497	1,500,000	0	0	400,475	0	0	1,977,972

YEAR TWO

Total Project Cost: \$ 1,685,687	Total Person Years: 2.11
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	1,299	0	0	0	325	0	0	1,624
District	547,250	0	0	0	136,813	0	0	684,063
Consultant	0	1,000,000	0	0	0	0	0	1,000,000
Total	548,549	1,000,000	0	0	137,138	0	0	1,685,687

Activities/Performance Measures

❖ **Program Center Liaison**

- Implement PennDOT Connects system update by 6/30/18.
- Initiate a new work order to develop a new approach to environmental resource agency coordination for planning products through the regional long range transportation planning process.
- Develop Work Orders to support implementation of the Program Development and Project Delivery Process through 6/30/20.
- Initiate actions for implementations of any new federal authorization or state laws or regulations by 6/30/20.
- Provide Project Management and Consultant Oversight through 6/30/20.

❖ **District Staff**

- Provide oversight and direction for any work orders developed for District Office support for planning and/or project delivery initiatives.

❖ **Consultant**

- Provide oversight and direction for any work orders developed for MPO/RPO support for planning and/or project delivery initiatives.

PENNDOT CONNECTS PLANNING STUDIES

Background

The Department continues to critically evaluate how we plan, program, develop, and implement our highway and bridge projects. An ongoing major initiative has been the development and implementation of the PennDOT Connects policy, and related procedures.

The SPR-funded portion of this initiative will focus on planning, program development, and program management activities. Those activities associated with project design, right-of-way acquisition, and construction will be funded with other federal and state funds.

Objectives

The Department will continue to work with Central Office, Districts, MPOs, RPOs, Independent County, resource agency staff, transit operators, and local governments to develop and implement specific actions required to fully integrate and enhance the PennDOT Connects process. The primary focus of the PennDOT Connects process involves enhanced collaboration throughout the planning phase of project development. Better collaboration in planning increases the opportunity to identify and incorporate local governments' visions for their communities into project scopes of work, budgets, and schedules prior to placing a project on the Transportation Improvement Program.

The focus on collaboration with local governments and MPOs/RPOs in planning creates some level of reliance on planning studies to support the decision-making process in the planning phase. Limited funding for project delivery makes it essential decisions in planning are well-thought-out and based on consistency with local planning, such as local comprehensive plans, local planning studies, and local ordinances. Local governments will also be expected to prioritize local community features that are considered for inclusion in PennDOT projects. Not all local community features can be addressed, due to limited funding.

To support better decision-making, the Department has identified Planning funds to be dedicated to transportation planning studies. Proposed planning studies will be selected for funding based on the following criteria:

- Planning studies should be focused on a specific transportation problems, such as corridor congestion, land use continuity with existing transportation infrastructure, limited pedestrian and/or bicycle accommodations, stormwater management problems, or lack of transit access.
- Planning studies should include a consideration for leveraging other funding sources to implement findings, such as Transportation Alternatives funding, DCNR funding, other local funding opportunities, etc.

- Local participation in funding transportation planning studies will be given priority consideration.
- Planning studies should support the prioritization of any problems relative to other problems within the community.

Responsible Manager:	Larry Shifflet	Project Manager: Brian Hare
Work Order Number(s):	98103 8 9 PDC 98113 8 9 PDC-Consultant	

YEAR ONE

Total Project Cost: \$	2,002,679	Total Person Years: 0.86
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	105,343	0	0	0	26,336	0	0	131,679
District	0	0	0	0	0	0	0	0
Consultant	0	1,871,000	0	0	0	0	0	1,871,000
Total	105,343	1,871,000	0	0	26,336	0	0	2,002,679

YEAR TWO

Total Project Cost: \$	1,835,152	Total Person Years: 0.86
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Participants	Federal				State		Other	Total
	SPR/CPG	SPR/Toll	FTA/CPG	PL/Toll	MLF	GF	Local	
Program Center	108,121	0	0	0	27,031	0	0	135,152
District	0	0	0	0	0	0	0	0
Consultant	0	1,700,000	0	0	0	0	0	1,700,000
Total	108,121	1,700,000	0	0	27,031	0	0	1,835,152

Activities/Performance Measures

❖ Program Center Liaison

- Support develop of Work Orders to support planning studies to further PennDOT Connects policy.
- Track the status of Planning Study development of Planning Partners who request and receive SPR funding for PennDOT Connects Planning Studies.
- Share Planning Studies via the Program Center's SharePoint site.

❖ District Staff

- No district activity

❖ Consultant

- Provide support to the PennDOT Connects initiative.

Deliverable(s):

- Completed copies of each Planning Study

PLANNING SUPPLEMENTS

YEAR ONE

**FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR ONE FINANCIAL REQUIREMENTS PROJECT SUMMARY**

	SPR FUNDED					PL FUNDED					OTHER FUNDED						100 % STATE MLF	GRAND TOTAL	
	SPR/CPG	100% SPR	MLF	LOCAL	TOTAL	PL/CPG	100% PL	MLF	LOCAL	TOTAL	FTA/CPG	FAA	OTHER ¹	GF	LOCAL	TOTAL			
I. ADMINISTRATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,196,297	2,196,297
II. TRANSPORTATION PLANNING	2,423,312	2,525,000	418,328	0	5,366,640	0	0	0	0	0	0	0	0	0	0	0	0	0	5,366,640
III. GEOGRAPHIC INFORMATION	3,064,815	2,711,000	578,708	0	6,354,523	0	0	0	0	0	0	0	0	0	0	0	0	13,249	6,367,772
IV. RESEARCH	3,613,700	5,600,320	903,425	0	10,117,445	0	0	0	0	0	0	0	0	222,864	150,000	372,864	477,000	10,967,309	
V. PLANNING	4,972,279	2,204,000	891,954	362,844	8,431,077	13,725,450	630,000	2,376,723	1,899,298	18,631,471	5,696,271	6,000	6,616,900	1,180,483	1,730,736	15,230,390	0	42,292,938	
VI. PROGRAM MANAGEMENT	1,780,400	7,253,872	813,701	0	9,847,973	0	0	0	0	0	101,356	0	25,340	0	0	126,696	402,625	10,377,294	
GRAND TOTAL	15,854,506	20,294,192	3,606,116	362,844	40,117,658	13,725,450	630,000	2,376,723	1,899,298	18,631,471	5,797,627	6,000	6,642,240	1,403,347	1,880,736	15,729,950	3,089,171	77,568,250	

