
FY2019 PLANNING WORK PROGRAM

JANUARY 2018



OUR
VISION





The Delaware Valley Regional Planning Commission is the federally designated Metropolitan Planning Organization for a diverse nine-county region in two states: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey.



DVRPC's vision for the Greater Philadelphia Region is a prosperous, innovative, equitable, resilient, and sustainable region that increases mobility choices by investing in a safe and modern transportation system; that protects and preserves our natural resources while creating healthy communities; and that fosters greater opportunities for all.

DVRPC's mission is to achieve this vision by convening the widest array of partners to inform and facilitate data-driven decision-making. We are engaged across the region, and strive to be leaders and innovators, exploring new ideas and creating best practices.

TITLE VI COMPLIANCE | DVRPC fully complies with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice, and related nondiscrimination statutes and regulations in all programs and activities. DVRPC's website, www.dvrpc.org, may be translated into multiple languages. Publications and other public documents can be made available in alternative languages and formats, if requested. DVRPC public meetings are always held in ADA-accessible facilities, and in transit-accessible locations when possible. Auxiliary services can be provided to individuals who submit a request at least seven days prior to a public meeting. Requests will be accommodated to the greatest extent possible. Any person who believes they have been aggrieved by an unlawful discriminatory practice by DVRPC under Title VI has a right to file a formal complaint. Any such complaint may be in writing and filed with DVRPC's Title VI Compliance Manager and/or the appropriate state or federal agency within 180 days of the alleged discriminatory occurrence. For more information on DVRPC's Title VI program or to obtain a Title VI Complaint Form, please visit: www.dvrpc.org/GetInvolved/TitleVI, call (215) 592-1800, or email public_affairs@dvrpc.org.

DVRPC is funded through a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. The authors, however, are solely responsible for the findings and conclusions herein, which may not represent the official views or policies of the funding agencies.

FY2019

PLANNING WORK PROGRAM

→ **DVRPC MEMBER GOVERNMENTS**

COMMONWEALTH OF PENNSYLVANIA

STATE OF NEW JERSEY

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

NEW JERSEY DEPARTMENT OF TRANSPORTATION

PENNSYLVANIA GOVERNOR'S POLICY OFFICE

NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS

BUCKS COUNTY

BURLINGTON COUNTY

CHESTER COUNTY

CAMDEN COUNTY

DELAWARE COUNTY

GLOUCESTER COUNTY

MONTGOMERY COUNTY

MERCER COUNTY

CITY OF CHESTER

CITY OF CAMDEN

CITY OF PHILADELPHIA

CITY OF TRENTON



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January 25, 2018

On behalf of the Delaware Valley Regional Planning Commission, we are pleased to present the Fiscal Year 2019 Planning Work Program as adopted by the DVRPC Board on January 25, 2018.

This document details work to be completed by DVRPC and our member governments during FY 2019, which runs July 1, 2018 through June 30, 2019. The program includes work mandated by the federal FAST Act (Fixing America's Surface Transportation) and the Clean Air Act Amendments (CAAA), as well as high-priority local and regional initiatives, as identified by the DVRPC Board.

DVRPC's vision for the Greater Philadelphia Region is a prosperous, innovative, equitable, resilient and sustainable region, that increases mobility choices by investing in a safe and modern transportation system; that protects and preserves our natural resources while creating healthy communities; and that fosters greater opportunities for all. Our mission is to achieve this vision by convening the widest array of partners to inform and facilitate data-driven decision making. We are engaged across the region, and strive to be leaders and innovators, exploring new ideas and creating best practices.

Key issues for the Commission in FY 2019 include providing for the safety, security, and resiliency of the region's transportation infrastructure, increasing the efficiency and operations of our roads and transit systems, strengthening and measuring the performance of our transportation assets, promoting growth and revitalization in our older communities, protecting our air, land, and water resources, and continuing to support programs that will integrate transportation, land use, the environment, economic development, and social equity. A priority for the Commission in FY 2019 will be the implementation of our long-range plan, the *Connections 2045 Plan for Greater Philadelphia*.

The Commission believes that the FY 2019 work program responds to changing planning and critical issues identified by the leadership and citizens of the region, and will continue to lead the way toward a brighter future. Your comments and suggestions are invited.

Diane Gutierrez-Scaccetti
Board Chair

Barry Seymour
Executive Director

RESOLUTION

by the Board of the Delaware Valley Regional Planning Commission

**ADOPTION OF THE
DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FISCAL YEAR 2019 UNIFIED PLANNING WORK PROGRAM**

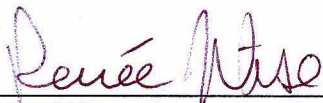
BE IT RESOLVED, that the Board of the Delaware Valley Regional Planning Commission (DVRPC):

1. Approves and adopts the Fiscal Year 2019 Unified Planning Work Program (UPWP), consisting of the Regular DVRPC Planning Work Program, the Supportive Regional Highway Planning Program and the Transit Support Program, as recommended by the Board Work Program Committee; and
2. Approves the actions to amend or modify the FY 2018 TIP for New Jersey (NJ18-001) and the FY 2017 TIP for Pennsylvania (PA17-75) as required.
3. Authorizes and directs Barry Seymour, Executive Director, to negotiate the final details of the Board approved and adopted Fiscal Year 2019 UPWP with appropriate funding agencies and to prepare, execute and file the required applications and negotiate and execute the necessary contracts and grant agreements, and modifications thereto, on behalf of the DVRPC with and in the form required by a local government, operating agency, state agency, or Federal agency to aid in financing the work described in the approved and adopted Fiscal Year 2019 UPWP ; and
4. Authorizes and directs Barry Seymour, Executive Director, to execute and file with such applications, contracts and agreements, such assurances as may be required or any other document concerning compliance with Title VI of the Civil Rights Act of 1964 and all other pertinent directives and requirements thereunder; and
5. Authorizes and directs Barry Seymour, Executive Director, to set forth and execute Disadvantaged Business Enterprise policies and establish and administer procedures as may be required to ensure utilization of disadvantaged businesses to the maximum extent feasible in connection with the procurement needs of the projects described in the adopted Fiscal Year 2019 UPWP; and

6. Designates Barry Seymour, Executive Director, as the authorized representative of the Commission, to provide such additional information, documents and certifications as may be required in connection with all matters pertaining to any application, grant agreement or project contained in the Fiscal Year 2019 UPWP; and
7. Authorizes and directs Renee Wise, Recording Secretary, to impress the official seal of the Commission and attest same on all documents as may be required.

Adopted this 25th day of January, 2018
by the Board of the Delaware Valley
Regional Planning Commission.

I certify that this is a true and correct copy of Resolution No. B-FY18-004.



Renee Wise, Recording Secretary

DELAWARE VALLEY REGIONAL PLANNING COMMISSION

FY 2019 PLANNING WORK PROGRAM

MASTER TABLE OF CONTENTS

Chapter One: Introduction.....1
Chapter Two: DVRPC Program Area and Project Descriptions..... 29
Chapter Three: Supportive Regional Highway Planning Program (SRHPP).....233
Chapter Four: Transit Support Program (TSP).....287
Chapter Five: Other Member Government Projects.....339

TABLES

Table A: Funding Summary..... 11
Table B: Project Funding by Source.....33
Table C: PA Supportive Regional Highway Planning Program.....237
Table D: NJ Supportive Regional Highway Planning Program.....257
Table E: PA Transit Support Program.....291
Table F: NJ Transit Support Program.....317



CHAPTER 1

→ Introduction

JANUARY 2018

DELAWARE VALLEY
 **dvrpc**
REGIONAL
PLANNING COMMISSION

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FISCAL YEAR 2019 PLANNING WORK PROGRAM

CHAPTER ONE

INTRODUCTION

TABLE OF CONTENTS

Introduction	5
Work Program Organization.....	6
Planning Emphasis Areas	6
Federal Legislation Requirements	8
Coordination with Member Governments and Other Planning Partners.....	9
Supportive Regional Highway Planning Program and Transit Support Program.....	10
FY 2019 Planning Work Program Budget	10
Agency Roles and Responsibilities	13
DVRPC’s Working Committees.....	17
FY 2019 Program Areas	19

Tables and Figures

Table A: Funding Summary.....	11
Figure 1 – FAST Act Planning Factors	27
Figure 2 – Long Range Plan Key Principles	28

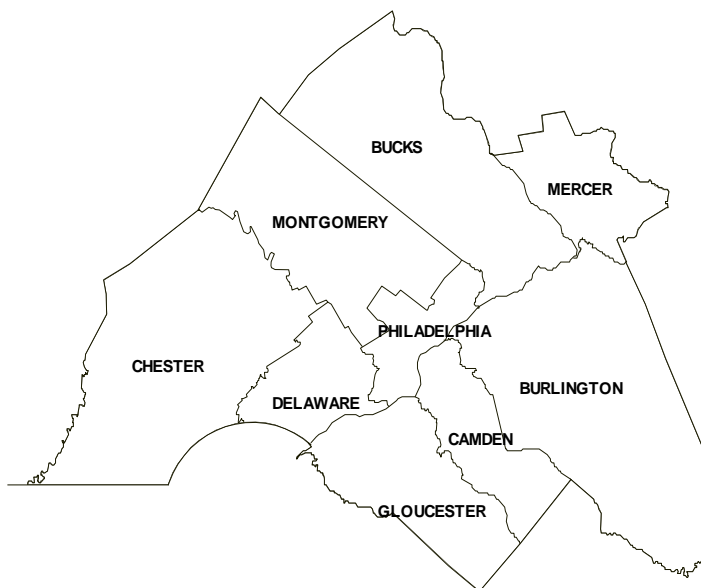
DELAWARE VALLEY REGIONAL PLANNING COMMISSION

Fiscal Year 2019 Planning Work Program

Introduction

The Fiscal Year (FY) 2019 Planning Work Program for the Delaware Valley Regional Planning Commission (DVRPC) incorporates the planning programs and support activities of DVRPC and its member governments for the period July 1, 2018 through June 30, 2019. A Planning Work Program (PWP) is developed annually by the DVRPC Board with its planning partners to reflect the region's short-range planning needs.

Federal laws and regulations require the formation of a metropolitan planning organization (MPO) for each urbanized area with a population of more than 50,000. The MPO designated for each urbanized area is obliged to carry out a continuing, cooperative and comprehensive, performance-based multi-modal transportation planning process. The Delaware



Valley Regional Planning Commission (DVRPC) is the federally-designated MPO for the nine-county metropolitan region that includes Bucks, Chester, Delaware, and Montgomery counties and the City of Philadelphia in Pennsylvania, and Burlington, Camden, Gloucester, and Mercer counties in New Jersey.

The federal laws and regulations that require the formation of MPOs also provide for the formula allocation of federal funds to support the required planning activities of the MPOs. In addition to its formula funds, DVRPC is fortunate to receive other federal, state, local, foundation, and private funds to conduct a robust and comprehensive slate of regional planning activities. It is this full complement of financial resources that provides the support for the priority planning activities proposed by our member governments and stakeholders and spelled out in this FY19 Planning Work Program.

DVRPC's vision for the Greater Philadelphia Region is a prosperous, innovative, equitable, resilient and sustainable region; that increases mobility choices by investing in a safe and modern transportation system; that protects and

preserves our natural resources while creating healthy communities; and that fosters greater opportunities for all.

DVRPC's mission is to achieve this vision by convening the widest array of partners to inform and facilitate data-driven decision-making. We are engaged across the region, and strive to be leaders and innovators, exploring new ideas and creating best practices.

Work Program Organization

The FY 2019 Planning Work Program is divided into five chapters. Chapter One serves as an introduction to DVRPC's operations and relationships to other transportation and planning organizations in the Delaware Valley region. Chapter Two provides details of the Program Areas and Projects which DVRPC will be undertaking during FY 2019. Chapters Three and Four contain the Supportive Regional Highway Planning Program (SRHPP) and the Transit Support Program (TSP), respectively. These programs provide funding from DVRPC for planning activities carried out by our member governments and transit operating agencies. Chapter Five includes other projects funded through the PWP to be carried out by member governments. Projects initially funded in prior years that will be carried over into FY 2019 are included in Appendix A of this document. Appendix B contains a list of acronyms commonly used in DVRPC's regional planning process

Within the framework of available financial and human resources, this work program effectively addresses the key regional transportation and land use issues facing the Delaware Valley. The program, however, is dynamic in nature and may be modified to respond to any emerging priority issue or special need vital to the orderly growth and development of the Delaware Valley. Throughout the fiscal year, new projects and funding may be added to this Planning Work Program through an amendment process which would require an approval by the DVRPC Board.

Planning Emphasis Areas

The products produced through this PWP include technical analyses, policy recommendations, and planning services for member state and local governments. The Program Areas and Projects outlined in this document are directed by priority Planning Emphasis Areas as identified by our federal and state partners. Planning activities identified in this document strive to incorporate the requirements of the most recent federal surface transportation legislation, Fixing America's Surface Transportation (FAST) Act where applicable;

Examples of these Planning Emphasis Areas as identified by our state and federal partners include the following:

- Continue to collaborate with state DOTs and federal partners to implement provisions of the FAST Act including Performance Measure Targets and freight provisions.
- Continue to support greater coordination with other MPOs, state DOTs, transit agencies, TMAs and counties in mobility and land use planning. This can include Regional Models of Cooperation like the Central Jersey Transportation Forum, grant or technical assistance programs to encourage vibrant, sustainable communities, and developing and maintaining data bases in support of smart growth, and other related activities.
- Implement actions that support Ladders of Opportunity through fairness and improved coordination of services, access and mobility for low income, minority, persons with disabilities and seniors.
- Pursue congestion relief strategies such as Transportation Demand Management (TDM) strategies and low-cost operational improvements at intersections and bottlenecks.
- Implement actions to assist the DOTs with data collection such as Model Inventory of Roadway Elements (MIRE) on county and local roads and data on local-owned road and bridge assets.
- Collect and submit traffic counts to state DOTs.
- Where possible, support the collection of bicycle and pedestrian volume data on county roadways
- Verify and update roadway inventory and performance measures on Highway Performance Monitoring System (HPMS) sample sections.
- Coordinate with NJDOT in the development and integration of standards and measures necessary to meet a performance based approach to Asset Management and to implement the Capital Investment Strategy.
- Participate in data-driven safety planning activities.
- Improve primary freight corridors and hubs for more efficient access and improved system performance.
- Enhance the visibility and effectiveness of freight planning and support the improvement of intermodal freight connectors.
- Maximize opportunities for Complete Streets implementation.
- Refine local project prioritization processes to include scoring factors that are based on potential health outcomes, safety improvements, connectivity for all modes, proximity to schools and transit stops, and other factors.
- Improve traffic operations through Intelligent Transportation System (ITS) upgrades and enhanced coordination at the interstate, state, county and local level.
- Work with state DOTs and other partners on risk management strategies for improving the resilience of transportation infrastructure against the impacts of extreme weather.
- In partnership with NJDOT's Complete Team, institutionalize an improved process for initiating mobility improvements with an updated, coordinated and streamlined approach to developing and vetting problem statements.

- Implement actions to foster improved local public agency project delivery and compliance with federal regulations
- Continue to engage with the public to strengthen public confidence and participation in the planning process through the use of web tools/technology, social media, outreach, education and public forums/meetings.
- Update and maintain the region's Long Range Plan, TIP, Congestion Management Process, and Travel Demand Model.
- Partner with PennDOT to market and manage PennDOT's Local Technical Assistance Program (LTAP) in District 6.

Federal Legislation Requirements

As the federally designated metropolitan planning organization for the region, DVRPC must respond to the planning requirements of two federal laws: the FAST Act and the Clean Air Act Amendments of 1990 (CAAA). The FAST Act, adopted in December 2015, continues many of the regional transportation planning programs advanced in MAP-21.

The FAST Act authorized \$305 billion in federal highway, transit, safety and rail programs for five years. Under this legislation, the MPO is a partner in the planning for the use of all federal transportation funds allocated within their region. The FAST Act also requires the MPO to produce and oversee a TIP, the region's short-range capital investment plan, which must be consistent with and serve to implement the region's long-range plan. The TIP prioritizes the Delaware Valley's transportation-related projects within the constraints of federal funding that Pennsylvania and New Jersey can reasonably expect to receive within four years.

The Metropolitan Planning Regulations promulgated from the FAST Act identify ten planning factors that must be considered in the metropolitan planning process. The ten planning factors listed below are integrated within the Program Areas and Projects detailed in Chapter Two of this Planning Work Program.

- Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the **safety** of the transportation system for motorized and non-motorized users.
- Increase the **security** of the transportation system for motorized and non-motorized users.
- Increase **accessibility and mobility** of people and freight.
- Protect and enhance the **environment**, promote **energy conservation**, improve the **quality of life**, and promote **consistency** between transportation improvements and State and local planned growth and economic development patterns.

- Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
- Promote efficient **system management and operation**.
- Emphasize the **preservation** of the existing transportation system.
- Improve the **resiliency and reliability** of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
- Enhance **travel and tourism**.

The requirements of the Clean Air Act Amendments (CAAA) establish a program and set a timetable for improving the nation's air quality. The Philadelphia area has been classified as a non-attainment area for ground-level ozone and portions of the region are in non-attainment and/or maintenance of the fine particulate matter standards. The region must attain or continue to maintain the mandated air quality standards for these factors. Although the responsibility for attaining the standards falls directly on the states, DVRPC is responsible for a key role in developing many of the programs relating to air quality attainment or maintenance. The projects in the region's TIP and the Long-Range Plan must conform to the states' air quality implementation plans. These projects must not lead to any further degradation of the region's air quality, but, instead improve air quality and move the region toward meeting the federal clean air standards.

Coordination with Member Governments and Other Planning Partners

The priority planning activities listed in DVRPC's annual Planning Work Program are also defined in part by the planning needs of the city and county member governments. The member governments' financial contribution to a Comprehensive Planning fund enables DVRPC to provide a local match to other federal, state, or private funds to undertake projects of regional significance that require a local contribution. Comprehensive Planning funds also support initiatives such as open space and environmental planning projects, economic development planning, and local or regional land use planning.

Many programs, while broad in scope, affect transportation conditions in the region. For example, DVRPC's Transportation and Community Development Initiative (TCDI) Program is an important effort whereby DVRPC provides planning grants, based on the competitive review of proposals, to counties and municipalities, to support projects that link revitalization, economic development and transportation needs.

DVRPC also responds to the needs of other partners, including state and federal agencies, operating authorities, as well as nonprofit foundations and organizations. Consequently, DVRPC annually undertakes a number of special projects funded under a variety of programs to address pressing regional issues. DVRPC continues to implement programs like Classic Towns of Greater Philadelphia, which is aimed at growing, revitalizing, and supporting the region's older suburbs and urban neighborhoods; coordination with the region's

environmental protection and open space organizations and reporting on the region's locally funded open space programs; and promoting linkages between active transportation and healthy communities. DVRPC continues its involvement in PennDOT's Linking Planning and NEPA initiative through the PennDOT Connects Program and continues energy, climate change and resiliency initiatives in both states that include coordination and facilitation, analyses, management, tool development and technical assistance to local governments.

Complementary and supportive initiatives also continue, including the development of the region's Comprehensive Economic Development Strategy, planning for transit system improvements, advancing transportation operations and safety projects, using DVRPC's Travel Demand Model to forecast travel movements on the region's transportation network, and responding to many other needs of DVRPC's member governments and agencies.

Supportive Regional Highway Planning Program and Transit Support Program

Each year, DVRPC passes through federal highway and transit planning funds to member governments and operating agencies to support their participation in the regional transportation planning process. The funds assist these organizations to develop and maintain their own plans, programs and data which helps inform the development of regional plans and programs such as the TIP, Long-Range Plan, Congestion Management Process, Transportation Operations Master Plan and Regional Transportation Safety Action Plan. Detailed individual scopes of work for each recipient in the Supportive Regional Highway Planning Program are found in Chapter Three of this document. The detailed individual scopes of work for The Transit Support Program which provides comprehensive planning, programming, monitoring and coordination of transit services within their jurisdiction can be found in Chapter Four. In addition to their core planning functions, both programs offer a limited amount of funding for special planning studies to address current areas of need for the recipients.

FY 2019 Planning Work Program Budget

The total budget for the FY 2019 Planning Work Program is **\$29,196,700** an increase of **\$3,692,237** from the FY 2018 Planning Work Program. A significant portion of this increase is attributed to the FY 2019 Transportation and Community Development Initiative (TCDI) Program which provides \$2,250,000 in direct pass through funds to member governments to conduct planning studies which help to implement the region's Long Range Plan. Table A, *Funding Summary*, shows DVRPC's overall funding by source. Table B, *Project Funding by Source* (page 31), shows the budget and funding sources for each Program Area and Project.

TABLE "A"

1/9/2018

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FY 2019 PLANNING WORK PROGRAM
FUNDING SUMMARY**

FUNDING SOURCE	GENERAL FUND	HIGHWAY PROGRAM	TRANSIT PROGRAM	COMP PLANNING	OTHER PROGRAMS	TOTAL
MISCELLANEOUS	\$0	\$0	\$0	\$0	\$2,726,778	\$2,726,778
FAA	0	0	0	0	90,000	90,000
PA FTA	0	0	1,160,000	0	715,000	1,875,000
PA FHWA	0	3,927,000	0	0	3,925,300	7,852,300
PA STATE	0	670,000	0	0	174,225	844,225
PA OTHER	0	0	0	0	832,000	832,000
LOCAL	68,750	0	0	0	-	68,750
NJ FTA	0	0	450,679	0	-	450,679
NJ FHWA	0	2,419,990	0	0	1,138,975	3,558,965
NJ STATE	0	0	0	0	-	0
LOCAL	0	0	0	0	22,500	22,500
PA LOCALS	\$152,448	\$311,750	\$290,000	\$355,120	\$2,220	\$1,111,538
Bucks County	23,782	30,910	34,504	55,399	444	145,039
Chester County	18,964	58,730	46,006	44,177	444	168,321
Delaware County	19,971	49,456	34,504	46,521	444	150,896
Montgomery County	30,413	46,365	46,006	70,846	444	194,074
City of Philadelphia	58,022	123,639	126,516	135,158	444	443,779
City of Chester	1,296	2,650	2,464	3,019	-	9,429
NJ LOCALS	\$61,484	\$0	\$0	\$177,455	\$1,776	\$240,715
Burlington County	17,068	0	0	49,262	444	66,774
Camden County	16,583	0	0	47,860	444	64,887
Gloucester County	10,963	0	0	31,640	444	43,047
Mercer County	10,704	0	0	30,895	444	42,043
City of Camden	2,939	0	0	8,482	-	11,421
City of Trenton	3,227	0	0	9,316	-	12,543
SUBTOTAL DVRPC	\$282,682	\$7,328,740	\$1,900,679	\$532,575	\$9,628,774	\$19,673,450
MEMBER GOVERNMENTS AND TRANSIT OPERATING AGENCIES						
PA FTA	\$0	\$0	\$900,000	\$0	\$0	900,000
PA FHWA	0	683,000	0	0	\$1,350,000	2,033,000
NJ FTA	0	0	386,600	0	\$0	386,600
NJ FHWA	0	0	0	0	\$2,761,250	2,761,250
PA LOCALS	0	170,750	225,000	0	\$0	395,750
NJ LOCALS	0	0	96,650	0	\$0	96,650
OTHER	0	0	0	0	\$2,950,000	2,950,000
SUBTOTAL	\$0	\$853,750	\$1,608,250	\$0	\$7,061,250	\$9,523,250
GRAND TOTAL	\$282,682	\$8,182,490	\$3,508,929	\$532,575	\$16,690,024	\$29,196,700

Agency Roles and Responsibilities

DVRPC, as the federally-designated MPO, has a requirement to carry out a continuing, cooperative, and comprehensive performance-based multimodal transportation planning process. The member agencies that comprise the DVRPC Board also play key roles in this process, as discussed below.

State Departments of Transportation (DOTs) — DVRPC works cooperatively with the Pennsylvania and New Jersey Departments of Transportation (PennDOT and NJDOT) in carrying out all of its transportation planning and programming activities. PennDOT and NJDOT representatives serve on all transportation related committees, as well as the DVRPC Board. Although outside our MPO boundary, staff from the Delaware and Maryland Departments of Transportation serve on DVRPC committees responsible for planning activities around freight, aviation, and transportation-related air quality issues.

The state DOTs are responsible for a number of activities that affect the metropolitan planning process. They are charged with development of statewide long-range plans, which include coordination with the long-range transportation plan developed by DVRPC. Each state DOT also develops a Statewide Transportation Improvement Program (STIP), which must embody the appropriate sections of DVRPC's regional TIP. Accordingly, both state DOTs participate actively in the process by which projects are prioritized and included in DVRPC's TIP.

Initially designated in MAP-21 and carried over into the FAST Act, the state DOTs have the lead responsibility for developing a State Freight Plan, statewide asset management systems, and a Strategic Highway Safety Plan. Development of these plans and systems involves extensive consultation with DVRPC and other MPOs and helps DVRPC to identify transportation needs and recommendations for addressing them.

The state DOTs also serve as the primary intermediaries between DVRPC and federal transportation agencies, including the Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and Federal Aviation Administration (FAA).

City and County Planners – The nine counties (Bucks, Chester, Delaware, Montgomery, Philadelphia, Burlington, Camden, Gloucester, and Mercer) and three cities (Chester, Camden, and Trenton) that comprise the DVRPC region and whose representatives sit on the DVRPC Board are key partners in the regional planning process. Using some of the federal planning funds made available to DVRPC, resources are passed through to the member governments to support their transportation planning work and the extensive coordination needed to prepare and maintain a regional planning process. Member governments also have seats on DVRPC's working committees, identify and prioritize projects for the TIP, contribute needed input into the development of the Long Range Plan, and provide the local knowledge and perspective needed to

integrate with the regional planning process.

Transit Operators — The largest provider of public transportation in the Delaware Valley region is the Southeastern Pennsylvania Transportation Authority (SEPTA). Substantial service is also provided by New Jersey Transit Corporation (NJT), Port Authority Transit Corporation (PATCO), and Pottstown Area Rapid Transit (PART). Each is responsible for both the capital and operating needs in their respective service areas. They are the principal source for identifying transit projects for inclusion in the transit portion of DVRPC's TIP. They also carry out many of the transit planning activities, funded in part through DVRPC's Planning Work Program and through other sources. PATCO, a subsidiary of the Delaware River Port Authority (DRPA), is responsible for operations management of the transit agency, while DRPA is responsible for planning. Transit operating agencies are participatory non-voting members of the DVRPC Board but voting members of DVRPC's Regional Technical Committee and other working committees.

In addition to the organizations that formally make up the DVRPC Board, coordination with several other federal and state partners is essential for the development of plans and programs which identify and implement the priority transportation investments in the region. Those agencies are identified below.

Federal Highway Administration - As a bi-state MPO, DVRPC is served by FHWA Division Offices in both Pennsylvania and New Jersey. The FHWA Division Offices are local field offices that provide leadership, guidance, and direction to State Departments of Transportation and MPOs in the planning, construction and maintenance of transportation projects. Working collaboratively with State partners, FHWA Division Offices ensure that the nation's roads, bridges and tunnels are safe and continue to support economic growth and environmental sustainability.

Federal Transit Administration - The FTA field offices, organized by Region, help transit operators, MPOs and state DOTs plan, apply, execute, and complete transit projects in their region. Their primary role is to oversee federal funding, provide grant support and program management as well as guidance on environmental, planning and other critical elements of transit projects. The DVRPC region straddles parts of Region II (New York and New Jersey) and Region III (Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia).

US Department of Housing and Urban Development - HUD's mission is to create strong, sustainable, inclusive communities and quality affordable homes for all. HUD is working to strengthen the housing market to bolster the economy and protect consumers; meet the need for quality affordable rental homes; utilize housing as a platform for improving quality of life; build inclusive and sustainable communities free from discrimination, and transform the way HUD does business. The Department is also organized with DVRPC being served by both Region II (New York and New Jersey) and Region III (Delaware, Maryland,

Pennsylvania, Virginia, West Virginia, and the District of Columbia).

State Departments of Environmental Protection (DEPs) — The Pennsylvania and New Jersey Departments of Environmental Protection have overall responsibility for compliance with the Clean Air Act, including development and adoption of air quality plans known as State Implementation Plans (SIPs). Both agencies rely on DVRPC as the lead planning agency for highway-related control measures for air quality in the metropolitan area. As a result, DVRPC provides transportation data used in emissions inventories and identifies and analyzes potential air quality strategies. State air quality agencies from all four states in the Philadelphia Ozone Nonattainment Area serve on DVRPC's Regional Air Quality Committee.

PA Department of Community and Economic Development - The mission of DCED is to foster opportunities for businesses to grow and for communities to succeed and thrive in a global economy. The Department seeks to improve the quality of life for Pennsylvania citizens while assuring transparency and accountability in the expenditure of public funds.

NJ Department of Community Affairs - DCA is a State agency created to provide administrative guidance, financial support and technical assistance to local governments, community development organizations, businesses and individuals to improve the quality of life in New Jersey. DCA offers a wide range of programs and services that respond to issues of public concern including community planning and development, housing production, fire and building safety, and local government management and finance.

NJ Office of Planning Advocacy - The office staffs the New Jersey State Planning Commission and the New Jersey Brownfields Redevelopment Task Force. Through the State Development and Redevelopment Plan, the office works to improve the efficiency and reduce the costs of land development and infrastructure in New Jersey by expanding areas of coordination and cooperation among State and local agencies.

Delaware River Port Authority - DRPA is a regional transportation agency that serves as steward of four bridges that cross the Delaware River between Pennsylvania and New Jersey. Through its Port Authority Transit Corporation (PATCO), the DRPA also operates a transit line between Camden County, New Jersey and Center City Philadelphia. DRPA operates, maintains, improves and protects key transportation infrastructure for the benefit of the region's citizens.

Lastly, there are several other agencies and authorities that have jurisdiction over facilities that make up important components of the region's transportation system. It is important that DVRPC coordinates and shares information on our plans and programs with these organizations so that all stakeholders may make informed transportation investment decisions. Key regional agencies and authorities are also identified below.

PA Turnpike Commission - The PA Turnpike consists of a 552-mile system of highways and bridges that are an integral component of the regional, state-wide, and national ground transportation network that must be maintained, protected and constantly improved. The Turnpike Commission strives to operate a safe, reliable, customer-valued toll road system that supports national mobility and commerce.

New Jersey Turnpike Authority - The Turnpike Authority is dedicated to the safe and efficient movement of people and goods over two of the busiest toll roads in the United States -- the New Jersey Turnpike (148 miles) and the Garden State Parkway (173 miles). The Authority's highways are a critical link in the transportation network of the Northeast I-95 Corridor. Every day, they provide the safest, quickest, and most convenient routes for hundreds of thousands of commuters, truckers, and recreational travelers.

South Jersey Transportation Authority - The SJTA was established by the New Jersey Legislature in June 1991 to assume operational responsibilities for the 44-mile long Atlantic City Expressway, Atlantic City International Airport terminal, and parking facilities in Atlantic City. SJTA also operates several shuttles in their region providing access to employment and shopping sites, rail stations, and educational institutions. The SJTA serves six counties --- Atlantic, Camden, Cape May, Cumberland, Gloucester, and Salem.

Delaware River Joint Toll Bridge Commission - DRJTBC's 140-mile jurisdiction extends from the Philadelphia-Bucks County line to the New Jersey/New York state border. In addition to its 20 Delaware River crossings (7 tolled, 13 non-tolled), the Commission owns and operates an additional 34 approach structures (smaller overpass/underpass type bridges) throughout its region. The Commission is committed to moving job commuters, commercial freight carriers, pedestrians and recreationists, it strives to deliver quality customer service, sound fiscal management, and dependable ground-transportation facilities.

Philadelphia Regional Port Authority - commonly known as **PhilaPort**, and referred to as *The Port of Philadelphia*, is an independent agency of the Commonwealth of Pennsylvania charged with the management, maintenance, marketing, and promotion of port facilities along the Delaware River in Pennsylvania, as well as strategic planning throughout the port district. PhilaPort works with its terminal operators to improve its facilities and to market those facilities to prospective port users around the world. Port cargoes and the activities they generate are responsible for thousands of direct and indirect jobs in the Philadelphia area and throughout Pennsylvania.

South Jersey Port Corporation - The South Jersey Port Corporation was created in 1968 to operate marine shipping terminals in the South Jersey Port District which consists of seven counties: Burlington, Camden, Gloucester, Salem, Cumberland, Mercer and Cape May. The SJPC is a quasi-state agency, which reports through the Department of Treasury to the Governor of New

Jersey. The SJPC owns and operates the Joseph A. Balzano and Broadway Marine Terminals in the Port of Camden, the Salem Marine Terminal at the Port of Salem, and is constructing the Paulsboro Marine Terminal at the Port of Paulsboro.

It is the ongoing coordination and history of cooperation among all these organizations that has led to an efficient transportation planning process in this region which continues to result in priority investments aimed at preserving, maintaining, operating, and growing where necessary, a seamless multimodal regional transportation network.

DVRPC's Working Committees

One of the primary roles of DVRPC is to coordinate its planning programs, and those of its member governments, with citizens residing in the region. To accomplish this objective, the DVRPC Board has established several committees to address the regional issues of transportation, land use, air quality, housing, airports, goods movement and citizens' concerns. These committees enhance the regional forum provided by the Board and extend it so that all interested and involved parties can discuss and provide direction for policy on regional planning in the Delaware Valley. The working committees include:

- **The Regional Technical Committee (RTC)** serves as an advisory unit, reporting directly to the DVRPC Board, in reference to: (1) Transportation Planning initiatives, (2) the development and maintenance of the Transportation Improvement Program, (3) the development of the Long-Range Plan, (4) the development of the Planning Work Program, and (5) all other transportation planning as directed by the Board.
- **The Public Participation Task Force (PPTF)** provides access for the public to the regional planning and decision-making process, to review timely issues, and to advise on public outreach strategies. The Task Force is composed of appointed members nominated by the member governments, as well as citizens at large, who are selected through an application process.
- **The Delaware Valley Goods Movement Task Force (DVGMTF)** was established to maximize the Delaware Valley's goods movement capability by sharing information and technology between public and private freight interests, promoting the region's intermodal capabilities and capacity, and developing and implementing a regional goods movement strategy. It advises the DVRPC Board on all goods movement issues, studies and projects.
- **The Information Resources Exchange Group (IREG)** provides a forum for the exchange of ideas, practices and experiences among regional data managers.

- **The Regional Community and Economic Development Forum (RCEDF)** facilitates the various economic development, land use and housing agencies in the region to work together on issues of regional importance, fosters greater cooperation between agencies, strives to coordinate regional transportation and land use planning activities with the needs of the economic development community and advises on the development of the Comprehensive Economic Development Strategy.
- **The Regional Aviation Committee (RAC)** provides technical and policy guidance concerning regional airport systems to the states, DVRPC and the Federal Aviation Administration.
- **The Regional Safety Task Force (RSTF)** is an interdisciplinary team of safety stakeholders/professionals that offers guidance and direction to the Commission's transportation safety planning program. The focus of the task force is diverse and addresses all users and operators of the transportation network, as well as all modes. The Task Force provides valuable input in the development of the Regional Transportation Safety Action Plan.
- **The Transportation Operations Task Force (TOTF)** is the focal point of regional ITS and operations coordination. The Task Force is a forum for agencies to share information on ITS deployments, develop a consensus on regional operations issues, and respond to federal and state initiatives. It has the ability to establish subcommittees to tackle specific issues as they arise. As a technical-level group, it informs DVRPC's ITS and Transportation Systems Management and Operations planning activities that in turn support the Task Force.
- **The Central Jersey Transportation Forum (CJTF)** has been meeting since 1999 to address concerns of municipalities in Mercer, Middlesex, and Somerset counties focused on the US 1 corridor. High-level representatives from twenty-five municipalities, three counties, and numerous state agencies and other organizations meet to coordinate and to discuss transportation and land use issues and implement solutions.
- **The Urban Waterfront Action Group (UWAG)** was created in 1980 through the PA Coastal Zone Management (CZM) Program to provide "one-stop" shopping for information about waterfront development permits in the Delaware Estuary in Pennsylvania.
- **The Healthy Communities Task Force** was first convened in 2014 to bring together public health, planning, and related professionals in the Greater Philadelphia area. The Task Force provides a venue for people interested in fostering healthy communities to learn about other communities, both near and far, that are successfully integrating planning and public health including active transportation. It serves as a way for professionals in these fields and

stakeholders in our communities to deepen their understanding of healthy communities and build the relationships to achieve them.

FY 2019 Program Areas

This Planning Work Program continues the reorganized structure begun in FY 2008 which consolidated many related projects into program areas. Some initiatives remain as stand alone projects due to special circumstances. Each program's concept allows various tasks and initiatives to be emphasized from year to year at the DVRPC Board's direction. The list below shows each of DVRPC's major program areas and their goals. Successful completion of these planning activities within these Program Areas and Projects may require the purchase of equipment or services

Regional Forum

This project ensures continued intergovernmental and policy coordination, as well as administrative oversight by the DVRPC Board and its Committees, through the provision of secretariat and management services. Through the Board Policy Committee, identification, monitoring and formulation of policy analyses for issues of regional significance is undertaken. Staff activities include researching and monitoring key issues, review of pertinent federal and state legislation or policy guidance, technical assistance and drafting proposed position statements or comment letters for consideration by the Policy Committee and the Board.

Work Program Administration

Preparation of the Planning Work Program includes negotiating program and project funding, monitoring progress throughout the year, and preparing and submitting required applications and contract documents. Administering the UPWP also includes preparing, administering and providing technical assistance for contracts between DVRPC and PA/NJ member governments to advance regional highway planning and transit supportive planning at the local level.

Public Participation Information and Visualization Techniques

DVRPC is committed to reaching audiences both familiar and unfamiliar with the regional planning process. This program supports DVRPC's responsibilities related to legal and public noticing, public information requests, and maintaining the Commission's website and social media platforms. This program also supports project-specific public outreach and meeting facilitation, and agency-wide earned media, government relations, and public affairs. DVRPC is also committed to expanding visualization techniques to portray and present data, plans, complicated processes, and plans.

Title VI and Environmental Justice

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have had a longstanding policy of actively ensuring nondiscrimination in federally funded activities under Title VI of the 1964 Civil Rights Act and the 1994 President's Executive Order on Environmental Justice. A renewed emphasis on Title VI issues and environmental justice has become a more integral focus of the transportation planning and programming process. This renewed commitment is reflected in DVRPC's Work Program, publications, communications, public involvement efforts, and general way of doing business.

Geographic Information Systems

A Geographic Information System (GIS) is an important planning tool that provides benefits to DVRPC, its member agencies, and others by supporting state, regional, county, and local planning and technical projects. GIS is the integration of hardware, software, and data used to collect, store, analyze and display spatially referenced information. GIS allows planners to view and query spatial data and perform advanced analysis to discover relationships, patterns, and trends that support their planning activities. Visualizing information is an integral part of nearly every project, and GIS is highly utilized to create maps necessary for meetings and reports. Improving the accessibility of spatial data is critical to the continued success of GIS and tasks under this program will be coordinated with the Data Exchange and Analysis program.

RideECO Marketing

RideECO provides area employers the opportunity and structure to provide employees with a transit benefit per federal IRS tax code, up to \$255/month as of January 2016. Originally instituted under clean air legislation, this program has become popular among employers since it provides a tax break for both participating employees and their employers. All regional transit providers support the program and accept its vouchers, as do most third-party vanpool operators.

Smart Growth

The Smart Growth work program will continue DVRPC's work on linking land use and transportation planning while also enhancing the level of outreach, education, coordination, advocacy, and overall support for smart growth principles. This program supports greater understanding of sprawl and its impacts on the region's accessibility and mobility, land preservation, urban revitalization, and economic development.

Community and Economic Development

Many of the region's older suburbs and boroughs face social and economic challenges due to aging infrastructure and disinvestment that are uncharacteristic of more affluent growing suburbs. At the same time, the older suburbs often lack the resources and attention available to the region's core cities to address these issues. This program will continue to convene forums

for these municipalities to learn from outside experts as well as their peers, while also providing technical assistance. The program also supports and fosters coordination and information exchange between the economic development and business community on one hand, and the transportation and land use planning community on the other. The program includes administration of the Regional Community and Economic Development Forum. It incorporates the voices of the economic development and business community into DVRPC's planning activities.

Energy and Climate Change Initiatives

This program focuses the attention of local governments on developing policies and actions for reducing energy use and associated greenhouse gas emissions and adapting to predicted climate change impacts by providing leadership, coordination, and technical assistance on these issues.

Environmental Planning

The Environmental Planning Program Area promotes a clean and sustainable environment and implementation of *Connections 2040* by assisting in efforts to preserve the 2040 Greenspace Network and 2040 Conservation Focus Areas, and to complete The Circuit (Greater Philadelphia's regional trail network) for natural resource protection, agricultural preservation, outdoor recreational, and alternative commuting purposes.

Long-Range Planning

The Long-Range Plan Program Area fosters and maintains a long-range vision to guide development patterns and transportation investments in the region and identifies strategies to implement the vision. The program ensures that the region's transportation investments are linked to long-range land use, environmental protection, economic development, and transportation goals, while providing guidance and a policy framework for numerous other DVRPC programs.

Delaware Valley Freight Planning

This program is intended to maximize the Delaware Valley's position in the global economy by promoting cooperation within the local freight community and implementing a regional goods movement strategy in accordance with State DOT and FAST Act guidance.

Transportation Safety

This program supports the goals of DVRPC's Long-Range Plan, Regional Safety Action Plan, and the DOTs' Strategic Highway Safety Plan. It incorporates the transportation safety Planning Factor, as required by federal metropolitan planning regulations, into the transportation planning process, and seeks to improve the safety of the region's transportation system, while maintaining acceptable levels of accessibility and efficiency. The program

addresses transportation safety from a multipronged approach in which coordination and outreach are important factors.

Regional Congestion Management Process

The CMP is a systematic process for managing congestion in the DVRPC region. It analyzes the multimodal transportation system, defines congested corridors, and results in agreed-upon strategies for each congested sub-corridor at a regional planning level. The CMP strengthens the connection between the Long-Range Plan, TIP, and other projects. It includes work with DOT, transit agencies, and county project managers and others to help make transportation investments more effective.

Air Quality Planning

The Air Quality Planning Program Area improves air quality in the region through coordination of intra- and interregional policies, public education and demonstration of transportation conformity of the region's long-range plan and transportation improvement programs. .

Data Exchange and Analysis

This program facilitates the acquisition, organization, analysis, automation, and dissemination of available data sets to support all regional land use and transportation planning activities. This data includes (but is not limited to) newly released Census data products, residential building permit data, and Home Mortgage Disclosure Act (HMDA) data, as well as data for which DVRPC is a primary source, including the TIP, traffic counts, land use and aerial photography. Additional program tasks include maintaining DVRPC's regional online information network; coordinating with the Census Bureau; and administering the Commission's Information Resources Exchange Group (IREG).

Technical Assistance to Member Governments

This Program Area ensures intergovernmental coordination, technical evaluation, and regional policy formulation on transportation issues, projects, and plans through monthly meetings of the Regional Technical Committee and quarterly meetings of the Regional Aviation Committee (including meeting minutes and pertinent presentations, research and technical assistance activities). Special studies and local asset inventory activities are also included.