1. Other funds include other state and/or federal funds that are outside of Planning.

FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR ONE

	SPR FUNDED					PL FUNDED					OTHER FUNDED						100% STATE MLF	GRAND TOTAL	
	SPR/CPG	100% SPR	MLF	LOCAL	TOTAL	PL/CPG	100% PL	MLF	LOCAL	TOTAL	FTA/CPG	FAA	OTHER ¹	GF	LOCAL	TOTAL			
I. ADMINISTRATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,196,237	2,196,237
ADMINISTRATION/MANAGEMENT/STAFF SUPPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,196,237	2,196,237
II. TRANSPORTATION PLANNING	2,423,312	2,525,000	416,328	0	5,366,640	0	0	0	0	0	0	0	0	0	0	0	0	0	5,366,640
TRAFFIC MONITORING SYSTEM	384,344	1,375,000	38,586	0	1,867,930	0	0	0	0	0	0	0	0	0	0	0	0	0	1,867,930
PERMANENT TRANSPORTATION DATA COLLECTION AND ANALYSIS SYSTEMS - ATR, CAVC, WIM	1,217,324	800,000	116,381	0	2,134,905	0	0	0	0	0	0	0	0	0	0	0	0	0	2,134,905
VIDEO LOG	0	200,000	0	0	200,000														200,000
PERFORMANCE INFORMATION	354,376	50,000	88,744	0	433,120	0	0	0	0	0	0	0	0	0	0	0	0	0	433,120
GEO-SPATIAL NETWORK	0	0	0	0	0														0
FIELD OPERATIONS	456,068	100,000	114,017	0	670,085	0	0	0	0	0	0	0	0	0	0	0	0	0	670,085
III. GEOGRAPHIC INFORMATION	3,064,815	2,711,000	578,708	0	6,354,523	0	0	0	0	0	0	0	0	0	0	0	0	13,249	6,367,772
CARTOGRAPHIC SERVICES	147,863	0	36,365	0	184,228	0	0	0	0	0	0	0	0	0	0	0	0	13,249	198,077
GEOGRAPHIC INFORMATION SYSTEMS	751,706	2,511,000	225,727	0	3,488,433	0	0	0	0	0	0	0	0	0	0	0	0	0	3,488,433
PLAN & RESEARCH COMPUTER SUPP	2,165,246	200,000	316,016	0	2,681,262	0	0	0	0	0	0	0	0	0	0	0	0	0	2,681,262
IV. RESEARCH	7,843,384	0	2,091,272	0	9,935,256	0	0	0	0	0	0	0	222,864	150,000	372,864	477,000	10,785,120		
RESEARCH PROGRAM MGMT	6,724,339	0	1,811,375	0	8,535,714	0	0	0	0	0	0	0	0	0	0	0	477,000	3,012,774	
RESEARCH TECHNOLOGY TRANSFER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MUNICIPAL RESEARCH OUTREACH	1,119,045	0	279,897	0	1,398,942														1,772,346
V. PLANNING	4,972,279	2,204,000	891,954	362,844	8,431,077	13,725,450	630,000	2,376,723	1,899,298	18,631,471	5,696,271	6,000	6,616,900	1,180,483	1,730,736	15,230,390	0	42,292,938	
METROPOLITAN PLANNING (Sub-A. Total)	2,602,286	350,000	470,076	180,344	3,602,706	13,289,450	130,000	2,342,723	1,836,798	17,598,971	5,239,536	6,000	5,085,300	371,980	1,273,960	11,976,776	0	33,178,453	
ADAMS	173,535	5,000	25,602	17,781	221,918	0	0	0	0	0	56,382	0	0	1,221	12,875	70,478	0	292,396	
ALTOONA	37,378	0	3,344	0	47,322	155,000	5,000	21,000	17,750	198,750	53,654	0	0	1,095	12,875	73,624	0	319,696	
CENTRE REGION	46,877	0	11,719	0	58,596	175,000	0	21,000	22,750	218,750	86,263	0	0	2,255	19,313	107,837	0	385,183	
ERIE	43,050	0	10,762	0	53,812	280,000	0	41,000	29,000	350,000	85,352	0	0	2,026	19,313	106,691	0	510,503	
FRANKLIN	195,150	0	31,370	16,813	243,313	0	0	0	0	0	62,020	0	0	2,630	12,875	77,525	0	321,438	
HARRISBURG	28,706	0	7,176	0	35,882	839,000	0	113,000	78,000	1,030,000	109,226	0	0	1,557	25,750	136,533	0	1,202,415	
JOHNSTOWN	29,893	0	7,473	0	37,366	205,000	5,000	31,000	20,250	261,250	57,783	0	0	1,571	12,875	72,229	0	370,845	
LACKAWANNA/LUZERNE	41,398	0	10,439	0	52,437	475,450	0	70,000	48,863	594,313	106,289	0	0	2,110	24,463	132,862	0	779,672	
LANCASTER	32,136	0	8,034	0	40,170	594,000	10,000	82,000	66,500	752,500	109,284	0	0	1,571	25,750	136,605	0	829,275	
LEBANON	188,756	15,000	29,438	17,750	250,944	0	0	0	0	0	53,268	0	0	1,343	12,875	74,086	0	325,030	
LEHIGH VALLEY	44,246	0	11,062	0	55,308	764,000	25,000	113,000	78,000	980,000	111,102	0	0	2,025	25,750	138,877	0	1,174,185	