Transportation Improvement Program (TIP)

This program area provides for transportation financial planning and capital programming for the DVRPC region. Staff works with state, regional, and federal planning partners to identify financial resources available from public and private sources to implement the Transportation Improvement Program (TIP) as well as the long-range plan. Serving as the facilitator for the region's stakeholders, DVRPC both develops and maintains a regional Transportation Improvement Program (TIP) for Pennsylvania and New Jersey, as mandated by federal regulations; identifies and selects transportation projects that

address the needs of the region; advances the goals of the long- range plan; documents modifications to the program; and provides information and documents related to those processes, funding, and capital programming issues. This information will be provided to stakeholders and the public via meeting materials and postings on the DVRPC website. DVRPC will undertake an extensive public participation program that responds to the requirements of FAST Act and environmental justice concerns, as it relates to this program.

Transportation Operations

Transportation Operations is one of the transportation planning factors mandated by federal metropolitan planning regulations. It represents a broad array of short-term improvement strategies employing technology and interagency coordination that will address recurring congestion and incident management.

Performance Based Planning and Asset Management

Greater and greater demands are straining the region's transportation system: increased congestion, more truck travel, growing population, aging infrastructure, higher customer expectations, and escalating construction and operating costs. These factors threaten the viability of our transportation system unless the region is able to more effectively and efficiently deploy financial resources to maintain and upgrade existing assets. A more strategic and systematic process of operating, maintaining, upgrading, and expanding these physical assets is needed. By effectively refocusing business and engineering practices on life cycle costs and benefits, better resource allocation and utilization will result. Such an approach requires quality information and well defined objectives.

Competitive Program and Project Management

This Program Area enables DVRPC staff to assist the state DOTs with the implementation of traditional and nontraditional projects by serving as adjunct project managers as well as running competitive grant programs with the state DOTs. The FAST Act includes funding for nontraditional transportation projects such as multiuse trails, streetscapes, historic restorations, alternative fueled vehicles, travel demand management, local highway and bridge projects, as well as projects that contribute to the attainment of the Clean Air Act by reducing emissions from highway sources. Three categories of federal funding that provide broad eligibility for these nontraditional and local transportation projects are: Transportation Alternatives, Congestion Mitigation and Air Quality and the Surface Transportation Program. Capital Program funds are also provided to the counties through the Local Concept Development Program in New Jersey.

Travel and Land Use Modeling

The Travel and Land Use Modeling work program element is intended to develop, enhance, maintain, and apply DVRPC's Land Use, Travel Demand, and Air Quality Models in support of a wide variety of planning activities.

Short and long-range regional, corridor, and facility planning studies require accurate socioeconomic, land use, and travel forecasts. Certification of the regional plan and planning process require up to date models that address federal regulations. The models that produce these projections and perform these analyses need to be validated and calibrated with current data. Furthermore, refinement and revalidation of DVRPC's land use, travel simulation, and mobile source emissions models are needed on a continuing basis to maintain the accuracy and credibility of forecasts and to respond to new mandates and guidance from the federal government, state agencies, and member governments. In addition to the studies performed by DVRPC, staff will also provide support and assistance under this program to DVRPC's consultants as they upgrade the land use and travel models and related software.

Regional Transit Planning Program

This program supports the conduct of transit planning studies, with project selections guided by our planning partners. Work includes evaluations of proposed services or facilities, corridor level transit analysis, evaluations of enhancements to transit access, studies to improve bicycle and pedestrian connectivity with transit, and examinations of the relationship between land use and transit for specific sites or corridors.

Bicycle & Pedestrian Planning Program

This program promotes transportation facilities and land use decisions that support active modes of transportation to make walking and biking more safe, convenient, affordable, and attractive transportation options throughout the region. Projects emphasize stakeholder outreach, the development and sharing of new data resources using bicycle and pedestrian counters, and the conduct of analysis to develop appropriate, safe, and context-sensitive bicycle and pedestrian facilities and "complete streets" in communities throughout the DVRPC region. As an area of focus, this work includes an emphasis on Active Transportation and Active Places—the idea that those places where walking and biking (Active Transportation) are prevalent are good for the vibrancy and quality of life of a community (Active Places), and vice versa. With this integrated approach, communities gain health benefits, increased mobility, economic stability, and an overall sense of vibrancy.

Corridor Planning

This program is the nexus between the long-range plan and project development. Corridor planning takes needs identified in the long-range plan related to routes identified as essential to the movement of goods and people in the region, refines the understanding of those needs, and evaluates potential strategies to address them. The process is designed to better inform regional transportation and land use decision making.

Travel Monitoring

Under this Program Area, travel data is collected and processed. The primary form being traffic counts, including hourly and 48 hour traffic volumes, for selected locations on the regional highway network. Data collected will provide input to VMT forecasting, the Traffic Monitoring System (TMS), the Congestion Management Process (CMP), travel simulation models, individual project level analysis and traffic monitoring and trend analysis. This information is vital to all project studies that address highway deficiencies and proposed solutions. The types of data collected have recently been enhanced to include the monitoring of selected bicycle and pedestrian movements. In addition, DVRPC facilitates the periodic review and revision of the region's highway functional classification system.

The FY 2019 Planning Work Program serves as an important implementation tool to achieve the directives of the FAST Act. In an effort to highlight the connection between the individual Program Areas in the Planning Work Program and the ten Planning Factors stipulated in the FAST Act, a matrix was developed that shows that linkage (Figure 1). Both primary and peripheral associations between the Program Areas and the Planning Factors are shown. As DVRPC develops future work programs, we will continue to strive to meet the key principles of the surface transportation act current at that time.

In addition to addressing the federal legislative requirements, the PWP serves as an important implementation tool to achieve the future land use and transportation development vision that is set forth in the region's Long Range Plan. The five key principles of the Long-Range Plan serve as a framework for many of the projects and programs undertaken by DVRPC. In an effort to highlight the connection between the individual Program Areas of the Work Program and the Long-Range Plan, a matrix was developed that shows the linkage between these two core documents (Figure 2). Both primary and peripheral associations between the Program Areas and the five key principles of the Long-Range Plan are shown.

Figure 1: FAST Act Planning Factors

DVRPC PROGRAM AREAS	1. Economic Vitality	2. Safety	3. Security	4. Accessibility and Mobility	5. Environment and Energy	6. Integration and Connectivity	7. Efficient System Management/Operations	8. System Preservation	9. Resiliency and Reliability	10. Travel and Tourism
Regional Forum	●	●	●	●	●	●	●	●	●	●
Work Program and Contract Administration	○	○	○	○	○	○	○	○	○	○
Public Participation, Information and Visualization Techniques	●	●	●	●	●	●	●	●	●	●
Title VI and Environmental Justice	●	○	○	●	●	●	○	○	○	○
Geographic Information Systems	○	○	○	○	○	○	○	○	○	○
RideECO Marketing	○	○	○	○	○	○	○	○	○	○
Smart Growth	●	○	○	●	○	○	○	○	○	○
Community and Economic Development	●	○	○	●	●	○	○	○	○	○
Energy and Climate Change Initiatives	●	○	○	○	●	○	○	○	○	○
Environmental Planning	○	○	○	○	○	○	○	○	○	○
Long-Range Planning	●	●	●	●	●	●	●	●	●	●
Delaware Valley Freight Planning	●	●	●	●	○	●	●	●	●	○
Transportation Safety	●	●	●	○	○	○	○	○	○	○
Regional Congestion Management Process	●	○	○	○	○	○	○	○	○	○
Air Quality Planning	○	○	○	○	○	○	○	○	○	○
Data Coordination and Analysis	●	○	○	○	○	○	○	○	○	○
Technical Assistance to Member Governments	●	●	●	●	●	●	●	●	●	●
Transportation Operations	○	○	○	○	○	○	○	○	○	○
Performance-Based Planning and Asset Management	○	○	○	○	○	○	○	○	○	○
Competitive Program and Project Management	●	●	○	●	●	●	●	●	○	○
Travel and Land Use Modeling	○	○	○	○	○	○	○	○	○	○
Regional Transit Planning Program	●	●	●	●	○	●	●	●	○	○
Bicycle and Pedestrian Planning Program	●	●	○	●	○	○	○	○	○	○
Corridor Planning	○	○	○	○	○	○	○	○	○	○
Travel Monitoring	○	○	○	○	○	○	○	○	○	○

● Primary Association ○ Secondary Association

The FAST Act identifies the following ten factors to serve as the basis for all metropolitan and statewide planning processes and products:

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

Figure 2: LONG-RANGE PLAN KEY PRINCIPLES

PROGRAM AREAS	Develop Livable Communities	Sustain the Environment	Expand the Economy	Advance Equity and Foster Diversity	Create an Integrated, Multimodal Transportation Network
1 Regional Forum	●	●	●	●	●
2 Work Program and Contracts Administration	●	●	●	●	●
3 Public Participation, Information and Visualization Techniques	●	●	●	●	●
4 Title VI and Environmental Justice	●	●	●	●	●
5 Geographic Information Systems	●	●	●	●	●
6 RideCO Marketing	●	●	○	○	○
7 Smart Growth	●	●	○	○	○
8 Community and Economic Development	●	●	●	●	●
9 Energy and Climate Change Initiatives	○	●	●	○	○
10 Environmental Planning	○	●	●	○	○
11 Long-Range Planning	●	●	●	●	●
12 Delaware Valley Freight Planning	○	○	●	○	●
13 Transportation Safety	○	○	○	○	○
14 Regional Congestion Management Process	○	○	○	○	○
15 Air Quality Planning	○	●	○	●	●
16 Data Coordination and Analysis	●	●	●	●	●
17 Technical Assistance to Member Governments	●	●	●	●	●
18 Transportation Improvement Program (TIP)	○	○	○	○	○
19 Transportation Operations	○	○	○	○	○
20 Performance-Based Planning and Asset Management	○	○	○	○	○
21 Competitive Program and Project Management	○	○	○	○	○
22 Travel and Land Use Modeling	○	○	○	○	○
23 Regional Transit Planning Program	○	○	○	●	○
24 Bicycle and Pedestrian Planning Program	○	○	○	○	○
25 Corridor Planning	●	○	○	○	○
26 Travel Monitoring	○	○	○	○	○

● Primary Association ○ Secondary Association



CHAPTER 2

→ Program Area &
Project Descriptions

JANUARY 2018

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FISCAL YEAR 2019 PLANNING WORK PROGRAM | CHAPTER 2**

DVRPC Program Areas

19-23-010	Regional Forum	37
19-23-020	Work Program and Contracts Administration	39
19-23-030	Public Participation, Information and Visualization Techniques	41
19-23-040	Title VI and Environmental Justice	45
19-31-010	Geographic Information Systems	49
19-32-020	RideECO Marketing	53
19-33-010	Smart Growth	55
19-33-020	Community and Economic Development	59
19-33-030	Energy and Climate Change Initiatives	65
19-33-040	Environmental Planning	71
19-34-010	Long-Range Planning	77
19-34-020	Delaware Valley Freight Planning	81
19-34-030	Transportation Safety	85
19-34-040	Regional Congestion Management Process	89
19-34-050	Air Quality Planning	93
19-34-060	Data Coordination and Analysis	97
19-41-010	Technical Assistance to Member Governments	101
19-41-020	Transportation Improvement Program (TIP)	105
19-41-030	Transportation Operations	109
19-41-040	Performance Based Planning and Asset Management	113
19-41-050	Competitive Program and Project Management	117
19-51-010	Travel and Land Use Modeling	119
19-52-010	Regional Transit Planning Program	123
19-52-020	Bicycle and Pedestrian Planning Program	127
19-52-030	Corridor Planning Program	131
19-53-010	Travel Monitoring	135

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FISCAL YEAR 2019 PLANNING WORK PROGRAM | CHAPTER 2**

DVRPC Projects

18-33-140	William Penn - DRWI Data/GIS Modeling Work Group	139
18-41-070	I-95 Planning Assistance	141
19-10-020	Miscellaneous Data Requests	143
19-31-020	Regional Transportation GIS Coordination	145
19-31-030	Local Asset Data Collection - Southeastern Pennsylvania	147
19-32-010	Commuter Benefit Program: RideECO	149
19-32-030	Commuter Services/Mobility Alternatives Program (Share-a-Ride)	153
19-33-050	Local Technical Assistance Program (LTAP)	157
19-33-060	Pottstown Area Regional Plan Development	159
19-33-070	Pennsylvania Coastal Zone Management Implementation Program	161
19-33-080	Healthy Communities Planning	163
19-33-090	PA/NJ Local Planning Initiatives	167
19-33-100	A Resilient Greater Philadelphia	171
19-33-120	Campbells Soup - Camden City Food Economy	175
19-34-080	Regional Aviation System Planning	177
19-34-090	Central Jersey Transportation Forum	179
19-34-100	PA Ozone Action Supplemental Services	181
19-34-110	NJ Ozone Action Supplemental Services	183
19-34-120	Kennett Area Freight Transportation Framework Plan	185
19-41-060	Transportation Systems Management and Operations (TSMO)	187
19-51-020	Enhance and Maintain Travel Forecasting Tools	191
19-51-030	Fast Turnaround Traffic Analysis	195
19-51-040	District 6 Modeling Assistance	197
19-51-060	Freight Model Enhancement	199
19-52-040	Local Modeling of Proposed New PA Turnpike Interchanges (Phased)	203
19-52-050	Route 422 Operations and Capacity Study	205
19-52-060	PennDOT Connects Evaluation of Philadelphia Paving Plan for Bicycle Improvement	209
19-52-070	Southeastern Pennsylvania Pedestrian Counting Program	211
19-52-080	Traffic Calming Toolkit and Decision Making Framework	213
19-52-090	Regional Transit Priority Setting — Pennsylvania	215
19-52-100	Feasibility Study for New Regional Rail Station in East Whiteland Township	217
19-52-110	Regional Strategy and Best Practices for Bike Share Program Coordination (Pennsylvania)	219
19-52-120	Regional Sidewalk Inventory - NJ Counties	223
19-53-020/025	HPMS and Functional Classification System (PA & NJ)	227
19-53-030	PennDOT District 6-0 Traffic Volume Data	229
19-59-700	Member Government Special Projects	231
Table B	Project Funding by Source	33

TABLE B
1/8/2018
DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FY 2019 PLANNING WORK PROGRAM

Page	PROJECT NUMBER	PROGRAMS/PROJECTS	FY 2019 BUDGET	HIGHWAY PLANNING	TRANSIT PLANNING	COMPREHENSIVE PLANNING	OTHER
	Chpt. Two-Sect. A						
	DVRPC PROGRAM AREAS						
37	19-23-010	Regional Forum	\$ 240,000	\$ 188,822	\$ 51,178	\$ -	\$ -
39	19-23-020	Work Program and Contracts Administration	340,000	267,498	72,502	-	-
41	19-23-030	Public Participation, Information and Visualization Techniques	320,000	68,237	251,763	-	-
45	19-23-040	Title VI and Environmental Justice	210,000	165,220	44,780	-	-
49	19-31-010	Geographic Information Systems	380,000	298,969	81,031	-	-
53	19-32-020	RideECO Marketing	312,500	-	-	-	312,500
55	19-33-010	Smart Growth	655,000	401,248	108,752	45,000	100,000
59	19-33-020	Community and Economic Development	535,000	247,829	67,171	20,000	200,000
65	19-33-030	Energy and Climate Change Initiatives	365,000	159,973	43,358	61,669	100,000
71	19-33-040	Environmental Planning	304,000	224,000	-	80,000	-
77	19-34-010	Long-Range Planning	675,000	416,983	113,017	45,000	100,000
81	19-34-020	Delaware Valley Freight Planning	445,000	338,307	91,693	15,000	-
85	19-34-030	Transportation Safety	420,000	330,439	89,561	-	-
89	19-34-040	Regional Congestion Management Process	230,000	230,000	-	-	-
93	19-34-050	Air Quality Planning	280,000	220,293	59,707	-	-
97	19-34-060	Data Coordination and Analysis	400,000	305,140	82,704	12,156	-
101	19-41-010	Technical Assistance to Member Governments	294,244	231,534	62,710	-	-
105	19-41-020	Transportation Improvement Program (TIP)	640,000	503,526	136,474	-	-
109	19-41-030	Transportation Operations	200,000	157,352	42,648	-	-
113	19-41-040	Performance Based Planning and Asset Management	325,000	157,352	42,648	25,000	100,000
117	19-41-050	Competitive Program and Project Management	990,000	50,000	-	-	940,000
119	19-51-010	Travel and Land Use Modeling	490,000	385,512	104,488	-	-
123	19-52-010	Regional Transit Planning Program	300,000	-	280,000	20,000	-
127	19-52-020	Bicycle and Pedestrian Planning Program	330,000	259,631	70,369	-	-
131	19-52-030	Corridor Planning	740,000	566,467	153,533	20,000	-
135	19-53-010	Travel Monitoring	765,000	645,000	-	-	120,000
		Subtotal	\$ 11,185,744	\$ 7,002,858	\$ 1,866,561	\$ 343,825	\$ 1,972,500
	Chpt. Two-Sect. B						
	DVRPC PROJECTS						
	15-44-300	William Penn-Planning, Design and Construction of Priority Trails**	\$ 100,000	\$ -	\$ -	\$ -	\$ 100,000
	17-51-160	I-95 Northeast Philadelphia and Bucks County**	125,000	-	-	-	125,000
	17-51-170	I-95 Southeast Philadelphia and Delaware County**	75,000	-	-	-	75,000
	17-51-360	I-95 Central and South Philadelphia Traffic Forecasts**	80,000	-	-	-	80,000
139	18-33-140	William Penn - DRWI Data/GIS/Modeling Work Group**	200,000	-	-	27,550	172,450
	18-33-200	William Penn - Completing The Circuit**	150,000	-	-	-	150,000
	18-34-080	FY2018 Regional Aviation System**	50,000	-	-	-	50,000
141	18-41-070	I-95 Planning Assistance**	100,000	-	-	-	100,000
	18-41-080	US202 Section 200 Operations Analysis**	100,000	-	-	-	100,000
139	18-52-050	Update to SEPTA Bus Stop Design Guidelines**	50,000	-	-	-	50,000
	18-52-090	Regional Sidewalk Inventory and Online Walkability Engagement**	100,000	-	-	-	100,000
	19-10-010	General Fund	282,682	-	-	-	282,682
143	19-10-020	Miscellaneous Data Requests	10,000	-	-	-	10,000
145	19-31-020	Regional Transportation GIS Coordination	400,000	-	-	-	400,000
147	19-31-030	Local Asset Data Collection - Southeastern Pennsylvania	100,000	-	-	-	100,000
149	19-32-010	Commuter Benefit Program: RideECO	450,000	-	-	-	450,000
153	19-32-030	Commuter Services/Mobility Alternatives Program (Share-a-Ride)	251,000	-	-	-	251,000
157	19-33-050	Local Technical Assistance Program (LTAP)	30,000	-	-	-	30,000
159	19-33-060	Pottstown Area Regional Plan Development	60,000	47,206	12,794	-	-
161	19-33-070	Pennsylvania Coastal Zone Management Implementation Program	50,000	-	-	-	50,000
163	19-33-080	Healthy Communities Planning	100,000	78,676	21,324	-	-
167	19-33-090	PANJ Local Planning Initiatives	200,000	-	-	42,450	157,550
171	19-33-100	A Resilient Greater Philadelphia	80,000	-	-	16,000	64,000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FY 2019 PLANNING WORK PROGRAM

TABLE B
1/8/2018

Page	PROJECT NUMBER	PROGRAMS/PROJECTS	FY 2019 BUDGET	HIGHWAY PLANNING	TRANSIT PLANNING	COMPREHENSIVE PLANNING	OTHER
175	19-33-120	Campbells Soup - Camden City Food Economy	50,000	-	-	-	50,000
177	19-34-080	Regional Aviation System Planning	100,000	-	-	-	100,000
179	19-34-090	Central Jersey Transportation Forum	150,000	-	-	-	150,000
181	19-34-100	PA Ozone Action Supplemental Services	125,000	-	-	-	125,000
183	19-34-110	NJ Ozone Action Supplemental Services	50,000	-	-	-	50,000
185	19-34-120	Kennett Area Freight Transportation Framework Plan	120,000	-	-	24,000	96,000
187	19-41-060	Transportation System Management and Operations (TSMO)	933,500	-	-	-	933,500
191	19-51-020	Enhance and Maintain Travel Forecasting Tools	640,000	-	-	-	640,000
195	19-51-030	Fast Turn Around Traffic Analysis	50,000	-	-	-	50,000
197	19-51-040	District 6 Modeling Assistance	220,000	-	-	-	220,000
199	19-51-060	Freight Model Enhancement	380,000	-	-	-	380,000
203	19-52-040	Local Modeling of Proposed New PA Turnpike Interchanges (Phased)	250,000	-	-	-	250,000
205	19-52-050	Route 422 Operations and Capacity Study	150,000	-	-	-	150,000
209	19-52-060	PennDOT Connects Evaluation of Philadelphia Paving Plan for Bicycle Improvement	120,000	-	-	-	120,000
211	19-52-070	Southeastern Pennsylvania Pedestrian Counting Program	80,000	-	-	-	80,000
213	19-52-080	Traffic Calming Toolkit and Decision Making Framework	150,000	-	-	-	150,000
215	19-52-090	Regional Transit Priority Setting — Pennsylvania	143,750	-	-	28,750	115,000
217	19-52-100	Feasibility Study for New Regional Rail Station in East Whiteland Township	190,000	-	-	36,000	152,000
219	19-52-110	Regional Strategy and Best Practices for Bike Share Program Coordination (PA)	60,000	-	-	12,000	48,000
223	19-52-120	Regional Sidewalk Inventory - NJ Counties	100,000	-	-	-	100,000
227	19-53-020/025	HPMS and Functional Classification System (PA & NJ)	200,000	200,000	-	-	-
229	19-53-030	PennDOT District 6-0 Traffic Volume Data	300,000	-	-	-	300,000
231	19-59-700	Member Government Special Projects	481,774	-	-	-	481,774
	19-59-701	Carryover of PennDOT Highway Needs Studies **	300,000	-	-	-	300,000
		Subtotal	8,487,706	325,882	34,118	188,750	7,938,956
			\$ 19,673,450	\$ 7,328,740	\$ 1,900,679	\$ 532,575	\$ 9,911,456
		SUBTOTAL DVRPC PROGRAM					
		** Carryover Projects					
MEMBER GOVERNMENT / TRANSIT OPERATING AGENCIES / OTHER PASS-THROUGH							
233	Cht. Three	Supportive Regional Highway Planning Program					
	19-60-000/19-61-000	PA/NJ Supportive Regional Highway Planning Program	\$ 1,365,000	\$ 853,750	\$ -	\$ -	\$ 511,250
287	Cht. Four	Transit Support Program					
	19-63-000	PA/NJ Transit Support Program	1,608,250	-	1,608,250	-	-
339	Cht. Five	Other Member Government Projects					
343	15-44-320	William Penn -- Planning, Design & Construction of Priority Trails Re-Grant Program**	500,000	-	-	-	500,000
345	18-33-200	William Penn - Completing The Circuit **	2,000,000	-	-	-	2,000,000
347	19-53-300	PA/NJ Regional GIS Implementation Coordination	300,000	-	-	-	300,000
349	19-62-000	New Jersey Local Concept Development	1,500,000	-	-	-	1,500,000
351	19-66-000/19-67-000	PA & NJ Transportation and Community Development Initiatives	2,250,000	-	-	-	2,250,000
		SUBTOTAL MEMBER GOVERNMENTS AND OPERATING AGENCIES	\$ 9,523,250	\$ 853,750	\$ 1,608,250	\$ -	\$ 7,061,250
		GRAND TOTAL	\$ 29,196,700	\$ 8,182,490	\$ 3,508,929	\$ 532,575	\$ 16,972,706



CHAPTER 2A

→ Program Area
Descriptions

JANUARY 2018

PROJECT: 19-23-010 Regional Forum

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Renee Wise

Project Manager: Barry Seymour

Goals:

To ensure intergovernmental coordination and technical assistance to the region's member governments and operating agencies.

Description:

This project ensures continued intergovernmental and policy coordination, as well as administrative oversight by the DVRPC Board and its Committees, through the provision of secretarial and management services. Through the Board Policy Committee, identification, monitoring, and formulation of policy analyses for issues of regional significance are undertaken. Staff activities include researching and monitoring key issues, review of pertinent federal and state legislation or policy guidance, technical assistance and drafting proposed position statements or comment letters for consideration by the Policy Committee and the Board. This project also includes coordination with the Office of Communications and Engagement on public information requests.

Tasks:

1. Plan, develop, coordinate and schedule all business to be transacted by the Board, Executive Committee and its subcommittees with follow-through to ensure that actions are implemented.
2. Record proceedings and maintain official records of all meetings.
3. Review and coordinate all DVRPC committee agendas.
4. Identify regional issues of significance through involvement with the DVRPC Board, staff, national and regional publications, journals, the media, the internet and other sources.
5. Conduct short-term research, including review of research by other agencies, as well as literature reviews, interviews, and analysis of regional impacts or implications and report the findings to the DVRPC Board and pertinent technical committees.
6. Review pending and proposed federal and state legislation, determine the effects on the region and draft proposed Board or staff position statements.
7. Attend conferences or meetings to coordinate with other agencies and organizations or to gather information for regional action.
8. Schedule to meetings of the DVRPC Board and Executive Committee and provide agenda, minutes and meeting materials as needed.
9. Schedule up to four meetings of the Board Policy Analysis Committee and provide agenda, minutes and meeting materials as needed.

Products:

- 1. Agenda, minutes and supporting materials as required.
- 2. Special policy reports, memoranda and correspondence as required.
- 3. Interim reports as appropriate.
- 4. Agendas and minutes of Board and Executive Committee meetings.
- 5. Agendas and minutes of Board Policy Analysis Committee meetings.

Beneficiaries:

All client groups.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$240,000	\$182,328	\$57,672		
2019	\$240,000	\$188,822	\$51,178		
2020	\$240,000				
2021	\$240,000				

PROJECT: 19-23-020 Work Program and Contracts Administration

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: John Griffies

Project Manager: Barry Seymour, John Ward

Goals:

To ensure intergovernmental coordination by preparing the annual work program, funding contracts, and monthly progress reports and provide technical assistance by administering the regional highway planning program and transit planning program.

Description:

Prepare contracts and monitor and report on the ongoing performance and progress of the FY 2019 Work Program. Prepare the draft and final FY 2020 Planning Work Program and budget, negotiate project funding, and prepare and submit required applications and contract documents. Provide input to the Regional Forum and receive output from all projects. Prepare, administer, and provide technical assistance for contracts between DVRPC and PA/NJ member governments to advance regional highway planning and transit support planning at the local level.

Tasks:

1. Prepare monthly and quarterly progress reports, and conduct program review meetings for the FY 2019 Work Program. Monitor on a daily basis the implementation of the planning programs.
2. Prepare and complete funding contracts and agreements to implement the FY 2019 Work Program.
3. Prepare the draft and final FY 2020 Planning Work Program and project budgets based on guidance provided by the Board's Work Program Committee.
4. Assist agencies in work program and budget development.
5. Review documents and provide technical assistance.
6. Coordinate prioritization of the TSP and SRHPP projects for inclusion into the Work Program and prepare agreements with member governments.
7. Prepare applications and contracts, and negotiate with federal, state and local governments to secure funding to carry out the planning programs.
8. Guide third-party consultant selection and assist in the preparation of documents required for consultant selection.
9. Establish accounting procedures and develop methods of progress and expenditure reporting.
10. Conduct sub-recipient monitoring and review audits of member governments prepared under 2 CFR 200.
11. Prepare closing report(s).

Products:

1. Contracts and agreements for the FY 2019 Work Program.
2. Monthly and quarterly progress reports and invoices.
3. Contract closing report(s).
4. Grant applications and contracts.
5. Special financial and internal management reports.
6. FY 2020 Planning Work Program.

Beneficiaries:

Member governments and operating agencies.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$260,000	\$197,522	\$62,478		
2019	\$340,000	\$267,498	\$72,502		
2020	\$340,000				
2021	\$340,000				

**PROJECT: 19-23-030 Public Participation, Information and Visualization
Techniques**

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Alison Hastings

Project Manager: Elise Turner

Goals:

To ensure intergovernmental coordination and community support by expanding public information, engagement, and participation activities, particularly by targeting audiences that will influence the implementation of DVRPC goals and programs. Maintain and expand outreach to all stakeholders in the Delaware Valley as per federal mandates.

Description:

DVRPC's Office of Communications and Engagement will maintain and deepen its communications program, emphasizing DVRPC's mission to audiences both familiar and unfamiliar with the planning process; promote the Commission's Long-Range Plan and the implementation of the Plan through public involvement; and foster outreach and collaboration between DVRPC and the region's policymakers, municipal officials, organizations, and citizens. The Office of Communications and Engagement seeks opportunities at which staff can highlight the Commission's work, engage existing stakeholders, and reach new audiences.

DVRPC uses both in-person and online techniques to engage stakeholders and reach members of the public. This office, working closely with the Office of Web, Creative and Publishing Services, uses DVRPC's website, social media platforms, in-person meetings, and published materials to enhance public participation and increase the availability of information in alternative formats. This office also ensures that Title VI and Environmental Justice (EJ) mandates in public participation are met by conducting outreach to traditionally underserved populations in the region, and by enhancing Limited English Proficiency (LEP) options by providing translations, and making interpretation services available by request.

DVRPC is a regional convener, and in-person meetings continue to be the most effective venue for public participation, shared learning, and consensus-building. This office will explore new ideas for both in-person and virtual meeting facilitation, community engagement, and stakeholder outreach. These approaches also include the use of visualization techniques and graphic design to present data, plans and programs in ways that are accessible to interested stakeholders and partners. This office also handles public comments, requests for information, and public records requests, and coordinates responses with DVRPC staff, Executive Office, legal counsel (if necessary), Board members, and project sponsors.

Tasks:

1. Prepare media releases and promote feature articles and op-ed pieces in traditional (i.e., newspapers) and non-traditional (i.e., blogs) media.
2. Use social media platforms (Facebook, Twitter, LinkedIn, etc.) to promote DVRPC news and public comment periods, engage partner organizations, and increase awareness of the Commission to the general public.
3. Prepare Annual Report.
4. Monitor and report on DVRPC's earned media and social media.
5. Organize and convene Public Participation Task Force: set agendas; plan and facilitate meetings; manage membership; and provide highlights of meetings.
6. Administer public comment periods, issue legal notices, and advertise public meetings.
7. Coordinate special events and conferences that promote DVRPC's image and message.
8. Participate in regional events and conferences in order to reach new stakeholders and members of the public.
9. Lead communications, stakeholder engagement, and public participation activities for DVRPC federally-mandated programs and projects, including the Long-Range Plan and the TIP; and support staff with communications and outreach for other studies, plans, programs, and events.
10. Prepare newsletters and special communication pieces on timely issues.
11. Update and enhance DVRPC's website to optimize use and enable translations, promote specific events and publications, and make public information readily available.
12. Assist Executive Office in managing relationships with stakeholders and coordinating strategic communications, and in particular HTML emails.
13. Assist staff with work product creation and distribution.
14. Respond to Public Comments, public information requests, and public records requests as needed.
15. Review and evaluate public participation strategies, as necessary, to ensure effectiveness and outreach to a broad audience. Update public participation documents, such as the Public Participation Plan and Planner's Methodology, as needed, to reflect federal mandates and ongoing work at DVRPC.
16. Respond to general comments received via www.dvrpc.org, or by other means of communication, from the general public, member governments, other MPOs, etc.
17. Respond to requests for translations, interpretation, and auxiliary services.
18. Hold annual Board Retreat.

Products:

1. Media releases.
2. DVRPC website.
3. DVRPC electronic newsletters.
4. Annual Report.
5. Public Participation Task Force: orientation program, presentations, notices, agendas, and highlights.

- 6. Legal Notices.
- 7. Public Comments on Board Action Items packet.
- 8. Communications (e-mail blasts, notices, brochures, select reports) to promote agency initiatives and public participation.
- 9. Translated materials, as needed.
- 10. Materials to be used and distributed at high profile events, including annual Board Retreat and conferences.

Beneficiaries:

Member governments, planning partners, the general public, and the private sector.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$320,000	\$243,104	\$76,896		
2019	\$320,000	\$251,763	\$68,237		
2020	\$320,000				
2021	\$320,000				

PROJECT: 19-23-040 Title VI and Environmental Justice

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Alison Hastings

Goals:

Implement Title VI of the Civil Rights Act of 1964 by ensuring that all residents of the Delaware Valley have opportunities to participate in the regional transportation planning process and are not discriminated against in the capital investment programming process. Ensure that Environmental Justice (EJ), as outlined by the 1994 President's Executive Order, and other nondiscrimination mandates, are considered in DVRPC's planning and outreach practices.

Description:

Title VI of the Civil Rights Act of 1964 states that no person or group shall be excluded from participation in or denied the benefits of any program or activity using federal funds. Environmental Justice (EJ) refines this concept by specifying the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal or commercial operations or the execution of federal, state, local, and tribal programs and policies.

DVRPC's Office of Communications and Engagement maintains and documents the Commission's Title VI and EJ compliance program. This office routinely evaluates the Commission's Public Participation Plan, Limited English Proficiency Plan, Title VI Compliance Plan, the Planner's Methodology, and Indicators for Potential Disadvantage analysis, and regularly explores the potential for other publications, brochures, and outreach tools. This office collects information from throughout the agency to document compliance with state and federal mandates. This office also supports agency staff in evaluating potential impacts of transportation projects on low-income and minority populations, and evaluating accessibility and mobility for disadvantaged populations.

Tasks:

1. Update and maintain the DVRPC Public Participation Plan, Limited English Proficiency Plan, Title VI Compliance Plan, the Planner's Methodology, and other publications related to DVRPC's efforts to create meaningful participation in the regional planning process.
2. Explore potential for other publications and brochures designed and/or translated for various audiences.
3. Work with DVRPC staff to monitor progress toward Title VI, EJ, and public participation goals, and integrate equity throughout the agency's projects.

4. Undertake assessment of the benefits and burdens of programmed and proposed transportation system improvements.
5. Participate in any reviews conducted by state transportation agencies or other planning partners.
6. Assess the region's transportation investments relative to the needs of disadvantaged populations, including, but not limited to, low-income and minority populations. Investigate the state of accessibility and mobility for disadvantaged populations, with a focus on safety, transit, and alternative transportation modes.
7. Perform Title VI/EJ analyses of the TIP, Long-Range Plan, and other mandated documents.
8. Incorporate Title VI/EJ analyses and concepts of equity and equitable development into individual studies, programs, and plans contained in the DVRPC Work Program.
9. Continue to train staff in Title VI/EJ strategies. Complete responsibilities of the Title VI Compliance Manager, including working with the Accounting Division to review DBE goals.
10. Explore opportunities for EJ events for DVRPC stakeholders and the general public.
11. Participate in equal opportunity, nondiscrimination, and DBE training and committees offered by PennDOT, NJDOT, FHWA, FTA, or other planning partners.
12. Continue to refine or update the Indicators of Potential Disadvantage (IPD). Explore IPD and other mapping/technology strategies to enhance data gathering, public information, and analysis.
13. Continue work related to Equity Through Access (ETA), DVRPC's Coordinated Human Services Transportation Plan (CHSTP).
14. Continue to support the Commission's healthy communities planning and in particular the Healthy Communities Task Force.
15. Act as a resource for planning partners, counties, subrecipients, etc. in meeting Title VI, EJ, and public participation mandates.

Products:

1. Contact lists for community organizations and individuals who have expressed interest in Commission's public involvement and outreach activities.
2. Refined and updated Indicators of Potential Disadvantage (IPD) methodology, maps, and online application.
3. Title VI/EJ Analyses assessing the benefits and burdens of TIP, LRP and other mandated documents.
4. Annual Report or memo for planning partners that documents DVRPC's Title VI/EJ Compliance Program.
5. Translated documents.
6. Supporting materials for planning partner agencies' Title VI/EJ audits.
7. Maintaining the following reports: (a) DVRPC Publication Participation Plan; (b) Limited English Proficiency Plan; (c) Title VI Compliance Plan; and (d) the Planner's Methodology.

Beneficiaries:

Transportation agencies and operators, environmental agencies, planning partners, counties, community organizations, low-income and minority population groups, and Greater Philadelphia residents.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$210,000	\$159,537	\$50,463		
2019	\$210,000	\$165,220	\$44,780		
2020	\$210,000				
2021	\$210,000				

PROJECT: 19-31-010 Geographic Information Systems

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: William Stevens

Project Manager: Christopher Pollard, Mark Gatti

Goals:

Improve planning efficiency and provide support for better-informed planning and engineering project decisions in the region by developing, maintaining, and improving access to accurate and current geospatial data.

Description:

A Geographic Information System (GIS) is an important planning tool that provides benefits to DVRPC, its member agencies, and others by supporting state, regional, county, and local planning and technical projects. Nearly all projects incorporate GIS technology, whether it is for data collection and storage, or analysis and presentation.

This ongoing program enables DVRPC to provide GIS services and technical assistance to its planning staff, our member agencies, and other outside parties. It also includes expanding and improving the geospatial database by creating features and attributes from compiled source documents and obtaining data from member governments and operating agencies and publicly available sources (US Census, NJDEP, PASDA, etc.). Enhancements to existing geospatial data will include the expansion and refinements of attributes and the improvement of the positional accuracy of features. DVRPC shares its GIS data with member governments and operating agencies, DOTs, and the public in both static and digital format through our website. Through our GIS Data Portal, users can view, download, or link to selected data in various GIS or non-GIS formats. We also convey GIS information as interactive maps and applications that allow users to further explore these datasets using only their web browser. Technical advances and methodologies to provide geospatial information in an efficient manner will continuously be reviewed.

This project also contains funds to assist in the development of a local transportation asset inventory. (Project 19-31-030, Page 147)

This program will be coordinated with other data development efforts ongoing at DVRPC as well as efforts at member governments and agencies in the region and with other federal and state efforts whenever possible.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Create new geospatial data from source documents.
2. Compile and evaluate existing geospatial data from all available sources.

3. Geo-reference existing features to current aerial imagery.
4. Develop and maintain metadata that meets current industry standards for all geospatial datasets.
5. Continuously update geospatial data from DVRPC programs and from external sources, including, but not limited to, the state DOT transportation management systems, U.S. Census, state agencies, operating agencies, and member governments.
6. Ensure compatibility of geospatial data with related databases.
7. Continue migration of geospatial data into DVRPC's enterprise Oracle database.
8. Provide data files and technical support to planning efforts of DVRPC, state agencies, county planning organizations, operators, and the private sector, as requested.
9. Coordinate data development with other DVRPC programs and federal, state, and local efforts, whenever possible.
10. Attend training, seminars, and conferences to keep current on latest industry trends.
11. Expand geospatial data sharing and distribution using current web technologies.
12. Develop and maintain web mapping applications in support of DVRPCs outreach goals.
13. DVRPC will also coordinate with PennDOT, the counties, and cities on the collection and validation of data on the local transportation asset inventory: locally owned public roads and bridges (over 8-foot spans), including georeferencing data.
14. Perform activities associated with the local transportation asset inventory.

Products:

1. Current, accurate, and comprehensive geospatial database.
2. Metadata that meets industry standards for all geospatial data.
3. Geospatial features consistent with current imagery, when applicable.
4. Enhanced enterprise database that includes geospatial data from DVRPC, member governments and operating agencies, DOTs, and other sources.
5. GIS data shared amongst member governments and operating agencies, DOTs, and the public through web technologies.
6. Updated and new web mapping applications.

Beneficiaries:

All client groups.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$380,000	\$288,686	\$91,314		
2019	\$380,000	\$298,969	\$81,031		
2020	\$380,000				
2021	\$380,000				

PROJECT: 19-32-020 RideECO Marketing

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Stacy Bartels

Project Manager: Erin Burke

Goals:

The goal of this RideECO effort is to help increase usage of the region's transit systems by promoting this program to and increasing awareness and interest among commuters and businesses via a coordinated marketing effort.

Description:

This work program focuses on marketing and outreach, particularly the production of marketing materials and placement of advertising.

This commuter benefit program has been administered by DVRPC since its inception in 1991, rebranded with the name RideECO commencing in 2013. RideECO provides area employers with an easy option to provide employees with a transit benefit per federal IRS tax code. Originally instituted under clean air legislation, this program has become popular among employers since it provides a tax break for both participating employees and companies. All regional transit providers support the program and accept its vouchers, as do most third-party vanpool operators. Note that this program also reaches to central Pennsylvania and northern Delaware. (See 19-32-010 for more program background.)

Tasks:

1. Work with contracted vendor to develop relevant advertising messages and materials for both key target audiences (below, #3).
2. Work with contracted vendor to find and place advertising in relevant and unique media and publications.
3. Promote the program to both main audiences: local employers with worksites accessible by transit, and transit-riding commuters.
4. Extend the educational effort, to a degree, to commuters not currently using transit or vanpools.
5. Initiate and analyze results of periodic research to ascertain any effects on commute mode changes and elicit suggestions to enhance the program for users.

Products:

1. Marketing and advertising material design and production.
2. Media schedule and placements.
3. Ensure website information is accurate and current; update as necessary.
4. Social media activity to reach a variety of audiences and to keep clients and users informed of program and legislative changes, and transit news in general.

Beneficiaries:

Public, area employers, transit agencies, and member governments.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$312,500				\$312,500
2019	\$312,500				\$312,500
2020	\$312,500				\$312,500
2021	\$312,500				\$312,500

*PA TIP - MPMS #17891 - \$200,000-CMAQ/\$50,000 Local (RideECO Funds)

NJ TIP - DB #D0406 - \$50,000-CMAQ/\$12,500 Local (RideECO Funds)

PROJECT: 19-33-010 Smart Growth

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Karin Morris

Project Manager: Andrew Svekla, Christina Arlt, Derek Lombardi, Elizabeth Compitello, Karen Cilurso

Goals:

To undertake smart growth studies, programs, and technical assistance, as well as to ensure communication and coordination among agencies in the region involved in creating and maintaining livable communities. To increase the level of education and outreach on smart growth principles to member governments and the public.

This project supports PennDOT's Planning Priorities of "Land Use / Transportation Linkages/Economic Development/Modernization," specifically "(B) to provide input on any training and planning activities targeted to county and local governments, conservation districts and community stakeholders; examples include Smart Growth, Complete Streets, implementation tools, access management, transit oriented development, healthy communities, etc.," and "(E) identify livability and sustainability strategies to tie the quality and location of transportation facilities to broader opportunities such as access to employment opportunities, affordable housing, quality schools, safe streets, economic development, social equity, and environmental conservation."

This project supports NJDOT's planning priorities of: supporting NJDOT's Transit Village Initiative; supporting coordination on mobility and land use planning; offering technical assistance to encourage vibrant, sustainable communities; developing and maintaining databases in support of smart growth; and implementing Complete Streets. This project supports FHWA-NJ Division's Planning Emphasis Areas of regional coordination on opportunities related to livability, and ladders of opportunity/access to essential services (housing, employment, health care, schools, and recreation).