1. Other funds include other state and/or federal funds that are outside of Planning.

FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR ONE

	SPR FUNDED					PL FUNDED					OTHER FUNDED						100 % STATE MLF	GRAND TOTAL
	SPR/CPG	100% SPR	MLF	LOCAL	TOTAL	PL/CPG	100% PL	MLF	LOCAL	TOTAL	FTA/CPG	FAA	OTHER ¹	GF	LOCAL	TOTAL		
NORTHEASTERN PA ALLIANCE	523,560	45,000	86,890	44,000	699,450	0	0	0	0	0	87,250	0	0	2,500	19,313	109,063	0	808,513
PHILADELPHIA AREA	309,091	0	37,273	40,000	386,364	4,610,000	30,000	1,094,225	849,833	6,584,058	2,803,653	6,000	4,995,300	329,163	693,750	8,827,866	0	15,798,288
PITTSBURGH/MONESSEN	206,375	250,000	51,595	0	507,970	4,095,000	0	587,000	521,100	5,203,100	1,012,695	0	90,000	8,548	259,620	1,370,863	0	7,081,933
READING/POTTSTOWN	68,627	0	17,157	0	85,784	390,000	15,000	62,000	35,500	502,500	115,817	0	0	3,204	25,750	144,771	0	733,055
SEDA-COG	517,216	35,000	85,304	44,000	681,520	0	0	0	0	0	86,714	0	0	2,366	19,313	108,393	0	789,913
SHENANGO VALLEY	42,260	0	10,566	0	52,826	162,000	0	24,498	16,002	202,500	60,486	0	0	2,246	12,875	75,607	0	330,933
WILLIAMSPORT	37,740	0	9,434	0	47,174	155,000	15,000	21,000	17,750	208,750	59,384	0	0	1,972	12,875	74,231	0	330,155
YORK	35,112	0	8,778	0	43,890	390,000	25,000	62,000	35,500	512,500	110,908	0	0	1,977	25,750	138,635	0	695,025
TRANSPORTATION MANAGEMENT (Sub-B. Total)	93,088	0	23,272	0	116,360	0	0	0	0	0	0	0	1,401,600	0	350,400	1,752,000	0	1,868,360
TRANS.MGT. ASSOC. ASSIST.	93,088	0	23,272	0	116,360	0	0	0	0	0	0	0	1,401,600	0	350,400	1,752,000	0	1,868,360
C. RURAL PLANNING (Sub-Total)	1,171,853	135,000	147,964	145,000	1,599,817	0	0	0	0	0	456,735	0	0	7,808	106,376	570,919	0	2,170,736
NORTHCENTRAL PA REGIONAL PLANNING	433,162	35,000	41,291	67,000	576,453	0	0	0	0	0	253,612	0	0	2,090	61,313	317,015	0	893,468
NORTHERN TIER REGIONAL PLANNING	233,056	30,000	32,764	25,500	321,320	0	0	0	0	0	56,324	0	0	1,206	12,875	70,405	0	391,725
NORTHWEST PA REGIONAL PLANNING	262,071	35,000	38,517	27,000	362,588	0	0	0	0	0	86,767	0	0	2,380	19,313	108,460	0	471,048
SOUTHERN ALLEGHENIES	237,849	35,000	33,963	25,500	332,312	0	0	0	0	0	58,603	0	0	1,775	12,875	73,253	0	405,565
WAYNE COUNTY	5,715	0	1,429	0	7,144	0	0	0	0	0	1,429	0	0	357	0	1,786	0	8,930
D. STATEWIDE (Sub-Total)	1,105,052	1,719,000	250,642	37,500	3,112,194	436,000	500,000	34,000	62,500	1,032,500	0	0	130,000	800,695	0	930,695	0	4,274,694
LONG RANGE TRANSPORTATION PLANNING	101,088	348,000	25,272	0	474,360	0	0	0	0	0	0	0	0	0	0	0	0	474,360
STATEWIDE TRANSP. PROG. DEV. & MGT.	504,586	500,000	125,526	37,500	1,167,612	200,000	200,000	0	37,500	437,500	0	0	0	0	0	0	0	1,605,112
PA INFRASTRUCTURE BANK	107,853	50,000	26,963	0	184,816	0	0	0	0	0	0	0	0	0	0	0	0	184,816
LAND USE AND TRANSPORTATION PLANNING	154,985	400,000	13,746	0	568,731	100,000	100,000	0	25,000	225,000	0	0	0	0	0	0	0	793,731
SPR WORK PROGRAM DEV. & MGT.	181,076	0	45,269	0	226,345	0	0	0	0	0	0	0	0	0	0	0	0	226,345
FINANCIAL CONSULTING														800,695				800,695
ANNUAL PLANNING PART. MEETING	55,464	0	13,866	0	69,330	0	0	0	0	0	0	0	0	0	0	0	0	69,330
PROJECT NEEDS STUDIES	0	200,000	0	0	200,000	136,000	200,000	34,000	0	370,000	0	0	130,000	0	0	130,000	0	700,000
CENSUS TRANSPORTATION PLANNING PRODUCTS		221,000			221,000													221,000

1. Other funds include other state and/or federal funds that are outside of Planning.

FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM

YEAR ONE

	SPR FUNDED					PL FUNDED					OTHER FUNDED						100 % STATE MLF	GRAND TOTAL
	SPR/CPG	100% SPR	MLF	LOCAL	TOTAL	PL/CPG	100% PL	MLF	LOCAL	TOTAL	FTA/CPG	FAA	OTHER ¹	GF	LOCAL	TOTAL		
VI. PROGRAM MANAGEMENT	1,780,400	7,253,872	813,701	0	9,847,973	0	0	0	0	0	101,356	0	0	25,340	0	126,696	402,625	10,377,294
ANNUAL PLAN MANAGEMENT	286,544	0	71,636	0	358,180	0	0	0	0	0	0	0	0	0	0	0	0	358,180
TRANSPORTATION ALTERNATIVES PROGRAM	93,720	400,000	23,430	0	517,150	0	0	0	0	0	0	0	0	0	0	0	0	517,150
SCENIC BYWAYS & GREENWAYS	37,240	75,000	9,310	0	121,550	0	0	0	0	0	0	0	0	0	0	0	0	121,550
TWELVE YEAR TRANS PROG SUPP	408,436	0	89,608	0	498,044	0	0	0	0	0	101,356	0	0	25,340	0	126,696	0	624,740
BRIDGE & NEW INITIATIVES PROGRAM	289,390	483,111	72,348	0	844,849	0	0	0	0	0	0	0	0	0	0	0	0	844,849
FEDERAL INITIATIVES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102,625	102,625
ST TRANS ADVISORY COMMITTEE	110,416	0	27,604	0	138,020	0	0	0	0	0	0	0	0	0	0	0	300,000	438,020
PROG CENTER COMPUTER SUPPORT	283,014	924,761	70,754	0	1,278,529	0	0	0	0	0	0	0	0	0	0	0	0	1,278,529
AIR QUALITY	88,800	2,000,000	22,200	0	2,111,000	0	0	0	0	0	0	0	0	0	0	0	0	2,111,000
TRANSPORTATION PROJECT DELIVERY	77,497	1,500,000	400,475	0	1,977,972	0	0	0	0	0	0	0	0	0	0	0	0	1,977,972
PENNDOT CONNECTS		1,871,000			2,002,679													2,002,679
GRAND TOTAL	15,854,506	20,294,192	3,606,116	362,844	40,117,658	13,725,450	630,000	2,376,723	1,899,298	18,631,471	5,797,627	6,000	6,616,900	1,428,687	1,880,736	15,729,950	3,089,171	77,568,250