Description:

The Smart Growth work program will continue DVRPC's work on linking land use and transportation planning, while also enhancing the level of outreach, education, coordination, advocacy, and overall support for smart growth and livable community principles. This program will support greater understanding of sprawl issues and its impacts on the region's accessibility, land preservation, urban revitalization, economic development, and climate change. This program also supports the agency's continuing efforts at transit-oriented development, TRID, age-friendly communities, and zoning reform (both smart growth and sustainable zoning).

DVRPC will continue its Municipal Outreach program, which includes: offering

training/webinars to municipalities and counties; producing Municipal Implementation Tool (MIT) brochures that implement the LRP through encouraging specific municipal actions; tracking and mapping the municipal adoption of smart growth tools in the region; and promoting products to local, regional, and national audiences.

Staff will continue to update and analyze the Smart Growth Project Database web mapping application at least twice per year, and seek new sources of data or partnerships.

Staff will continue to coordinate the Regional Streetlight Procurement Program (RSLPP), begun in FY2016, which is an effort to work with 35 municipalities to replace their streetlights with energy-efficient LED lighting. FY2019 work for this project includes working with the ESCO and the municipalities on the effective execution of the Measurement and Verification Period as per the program contracts.

In FY 2019, staff will continue the evaluation of the first round of the program, begun in FY 2018, that includes surveying current participants, documenting lessons learned, surveying all SE PA municipalities for interest in participation in a second round, discussing interest and feasibility of a NJ program, and convening a municipal steering committee on regional procurement. Staff will evaluate the potential for different fee-for-service models, as well as the feasibility of replicating this program concept for other municipally-owned assets or services. Further, staff will support other DVRPC departments in support of non-energy regional procurement efforts. If feasible and with enough interest, staff will launch a second round of the RSLPP and/or other joint procurement and implementation program. This work will likely include the development of a joint RFP, ensuring the selected consultant works effectively with municipalities, ensuring municipalities have the support and resources they need to execute contracts, coordinating with project partners, and assuring that all phases of the project are completed to the benefit of municipalities. Regional procurement and implementation programmatic efforts can help improve the economic vitality of local municipalities through reducing their overall operational costs while also achieving economies of scale for the bulk purchase equipment and services. Further, by working together through a program, municipalities can access standardized contracts, peer learning and technical expertise, which builds confidence in the local decision-making process. This work will likely require the hiring of a technical consultant(s).

Staff will engage with municipalities and other partners in the four counties of New Jersey in order to establish a foundation for identifying and implementing actions to manage energy use in their operations and support renewable energy development in their communities. This work will build off of DVRPC's programs in Pennsylvania including Circuit Rider, RSLPP, and Solar Ready II/SolSmart. To conduct this work in New Jersey, DVRPC will build off of and leverage the foundational programs and resources available to communities in New Jersey through Sustainable Jersey and the NJBPU Clean Energy Programs.

Staff may also provide technical assistance to municipalities on their efforts to support renewable energy and energy efficient development in their communities. This work may include the development of renewable energy ordinances and permitting processes, support for Solarize campaigns, and engaging the local utility. This work would build off of Solar Ready II in FY2016 and SolSmart in FY2017, if there is demand and budget.

Staff will continue research and investigation into the local community impacts and benefits of higher density residential development. In addition to analyzing recent development projects and trends in the region, the second phase of this effort will focus on creating products and resources that will help municipal and county officials make more informed decisions about development proposals and land use regulations.

Staff will continue to offer technical assistance and promotion of smart growth to national, state, regional and local partners on such initiatives as the NJDOT Transit Village Task Force, Sustainable NJ committees, AARP Livable Communities Network, Age-Friendly West Philly task force, Delaware Valley Smart Growth Alliance, Urban Land Institute Philadelphia Chapter Councils, and other partnerships.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Lead the Municipal Outreach program, which includes webinars and MITs.
2. Update the Smart Growth Project Database twice/year and promote through DVRPC News and social media.
3. Coordinate the Regional Streetlight Procurement Program; assess the feasibility of a round two, as well as its replicability for other municipal-owned assets or services.
4. Provide technical assistance to municipalities on renewable energy ordinances, permitting, and Solarize campaigns, as needed and as budget allows.
5. Gather data on recent multifamily developments and analyze development trends related to higher density residential development in our region.
6. Provide technical assistance to numerous partners on livable community efforts.
7. Present and promote DVRPC's smart growth studies and products to local, regional, and national audiences, through workshops, seminars, conferences, etc.

Products:

1. Municipal outreach webinars, MIT brochures, trainings.
2. Updated Smart Growth Project Database and related promotion.
3. Meeting highlights, PowerPoints, evaluation, or other technical assistance from RSLPP.
4. Technical assistance on solar ordinances, permitting, buying campaigns, as needed.
5. Community Impacts of Higher Density Development case studies, meeting

materials, and resources

6. Smart growth presentations at local, regional, and/or national conferences and workshops.

Beneficiaries:

Member governments, DOTs, transit agencies, private sector, and nonprofits.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$640,000	\$419,354	\$132,646	\$48,000	\$40,000
2019	\$655,000	\$401,248	\$108,752	\$45,000	\$100,000
2020	\$655,000				
2021	\$655,000				

*PennDOT FTA Funds

PROJECT: 19-33-020 Community and Economic Development

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Karen Cilurso

Project Manager: Andrew Svekla, Christina Arlt, Karin Morris

Goals:

To support the key policies of Connections 2045 by ensuring a diverse and competitive regional and local economy by encouraging reinvestment in the region by coordinating regional transportation, land use, redevelopment, and economic development cooperation. This program area addresses the planning issues identified in the FAST Act, specifically by supporting the economic vitality of the metropolitan area by promoting consistency between transportation improvements and state and local planned growth and economic development initiatives; improving the regional freight network to expand access to national and international trade markets, ensuring equitable and efficient multimodal transportation options with respect to travel and tourism activities, and supporting local and regional economic development.

The Community and Economic Development program area supports PennDOT's Planning Priority (I) Land Use/Transportation Linkages/Economic Development/Modernization, specifically (B) to provide input on any training and planning activities targeted to county and local governments, conservation districts, and community stakeholders; examples include Smart Growth, Complete Streets, implementation tools, access management, transit-oriented development, healthy communities, etc., and (E) identify livability and sustainability strategies to tie the quality and location of transportation facilities to broader opportunities, such as access to good jobs, affordable housing, quality schools, safe streets, economic development, social equity, and environmental conservation.

This program supports NJDOT's support of the NJ State Strategic Plan, whose vision is for sustainable, physical, and economic development. Additionally, this megaproject supports NJDOT's MPO Transportation Priorities, including promoting partnerships and maximizing opportunities for Complete Streets implementation. The work through the Community and Economic Development program also supports NJDOT's MPO Priorities by continuing to engage with the public to strengthen public confidence and participation in the planning process through the use of web/technology, social media, outreach, education, and public forum meetings. This project supports FHWA-NJ Division's Planning Emphasis Areas of expanded use of management systems and data-driven tools to inform investment decisions, particularly for programs such as the Transportation and Community Development Initiative (TCDI). This project supports the New Jersey Statewide Long Range Transportation Plan.

Description:

Many of the region's mature communities face social, economic, transportation (motorized and nonmotorized), and infrastructure challenges uncharacteristic of more affluent exurban communities and lack the resources available to the region's core cities. Outreach and education directed at municipal officials will be facilitated through Roundtable Conversations. This conversation is primarily for local planning partners (ex. BIDs, Main Streets, nonprofits) to discuss common issues and exchange ideas and develop solutions. Topics may include infrastructure, bicycle and pedestrian enhancements, economic development, conservation, public relations, and grant development. Up to three conversations may be held. Staff will continue to identify techniques, programs, and strategies that have been successfully utilized in this region as well as elsewhere to facilitate community revitalization and create mechanisms through which developed communities can network with other municipalities facing common challenges.

Staff will continue work on the Classic Towns of Greater Philadelphia (CTGP) cooperative marketing program. The CTGP program enables DVRPC to promote participating communities as great places to live, work, and play. The program currently has 22 participating communities representing different planning areas in the region. CTGP strives to improve the quality of life in older communities and neighborhoods of the region, thus utilizing existing infrastructure. A consultant will be used to provide assistance with these marketing tasks and staff will work directly with all communities on various events, promotional pieces, and other tasks, as requested. This program utilizes local funds collected directly from the participating communities for all marketing tasks.

Administration of the Transportation and Community Development Initiative (TCDI) grant program will continue in FY 2019. Solicitation for new projects will be held in the spring 2018, thus requiring staff to administer contracts to awardees. Individual project managers will be assigned to each of the projects to monitor progress. The TCDI project also includes maintaining the Smart Growth Grant database to oversee communication with previous grantees and providing updated information for the DVRPC website for all projects completed. The TCDI database update require assistances from internal IT for updates to the website.

As tourism is identified as a key planning factor in the FAST, staff will continue to identify livability and sustainability strategies to tie the quality and location of transportation facilities to access to tourist destinations, and employment. Extensive outreach to tourism stakeholders took place in FY 18. Possible tasks for FY 2019 include a review of the current TIP and Long Range Plan to identify accessibility to currently funded projects; developing/enhancing a tourism GIS database; providing shared parking or wayfinding recommendations to sites determined to be in need of improvement; analyzing access to emerging tourist destinations such as wineries, distilleries, and other agritourism points of interest; analyzing PHLASH service and possible route extensions into neighborhood commercial districts; analyzing intercity bus travel; or factoring access to tourist

destinations into the screening of TIP projects, among other ideas.

Staff will continue to lead, participate in, and provide support for local and regional efforts to better coordinate economic development and transportation investment strategies in the region, including managing and maintaining the Greater Philadelphia region's Comprehensive Economic Development Strategy (CEDS), as required by the US EDA. As part of the mandate for the CEDS, data in the report must be tracked and updated on a yearly basis (as available). In addition, the entire CEDs report must undergo a complete update every five years where goals and objectives are re-evaluated. FY 2019 is the beginning of a new five-year update. Tasks will include completing the 2018 CEDS review and data update; amending the list of vital projects as appropriate; beginning the preparation of the 2019 five-year CEDs update; and working with regional partners to identify how to best advance the CEDs goal of investing in people and places.

As part of economic development coordination, staff will continue the meetings of the Regional Community and Economic Development Forum (RCEDF). The RCEDF facilitates networking and coordination between the region's transportation, economic development, and land use planning professionals on issues of regional importance; fosters greater cooperation between agencies; and strives to coordinate regional transportation and land use planning activities with the needs of the economic development community.

Staff will continue working with partner organizations to better understand how workforce development and job training is provided in the region and whether current workforce development programs are meeting the needs of the region's current and future employers. Workforce issues will include our transportation operators and other key economic sectors of the region. Tasks to enhance workforce development will include expanding our economic development stakeholder lists and facilitating a conversation about workforce needs among the region's transit providers.

Tasks:

1. Maintain and interact with the roundtable invitees made up of state, county, and local governments, nonprofits, main street communities, and economic development partners on issues facing older suburbs and downtowns through the Roundtable Conversations. Up to three roundtables may be held.
2. Identify and engage local stakeholders and community leaders, as well as provide local technical assistance to communities on revitalization strategies.
3. Continue to gain technical support for the marketing of Classic Towns through outreach and collaboration with regional, state, local entities, and partnerships with Philadelphia agencies.
4. Contract with qualified consultants on Classic Towns for advertising and website administration.
5. Administer the TCDI program.
6. Maintain the Smart Growth Grants database.

7. Develop deliverable for tourism tasks including an updated stakeholder list.
8. Work with regional stakeholders and members of the CEDS Review Committee to complete the FY2018 review and update. This report is due to US EDA by September 30, 2018, and must include a thorough review of the region's economic circumstances; an updated list of strategic projects (including a set of priority transportation investments), programs, and activities intended to implement the CEDS goals and objectives; and an evaluation and update of performance measures that track progress toward achieving the CEDS goals and objectives for the FY 2019 required five year update.
9. Convene up to 3 meetings of the Regional Community and Economic Development Forum (RCEDF), whose membership includes regional economic development professionals; regional, county, and local land use and transportation planners; and private and non-profit sector representatives.
10. Conduct meetings (as necessary) of the CEDS committee (a subcommittee of the RCEDF) to review projects proposed for inclusion on the CEDS list of vital economic development projects, and amend the list as appropriate.
11. Facilitate at least one meeting with transit agencies to better understand how workforce development and job training is provided in the region and whether current workforce development programs are meeting the needs of the region's current and future employers.

Products:

1. Roundtable conversations including meeting and promotional materials.
2. Marketing materials and web-based products including writing for social media outlets for the Classic Towns program.
3. Events and contests for the Classic Towns member communities.
4. Deliverable products as required by each TCDI contract.
5. Smart Growth grants database.
6. Technical memo on tourism recommendations for the region
7. Highlights from Regional Community and Economic Development Forum (RCEDF) meetings.
8. Minutes of CEDS committee meetings and amendments to the CEDS list of vital projects.
9. The required FY 2018 CEDS review and update. Host meetings for five-year update.
10. Event on future workforce needs for key economic sectors including transportation-related employment.

Beneficiaries:

Member governments, nonprofits, developers, private sector, and Classic Towns communities.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$450,000	\$159,537	\$50,463	\$40,000	\$200,000
2019	\$535,000	\$247,829	\$67,171	\$20,000	\$200,000
2020	\$535,000				
2021	\$535,000				

* PA TIP - MPMS #97311 - \$120,000 STU/Toll Credit Match for TCDI Administration

NJ TIP - DB #D0204 - \$80,000 STBGP-STU for TCDI Administration

PROJECT: 19-33-030 Energy and Climate Change Initiatives

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Robert Graff

Project Manager: Shawn Megill Legendre

Goals:

- Provide leadership to the region on increasing the resilience of the region to the impacts of extreme weather, which is increasing in likelihood and frequency due to climate change, and on reducing energy use, increasing the use of low-carbon energy, and reducing the greenhouse gas (GHG) emissions responsible for climate change. A key focus of this work will be on energy use, greenhouse gas emissions, and increased resilience as they relate to vehicles, transportation infrastructure including mass transit, and the built environment.

- Focus the resources and attention of municipal, county, regional, state and transit agency officials on developing policies and practices to increase the resilience of the region to the impacts of extreme weather associated with climate change and to reduce energy use and GHG emissions.

- Develop and disseminate information on the expected impacts of climate change within the region, as well as how to prepare for those impacts. This information will be provided at the local and sectoral level where feasible.

- Develop and disseminate information on regional energy use, energy costs, and GHG emissions. This information will be provided at the local and sectoral level where feasible.

- Facilitate regional coordination by drawing on and strengthening relationships among state, regional, county, and municipal officials throughout the region, as well as relationships with other key stakeholders, including transit authorities, utilities, businesses, institutions, and non-profit organizations. This work will foster continued cooperation and coordination across MPO and state boundaries where appropriate to ensure a regional approach to addressing these issues.

Description:

This program area leads planning efforts to prepare the region for the ongoing and anticipated impacts of climate change on the built and natural environment. In addition, it seeks to promote greater energy efficiency, cleaner energy, and lower greenhouse gas emissions within the region. Regions that are prepared for the challenges of climate change and move toward cleaner energy are expected to be at a competitive advantage going forward.

This program area supports the goals of the State of New Jersey's Global Warming Response Act (2007) of reducing GHG emissions by 80 percent of 2006 levels by

2050. It also supports the provisions of the Pennsylvania Climate Change Act (Act 70 of 2008), as well energy use, GHG emissions, and regional resilience goals of DVRPC's Long Range Plan. It will also support the USDOT FAST Act Resilience Performance Factor, as well as any Greenhouse Gas (GHG) Emissions Measure that may be established by the FHWA's National Performance Management Measures.

Climate change influences the design, construction, safety, operations, and maintenance of transportation infrastructure and systems. Extreme weather events such as Hurricane Irene and Superstorm Sandy have illustrated how vulnerable the region's transportation infrastructure is to violent storms. As global temperatures increase, sea levels rise, and weather patterns change, the risk to the region's transportation system will continue to increase. The stewards of the region's infrastructure will be challenged to consider how these changes may affect the region's roads, airports, rail, transit systems, and ports, as they endeavor to assure the transportation system's resilient connectivity to essential services. In addition, the changing climate has broader implications for the region's stormwater systems, land use decisions, and the natural environment. These impacts affect a wide range of county and municipal functions, including public health and stewardship of trees and forests.

Energy use and greenhouse gas emissions are closely related issues: DVRPC's report on regional greenhouse gas emissions in 2010 shows that about 90 percent of the region's GHG emissions are attributable to burning fossil fuels for energy. Energy use by the transportation sector (motor vehicles, trains, planes, ships, and other mobile applications) accounted for more than 27 percent of the region's energy use, and over 31 percent of its GHG emissions. Essentially all of the energy used for transportation is petroleum imported into the region.

The energy system in the region and the country as a whole is undergoing a profound transformation, with increased private and public investment in energy efficiency and conservation as well as in renewable and lower-carbon energy sources for both the transportation sector (e.g., electric vehicles, natural gas vehicles, public transit investments) and for stationary energy use (e.g., buildings, industry). The use of natural gas to generate electricity is displacing coal at a very rapid pace. In addition, concern regarding the long-term availability and cost of fossil fuels, as well as the implications of natural gas production in Pennsylvania, shapes the activities of this program area.

This program area assists the region as our economy transforms to one that over time uses less fossil-fuel based energy while maintaining a high quality of life. This program area also assists the region prepare for inevitable changes in the region's climate, regardless of global reductions in GHG emissions.

Tasks:

Coordination and Facilitation—Facilitate coordination and discussion among partner organizations within the region. Participate in relevant local, regional, state, and federal efforts related to alternative fuel vehicles, energy-efficiency and conservation, GHG emissions reduction, and resilience to the impacts of climate change on transportation infrastructure, including mass transit infrastructure, and other public goods. Continue to work with local governments, state and federal agencies, neighboring MPOs, and partner organizations such as transit agencies in the region.

Climate Adaptation Forum—Continue to organize and produce the Climate Adaptation Forum, an ongoing series of half-day workshops, taking place about three times per year. The CAF brings together professionals currently engaged in preparing for climate change, and one or more professionals presenting on their current activities related to addressing a particular climate change adaptation issue.

Information Collection and Analysis—Continue to develop and disseminate information on regional energy use, energy costs, and GHG emissions, as well as opportunities for reducing energy use, energy costs, and GHG emissions, at the state, local, and sectoral level. Disseminate information on the predicted impacts of climate change on the region's transportation infrastructure, other public goods, and the economy.

Technical Assistance: Energy Use and GHG Emissions—Continue to serve as a resource for counties and municipalities in carrying out analysis of energy use and GHG emissions both in local government operations and at the community level. A key focus of this work, in coordination with the Office of Smart Growth (19-33-010), will be on energy use and emissions associated with public sector vehicles, lighting, and traffic signals.

Technical Assistance: Ordinance Assistance and Coordination—Continue to assist municipal and county officials in developing and implementing of local ordinances and permitting practices that address the siting and access of renewable energy systems, energy-efficient development, and siting of alternative fuel vehicle infrastructure. This work will be coordinated with the Office of Smart Growth (19-33-010)

Technical Assistance: Climate Change Adaptation Planning—Continue to assist local government stakeholders and transit agencies in understanding and preparing for the expected impacts of climate change on the region, including providing information on carrying out risk and vulnerability assessments of the region's transportation infrastructure and communities, and developing strategies to increase resilience. Continue to participate in ongoing climate change adaptation activity at the national, state, regional, and local level to ensure the concerns of the region are represented. This work will be carried out in coordination with DVRPC's Office of Environmental Planning (19-33-040). In coordination with the Resilient Greater

Philadelphia project (19-33-100), review and summarize resiliency planning methodologies, tools and approaches, including those in use and being developed by PennDOT, NJDOT, SEPTA, PATCO and NJ Transit. Data development, analyses and mapping will be coordinated with Regional Transportation GIS Coordination (19-31-020).

Technical Assistance: Impact Analysis—Continue to assist member governments and others in assessing policies and actions appropriate at the regional, county and municipal level in order to identify the most appropriate set of responses from among the many alternatives to reduce energy use and GHG emissions primarily in the transportation sector. This selection requires rigorous analysis of the reduction impacts, cost-effectiveness, feasibility, energy savings, and other associated benefits and costs associated with the various options.

Scenarios and Modeling—In coordination with DVRPC’s Office of Long Range Planning (19-34-010), model future regional energy use and GHG emissions scenarios and develop tools for use by individuals, organizations and regional partners to help decision makers envision the relative GHG emission and energy use impacts of various planning and policy actions.

Coordination with other DVRPC Activities—GHG emissions and energy use are affected by many activities at DVRPC. This project will continue to coordinate a broader public message that links the related issues of energy, air quality, cost-savings and climate change through DVRPC’s ongoing programs.

This program area is prepared to carry out additional tasks, depending on staff availability and the priorities of member governments, including those noted below.

Technical Assistance: Additional Sectors – DVRPC recognizes that other public sector organizations, such as school districts, have tremendous opportunities for energy savings as well as to prepare for the impacts of climate change. DVRPC is prepared to begin a discussion with these sectors to identify ways to adapt and disseminate to these sectors technical tools we have developed. In addition, DVRPC is prepared to work with selected commercial areas, such as those located in DVRPC’s Classic Towns (19-33-020). Working with interested business associations and property-owners, DVRPC is able to provide basic training and resources for energy-efficiency improvement and preparation for the impacts of climate change. This work would facilitate consistency and draw on the economies of scale inherent in regional-level data gathering and analysis.

Technical Assistance: Ordinance Assistance and Coordination – In addition to the ordinance assistance and coordination tasks noted above, DVRPC is prepared to continue developing and disseminating quantitative tools to evaluate the links between development patterns, energy use, and greenhouse gas emissions and assist municipalities to incorporate best practices into land use regulations and building codes.

This work will be carried out in coordination with county, state, and federal-level efforts, as well as with regional and national organizations that support work in energy and climate change action.

Completion of these tasks may require the support of consultants.

Products:

1. Updated website pages and on-line tools to disseminate and support the results of the 2015 Regional Energy Use and GHG Emissions Inventory.
2. Support for electric vehicle analysis work being carried out by the Plug-in Hybrid & Electric Vehicle Research Center at UC Davis.
3. Climate Adaptation Forum series. This is an on-going series of DVRPC-hosted, half-day workshops bringing together regional professionals currently engaged in preparing for climate change. DVRPC intends to host a minimum of three such workshops in FY 2019.
4. Support the Resilient Greater Philadelphia project (Project 19-33-100, Page 171) in reviewing and summarizing resiliency planning methodologies, tools and approaches, including those in use and being developed by PennDOT, NJDOT, SEPTA, PATCO and NJ Transit.
5. Continued development of support tools (e.g., MITs, webinars, workshops) for municipalities on preparing for climate change adaptation.
6. Continued integration of energy use and GHG emissions analysis into DVRPC planning documents.
7. Contributions to local, regional, state, and national efforts to reduce energy use and greenhouse gas emissions, and to build resilience in preparation for climate change. These will include written comments on documents, active participation in meetings, and recommendations for actions. Efforts supported include Drive Electric PA Coalition, the PA DEP Climate Change Advisory Committee, as well as any support needed for the USDOT's FAST Act Resilience Performance Factor, any UDDOT greenhouse gas reporting measure, PennDOT's Extreme Weather Vulnerability work, and NJDOT's FHWA-funded pilot project on extreme weather.
8. Products related to technical assistance efforts mentioned in tasks will be determined at beginning of fiscal year.

Beneficiaries:

Member governments; DVRPC planning professionals; state and federal agencies; transit authorities, municipal officials; and citizens.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$240,000	\$154,471	\$48,860	\$36,669	
2019	\$365,000	\$159,973	\$43,358	\$61,669	\$100,000
2020	\$365,000				
2021	\$365,000				

*PennDOT FTA Funds

PROJECT: 19-33-040 Environmental Planning

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher Linn

Project Manager: Amy Verbofsky, Melissa Andrews, Shawn Megill Legendre

Goals:

This program area will:

- Provide leadership to the region on maintaining healthy ecological systems, protecting water quality, creating livable communities, incorporating a comprehensive and connected network of facilities for bicyclists and pedestrians into the current transportation system, and preparing the region to adapt to the predicted impacts of climate change.
- Increase the level of education and outreach on sustainability planning principles to member governments and the public.
- Develop and disseminate information on green infrastructure, growth management, land preservation, watershed protection, active transportation, and climate change adaptation.

And will promote the following goals of PennDOT, NJDOT, and FHWA:

- Support a broad range of commuting alternatives to single occupancy vehicle (SOV) travel to maximize the efficiency of the existing transportation system.
- Identify livability and sustainability strategies to tie the quality and location of transportation facilities to broader opportunities such as access to good jobs, affordable housing, quality schools, safe streets, economic development, social equity, and environmental conservation.
- Implement the Program Development and Project Delivery Process to make the best use of available transportation funds and improve project implementation.
- Provide transportation choice and efficient mobility of goods.
- Support land use patterns that promote accessibility, sustainable mobility and transportation choices.
- Incorporate environmental stewardship principles into transportation investments.
- Maximize opportunities for Complete Streets.
- Expand use of management systems and data-driven tools to inform investment decisions.
- Conduct planning studies with the goal of using findings to develop problem statements.
- Streamline the environmental review process.
- Identify, implement, and assess programs and strategies to adapt to and mitigate the impacts of climate change.
- Support sustainable growth patterns, and consider all modes of transportation.

Description:

This program area will lead planning efforts to build a sustainable region by maintaining and improving environmental quality, creating new opportunities for active transportation, and making the region more resilient to climate hazards. Issues addressed include land use, water quality, hazard mitigation and flooding, natural vegetation, open space preservation, climate change resiliency, active transportation and multi-use trails. To the degree appropriate for a given task or project, work will be approached in an integrated way, drawing on staff expertise across DVRPC offices and partner agencies to best achieve desired outcomes.

The project includes the following components:

- **Information Collection and Analysis**—Update inventory of protected public and private open space lands and locally funded open space programs. Publish this information on the DVRPC website including maps, tables and narrative.
- **Regional Environmental Planning**—Build upon DVRPC’s on-going efforts to support land conservation and green infrastructure implementation. Work to promote open space protection, greenway development and green stormwater infrastructure in projects and plans. Incorporate this work into the long-range plan, corridor studies, land use and transportation studies, and the PennDOT Connects Process. Focus on helping the region minimize and mitigate the impacts of transportation and development on environmental resources and promote improved stormwater management practices in the transportation project development process. Data gathered and tools developed will be used to strengthen the linkages between environmental stewardship and transportation investments, and streamline the environmental review process.
- **Municipal Environmental Planning**—Continue Environmental Resource Planning Services for New Jersey Municipalities, which provides environmental resource inventories, open space plans, municipal public access plans, master plan conservation elements, etc. The regional vision for green infrastructure and open space can more likely be achieved by empowering municipalities to conduct better and targeted land preservation and stewardship work at the local level. The program is fee-based, but DVRPC provides a subsidy to communities in Mercer, Burlington, Camden and Gloucester counties to encourage more municipalities to undertake the work. In this fiscal year, staff will continue to advertise the program to local governments, as well as respond to direct requests from municipalities.
- **Climate Change Resiliency Planning**—Work with member governments, federal and state agencies, non-profit partners and academic institutions to understand and prepare for the expected impacts of climate change. While communities are aware of the threats posed by extreme heat, severe storms, flooding and sea level rise, the historical patterns upon which they base their planning are expected to change. This program will help local governments understand how these climate stressors are predicted to change, assess community vulnerability, and identify strategies to

increase resilience. Strategies that support existing planning goals will be prioritized. DVRPC will continue to participate in ongoing climate change adaptation efforts at the national, state, and local level to assure the concerns of the region are represented. Environmental Planning staff will continue to co-chair the Sustainable Jersey Climate Adaptation Task Force, help organize the community of practice Climate Adaptation Forums, participate in the NJ Coastal Resilience Resilience Planning Partners (NJRPP) program and work with PA DEP to continue to develop Pennsylvania's coastal resilience planning program with funding from the PA Coastal Zone Management program. During the FY2019, DVRPC will also draw on its extensive resiliency planning work to develop a Regional Resiliency Strategy/Overview/Framework with additional PennDOT Supplemental Land Use funding. Some of the data collection, coordination, analysis and mapping for this project will be covered under both the Environmental Planning Program, as well as (Project 19-31-020, Page 145) -- Regional Transportation GIS Coordination

- Continue to support actions to protect and improve water quality—A 30-month effort to help technical assistance providers improve their ability to assist municipalities with water quality improvements resulted in the development of 14 detailed recommendations, or "Action Plans". Under this program DVRPC will continue to investigate ways to work with municipalities and non-profits to advance the Action Plans. Examples might be coordinating municipalities to work together to procure technical, educational and legal services to develop stormwater fee programs or work on Pollution Reduction Plans (PRPs). Other activities could include helping municipalities "lead by example" by providing guidance on green stormwater infrastructure planning, including a discussion of funding sources.
- Trail and Greenway Planning—Support the Circuit Coalition's efforts to implement The Circuit by providing technical assistance on funding, trail planning, evaluation metrics, and trail construction. The Environmental Planning Team will focus on maintaining the permanent trail-user counting program started in FY2015 and look to assist partners with trail user counting programs as opportunities arise. This project also provides continued technical assistance for greenway development and the protection and acquisition of open space. Together, these activities will protect and link the region's Greenspace corridors and provide increased opportunities for non-motorized access to jobs, housing, recreational activities and cultural services.
- Healthy Communities—The program area will support the agency's healthy communities planning work by coordination a variety of DVRPC environmental, land use and transportation planning activities and partners to promote the development of communities that support healthy physical, social, and mental lifestyles.
- Scenarios and Modeling—The program area will support DVRPC's Office of Long Range Planning, as needed, in developing land use, green infrastructure, and environmental data and mapping needed to shape a vision for the region's future and evaluate transportation investments.
- Coordination and Facilitation—DVRPC will continue to facilitate coordination and

discussion within the region through meetings, information sharing, websites and other means, and will participate in environmental, sustainability, trail-development, and climate change adaptation work locally, regionally, at the state and federal level. DVRPC will partner with local governments, neighboring MPOs, state and federal agencies, and non-profit organizations. DVRPC may bring planners and practitioners together to explore and discuss preparing for the impacts of climate change and/or bring the open space planning community together to focus on land conservation, watershed protection and similar issues. DVRPC will also continue to coordinate and facilitate meetings of the PA East Coast Greenway Committee, and, as time permits, will support efforts to develop and improve the East Coast Greenway in New Jersey.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Update data on protected lands and share with counties and other agencies.
2. Gather post-election data on localities initiating or changing their open space funding programs through voter referendums.
3. Update and post open space data and tables to the web.
4. Conduct research and data collection to support municipal green infrastructure implementation.
5. Share and disseminate trail-user counting data.
6. Conduct municipal-based environmental planning work to assist local governments.
7. Provide data, research and analysis to the SJ CATF.
8. Work with partners to advance recommendations generated by the William Penn-funded "Municipal Actions to Protect Water Quality" project.
9. Continue technical assistance to municipalities, counties, state agencies, and non-profits for greenway, open space and environmental planning.
10. Engage with the Circuit Coalition to provide technical assistance on funding, marketing, trail planning, evaluation metrics and project management.
11. Cultivate projects and initiatives that promote active transportation and provide technical assistance as needed to local governments and non-profit partners.
12. Co-convene the Climate Change Adaptation Forum workshops and other environmental meetings as needed with guest speakers on topical issues and ample time for coordination and collaboration.
13. Organize and host quarterly meetings of the PA East Coast Greenway Committee.

Products:

1. Updated DVRPC website pages containing current maps, tables, and narrative about protected open space lands and funding programs.
2. Publication of Environmental Resource Inventories, Open Space Plans, Municipal Public Access Inventories, etc. for local governments with which DVRPC has project agreements.

3. Maps, data, and presentations to municipalities and counties with which DVRPC has worked on greenway plans or municipal projects, as needed.
4. Updated Circuit map and data tables. Publish the map via the web and link it to the circuittrails.org website.
5. Presentations on environmental- and trail-related topics.
6. Meetings, data, maps and graphics to support development of the Circuit and active transportation projects.
7. Meeting materials, summaries and analyses in support of the Sustainable Jersey Climate Change Adaptation Task Force.
8. Meeting materials of the Climate Change Adaptation Forum and environmental coordination meetings as needed.
9. Meeting materials of the PA East Coast Greenway Committee.

Beneficiaries:

PADEP, PADCNR, PennDOT, NJDEP, NJDOT, counties, municipalities, conservation organizations, land trusts, watershed organizations, sustainability coordinators, trail advocacy groups, the Circuit Coalition, the private sector, and citizens.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$304,000	\$204,000		\$100,000	
2019	\$304,000	\$224,000		\$80,000	
2020	\$304,000				
2021	\$304,000				

PROJECT: 19-34-010 Long-Range Planning

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Brett Fusco

Project Manager: Benjamin Gruswitz, Jackie Davis

Goals:

Develop and implement a long-range vision and plan for a sustainable future by providing guidance for future growth and development and ensuring that transportation investments are linked to long-term land use, economic development, environmental, transportation, and equity goals.

Description:

Metropolitan planning organizations (MPOs) are required to prepare and maintain a long-range transportation plan with a minimum 20-year horizon, and in air quality non-attainment areas to update the plan every four years. DVRPC has worked with member governments, regional stakeholder organizations, and the public to develop a comprehensive Long-Range Plan that not only addresses the future of transportation, but also looks at the interaction with land development and revitalization, environmental resources, equity, and economic growth.

The Plan serves as a high-level policy directive for all of DVRPC's work and is incorporated into every DVRPC project and program. The Plan incorporates performance measures for selecting transportation projects and gauging progress toward Long-Range Plan goals. Additionally, the Plan addresses the planning factors required under current federal planning regulations, as well as the national goal areas identified in the most recent federal transportation authorization, the FAST Act. It is also compliant and coordinated with state initiatives, such as PennDOT Connects, and member government comprehensive planning efforts.

The Connections 2045 update to the Long-Range Plan was adopted by the DVRPC Board on October 26, 2017. The focus now turns to plan implementation by working with planning partners, stakeholders, and the public on taking actions and identifying municipal strategies to bring about the vision. Work is also beginning on the next update to the Plan, taking it out to the year 2050. Staff will work with the Futures Group to revise and update the Future Forces. Later fiscal years will include visioning and strategy workshops, an update to the vision plan for transportation infrastructure investment, including a needs assessment to achieve and maintain a state-of-good repair for all existing transportation infrastructure and a fully updated financial plan. The Plan will continue to be developed and implemented through outreach to member governments, stakeholders, and the public.

DVRPC will strive to deliver value to the region's economic development community by collecting and assessing economic data; identifying its importance and relevance; and disseminating the results of that research through economic impact

studies; data bulletins, analytical data reports, policy reports, and forums. This research will be based on data available through federal sources (including the U.S. Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis) and on regional employment data acquired by DVRPC from the National Establishments Time Series (NETS) database, the CoStar Commercial Real Estate database, and other available economic data sources. This research is intended to highlight (both quantitatively and qualitatively) the economic value of implementing DVRPC recommendations regarding transit-oriented development, reinvestment in older communities, and agricultural and natural resource protection. The project will also support DVRPC staff to help them assess the economic impact of their projects, where feasible.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Continue a comprehensive public and stakeholder outreach program to identify, prioritize, and implement the policies, strategies, and projects included in the Long-Range Plan.
2. Work with stakeholder agencies, such as the Pennsylvania State Planning Board, New Jersey Office of Planning Advocacy, PA and NJ DOTs, transit operating agencies, transportation authorities, and county planning departments, to develop, update, and implement their respective strategic and Long-Range Plan documents and ensure consistency across federal, state, regional, county, and local planning processes.
3. Collect and analyze demographic, land use, travel, and other data to determine their impact on the future growth and development of the region.
4. Update the 'Tracking Progress' set of indicators to gauge the extent to which Long-Range Plan goals are being met and align with state DOT and MPO performance measure targets.
5. Identify and incorporate sustainable land use, housing, growth management, energy, environmental, economic development, equity, and transportation practices into the regional planning process.
6. Work with the state DOTs and regional transit operators to collect and update asset management data, including local data, and investigate appropriate methodologies to determine and improve the condition of the region's transportation system.
7. Work with the RTC and other regional stakeholders and the public, to revise the process to prioritize major regional investments and identify investment priorities for the future.
8. Maintain collaboration with surrounding Metropolitan Planning Organizations as a means to discuss and coordinate multi-regional issues and success stories that cross MPO boundaries on an as-needed basis.
9. Continue analyzing alternative funding options for transportation investments. Specific tasks and products may focus on developing case studies or scenarios that assess how they could be utilized on specific regional facilities and providing a forum for discussion of alternative transportation funding approaches. This will be carried

out in consultation with planning partners.

10. Conduct analytical work on issues related to regional economic development, including the relationship between transportation investment and economic development; improving access to essential services, including employment and job training; efforts to promote an energy efficient economy; the economic value of workforce development; and other studies that support and advance the goals of the Long-Range Plan.

a. The continued review and analysis of the NETS database and other alternative sources of employment data.

b. The continued analysis of the CoStar Commercial Real Estate database.

c. Continued drill-down analyses of specific economic clusters, using the most current sectoral employment data available at the 4-to-6 digit NAICS-code level.

11. Provide data and support for land use, scenario planning, and/or economic impact models that measure the impacts of transportation projects and development patterns.

12. Undertake background data collection and research on various economic sectors in Greater Philadelphia, as requested. Using the most recent NETS data, the locations of specific sector employees will be mapped, and the magnitude and relative impact of the sector on the region's overall economy will be assessed. This work supports NJDOT's MPO Transportation Priorities, including promoting partnerships. This task also supports FHWA-NJ Division's Planning Emphasis Areas of expanded use of management systems and data-driven tools to inform investment decisions, particularly for increasing multimodal opportunities.

13. Incorporate FHWA performance measures and targets into the long-range planning process. This will include working with state departments of transportation and other planning partners to identify appropriate targets and monitor regional progress.

14. Update the Choices & Voices online platform to show how implementing the strategies and recommendations of the Connections 2045 Plan can help the region account for future forces, such as Enduring Urbanism or the Free Agent Economy.

15. Continue to update the online Municipal Implementation Toolbox, to help the region's municipalities implement the recommendations of the Connections 2045 Plan and to showcase regional best practices, model ordinances, and successful case studies.

16. A white paper researching the potential risks and rewards of emerging digital technologies, particularly those identified in the Connections 2045 Plan and Networking Transportation. Planning for automated and connected vehicle technology, how they will impact the transportation system in the future, and how the region can prepare for them will be a particular focus. Will identify potential implications for EJ communities.

17. Provide assistance with the Transit Vision project, including analysis and public outreach.

18. Work with Futures Group to identify and update the Future Forces scenarios to guide the 2050 long-range plan. This is expected to be an 18 month project.

Products:

1. An updated online Municipal Implementation Toolbox database.
2. Updates to Tracking Progress indicators web page.
3. A relaunched Choices & Voices web application that incorporates the recommendations of the Connections 2045 Plan and their relation to the five identified Connections 2045 Future Forces.
4. White paper on balancing the risks and rewards of emerging technologies, includes automated and connected vehicles, and EJ implications.
5. A high-profile scenario planning report on 2050 Future Forces.
6. Results of analytical work, including periodic white papers, regional data bulletins, analytical data reports, data snapshots, as well as input into other planning and transportation documents.

Beneficiaries:

State, county, and municipal levels of government; transportation agencies and transit operators; and businesses and residents of the region.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$660,000	\$417,835	\$132,165	\$30,000	\$80,000
2019	\$675,000	\$416,983	\$113,017	\$45,000	\$100,000
2020	\$675,000				
2021	\$675,000				

* PennDOT FTA Funds

PROJECT: 19-34-020 Delaware Valley Freight Planning

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Theodore Dahlburg

Project Manager: Michael Ruane

Goals:

Maximize the Delaware Valley's position in the global economy by promoting freight as a good neighbor policy among local stakeholders and implementing a regional goods movement strategy.

Description:

Freight movement is a critical planning factor in the Delaware Valley. The region's economic competitiveness is closely tied to the freight network and, from a transportation perspective, freight shipments continue to grow and change across all modes. Planning for freight also helps promote quality of life, safety, environmental, sustainability, and land use goals.

The DVRPC freight planning program has evolved substantially since its inception in 1992. The program has directly led to the formulation of policies and projects designed to maintain the region as a preeminent international freight gateway and to promote "good neighbor strategies" that mitigate adverse local impacts. Evidence of the broad integration of freight considerations can be found in the DVRPC Long-Range Plan, the DVRPC TIPs, transportation modeling and travel monitoring, corridor studies, Smart Growth, and in many other aspects of DVRPC's work.

A major goal of the freight planning program area is to seek to maximize each of the major freight modes and to improve their inter-connectivity. This approach is being advanced by highlighting freight activity and infrastructure needs at designated freight centers and on the region's National Highway Freight Network and National Highway System connectors.