1. Other funds include other state and/or federal funds that are outside of Planning.

**FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR ONE PERSON YEAR REQUIREMENTS
CHAPTER SUMMARY**

PROJECT	OFFICE OF PLANNING					OTHER PENNDOT			GRAND TOTAL
	DEPUTY'S OFFICE	PROGRAM CENTER	PLANNING & RESEARCH	P3 OFFICE	TOTAL	CENTRAL OFFICE	DISTRICT OFFICE	TOTAL	
I. ADMINISTRATION	2.75	7.80	5.20	3.00	18.75	0.00	0.00	0.00	18.75
II. TRANSPORTATION PLANNING	0.00	0.00	20.30	0.00	20.30	0.00	5.10	5.10	25.40
III. GEOGRAPHIC INFORMATION	0.00	0.00	20.10	0.00	20.10	0.00	0.00	0.00	20.10
IV. RESEARCH	0.00	0.00	9.40	0.00	9.40	0.00	0.00	0.00	9.40
V. PLANNING	0.00	31.69	0.00	0.00	31.69	0.00	6.52	6.52	38.21
VI. PROGRAM MANAGEMENT	0.00	18.76	0.00	0.00	18.76	0.00	0.00	0.00	18.76
GRAND TOTAL	2.75	58.25	55.00	3.00	119.00	0.00	11.62	11.62	130.62

**FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR ONE PERSON YEAR REQUIREMENTS
PROJECT SUMMARY**

PROJECT	OFFICE OF PLANNING					OTHER PENNDOT			GRAND TOTAL
	DEPUTY'S OFFICE	PROGRAM CENTER	PLANNING & RESEARCH	P3 OFFICE	TOTAL	CENTRAL OFFICE	DISTRICT OFFICE	TOTAL	
I. ADMINISTRATION	2.75	7.80	5.20	3.00	18.75				18.75
ADMINISTRATION/MANAGEMENT/STAFF SUPPORT (100% State)	2.75	7.80	5.20	3.00	18.75				18.75
II. TRANSPORTATION PLANNING	0.00	0.00	20.30	0.00	20.30	0.00	5.10	5.10	25.40
TRAFFIC MONITORING SYSTEM			5.10		5.10				5.10
PERMANENT TRANSPORTATION DATA COLLECTION AND ANALYSIS SYSTEMS - ATR, CAVC, WIN			5.85		5.85				5.85
PERFORMANCE INFORMATION			4.00		4.00		5.10	5.10	9.10
FIELD OPERATIONS			5.35		5.35				5.35
VIDEO LOG			0.00		0.00				0.00
GEO-SPATIAL LOG			0.00		0.00				0.00
III. GEOGRAPHIC INFORMATION	0.00	0.00	20.10	0.00	20.10	0.00	0.00	0.00	20.10
CARTOGRAPHIC SERVICES			1.77		1.77				1.77
GEOGRAPHIC INFORMATION SERVICES			12.53		12.53				12.53
PLANNING & RESEARCH COMPUTER SUPPORT			5.80		5.80				5.80
IV. RESEARCH	0.00	0.00	9.40	0.00	9.40	0.00	0.00	0.00	9.40
RESEARCH PROGRAM MANAGEMENT			5.10		5.10				5.10
RESEARCH TECHNOLOGY TRANSFER			0.00		0.00				0.00
MUNICIPAL RESEARCH AND OUTREACH			4.30		4.30				4.30
V. PLANNING	0.00	31.69	0.00	0.00	31.69	0.00	6.52	6.52	38.21
A. METROPOLITAN PLANNING	0.00	10.12	0.00		10.12		4.23	4.23	14.35
METROPOLITAN PLANNING	0.00	10.12			10.12		4.23	4.23	14.35
B. TRANSPORTATION MANAGEMENT	0.00	0.88			0.88				0.88
TRANS MGT ASSOC ASSIST	0.00	0.88			0.88				0.88
C. RURAL PLANNING	0.00	1.83			1.83		2.29	2.29	4.12
RURAL PLANNING		1.83			1.83		2.29	2.29	4.12

**FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR ONE PERSON YEAR REQUIREMENTS
PROJECT SUMMARY**

PROJECT	OFFICE OF PLANNING					OTHER PENNDOT			GRAND TOTAL
	DEPUTY'S OFFICE	PROGRAM CENTER	PLANNING & RESEARCH	P3 OFFICE	TOTAL	CENTRAL OFFICE	DISTRICT OFFICE	TOTAL	
D. STATEWIDE	0.00	18.86	0.00	0.00	18.86	0.00	0.00	0.00	18.86
STATEWIDE LONG RANGE TRANSPORTATION/MOBILITY PLAN		1.13			1.13				1.13
STATEWIDE TRANSPORTATION PROGRAM DEVELOPMENT AND MANAGEMENT		3.98			3.98				3.98
PA INFRASTRUCTURE BANK		1.37			1.37				1.37
LAND USE/TRANSPORTATION COORDINATION		0.68			0.68			0.00	0.68
SPR WORK PROGRAM DEVELOPMENT & MGT.		2.05			2.05			0.00	2.05
ANNUAL PLANNING PARTNERS MEETING		0.10			0.10			0.00	0.10
PROJECT NEEDS STUDIES		0.00			0.00			0.00	0.00
FINANCIAL CONSULTING		9.55			9.55				9.55
VI. PROGRAM MANAGEMENT	0.00	18.76	0.00		18.76				18.76
ANNUAL PLAN MANAGEMENT		4.00			4.00				4.00
TRANSPORTATION ALTERNATIVES PROGRAM		1.25			1.25				1.25
PA BYWAYS AND GREENWAYS		0.30			0.30				0.30
TWELVE YEAR TRANS PROG SUPP		2.67			2.67				2.67
BRIDGE & NEW INITIATIVES PROGRAM		3.88			3.88				3.88
FEDERAL INITIATIVES		0.31			0.31				0.31
STATE TRANS ADVISORY COMMITTEE		1.55			1.55				1.55
PROG CENTER COMPUTER SUPPORT		3.21			3.21				3.21
AIR QUALITY		0.72			0.72				0.72
TRANSPORTATION PROJECT DELIVERY		0.01			0.01				0.01
PENNDOT CONNECTS		0.86			0.86				0.86
GRAND TOTAL	2.75	58.25	55.00	3.00	119.00	0.00	11.62	11.62	130.62

YEAR TWO

**FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR TWO FINANCIAL REQUIREMENTS PROJECT SUMMARY**

	SPR FUNDED					PL FUNDED					OTHER FUNDED						100 % STATE MLF	GRAND TOTAL	
	SPR/CPG	100% SPR	MLF	LOCAL	TOTAL	PL/CPG	100% PL	MLF	LOCAL	TOTAL	FTA/CPG	FAA	OTHER ¹	GF	LOCAL	TOTAL			
I. ADMINISTRATION	0	0	0	40,000	40,000	0	0	0	0	0	0	0	0	0	0	0	0	2,243,277	2,243,277
II. TRANSPORTATION PLANNING	2,454,352	2,475,000	461,088	0	5,390,440	0	0	0	0	0	0	0	0	0	0	0	0	0	5,390,440
III. GEOGRAPHIC INFORMATION	2,969,008	2,511,000	588,054	0	6,068,062	0	0	0	0	0	0	0	0	0	0	0	0	10,297	6,078,359
IV. RESEARCH	7,857,977	0	2,094,769	0	9,952,746	0	0	0	0	0	0	0	0	219,910	150,000	369,910	477,000	10,799,656	
V. PLANNING	4,669,855	1,978,000	907,639	282,844	7,838,338	13,663,050	630,000	2,344,628	1,602,471	18,240,149	4,815,761	0	4,690,900	1,199,206	1,498,431	12,204,298	0	38,282,785	
VI. PROGRAM MANAGEMENT	1,836,409	6,361,435	443,604	0	8,641,448	0	0	0	0	0	103,741	0	25,935	0	0	129,676	403,644	9,174,768	
GRAND TOTAL	19,787,601	13,325,435	4,495,154	322,844	37,931,034	13,663,050	630,000	2,344,628	1,602,471	18,240,149	4,919,502	0	4,716,835	1,419,116	1,648,431	12,703,884	3,134,218	71,969,285	

1. Other funds include other state and/or federal funds that are outside of Planning.

FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR TWO

	SPRFUNDED					PLFUNDED					OTHERFUNDED						100% STATE MLF	GRAND TOTAL	
	SPR/CPG	100% SPR	MLF	LOCAL	TOTAL	PL/CPG	100% PL	MLF	LOCAL	TOTAL	FTA/CPG	FAA	OTHER ¹	GF	LOCAL	TOTAL			
I. ADMINISTRATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,243,277	2,243,277
ADMINISTRATION/MANAGEMENT/STAFF SUPPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,243,277	2,243,277
II. TRANSPORTATION PLANNING	2,454,352	2,475,000	461,088	0	5,390,440	0	0	0	0	0	0	0	0	0	0	0	0	0	5,390,440
TRAFFIC MONITORING SYSTEM	402,040	1,375,000	100,510	0	1,877,550	0	0	0	0	0	0	0	0	0	0	0	0	0	1,877,550
COLLECTION AND ANALYSIS SYSTEMS - ATR, CAVC, WIM	1,227,016	750,000	119,254	0	2,096,270	0	0	0	0	0	0	0	0	0	0	0	0	0	2,096,270
VIDEO LOG	0	200,000	0	0	200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	200,000
PERFORMANCE INFORMATION	361,304	50,000	30,326	0	501,630	0	0	0	0	0	0	0	0	0	0	0	0	0	501,630
GEO-SPATIAL NETWORK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FIELD OPERATIONS	463,392	100,000	150,398	0	714,390	0	0	0	0	0	0	0	0	0	0	0	0	0	714,390
III. GEOGRAPHIC INFORMATION	2,363,008	2,511,000	588,054	0	6,068,062	0	0	0	0	0	0	0	0	0	0	0	0	10,297	6,078,359
CARTOGRAPHIC SERVICES	151,118	0	37,778	0	188,896	0	0	0	0	0	0	0	0	0	0	0	0	10,297	199,193
GEOGRAPHIC INFORMATION SYSTEMS	763,412	2,511,000	231,052	0	3,511,464	0	0	0	0	0	0	0	0	0	0	0	0	0	3,511,464
PLAN & RESEARCH COMPUTER SUPP	2,048,478	0	319,224	0	2,367,702	0	0	0	0	0	0	0	0	0	0	0	0	0	2,367,702
IV. RESEARCH	7,857,377	0	2,094,769	0	9,952,146	0	0	0	0	0	0	0	219,310	0	150,000	363,310	477,000	10,739,656	
RESEARCH PROGRAM MGMT	6,736,353	0	1,814,365	0	8,550,724	0	0	0	0	0	0	0	0	0	0	0	0	477,000	9,027,724
RESEARCH TECHNOLOGY TRANSFER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MUNICIPAL RESEARCH OUTREACH	1,121,618	0	280,404	0	1,402,022														1,771,932
V. PLANNING	4,663,855	1,378,000	907,639	282,844	7,838,338	13,663,050	630,000	2,344,628	1,602,471	18,240,149	4,815,761	0	1,199,206	4,690,300	1,438,431	12,204,298	0	38,282,785	
METROPOLITAN PLANNING (5-w- A. Total)	2,433,397	100,000	479,144	140,344	3,152,885	13,227,050	130,000	2,310,628	1,533,371	17,207,649	4,524,262	0	0	371,367	1,083,655	9,082,087	0	29,220,127	
ADAMS	173,396	5,000	25,717	17,781	222,434	0	0	0	0	0	56,437	0	0	1,250	12,875	70,622	0	233,116	
ALTOONA	37,317	0	3,473	0	47,336	155,000	5,000	21,000	17,750	198,750	61,633	0	0	2,535	12,875	77,043	0	323,195	
CENTRE REGION	47,619	0	11,905	0	59,524	175,000	0	21,000	22,750	218,750	86,455	0	0	2,301	19,313	108,063	0	386,343	
ERIE	43,573	0	12,335	0	61,974	280,000	0	41,000	23,000	350,000	86,385	0	0	2,194	19,313	108,492	0	520,466	
FRANKLIN	180,135	0	28,221	16,813	225,169	0	0	0	0	0	58,271	0	0	1,633	12,875	72,839	0	298,008	
HARRISBURG	23,243	0	18,621	0	47,864	764,000	0	113,000	78,000	955,000	109,361	0	0	1,530	25,750	136,701	0	1,133,565	
JOHNSTOWN	31,030	0	7,772	0	38,862	205,000	5,000	31,000	20,250	261,250	57,322	0	0	1,606	12,875	72,403	0	372,515	
LACKAWANNA/LUZERNE	42,710	0	10,678	0	53,388	475,450	0	70,000	48,863	594,313	106,468	0	0	2,154	24,463	133,085	0	780,786	
LANCASTER	24,719	0	6,173	0	30,838	534,000	10,000	82,000	66,500	752,500	107,423	0	0	1,108	25,750	134,287	0	917,685	
LEBANON	183,473	15,000	23,619	17,750	251,848	0	0	0	0	0	53,443	0	0	1,368	12,875	74,312	0	326,160	
LEHIGH VALLEY	44,640	0	11,160	0	55,800	764,000	25,000	113,000	78,000	980,000	111,200	0	0	2,050	25,750	133,000	0	1,174,800	