In FY2019, the Freight Planning Office will undertake targeted research efforts in addition to its ongoing core activities. These efforts reflect the growing interest of the DVRPC member governments in freight transportation and include the following topics:

1. Camden City delivery issues and strategies
2. Philadelphia truck parking and delivery strategies
3. Future freight transportation technologies and scenarios

Finally, a major objective of the freight program is to initiate and sustain meaningful outreach to the local freight community and to build awareness and expertise among planners and the general public. A freight advisory committee is the focal

point of this effort. Educational pieces on freight operations and issues are prepared each year, and many helpful resources are made available on the freight page of the DVRPC website, primarily through the PhillyFreightFinder web mapping application and data platform.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Provide staffing for the Delaware Valley Goods Movement Task Force, its three subcommittees, the Task Force's Executive Committee, and membership development efforts.
2. Facilitate Task Force and freight community input on the DVRPC Transportation Improvement Programs (TIPs) (e.g., PennDOT Connects requests), Long-Range Plan, Work Program, transportation funding programs, and other DVRPC policies, programs, and technical studies.
3. Respond to inquiries, surveys, and requests regarding the region's freight transportation network and freight planning process.
4. Participate in local associations, special events, and conferences that promote expertise and awareness regarding freight (e.g., counties, cities, TMAs, and the Traffic Club of Philadelphia).
5. Maintain and update a user-friendly freight page on the DVRPC website with accurate and current information.
6. Maintain an ongoing freight data and mapping program highlighting facility capacity and activity measures through the PhillyFreightFinder tool, leading to assessments of deficiencies and improvement opportunities.
7. Support freight initiatives, freight advisory committees, freight plans, funding programs, multi-state efforts, and staffs from neighboring MPOs, the New Jersey, Pennsylvania, and Delaware DOTs, and FHWA.
8. Promote "freight as a good neighbor" strategies that balance freight facilities and operations with community goals.
9. Monitor pertinent federal legislation, support the Transportation Research Board's Urban Freight Transportation Committee, and promote MPO efforts and careers in the field of freight planning.
10. Prepare meaningful and timely technical products for area decision-makers and planners, DVRPC committees, and informational pieces for the general public.
 - a. City of Camden urban freight strategy
 - i. Documentation of existing loading zones and truck routes
 - ii. Analysis of parking violation data
 - iii. Identification of commercial and residential delivery trends and growth
 - iv. Elaboration of delivery strategies and infrastructure improvements
 - b. Philadelphia freight planning
 - i. Performance of educational activities about freight operations
 - ii. Support of development of a citywide truck network
 - iv. Continued promotion of downtown delivery strategies
 - c. Future freight transportation technologies and scenarios
 - i. Survey of emerging freight transportation technologies

ii. Identification of regional infrastructure implications

Products:

1. Quarterly meetings of the Delaware Valley Goods Movement Task Force, meeting highlights, facilitated communication among the Task Force Executive Committee, contact information for committee members and friends, and quarterly progress reports.
2. Task Force action items, recommendations, input on the TIPs, Long-Range Plan, and Work Program, DVRPC technical studies and policy issues, and exposure to funding opportunities.
3. Presentations and completed surveys and technical responses as requested.
4. Participation in meetings and projects to increase awareness of freight transportation and DVRPC.
5. Updated freight page on the DVRPC website.
6. Updated PhillyFreightFinder web mapping application and data platform.
7. Support of city and county planners and MPO and state DOT staffs (e.g., I-95 Sector B project).
8. Support of municipal officials.
9. Tracking of national initiatives, federal legislation, and opportunities to promote MPOs and careers in freight transportation.
10. Targeted research:
 - a. City of Camden urban freight strategy final report
 - b. Philadelphia freight planning materials
 - c. Future freight transportation technologies and scenarios white paper

Beneficiaries:

Freight and business communities, member governments, local municipalities, general public, adjacent regions, and states.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$450,000	\$326,671	\$103,329	\$20,000	
2019	\$445,000	\$338,307	\$91,693	\$15,000	
2020	\$445,000				
2021	\$445,000				

PROJECT: 19-34-030 Transportation Safety

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kevin Murphy

Project Manager: Marco Gorini

Goals:

Improve the safety of the region's transportation system through the identification of crash trends and problem locations, and promoting data-driven solutions and best practices. This program helps implement the Long-Range Plan and supports advancement of project-level safety countermeasures. It is a collaborative effort with a wide, multimodal range of partners covering many elements, from crash database management and problem analysis, to tracking performance and helping partners identify and advance safety projects with dedicated safety funds.

Description:

1. Regional Safety Task Force (RSTF)

The RSTF is a multimodal partnership of agencies and organizations that work together to improve transportation safety. It is increasingly action-oriented and tracks performance toward its objectives. Staff will evaluate progress toward goals and objectives and serve as facilitator to the task force.

2. Crash Data Management

Coordinate the acquisition and quality control of state crash databases and GIS layers. Support analysis best practices, select data-driven safety themes and locations for work program tasks, and fulfill data and analysis requests within DVRPC and from partners.

3. Safety Project Development Assistance and Coordination on HSIP Project Implementation

This task provides valuable assistance to county and state partners in developing and advancing safety projects to implementation with HSIP and other funds, and tracking progress toward safety objectives. In an effort to better serve municipal partners, activities will be expanded to townships and boroughs interested in safety projects. Specific activities include program management, supporting crash analyses, and problem identification via road safety audits and other tools, as needed. This work advances the goals of the Transportation Safety Action Plan, DVRPC's Long-Range Plan, and each DOT's Strategic Highway Safety Plan, and tracks federal safety performance measures. This work is done in collaboration with DVRPC's Office of Capital Programs and the Office of Project Implementation.

4. Rebuild Walkability, Safety Audits and Analysis

Rebuilding Community Infrastructure in Philadelphia is a program to revitalize neighborhood parks, recreation centers, playgrounds, and libraries across the city. Potential Rebuild sites correlate positively with the City's Vision Zero High Injury

Network, identifying disproportionate exposure to traffic crashes. Building on DVRPC's current Vision Zero work, this project will combine priority data layers for infrastructure, safety, transit, and various stress indicators with Rebuild potential sites and the HIN into a tool for prioritizing sites for investment, plus a field survey guide for assessing the strengths, weaknesses, opportunities, and threats of candidate locations.

5. Special Studies & Coordination Efforts

As time permits, conduct traditional and non-traditional analyses to deepen program knowledge base, and participate in efforts with outside partners to advance safety programs and projects that are consistent with the goals of the Transportation Safety Action Plan.

Tasks:

1. Regional Safety Task Force (RSTF)

- a. Prepare for and hold quarterly meetings focused on emphasis areas identified in the Transportation Safety Action Plan, and one or more special meetings per cycle, e.g., via collaboration with another DVRPC task force or committee.
- b. Use adopted measures to track progress toward objectives and take action to improve performance.
- c. Manage volunteer action items and other tasks that emerge from RSTF meetings.

2. Crash Data Management System

- a. Coordinate the refinement and maintenance of the crash databases, stay engaged with state partner crash data systems, and consider opportunities for efficient coordination.
- b. Coordinate the crash data updates to DVRPC's databases, GIS layers and data navigator, and coordinate with DOT's on quality issues.
- c. Respond to data, mapping, and analysis requests from inside and outside of DVRPC providing the high-quality service for partners and other agencies that has come to be expected of this task.

3. Safety Project Development Assistance and Coordination with Safety Partners on HSIP Project Implementation

- a. Distribute network screenings and assist partners with identifying data-driven safety projects. Provide needed support such as specific crash analysis, countermeasure development assistance, HSM analysis, or sketch planning.
- b. Facilitate the New Jersey HSIP Local Safety Program to help county partners fund data-driven safety projects. This is a cooperative effort with the DVRPC Offices of Project Implementation and Capital Programs.
- c. Facilitate regular meetings to support the PennDOT District 6-0 HSIP program, and provide special services as needed, e.g., safety data mapping, HSIP project tracking, coordination with county partners to plan for future rounds of statewide HSIP funds, and assist with project identification.
- d. Coordinate with state and federal partners on FAST Act safety performance measurement monitoring and assessment.

- e. Collaborate with state, county, and municipal partners to identify data-driven HSIP-eligible systemic safety projects.
- f. Assist with RFP development, proposal review, and project tracking for HSIP-funded consultant led safety improvement project.

4. Rebuild Walkability, Safety Audits and Analysis

- a. Form a steering committee of stakeholders from relevant City of Philadelphia offices.
- b. Compile database of GIS layers and datasets for use in development of a prioritization tool.
- c. Research best practices from RSA’s, Pedestrian RSA’s, Place Audits, and other field evaluation tools.
- d. Use findings to develop customized tools for location selection and evaluation.

5. Special Studies & Coordination Efforts

- a. Perform sensitivity-level GIS analysis in pursuit of a pedestrian safety metric using bus ridership data that can be used to prioritize locations for pedestrian and bicyclist safety improvement projects.
- b. Participate in other studies and efforts as requested.
- c. Coordinate with the Office of Transit, Bike, & Pedestrian Planning on small tasks arising from the Trenton Complete Streets project.

Products:

- 1. RSTF meeting materials and summaries, results of volunteer actions.
- 2. Crash databases and other electronic products.
- 3. Potential HSIP projects carried to the application stage, coordination of all applications, and delivery of accepted applications to FHWA for funding, summaries of meetings with PennDOT officials.
- 4. GIS layers, prioritization tool, place audit guide.
- 5. Various meeting materials, handouts, or web tools.

Beneficiaries:

Residents, employees, through-travelers, and shippers experiencing a safer and more reliable transportation system; municipalities, counties, state agencies, and federal agencies.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$420,000	\$319,074	\$100,926		
2019	\$420,000	\$330,439	\$89,561		
2020	\$420,000				
2021	\$420,000				

PROJECT: 19-34-040 Regional Congestion Management Process

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Michael Boyer

Project Manager: Thomas Edinger

Goals:

Minimize congestion in the Delaware Valley and enhance the ability of people and goods to get where they need to go by means of a systematic, integrated, multimodal transportation network. The CMP is a medium-term planning process and advances the goals of the DVRPC Long-Range Plan and strengthens the connection between the Plan and the TIP.

Description:

The Congestion Management Process (CMP) uses performance measures to identify and prioritize congested corridors on the regional transportation network. It helps determine the causes of traffic congestion and develops multi-modal transportation strategies to reduce congestion to allow for better mobility and accessibility across the region. The CMP assists with considering alternative strategies to mitigate congestion rather than building additional roadway capacity, and with developing the required supplemental strategies where additional capacity is needed.

The CMP is an objective-driven, performance-based approach that addresses all elements of federal CMP regulations. It incorporates Transportation Systems Management and Operations (TSMO), Travel Demand Management (TDM), coordination of transportation and land use planning, goods movement, Complete Streets, safety, transportation resiliency planning, and use of archived operations data for planning. The CMP includes work with the new federal Transportation Performance Measures (TPMs) and continues to evolve as more data and software tools are available to identify and analyze congestion. Following are the focus areas for FY '19.

Implement the New Transportation Performance Measures (TPMs) – Coordinate with planning partners in calculating performance measures and identifying targets, and monitor progress toward attaining targets.

Update the CMP - Work with the broad CMP Advisory Committee to incorporate improved data sources, TPMs, updates in CMP regulations, and evolving understanding of strategies. This is a needed refresh of the CMP since most of the previous analysis was done in 2013 or 2014.

Use the CMP in Project Development - The CMP takes Long-Range Plan goals and helps turn them into projects. It does this through work on problem statements, participating in multimodal alternative analyzes, facilitating development of

supplemental projects that will help get the most long-term value out of new road capacity investments, and supporting completion of these commitments. These are all federally required CMP tasks.

Stay Current with the Practice of CMP - DVRPC's CMP is known nationally as a leading practice, and has been cited in both of FHWA's CMP guidebooks. We endeavor to stay in the lead of the state of the practice in order to do effective work in the region, and to excel when resources allow. The FAST Act reinforced the existing CMP and also adds additional potential work on improving access to jobs. The use of archived operations data for planning has been essential to the CMP and preparing for TPMs. This has been facilitated through participation in the I-95 Corridor Coalition technical work and through the megaregional leadership of the Partners Using Archived Operations Data, an informal group of MPOs and DOTs from Florida to Vermont.

Tasks:

Implement the New Transportation Performance Measures (TPMs)

1. Review final regulations and guidance with other DVRPC staff and with partners within and outside the region, such as DOTs, and MPOs. Stay informed of related regulations.
2. Conduct necessary technical efforts with NJDOT, PennDOT, MPOs and other planning partners on developing and using the new performance measures, and setting targets as part of FAST Act performance measures regulations. Review and discuss them with the CMP Planning Advisory Committee.

Update the CMP

1. Conduct analysis of the performance of the regional transportation roadway network using TPMs and other performance measures to identify and prioritize congested corridors with the CMP Advisory Committee.
2. Update the CMP subcorridor criteria scoring using new data sources such as TPMs, safety, updated Long-Range Plan goals, etc., in consultation with the Committee.
3. Use analysis, existing studies, and discussion to refine strategies for each CMP subcorridor with the Committee.
4. Hold meetings with the individual partners and the Committee, brief the RTC and others as needed or requested. The updated CMP Overview, web mapping and other contents will be published in late FY 2019 or early FY 2020.

Use the CMP in Project Development

1. Help develop and advance problem statements consistent with the CMP.
 - a. Participate in internal DVRPC process to implement high priority recommendations from NJDOT project reports.
 - b. Participate in NJDOT Complete Team, Congested Places, and CMS-21 programs. As part of Congested Places, conduct field work or prepare draft problem statements for submission by NJDOT staff as requested and track results.
 - c. Participate in PennDOT problem statement development process that is now partially facilitated through the PennDOT Connects process, which may involve working with PennDOT Subject Matter Experts.

2. Review TIP projects with respect to consistency with the CMP. Coordinate using TIP and Long-Range Plan processes in prioritizing projects.
3. Participate in required CMP activities to evaluate whether congestion problems can be substantially minimized through strategies other than adding roadway capacity. Participate in alternatives analysis as already invited by NJDOT.
4. Facilitate development of supplemental strategies for projects that will add road capacity to get the most long-term value from the investment and present to RTC for acceptance.
5. Support progress of supplemental CMP projects through coordinating with multimodal partners and tracking that progress is being made in keeping with regulations. Continue to refine new online database that provides access to Supplemental Strategies report information.

Stay Current with the Practice of CMP

1. Stay engaged with the fast-evolving use of archived operations data for planning. Two important areas are correct use of arterial roadway data for calculating travel times and shaping how estimated traffic counts will be derived. This is done through engagement with the Vehicle Probe Project of the I-95 Corridor Coalition and with DOT partners.
2. As time allows, continue to improve understanding of the effectiveness of individual CMP strategies through sketch-level models and before-and-after analysis.
3. Participate in CMP-related efforts by regional and national partners based on invitations and time available.

Products:

1. Coordinated work with DOTs and other planning partners on performance measures and targets appropriate for presentation to the RTC and DVRPC Board. Document generation and analysis of measures and targets.
2. Updated CMP analysis, overview document and web mapping identifying and prioritizing congested corridors using multimodal performance measures.
3. Draft CMP-related problem statements and track their status.
4. Database of supplemental projects.
5. Refined online resource for understanding status of supplemental projects.

Beneficiaries:

Member governments and agencies, organizations involved in managing congestion, businesses and citizens served by a more efficient and reliable multimodal transportation network.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$230,000	\$230,000			
2019	\$230,000	\$230,000			
2020	\$230,000				
2021	\$230,000				

PROJECT: 19-34-050 Air Quality Planning

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Sean Greene

Goals:

Improve air quality in the region through coordination of intra- and inter-regional policies, public education and outreach, and demonstration of transportation conformity of the region's Long-Range Plan and Transportation Improvement Programs.

Description:

DVRPC's air quality program has three main components:

1. Technical Analysis (Transportation Conformity),
2. Public Education and Outreach (Air Quality Action), and
3. Stakeholder Coordination (Air Quality Planning Coordination).

Federal requirements mandate that DVRPC must demonstrate the conformity of the region's Long-Range Transportation Plan (Plan) and the Transportation Improvement Program (TIP) with air quality goals. The Plan and TIP need to be amended from time to time with projects which may require a demonstration of conformity. This work will be consistent with the guidance released by the US EPA and US DOT. Acceptance of the conformity findings is necessary for transportation projects to be funded.

DVRPC administers the Air Quality Action (AQA) program through the auspices of the Air Quality Partnership. The region will continue to implement a program in which the public, employers, and the media will be informed of anticipated poor air quality days. Residents, and especially commuters, are encouraged to voluntarily adopt measures to minimize emissions — such as using transit, carpooling, conserving energy in the home, postponing driving, or refueling after the air quality episode has passed. The program will reinforce elements of several other programs already in place, such as the Mobility Alternatives Program and RideECO. The program functions to reduce emissions on days when conditions are favorable for ozone and/or fine particulate matter formation, and serves as an educational effort to make residents aware of the air quality problem and of the behavioral changes which can limit exposure and reduce emissions.

DVRPC also serves as a regional coordinator and participant in various air quality forums. The focus is on discussion, coordination, and progress on air quality issues with regional and federal air quality stakeholders. Policies selected to guide the region on transportation-related air quality measures will also be discussed. DVRPC will also work to achieve interstate coordination within the ozone and fine particulate matter (PM 2.5) nonattainment and maintenance areas. This project permits

proactive participation in the air quality planning activities of the departments of transportation and environmental protection in Pennsylvania and New Jersey, as well as the US EPA and US DOT. Contacts will be maintained with Delaware and Maryland agencies as well. Communication and educational activities will be maintained with the region's leadership to broaden the understanding of issues and policies. Staff will also participate in additional air quality related activities that promote the reduction of emissions in the nonattainment and maintenance areas.

DVRPC will work towards reducing regional emissions by assisting planning partners to apply for and access funding sources, such as the Volkswagen Environmental Mitigation trust and state and federal DERA funds to replace or repower diesel engines. DVRPC staff will coordinate partner strategies, assist with funding applications, and emission reduction calculations..

Completion of this project may require the purchase of equipment or services.

Tasks:

Transportation Conformity

1. Determine the projects in the Plan and/or TIP, or any revisions, which have an impact on air quality conformity determination.
2. Review and update procedures for conducting conformity tests, incorporating model enhancements and revisions to the applicable State Implementation Plans.
3. Prepare input parameters for the regional travel simulation model and for the latest version of MOVES approved by US EPA, especially inspection and maintenance characteristics in each state.
4. Run the travel demand model to determine emissions associated with proposed TIP, Plan, or TIP/Plan amendments.
5. Perform off-model analyses on projects as required.
6. Ensure that Conformity Determination meets requirements and deadlines for emerging regulations and updated standards
7. Coordinate all activities with the Transportation Conformity Interagency Consultation Group and conduct public outreach.

Air Quality Action

1. Convene regular meetings of the Air Quality Partnership Board and any committees it may create. Include representation throughout the nonattainment area.
2. Refine the program's specific procedures for informing the public, in cooperation with the Partnership Board, in order to maximize its effectiveness. The procedures will include informing the public, individual employers, the media, and other select groups.
3. Develop and produce various products required to promote the program and strategies for air pollution avoidance and emission reduction.
4. Work with other agencies to improve forecasting capabilities and means of delivering forecasts for ozone and fine particulate matter exceedances to the appropriate agencies.
5. Refine and implement an ongoing evaluation of the program's effectiveness.

6. Distribute forecasts of ozone and fine particulate matter concentrations.

Air Quality Planning Coordination

1. Provide staff support for the Regional Technical Committee, including the maintenance of records, agendas, meeting summaries, and staff presentations. Participate in meetings and workshops, at the request of US EPA, the state environmental departments, and others, on air quality planning. This will include quarterly meetings of the PA Air Quality Working Group and periodic meetings of the NJ Air Quality Working Group.
2. Provide literature or presentations to groups requesting information on transportation and air quality programs.
3. Publish 10 issues of the ALERT newsletter on air quality activities.
4. Review conformity demonstrations with transportation and air quality committees and present the results of meetings on the Plan and/or TIP.
5. Conduct a program of interagency consultation on any conformity demonstration.
6. Demonstrate the air quality benefits of CMAQ-funded projects through air quality analysis using the Air Quality Off-Network Estimator for state DOTs.
7. Provide data and information to planning partners and health professionals regarding regional air quality statistics and analysis.
8. Serve on state ICG for project-level conformity hot-spot analysis.
9. Work with DOTs to develop emissions-related CMAQ performance measures and reports.
10. Assist planning partners to apply for state and federal funding, including but not limited to the Volkswagen Environmental Mitigation Trust and DERA, to replace or repower diesel engines and reduce diesel emissions. Assist partners with emissions reduction calculations of proposed projects.

Products:

Transportation Conformity

1. Summary report documenting conformity procedures, including MOVES inputs, program modules, and emissions factors that demonstrate that the TIP and Long-Range Plan are compatible with air quality goals.

Air Quality Action

1. A report on the year's activity.
2. Resources for news and editorial outlets for stories on air quality.
3. Paid advertisements and promotional literature.
4. Public outreach at community and environmental events.

Air Quality Planning Coordination

5. Action items for the RTC and other committees.
6. Papers and presentations on transportation and air quality planning.
7. 10 issues of Alert newsletter on transportation and air quality items of interest.
8. Funding applications for projects to reduce diesel emissions.

Beneficiaries:

State, county, and municipal governments, DOTs, and residents of the region.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$280,000	\$212,716	\$67,284		
2019	\$280,000	\$220,293	\$59,707		
2020	\$280,000				
2021	\$280,000				

PROJECT: 19-34-060 Data Coordination and Analysis

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kimberly Korejko

Project Manager: Benjamin Gruswitz, Christopher Pollard, Elizabeth He, James Strangfeld

Goals:

To further DVRPC's mission of "convening the widest array of partners to inform and facilitate data-driven decision-making." This will be achieved by creating and maintaining critical and innovative data resources in collaboration with our planning partners while providing key insights into the data through analysis, tool development, visualizations, and reports.

Description:

This program includes new and ongoing external data coordination activities. DVRPC will continue to strengthen relationships with its planning partners such as the state DOTs and transit agencies in an effort to streamline data sharing workflows as well as improve general information and knowledge sharing about agency datasets. DVRPC also serves as an affiliate member of Pennsylvania and New Jersey state data centers, which aim to promote Census Bureau datasets and activities. Along with Census products like the American Community Survey (ACS) and the Census Transportation Planning Package (CTPP), this program also includes reviewing and assessing other public and private data sources.

This program also supports the activities of DVRPC's Information Resource Exchange Group (IREG). IREG provides a forum to discuss the creation, use, and exchange of planning-related information in the region, and promotes knowledge sharing in the methods and technology for data analysis, synthesis, and presentation. For more information on DVRPC's IREG Committee, see: <http://www.dvrpc.org/Committees/IREG/>.

Finally, the Data Coordination and Analysis Program supports internal data coordination activities at DVRPC. These activities coordinate efforts and improve communication; aim to identify and support staff stewards of planning data to improve data development, maintenance, and sharing activities; and create a shared platform to develop and nurture new ideas, and pursue new efforts in a more strategic way.

Completion of this work may require the purchase of equipment or services.

Tasks:

1. Coordinate and communicate with member governments, transit agencies, State and Federal Agencies, and other traditional partners, while seeking new partnerships where appropriate to maintain and improve communication and information sharing about agency data.
2. Continue to foster data sharing strategies through the development of memoranda of understanding with appropriate agencies and exploring shared data/tool purchases.
3. Continue to oversee and administer the existing IREG and participate in other ad-hoc committees of DVRPC member governments, as appropriate, to facilitate the coordination of data acquisition, processing, and distribution.
4. Participate as affiliates of the New Jersey and Pennsylvania State Data Centers.
5. Participate in and promote Census Geography update processes (PSAP, LUCA, BAS, etc.) and products (ACS, Decennial, CTPP, PUMS, PEP, etc).
6. Disseminate Census-related data through DVRPC internal and external resources.
7. Produce Data Bulletins and Analytical Data Reports for new releases of ACS, CTPP, and other Census-related products, along with other sources.
8. Develop and oversee agencywide data coordination activities and adherence towards a formal data management framework and data life cycle practices.
9. Create and enforce metadata standards that support the data management framework.
10. Identify data gaps and needs on an ongoing basis.
11. Research, evaluate, and acquire new data resources as needed to support agency planning activities.
12. Identify opportunities to improve data quality and standardize how data quality is measured.
13. Coordinate special data improvement, data sharing, or data tool development efforts that require interdepartmental collaboration.
14. Coordinate or lead internal Data Info Sessions for users.
15. Create a plan to drive documentation of available data and publication of DVRPC datasets.
16. Develop, improve, and update datasets that support planning efforts at DVRPC such as NETS, CoStar, and other regional data resources.
17. Continue to develop strategies for and manage internal Data Advisory Committee and Data Innovation Teams.
18. Develop the DVRPC Data Center, a centralized online platform for data dissemination.

Products:

1. Meeting materials and records for the IREG committee and subcommittees
2. Regional data bulletins, analytical data reports, data snapshots, and other summaries and analyses of available information.
3. Documents related to inventory and lifecycle of datasets for internal use.
4. Meeting materials and records for the Advisory Committee and Innovation Teams.
5. Internal data search tool.
6. Catalog of data products that contribute to the DVRPC Data Center.

- 7. Beta online platform for DVRPC Data Center.
- 8. Additional materials as appropriate.

Beneficiaries:

All client groups.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$313,750	\$230,189	\$72,811	\$10,750	
2019	\$400,000	\$305,140	\$82,704	\$12,156	
2020	\$400,000				
2021	\$400,000				

PROJECT: 19-41-010 Technical Assistance to Member Governments

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: John Ward

Project Manager: Renee Wise

Goals:

To ensure intergovernmental coordination on transportation issues; provide technical assistance and training to increase implementation opportunities; and encourage local and agency actions that help to implement the regional long-range transportation plan's policies and concepts, as well as federal and state policy and program initiatives.

Description:

Ensure intergovernmental coordination, technical evaluation, and regional policy formulation on transportation issues, aviation issues, projects, and plans through monthly meetings of the Regional Technical Committee and quarterly meetings of the Regional Aviation Committee (including meeting minutes and pertinent presentations, research, and technical assistance activities). In addition, flexible, short-term responses to the day-to-day needs of DVRPC's member governments and operating agencies will be prepared. DVRPC will also respond to specific requests from PennDOT to assist with special traffic studies. Assessment and analysis of transportation systems financing options may also be undertaken. Responses to legal inquiries and estimates of the air quality, land use, and transportation effects of proposed transportation improvements may also be prepared. Coordination with PennDOT Connects activities, meetings, and program tasks will also occur, including application of the new approaches to pertinent projects.

PennDOT guidance requires DVRPC to contribute to a statewide effort to develop an inventory of locally owned transportation assets, such as roads and bridges. DVRPC will commit its resources to the collection and validation of data related to the designated local assets. This project contains funds to assist in the development of the local transportation asset inventory.

This project will also allow DVRPC staff to participate in PennDOT planning and programming efforts such as the Planning Partners meetings, Planning Catalyst Team, the Secretary's new PennDOT Connects initiative, and the annual Unified Planning Priorities Work Group. It will also allow staff to prepare and participate in the NJDOT Quarterly Collaboration Meetings, NJDOT Statewide Transportation Innovation Council, NJDOT Complete Team, NJ Statewide Traffic Incident Management Steering Committee, and work with NJ DOT to refine the Problem Statement Pipeline.

Tasks:

1. Staff the Regional Technical Committee and Regional Aviation Committee meetings, including agendas, minutes, and similar materials related to the long-range plan, Transportation Improvement Program, the Annual Planning Work Program and other transportation and land use issues or projects.
2. Participate on transportation committees at the regional, state, or national levels.
3. At least semiannually, consult with city/county planning directors regarding ongoing projects and short-term needs.
4. Participate on regional or statewide working groups and task forces, as appropriate, to represent DVRPC's interests.
5. Conduct short-term research or prepare policy papers and memoranda in response to member government requests or as a follow-up to on-going or proposed DVRPC initiatives..
6. If required, respond to legal inquiries on previously completed PennDOT studies.
7. Continue to undertake activities that respond to the new PennDOT Connects initiatives, including development and implementation activities, such as PennDOT Connects Collaboration meetings, completion of and research for Screening Forms and Environmental Screening Tools, and centralized asset management. Other activities will include coordination with PennDOT and communication of the outcome to local, city, and county planners.
8. DVRPC will also coordinate with PennDOT, the counties, and cities on the collection and validation of data on the local transportation asset inventory: locally owned public roads and bridges (eight to 20-foot spans), including georeferencing data.
9. Coordinate with the Federal Transit Administration with regard to New Start and Small Start applications proposed by member governments and transit operators.
10. DVRPC will continue to monitor US DOT Metropolitan Planning Organization requirements as well as other policy and program initiatives.

Products:

1. Policy papers, memoranda, and brief research reports as required.
2. Meeting agendas, minutes and related materials as required.
3. Data and other research materials related to the investigation of legal issues involving specific transportation improvement proposals or projects.
4. Summary of coordination and outreach activities related to PennDOT Connects as required.
5. Inventory data for inclusion in PennDOT's statewide Local Asset Inventory.

Beneficiaries:

Municipalities, state DOTs, operating agencies, county planning agencies, businesses, and citizens.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$349,578	\$265,565	\$84,013		
2019	\$294,244	\$231,534	\$62,710		
2020	\$294,244				
2021	\$294,244				

PROJECT: 19-41-020 Transportation Improvement Program (TIP)

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Elizabeth Schoonmaker

Project Manager: Kwan Hui, Richard Murphy

Goals:

To improve access to and efficiency of the region's transportation network by developing a financially constrained, multi-modal, multi-year transportation capital program and securing the financial resources to implement the program as reflected in the TIP and the Long-Range Plan.

Description:

This project provides for transportation financial planning and capital programming for the DVRPC region. Staff will work with state, regional, and federal planning partners to identify financial resources available from public and private sources to implement the Transportation Improvement Program (TIP) as well as the Long-Range Plan. DVRPC will also develop and maintain a regional DVRPC TIP for both Pennsylvania and New Jersey, as mandated by federal regulations, and will post information related to both processes on the DVRPC website. This project supports negotiations to ensure that this region receives adequate financial resources, and to identify and select transportation projects that address the needs of the region and advance the goals of the Long-Range Plan.

The TIP selection process is ultimately based on consensus, but performance-based measures have been incorporated into benefit criteria which will proactively position the region to address requirements of federal transportation authorizations and further link to goals of the long-range-plan. Universal project benefit criteria are used to evaluate new project proposals of various modes and project types (roadway, transit, bike, pedestrian, freight), and are used in Pennsylvania and New Jersey counties in the DVRPC region. The following factors are considered in determining benefits of project proposals: Facility/Asset Condition, Safety, Reducing Congestion, Investing in Centers, Facility/Asset Use, Economic Competitiveness, Multimodal Bike/Pedestrian considerations, Environmental Justice, and Air Quality/Green Design. Program development occurs through a TIP subcommittee comprised of regional stakeholders who consider schedules and costs of existing projects as well as potential for new projects, all constrained by the level of funding available. All project costs and schedules are updated by DOT project managers or project sponsors as appropriate. A series of subcommittee meetings is held where costs and schedules are further reviewed and concerns vetted and negotiated. A constrained draft program is released for a 30-day public comment period prior to presenting to the DVRPC Board.

DVRPC will undertake an extensive public participation program that responds to the requirements of federal transportation legislation and environmental justice

concerns as it relates to this project. Coordination with DOTs' program development and project development and delivery activities, including PennDOT Connects in PA, and Concept Development in NJ, will also occur. Staff will continue to investigate innovative financing techniques and emerging federal regulations and state policies, particularly as they pertain to funding and capital programming. For more information, see: <http://www.dvrpc.org/tip>

Tasks:

1. Participate in development of statewide financial guidance with NJDOT, PennDOT, and the federal agencies (FTA and FHWA), as appropriate.
2. Conduct negotiations with the state DOTs and transit operators on behalf of the region to arrange for funding of the projects in the TIP.
3. During the TIP update cycle, revise costs, schedules, and descriptions of carryover projects from the previous TIP; coordinate program development and project development and delivery activities, including PennDOT Connects, and NJ Local Concept Development project development processes; evaluate new project proposals using the TIP Benefit Criteria and assist the RTC in prioritizing projects.
4. Participate in PennDOT Connects project development activities and in NJDOT Capital Program Committee project reviews, and coordinate as needed including external partners and internal Subject Matter Experts.
5. Undertake an extensive public participation program to solicit comments and input from the general public on the TIP and to provide public education opportunities in various forums. The public participation component will respond to the requirements of the FAST ACT and environmental justice concerns.
6. Provide opportunities for public comment on the capital program and prepare a summary of public comments and agency responses for Board consideration prior to adoption of the TIP.
7. According to constraints of financial guidance and in consultation with the counties/cities, DOTs, transit operators, and the RTC, develop a draft TIP (in printed and electronic form), prepare an administrative version of the TIP (following Board adoption) with supporting documentation for submission to state DOTs to be included in the STIP for transmittal to the federal agencies, and prepare a final document for general use (in printed and electronic form).
8. Prepare financial summaries for each TIP (Pennsylvania and New Jersey); monitor actual funding of these programs; maintain project data; monitor projects; and provide periodic reports and summaries to DVRPC committees and Board.
9. Assist states, counties, and transit operators with funding changes for TIP actions to maintain fiscal constraint. Review, evaluate, and process requests for TIP amendments and modifications according to procedures in the Memorandum Of Understanding for Pennsylvania and New Jersey. Periodically review and revise the MOU in conjunction with the state DOT's and FHWA/FTA.
10. Update and maintain the TIP database and post information on the website.
11. Coordinate with DOT's in development and integration of transportation performance measures.
12. Develop financial estimates for the transportation element of the long-range plan, when appropriate.

13. Participate in special project solicitations (e.g., CMAQ, HSIP, Local Bridges).
14. Investigate and explain to the Board, its committees and the public, the laws and regulations related to federal funding programs and planning requirements, as well as state funding programs.
15. Research innovative funding techniques and assess for local applicability.
16. Make presentations to committees and public groups and respond to public questions.

Products:

1. Financial plans for the TIP (and Plan when appropriate).
2. Financial Summary Reports.
3. Project Development Screening Forms.
4. Regional Transportation Improvement Program.
5. Periodic amendments and modifications to the TIP.
6. Periodic status reports.
7. News Releases and Public Information documents.

Beneficiaries:

State and federal agencies, operator agencies, member governments, and the public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$640,000	\$486,208	\$153,792		
2019	\$640,000	\$503,526	\$136,474		
2020	\$640,000				
2021	\$640,000				

PROJECT: 19-41-030 Transportation Operations

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher King

Project Manager: Paul Carafides

Goals:

Optimize the efficiency of the highway network through transportation systems management and operations.

Description:

Federal metropolitan planning regulations require incorporating transportation operations into the transportation planning process. This program will not only help DVRPC comply with federal requirements, it will also support DVRPC's ongoing transportation operations planning activities. More detailed information about DVRPC's transportation operations activities can be found at <http://www.dvrpc.org/Transportation/TSMO/>. Transportation Systems Management and Operations (TSMO) principles are integrated into DVRPC's planning processes through the Long-Range Plan, the Congestion Management Process, and the Transportation Systems Management and Operations Master Plan.

This year's work program is divided into four major components: incident management task forces, traffic signals, TSMO outreach, and technical assistance. As transportation operations activities tend to be short-term oriented, tasks listed under technical assistance are likely to change as new needs arise.

Managing Incident Management Task Forces (IMTFs) is a major component of transportation operations and is a collaborative effort with the Pennsylvania and New Jersey Departments of Transportation, and Pennsylvania and New Jersey State Police Departments. Currently, DVRPC administers and manages eight IMTFs, supports other efforts in the region as needed, and serves as the regional clearinghouse for regional incident management activities. IMTFs address regional safety issues, improve incident management responses, and foster interagency coordination. In Pennsylvania, DVRPC is working with Philadelphia agencies and PennDOT to improve the operations of expressways in the city, with a major emphasis on operational planning for the reconstruction of I-95. DVRPC continues to manage the I-476/I-76 Crossroads Area (with special outreach as needed for the I-76 Integrated Corridor Management Project), Chester County, and Bucks County IMTFs. In New Jersey, DVRPC continues to manage the NJ SAFR (Southern Area First Responders) IMTF, which covers Gloucester and Camden Counties, and the Burlington and Mercer County IMTFs. Additionally, DVRPC participates in other incident management programs including both statewide Pennsylvania and New Jersey efforts, and IMTFs initiated by other agencies.

DVRPC will continue to support the Pennsylvania Regional Signal Retiming

Initiative effort by working with PennDOT and the counties to choose corridors for retiming and serve on the project team. DVRPC will be supporting the New Jersey Regional Signal Retiming Initiative Program by working with a consultant and stakeholder team to choose corridors for retiming and serve on the project team as coordinator.

DVRPC will conduct outreach to municipalities. Topics included in the outreach will be an awareness of transportation operations resources in the region such as RIMIS and IDRUM.

DVRPC will continue to provide planning and technical assistance for transportation operations. In FY 2019, DVRPC will continue to produce periodic bulletins to highlight incident management and transportation operations data as available. In addition, DVRPC will continue to investigate innovative programs related to transportation systems management and operations.

This work program is subdivided by the four components described above. Some of these activities may require DVRPC to purchase equipment and/or services.

Tasks:

Incident Management Task Forces Tasks

1. Continue managing the Philadelphia Incident Management Task Force, composed of PennDOT, FHWA, Philadelphia Streets Department, Philadelphia Police Department, Philadelphia Fire Department, Philadelphia Office of Emergency Management, Pennsylvania State Police, Delaware River Port Authority, and other applicable agencies.
2. Assist the Philadelphia Incident Management Task Force to address operational and traffic management issues, including ITS equipment deficiencies, detour routes, traffic management plans, incident management plans, incident management policy and procedures, communications, upgrading of traffic signals, construction coordination, and work zone traffic management.
3. Continue managing the Delaware County Incident Management Task Force. The task force is composed of PennDOT, FHWA, Delaware County Emergency Management Agency, Pennsylvania State Police, local police and fire departments, and other applicable agencies.
4. Assist the Delaware County Incident Management Task Force to address operational and traffic management issues, including ITS equipment deficiencies, detour routes, traffic management plans, incident management plans, incident management policy and procedures, communications, upgrading of traffic signals, construction coordination, and work zone traffic management.
5. Continue to manage the Chester County Incident Management Task Force. The task force is composed of PennDOT, Chester County Department of Emergency Services, Chester County Planning Commission, Pennsylvania State Police, local police and fire departments, and other applicable agencies.
6. Assist the Chester County Incident Management Task Force in conducting incident reviews, developing procedures to implement PennDOT detour routes, and

updating the policy and procedures manual as necessary.

7. Continue managing the Burlington County Incident Management Task Force in cooperation with NJDOT, New Jersey State Police, the New Jersey Turnpike Authority, Burlington County, local police and fire departments, and other applicable agencies.
8. Assist the Burlington County IMTF in providing training, construction coordination, and response area coordination.
9. Continue to manage the Bucks County IMTF, in cooperation with PennDOT, Pennsylvania State Police, Bucks County, local police and fire departments, and other applicable agencies.
10. Assist the Bucks County IMTF in providing training, construction coordination, and response area coordination.
11. Continue to manage the existing Incident Management Task Force established in the I-476/I-76 Crossroads Area, in coordination with PennDOT, Pennsylvania State Police, Montgomery County, local police and fire departments, and other applicable agencies.
12. Assist the I-476 Crossroads Area IMTF in providing training, updating operating guidelines, and construction coordination. Subcommittee meetings may be necessary for coordination with the I-76 Integrated Corridor Management Project.
13. Continue to manage the existing NJ SAFR Incident Management Task Force established in the NJ 42/NJ 55/I-76/I-676/I-295 Corridor in coordination with NJDOT, New Jersey State Police, Camden and Gloucester Counties, local police and fire departments, and other applicable agencies. Outreach to agencies further south of the corridor in Gloucester County as needed.
14. Assist the NJ SAFR IMTF in providing training, construction coordination, and response area coordination. Continue to support expansion of the task force farther south onto and I-295.
15. Manage the existing Mercer County Incident Management Task Force as established in coordination with NJDOT, New Jersey State Police, Mercer County, local police and fire departments, and other applicable agencies.
16. Assist the Mercer County IMTF in providing training, construction coordination, and response area coordination.
17. Participate in New Jersey's Statewide Traffic Incident Management Program and Pennsylvania's PennTime Program
18. Participate in other incident management programs initiated by state agencies and other agencies. Provide technical support, including mapping services, GIS, and other assistance as requested.
19. Provide topical specialized training session(s) to be determined.

Traffic Signal Optimization Tasks

1. Provide technical and policy assistance to PennDOT as it advances the concept of retiming and optimizing traffic signals on a regional basis for Pennsylvania's DVRPC Counties. Attend relevant meetings as requested.
2. In cooperation with PennDOT and DVRPC's Pennsylvania counties, select which traffic signals will be chosen for retiming.
3. Provide technical and policy assistance to the New Jersey Regional Signal Retiming Initiative Program.

4. In cooperation with NJDOT, and NJ's DVRPC Counties, select which traffic signals on 500 and 600 numbered routes will be chosen for retiming.
5. Participate in all kick-off, planning, and coordination meetings related to the regional program.

Transportation Operations Outreach to Municipalities

1. Meet with identified municipalities to present transportation operations resources in the region, such as RIMIS and IDRUM. Meetings may include county and state representatives.

Technical Assistance Tasks

1. Perform other activities as requested by NJDOT, PennDOT, operating agencies, or counties.

Products:

Incident Management Task Force Products

1. Incident management task force meeting agendas, summaries, and meeting materials.
2. IMTF policy and procedures guidelines, training aids, maps depicting response areas, and other relevant materials identified by IMTF members.

Traffic Signal Optimization Products

1. MOUs, Concept of Operations, memorandums, and final reports, developed for both the Pennsylvania and New Jersey Regional Signal Retiming Initiative Programs.

Transportation Operations Outreach to Municipalities

1. Outreach meeting agendas and highlights.

Technical Assistance Products

1. Meeting agendas, highlights, and memos as requested.

Beneficiaries:

Member governments and agencies, including PennDOT, NJDOT, and County Planning Agencies, and citizens served by a more efficient and reliable transportation network.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$300,000	\$227,910	\$72,090		
2019	\$200,000	\$157,352	\$42,648		
2020	\$200,000				
2021	\$200,000				

PROJECT: 19-41-040 Performance Based Planning and Asset Management

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Brett Fusco

Project Manager: Jackie Davis, John Coscia

Goals:

Performance-based planning applies performance management principles that measure, evaluate, and report on the impacts of resource allocation decisions on transportation performance for the multimodal transportation network. Transportation Asset Management (TAM) procedures and data can be used to maintain and improve the region's transportation network by identifying the region's transportation assets, monitoring conditions, and advancing improvements in a systematic manner that will minimize life cycle costs. Assets include roads, bridges, rails, transit vehicles and stations, signals, and various roadside features.

Description:

More and more demands are straining our transportation network: increased congestion, more truck travel, growing population, aging infrastructure, higher customer expectations, and escalating construction and operating costs. These factors threaten the viability of our transportation network unless the region is able to more effectively and efficiently deploy financial resources to maintain and upgrade our existing assets.

Performance-based planning is a strategic approach that uses transportation network information to guide investment and policy decisions to meet desired performance objectives. A performance-based process includes coordination and collaboration with external partners along with transportation network data collection, management, and analysis. Performance-based plans identify strategic objectives, set targets, make performance-based planning and programming recommendations, undertake monitoring and adjustment, and report and communicate outcomes. Performance-based planning was one of the most transformative elements of the MAP-21 federal transportation legislation, which was continued and reinforced in the FAST Act. The initiative is a strategic approach that uses real data to measure how our systems and infrastructure are performing to make investment decisions that help organizations reach a set of predetermined targets that guide how their systems and infrastructure should operate. U.S. DOT is now implementing new regulations related to performance measures through the Federal Rulemaking process. Through these regulations, state DOT's, MPO's, and transit operators will all be held to some level of performance accountability.

Through the use of transportation asset management systems (TAM) and engineering and economic analysis tools, the region, in concert with the infrastructure owners and operators, can more comprehensively view the big picture

and evaluate system data to guide performance-based decision making on how limited financial resources can best be deployed in the long-range plan (LRP) and the Transportation Improvement Program (TIP). Asset management plans should guide a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state-of-good repair over the lifecycle of the assets at minimum practicable costs; as well as track progress of selected projects toward meeting performance goals. By effectively refocusing business and engineering practices on life-cycle costs and benefits, better decision-making on resource allocation and utilization will result.