1. Other funds include other state and/or federal funds that are outside of Planning.

FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM

YEAR TWO

	SPR FUNDED					PL FUNDED					OTHER FUNDED					100% STATE MLF	GRAND TOTAL	
	SPR/CPG	100% SPR	MLF	LOCAL	TOTAL	PL/CPG	100% PL	MLF	LOCAL	TOTAL	FTA/CPG	FAA	OTHER ¹	GF	LOCAL			TOTAL
PHILADELPHIA AREA	151,286	0	37,822	0	189,108	4,610,000	30,000	1,060,225	550,686	6,250,911	2,089,202	0	3,069,300	329,300	515,000	6,002,802	0	12,442,821
PITTSBURGH/MONESSEN	199,032	0	49,758	0	248,790	4,095,000	0	587,000	522,175	5,204,175	1,010,858	0	90,000	8,089	260,940	1,369,887	0	6,822,852
NORTHEASTERN PA ALLIANCE	524,232	45,000	87,058	44,000	700,290	0	0	0	0	0	87,418	0	0	2,542	19,313	109,273	0	809,563
READING/POTTSTOWN	69,623	0	17,405	0	87,028	390,000	15,000	62,000	35,500	502,500	116,065	0	0	3,267	25,750	25,750	0	734,610
SEDA-COG	517,888	35,000	85,472	44,000	682,360	0	0	0	0	0	86,882	0	0	2,408	19,313	108,603	0	790,963
SHENANGO VALLEY	45,962	0	11,490	0	57,452	174,600	0	26,403	17,247	218,250	61,520	0	0	2,506	12,875	76,901	0	352,603
WILLIAMSPORT	38,405	0	9,433	0	47,838	155,000	15,000	21,000	17,750	208,750	59,551	0	0	2,013	12,875	74,439	0	331,027
YORK	35,842	0	8,960	0	44,802	390,000	25,000	62,000	35,500	512,500	111,090	0	0	2,023	25,750	138,863	0	696,165
TRANSPORTATION MANAGEMENT (Sub-B. Total)	95,194	0	23,798	0	118,992	0	0	0	0	0	0	0	0	1,401,600	350,400	1,752,000	0	1,870,992
TRANS. MGT. ASSOC. ASSIST.	95,194	0	23,798	0	118,992	0	0	0	0	0	0	0	0	1,401,600	350,400	1,752,000	0	1,870,992
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C. RURAL PLANNING (Sub-Total)	1,019,753	135,000	149,939	105,000	1,409,692	0	0	0	0	0	291,499	0	8,499	0	64,376	364,374	0	1,774,066
NORTHCENTRAL PA REGIONAL PLANNING	273,392	35,000	41,348	27,000	376,740	0	0	0	0	0	86,058	0	2,202	0	19,313	107,573	0	484,313
NORTHERN TIER REGIONAL PLANNING	233,427	30,000	32,857	25,500	321,784	0	0	0	0	0	56,417	0	1,229	0	12,875	70,521	0	392,305
NORTHWEST PA REGIONAL PLANNING	268,870	35,000	40,218	27,000	371,088	0	0	0	0	0	88,468	0	2,804	0	19,313	110,585	0	481,673
SOUTHERN ALLEGHENIES	238,214	35,000	34,054	25,500	332,768	0	0	0	0	0	59,094	0	1,898	0	12,875	73,867	0	406,635
WAYNE COUNTY	5,850	0	1,462	0	7,312	0	0	0	0	0	1,462	0	366	0	0	1,828	0	9,140
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. STATEWIDE (Sub-Total)	1,121,511	1,743,000	254,758	37,500	3,156,769	436,000	0	0	0	0	0	0	130,000	819,340	0	0	0	6,187,199
STATEWIDE LONG RANGE TRANS. PLANNING	102,706	372,000	25,677	0	500,383	0	0	0	0	0	0	0	0	0	0	0	0	500,383
STATEWIDE TRANSP. PROG. DEV. & MGT.	511,608	500,000	127,282	37,500	1,176,390	200,000	200,000	0	37,500	437,500	0	0	0	0	0	0	0	1,613,890
PA INFRASTRUCTURE BANK	110,364	50,000	27,591	0	187,955	0	0	0	0	0	0	0	0	0	0	0	0	187,955
LAND USE AND TRANSPORTATION PLANNING	156,157	400,000	14,039	0	570,196	100,000	100,000	0	25,000	225,000	0	0	0	0	0	0	0	795,196
SPR WORK PROGRAM DEV. & MGT.	185,036	0	46,259	0	231,295	0	0	0	0	0	0	0	0	0	0	0	0	231,295
FINANCIAL CONSULTING	0	0	0	0	0	0	0	0	0	0	0	0	0	819,340	0	0	0	819,340
ANNUAL PLANNING PART. MEETING	55,640	0	13,910	0	69,550	0	0	0	0	0	0	0	0	0	0	0	0	69,550
PROJECT NEEDS STUDIES	0	200,000	0	0	200,000	136,000	200,000	34,000	0	370,000	0	0	130,000	130,000	0	130,000	0	700,000
CENSUS TRANSPORTATION PLANNING PRODUCTS	0	221,000	0	0	221,000	0	0	0	0	0	0	0	0	0	0	0	0	221,000

1. Other funds include other state and/or federal funds that are outside of Planning.

FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR TWO

	SPR FUNDED					PL FUNDED					OTHER FUNDED						100 % STATE MLF	GRAND TOTAL
	SPR/CPG	100% SPR	MLF	LOCAL	TOTAL	PL/CPG	100% PL	MLF	LOCAL	TOTAL	FTA/CPG	FAA	OTHER ¹	GF	LOCAL	TOTAL		
VI. PROGRAM MANAGEMENT	1,836,409	6,361,435	443,604	0	8,641,448	0	0	0	0	0	103,741	0	25,935	0	0	129,676	403,644	9,174,768
ANNUAL PLAN MANAGEMENT	293,288	0	73,322	0	366,610	0	0	0	0	0	0	0	0	0	0	0	0	366,610
TRANSPORTATION ALTERNATIVES PROGRAM	110,940	400,000	24,735	0	535,675	0	0	0	0	0	0	0	0	0	0	0	0	535,675
SCENIC BYWAYS & GREENWAYS	37,936	75,000	9,484	0	122,420	0	0	0	0	0	0	0	0	0	0	0	0	122,420
TWELVE YEAR TRANS PROG SUPP	412,009	0	90,503	0	502,512	0	0	0	0	0	103,741	0	25,935	0	0	129,676	0	632,188
BRIDGE & NEW INITIATIVES PROGRAM	295,899	486,435	73,975	0	856,309	0	0	0	0	0	0	0	0	0	0	0	0	856,309
FEDERAL INITIATIVES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103,644	103,644
ST TRANS ADVISORY COMMITTEE	112,968	0	28,242	0	141,210	0	0	0	0	0	0	0	0	0	0	0	300,000	441,210
PROG CENTER COMPUTER SUPPORT	289,560	700,000	72,390	0	1,061,950	0	0	0	0	0	0	0	0	0	0	0	0	1,061,950
AIR QUALITY	90,705	2,000,000	22,676	0	2,113,381	0	0	0	0	0	0	0	0	0	0	0	0	2,113,381
TRANSPORTATION PROJECT DELIVERY	85,297	1,000,000	21,324	0	1,106,621	0	0	0	0	0	0	0	0	0	0	0	0	1,106,621
PENNDOT CONNECTS	107,807	1,700,000	26,953		1,834,760													1,834,760
GRAND TOTAL	19,787,601	13,325,435	4,495,154	282,844	37,891,034	13,663,050	630,000	2,344,628	1,602,471	18,240,149	4,919,502	0	1,445,051	4,690,900	1,648,431	12,703,884	3,134,218	71,969,285

1. Other funds include other state and/or federal funds that are outside of Planning.

**FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR TWO PERSON YEAR REQUIREMENTS
CHAPTER SUMMARY**

PROJECT	OFFICE OF PLANNING					OTHER PENNDOT			GRAND TOTAL
	DEPUTY'S OFFICE	PROGRAM CENTER	PLANNING & RESEARCH	P3 OFFICE	TOTAL	CENTRAL OFFICE	DISTRICT OFFICE	TOTAL	
I. ADMINISTRATION	2.75	7.80	5.20	3.00	18.75	0.00	0.00	0.00	18.75
II. TRANSPORTATION PLANNING	0.00	0.00	20.30	0.00	20.30	0.00	5.10	5.10	25.40
III. GEOGRAPHIC INFORMATION	0.00	0.00	20.10	0.00	20.10	0.00	0.00	0.00	20.10
IV. RESEARCH	0.00	0.00	9.40	0.00	9.40	0.00	0.00	0.00	9.40
V. PLANNING	0.00	31.69	0.00	0.00	31.69	0.00	6.52	6.52	38.21
VI. PROGRAM MANAGEMENT	0.00	18.76	0.00	0.00	18.76	0.00	0.00	0.00	18.76
GRAND TOTAL	2.75	58.25	55.00	3.00	119.00	0.00	11.62	11.62	130.62

**FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR TWO PERSON YEAR REQUIREMENTS
PROJECT SUMMARY**

PROJECT	OFFICE OF PLANNING					OTHER PENNDOT			GRAND TOTAL
	DEPUTY'S OFFICE	PROGRAM CENTER	PLANNING & RESEARCH	P3 OFFICE	TOTAL	CENTRAL OFFICE	DISTRICT OFFICE	TOTAL	
I. ADMINISTRATION	2.75	7.80	5.20	3.00	18.75				18.75
ADMINISTRATION/MANAGEMENT/STAFF SUPPORT (100% State)	2.75	7.80	5.20	3.00	18.75				18.75
II. TRANSPORTATION PLANNING	0.00	0.00	20.30	0.00	20.30	0.00	5.10	5.10	25.40
TRAFFIC MONITORING SYSTEM			5.10		5.10				5.10
PERMANENT TRANSPORTATION DATA COLLECTION AND ANALYSIS SYSTEMS - ATR, CAVC, WIN			5.85		5.85				5.85
PERFORMANCE INFORMATION			4.00		4.00		5.10	5.10	9.10
FIELD OPERATIONS			5.35		5.35				5.35
VIDEO LOG			0.00		0.00				0.00
GEO-SPATIAL LOG			0.00		0.00				0.00
III. GEOGRAPHIC INFORMATION	0.00	0.00	20.10	0.00	20.10	0.00	0.00	0.00	20.10
CARTOGRAPHIC SERVICES			1.77		1.77				1.77
GEOGRAPHIC INFORMATION SERVICES			12.53		12.53				12.53
PLANNING & RESEARCH COMPUTER SUPPORT			5.80		5.80				5.80
IV. RESEARCH	0.00	0.00	9.40	0.00	9.40	0.00	0.00	0.00	9.40
RESEARCH PROGRAM MANAGEMENT			5.10		5.10				5.10
RESEARCH TECHNOLOGY TRANSFER			0.00		0.00				0.00
MUNICIPAL RESEARCH AND OUTREACH			4.30		4.30				4.30
V. PLANNING	0.00	31.69	0.00	0.00	31.69	0.00	6.52	6.52	38.21
A. METROPOLITAN PLANNING	0.00	10.12	0.00		10.12		4.23	4.23	14.35
METROPOLITAN PLANNING	0.00	10.12			10.12		4.23	4.23	14.35
B. TRANSPORTATION MANAGEMENT	0.00	0.88			0.88				0.88
TRANS MGT ASSOC ASSIST	0.00	0.88			0.88				0.88
C. RURAL PLANNING	0.00	1.83			1.83		2.29	2.29	4.12
RURAL PLANNING		1.83			1.83		2.29	2.29	4.12