DVRPC has been working closely with NJDOT, PennDOT, SEPTA, NJ TRANSIT, and DRPA/PATCO to establish strategic objectives for managing and improving their assets and identifying specific performance measures needed to meet those objectives. DVRPC has also addressed project prioritization in its long-range plan development, in its Congestion Management Process (CMP), and project benefit evaluation criteria for the TIP. DVRPC will continue to provide input and guidance to our partners as they develop and expand on performance-based planning and transportation asset management processes and utilize them to identify cost-effective improvements to maintain and enhance the region's transportation network. Our partners hope to extend these systems to cover all owners and operators in the region, including turnpikes and authorities, as well as counties and municipalities. It is essential that the asset owners and operators establish an internal asset management agenda and a willingness to share with DVRPC their data on asset age, design, condition, and improvement costs by treatment type. The parties recognized that data does not currently exist for all asset categories or that it may exist in formats that are not readily usable by an asset management system. For TAM to be used as a decision-support tool, it is critical to know what assets are in place, their current condition, their expected performance over time, and how the data can be linked to engineering and economic performance measures.

A key reason to develop performance-based plans and TAMs is to better inform the capital programming process, whether short-term (TIP) or long-term (LRP). Both DOTs have established mechanisms to advance this linkage. In New Jersey, the Capital Investment Strategy is the mechanism that NJDOT uses to link asset management to the capital programming process. In Pennsylvania, the PennDOT Connects initiative is a key mechanism that links asset management to the capital programming process. In addition, the Pennsylvania Local Asset Data Collection effort, whereby MPOs will assist PennDOT in establishing an inventory of locally-owned (initially bridges and roadways) assets. This project contains funds to assist in the development of this local transportation asset inventory.

Staff will work with the DOTs, transit operators, and authorities as they use performance-based planning and programming to advance their TAM plans and systems. DVRPC will be involved in the development of these processes, working cooperatively with stakeholders to obtain agreement on data structures, performance measures, strategic funding allocation methods, local system data collection, and data sharing and reporting procedures. Staff will coordinate TAM

efforts with work being done under the CMP.

Tasks:

In a cooperative effort with the owners/operators of the various transportation assets, in particular NJDOT, PennDOT, member counties, SEPTA, NJ TRANSIT, and DRPA/PATCO (and possibly the turnpikes):

1. Outreach and coordination with planning partners to identify transportation asset categories, strategic objectives, and measurable performance and/or service levels to meet those objectives.
2. Participate in the development and use of the various partner performance based plans and asset management systems to track information on asset inventory, condition, needs, and performance for various asset categories as required to comply with the Performance Based Planning initiatives identified in MAP-21 and reinforced in the FAST Act. This will include working with state DOTs to develop a Transportation Asset Management Plan (TAMP).
3. Participate in NJDOT Problem Intake Process meetings and tasks.
4. DVRPC will also coordinate with PennDOT, the counties, and cities on the collection and validation of data on the local transportation asset inventory: locally owned public roads and bridges (8- to 20-foot spans), including georeferencing data.
5. Assist asset owners to utilize their performance-based plans and asset management systems to:
 - a. Identify typical costs for maintaining and preserving existing assets;
 - b. Identify stakeholder and public expectations and desires;
 - c. Define those asset condition values that would trigger when to make a particular investment (such as preservation, rehabilitation, reconstruction, replacement, or capacity enhancement);
 - d. Analyze asset data to determine when to implement the most cost-effective action for a specific asset;
 - e. Coordinate with the CMP, including sharing data and methods; and
 - f. Utilize the asset system processes and data to develop draft TIP and Plan updates.
6. Assist TAM owners in the development and production of system performance reports.
7. Track how technology and process innovations are changing the nature of asset management and transportation infrastructure design, project delivery, lifespans, and maintenance needs.
8. Work with planning partners to develop FHWA performance measure targets, analyzing current conditions and project likely future conditions, monitor and report on performance over time.

Products:

1. New or updated memorandum(s) of understanding with planning partners.
2. Technical Memorandum(s) detailing FHWA performance measures and targets.

Beneficiaries:

Member counties, state DOTs, and transit operators.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$220,000	\$167,134	\$52,866		
2019	\$325,000	\$157,352	\$42,648	\$25,000	\$100,000
2020	\$325,000				
2021	\$325,000				

*PennDOT FTA Funds

PROJECT: 19-41-050 Competitive Program and Project Management

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: John Coscia

Project Manager: Daniel Snyder, Joseph Banks, Katrina Lawrence, Ryan Gallagher

Goals:

To ensure the timely selection and delivery of traditional and non-traditional local projects in an effort to enhance the transportation system within our region.

Description:

Funding from a Transportation Improvement Program line item enables DVRPC staff to assist PennDOT with the implementation of traditional and non-traditional projects by serving as adjunct project and program managers. This assistance will generally involve facilitation and coordination among the project sponsor and their team, local governments, the public, the PennDOT district office, PennDOT's central office staff, and the FHWA in order to develop a project to the point of construction.

The current federal authorizing legislation for highways and transit includes funding for bicycle and pedestrian transportation projects such as multi-use trails, streetscapes, bike lanes and historic transportation structure restorations, as well as projects that contribute to the attainment of the Clean Air Act by reducing emissions from highway sources. The three current categories of federal funding for these non-traditional transportation projects are: Transportation Alternatives, Congestion Mitigation and Air Quality, and the Surface Transportation Program.

TIP funds are also provided to the sub-regions through the Local Concept Development and Highway Safety Improvement Programs in New Jersey. The goal of the Local Concept Development program is to complete a study that identifies potential alternatives, identifies any environmental issues, and completes a conceptual design. This will ensure that projects that move into Preliminary Engineering are ready to move forward in a timely manner and are eligible for inclusion in the State Transportation Improvement Program (STIP). As part of this work, staff will also continue to assist counties and municipalities with Federal Aid Highway Program requirement compliance.

For more information, see the following website:

<http://www.dvrpc.org/ProjectImplementation/>

Tasks:

1. For each program, as appropriate, establish a Steering Committee and develop a process for project application and selection.

2. Develop project application and guidance materials in coordination with the DOTs. Establish evaluation criteria and process. Solicit, screen, and evaluate candidate projects.
3. Conduct public information sessions, respond to questions, and provide assistance to applicants, as appropriate.
4. Recommend selected projects to the DVRPC Board.
5. Prepare requests for proposals, solicit proposals, and in concert with the appropriate county, evaluate proposals received.
6. Prepare consultant selection documentation and files, when required.
7. Prepare consultant agreements, establish accounting procedures, arrange methods of progress, and expenditure reporting, when required.
8. Coordinate activities leading to the implementation of the project within its planned time frame, maintain costs within the budget, and ensure that applicable federal and state standards are observed.
9. Submit the consultant's final documents to the DOTs for approval. DVRPC, in cooperation with the DOTs, will prepare and submit when required, the appropriate documents for federal approval on each project phase.
10. Work with the DOTs to update schedules, costs, and statuses of each project in the respective DOT system, as needed.
11. Prepare status reports that will be posted on the DVRPC website.

Products:

1. Program Guidance/Workshops.
2. Recommended list of projects for funding.
3. Project Agreements.
4. Progress Reports.
5. Project Management Database.
6. Completed Construction Projects.

Beneficiaries:

State DOTs, member governments, transit operators, municipalities, non-profit groups, etc.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$950,000	\$50,000			\$900,000
2019	\$990,000	\$50,000			\$940,000
2020	\$1,030,000	\$50,000			\$980,000
2021	\$1,070,000	\$50,000			\$1,020,000

*PA TIP - MPMS #66460 - \$552,000 STU/\$138,000 State 581; MPMS #66461 - \$120,000 CMAQ/\$30,000 State 581
 NJ TIP - DB #X30A - \$100,000 STBGP-STU

PROJECT: 19-51-010 Travel and Land Use Modeling

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Matthew Gates

Project Manager: Fang Yuan

Goals:

Support the economic vitality of the region, increase safety for all users, improve accessibility for people and freight, protect the environment, enhance connectivity between modes, and promote the efficient management and operation of the existing transportation system through the development and use of transportation, air quality, economic development and land use models.

Description:

The Travel Model work program area develops, enhances, and maintains DVRPC's Land Use, Travel Demand, Economic Development, and Air Quality Models in support of regional planning activities. Short and long-range regional, corridor, and facility planning studies require accurate socioeconomic, land use, and travel data. The models that produce these forecasts need to be calibrated and validated with current data. Validation and refinement of DVRPC's land use, travel simulation, and mobile source emissions models are needed on a continuing basis to maintain the accuracy and credibility of forecasts and to respond to new mandates and guidance from the federal government, state agencies, and member governments.

Major activities include collecting travel data and statistics, preparing highway and transit networks, validating travel simulation models, implementing new forecasting procedures and methods, applying the models to produce forecasts for various planning projects, and serving as a repository for socio-economic, travel, and air quality related data. Major model outputs include highway and transit facility volumes, regional and corridor travel patterns, estimates of vehicle-miles of travel by vehicle type and functional class, and transit ridership statistics. Current and projected land use patterns and highway and transit network model inputs are updated as required and the models are applied on an ongoing basis in support of regional and corridor planning studies, facility design data requests, transportation air quality conformity demonstrations, land use impact studies, highway and transit traffic studies, bicycle and pedestrian facility planning, and other planning activities.

DVRPC undertakes a continuous program of travel model maintenance, development, and enhancement. Socio-economic, land use, travel, and transportation-related data are collected, analyzed, and incorporated into DVRPC's models on a regular basis. These data include travel trends, traffic volumes, transit ridership, travel times, fares, operating costs, tolls, parking charges, freight movements, changes in transit service patterns and schedules and changes to highway facilities or operations due to construction or reconstruction. New modeling

procedures and methods due to changes in the state-of-the practice, software updates, or new guidance from FHWA, FTA, EPA, or others are evaluated and implemented.

Some of these activities may require DVRPC to purchase equipment or services, including software maintenance for PTV, DaySim, and TREDIS software and NETS employment and CoStar real estate databases.

Tasks:

1. Collect data on traffic volumes including autos, trucks, bikes, pedestrians, and transit riders by direction and time of day.
2. Collect, tabulate, and analyze travel time data for selected corridors from Traffic.com, INRIX, HERE, and other sources.
3. Collect other transportation data, including vehicle-miles of travel, journey-to-work, parking shed, external travel, tolls and fares, and trip length frequency.
4. Update highway and transit networks for base and future years, to reflect federal functional class changes, and TIP and Plan project changes; updated tolls, fares, and parking charges.
5. Collect data on employment and land use changes.
6. Revise zonal demographic and employment data and forecasts, including extended model area, as needed.
7. Update vehicle registration, age distributions, fuel, I/M programs, and other inputs for air quality post-processor and MOVES model, as needed.
8. Prepare air quality conformity demonstrations and SIP revisions as needed using the MOVES2014b air quality model.
9. Analyze bike, pedestrian, transit, and highway projects, as required.
10. Prepare estimates of truck and bus travel, as needed.
11. Prepare growth factors as required to support regional planning and engineering efforts.
12. Prepare trip tables, select-link analysis, and other travel model tabulations, as required.
13. Respond to other member governments and planning partners requests for socio-economic, travel, and transportation system data and statistics.
14. Update transportation-related economic impact data and parameters for TREDIS and other economic impact tools, as needed.
15. Migrate TIM3 base year from 2010 to 2015, revise population synthesizer, microzone and zonal data, and transportation networks.
16. Update TIM3 airport, sports complex, and freight models.
17. Prepare TIM3 validation for 2015 base year.
18. Update TIM3 model documentation.

Products:

1. Summaries of screenline traffic volumes, VMT, and transit ridership.
2. Summaries of corridor travel times.
3. Base and future-year highway and transit networks.
4. Summaries of the results of air quality conformity demonstrations.

- 5. Travel patterns, volumes, statistics, etc. for data request and to support member governments and other DVRPC planning efforts.
- 6. Average annual growth factors by County and Functional class.
- 7. Growth rates and other model data to support planning efforts as required.
- 8. Up-to-data travel model documentation.

Beneficiaries:

State DOTs, transit operators, member counties and cities, and local governments.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$490,000	\$364,656	\$115,344	\$10,000	
2019	\$490,000	\$385,512	\$104,488		
2020	\$490,000				
2021	\$490,000				

PROJECT: 19-52-010 Regional Transit Planning Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Betsy Mastaglio

Project Manager: Amy Bernknopf, Cassidy Boulan, Gregory Krykewycz, Logan Axelson

Goals:

Perform transit planning work on behalf of DVRPC's member governments that reflects and promulgates industry best practices. Support the integrated consideration of transit access and mobility with smart land use planning. Leverage the technical capabilities of DVRPC to develop and share planning tools that make good-practice thinking and analysis more accessible to local partners and the public.

Description:

The Regional Transit Planning Program funds a coordinated program of transit planning projects requested annually by DVRPC's member governments, including evaluations of proposed services or facilities, corridor level transit analysis, evaluations of enhancements to transit access, studies to improve bicycle and pedestrian connectivity with transit, and examinations of the relationship between land use and transit for specific sites or corridors. To the degree appropriate for a given task or project, work will be approached in an integrated way, drawing on staff expertise across DVRPC offices or partner agencies to best meet the needs of the planning partner. Work tasks may range from data/quantitative analysis to concept-level facility and service design and visualization. Some of these activities may also require DVRPC to purchase equipment and/or services to meet program goals.

One element that is central to this program is the development of new data-driven tools to inform investment decisions and local decisionmaking by making technical concepts more accessible to nontechnical audiences. Prior examples of this type of work include: the Transit Signal Priority (TSP) Favorability Score, Community Investment Index, Transit Score, and RideScore. Each of these efforts has expanded our regional toolkit to assist planning partners and members of the public in understanding and prioritizing investments.

This program also supports data collection, processing, and sharing activities wherever possible: passenger intercept, parking shed, and station-area observations are essential for the analysis of transit in the region. This data collection and analysis may include transit stations and their surrounding land use, ridership, parking, and related data. Surveys conducted in coordination with DVRPC's Office of Travel Monitoring, Office of Modeling and Analysis, and our planning partners may support specific planning studies as well as transportation modeling efforts and the evaluation of transit alternatives in the region.

Federal and state guidance puts an emphasis on the regional coordination of

investments made to improve transportation access by disadvantaged populations. This may include projects formerly funded under the Federal Transit Administration (FTA)'s Job Access and Reverse Commute (JARC) program, which may now be funded under the Section 5307 Urbanized Area Formula Program, and the Enhanced Mobility for Seniors and Individuals with Disabilities (Section 5310) program. The Regional Transit Planning Program supports DVRPC participation in project development and prioritization for Coordinated Human Services Transportation Planning (CHSTP) programs in Pennsylvania and New Jersey, as well as regional analysis and Coordinated Plan updates, including the ongoing Equity Through Access (ETA) program.

Tasks:

1. Provide ongoing staff support for the SEPTA Bus Stop Design Guidelines update as necessary to supplement remaining FY2018 project funding under project 18-52-050.
2. Provide ongoing staff support for the Regional Transit Priority Setting project's Fiscal Year 2019 tasks in New Jersey counties (Pennsylvania work funded under Project 19-52-090, Page 215).
3. Provide technical and in-person staff support for ongoing NJ Transit Survey work.
4. In collaboration with the Office of Smart Growth and DVRPC's Environmental Justice Program, continue work related to Equity Through Access (ETA), DVRPC's Coordinated Human Services Transportation Plan (CHSTP). Work tasks may include content updates for the ETA web page and communication or coordination support for related funding programs.
5. Provide ongoing DVRPC participation in and project support for City of Philadelphia-SEPTA Transit First efforts, including the Transit First Technical Committee, Transit First Project Implementation Committee, and Transit First Connect Committee.
6. Provide Subject Matter Expert (SME) review for potential transit facilities and connections for PennDOT projects through the PennDOT Connects program.
7. Oversee the Regional Transit Advisory Committee (RTAC) as a subcommittee of the Regional Technical Committee (RTC), comprised of regional transit operators, FTA, and county representatives (with feedback from Transportation Management Associations (TMAs) and representatives of the DVRPC Public Participation Task Force as appropriate) to meet as needed and to develop and prioritize additional work tasks to be conducted under this program, where capacity permits. Projects may be jointly funded and will be conducted collaboratively with the Bicycle and Pedestrian Planning Program (Project 19-52-020, Page 127) or Southeastern Pennsylvania Transit Planning and Technical Assistance Program (Project 19-63-008, Page 309).
8. Review, assess, generate, and apply innovative or state-of-the-art planning practices. Develop new means of analyzing data to meet the changing requirements of integrated transit, bicycle/pedestrian, and land use planning. Ensure that appropriate technical resources (such as new software) are available for staff use as new best practices develop.
9. Work with state and regional planning partners (PennDOT, SEPTA, and NJ

TRANSIT) to participate in regional CHSTP project development, prioritization, and selection rounds as appropriate.

Products:

1. Member government and planning partner outreach and coordination in identifying, scoping, and conducting new studies in support of partner goals.
2. Coordination with planning partners to provide specific expertise in support of planning efforts, including Alternatives Analyses, and other evaluation or project support.
3. Planning/policy documents, technical reports, white papers, and/or memorandums with findings and recommendations.
4. Data from survey and other data collection efforts in support of agency projects.
5. As-needed meetings and communications with the RTAC to develop work tasks and update timetables and statuses.
6. As-needed meetings and communications with member governments to coordinate transit projects and initiatives throughout the region.

Beneficiaries:

Member governments, SEPTA, PATCO, NJ Transit, and the transit-riding public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$301,250		\$301,250		
2019	\$300,000		\$280,000	\$20,000	
2020	\$300,000				
2021	\$300,000				

PROJECT: 19-52-020 Bicycle and Pedestrian Planning Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Betsy Mastaglio

Project Manager: Cassidy Boulan, Sarah Moran

Goals:

Promote transportation facilities and land use decisions that make active modes of transportation more safe, convenient, affordable, and attractive options throughout the region.

Description:

DVRPC seeks to create an environment where people of all ages choose to bike and walk as part of an active, healthy, and environmentally-friendly lifestyle. The main priorities of this program are to work with municipalities, counties, and our planning partners to develop and maintain safe bicycle and pedestrian facilities that enhance local mobility. Work will be integrated across DVRPC offices or partner agencies to best meet the needs of the planning partner.

Projects will emphasize stakeholder outreach, the development and sharing of new data resources using bicycle and pedestrian counters, and the conduct of analysis to develop appropriate, safe, and context-sensitive bicycle and pedestrian facilities and complete streets in communities throughout the DVRPC region. This program also supports DVRPC's participation in state, regional, and local bicycle and pedestrian advisory or policy committees, helping to shape and promote constructive bicycle and pedestrian direction and policy. Some of these activities may also require DVRPC to purchase equipment or services to meet program goals.

As an area of focus, this work includes an emphasis on Active Transportation and Active Places—the idea that those places where walking and biking (Active Transportation) are prevalent are good for the vibrancy and quality of life of a community (Active Places), and vice versa. With this integrated approach, communities gain health benefits, increased mobility, economic stability, and an overall sense of vibrancy.

Tasks:

1. Provide ongoing support for the Bicycle LTS and Connectivity Analysis project, including dissemination of data, interface with related projects and programs, continued work to extend the analysis beyond the PA suburban counties to other geographies, and ongoing technical work as necessary.
2. Conduct the Bicycle and Pedestrian Facilities on Arterial Roads through Expressway Interchanges project. This project will identify best practices for crossing treatments and prepare guidance for facilities in the region that can then be supported by the PA resurfacing program or by other agencies and respective programs to design and implement appropriate facilities along heavily traveled

corridors.

3. Support the Office of Freight and Aviation planning's Kennett Area Freight project (Project 19-34-020, Page 81) by identifying safe and practical bicycle and pedestrian connectivity around a project area with high freight activity.
4. Provide support as appropriate for the Traffic Calming Toolkit and Decision Making Framework (Project 19-52-080, Page 213).
5. Support adaptation of the Regional Sidewalk Inventory's Pedestrian Facilities and Planning Portal as necessary to include maintenance of New Jersey inventory and planning information.
6. Participate in state pedestrian and bicycle advisory boards: the NJ Bicycle and Pedestrian Advisory Council (NJ BPAC) in New Jersey and Pennsylvania Pedalcycle and Pedestrian Advisory Committee (PPAC) in Pennsylvania; continue to chair and coordinate NJ BPAC Design/Infrastructure Subcommittee.
7. Support, through outreach and project recommendations, implementation of various best practice efforts that benefit, and benefit from, the inclusion of bicyclists and pedestrians, including Complete Streets, Vision Zero, green stormwater infrastructure, and placemaking efforts.
8. Work with the Office of Travel Monitoring to continue to gather region-wide bicycle and pedestrian counts.
9. Together with the Office of Travel Monitoring, perform roughly 1/3 of the cyclical bicycle counts of the regional cycle bicycle count program (which includes approximately 150 locations within the region) including any technical deliverables as needed.
10. Provide technical assistance to and coordination among member governments and broader regional and state committees. This includes participation in state, regional, and local task forces and relevant project technical advisory committees.
11. Review bicycle and pedestrian project funding applications as appropriate for programs such as TAP, SRTS, and Pennsylvania's Multimodal Fund.
12. Provide Subject Matter Expert (SME) comment on potential pedestrian and bicycle facilities for PennDOT projects through the PennDOT Connects program.
13. Projects may be jointly funded, and conducted collaboratively, with the Regional Transit Planning Program.

Products:

1. Complete planning/policy documents, technical reports, white papers, and/or memorandums with findings and recommendations, as appropriate.
2. Survey and data collection in support of agency projects.
3. Other technical work for regional stakeholders as required.

Beneficiaries:

State DOTs, transit operators, counties, municipalities, pedestrians, bicyclists, the commuting public, and all users of roadways.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$330,000	\$250,701	\$79,299		
2019	\$330,000	\$259,631	\$70,369		
2020	\$330,000				
2021	\$330,000				

PROJECT: 19-52-030 Corridor Planning Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: David Anderson

Project Manager: Al Beatty, Karen Whitaker, Meijun Liu, Sarah Moran

Goals:

The purpose of this Program is to support DVRPC's long-range plan, Connections 2045, the DOTs' land use and transportation linkage initiatives, and member government planning and implementation activities; explore innovative approaches to help implement the long-range land use and transportation plan; and help communities plan for a sustainable future. This program seeks to alleviate congestion and improve the efficiency and safety of the existing transportation network, and inform local governments, affected stakeholders, and the public about current best practices to achieve effective corridor plans that link land use and transportation goals and policies.

Description:

This program is the nexus between the long-range plan and project development. Corridor Planning takes needs identified in the long-range plan and congestion management process (CMP), refines the understanding of those needs, and evaluates potential strategies to address them. The process is designed to better inform regional and local transportation and land use decision-making.

This program is multifaceted. It will examine and analyze specific corridors, as well as explore innovative approaches that seek transportation and land use planning integration in order to better manage growth in the region. Moreover, the program will strive to improve access to and efficiency of the region's transportation system, improve mobility and safety, and mitigate congestion. Components of Corridor Planning will be conducted with the collaboration of federal, state, and local planners, officials, the development community, and other stakeholders, as deemed appropriate. The Corridor Planning program includes providing both technical and policy guidance on best practices addressing mobility, access, growth, development, zoning, and community design. Corridors to be evaluated are based on long range plan and CMP determinations, as well as county and state recommendations.

In FY 2019, research and analysis on best management practices linking transportation and land use (including access management and other topics, as appropriate) will continue, along with additional implementation plans or case studies, as directed by the pertinent study steering committee. We will continue to collaborate with NJDOT and PennDOT in applying FAST Act planning factors to form the basis of the planning process and products. In keeping with PennDOT guidelines, efforts under this program will identify livability and sustainability strategies to tie the quality and location of transportation facilities to broader

opportunities, such as access to good jobs, affordable housing, quality schools, safe streets, economic development, social equity, and environmental conservation. DVRPC will continue to work with PennDOT and local governments to implement access control measures as an alternative to capacity improvements. Findings from the research will be incorporated into the corridor planning work and other DVRPC plans and projects.

In addition, this program will support participation in the PennDOT Connects process to improve the efficiency of project implementation and make the best use of available transportation funds through Smart Transportation philosophies of project development and programming. DVRPC will participate with PennDOT in coordination and research required for PennDOT Connects initiatives.

In Pennsylvania, several corridor studies will document operational and management strategies to improve the performance of existing transportation facilities through reducing congestion and improving mobility and safety.

- This program will support a continuation of the Vine Street Local Lane Reconfiguration project in the City of Philadelphia (17-52-100), with detailed analysis of improvement scenarios.
- Phase 2 of the Pottstown Area Transportation study will be concluded in FY 2019. This project will be funded jointly through the Corridor Planning program area as well as the Pottstown Area Regional Plan Development program (Project 19-33-060, Page 159).
- Phase 2 of the Local Modeling of Proposed New PA Turnpike Interchanges project will be jointly funded through the Corridor Planning program area as well as (Project 19-52-040, Page 203)

In New Jersey, the Burlington County Highway Master Plan Phase 3 effort will be concluded in FY 2019.

Tasks:

1. Form a corridor/area planning steering committee comprised of representatives from federal, state, county, and local government and other stakeholders as appropriate.
2. In coordination with the steering committee, identify corridor/area issues that must be addressed, as well as other guidelines for the study. This task may involve reviewing previous studies, conducting field visits, and data collection to better document the issues.
3. Develop and conduct public outreach and involvement program.
4. Prepare a complete description of corridor deficiencies within the study areas. Assess the need for zoning ordinance amendments to achieve the vision for the corridor or area.
5. Perform activities associated with the local transportation asset inventory, as necessary.
6. Identify low-cost near-term operational improvements at intersections, interchanges, and identified bottlenecks in addition to long term improvements. Corridor improvement strategies will consider existing land use and transportation

- plans, analysis of deficiencies from Task 4, and the steering committee and public participation processes. Evaluate these strategies to determine their effectiveness.
7. With the New Jersey and Pennsylvania efforts, conduct detailed analysis of current conditions and recommended future improvements.
 8. Prepare an implementation strategy for the final recommendations and an action plan to advance them.
 9. Document results of the study in a technical report, including existing conditions and proposed improvements.
 10. Coordinate long-range plan elements with affected state, county, and local governments, operating agencies and other groups.

Additionally, in furtherance of PennDOT Connects, DVRPC will use PennDOT Linking Planning and NEPA Project Development Screening Forms to initiate all new projects being considered for the LRTP updates and inclusion in the 2019 TIP. DVRPC will also use recommendations, and development of case studies or implementation plans, to prepare and/or participate in project needs studies for transportation problems, at selected locations. DVRPC will also coordinate with PennDOT and the environmental resource agencies to gain acceptance for the completion of needs studies as part of the planning process.

Efforts under this program may require the purchase of hardware, software, equipment, and/or services.

Products:

1. Corridor or area study reports that identify deficiencies and an implementation strategy to address them. The steering committee and public participation processes will also be documented.
2. Coordinate the corridor plan and other long-range plan elements with affected state departments of transportation, local governments, operating agencies, and other groups.
3. Handouts and/or PowerPoint presentations for steering committees and for public presentations.
4. Findings and lessons learned from the identified studies will be incorporated into DVRPC's continuing corridor planning work.

Beneficiaries:

Member governments, DOTs, operating agencies, municipal governments, study area residents, businesses, and workers.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$760,000	\$562,178	\$177,822	\$20,000	
2019	\$740,000	\$566,467	\$153,533	\$20,000	
2020	\$740,000				
2021	\$740,000				

PROJECT: 19-53-010 Travel Monitoring

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Charles Henry

Goals:

Improve efficiency of the region's transportation system by collecting and analyzing traffic data to determine the utilization of the region's transportation network.

Description:

This continuing project collects and processes travel data, the primary form being traffic counts, including hourly and 48-hour traffic volumes, for selected locations on the regional highway network. Data collected will provide input to VMT forecasting, the Traffic Monitoring System (TMS), the Congestion Management System (CMS), travel simulation models, individual project level analysis, traffic monitoring, and trend analysis. This information is vital to all project studies that address highway deficiencies and proposed solutions. In addition, DVRPC facilitates the periodic review and revision of the highway functional classification system (see 19-53-020/025). Traffic count information from the database may be queried at <http://www.dvrpc.org/traffic>.

To facilitate uninterrupted data collection, it will be necessary to procure new counting equipment, supplies, repairs, or services as needed.

Tasks:

1. Coordinate with PennDOT and member governments to review traffic count locations.
2. Establish weekly schedules, staff assignments, and control procedures.
3. Collect traffic data at approximately 3,000 selected locations.
4. Upload data into the DVRPC Traffic Count system, process counts, edit for quality control, and develop annual average daily traffic volumes.
5. Maintain and further automate traffic data systems and procedures to enhance productivity, including data obtained by third parties via remote sensors, etc.
6. Submit counts collected during the year electronically by specific deadlines established by PennDOT and member governments.
7. Input traffic count data files into the comprehensive regional GIS-T database for sharing over the Internet.
8. Maintain an inventory of data collection and safety equipment, including purchasing new equipment with enhanced technology and capability, purchasing needed supplies such as road tube, and procuring necessary repairs if existing equipment gets damaged.
9. Collect travel data from non-highway modes, including pedestrian, bicycle and public transportation travel system characteristics and user traits.
10. DVRPC will also coordinate with PennDOT, the counties, and cities on the collection and validation of data on the local transportation asset inventory: locally

owned public roads and bridges (eight to 20-foot spans), including georeferencing data.

Products:

1. Computer database file containing new and historic traffic counts.
2. Transmittals of traffic data to DOTs, member governments and interested parties.

Beneficiaries:

Member governments, operating agencies, private sector, and agency staff.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$765,000	\$645,000			\$120,000
2019	\$765,000	\$645,000			\$120,000
2020	\$765,000				
2021	\$765,000				

*PA TIP - MPMS #104639 - \$120,000 STU/Toll Credit Match



CHAPTER 2B

→ Project Descriptions

JANUARY 2018

PROJECT: 18-33-140 William Penn - DRWI Data/GIS Modeling Work Group

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christina Arlt

Project Manager: Christopher Pollard, Kimberly Korejko, Patricia Elkis

Goals:

DVRPC staff will convene a Data/GIS/Modeling Group to prioritize data needs, share knowledge, expand capacity and collaborate to provide technical mapping, modeling, and spatial analyst assistance to support the Delaware River Watershed Initiative (DRWI). By December 2019, GIS professionals across the Delaware River Watershed will be more aware of each other's work and will produce up to four webinars to teach non-profits about how to use online mapping programs and where to find data. This work will be funded by a grant from the William Penn Foundation in the amount of \$275,000 over a 24-month period (January 2018-December 2019).

Description:

In November 2017, DVRPC applied for and was awarded a two-year \$275,000 grant from the William Penn Foundation to assist with the creation of a Data/GIS/Modeling Work Group to support the Delaware River Watershed Initiative (DRWI). Of the \$275,000, \$90,000 will be re-granted to other organizations in the form of stipends for Work Group participation, map creation, and webinar production, and \$185,000 will support DVRPC's administration of the grant program, management of awarded stipends, and convening of the Work Group. "Manage stormwater and improve water quality" is one of the goals under the "Sustain the Environment" principle, while "Encourage regional cooperation and multimunicipal planning" is a goal under the "Develop Livable Communities" principle in the Connections 2045: Plan for Greater Philadelphia.

Tasks:

1. Convene and facilitate DRWI Data/GIS/Modeling Work Group.
2. Improve awareness of, understanding of, and ability to use WikiWatershed via webinar.
3. Improve awareness of, understanding of, and ability to use Stream Reach Assessment Tool (SRAT) via webinar.
4. Produce up to two additional webinars on topics of DRWI Data/GIS/Modeling Work Group's choosing.
5. Review GIS data availability and prioritize recommendations for investing in the provision of additional basin data sets and/or modeling analysis.
6. Prioritize recommendations for future cohort activities and funding.
7. Manage awarded stipends.
8. Submit narrative reports to update the Foundation on progress toward achieving the grant milestones.

Products:

1. Up to six meetings of DRWI Data/GIS/Modeling Work Group (some virtual)
- 2 . Up to four educational webinars
3. Maps for non-profits doing work in the Delaware River Watershed
4. Prioritized recommendations for additional Delaware River watershed data sets and/or modeling analysis, as well as future Work Group activity
5. Interim report and final report to William Penn Foundation.

Beneficiaries:

Counties, municipalities, GIS professionals, data professionals, modeling professionals, non-profit organizations, land trusts, water users in the Delaware River watershed.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$200,000			\$27,550	\$172,450
2019					
2020					
2021					

*Funds Provided by the William Penn Foundation

PROJECT: 18-41-070 I-95 Planning Assistance

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Elizabeth Schoonmaker, Jesse Buerk

Goals:

The purpose of this program is to support the implementation of I-95 Reconstruction Projects by serving as a planning and coordination resource for PennDOT.

Description:

This project provides for technical and planning assistance to PennDOT District 6 for support in implementation of the I-95 Reconstruction Projects. DVRPC will be “on call” for quick-turnaround analysis or data collection tasks in support of specific and timely I-95 project planning needs. Tasks will include data collection, meeting and stakeholder coordination, and general research as needed. Subject areas include congestion mitigation strategies, as well as transit, Transportation Management Association, environmental, freight, historic, and bicycle/pedestrian issues. District 6 has limited planning staff, while DVRPC planning staff has multiple areas of expertise which are beneficial for this work and have been utilized in the past.

Tasks:

1. Facilitate discussion and prioritization with SEPTA on capital improvements to mitigate congestion on I-95 during and beyond the reconstruction project timeline; provide sketch-level benefit/cost analysis of proposed improvements.
2. Coordinate implementation of recommended strategies developed from the DVRPC Alternatives Development for Roosevelt Boulevard Transit Enhancements study.
3. Coordinate implementation of recommended strategies developed from the DVRPC Improving Non-motorized Access to Regional Rail Stations on the I-95 Corridor study.
4. Coordinate implementation of recommended strategies developed from the Bucks County Planning Commission on bicycle and pedestrian access to stations in Lower Bucks County on SEPTA’s West Trenton Line.
5. Facilitate coordination between SEPTA, Amtrak, PennDOT, and other agencies.
6. Coordinate communications and outreach activities with the TMAs, particularly with TMAs in Center City, and Bucks and Delaware counties.
7. Assist with bicycle and pedestrian planning and coordination efforts in the I-95 corridor.
8. Assist with trail alignment and coordination efforts for trails along the I-95 corridor, especially for portions related to the East Coast Greenway.
9. Assist with environmental mitigation efforts and context sensitive planning related to the I-95 reconstruction projects.
10. Assist with coordination of historical preservation efforts related to the I-95

reconstruction projects.

11. Coordinate with freight industry representatives on construction activities and detour routes.

12. Provide mapping and Geographic Information Systems (GIS) support as requested.

13. Provide support in coordinating and developing legal agreements, as needed.

14. Assist with identifying and cataloging transportation infrastructure projects within the corridor.

Products:

1. Meeting summaries and process memos
2. Prioritized recommendations
3. Benefit-cost and short-term analyses
4. Other documents as requested; may include brochures, tables, charts, and fact sheets
5. Maps and interactive map services

Beneficiaries:

PennDOT, Member Governments, SEPTA, Residents, Businesses, Workers

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$155,000				\$155,000
2019					
2020	\$100,000				
2021	\$100,000				

* PA TIP - MPMS #106708 - \$124,000 STU/\$31,000 State 581

PROJECT: 19-10-020 Miscellaneous Data Requests

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Glenn McNichol, William Stevens

Goals:

Respond to data requests from member governments, operating agencies, public and private organizations, businesses, and individuals.

Description:

Provide data, maps, aerial imagery prints, and publications to government agencies, organizations, private sector businesses, and individuals. Orders are placed with the Resource Center for paper or digital copies, or other staff for particular data requests, in person, by phone, and through the DVRPC website.

Tasks:

1. Provide digital files and printed copies of DVRPC aerial imagery.
2. Provide digital files and printed maps containing GIS data.
3. Provide copies of available DVRPC publications.
4. Provide photocopies of special materials as required.
5. Provide other data, as requested and agreed to.

Products:

1. Prints of DVRPC maps or aerial imagery, as ordered, through the customer service counter.
2. Digital files containing GIS data or aerial imagery, as ordered.
3. Copies of available DVRPC publications, as ordered.
4. Other data, in format ordered.

Beneficiaries:

All client groups.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$10,000				\$10,000
2019	\$10,000				\$10,000
2020	\$10,000				\$10,000
2021	\$10,000				\$10,000

*Private and Public Sector

PROJECT: 19-31-020 Regional Transportation GIS Coordination

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: William Stevens

Project Manager: Christopher Pollard, Sean Lawrence

Goals:

Ensure integrated and coordinated planning and promote information sharing through the continued development and maintenance of regional transportation GIS data.

Description:

The focus of this continuing project will be to integrate transportation data developed by federal, state, and local governments and DVRPC into a regional transportation network that allows for the seamless exchange of data. This project benefits all member governments and agencies by providing support to DVRPC to develop and coordinate transportation data development and data sharing and includes the continued growth of DVRPC's transportation GIS system, including the update and maintenance of it's web mapping capabilities. Efforts are being coordinated with NJDOT, PennDOT, member governments, and operating agencies to maximize the investments made in technology and data.

In addition, this project will support the development of data, tools, and maps to support the "total water levels" approach, riverine flooding models, and the mapping and analysis of select transportation assets carried out under the project "A Resilient Greater Philadelphia" and the Energy and Climate Change Program area.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Coordinate regional database development with project participants, including PennDOT and NJDOT.
2. Provide technical assistance to member governments, as requested, to identify and address IT, GIS, and data issues and opportunities.
3. Facilitate meetings with project participants to discuss transportation-related issues and developments as needed.
4. Acquire additional hardware, software, and training, as appropriate.
5. Ensure that geospatial data developed by NJDOT, PennDOT, and member governments and integrated into DVRPCs regional database can be shared amongst project participants.
6. Maintain a transportation data clearinghouse for project participants.
7. Develop and maintain web mapping applications in support of DVRPCs outreach goals.
8. Provide technical assistance to PennDOT to collect local road and bridge asset data under Local Asset Data Collection project. (Project 19-31-030, Page 147)
9. Provide technical assistance to A Resilient Greater Philadelphia (Project 19-33-

100, Page 171) and Energy and Climate Change Initiatives (Project 19-33-030, Page 65)

Products:

1. Regional transportation-related data available to all member governments in support of their GIS programs.
2. Hardware, software, and training for DVRPC and participating organizations, as necessary.
3. Updated and new web mapping applications.
4. Continued development of efficient data sharing platform.

Beneficiaries:

State DOTs, member governments and operating agencies, and DVRPC.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$400,000				\$400,000
2019	\$400,000				\$400,000
2020	\$400,000				\$400,000
2021	\$400,000				\$400,000

*PA TIP - MPMS #48202 - \$200,000 STU/Toll Credit Match
NJ TIP - DB #X30A - \$200,000 STBGP-STU

**PROJECT: 19-31-030 Local Asset Data Collection - Southeastern
Pennsylvania**

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: William Stevens

Goals:

To improve transportation planning and asset management strategies through the identification and collection of missing critical data on all locally-owned roads and bridges over eight (8) feet in length southeastern Pennsylvania.

Description:

PennDOT initiated a Local Road and Bridge data collection project to collect important data on municipal and county roadways. Working with the state's MPOs and RPOs, PennDOT's goal is to gather comprehensive information on the Commonwealth's extensive network of local roads and bridges missing from the current inventory. The supporting data that is collected will be stored in a database available to PennDOT's planning partners and counties for use in planning, programming, and other business needs.

PennDOT currently does not have complete data on "non-liquid fuel" local roadways and bridges. Non-Liquid Fuel local roads are owned and maintained by municipalities and are not funded by the liquid fuels tax. In past years, data has been collected for Chester and Delaware counties, and portions of Bucks and Montgomery counties. This year, staff will continue the data collection in Bucks and Montgomery, and may begin collecting data in the City of Philadelphia. Using existing data from PennDOT and the counties/City, DVRPC will need to field verify locations of potential public local roads and bridges. The project does not include private roads, or bridges on private roads, such as cemetery drives, private driveways, or roads used on private property such as mobile home, apartment or commercial complexes.

DVRPC staff will perform the data collection according to established methodology developed by PennDOT utilizing tablets and software provided by PennDOT. Prior to any data collection, DVRPC will send a letter to the appropriate city or township official that explains the purpose of the project. DVRPC will continuously monitor progress and perform quality checks on all collected data utilizing PennDOT's web-based mapping application.

Upon completion of data collection in a county, a list of bridges that were found to be 18' or greater in length will be provided to staff from PennDOT District 6 as directed.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Prepare field maps that indicate the locations of potential features to be collected, along with all other necessary documentation.
2. Using a two person team, identify and compile field data for locally-owned roads and bridges according to procedures defined in the Local Roads and Bridges Data Collection Reference Manual prepared by PennDOT.
3. Upload collected data to PennDOT’s database weekly, at a minimum.
4. Perform checks on data collected to ensure accuracy and completeness.

Products:

1. Updated PennDOT non-liquid fuel roads database with required attribution.
2. Updated PennDOT bridge database with required attribution.
3. List of bridges that were found to be greater than 18' in length.

Beneficiaries:

PennDOT, counties in southeastern PA, DVRPC.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$100,000				\$100,000
2019	\$100,000				\$100,000
2020	\$100,000				
2021	\$100,000				

*PA TIP - MPMS #108554- \$100,000 STU/Toll Credit Match

PROJECT: 19-32-010 Commuter Benefit Program: RideECO

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Erin Burke, Stacy Bartels

Goals:

Help ease traffic congestion and improve air quality by encouraging/rewarding use of transit and vanpools through administration and promotion of this employer-offered benefit program.

Description:

RideECO is a commuter benefit program that enables employers to offer employees a cost-effective way to pay for transit expenses, either as a pre-tax payroll deduction (reducing employer and employee taxes), as a benefit (tax free to employees and tax deductible to employers), or as a combination of both.

RideECO provides area employers with an easy way to provide employees with a transit benefit per federal IRS tax code 132(f). Originally instituted under clean air legislation, and previously known by another name (until November 2012), the RideECO program has been administered by DVRPC since its inception in 1991. All regional transit providers recognize the program and accept its vouchers and stored value card, as do most third-party vanpool operators. Note that this program also reaches to south central Pennsylvania, and the SVC can be used nationally.

RideECO also offers a premium service, RideECO Select, which eliminates the distribution function for employers and allows direct mailing of products to employee homes, as well as electronic reloading of cards. Through Select, employees can order vouchers, the RideECO stored value card, SEPTA monthly passes and 10-trip rail tickets, and load PATCO FREEDOM cards. Employees also have online access to their account and can update deduction/benefit information with less administrative burden by the employer. This new option makes the program even easier for employers to offer and keeps RideECO abreast of the private sector competition. Note: RideECO has been working with SEPTA to stay compatible with the Key payment technology as it is being introduced.

Tasks:

Operations:

1. Contract with vendor to produce vouchers and stored value cards and to provide fulfillment services and sales data. Work with this contractor on RideECO Select distribution services.
2. Supervise and manage required vendor services, per contract.

Administration:

1. Coordinate with participating transit operators and internal and external support

services and organizations.

2. Compile quarterly sales and membership progress reports and fulfillment summaries.
3. Develop and manage annual project budgets.
4. Maintain a comprehensive database to track inquiries, program participants, sales, and other activities (measure and monitor progress).
5. Evaluate sales and corporate member data figures vs. projections at the end of the fiscal year.

Marketing:

1. Prepare annual marketing plan and budget. Evaluate progress and adjust if necessary mid-year.
2. Communicate with target audiences to educate and persuade employers to provide this commuter benefit to their employees (over competition). Keep program name visible to maintain brand recognition.
3. Develop and use the most efficient materials and media outlets (noted in annual plan); also see Project 19.32.020, Page 53. Oversee work of design and media vendors.

Public Relations:

1. Work with DVRPC Office of Communication and Engagement staff to develop press releases and seek news coverage as relevant, especially when dealing with new legislation.
2. Maintain and increase presence in social media outlets; use as a way to disseminate program information as well as general transit news, and to track interest and action.

Sales:

1. Provide materials to employees and employers who call the RideECO information line or request information online. Send emails and DM flyers to appropriate target lists. Follow up with those who have received information to ascertain interest and/or problems (phone and/or personal meetings).
2. Meet with interested employers to explain and/or help implement the program, and work with employer-related groups to reach this target specifically (chambers of commerce, HR associations, etc.). Personal follow up on some efforts is needed. Set up meetings as requested or proposed. Increase participation by attending benefits fairs of existing clients.
3. Explore and implement relevant, additional ways to reach employers at their offices (opt-in email blasts, e-newsletter articles, editorial on association websites, etc.)
4. Track effectiveness of various sales and marketing tactics per new companies and/or participants added at current clients.
5. Maintenance of sales at current level.

Products:

1. Annual marketing plan and budget.
2. Annual media plan.
3. Marketing and media materials; email lists/mailings.
4. Website information and updates; social media activity with target audiences.
5. Quarterly and annual sales reports.
6. Updated databases.

Beneficiaries:

Public, commuters, area employers, transit agencies, and member governments.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$500,000				\$500,000
2019	\$450,000				\$450,000
2020	\$450,000				\$450,000
2021	\$450,000				\$450,000

*\$434,000 RideECO Generated Funds, \$16,000 Pa Public Transit Assistance Funds

**PROJECT: 19-32-030 Commuter Services/Mobility Alternatives Program
(Share-a-Ride)**

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Erin Burke, Stacy Bartels

Goals:

To increase awareness of and encourage participation in the Mobility Alternatives Program (MAP) and the Share-A-Ride (SAR) commute match service, in order to help reduce traffic congestion and improve air quality in the region (specifically SE PA), focusing on the heaviest commute times.

Description:

The Mobility Alternatives Program (MAP) is an education effort directed to employers located in southeastern Pennsylvania. DVRPC partners with local TMAs and other organizations as contractors who do outreach to businesses in their specific service area, informing employers of the benefits - to their employees and to the company - of encouraging various alternate commutes; employers are given a menu of options to consider and/or implement. Services are free to interested employers within the 5-county SE PA region. This program was initiated to fill the gap when the federal Employer Trip Reduction Program (ETRP) was rescinded in 1995; as it is largely educational-focused, behavior change and participation levels are challenging to evaluate; contractors are urged to report effort while also maintaining data on activities and mode changes.

Two components of MAP are also available directly to commuters working in this region: 1) Share-A-Ride (SAR) is part of MAP employer services, but individual commuters who work in southeastern Pennsylvania can also access this internet-based service directly. There is no fee for using SAR. 2) the Emergency Ride Home (ERH) program serves as a "safety net" for those commuters working in southeastern Pennsylvania who commit to an alternate commute at least three days a week; ERH can help eliminate one of the main concerns of commuters who currently do not use transit or pooling as a way to work by offering a ride in case of a personal emergency. (Details for all programs related to MAP are on the DVRPC website.)

DVRPC leases the software for SAR, and coordinates and maintains the databases affiliated with SAR and ERH; DVRPC is also responsible for creating a coordinated regional marketing message and effort, and provides materials to be used by TMAs in their outreach efforts.

DVRPC works with the TMAs, PennDOT and the PA TMA Policy Committee in developing specific MAP-related and TMA Assistance grant work programs each fiscal year, along with reviewing progress reports and reporting measurements.

Tasks:

1. Work with PennDOT and the PA TMA Policy Committee in reviewing and approving TMA work programs and efforts; review monthly contractor progress reports. Note: PennDOT Central Office and each corresponding County Planning Commission/Dept. (CPC) receives, reviews and approves monthly invoices.
2. Involve county planning partners in work program development and in setting common measurable goals through the PA TMA Policy Committee.
3. Meet quarterly with contractors and compile quarterly reports on progress, per their submissions.
4. Develop a marketing strategy brief and annual budget.
5. Develop media strategies and schedule, as appropriate and as budget allows.
6. Produce outreach and marketing materials for all contractors to use, as necessary.
7. Maintain websites and databases for use by TMAs and the public.
8. Maintain contract and licenses with software company for SAR; provide training for contractors. NOTE: An update to the SAR software will be implemented in FY18 that will enhance applicant use of the database and provide for easier access to mode change data.
9. Utilize database of SAR applicants to estimate any mode changes, and communicate with applicants as needed.
10. Manage the ERH database and review and reimburse as applicable any submissions for use of the ERH program by registered participants.
11. Coordinate efforts between Contractors and Enterprise Rideshare (vanpool provider) to promote PennDOT's new Vanpool Incentive Program (PVIP) beginning in FY18 (3-year subsidy program for new vanpools) and to establish several new vanpools in this region; monitor progress on this effort. Continue to offer and manage the gas card incentive program for new carpools.
12. Participate in any national or statewide TDM efforts (ex. ACT and MPO TDM Roundtable), as allowable, and hold a place on the PPTA Rideshare Committee.
13. Assist with air quality efforts as requested.

Products:

1. Annual marketing brief and budget.
2. Media plan.
3. Marketing and informational materials, as needed.
4. Databases for SAR and ERH. Communication with applicants, as needed.
5. Training on ridematch software and other TDM options, as needed.
6. Quarterly and annual aggregate progress reports.

Beneficiaries:

Commuters who work in southeastern Pennsylvania, area employers, TMAs, Pennsylvania member governments, and PennDOT.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$251,000				\$251,000
2019	\$251,000				\$251,000
2020	\$251,000				\$251,000
2021	\$251,000				\$251,000

* PA TIP - MPMS #110460 - \$200,800 CMAQ/\$34,200 State 581/\$16,000 RideECO Cash

PROJECT: 19-33-050 Local Technical Assistance Program (LTAP)

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Linda McNeffer, Melissa Andrews, Patricia Elkis

Goals:

DVRPC is the local planning partner for PennDOT's Local Technical Assistance Program (LTAP) in southeastern Pennsylvania. 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.

Description:

The Local Technical Assistance Program (LTAP) is a national program run by the U.S. Department of Transportation that is operated in Pennsylvania by PennDOT. The program offers:

- **Training:** LTAP offers 36 courses about roadway maintenance and safety. For a complete list of classes, visit <https://www.dot7.state.pa.us/LTAP/default.aspx> and click "Course Info" under "LTAP Tools."
- **Road Scholar Program:** If municipal employees take 10 classes within 3 years, they receive "Road Scholar" certification—a valuable professional development credential.
- **Technical Assistance:** LTAP technical experts are available by phone, email, or in-person to help municipalities troubleshoot specific roadway maintenance and safety problems.
- **Newsletters, Technical Sheets, and Resource Library:** Visit <https://www.dot7.state.pa.us/LTAP/default.aspx> and click "Public Resources and Documents" under "LTAP Tools."
- **Coordination with PennDOT;** attend annual LTAP conference.

Each year, nearly 6,000 municipal employees take advantage of LTAP training and assistance in PA. In FY 2017, 809 students were trained in southeastern Pennsylvania.

Tasks:

1. Partner with PennDOT and the Pennsylvania State Association of Township Supervisors (PSATS) to market LTAP classes to municipalities, County Associations, and other similar organizations in the four suburban counties of southeastern Pennsylvania.
2. Find venues for LTAP classes and, when requested, roadshows, webinars, and other educational programs.
3. Work with municipal representatives and PennDOT personnel to identify training needs and opportunities, encourage participation among municipalities that have not participated in the past, and maximize class attendance.

- 4. Submit quarterly and annual reports to PennDOT.
- 5. Attend annual LTAP Planning Partner conference.

Products:

- 1. Coordination of 10-15 LTAP classes in southeast Pennsylvania per year.
- 2. Quarterly and annual reports to PennDOT.

Beneficiaries:

Municipalities in Bucks, Chester, Delaware, and Montgomery Counties.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$30,000				\$30,000
2019	\$30,000				\$30,000
2020	\$30,000				\$30,000
2021	\$30,000				\$30,000

*PA FHWA - PL/SPR/Toll Matched

PROJECT: 19-33-060 Pottstown Area Regional Plan Development

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: David Anderson

Goals:

Assist municipal officials in developing and implementing transportation and/or land use policies and plans that enhance the region and link transportation facilities by supporting the timely implementation of the Pottstown Metropolitan Regional Planning Committee (PMRPC) Transportation Study recommendations and integrating the study with other local planning efforts.

Description:

This work program element is dedicated to continuing efforts that cooperatively support the PMRPC's work on identifying, prioritizing and developing transportation studies and improvement projects in and around the Borough of Pottstown in Chester and Montgomery counties. Each year a study or project is selected for DVRPC to undertake. Previous efforts have included the Swamp Pike corridor, the PA 724 corridor, the development of an information resource guide, transportation infrastructure asset management tools and plans, and multi-use trail network development. This year's focus will be to work with the members of the PMRPC to identify and begin work on a project focusing on a current priority issue within the region: rapid growth.

The Pottstown Metropolitan Regional Planning Committee (PMRPC) region has been experiencing significant growth recently, and this trend is expected to continue in the near future. A regional traffic analysis that was started in FY2018 is needed to identify and plan for such growth. This traffic study will be continued in FY2019. Current traffic operations will be assessed to establish operational qualities of the transportation infrastructure during the AM and PM peak travel hours. Future year traffic volumes will be applied to existing transportation infrastructure to determine whether capacity exists to accommodate future growth, and recommendations will be developed for locations where it does not.

This project will have additional funding support through the Corridor Planning Program (Project 19-52-030, Page 131).

Tasks:

1. Participate in periodic PMRPC meetings to coordinate local planning efforts and further educate local representatives on implementation strategies.
2. Work with the Committee to identify a problem location(s) for detailed study or a priority planning project.
3. Work to collect pertinent data in support of the identified project.
4. Assess current traffic operations and future conditions using microsimulation

analysis.

- 5. Perform technical analysis on identified problems.
- 6. Develop recommendations pertaining to transportation and land use issues.
- 7. Present preliminary findings and recommendations to Committee.
- 8. In cooperation with the Committee, develop an action plan for the recommended improvements.

Products:

- 1. Meetings with the Pottstown Metropolitan Regional Planning Committee.
- 2. A technical memo documenting the identified project(s).
- 3. Summary report.

Beneficiaries:

Chester and Montgomery counties; municipalities within the Pottstown Metropolitan Regional Planning Commission area; the Schuylkill River Heritage Area; and local residents and businesses.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$60,000	\$45,582	\$14,418		
2019	\$60,000	\$47,206	\$12,794		
2020	\$60,000				
2021	\$60,000				

**PROJECT: 19-33-070 Pennsylvania Coastal Zone Management
Implementation Program**

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Amy Verbofsky, Christopher Linn

Goals:

Assist the Pennsylvania CZM program as it works to protect and preserve tidal and freshwater wetlands, provide and maximize public access to coastal waters, preserve and restore historic sites and structures, minimize coastal hazard areas, manage fisheries, encourage public involvement in the management of coastal resources, ensure intergovernmental consistency with regard to regulatory issues in the Delaware Estuary Coastal Zone (DECZ), and preserve coastal lands through the use of Coastal and Estuarine Land Conservation Program funds. Assist the Pennsylvania Department of Environmental Protection (PADEP) in its efforts to achieve the above goals through legislative authority, environmental monitoring, and technical and financial assistance.

Description:

This is a continuing project to maintain regional coordination with local governments and the public to further the interests of the PADEP Coastal Zone Management Program. DVRPC will also continue to provide technical assistance to the state, its member governments, and citizens.

Through this project, DVRPC will provide support to PADEP's Coastal Resources Management (CRM) Program in implementing the Delaware Estuary component of the Coastal Zone Management (CZM) program. DVRPC shall provide coordination between the Coastal Resources Management Program, which administers the CZM program for the Commonwealth of Pennsylvania, and CZM constituents throughout the Delaware Estuary region. DVRPC will reach out to and coordinate with the local stakeholders in the Delaware Estuary. Through this collaborative effort, DVRPC will enable the CRM program to support important projects that improve water quality, enhance public enjoyment of and access to coastal resources, and mitigate the adverse impacts of stormwater runoff, extreme weather events, and non point source pollution.

DVRPC will also partner with the Coastal Resources Management Program to assist member governments, federal and state agencies, and academic institutions in understanding and preparing for the expected impacts of climate change in the coastal zone. This program will help local governments understand how climate stressors are predicted to change, assess community vulnerability, and identify strategies to increase resilience. Most of the staff time for this effort will be funded under a separate grant.

Tasks:

1. Coordinate the activities of the DECZ Advisory Committee and provide technical and administrative services.
2. Organize up to two DECZ Advisory Committee meetings during the course of the year. One of these meetings will be held to review and rank the CZM grant applications for the Delaware Estuary region.
3. Provide a mechanism for public involvement and education in the CZM Program.
4. Assist PADEP in working with eligible municipalities, agencies, and non-profit organizations to prepare and submit project applications for federal grants.
5. Attend Coastal Zone Advisory Committee (CZAC) meetings and water/environment-related meetings, committees and special events in the Delaware Valley.
6. Organize and host up to six meetings of the Urban Waterfront Action Group (UWAG).
7. Provide technical and administrative services on permitting to the Urban Waterfront Action Group (UWAG).
8. Assist the CZM Program with tasks related to Section 6217 (Coastal Nonpoint Pollution Program).
9. Coordinate with PADEP on coastal climate change resiliency planning.
10. Undertake other activities as required.

Products:

1. Mailing lists, agendas and meeting minutes for two DECZ Advisory Committee meetings.
2. A biannual presentation on coastal zone activities, plans, and projects for the state CZAC.
3. Memorandum detailing the results of the coastal zone grant ranking process.
4. Technical memoranda, as required.

Beneficiaries:

NOAA, PADEP, ACOE, NMFS, FWS, EPA, U.S. Coast Guard, DRBC, member governments, non-profit organizations, watershed groups, the private sector, and the public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$40,000				\$40,000
2019	\$50,000				\$50,000
2020	\$50,000				\$50,000
2021	\$50,000				\$50,000

*PA DEP-CZM

PROJECT: 19-33-080 Healthy Communities Planning

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Amy Verbofsky

Project Manager: Karin Morris, Patricia Elkis

Goals:

To understand how the built environment, including the transportation system, affects physical, mental, and social health; explore the intersection of various planning fields with healthy communities planning, including active transportation, air quality, safety, active design, aging in place, and complete streets; promote healthy community planning; explore food system challenges within the DVRPC region and promote food system assets; and support and collaborate with healthy communities stakeholders, county and municipal constituents, and other partners.

This project specifically supports PennDOT's Planning Priority of (I) Land Use/Transportation Linkages/Economic Development/Modernization, specifically (B) to provide input on any training and planning activities targeted to county and local governments, conservation districts and community stakeholders; (D) support the improvement of intermodal freight connections; and identify livability and sustainability strategies to tie the quality and location of transportation facilities to broader opportunities such as access to good jobs, affordable housing, quality schools, safe streets, economic development, social equity, and environmental conservation.

The project also supports NJDOT MPO Transportation Priorities of improving freight mobility, leveraging additional funding sources, and promoting partnerships. Although NJDOT's Planning Priority within the State Plan's Strategic Goals have not yet been adopted, the project supports targeted economic growth; effective planning for vibrant regions; preservation and enhancement of critical state resources, and tactical alignment of government; and transportation choice and efficient mobility of goods.

This project also supports FHWA's Ladder of Opportunity emphasis area.

Description:

The Centers for Disease Control and Prevention defines Healthy Places as "those designed and built to improve the quality of life for all people who live, work, worship, learn, and play within their borders — where every person is free to make choices amid a variety of healthy, available, accessible, and affordable options." Healthy communities planning encompasses a broad range of built environment issues that have the ability to impact an individual's well-being, including land use, active transportation, air quality, safety, complete streets, food systems, and open space. Healthy communities planning strives to integrate design, programmatic,

and policy strategies to improve public health outcomes and increase livability within our region. NJDOT's Complete Streets Policy is an example policy that can be implemented to improve public health outcomes. Additionally, healthy community planning supports important environmental justice/ladders of opportunity work.

Both planning and health professionals have come to understand that a person's address plays an important role in both how long and how well they live. The way we design and build our communities – including factors like walkability, food access, and air quality – can have a significant impact on an individual's well-being and the broader public's health. With an eye towards better understanding these connections, DVRPC has undertaken healthy community planning to improve the public health outcomes and increase livability within our region. Additionally, this year, DVRPC will continue to develop the Health Element of the City of Camden's Master Plan.

DVRPC will a) convene Healthy Communities Task Force meetings; b) continue the development of a City of Camden Health Element; c) provide coordination and technical assistance to stakeholders and municipal/county constituents; and d) represent DVRPC on local healthy communities-related working groups.

Background on City of Camden effort: within the past five years, Camden City has seen a renewed focus on improving the health of Camden's residents. In 2011, Campbell Soup Company launched the Campbell Healthy Communities Initiative with the mission of measurably improving the health of young people in their hometown community by reducing childhood obesity and hunger by 50 percent. As a part of this program, DVRPC published Cultivating Camden: The City's Food Economy Strategy. Campbell Soup Company also funded The Food Trust to grow the Camden Healthy Corner Store Network, which now has almost 50 stores enrolled. More recently, the Camden Collaborative Initiative, which is housed at Cooper's Ferry Partnership, added a new subcommittee on health, called Get Healthy Camden. This subcommittee convenes local organizations committed to improving the health of Camden residents.

Last year, DVRPC started to develop a Health Element for the City of Camden's Master Plan to provide a high-level vision, along with measurable objectives and recommendations, to promote health as a priority for Camden's future growth and development. In FY2018, DVRPC focused on engaging the community and key stakeholders as well as researching existing conditions. During FY 2019, DVRPC will focus on working with the community to develop a vision for a healthy Camden, identifying areas of concern, and generating strategies for improving public health through built environment enhancements.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Provide technical assistance to member governments and stakeholders on an ongoing basis.
2. Continue to convene the Healthy Communities Task Force on a regular basis.
3. Represent DVRPC and provide support and content to other projects, such as the Get Healthy Camden Collaborative, the Healthy Communities in PA Task Force, the Collaborative Opportunities to Advance Community Health (COACH) Group, and the Food Fit Philly Coalition.
4. Update DVRPC's healthy communities, age-friendly communities, and food system planning webpages with new content on a regular basis.
5. Participate in and coordinate with government agencies, institutions, foundations, and non-profit organizations to support healthy communities, including national, regional, and local partners focusing on active transportation, air quality, safety, complete streets, and access to healthy food.
- 6 Continue to meet with Camden Health Element advisory committee to guide the development of the Health Element. Committee will meet 3-4 times over the course of the project.
7. Host at least two stakeholder/public workshops to discuss existing findings, solicit ideas for vision and goals, and finalize recommendations over the course of the Health Element.
8. Using the results of the stakeholder engagement and existing conditions analysis, develop vision, goals, policies, and actions for a healthier Camden.
9. Refine preliminary goals and strategies based on feedback from the community, stakeholders, and advisory committee for the Health Element.
10. Finalize and publish Camden Health Element. Present to community, advisory committee, and City as needed.

Products:

1. Supporting materials related to technical assistance, as appropriate.
2. Two to four Healthy Communities Task Force meetings, including supporting materials.
3. Meetings with constituents.
4. Healthy communities and food system planning webpages.
5. Camden City Health Element - materials related to continued stakeholder engagement; final draft of City of Camden Health Element.

Beneficiaries:

State DOTs, FHWA, member governments and citizens, health care and public health community, Camden City, Camden County, local residents and businesses

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$100,000	\$75,970	\$24,030		
2019	\$100,000	\$78,676	\$21,324		
2020	\$100,000				
2021	\$100,000				

PROJECT: 19-33-090 PA/NJ Local Planning Initiatives

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Christopher Linn, Patricia Elkis

Goals:

Partner with New Jersey and Pennsylvania non-profits and local governments on environmental, smart growth, and livability planning initiatives. Additionally, assist local governments by providing planning services on a contractual basis, particularly where matching grant or local funding support exists.

Description:

This continuing program promotes implementation of the DVRPC Long-Range Plan in both Pennsylvania and New Jersey, specifically by contracting for planning services that will enhance sustainability initiatives such as natural resource protection, smart growth, climate change mitigation and adaptation, livability initiatives, and public health.

Projects include assistance in obtaining funding through grant proposals for part of the costs of the projects. Project subsidies are also offered to municipalities within the nine DVRPC counties. Specific projects may include:

- Environmental Resource Inventories
- Municipal Public Access Plan
- Master Plan Sustainability Elements
- Open Space and Recreation Plans
- Farmland Preservation Plans
- Master Plan Conservation Elements
- Conservation Design Zoning/Subdivision Ordinances
- Climate Change Mitigation and Adaptation Plans
- Alternative Energy Ordinances
- Energy Efficiency Assessments for Municipal Operations
- Greenhouse Gas Inventories
- Transit Oriented Development Studies
- Form Based Codes
- Local Food Access and Nutrition Strategies
- Green Infrastructure Plans
- Trail Development Plans
- Street Tree Inventories

This project also provides for DVRPC to partner with non-profit environmental organizations on environmental protection and conservation projects.

Tasks:

1. Meet with municipal leaders, especially environmental commissions/environmental advisory councils, sustainability teams, public works departments, and planning boards to present project opportunities.
2. Assist municipalities in obtaining funding for part of the project by preparing draft grant proposals. Funding may come from foundations and a variety of programs run by state and federal agencies.
3. Meet with appropriate committees and municipal staff to gather information for the project and to obtain review and approval of the final product.
4. Develop GIS mapping for the municipality that is relevant to the project. Provide larger maps as needed for future use by municipality.
5. Work with other consultants to the municipality, as needed, to obtain and/or share information.
6. Write and produce a printed summary document, plan, implementation brochure, etc., and CD for distribution by the municipality, including publication on its local website.
7. Participate in municipal public hearings pertaining to the projects, as needed.
8. Provide technical support to the municipality on obtaining and processing data to support planning analysis.
9. Include the municipality in any DVRPC-sponsored education programs on natural resource protection, open space/farmland preservation, climate change mitigation and adaptation, and livability initiatives.
10. Work with non-profit organizations on other efforts as needs are identified and opportunities arise.

Products:

1. Meeting materials, citizen questionnaires, and background information on resource topics.
2. Project documents – project summary, inventory, plan, ordinance, or other document, with appropriate maps.
3. CD of the document and of GIS files for future use by the municipality or non-profit.

Beneficiaries:

Local governments, environmental/conservation non-profit organizations and trail and active transportation organizations.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$200,000			\$39,656	\$160,344
2019	\$200,000			\$42,450	\$157,550
2020	\$200,000				
2021	\$200,000				

*PA/NJ Local Governments

PROJECT: 19-33-100 A Resilient Greater Philadelphia

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher Linn

Project Manager: Amy Verbofsky, Melissa Andrews, Robert Graff, Shawn Megill Legendre

Goals:

Assess resiliency tools, methods, and data and engage planning partners to 1) increase knowledge of climate hazard data and risks among our constituents; 2) determine what planning approaches and tools work best for our region; and 3) identify opportunities to employ the agreed upon approaches to development policies and management strategies to increase resiliency in concert with our partners.

Description:

There are two primary ways climate change will impact our region: flooding and increasing temperatures. Coastal flooding hazards will increase over time due to sea level rise, and there is also strong evidence that inland flooding will increase due to more severe extreme precipitation events as the climate warms. Furthermore, the unpredictability and variability of extreme flooding events makes them difficult to plan for even in the absence of climate change. Extreme heat events and heat waves are also predicted to increase in the Delaware Valley over the coming decades, introducing additional risks for infrastructure, agriculture, public health, ecosystems, and vulnerable groups.

Flooding and extreme heat are not new threats to planners, developers and policy makers. However, due to a growing understanding of the impacts of climate change among planning partners and recent large-scale coastal storms such as Katrina, Sandy, and Harvey, there is a growing interest in making our communities more resilient to flooding events and other impacts of climate change. With each new storm it is also increasingly clear that taxpayer-subsidized flood insurance and policies which encourage, rather than dis-incentivize, risky development decisions, have increased our collective liability to flooding, and the impacts of climate change only make this situation worse.

Understanding, communicating, and preparing for climate-related threats with the goal of increasing the region's resiliency is already underway in a wide variety of scales and forms. Numerous tools, databases, models, and mapping resources exist to assess the threats that communities, businesses and operating agencies face from coastal and inland flooding hazards and extreme heat, both now and in the future. At the same time, a variety of organizations and agencies have conducted studies to assess impacts, vulnerabilities and risks. Examples include studies and assessments conducted by the U.S. Global Change Research Program, the University of Pennsylvania, PennDOT, NJDOT, NJDEP, SEPTA, Rutgers University, the Consortium for Climate Risk in the Urban Northeast

(CCRUN), the NJ Climate Resiliency Collaborative, Sustainable Jersey, the City of Philadelphia, and the Union of Concerned Scientists, among others.

DVRPC has contributed to, built upon, or led many of these efforts, including documenting the impacts of climate change for New Jersey municipalities, reporting on the impacts of sea level rise in the Delaware Estuary, preparing vulnerability and adaptation plans for coastal communities on both the PA and NJ sides of the Delaware River, and advising NJDOT, PennDOT and SEPTA on their climate resiliency planning efforts. As part of DVRPC's work on these projects, the agency has run NOAA's coastal storm surge model, piloted New Jersey's coastal vulnerability assessment tool, championed NJDEP's "Total Water Levels Approach", and worked with storm surge and sea level rise data generated by NJDEP. DVRPC also recently utilized the CMIP (Coupled Model Intercomparison Project) tool to generate future climate projections for a variety of variables in the Greater Philadelphia region, and is a contributing partner to on-going resiliency efforts, including the New Jersey Resiliency Planning Partners Program, the Sustainable Jersey Climate Adaptation Task Force, and Pennsylvania's Climate Change Advisory Committee. Finally, DVRPC is leading PA's coastal resiliency planning work on behalf of the PA DEP.

Given the wide variety of resiliency planning resources and activities available to DVRPC and its partners, this work program project aims to assess available resiliency tools, methods and data in order to determine the best approaches for our region. DVRPC will build on its existing knowledge and engage planning partners to increase their knowledge of climate hazard data and resiliency planning approaches. An emphasis will be placed upon gathering and summarizing existing climate impact data gathered through past projects. The project will also develop maps depicting expanded coastal flooding risks using the "total water levels approach" developed by the NJDEP using NOAA's "What Will Adaptation Cost" framework. DVRPC will also build on its on-going participation in PennDOT and NJDOT's efforts to inform their capital planning, design and asset management guidelines and strategies with latest resilience data and techniques. DVRPC will gather the appropriate data and test these and other "vulnerability assessment" approaches in order to develop a preferred approach for resiliency planning in the Greater Philadelphia region.

Coordination with the DOTs will be covered under the Energy and Climate Change Initiatives work program, while the development of data, tools, and maps to support the "total water levels" approach, riverine flooding models, and the mapping and analysis of select transportation assets will fall under Regional Transportation GIS Coordination, (Project 19-31-020, Page 145).

To build upon the data collection and resiliency tool assessment efforts programmed in FY2019, DVRPC will begin discussing ways to utilize preferred methodologies to assist planning partners with more detailed resiliency planning efforts in future years. This project will lay the foundation to begin working with municipalities, counties, agencies, and nonprofit organizations to identify and

develop targeted management practices and policy approaches to increasing resiliency. Examples may include the following: 1) incorporating climate projections into asset management and capital improvement strategies; 2) modification of land use planning tools and techniques; 3) programs to assist vulnerable populations; 4) incorporating sea level rise projections in future enforceable coastal flood maps; and 5) development of polices to increase risk transparency, decrease risk subsidization, and increase incentives for minimizing and eliminating risks posed by floodplain development.

Tasks:

1. Review and summarize existing resiliency and climate science data.
2. Review resiliency planning methodologies, tools and approaches.
3. Communicate and discuss findings with partners to understand the approaches that work best for our region.
4. Document the agreed upon approach or approaches and identify ideas for piloting the approach in select communities.
5. Hold meetings with local government and agency stakeholders to discuss, identify and prioritize resiliency policies and implementation strategies

Products:

1. Publish a guide to useful climate risk information for Greater Philadelphia similar to the New York City Panel on Climate Change’s Useful Climate Risk Information.
2. Outline or guide on recommended resiliency planning approaches and tools.
3. Maps, tables, and data.

Beneficiaries:

Municipalities, counties, floodplain managers, state DOTs, NJDEP, PA DEP, PA DCED, transit operating agencies, environmental nonprofits.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$80,000			\$16,000	\$64,000
2020					
2021					

*PA Supplemental Land Use

PROJECT: 19-33-120 Campbells Soup - Camden City Food Economy

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Amy Verbofsky

Goals:

To continue to work with partners to support a healthy Camden, specifically focusing on addressing transportation barriers that City of Camden residents face in accessing healthy amenities such as healthcare providers, healthy food retail, fitness facilities, and clean open space.

Description:

The Road to Health project is part of a multi-year relationship with Campbell Soup Company, specifically the Healthy Communities Initiative. It builds off of recommendations in Cultivating Camden: The City's Food Economy Strategy, which analyzed transit access to existing grocery stores in and around Camden. Additionally, this project responds to the experience of other Healthy Communities partners, who work directly with Camden residents and frequently note that transportation to healthy destinations like grocery stores, doctor's appointments, and community events is a significant challenge for Camden communities.

The Road to Health project also expands upon our outreach efforts from our previous work with Campbell Soup Company, which sought to engage Camden residents and stakeholders in conversations about what they need to be healthy, where they go to be healthy, and what they would do if they were the Director of Transportation for the City of Camden (framed to identify solutions). The intent of these conversations was to understand where people experience gaps in the existing transportation system and begin to work towards solutions that improve access to healthy places. Year two (FY2018) of the Road to Health effort convened transportation providers and key stakeholders to increase awareness of transportation barriers that Camden residents face and provide an opportunity for nontraditional partners and stakeholders to share their experiences/challenges and brainstorm potential solutions.

In FY2019, DVRPC will focus on another issue that residents and stakeholders raised, specifically improving the condition and connectivity of sidewalks in Camden. To that end, DVRPC will work with local residents and community groups in Camden to support DVRPC's ongoing regional sidewalk inventory. Activities with local community groups may include conducting organized walk audits or hosting "walkshops" to gather qualitative and contextual data.

Tasks:

1. Continue to engage with transportation providers and key stakeholders to support the implementation of transportation access solutions identified in the FY2018 convening.

2. Work with local residents and community groups to support the development of DVRPC's Regional Sidewalk Inventory in Camden.
3. Support Campbell's Healthy Communities Initiative grantees and partners.

Products:

1. Quantitative data related to the sidewalk network in Camden.
2. Quantitative data related to sidewalk condition in Camden.
3. Meeting agendas, materials, and minutes.
4. Presentations.

Beneficiaries:

Camden City and Camden County

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$40,000				\$40,000
2019	\$50,000				\$50,000
2020	\$50,000				\$50,000
2021	\$50,000				\$50,000

*Campbells Soup Company

PROJECT: 19-34-080 Regional Aviation System Planning

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Theodore Dahlburg

Project Manager: Kenneth Thompson, Thomas Edinger

Goals:

To encourage regional growth, orderly development and more efficient mobility by preserving and improving aviation facilities through Regional Aviation Systems Planning.

Description:

Regional Aviation Systems Planning is an important ongoing effort designed to support the region's network of airports and heliports and regional air travel. Objectives and tasks include the implementation of a Regional Airport System Plan (RASP); periodic updates to the plan where travel demand, safety, and improved efficiency and other criteria warrant; the collection of aircraft operations counts at regional airports; the provision of technical assistance to various stakeholders; and the undertaking of special studies.

One of the primary components of this project will continue DVRPC's long-standing non-towered aircraft operations counting program. Working with the Federal Aviation Administration (FAA) and its aviation partners from the 12-county area that makes up the Delaware Valley Regional Airport System, DVRPC has been conducting non-towered aircraft operations counts since 1986.

The aircraft counting program is largely based on a recurring schedule, with greatest emphasis placed on those airports which are designated National Plan of Integrated Airport Systems (NPIAS) facilities. In special cases, certain airports may be counted out of cycle or they may be added to the cycle. These include airports near locations of changing development, airports which may potentially close, airports for which there is no current counting data, and airports identified by special request from the FAA or state governments.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Promote the implementation of the 2040 RASP and support systems planning as a result of changing airport needs, funding availability, and safety and security concerns in cooperation with PennDOT, NJDOT, DeIDOT, MDOT, FAA, airport operators, and others.
2. Continue annual operations counting at selected regional general aviation airports.
 - a. Working closely with the identified airports (Doylestown, Heritage, Pottstown

- Municipal, Quakertown), develop a target counting schedule for each airport by season.
- b. Based on the pre-determined schedule, set up and collect the LDL 820 Sound Level Meter counting equipment at the subject airports throughout the year.
 - c. Download the collected data to the Aircraft Counting System software, review the data for possible errors, and then assemble the data into Airport Activity Reports.
 - d. Use the collected operations data to project estimates of seasonal and annual operations.
 - e. Establish estimates of based aircraft and helicopter activity at each airport.
 - f. Prepare summary figures and tables and a narrative synopsis of annual operations for each airport.
 - g. Compile all relevant materials into a final, bound report.
 - h. Circulate final report to interested parties and present findings to the members of the DVRPC Regional Aviation Committee.
3. Provide assistance to states, local governments, operators and consultants in preparing feasibility, master plan studies and state system plans, and other planning documents and policies.
 4. Develop proposals for new aviation special studies.

Products:

1. Airport operations counting report for selected airports.
2. Updates to the 2040 RASP contents and continued systems planning.
3. Policy input to PennDOT/NJDOT and member governments regarding airport development, plans and studies, and regulation and licensing.
4. Concepts for airport special studies.

Beneficiaries:

Member governments, regional and local airports, and regional residents and businesses.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$100,000				\$100,000
2019	\$100,000				\$100,000
2020	\$100,000				\$100,000
2021	\$100,000				\$100,000

*\$90,000 FAA, \$4,000 Local, \$6,000 PA Aviation Revenue

PROJECT: 19-34-090 Central Jersey Transportation Forum

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Jackie Davis

Goals:

Achieve improved and more integrated regional land use and transportation planning that will result in a better quality of community life in Central Jersey.

Description:

The Central Jersey Transportation Forum serves a unique role in the state of New Jersey: that of bringing together a wide range of public, non-profit, and private organizations to facilitate a regional, cooperative approach to solving transportation problems. The Forum has held steadily well-attended meetings for over 15 years. It meets to address concerns of municipalities in Mercer, Middlesex, and Somerset counties focused on the US 1, US 130, and US 206 corridors. The geography is from Trenton to New Brunswick, and Robbinsville to Hillsborough, and includes 24 municipalities in three counties.

The Forum has a formal voting structure to speak as a strong and effective regional voice for central New Jersey. Membership elects its own chair from among its municipal and county voting members, is guided by a Steering Committee, and supported by an Action Team. The Steering Committee consists of the Chair; the co-Chairs of the Action Team; representatives from Mercer, Middlesex, and Somerset counties; NJDOT and NJ Transit; DVRPC and North Jersey Transportation Planning Authority (NJTPA); Keep Middlesex Moving TMA and Greater Mercer TMA; and a municipal representative. DVRPC provides staff support in consultation with NJTPA staff.

The Forum moves toward its goal through an agreed upon action plan, informed by an inclusive, strategic planning process that is underway as of FY18. Membership meets three times per year. Before a meeting, the Steering Committee convenes to develop the agenda. Usually there is an Action Team meeting as well. The Joint Action team is made up of the formerly separate Rt. 1 Regional Growth Strategy Action Team and the Transit Action Team. The Joint Action team helps NJDOT implement the Rt. 1 Regional Growth Strategy, delivered a Smart Growth Road Show presented to elected officials, created a Smart Growth Best Practices Brochure, and supports NJ Transit's Route 1 Bus Rapid Transit (BRT) project.

Tasks:

1. Support the Forum, Steering Committee, and Action Team
Arrange meetings, prepare materials, track progress on the action plan, and expand and maintain web pages.
2. Begin implementation of the latest strategic plan – Assist the Steering Committee

and Action Team in implementing the action plan through identified strategies and by setting appropriate agendas for regular Forum meetings. Use the best practices brochure as a launching pad to share good work with a broader audience within available staff support resources, and continue to build municipal and county ownership of the Forum.

3. Continue to provide meaningful technical contents that help the Forum advance toward its goal. Explore possibility of a database for regional transportation projects (linked with the TIP) and a portal for municipalities to upload land development projects. Increase communication between members and to the public through social media and by providing other web platforms. This technical support component will continue to be refined within staff resources.

4. Coordinate with other projects – Communicate with Forum participants and serve as liaison to related projects as requested and as time allows.

Products:

- 1. Meeting materials and highlights, web content and portal, social media content, and a refined strategic plan.

Beneficiaries:

NJDOT, New Jersey Transit, New Jersey Office for Planning Advocacy, Transportation Management Associations (Keep Middlesex Moving and Greater Mercer TMA), counties (Mercer, Middlesex, and Somerset) and municipalities (15 voting plus 9 participating), the residents and employees of Central Jersey.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$150,000				\$150,000
2019	\$150,000				\$150,000
2020	\$150,000				\$150,000
2021	\$150,000				\$150,000

* NJ TIP - DB #X30A - \$150,000 STBGP-STU

PROJECT: 19-34-100 PA Ozone Action Supplemental Services

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Sean Greene

Goals:

Improve the region's air quality by encouraging public action to reduce air pollution and protect public health through the Air Quality Action program, an episodic, voluntary program for ground-level ozone and fine particulate matter (PM 2.5).

Description:

This project will fund supplemental services performed by contractors in the implementation of the Air Quality Action program. Types of services may include design and production of education and outreach materials and advertising, printing, placement of advertising on television, online, radio, and in newspapers.

Advertisements will educate the public about ozone and PM 2.5 pollution and encourage actions to reduce activities that contribute to air pollution, especially on days that are forecast as unhealthy for people susceptible to ozone and PM 2.5 pollution.

Tasks:

1. Contract for the design and production of advertisements and promotional literature such as brochures, posters, flags, and educational materials.
2. Contract for the placement of advertising on radio, television, web, place-based or newspapers.
3. Conduct a survey to evaluate program effectiveness on a five-year rotating basis. Last conducted in 2015. Next scheduled survey is 2020.

Products:

1. Advertisements and educational literature.
2. Event and organizations sponsorships.
3. Survey of region's residents evaluating program effectiveness (on a five-year rotating schedule). Last conducted in 2015. Next scheduled survey is 2020.

Beneficiaries:

Member governments and residents of the region.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$125,000				\$125,000
2019	\$125,000				\$125,000
2020	\$125,000				\$125,000
2021	\$125,000				\$125,000

* PA TIP - MPMS #17928 - \$100,000 CMAQ/\$25,000 PA DEP State Match

PROJECT: 19-34-110 NJ Ozone Action Supplemental Services

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Sean Greene

Goals:

Improve the region's air quality by encouraging public action to reduce air pollution and protect public health through the Air Quality Action program, an episodic, voluntary program for ground-level ozone and fine particulate matter (PM 2.5).

Description:

This project will fund supplemental services performed by contractors in the implementation of the Air Quality Action program. Types of services may include design and production of education and outreach materials; and advertising, printing, and placement of advertising on television, online, radio, and in newspapers.

Advertisements will educate the public about ozone and PM 2.5 pollution and encourage actions to reduce activities that contribute to air pollution, especially on days that are forecast to be unhealthy for people susceptible to ozone and PM 2.5 pollution.

Tasks:

1. Contract for the design and production of advertisements and promotional literature such as brochures, posters, flags, and educational materials.
2. Contract for the placement of advertising on radio, television, or newspapers.
3. Conduct survey to evaluate program effectiveness on a five-year rotating basis. Last conducted in 2015. Next scheduled survey is 2020.

Products:

1. Advertisements and educational literature.
2. Event and organizations sponsorships.
3. Survey of region's residents evaluating program effectiveness (on a five-year rotating schedule). Last conducted in 2015. Next scheduled survey is 2020.

Beneficiaries:

Member governments and residents of the region.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$50,000				\$50,000
2019	\$50,000				\$50,000
2020	\$50,000				\$50,000
2021	\$50,000				\$50,000

* NJ TIP - DB #D0407 - \$40,000 CMAQ/\$10,000 SILOC Match

PROJECT: 19-34-120 Kennett Area Freight Transportation Framework Plan

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Theodore Dahlburg

Project Manager: Michael Ruane

Goals:

Expand the economy by improving the movement of people and goods through an integrated multimodal transportation network while strengthening livable communities.

Description:

The Kennett area of Chester County, PA (including Kennett Square Borough, Avondale Borough, Kennett Township, East Marlborough Township, London Grove Township, and New Garden Township) possesses a charming small town and rural character, and, at the same time, it plays a dynamic role in the regional economy as a national center for mushroom farming and the packaging and distribution of refrigerated fruits and vegetables. These two defining attributes sometimes enter into conflict with each other, most noticeably in the form of tractor trailer traffic on narrow rural and village streets.

Due to local initiative, the Kennett Area has also been the subject of a variety of independent planning studies, including comprehensive plan updates for Kennett Square Borough and New Garden Township, a multi-municipal economic development plan including Kennett Township, the Southern Chester County Housing and Transportation Plan, a Complete Streets plan for Baltimore Pike led by the Chester County Planning Commission, and an Active Transportation Plan being conducted by Alta Planning. Planned and programmed transportation improvements include a redesign for sections of US 1 led by PennDOT, and multimodal fund applications for a redesigned intersection of Baltimore Pike with Newark Road.

This study will convene a broad-based coalition of public, private, and institutional stakeholders--including the Chester County Planning Commission, TMACC, Chester County Visitors Bureau, East Penn Railroad, New Garden Airport, the American Mushroom Institute Trade Association, Manfredi Cold Storage, key local employers, and the following six municipalities: Kennett Square Borough, Avondale Borough, Kennett Township, East Marlborough Township, London Grove Township, and New Garden Township. This study will gather and synthesize the recommendations from prior, ongoing, and programmed efforts into a coordinated framework plan for transportation improvements geared towards optimizing freight movement and managing the community impacts of freight movement in the greater Kennett Area. The plan will focus on key truck traffic generators, with an emphasis on using targeted projects to better manage truck movements while also considering community character and safety for vehicle, transit (SCCOOT), pedestrian, and bicycle trips. It will identify low-cost improvements for immediate

action, opportunities to leverage programmed capital projects in a more coordinated way, and hotspot locations where further analysis is warranted.