**FY 2018-20 TRANSPORTATION PLANNING & RESEARCH WORK PROGRAM
YEAR TWO PERSON YEAR REQUIREMENTS
PROJECT SUMMARY**

PROJECT	OFFICE OF PLANNING					OTHER PENNDOT			GRAND TOTAL
	DEPUTY'S OFFICE	PROGRAM CENTER	PLANNING & RESEARCH	P3 OFFICE	TOTAL	CENTRAL OFFICE	DISTRICT OFFICE	TOTAL	
D. STATEWIDE	0.00	18.86	0.00	0.00	18.86	0.00	0.00	0.00	18.86
STATEWIDE LONG RANGE TRANSPORTATION/MOBILITY PLAN		1.13			1.13				1.13
STATEWIDE TRANSPORTATION PROGRAM DEVELOPMENT AND MANAGEMENT		3.98			3.98				3.98
PA INFRASTRUCTURE BANK		1.37			1.37				1.37
LAND USE/TRANSPORTATION COORDINATION		0.68			0.68			0.00	0.68
SPR WORK PROGRAM DEVELOPMENT & MGT.		2.05			2.05			0.00	2.05
ANNUAL PLANNING PARTNERS MEETING		0.10			0.10			0.00	0.10
PROJECT NEEDS STUDIES		0.00			0.00			0.00	0.00
FININANCIAL CONSULTING		9.55			9.55				
VI. PROGRAM MANAGEMENT	0.00	18.76	0.00		18.76				18.76
ANNUAL PLAN MANAGEMENT		4.00			4.00				4.00
TRANSPORTATION ALTERNATIVES PROGRAM		1.25			1.25				1.25
PA BYWAYS AND GREENWAYS		0.30			0.30				0.30
TWELVE YEAR TRANS PROG SUPP		2.67			2.67				2.67
BRIDGE & NEW INITIATIVES PROGRAM		3.88			3.88				3.88
FEDERAL INITIATIVES		0.31			0.31				0.31
STATE TRANS ADVISORY COMMITTEE		1.55			1.55				1.55
PROG CENTER COMPUTER SUPPORT		3.21			3.21				3.21
AIR QUALITY		0.72			0.72				0.72
TRANSPORTATION PROJECT DELIVERY		0.01			0.01				0.01
PENNDOT CONNECTS		0.86			0.86	0.00		0.00	0.86
GRAND TOTAL	2.75	58.25	55.00	3.00	119.00	0.00	11.62	11.62	130.62

ACRONYMS

ACRONYMS

AASHTO	Association of State Highways and Transportation Officials
ADA	Americans with Disabilities Act of 1990
AG	Attorney General
ATR	Automatic Traffic Recorder
BOPD	Bureau of Project Delivery
CAAA	Clean Air Act Amendments
CAC	Community Advisory Committee
CAVC	Continuous Automatic Vehicle Classification
CCIP	Congested Corridor Improvement Program
CDART	Crash Data Analysis
CEMIS	Capital Equipment Management Inventory System
CFR	Code of Federal Regulations
CIO	Chief Information Officer
CMAQ	Congestion Mitigation and Air Quality
CMP	Congestion Management Program
CO	Carbon Monoxide
COG	Councils of Governments
CONEG	Coalition of Northeastern Governments
CMS	Congestion Management System
DBE	Disadvantaged Business Enterprises
DCED	Department of Commerce and Economic Development
DCNR	Department of Conservation & Natural Resources
DEP	Department of Environmental Protection
DWRI	Department Wide Research Initiative
EA	Environmental Assessment
EIS	Environmental Impact Statement
EJ	Environmental Justice
EMS	Engineering Management System
EQAD	Environmental Quality Assurance Division
FAHP	Federal-aid Highway Program
FAST ACT	Fixing America's Surface Transportation Act
FFY	Federal Fiscal Year (October 1- September 30)
FHWA	Federal Highway Administration
FCSD	Fiscal and Contract Services Division
FTA	Federal Transit Administration

ACRONYMS (cont.)

GHS	General Highway Series
GID	Geographic Information Division
GIS	Geographic Information System
GIS-T	GIS for Transportation Symposium
GTAC	Geospatial Technology Advisory Committee
GTC	Geospatial Technology Committee
GTSC	Geospatial Technology Steering Committee
HATS	Harrisburg Area Transportation Study
HOP	Highway Occupancy Permit
HPMS	Highway Performance Monitoring System
HSIP	Highway Safety Improvement Program
ICAP	Indirect Cost Allocation Plan
IDEA	Innovation Deserving Exploration and Analysis
IES	Integrated Enterprise System
IGA	Intergovernmental Agreements
IHE	Institutions of Higher Education
I/M	Inspection/Maintenance
IMS	Intermodal Management System
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITQ	Invitation To Qualify
ITS	Intelligent Transportation System
LEP	Limited English Proficiency
LOU	Letters of Understanding
LRP	Long Range Plan
LTAP	Local Technical Assistance Program
LTPP	Long Term Pavement Performance
LUTED	Land Use Transportation and Economic Development
MAUTC	Mid-Atlantic Universities Transportation Consortium
MIS	Major Investment Study
MOU	Memorandum Of Understanding
MPMS	Multi-Modal Project Management System
MPO	Metropolitan Planning Organization

ACRONYMS (cont.)

NASTO	Northeastern Association of State Transportation Officials
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act
NGA	National Governors Association
NHPP	National Highway Performance Program
NHS	National Highway System
NOx	Nitrogen Oxides
NTEC	National Transportation Enhancement Clearinghouse
PAMAGIC	PA Mapping and Geospatial Information Consortium
PEA	Planning Emphasis Areas
PIB	Pennsylvania Infrastructure Bank
PDPMI	Program Development, Project Management and Implementation
PL	Metropolitan Planning Program
PMC	Program Management Committee
PMS	Pavement Management System
PPTA	Pennsylvania Public Transportation Association
PXC	Planning Executive Committee
RASC	Rubberized Asphalt Seal Coat
RMS	Roadway Management System
ROW	Right Of Way
RPO	Rural Planning Organization
RPM	Research Program Management
RT2	Research Technology Transfer
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Trans. Equity Act: A Legacy for Users
SAN	Storage Area Network
SFA	Strategic Focus Areas
SFY	State Fiscal Year (July 1 - June 30)
SHRP	Strategic Highway Research Program
SIP	State Implementation Plan
SISSI	Superpave In-situ stress/strain investigation
SMS	Safety Management System
SPR	Transportation Planning & Research
STAMPP	Systematic Techniques to Analyze and Manage Pennsylvania Pavements
STC	State Transportation Commission
STIC	State Transportation Innovation Council
STIP	State Transportation Improvement Program
STRAHNET	Strategic Highway Network

ACRONYMS (cont.)

TAC	Transportation Advisory Committee
TAP	Transportation Alternatives Program
TDM	Transportation Demand Management
TDUS	Traffic Data Upload System
TEA-21	Transportation Efficiency Act-21st Century
TIP	Transportation Improvement Program
TIS	Traffic Information System
TMA	Transportation Management Association
TMG	Traffic Monitoring Guide
TMS/H	Traffic Monitoring System/Highways
TRB	Transportation Research Board
TRID	Transit Revitalization Investment District
TVM	Traffic Volume Map
UPWP	Unified Planning Work Program
US	United States
U.S.C.	United States Code
USDOT	United States Department of Transportation