Tasks:

1. Establish a steering committee to oversee the overall direction and objectives of the study and convene the committee at strategic milestones during the course of the study.
2. Assemble all recent and related studies and reports and create a summary of all identified recommendations.
3. Working with local businesses, prepare a profile of local businesses and perform supply chain case studies of major commodities moving to and from the study area (with special emphasis on mushrooms and refrigerated produce).
4. Identify the major concerns of the study area municipalities and residents regarding local freight operations.
5. Overlay existing designated transportation networks and services: National Highway Freight Network, rail freight lines, transit networks, bicycle facilities, etc.
6. Gather truck activity data, fill in gaps, and prepare helpful info-graphics.
7. Develop/identify improvement concepts to better and more safely accommodate freight movement to/from/within the study area.
8. Prepare a guide for state and federal funding programs for transportation improvements.
9. Create a local education campaign about commercial vehicles/trucks.
10. Develop a truck route plan for the study area with appropriate supporting design standards to ensure safe and efficient movement of freight.
11. Provide truck-routing attribute data to navigation data providers for commercial vehicles.

Products:

1. Final report documenting existing conditions, identified issues and problems, and a set of agreed to recommendations organized in a study area action plan.
2. Geospatial database of truck network and attributes

Beneficiaries:

Study area municipalities and local residents and businesses.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$120,000			\$24,000	\$96,000
2020					
2021					

*PA Supplemental Land Use

**PROJECT: 19-41-060 Transportation Systems Management and Operations
(TSMO)**

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher King

Project Manager: Paul Carafides

Goals:

Ease traffic congestion and improve the efficiency of existing transportation facilities and services through enhanced coordination and integration of Intelligent Transportation Systems (ITS) with Transportation Systems Management and Operations (TSMO).

Description:

DVRPC's TSMO program encompasses a wide range of activities including management and administration of the Transportation Operations Task Force (TOTF), coordination of multi-agency regional initiatives, maintenance of the Regional ITS Architecture, coordination of training programs for ITS operators and emergency response personnel, establishment of performance measures, security planning and providing technical assistance to agencies. Its centerpiece is the Regional Integrated Multi-modal Information Sharing (RIMIS) project, an information exchange network functioning as the communications backbone among transportation operation centers throughout the region. A virtual video wall component allows operations center and field personnel to view traffic video feeds in the region.

RIMIS became operational in 2010 and since it is managed by the same developer as the NJDOT system, it automatically receives incident and operational information from NJDOT's database. To receive PennDOT incident information, a data interface to PennDOT's Road Conditions Reporting System (RCRS) was constructed in FY 2011. A data interface to the City of Philadelphia Streets Department's Road Permit system provides street closure information related to events such as utility work, block parties, special events, and construction. This not only greatly increased the amount of useable data for RIMIS users, but was a critical project for the Philadelphia Traffic Management Center. DVRPC has continued to roll out RIMIS to regional transportation agencies, county 911/emergency management centers, local police and fire departments in major corridors, and counties' engineering/public works departments in New Jersey as requested. Assistance in using RIMIS in local municipalities for Integrated Corridor Management purposes is offered, especially with respect to the I-76 ICM Project in Pennsylvania.

In FY 2019, the primary emphasis will be operating and maintaining RIMIS software, continuing to expand the number of agencies participating in RIMIS, continued

exploration of the RIMIS SPATAL tool, and working with the agencies to ensure quality control of RIMIS data. As the number of RIMIS users has grown, it is becoming more essential to coordinate with our RIMIS users, monitor usage, and rapidly address any issues that they may be encountering.

Quarterly meetings of DVRPC's Transportation Operations Task Force (TOTF) are the focal point of coordinating transportation operations activities in the region, providing highway and transit operators and emergency responders an opportunity to interact with each other. As an ongoing effort to support our stakeholders, DVRPC continues to either maintain or update several regional operational efforts such as the Regional ITS Architecture, Transportation Systems Management and Operations Master Plan, Regional ITS Infrastructure Inventory, and DVRPC's Interactive Detour Route Mapping (IDRuM) application.

There continues to be emphasis placed on integrating the use of performance measures into strategic and operations planning. One of the primary outcomes that operations programs strive for is reduced congestion, and typical performance measures include travel times and travel time reliability, which tells us that conditions are better or worse than in the past. However, there are many other operational performance measures that need to be developed to measure our region's success for improving these travel times. These measures may include: Incidents – How long does it take to detect, respond to, and clear incidents?; Work Zones – How long do work zones exist and how many traffic lanes are lost during them?; Weather – How long did it take to clear snow- or ice-covered roadways after the precipitation event?; and Arterial Control – How many signals were retimed? Although federal guidance continues to be defined, in FY 2019, DVRPC will continue to work with our stakeholders to develop a consistent approach where applicable to define the proper measures, collect and analyze the data, and report on our region's performance measures.

Activities listed below fall under two broad categories: RIMIS and Other TSMO Tasks. The former includes Operations and Maintenance (O&M) tasks performed by the software vendor (TRANSCOM) and DVRPC supervisory/technical activities associated with RIMIS. The latter category includes DVRPC staff activities that support programs for greater integration among the region's TSMO stakeholders, and more general activities. Some of these activities may require DVRPC to purchase equipment and/or services.

Tasks:

RIMIS Software Vendor Tasks

1. Software vendor will perform software operations and maintenance functions.
2. Software vendor will function as the system administrator, adding additional ITS devices to the RIMIS database and modifying the highway and transit network as required.
3. Software vendor will make enhancements to RIMIS software as directed.

4. Software vendor will assist RIMIS agencies in developing data interfaces with legacy software systems as required.
5. Software vendor will periodically meet with DVRPC and the users to review RIMIS's status and discuss and resolve operational issues.

DVRPC Tasks:

1. Coordinate software vendor's activities with the RIMIS users and the Transportation Operations Task Force.
2. Supervise the RIMIS software vendor's adherence to its contract.
3. Review and approve all invoices and progress reports with respect to the RIMIS software vendor.
4. Organize training programs for RIMIS users.
5. Work with software vendor to phase-in additional RIMIS users. This may include construction of additional data interfaces.
6. Perform system administration functions, such as modifying agency and user accounts, installing RIMIS software for users, developing video walls for users, and assisting the RIMIS software vendor in performing some of the other minor administration functions.
7. Perform quality control review of RIMIS information and its usage. Work with users to ensure that information entered into RIMIS is accurate and timely, and that agencies use RIMIS information to manage events.
8. Perform additional activities associated with RIMIS as the need arises.

Other TSMO Tasks

1. Continue to provide staff support to the Transportation Operations Task Force including developing agendas, arranging presentations, and developing handout materials.
2. Continue and expand initiatives to enhance interagency information sharing and cooperation. Activities include providing technical assistance to operating agencies. As opportunities for interagency cooperation become available, provide technical support or purchase equipment or services.
3. Work with agencies to develop Traffic Management Plans (TMP's). Continue the regional construction coordination program to minimize traffic impacts of overlapping construction projects.
4. Maintain the Regional ITS Architecture for the Delaware Valley. Work with local stakeholders to ensure consistency between the regional architectures and their project architectures. Continue to coordinate with NJTPA, NJDOT, and PennDOT with their regional and statewide ITS Architecture updates.
5. Continue to maintain the region's ITS Infrastructure Inventory.
6. Continue to incorporate TSMO, including ITS investments, into the transportation planning process. Identify all TIP projects involving ITS and evaluate their consistency with the Transportation Systems Management and Operations Master Plan. Assist agencies to advance projects identified in the Plan, PennDOT's Regional Operations Plan, or in the Regional ITS Architecture.
7. Continue to operate and maintain Interactive Detour Route Mapping (IDRuM). Periodic updates may be needed to reflect changes to detour routes and construction activity.

- 8. Participate in appropriate security planning efforts by attending external meetings, webinars and other events such as the Delaware Valley Intelligent Center (DVIC) security roundtable quarterly meetings
- 9. Continue to provide training programs for ITS technical staff. These activities may include identifying training opportunities, hosting training courses, bringing in industry experts, sponsoring conferences on special topics, and arranging tours of ITS deployments within and outside of the region.
- 10. Continue coordination with I-95 Corridor Coalition programs. These activities may include sharing information about and partnering on ITS-related projects.
- 11. Monitor federal guidance on performance measures and begin to develop a consistent approach to define operational performance measures with our regional operations stakeholders. Continue to determine a method for collecting, managing, analyzing, reporting, and disseminating data to support the performance measures.
- 12. Continue participation in the Southeastern Pennsylvania Regional Task Force and the Philadelphia Local Emergency Planning Committee. These activities include providing staff support to the Public Works, Engineering, and Transportation Committee.
- 13. Monitor federal ITS programs, regulations, and initiatives to identify which ones may impact projects in the region.

Products:

- 1. Transportation Operations Task Force meeting agendas, and meeting minutes.
- 2. Operation and maintenance of RIMIS software.
- 3. Management of RIMIS software vendor.
- 4. Maintenance of the ITS Regional Architecture.
- 5. Operation and maintenance of IDRUM.
- 6. Implementations of programs to foster interagency cooperation.
- 7. Technical assistance to agencies.

Beneficiaries:

ITS operators, emergency responders, motorists, and transit users. Member governments and agencies, including PennDOT, NJDOT, and County Planning Agencies; and citizens served by a more efficient and reliable transportation network.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$933,500				\$933,500
2019	\$933,500				\$933,500
2020	\$933,500				\$933,500
2021	\$933,500				\$933,500

* PA TIP - MPMS #72738 - \$560,100 CMAQ/\$140,025 State 581
 NJ TIP - DB #01300 - \$233,375 STBGP-STU

PROJECT: 19-51-020 Enhance and Maintain Travel Forecasting Tools

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Matthew Gates

Project Manager: Fang Yuan

Goals:

Support the economic vitality of the region, improve accessibility and mobility for people and freight, protect the environment, enhance connectivity between modes, and promote the efficient management and operation of the existing transportation system by updating DVRPC's travel simulation models to state-of-the-art standards and updating the data used in the model.

Description:

DVRPC continually strives to keep its travel simulation models up to date to ensure the accuracy of travel forecasts and to respond to new forecasting requirements associated with the FTA New Starts program, FHWA conformity demonstration and NEPA requirements, and EPA clean air amendments and other environmental regulations.

An FHWA peer review in 2009 recommended two major improvements to DVRPC's Travel Simulation Models. The first was an update of the 2000 household travel survey. Household travel surveys ask a sample of households, usually recruited with minor enticements, throughout the region to keep a one-day travel diary. The information obtained is not only critical for travel forecasting, but also has numerous other planning uses, including JARC, LEED certification, environmental justice, and greenhouse gas inventories. Household travel surveys need to be redone whenever travel patterns or behaviors change significantly, with an industry standard of approximately every 10 years. Data collection for this survey was completed in FY2014, and data processing and analysis was done in FY2015.

The other major element was the development of an activity-based travel model (AB). Conventional 4-step models use a number of weakly connected models to estimate various travel decisions: how often to travel and for what purpose, where to travel, by which mode to travel, and by which route to travel. Conventional 4-step models were originally developed for planning the interstate highway system and later modified for planning major transit projects. They have a mixed ability to inform transportation planning and policy not related to major capacity expansion. AB models, on the other hand, treat travel demand as derived from the individuals' need to participate in various spatially dispersed activities. Since AB models are behaviorally based, they can do a better job of modeling a wide variety of transportation policy and planning options. Within the last 10 years AB models have moved from academia into practice. Nearly all large MPOs currently have an AB model either in use or under development. In FY 2017, DVRPC completed the

estimation and calibration of its AB model, TIM3.0, using data from the new household survey. Also, in FY2017, the TIM 3.0 model was validated for a 2010 base year.

In fiscal years 2018 and 2019, several additional steps will be undertaken to allow DVRPC to fully migrate from the trip-based TIM 2.3 model to the AB TIM 3.0 model for all future traffic studies and planning activities. The first step is to update the TIM 3.0 model's base year to 2015 by migrating the TIM 3.0 model system to the recently updated TIM 2.3 network and data base, which was completed in FY2017. The TIM 2.3 model updates include the roadway network addition and/or modification based on the 2015 OSM data, the transit network and schedule update based on the 2015 GTFS data, the 2015 zonal data, and the highway counts, highway travel time, transit ridership and boarding counts collected around 2015 for the model validation purpose. The TIM 2.3 highway and transit network will be adapted as the new TIM 3.0 base network. The 2015 zonal data will be used as control totals for generating synthetic population/household inputs for DaySim. Other DaySim inputs will also be updated with reference to the TIM 2.3 TAZ and network data. Model re-estimation will be conducted with new network skims and household travel survey data. The updated TIM 3.0 model will be calibrated and validated at more detailed and various levels, including comparing simulated screenline highway and transit volumes, vehicle miles traveled (VMT) by county and functional classification, highway volume and travel time by link type and time of day, transit ridership by sub-mode, and transit boardings by rail stations, bus lines and operators against counts ; comparing the simulated county-to-county work flow against the ACS and CTPP data; and comparing simulated transit travel patterns against the transit on-board survey and park-and-ride survey. Furthermore, the long-term choice model components in the TIM 3.0 model will be compared and validated with vehicle registration, transit pass sales, school enrollment, and other public data.

Furthermore, a series of sensitivity tests will be performed to ensure that the TIM 3.0 model responds in an intuitive and proportional way to changes in socio-economics, transportation system operations, and policies. Also, two back-casting exercises will be conducted to test the model's ability to replicate observed changes that resulted from recent major highway and transit projects. These projects will be the opening of NJ Transit's RIVERLine and the US 202 section 700 Parkway in Montgomery and Bucks counties. Additionally, ties will be made between the ABM and other software tools and processes used by DVRPC, including EPA's MOVES air quality model, FTA's user benefits model (STOPS), VISSIM microsimulation, DVRPC's economic impact model, and others as required.

Another task is to improve the efficiency and productivity with the TIM 3.0 model. Not only has the TIM 3.0 model required a longer run time, but also the TIM 3.0 model application requires a much larger data preparation effort than the TIM 2.3 model. Different tools and processes were used to prepare DaySim inputs, including converting data from VISUM to DaySim or PopGen or other intermediate tools used for preparing DaySim inputs. In FY2018, a more effective TIM 3.0 data

preparation and management process will be developed for routine model applications, including, consolidating existing tools and scripts, reducing intermediate steps, and developing additional tools or scripts to fully automate the data preparation for the TIM 3.0 model runs.

Before the activity-based model can be used for planning studies, the necessary inputs for 2020, 2025, 2030, 2035, 2040, and 2045 will need to be developed. Some of these will be available from the legacy TIM2.3 4-step model, but others will be unique to the activity-based model. These include developing synthetic populations, employment projections, and other data at the microzone level; performing 24 hourly stop-to-stop skims of the transit network for each future year; and developing daily "activity patterns" for each synthetic household for each future year.

Another task that will be undertaken by this project will be the development of a new long-term model improvement plan. A steering committee will be assembled and presented with a list of potential enhancements to DVRPC's travel forecasting models. Each item will have a corresponding cost estimate and schedule associated with it. The Steering Committee will rank and prioritize each of the candidate enhancements into a plan for the next several years. Some potential enhancements include a tool to assess the health impacts of transportation projects, a special generator model of the south Philadelphia Sports Complex, ride sharing and autonomous vehicle models, multi-class and dynamic traffic assignment models, new freight and/or truck models, and a new Land Use model.

The models developed under this program will ensure that DVRPC continues to meet and exceed the state and federal requirements and also has the necessary tools to evaluate the projects, policies, and programs that are of interest to the Commission's member governments. This project may require DVRPC to purchase goods and/or services.

Tasks:

1. Update the TIM 3.0 model base year to 2015.
2. Calibrate and validate the 2015-based TIM 3.0 model.
3. Develop TIM 3.0 data management strategies and tools.
4. Conduct sensitivity tests on TIM3.0 travel demand model.
5. Perform back-casting exercise on NJ Transit's RIVERLine.
6. Perform back-casting exercise on US 202 section 700 Parkway.
7. Develop tie-in between TIM 3.0 and MOVES2014 or successor model.
8. Develop tie-in between TIM 3.0 and FTA's User Benefits calculator and DREAM economic impact model as needed.
10. Develop synthetic population at microzone level for 2020, 2025, 2030, 2035, 2040 and 2045.
11. Develop employment forecasts at microzone level for 2020, 2025, 2030, 2035, 2040 and 2045.
12. Code all TIP and Long Range Plan projects into TIM3 Scenario Manager.

13. Prepare 24 hourly transit stop-to-stop network skims for 2020, 2025, 2030, 2035, 2040 and 2045.
14. Update TIM3 model documentation and validation report.
15. Develop long-term travel model improvement plan.

Products:

1. Validated 2015-based TIM 3.0 model.
2. Updated TIM 3.0 model documentation (including sensitivity testing and back-casting results) and validation report.
3. Tie-ins with MOVES, User Benefits, and DREAM.
4. Population and employment forecasts/TIM 3.0 model inputs for 2020, 2025, 2030, 2035, 2040 and 2045.
5. VISUM Scenario Manger for 2045 Long Range Plan.
6. Long-term travel model improvement plan.

Beneficiaries:

State DOTs, transit operators, member governments.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$640,000				\$640,000
2019	\$640,000				\$640,000
2020	\$640,000				\$640,000
2021	\$640,000				\$640,000

* PA TIP - MPMS #86077 - \$454,400 STU/Toll Credit Match
 NJ TIP - DB #X30A - \$185,600 STBGP-STU

PROJECT: 19-51-030 Fast Turnaround Traffic Analysis

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: David Anderson, Matthew Gates

Goals:

To provide quick response traffic analysis and planning services to the City of Philadelphia on an as needed basis to address traffic safety, mobility, access, or congestion issues within a localized area.

Description:

During the course of a year, City agencies find the need for assistance with traffic modeling or traffic analysis studies. The exact analysis needs are not always known in advance but would typically involve the use of existing (or easily developed) VISSIM or VISUM models or specific analysis using HCM or SYNCHRO based models where the City does not currently have capacity. These modeling efforts would inform potential conceptual improvements with a focus on quick turnaround design and operational improvements. The projects would be expected to last around 4-6 weeks from start to finish. This work would require that very little if any effort be spent on presentation and might involve simply the exchange of electronic data files to support further analysis or design work on the City's end.

Examples of projects might include:

- Use of the Center City, Schuylkill Expressway, or Roosevelt Boulevard microscopic simulation models to evaluate the traffic impacts of Street or ramp closures or other capacity constraints.
- Multimodal evaluation of capacity impacts due to bike lanes, transit stops, pedestrian accommodations, and other focused street design measures.
- Order of magnitude forecasts of travel demand for subareas and corridors for predefined land use and network scenarios.

Tasks:

1. Assemble an advisory committee which includes staff from DVRPC, the City of Philadelphia Streets Department, and the Office of Transportation and Infrastructure.
2. Clearly define the study area and the problem to be addressed.
3. Collect traffic data and perform field views.
4. Conduct Macro- or Micro-simulation modeling to quantify existing and future scenarios.
5. Develop conceptual improvements.

Products:

- 1. Periodic process memos as required documenting the study process, findings, and recommendations.

Beneficiaries:

The City of Philadelphia, SEPTA, local residents, and businesses.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$50,000				\$50,000
2019	\$50,000				\$50,000
2020	\$50,000				\$50,000
2021	\$50,000				\$50,000

*Funding from the City of Philadelphia

PROJECT: 19-51-040 District 6 Modeling Assistance

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Keith Hartington

Goals:

Support the implementation of PennDOT District 6 Reconstruction Projects by serving as a planning and coordination resource for PennDOT and providing traffic modeling and forecasting services throughout the I-95 corridor, and along other facilities as needed.

Description:

This project provides for technical and planning assistance to PennDOT District 6 for support in implementation of the I-95 Reconstruction Projects, and other traffic studies as identified by PennDOT. DVRPC will be “on call” for quick-turnaround analysis or data collection tasks in support of specific and timely I-95 project planning needs. Tasks will include data collection, meeting and stakeholder coordination, traffic modeling and forecasting, and general research as needed. This project will require an expansion of DVRPC staff to include a dedicated travel modeler to prepare traffic forecasts throughout the I-95 corridor in Pennsylvania. The additional staff member will report to the Manager, Office of Modeling and Analysis, and work with other OMA staff as needed to prepare traffic forecasts and other modeling services.

New traffic data and forecasts are needed for several tasks. These include analyzing additional interchange configurations to improve safety, reduce congestion, and address community concerns; support new or updated Point-of-Access (POA) studies; extend the horizon year of previous traffic forecasts in the corridor; analyze and plan for future freight activity; and prepare detour route forecasts for later construction phases.

Tasks:

1. Coordinate with PennDOT and their consultants; attend meetings and make presentations as needed.
2. Focus and calibrate regional travel demand model on the I-95 corridor, and other facilities as needed.
3. Conduct computerized traffic assignments to determine horizon year traffic volumes under No-Build and Build scenarios.
4. Prepare daily (AWDT) traffic volumes for I-95 mainline, ramps, and selected facilities impacted by the I-95 scenarios throughout Sectors A, B, C, and D.
5. Prepare AM and PM peak hour traffic forecasts, including intersection turning movements for the No-Build and Build scenarios, as needed.
6. Collect, tabulate, and/or process origin-destination and travel time data, as needed.
7. Prepare forecasts to evaluate the impact of new or improved transit connections

- on highway patterns, volumes, and interchange operations, as needed.
8. Prepare forecasts to evaluate the impacts of new land uses and/or redevelopment on travel patterns, volumes, and interchange operations, as needed.
 9. Prepare maps and tables for transmittal of the data and travel forecasts to PennDOT and their consultants.
 10. Prepare technical memorandums documenting the results of the travel forecasting; incorporate any comments from PennDOT and their consultants.

Products:

1. Traffic forecasts with supporting maps, tables, and figures.
2. Process memos as needed.

Beneficiaries:

PennDOT

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$105,000				\$105,000
2019	\$220,000				\$220,000
2020	\$220,000				\$220,000
2021	\$220,000				\$220,000

*PA TIP MPMS # 110127 - \$176,000 NHPP , \$44,000 State Appropriation 581

PROJECT: 19-51-060 Freight Model Enhancement

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Fang Yuan

Goals:

Update and enhance the truck model components in the DVRPC's regional travel forecasting model to improve freight and commercial vehicle forecasting and to support various planning projects where freight and truck movements are important considerations

Description:

Freight movement is significant in the Delaware Valley, with 9.8 million miles of daily truck activity pertaining to 1,000 miles of the National Highway System in the region. Efficient freight and commercial truck travel is essential to national, state, and local transportation infrastructure planning and our economic well-being. Moreover, during the reconstruction of the I-95 corridor in the region, accommodation of truck travel, including its mitigation along local roads, is of critical importance for the reconstruction of interchanges, planning traffic detours, and determining hours of construction. Behaviorally accurate modeling tools are needed to support all these activities.

DVRPC's existing freight demand model was limited to modeling light and heavy truck trips within the context of a traditional 4-step model. A truck survey was conducted in 2000 to determine truck trip generation rates and trip length frequency distributions. Vehicle classification traffic counts were collected and used to calibrate the model. The current truck model estimates truck trips generated or attracted to a traffic analysis zone (TAZ) based on employment by sector and the number of households within the TAZ. While the existing model is able to fairly accurately predict the average truck generation at the TAZ level and the total truck VMT in the region, its ability to predict truck volumes on individual highway facilities is less than ideal. The model is also unable to predict behavioral changes of truck travel due to programming or policy measures, or large-scale changes to the supply chain, such as the widening of the Panama Canal. This project will enhance various components in the regional travel forecasting model to better present and forecast truck travel in the region.

First, this project will update the truck generation component in the regional model to better estimate freight truck trips generated from special generators such as ports and airports and other major freight centers in the region. A new special freight generator model will be implemented, using the commodity flow data (the Freight Analysis Framework, FAF, data from FHWA or the TRANSEARCH data through PennDOT), split by mode, and disaggregated to the sub-county level or individual freight generators, to estimate freight trips generated at marine terminals, Philadelphia International Airport, and other rail or intermodal yards. Several freight truck trip generation methods will be tested and implemented to better capture

freight truck trips generated from warehouses, major shopping centers, and freight distribution centers along the I-95 corridor and throughout the region. Truck counts will be collected for model calibration and validation.

Second, this project will improve how the regional model presents service and delivery truck trips generated by commercial establishments in the urban area and by households from e-commerce. Service and delivery trucks are another major component of urban truck movements. These trips will be estimated by the establishment size and the households at the TAZ level, using DVRPC's cleaned up version of the National Establishment Time Series (NETS) employment database and freight trip generation rates from the National Cooperative Freight Research Program, truck diary surveys, and/or GPS data. Delivery truck trips may be estimated using the parcel delivery data available to DVRPC. A tour-based truck model will be implemented to represent trip chaining characteristics of urban truck movements. For each truck tour, a series of choice models will be employed to determine the start time of the tour, the number and type of stops along the tour, and the location of the stop and stop duration. The tour-based truck model is a more behaviorally accurate way to represent service and delivery truck movement in the urban area. It also better presents freight truck movements from ports, airports, or highway cordons to the freight distribution centers in the region and then to local TAZs. With truck travel demand estimated in the form of truck tours, truck volumes on individual highway facilities will be estimated more accurately, as will truck VMT, especially at smaller geographies. Commercial truck GPS data will be purchased and used for estimating the number and type of truck tours and other trip chaining characteristics, and for understanding truck trip distribution from key freight generators in the region.

Third, after the improvements at the truck demand side, this project will enhance the highway assignment model (which simulates the route choice between stops along the vehicle tours and forecasts the total vehicular volume at the link level) in the regional model. A multi-class highway assignment procedure will be implemented to assign autos, light trucks, and heavy trucks simultaneously, with each of these vehicle types' route-choice preferences considered specifically while impacting the highway performance jointly. The regional highway network will be modified to represent the different capacity, free-flow speed, toll, value of time, and other operational characteristics (e.g. gradient) or restrictions (e.g. height and weight) for trucks versus automobiles. The multi-class highway assignment is the necessary step to take in order to obtain accurate estimates of truck volumes at the link and route level in the highway construction scenarios.

Last, this project will improve the model's forecasting and sensitivity in response to the supply-chain change at the larger regional, national or international level (e.g. the impact of Panama Canal expansion to the shipping activities in the east coast). This project will develop the method to link the regional travel forecasting model with other forecasting models/results, such as marine and aviation activity forecasts for the Philadelphia ports and airports, commodity flow forecasts at the federal level, or national supply chain model that was built at other regions but may be adopted to our region. Thus, the model is able to forecast and present the truck travel change generated not only from the Philadelphia Ports but also from the New York/New Jersey Ports travelling to and through the DVRPC region as a result of the Panama

Canal expansion.

This project will require the purchase of goods and services. It will begin in FY2018 and end in in FY2020.

Tasks:

1. Form the project steering committee; identify the planning and analysis needs for freight model improvements.
2. Collect truck counts at selected freight generators, major highways, and other facilities for model validation.
3. Evaluate commercial truck GPS data sources, purchase and analyze the selected data for truck touring and distribution characteristics.
4. Update truck generation models for special generators.
5. Draft RFP for consultant assistance to develop the tour-based truck model and improve the model sensitivity to supply-chain changes, review proposals, and select consultants.
6. Assist the selected consultant for the tour-based truck model development, calibration, and other freight model enhancements.
7. Update the regional highway network and implement multi-class highway assignment procedure.
8. Conduct model sensitivity test.
9. Develop model documentation.

Products:

1. Updated truck model components in the regional travel forecasting model.
2. An enhanced regional highway network with roadway and operational characters that affect truck travel.
3. Memorandum documenting model development, calibration, and sensitivity test.

Beneficiaries:

PennDOT, DVRPC member counties

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$120,000				\$120,000
2019	\$380,000				\$380,000
2020					
2021					

\$342,000 Interstate Management (IM) \$38,000 State Appropriation 581-IM

PROJECT: 19-52-040 Local Modeling of Proposed New PA Turnpike Interchanges (Phased)

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: David Anderson

Project Manager: Matthew Gates, Meijun Liu

Goals:

Manage growth. Establish a modern transportation system. Advance transportation improvement projects contained in the Long-Range Plan toward implementation.

Description:

Montgomery County is seeking to promote reinvigorated business centers along the Pennsylvania Turnpike corridor via expanded access to the highway. In 2015, Montgomery County Planning Commission (MCPC) staff completed its Turnpike Corridor Reinvestment Project. The study's vision included providing six new or modernized interchanges, as well as other improvements. All are identified in the current DVRPC Long-Range Plan for the Year 2045. New interchanges—proposed at Henderson Road in Upper Merion Township, and at Welsh Road (PA 63) in Upper Dublin and Upper Moreland Townships—are not funded in the current Plan.

New activity in the business parks is likely to generate additional traffic volumes. New traffic on the Turnpike will add revenue. Expanded accessibility to the regional highway will reduce traffic at existing toll plazas, but introduce it on busy arterials where new toll plazas are proposed.

DVRPC supported the Reinvestment Project by producing Year 2040 daily travel demand forecasts for its conceptual engineering / interchange design content. The present project evaluates peak hour traffic conditions in the vicinity of the two new interchanges to: inform the public and municipal decision makers of the likely impacts, identify localized transportation improvements to ameliorate identified problems, and build support with the funding agencies.

The project is being undertaken as a two year effort. Year one (FY1018) was devoted to data collection and regional travel demand forecast modeling (VISUM) surrounding both new interchanges. Current, 2045 No-Build, and 2045 Build conditions were modeled. Year two (FY1019) will include traffic operational modeling (VISSIM) of each scenario to assess peak hour traffic conditions and needs. Public workshops or open houses will be held for each interchange study area.

Tasks:

Year Two (FY2019):

1. Continue project steering committee for each interchange study area comprised of municipal representatives, staff from the Montgomery County Planning

Commission, SEPTA, PennDOT, and the Pennsylvania Turnpike Commission. Get input at two meetings in each study area.

2. Perform traffic operational modeling (VISSIM) for the AM and PM peak traffic hours for current, Year 2045 No-Build, and Year 2045 Build conditions.
3. Identify traffic deficiencies, and model transportation solutions to ameliorate conditions or accommodate the vehicular demands in each scenario.
4. Meet with each study area steering committee at the conclusion of the No-Build and Build scenarios.
5. Conduct a public open house meeting in each study area to gauge reaction to the transportation plans and proposals.
6. Prepare a reporting document that summarizes the undertakings and findings of the study interchange investigations.

Products:

Meeting materials, final report, and transportation operational models.

Beneficiaries:

Traveling Public, Upper Merion Township, Upper Dublin Township, Upper Moreland Township, Montgomery County, PennDOT, Pennsylvania Turnpike Commission, and SEPTA.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$240,000				\$240,000
2019	\$250,000				\$250,000
2020					
2021					

*PA TIP - MPMS #108512 - \$250,000 STU/Toll Credit Match

PROJECT: 19-52-050 Route 422 Operations and Capacity Study

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Matthew Gates

Project Manager: Keith Hartington

Goals:

To develop a traffic operations model for the US 422 corridor in Chester and Montgomery counties that can provide performance measures to assess the current and projected operating conditions of the highway and its interchanges.

Description:

The efficient operation of the US 422 corridor is fundamental to the vitality of the greater Philadelphia region. Due to limited capital funding for capacity improvements, alternative strategies to maximize the current and future operating performance of this corridor continue to be identified. The primary focus of this study will be to develop a microsimulation tool and use it to analyze those strategies identified via participation of the project's stakeholders.

US 422 is an important facility to southeastern Pennsylvania. It extends from King of Prussia to Pottstown and beyond, carrying over 60,000 vehicles on a daily basis. It provides connections to many of the region's expressways, including the Pennsylvania Turnpike, US 202, and I-76. Many sections of US 422 currently operate under congested conditions throughout much of the day. This project will develop a traffic operations model for the US 422 mainline, interchange ramps, and the ramp intersections with crossing streets. This model will simulate the travel of individual vehicles along the US 422 corridor during AM and PM peak periods under current (2018) conditions. To construct this operations model, DVRPC will collect data on existing conditions, including traffic volumes, travel speeds, roadway geometry, and signal timing plans. A microscopic traffic operations model using VISSIM software will be developed.

This model will provide measurements such as average vehicle speeds, throughput, congestion, delay, and queue lengths. US 422 will be modeled as a system; the effects of spillback from downstream congestion will be captured in the analysis. In addition, animated graphics will allow visualization of traffic operations under prevailing conditions, including the effects of merging and weaving sections, lane drops and lane adds, and lane changing behavior at off-ramps.

Once this model is in place and fully tested, it can then be used to evaluate the effectiveness of conceptual improvement strategies such as new interchange configurations, additional freeway auxiliary lanes or hard shoulder running, ramp metering, limited expressway widenings, improved geometry, or other local improvements that could alleviate traffic congestion throughout the corridor. Specific

improvement strategies will be developed in consultation with PennDOT throughout the study process. The goal is to identify the most appropriate set of discrete roadway and corridor operational improvements for this corridor. This multi-year project is expected to take approximately 30 months to complete.

Tasks:

1. DVRPC will coordinate this project with PennDOT, the Chester and Montgomery County Planning Commissions, and the affected municipalities. A project steering committee will be formed to share data, analysis, and results. In addition to a kick-off meeting, periodic meetings will be held to review data, to compare the base-year VISSIM traffic operations to real-world data, to review daily AM and PM peak period traffic volumes, and review the simulated traffic operations. This task will continue throughout the project.
2. Traffic counts will be collected on every on-ramp and off-ramp along US 422 and at selected locations along the mainline. Daily volumes will also be reported in order to calibrate the travel demand model. A sample of counts will also collect vehicle classification to determine the proportions of light and heavy truck traffic using the facility at various locations. These counts will be summarized in hourly intervals during the AM and PM peak periods for input to the VISSIM traffic operations model. If warranted, manual intersection turning movement counts will be collected at signalized intersections at ramp junctions with crossing streets. These counts will be used to model the storage capacity of off-ramps, and determine whether or not their queues extend far enough to affect mainline traffic operations.
3. DVRPC's regional travel demand model will be focused on the US 422 corridor and calibrated to base-year (2018) conditions. The travel demand model will be executed and the output traffic forecasts compared to existing travel patterns and traffic volumes collected in Task 2. Travel demand model parameters will be fine-tuned as necessary until the model reasonably replicates existing travel patterns and traffic volumes throughout the study area.
4. Current signal timing plans at ramp intersections will also be input into the model. Field observations on the location and extent of recurring bottlenecks may be required. Additional data needed for model calibration, such as travel speeds, flow rates, mainline volumes, and queue lengths will be obtained through a variety of sources, including Here.com, Google Traffic, INRIX, PennDOT's traffic cameras, and project team field visits.
5. DVRPC will create a traffic operations model using VISSIM software representative of base-year (2018) conditions during the AM and PM peak periods. The model's parameters will be calibrated to ensure that the model adequately represents existing conditions, including volumes, travel speeds, and the location, extent, and duration of congested conditions.
6. DVRPC will work with project team stakeholders to develop a horizon year for analysis to serve as a basis for the No-Build and Build scenarios. A near-term timeline provides a more realistic and tangible deliverable set. DVRPC recommends a 2030 horizon year, but this will be finalized with input by the steering committee.
7. Develop No-Build and Build scenarios based on the agreed-upon horizon year. The No-Build will serve as the future base line scenario from which other future-year

networks can be compared. Under the Build scenarios, various improvements will be developed and tested. These improvement strategies may come from stakeholder suggestions, prior studies, DVRPC recommendations, or identified within the VISSIM model.

8. Collect, quantify, and compare performance measures for the Base Year, No-Build, and Build conditions.

9. Maps, figures, and tables displaying various input data and resulting performance measures for the AM and PM peak period will be prepared. Additional summaries of the travel simulation model outputs, such as users cost/benefit, emissions analysis, and fuel consumption may also be provided.

10. Upon completion of travel forecasts and operations model development, DVRPC will prepare a report that documents the operational model. The report will include current traffic count data, a description of the travel forecasting process, and the preparation, calibration, and results of the operations model.

11. DVRPC staff will provide technical assistance in interpreting and presenting the results of the study as needed. The traffic operations model and its input data for base year conditions will be made available to PennDOT for its use. Additional Build scenarios may be evaluated using the operations model under subsequent projects.

Products:

1. Technical report that documents the preparation and calibration of the operations model, presents current traffic count data, a description of the travel forecasting process, and the results of the model.

Beneficiaries:

PennDOT, Chester County Planning Commission, Montgomery County Planning Commission

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$150,000				\$150,000
2020	\$150,000				\$150,000
2021	\$100,000				\$100,000

PA TIP #110837 \$150,000 STU/Toll Credit Match

Responsible Agency: Delaware Valley Regional Planning Commission**Program Coordinator:** Gregory Krykewycz**Project Manager:** Betsy Mastaglio, David Anderson, Matthew Gates**Goals:**

Review PennDOT's 5-year resurfacing program for locations in Philadelphia that are, or could be, City bicycle network priorities. Conduct concept development and technical analysis to identify safe bicycle improvements that could be accommodated as part of resurfacing projects while balancing impacts on other modes and roadway needs.

Description:

PennDOT paving projects provide the City of Philadelphia an opportunity to re-evaluate the operations, safety, and striping configurations of state roads in the City. These are commonly higher-volume, higher-speed collector or arterial roadways that are most primed for a fresh look through a Vision Zero lens, but due to their regional traffic carrying role, require more intensive study and evaluation prior to implementation of meaningful multimodal and safety improvements.

DVRPC will support continued expansion of the City bicycle network and renewed focus on safety through Vision Zero street redesigns by first, assisting the City and PennDOT in identifying roadways on the PennDOT resurfacing plan that are the best candidates for bike-friendly redesign. This will be based on factors like timing (with a likely focus on projects in years 2-3 of the 5-year plan), favorability for redesign based on an initial screening-level review, and role in the planned network. Next, staff will conduct technical work to develop planning-level design concepts. Depending on the characteristics of a given corridor, concept refinement may require capacity analysis to assess the impacts of lane configuration changes on traffic movements, as well as network analysis to assess the likely impact of any capacity changes on other roadways. An initial scoping review in collaboration with city and PennDOT staff will determine the complexity of the priority projects and level of analysis required, which will in turn determine the number and extents of locations to be evaluated--with a target of roughly 4 projects to be evaluated during the course of this work.

Tasks:

1. Work with City and PennDOT staff as appropriate to identify candidates for redesign on PennDOT's 5-year paving plan.
2. Work with City and PennDOT staff as appropriate to develop initial concept plans for these candidate corridors.
3. Collect data and provide traffic analysis and modeling support to evaluate the facility and network-level traffic impacts of the initial concepts, as necessary.

4. Refine initial concepts as appropriate based on traffic analysis findings.
5. Prepare memos for PennDOT review and documentation of each evaluated corridor's proposed configuration, traffic impacts, and anticipated benefits. These memos will be bundled into a technical report of work and findings over the course of the project.

Products:

1. Memorandums documenting each evaluated corridor's proposed configuration, traffic impacts, and anticipated benefits. These memos will be bundled into a technical report of work and findings over the course of the project.

Beneficiaries:

City of Philadelphia, PennDOT District 6-0.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$120,000				\$120,000
2020					
2021					

* PennDOT SPR Funds

PROJECT: 19-52-070 Southeastern Pennsylvania Pedestrian Counting Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Cassidy Boulan

Project Manager: Betsy Mastaglio

Goals:

Design and develop a new cyclical pedestrian counting program for Southeastern PA, to complement the regional cyclical bicycle counting program, and conduct the initial round of counts for the program. This project will also create capacity for DVRPC to conduct additional pedestrian counts, on request, to support PennDOT Connects project scoping.

Description:

DVRPC's counting program is a leading industry practice in advancing data collection for all modes, but is particularly innovative on the active transportation side. The cyclical bicycle counting program was established in 2014 as the first of its kind nationally, to permit a better understanding of local bicycle trips now and time series comparisons in the future for bicycle travel growth in the coming years. This project will establish a cyclical pedestrian counting program for Southeastern Pennsylvania to complement the regional cyclical bicycle counting program. It will also support work that will build off the Regional Sidewalk Inventory and online walkability engagement platform, such as prioritization of sidewalk gaps for closure.

A cyclical pedestrian counting program will establish a program of count locations of regional and county/local interest based on a mix of place types and including locations where walkability investments have been made or are planned. Using the data from the program will help build a better understanding of the impact of changes on demand.

Included in the pedestrian counting program funded through this project will also be capacity to conduct additional pedestrian counts on behalf of, and at the request of, PennDOT and other partner agency staff to support PennDOT Connects project scoping during FY2019. If this project is funded, DVRPC will fund (under other programs) the purchase of additional pedestrian counting equipment necessary to complete this work.

The major program tasks will include:

- designing and coordinating a new cyclical pedestrian counting program for Southeastern Pennsylvania
- conducting the initial round of counts for this program program, up to approximately 90 locations
- conducting additional pedestrian counts on request to support PennDOT Connects

project scoping

Tasks:

1. Convene a meeting of PennDOT representatives, Pennsylvania county planning staff, TMAs, and others as appropriate to identify candidate locations for the pedestrian cyclical counting program.
 - a. Rationalize the list of candidate locations based upon expected facility use patterns, adjacent land use, and other relevant criteria to establish a consensus final list of up to roughly 90 locations.
 - b. Conduct baseline weeklong pedestrian counts at the candidate locations
 - c. Revise the list of locations based on the results of the baseline counts
 - d. Divide the list into 3 approximately equal groups of locations and assign to a year in a 3 year data collection cycle for future work.
2. Conduct weeklong pedestrian counts in a timely manner to support PennDOT Connects scoping review, as needed.

Products:

1. Process memos, tables, databases, GIS layers and maps, and other deliverables as warranted to summarize and share results from the program.

Beneficiaries:

PennDOT, Pennsylvania member governments, operating agencies, pedestrians, and the public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$80,000				\$80,000
2020					
2021					

*PennDOT SPR Funds

PROJECT: 19-52-080 Traffic Calming Toolkit and Decision Making Framework

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kevin Murphy

Project Manager: Marco Gorini

Goals:

Speeding and aggressive driving are leading contributing factors in the rise of killed and severe injury crashes on the region's roadways. While it has been challenging to address these issues with only engineering approaches, speed management techniques have demonstrated effectiveness in many contexts. Local and state zero crash deaths initiatives promote speed management as an effective tool for advancing safety goals. Integrating the right speed management techniques on appropriate corridors and intersections provides localized benefits and contributes to area-wide crash reduction.

Description:

A framework for deploying speed management techniques is needed to ensure context appropriateness. This project is designed to more specifically define context sensitive speed management solutions for cross-section types and unique roadway environments, to ensure a safe and efficient movement of people and goods throughout the transportation network. This effort would build on PennDOT Publication 383 – Pennsylvania's Traffic Calming Handbook, and the Smart Transportation Guidebook (NJDOT/PennDOT), to assist the regional partners in standardizing the application of specific speed management and traffic calming treatments. The roadway categories and land use contexts presented in these documents, as well as those considered national best practices, provide a solid foundation on which to develop a context responsive decision-making framework to guide speed management investments.

Tasks:

1. Collaborate with state partners to define goals and final scope.
2. Catalog all roadway types, cross-section types, and contexts to be included.
3. Create a database of criteria recommended for proper application of all available speed management and traffic calming techniques applicable to PennDOT roadways, drawing from referenced resources and national best practices.
4. Produce a final report which prioritizes easy reference for practical application.
5. Evaluate the usefulness of USLIMITS2 for speed limit setting to match context.

Products:

1. Catalog of roadway typologies, contexts, and speed management techniques.
2. Final report.

Beneficiaries:

PennDOT, residents, commuters, bicyclists, pedestrians, and all roadway users in DVRPC's five Pennsylvania counties.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$150,000				\$150,000
2020					
2021					

* PennDOT SPR Funds

PROJECT: 19-52-090 Regional Transit Priority Setting — Pennsylvania

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Gregory Krykewycz

Project Manager: Sarah Moran

Goals:

Conduct analysis and develop new tools to improve our shared regional capacity to think about transit system improvement, operations, expansion, access, and TOD priorities in a more coordinated way.

Description:

This project includes a comprehensive “fresh look” service gap analysis that can inform regional public transit improvements in the DVRPC region, including the development of new planning tools. This work will support the Southeastern Pennsylvania Transportation Authority’s development of a Comprehensive Long Range Plan; inform regional priority-setting in New Jersey, and support future DVRPC transit planning work and development of the next regional Long Range Plan.

This project will continue a sequence of work, with tasks being developed collaboratively with regional partners to support ongoing and future planning activities.

Tasks:

1. Service gap analysis: Continuation of FY2018 analysis to identify gaps in transit service availability, frequency, and accessibility.
2. Screening gaps: Using additional datasets and information, continue conducting analyses to screen the gaps for different sets of priorities. Screening analyses will be focused on informing transit investment decisions based on factors such as wheelchair accessibility, park-and-ride capacity and demand, bicycle and pedestrian station access, and encouraging growth in planned centers.
3. Synthesis: Work with planning partners to develop methods for combining the results of gap and screening analyses to allow for overall prioritization of transit needs and opportunities.
4. Deliverables: Develop interactive webmaps, along with supplementary datasets and explanatory documentation, to share results of tasks 1-3.

Note: Completion of this project may require the purchase of equipment or services.

Products:

1. Datasets, reports, interactive tools, memorandums, or other products as appropriate.

Beneficiaries:

SEPTA, NJ TRANSIT, DRPA/PATCO, member counties and municipalities, and the transit riding public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$175,000			\$35,000	\$140,000
2019	\$143,750			\$28,750	\$115,000
2020					
2021					

*PA FTA \$115,000

Responsible Agency:**Program Coordinator:** Betsy Mastaglio**Goals:**

This Study will evaluate concepts and technical feasibility for adding a new Regional Rail station in East Whiteland Township between the existing Malvern and Exton Stations on the Paoli-Thorndale line near to, or on, the Immaculata University campus. Analysis will include alternatives for siting the station with applicable land ownership, environmental, and access opportunities and constraints (both physical and scheduling/operations requirements), and order of magnitude costs. Input from stakeholders will refine alternatives such that ridership will be forecast for up to two (2) alternatives.

Description:

Both East Whiteland Township and Immaculata University have expressed interest in the potential development of a new rail station between the existing Malvern and Exton Stations along the Paoli/Thorndale line. East Whiteland Township would like to see a new station as part of revitalizing the US 30 Corridor, a recommendation being considered in their current TCDI-funded DRAFT US 30 Corridor Master Plan.

Immaculata has inquired with SEPTA and PennDOT about the technical feasibility of adding a new station and potentially acting as a developer in a P3 arrangement if a new station is determined to be feasible. A station in this area would have excellent highway access due to its proximity to the convergence of both the US 30 Exton Bypass and US 202. It would also be sited proximate to SEPTA's Frazer Yard, a maintenance facility and rail yard. The Frazer Yard is underway with a multi-phased construction project to expand and update the site in preparation for the arrival of new locomotives and multi-level cars.

Analysis of a new station in this location will require technical input from a number of key stakeholders including: several departments within SEPTA, Amtrak, Norfolk Southern, the PennDOT Bureau of Public Transportation, Chester County, East Whiteland Township, and Immaculata University.

Tasks:

1. Form a project steering committee comprised of SEPTA, PennDOT Bureau of Public Transportation, Amtrak, Norfolk Southern, Chester County, East Whiteland Township, Immaculata University, and other stakeholders as appropriate.
2. Gather and inventory data on baseline conditions including parcel ownership; track layout; interlockings and sidings, train activity by operator and time of day, environmental conditions including floodplain, wetlands, and steep slopes; existing

auto, bicycle, and pedestrian connectivity; current SEPTA ridership; ADA station accessibility; and parking along the Paoli-Thorndale line. Prepare an existing conditions summary with a preliminary assessment of needs and opportunities, including initial siting opportunities for the station based on SEPTA station layout requirements.

3. Collect feedback on the needs and opportunities for a station through a steering committee workshop facilitated by DVRPC to solicit technical input on operations and engineering requirements. Collect additional focused design input and guidance on train movements from SEPTA engineering and operations staff as appropriate.
4. Develop up to two (2) conceptual alternative sites for a new station that take into consideration the operations, environmental, access, and ownership opportunities. Station siting concepts might include: siting of parking, access, platform, ticketing facilities, permeable/green stormwater management areas, potential development connectivity, and preliminary service scheduling. A summary of each alternative will outline the capital and operational requirements and an order-of-magnitude cost estimate.
5. Prepare ridership forecasts to evaluate new ridership that could be attracted to a new station (supported in part by new station-oriented development), as well as how a new station would redistribute existing ridership from nearby stations--and how that, in turn, might impact parking demand across the line.
6. Convene stakeholders to review conceptual alternatives with ridership forecasts and to brainstorm an implementation plan.
7. Prepare a final report summarizing the results of the project.

Products:

1. A report detailing the project’s findings.

Beneficiaries:

SEPTA, East Whiteland Township, Chester County, Paoli-Thorndale Regional Rail customers, and Immaculata University.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$190,000			\$38,000	\$152,000
2020					
2021					

*PA Transit Supplemental

Responsible Agency:**Program Coordinator:** Betsy Mastaglio**Project Manager:** Elizabeth Compitello**Goals:**

This project will explore options and good practice for regional coordination of bike share programs. Working with an advisory committee, DVRPC staff will identify current bike share practices at various scales and weigh their applicability to local contexts within the Region. The project will support ongoing dialogue toward a framework under which a regionally-coordinated program could be administered.

Description:

Bike share programs are being introduced across the country, in small and large cities alike. Our region's own Indego program is viewed as a tremendous success. As communities search for more sustainable modes to move people, bike share programs are being explored in places, and by sponsors, we might never have imagined. Within the DVRPC region, a number of bike share practices are being explored for different contexts and operating goals.

This project is the Pennsylvania portion of a regional project that will develop an appropriate framework for creating a platform for regionally coordinating bike share program(s). This framework will explore the following elements: 1) the development of system specifications and functionality that ensures both an effective system and system interoperability across geographical boundaries; 2) contract standardization between system owners and operators across the system network; and 3) a central management or direction team to coordinate and align system design, development, and implementation.

This project will be performed with two pillars of focus. Tasks for this project support one or both of these focus areas:

- 1) Scanning the Practice: Scanning the Region – including a scan of bike share practices, their necessary context characteristics, and lessons learned; a scan of the various context characteristics within the DVRPC region; and match-making between bike share practice type and DVRPC context. Short case studies will help illustrate service models in various contexts.
- 2) Bike Share Working Group – Convene and facilitate a Bike Share working group to foster information sharing and networking between those that are interested in implementing or continuing a bike share program, and to discuss the platform under which a regionally-coordinated bike share program could be administered.

Tasks:

1. Conduct a survey of planning partners, soliciting interest level and active pursuits of bike share programs, and the characteristics of those systems that are considered to be most desirable.
2. Form an advisory group of interested member governments to serve throughout the project, including to identify system, and system integration, goals of a bike share program, and to vet framework scenarios for administering a regionally-coordinated program.
3. Conduct a bike share program current practice scan, looking at the pros and cons of various practices, understanding the necessary context characteristics to support the practice, and identify key aspects that increase the effectiveness of those systems.
4. Take an inventory of the various contexts within the region that exist; for example, urban centers, suburban corridors, office parks, or close knit municipalities.
5. Apply the necessary context characteristics of bike share practices from Task 3, to the regional context inventory of Task 4, to perform a bike share match-making of the region. This will be supplemented with short case studies as appropriate.
6. Develop various platforms under which a regionally-coordinated bike share program could be organized under one (or more) entities that could assist municipalities or institutions in administering the contracting and procurement process between each municipality and the bike share program suppliers and operators.

Products:

1. A report, memorandum and/or web-based summary of findings and a platform under which a regionally-coordinated bike share program could be administered.

Beneficiaries:

Municipalities and member governments interested in starting or maintaining a bike share program; members of the general public seeking to use bike share as a more sustainable and active mode of transportation.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$60,000			\$12,000	\$48,000
2020					
2021					

*PA Transit Supplemental

PROJECT: 19-52-120 Regional Sidewalk Inventory - NJ Counties

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kimberly Korejko

Project Manager: Alison Hastings, Gregory Krykewycz, William Stevens

Goals:

To improve pedestrian planning efforts and regional asset management by developing the New Jersey portion of the regional sidewalk inventory.

Description:

To assist with planning efforts to help communities in the region become more pedestrian-friendly and accessible, this project, building on work completed in FY2018 for Southeastern Pennsylvania, will complete the development of a new regional sidewalk inventory by gathering data for our New Jersey counties. NJ data gathering is anticipated to occur over two years.

The regional sidewalk inventory will allow DVRPC and partners to do things like map and measure the mileage, connectivity, and quality of sidewalks in the region or a local area, identify gaps where sidewalk infrastructure is not present or in poor condition, set grounded targets for sidewalk network buildout, and can serve as a starting point for the development of priorities to address sidewalk gaps in the most appropriate places. Development of the regional sidewalk inventory began in FY2018, as a consultant was selected to create the inventory data for sidewalks in the five county Pennsylvania portion of the DVRPC region.

Completion of the New Jersey portion of the regional sidewalk inventory will allow DVRPC to better address walkability in regional performance measures, support regional asset management efforts, and will be beneficial for other planning activities like Safe Routes to School, pedestrian safety audits, healthy communities planning, and improving safe and equitable access to transit and other essential services. A sidewalk inventory can also be used to support the creation of pilot funding programs related to improving walkability and accessibility.

The regional sidewalk inventory is a necessary component of the Pedestrian Facilities and Planning Portal. This portal, begun in FY2018 using other funds, will provide a space to allow collaboration between local and regional planning partners developing pedestrian improvements using a shared web-based tool. The present project will also support adaptation of the Portal as necessary to include maintenance of New Jersey inventory and planning information.

FY2019: NJ Inventory Part I

During the first part of this multiyear project, building from input gathered from a working group of NJ stakeholders, the process of retaining a consultant to create

the sidewalk inventory for Mercer and Burlington counties will occur. If FY2018 performance is satisfactory, the qualified consultant creating the inventory for the five PA counties will be retained to develop an NJ sidewalk inventory beginning in FY2019 for these two NJ counties. Where appropriate, DVRPC and the consultant will incorporate existing sidewalk inventories into the regional dataset. DVRPC will continue to establish and enhance a working group with appropriate staff from NJDOT and our NJ member governments to discuss needs and strategy for the development of the sidewalk inventory for the NJ counties.

FY2020: NJ Inventory Part II

The second part of this project will complete the regional sidewalk inventory by creating data for the remaining two counties in the DVRPC region; Camden and Gloucester Counties. If FY2018 and FY2019 performance is satisfactory, we anticipate that the qualified consultant creating the inventory for the five PA counties as well as for Mercer and Burlington Counties will be retained to develop this portion of the regional inventory.

Note: Completion of this project will require the purchase of equipment or services.

Tasks:

FY2019:

Sidewalk Inventory (Mercer and Burlington Counties, New Jersey)-

1. Continue to work with stakeholders to discuss needs and investigate known existing sidewalk datasets.
2. Develop contract for consultant support to develop the sidewalk inventory, and retain consultant.
3. In collaboration with the vendor perform quality control checks as needed on interim and final datasets.

FY2020:

Sidewalk Inventory (Camden and Gloucester Counties, New Jersey)-

1. Continue to work with stakeholders to discuss needs and investigate known existing sidewalk datasets.
2. Develop contract for consultant support to develop the sidewalk inventory, and retain consultant.
3. In collaboration with the vendor perform quality control checks as needed on interim and final datasets.

Products:

1. Spatial dataset of centerlines of sidewalks in the NJ portions of the DVRPC region.
2. Additional datasets for NJ portions of the DVRPC region that are created during the process of building the NJ sidewalk inventory.

Beneficiaries:

State DOTs, member governments, transit operators, municipalities, nonprofit groups, regional residents.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$100,000				\$100,000
2020					
2021					

* NJ TIP - DB #D1706 - \$100,000 STBGP-STU

PROJECT: 19-53-020/025 HPMS and Functional Classification System (PA & NJ)

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Jonathan Ferullo

Goals:

Improve efficiency of the region's transportation system by providing an updated Highway Performance Monitoring System and Functional Classification System to meet FHWA requirements and determine improvement.

Description:

This project will collect and update traffic characteristics of the HPMS links and Highway Functional Classification System. HPMS is a database system designed to annually assess the physical and operational characteristics of approximately 300 selected non-interstate highway links. This and other urban area information will be used at the national level to assess system condition and usage and to allocate highway funding.

The Highway Functional Classification is a system of highway designations by area type and facility type. One use of a link's classification is to determine federal funding eligibility for improvement projects. DVRPC works with member governments and state DOTs in updating the highway classifications to reflect changing conditions.

Tasks:

1. Collect traffic information, geometric, and operational characteristics for approximately 300 sample links of the HPMS network in the Pennsylvania portion of the region.
2. Gather volume/classification counts for 100 non-interstate links.
3. Prepare field forms and collect traffic counts for 40 links on the New Jersey portion of the region.
4. Enter counts collected during the year into the DVRPC Traffic Count system.
5. Transmit data to PennDOT and NJDOT by specified dates.
6. Review, coordinate, and process requests for functional classification changes from state, county, and local governments.
7. Revise the functional classification system based on these requests.

Products:

1. Updated HPMS data files of physical and operational characteristics.
2. Database of counts taken in New Jersey and Pennsylvania.
3. Record of requests for functional classification changes.
4. Updated functional classification maps.

Beneficiaries:

States, counties, and cities.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$200,000	\$200,000			
2019	\$200,000	\$200,000			
2020	\$200,000	\$200,000			
2021	\$200,000	\$200,000			

PROJECT: 19-53-030 PennDOT District 6-0 Traffic Volume Data

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Charles Henry

Goals:

Improve efficiency of the region's transportation network by providing travel mode volume data to design highway improvements in the Pennsylvania portion of the Delaware Valley region.

Description:

This continuing project provides PennDOT District 6-0 with specific volume data at locations in Bucks, Chester, Delaware, Montgomery, and Philadelphia counties for studies primarily related to traffic signals and controls. Depending on the location and type of information required, these data may include one or more of the following: manual vehicle classification counts; turning-movement counts; bicycle counts; pedestrian counts; physical characteristics of the intersection; descriptions of adjacent land use, particularly schools; and other appropriate information.

Tasks:

1. Review PennDOT District 6-0 requests and prepare assignments for field personnel to collect data.
2. Collect data for one of the following types of studies and time periods: (a) video or manual intersectional vehicle turning movements between 7:00 a.m. and 6:00 p.m. recorded in 15-minute time increments; (b) 48-hour portable traffic recorder counts by hour; (c) video or manual truck classification hourly counts between 7:00 a.m. and 3:00 p.m.; and (d) weeklong non-motorized (bicycle/pedestrian) counts in 15-minute time increments.
3. Review, process and tabulate field count data. Convert recorder counts to AADT (motorized) and AADB and AADP (non-motorized).
4. Enter counts into DVRPC Traffic Count System and transmit to PennDOT and member governments.
5. Transmit appropriate field data to PennDOT District 6-0 office and other entities as appropriate.

Products:

1. Data Files.
2. Responses to specific District 6-0 requests.

Beneficiaries:

PennDOT.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$300,000				\$300,000
2019	\$300,000				\$300,000
2020	\$300,000				\$300,000
2021	\$300,000				\$300,000

*PA State Appropriation 582 Funds

PROJECT: 19-59-700 Member Government Special Projects

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: John Ward

Goals:

Improve the efficiency of the region's infrastructure by preparing special studies for collecting data, improving the existing transportation system and other infrastructure, environmental clearance process, and related planning and coordination needs.

Description:

DVRPC will respond to specific project requests and coordinate with member governments and other agencies to prepare special studies, such as data collection, data analysis, socioeconomic and traffic forecasts, technical analysis, public involvement, and related planning activities.

Tasks:

1. Collect and analyze required data and environmental and demographic information.
2. Assist in the intergovernmental and public coordination process.
3. Prepare special technical reports and related documentation as required.

Products:

1. Technical memo or report for each study.

Beneficiaries:

Member governments and other agencies.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$1,065,403				\$1,065,403
2019	\$581,774				\$581,774
2020	\$581,774				\$581,774
2021	\$581,774				\$581,774

* Projects to be defined



CHAPTER 3

→ Supportive Regional Highway
Planning Program (SRHPP)

JANUARY 2018

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FISCAL YEAR 2019 PLANNING WORK PROGRAM | CHAPTER 3**

PA Supportive Regional Highway Planning Program (SRHPP)

19-60-010	Bucks County: Supportive Regional Highway Planning Program	239
19-60-020	Chester County: Supportive Regional Highway Planning Program	243
19-60-030	Delaware County: Supportive Regional Highway Planning Program	245
19-60-040	Montgomery County: Supportive Regional Highway Planning Program	249
19-60-050	Philadelphia: Supportive Regional Highway Planning Program	251
19-60-051	City of Philadelphia Traffic Counts	255

NJ Supportive Regional Highway Planning Program (SRHPP)

19-61-010	Burlington County: Supportive Regional Highway Planning Program	259
19-61-020	Camden County: Supportive Regional Highway Planning Program	263
19-61-030	Gloucester County: Supportive Regional Highway Planning Program	267
19-61-040	Mercer County: Supportive Regional Highway Planning Program	271
19-61-060	City of Camden - Supportive Regional Highway Planning Program	275
19-61-070	Camden County - Traffic Counting Program	277
19-61-080	Gloucester County Traffic Counting Program	279
19-61-090	Mercer County Traffic Counting Program	281
19-61-100	Regional Strategy and Best Practices for Bike Share Program Coordination (New Jersey)	283

Table C	FY 2019 PA Supportive Regional Highway Planning Program	237
Table D	FY 2019 NJ Supportive Regional Highway Planning Program	257

**Delaware Valley Regional Planning Commission
 FY 2019 PENNSYLVANIA SUPPORTIVE REGIONAL
 HIGHWAY PLANNING PROGRAM
 TABLE C**

Core Projects					
Project Number	Agency	Project	FY 2019 Budget		
			Cash	Match	Total
19-60-010	Bucks County	Supportive Regional Highway Planning	\$91,357	\$22,838	\$114,195
19-60-020	Chester County	Supportive Regional Highway Planning	132,250	33,063	165,313
19-60-030	Delaware County	Supportive Regional Highway Planning	66,125	16,531	82,656
19-60-040	Montgomery County	Supportive Regional Highway Planning	137,470	34,368	171,838
19-60-050	City of Philadelphia Streets Department	Supportive Regional Highway Planning	205,799	51,450	257,249
19-60-051 I.	City of Philadelphia Traffic Counts	Supportive Regional Highway Planning	50,000	12,500	62,500
Program Total			\$683,000	\$170,750	\$853,750

- I. Project work will be performed by DVRPC Staff. Match will be added to the City of Philadelphia Streets Department Core Agreement

PROJECT: 19-60-010 Bucks County: Supportive Regional Highway Planning Program

Responsible Agency: Bucks County Planning Commission

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in sub-regional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs, and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Participate in the development of DVRPC's Planning Work Program and Bucks County SRHPP for next fiscal year.
2. Review transportation reports and correspondence and provide responses.
3. Perform general administrative duties, including liaison and interagency coordination.
4. Perform contract administration, including the preparation and submission of Quarterly Progress Reports/Invoices.
5. Attend monthly DVRPC Board and Regional Technical Committee meetings and other meetings with federal, state, and local transportation agencies.
6. Respond to information requests, including those from the public.
7. Perform public participation as appropriate.

Task II - Transportation Planning Data and Analysis

1. Maintain traffic count data.
2. Review and revise the county's roadway capacity analysis.
3. Disseminate transportation information and data.
4. Integrate county accident, capacity and traffic information into a GIS database.
5. Continue to assist with PennDOT's Local Asset data collection efforts.

Task III - Transportation Improvement Program (TIP)

1. Maintain an inventory of proposed transportation improvements in Bucks County for the TIP.
2. Review and evaluate new proposals for inclusion in the TIP.
3. Inventory and prioritize all existing and new projects for the TIP.

4. Participate and assist in the TIP update and maintenance processes.
5. Assist PennDOT in the maintenance and update of the Twelve Year Program.
6. Monitor funding programs and opportunities, and provide programming information to county officials, legislators and local officials.
7. Coordinate with DVRPC, PennDOT, municipalities, and other project sponsors on the implementation of programmed improvements
8. Participate and assist PennDOT and DVRPC with PennDOT Connects.

Task IV - Transportation System Program

1. Work with DVRPC and PennDOT on congestion management strategies (CMP).
2. Provide technical assistance to municipalities concerning CMP implementation.
3. Promote inter-municipal coordination for transportation planning and other development-related issues.
4. Provide technical guidance to municipalities concerning the need for access controls along arterial highways.

Task V - Transportation Plan Maintenance

1. Maintain a comprehensive transportation plan.
2. Determine a strategy to implement transportation plan objectives that meet transportation improvements and clean air standards.
3. Coordinate with municipalities and regional planning agencies to implement transportation and clean air standards.
4. Provide input to DVRPC for short-range and long-range transportation planning studies.

Products:

1. Quarterly progress and expenditure reports and invoices.
2. Up-to-date inventory of proposed highway improvements.
3. Recommendations to DVRPC for regional TIP submissions and to PennDOT's Twelve Year Program.
4. Updated regional TIP.
5. Input on various transportation task forces.
6. Input to municipal requirements for new development.
7. Participate in municipal transportation planning efforts.
8. GIS database.
9. Sample corridor evaluation and recommended improvements.
10. SRHPP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.
11. County project proposals for consideration in next year's UPWP, if available.
12. Local asset data collection, as requested.

Beneficiaries:

Bucks County, state, municipalities, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$105,000	\$105,000			
2019	\$114,195	\$114,195			
2020	\$114,195	\$114,195			
2021	\$114,195	\$114,195			

\$91,357 Cash - \$22,838 Match

PROJECT: 19-60-020 Chester County: Supportive Regional Highway Planning Program

Responsible Agency: Chester County Planning Commission

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in subregional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Perform contract administration, including the preparation and submission of Quarterly Progress Reports/Invoices.
2. Participate in the development of the DVRPC Planning Work Program and Chester County SRHPP for next fiscal year.
3. Perform general administrative duties, including liaison and interagency coordination.
4. Attend monthly DVRPC Board and Regional Technical Committee meetings and other meetings with federal, state, and local transportation agencies.
5. Respond to information requests, including those from the public.
6. Perform public participation as appropriate.
7. Review transportation reports and correspondence and provide responses.

Task II - Transportation Improvement Program (TIP)

1. Maintain an inventory of proposed transportation improvements in Chester County for the TIP.
2. Review and evaluate new proposals for inclusion in the TIP.
3. Inventory and prioritize all existing and new projects for the TIP.
4. Participate and assist in the update and maintenance of the DVRPC TIP and PennDOT Twelve Year Program.
5. Coordinate with DVRPC, PennDOT, municipalities, and other project sponsors on the implementation of programmed improvements.
6. Monitor transportation funding programs and opportunities, and provide programming information to county officials, legislators and local officials.
7. Participate and assist PennDOT and DVRPC with PennDOT Connects.

Task III - Transportation Plan Maintenance

1. Participate in DVRPC committees and provide input to DVRPC for studies concerning short-range and long-range transportation planning.
2. Maintain the county transportation plan and other county-wide plans or studies related to transportation.
3. Assist in the development of local transportation plans and studies. Coordinate with municipalities, DVRPC, PennDOT, TMAs, and developers.
4. Review traffic impacts studies, land development plans, zoning changes, and Comprehensive Plans that impact the county and regional transportation plans.

Products:

1. Quarterly progress and expenditure reports and invoices
2. SRHPP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.
3. County project proposals for consideration in next year's UPWP, if available
4. Inventory of proposed transportation improvements
5. Twelve Year Program and TIP submissions, including an updated regional TIP.
6. Input on various transportation plans and studies
7. Correspondence on meetings and seminars attended related to highway planning.

Beneficiaries:

Chester County, state, municipalities, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$152,000	\$152,000			
2019	\$165,313	\$165,313			
2020	\$165,313	\$165,313			
2021	\$165,313	\$165,313			

\$132,250 Cash - \$33,063 Match

PROJECT: 19-60-030 Delaware County: Supportive Regional Highway Planning Program

Responsible Agency: Delaware County Planning Department

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in subregional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I – Program Administration and Coordination

1. Perform contract administration, including the preparation and submission of Quarterly Progress Reports/Invoices.
2. Participate in the development of next fiscal year's DVRPC Planning Work Program and Delaware County SRHPP.
3. Perform general administrative duties, including liaison and interagency coordination.
4. Respond to information requests, including those from the public.
5. Attend monthly DVRPC Board and Regional Technical Committee meetings and other meetings with federal, state, and local transportation agencies, such as DVRPC and Delaware County TMA meetings that are not for specific projects or studies.
6. Perform public participation as appropriate.
7. Review transportation reports and correspondence and provide responses.

Task II – Transportation Improvement Program (TIP)

1. Maintain an inventory of proposed transportation improvements in Delaware County for the TIP.
2. Review and evaluate new proposals for inclusion in the TIP.
3. Inventory and prioritize all existing and new projects for the TIP.
4. Survey municipalities every two years for potential TIP funded projects.
5. Participate and assist in the update and maintenance of the DVRPC TIP and PennDOT Twelve Year Program.

6. Monitor transportation funding programs and opportunities, inform municipalities of funding programs and provide assistance to them, and advocate Delaware County's position on this issue.
7. Provide programming information to county council, county executive director, legislative delegation, and municipal officials.
8. Coordinate with PennDOT, municipalities, and other project sponsors on the implementation of programmed improvements.
9. Participate and assist PennDOT and DVRPC with PennDOT Connects.

Task III – Transportation Plan Maintenance

1. Participate in the process to update the DVRPC Long-Range Plan.
2. Prepare highway/bicycle/pedestrian components of Delaware County Comprehensive Plan.
3. Prepare highway, bicycle, and pedestrian mobility components of municipal comprehensive plans (under contract with municipalities); review highway/bicycle/pedestrian components of draft municipal comprehensive plans (under Act 247 reviews).
4. Review land developments and traffic impact studies and provide comments on highway, bicycle, and pedestrian access to the Delaware County Planning Commission.
5. Participate in Delaware County, DVRPC, PennDOT, and municipal highway, bicycle, and pedestrian studies and planning efforts.

Products:

1. Quarterly progress and expenditure reports and invoices
2. SRHPP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.
3. Inventory of proposed transportation improvements.
4. Updated TIP and 12 Year Program submissions.
5. Correspondence on meetings and seminars attended related to highway planning.
6. Comments on land development plans.
7. Input on various transportation plans and studies.
8. County project proposals for consideration in next fiscal year's UPWP, if available.

Beneficiaries:

Delaware County, municipalities, state, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$76,000	\$76,000			
2019	\$82,656	\$82,656			
2020	\$82,656	\$82,656			
2021	\$82,656	\$82,656			

\$66,125 Cash - \$16,531 Match

PROJECT: 19-60-040 Montgomery County: Supportive Regional Highway Planning Program

Responsible Agency: Montgomery County Planning Commission

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in sub-regional transportation planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs, and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I – Program Administration and Coordination

1. Perform general administrative duties, including liaison and interagency coordination.
2. Review transportation reports and correspondence and provide responses.
3. Perform contract administration, including the preparation and submission of Quarterly Progress Reports/Invoices.
4. Participate in the development of the DVRPC Planning Work Program and Montgomery County SRHPP for next fiscal year.
5. Respond to information requests, including those from the public.
6. Attend monthly DVRPC Board and Regional Technical Committee meetings and other meetings with federal, state, and local transportation agencies.
7. Perform public participation as appropriate.

Task II – Transportation Improvement Program (TIP)

1. Maintain an inventory of proposed transportation improvements in Montgomery County for the TIP.
2. Review and evaluate new proposals for inclusion in the TIP.
3. Inventory and prioritize all existing and new projects for the TIP.
4. Participate and assist in the update and maintenance of the DVRPC TIP and PennDOT Twelve Year Program
5. Monitor funding programs and opportunities, and provide programming information to county officials, legislators and local officials.
6. Coordinate with DVRPC, PennDOT, municipalities, and other project sponsors on the implementation of programmed improvements

7. Participate and assist PennDOT and DVRPC with PennDOT Connects.

Task III – Transportation Plan Maintenance and Implementation

1. Review traffic impact studies, zoning changes and new/revised comprehensive plans that impact the county and regional transportation plans.
2. Participate in various transportation study task forces.
3. Implement the county comprehensive plan.

Products:

1. Updated regional TIP.
2. County Comprehensive plan implementation.
3. Public participation and outreach activities for Transportation Planning and Programming
4. SRHPP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.
5. Quarterly progress reports, closing report, and invoices.
6. County project proposals for consideration in next fiscal year's UPWP, if available.
7. Correspondence on meetings and seminars attended related to highway planning.

Beneficiaries:

Montgomery County, municipalities, state, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$158,000	\$158,000			
2019	\$171,838	\$171,838			
2020	\$171,838	\$171,838			
2021	\$171,838	\$171,838			

\$137,470 Cash - \$34,368 Match

PROJECT: 19-60-050 Philadelphia: Supportive Regional Highway Planning Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve efficiency of the region's transportation network by participating in subregional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs, and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I – Program Administration and Coordination

1. Review and comment on the Commission's staff reports.
2. Continue development of Certification Acceptance or Modified Certification Acceptance documents, standards, and/or procedures.
3. Identify and resolve differences among city and regional highway planning agencies.
4. Develop a work program for future "pass through" funds.
5. Participate in the development of the Philadelphia SRHPP and DVRPC Planning Work Program for next fiscal year.
6. Attend monthly DVRPC Board and Regional Technical Committee meetings and other meetings with federal, state, and local transportation agencies.
7. Perform general administrative duties, including liaison and interagency coordination.
8. Perform contract administration, including the preparation and submission of Quarterly Progress Reports/Invoices.
9. Respond to information requests, including those from the public.
10. Perform public participation as appropriate.
11. Review transportation reports and correspondence and provide responses.

Task II – Transportation Improvement Program (TIP)

1. Participate and assist in the update and maintenance of the DVRPC TIP and PennDOT Twelve Year Program.
2. Develop, collect, and maintain information and data on individual transportation

- projects under construction for inclusion in the TIP and maintain an inventory of projects for capital program consideration.
2. Assist in developing project descriptions.
 3. Coordinate preparation of the TIP with local community groups, elected officials, DVRPC, state agencies, and the public for the purpose of developing a regional TIP. This includes participation in programs such as Transportation Alternatives Program (TAP), Congestion Mitigation and Air Quality Improvement (CMAQ), Safe Routes to School (SRTS), and the Transportation Community Development Initiative (TCDI).
 4. Coordinate candidate projects with other city agencies to ensure that transportation capital projects are consistent with overall city and regional goals and objectives.
 5. Develop a prioritization of projects and facilities under consideration for inclusion in the Capital Program.
 6. Review and comment on the TIP with federal, state and regional agencies.
 7. Coordinate city involvement for PennDOT's Twelve-Year Program.
 8. Monitor and update the TIP as it relates to county and regional transportation objectives.
 9. Coordinate and review projects with implementing agencies, including PennDOT and DVRPC..
 10. Review and update certain "milestone" data for city federal-aid projects on file in the PennDOT Multimodal Project Management System (MPMS) computer information bank.
 11. Review and coordinate project cost estimates and breakdowns for programming with the PennDOT Program Management Committee (PMC).
 12. Monitor funding programs and opportunities, and provide programming information to city officials and legislators.
 13. Participate and assist PennDOT and DVRPC with PennDOT Connects.

Task III - TSMO Planning

1. Develop, maintain and prioritize an inventory of TSMO-type projects.
2. Identify TSMO deficiencies and candidate projects.
3. Review literature on TSMO planning.
4. Coordinate the City of Philadelphia TSMO programs.
5. Coordinate and participate in TSMO public forums.
6. Review and comment on TSMO studies and proposals for the county and region. Provide county input to the regional TSMO effort.
7. Review and comment, as required, on the recommended TSMO Plan report and assist and coordinate with DVRPC in the adoption of the plan, as may be appropriate.
8. Participate, coordinate, and assist in the implementation of regional TSMO strategies, such as ride sharing, staggered work hours, intermodal considerations and other appropriate activities.
9. Assist and coordinate in the maintenance of the Regional TSMO plan through periodic update and plan amendments.
10. Assist and coordinate corridor-level analysis of a selected TSMO corridor for incorporation in the TIP in cooperation with PennDOT and DVRPC.

Task IV - Transportation Plan Maintenance/Technical Coordination

1. Analyze and evaluate the impact of proposed developments on transportation facilities.
2. Coordinate the city highway network with the regional highway network.
3. Identify and update those links of the city highway system that augment the regional system.
4. Review existing functional classification system.
5. Participate in development and implementation of a county and regional transportation planning work program, including participation at intra-city planning strategy meetings.
6. Participate in regional transportation study meetings, committees, community meetings, teams, panels, etc. Review and comment on data and reports developed as part of these studies.
7. Participate in the corridor analysis of locations, corridors, neighborhood commercial streets, and other highways.
8. Participate in local and regional intermodal improvement efforts such as "Transit First" and park/ride facilities, pedestrian/bicycle facilities and goods movement strategies.
9. Manage and oversee selected grant recipients, such as TAP, SRTS, and TCDI.

Task V - Transportation Facilities/Data Files

1. Collect, coordinate, update and process traffic flow/volume information.
2. Review, analyze and evaluate traffic flow/volume data.
3. Inventory and assemble appropriate physical transportation facilities and put such information into an easily accessible and usable form.
4. Process the automatic traffic recorder information through the MPO to ensure compatibility of data collection efforts with those in the surrounding areas.
5. Provide federal, state, county and regional agencies with traffic flow/volume data.
6. Assemble traffic information files that accurately reflect existing physical conditions resulting in more efficient revisions to the functional classification system and an equitable allocation of funding.
7. Expand traffic counting coverage throughout the city.
8. Plan showing the updated systems.
9. Proper technical coordination of studies, plans, committee reports, analyses, etc. concerning the city's highways and highway program.
10. Assist with PennDOT's Local Asset data collection efforts.

Products:

1. Correspondence on meetings and seminars attended related to highway planning.
2. SRHPP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.
3. Successful completion of capital improvements.
4. An up-to-date highway capital improvement program for the City of Philadelphia.
5. A program TIP document for use by the Commission and others.
6. Advancement of high-priority TSMO projects.
7. A plan showing the updated systems.

- 8. Proper technical coordination of studies, plans, committee reports, analyses, etc. concerning the city's highways and highway program.
- 9. County project proposals for consideration in next fiscal year's UPWP, if available.
- 10. Quarterly progress reports, closing report, and invoices.
- 12. Local asset data collection, as requested.

Beneficiaries:

City of Philadelphia, state, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$244,000	\$244,000			
2019	\$257,249	\$257,249			
2020	\$257,249	\$257,249			
2021	\$257,249	\$257,249			

\$205,799 Cash, \$63,950 Match (\$51,540 for 19-60-050, \$12,500 for 19-60-051)

PROJECT: 19-60-051 City of Philadelphia Traffic Counts

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Scott Brady

Project Manager: Charles Henry

Goals:

Obtain data needed for transportation, engineering, and pavement management studies.

Description:

The City of Philadelphia has requested that DVRPC perform a travel mode counting program. This information will be used for the county's transportation, planning, engineering and pavement management studies. DVRPC will provide vehicular, bicycle, pedestrian and crosswalk count information as well as speed studies at locations determined by the City's planning and engineering staff.

Tasks:

1. Schedule meetings with City of Philadelphia representatives to determine locations for conducting counts.
2. Collect travel data at selected locations, for vehicle volume and intersection turning movement, pedestrian, bicycle, crosswalk counts and speed studies where required.
3. Process data and develop annual average daily traffic volumes (AADT) based on a continuous 48 hours of an average week (motorized) or annual average daily bicycles (AADB) / annual average daily pedestrians (AADP) based on a week of data for non-motorized travel.
4. Check field data for accuracy.
5. Prepare annual summary data in tabular form and also present data individually by location with counts for individual hours.
6. Present data to City of Philadelphia Planning Commission and Streets Department for their use.

Products:

Detailed printouts showing hourly counts, turning movements, and AADT, AADB, or AADP for selected locations.

Beneficiaries:

City of Philadelphia Planning Commission, City of Philadelphia Streets Department, City of Philadelphia Office of Transportation & Infrastructure Systems (otis), PADOT, residents, and businesses.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$50,000	\$50,000			
2019	\$50,000	\$50,000			
2020	\$50,000	\$50,000			
2021	\$50,000	\$50,000			

**Delaware Valley Regional Planning Commission
 FY 2019 NEW JERSEY SUPPORTIVE REGIONAL
 HIGHWAY PLANNING PROGRAM
 TABLE D**

Core Projects					
Project Number	Agency	Project	FY 2019 Budget		
			Cash	Match	Total
19-61-010	Burlington County	Supportive Regional Highway Planning	\$39,755	\$9,939	\$49,694
19-61-020	Camden County	Supportive Regional Highway Planning	44,015	11,004	55,019
19-61-030	Gloucester County	Supportive Regional Highway Planning	39,100	9,775	48,875
19-61-040	Mercer County	Supportive Regional Highway Planning	34,130	8,532	42,662
19-61-060	City of Camden	Supportive Regional Highway Planning	24,000	6,000	30,000
Subtotal			\$181,000	\$45,250	\$226,250
Special Studies					
Project Number	Agency	Project	FY 2019 Budget		
			Cash	Match	Total
19-61-070 I.	Camden County /DVRPC	Traffic Counting Program	56,000	14,000	70,000
19-61-080 II.	Gloucester County/DVRPC	Traffic Counting Program	56,000	14,000	70,000
19-61-090 III.	Mercer County County/DVRPC	Traffic Counting Program	56,000	14,000	70,000
19-61-100 IV.	DVRPC	Regional Strategy and Best Practices for Bike Share Programs (New Jersey)	60,000	15,000	75,000
Subtotal			\$228,000	\$57,000	\$285,000
Program Total			\$409,000	\$102,250	\$511,250

- I. Project work will be performed by DVRPC staff. Match will be added to the Camden County core agreement and will be noted on the project write-up and reflected in the contract.
- II. Project work will be performed by DVRPC staff. Match will be added to the Gloucester County core agreement and will be noted on the project write-up and reflected in the contract.
- III. Project work will be performed by DVRPC staff. Match will be added to the Mercer County core agreement and will be noted on the project write-up and reflected in the contract.
- IV. Project work will be performed by DVRPC staff. Match will be added to all NJ core agreements and will be noted on the project write-ups and reflected in the contracts.

PROJECT: 19-61-010 Burlington County: Supportive Regional Highway Planning Program

Responsible Agency: Burlington County - Land Development

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in sub-regional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs, and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Attend monthly DVRPC Board and Regional Technical Committee meetings, and other meetings with federal, state, regional, and local transportation agencies.
2. Prepare and submit the Quarterly Progress Reports/Invoices.
3. Participate in the development of the DVRPC Planning Work Program and Burlington County SRHPP for next fiscal year.
4. Perform general administrative duties, including liaison and interagency coordination.
5. Review transportation reports and correspondence and provide responses.
6. Respond to information requests, including those from the public.
7. Perform public participation as appropriate.

Task II - Transportation Improvement Program (TIP)

1. Participate and assist in the TIP update and maintenance processes.
2. Provide feedback to the state and DVRPC on the TIP and Statewide TIP (STIP).
3. Maintain and provide to DVRPC an inventory of project candidates to be considered for inclusion of the local capital improvement program.
4. Maintain channels of communication with DVRPC, NJDOT, and the public regarding TIP project status.
5. Assist with the coordination of DVRPC Work Program projects as necessary (e.g. TCDI grant process).

Task III - Transportation Plan Maintenance

1. Coordinate local governments land use and transportation policies.
2. Periodically review and update the Burlington County Transportation Plan.

3. Review proposed development to ensure compliance with the transportation plan and to assess its impact on existing and proposed transportation systems.
4. Update the priority list of projects generated by the transportation plan.
5. Participate in the development of Transportation Development Districts to further the goals of the transportation plan.
6. Produce and review maps and conceptual plans to be used for transportation planning.
7. Review regional, state and municipal transportation plans for consistency with the transportation plan.

Task IV - Transportation Planning Data and Analysis

1. Update and maintain the County Traffic Volume Map using data supplied by DVRPC as well as counts taken by the county.
2. Maintain accident files and analyze accident reports as a data source for the transportation planning effort.
3. Take traffic counts at selected locations to support transportation studies, to gauge the effectiveness of implemented or proposed transportation improvements, and to maintain the county's traffic count map.

Products:

1. Quarterly progress and expenditure reports and invoices
2. Correspondence on meetings and seminars attended related to highway planning.
3. County project proposals for consideration in next fiscal year's UPWP, if available.
4. SRHPP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.
5. Commentary on transportation reports when appropriate.
6. A federally approved TIP to maintain with DVRPC.
7. Various maps and/or plans used in planning transportation improvements.
8. Coordination of various transportation studies and projects to ensure an integrated transportation system.
9. Traffic Volume Map, available for public use.
10. Updated accident files.

Beneficiaries:

Burlington County, municipalities, state, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$64,694				\$64,694
2019	\$52,694				\$52,694
2020	\$49,964				\$49,964
2021	\$49,964				\$49,964

* NJ TIP - DB #X30A - \$39,755 STP-STU Cash- \$12,939 Match (\$9,939 for 19-61-010 . \$3,000 for 19-61-100)

PROJECT: 19-61-020 Camden County: Supportive Regional Highway Planning Program

Responsible Agency: Camden County - Department of Public Works - Division of Planning

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

To improve the efficiency of the region's transportation network by participating in subregional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Attend monthly DVRPC Board and Regional Technical Committee meetings, and other meetings with federal, state, regional, and local transportation agencies.
2. Prepare and submit the Quarterly Progress Reports/Invoices.
3. Participate in the development of the DVRPC Planning Work Program and Camden County SRHPP for next fiscal year.
4. Perform general administrative duties, including liaison and interagency coordination.
5. Review transportation reports and correspondence and provide responses.
6. Respond to information requests, including those from the public.
7. Perform public participation as appropriate.
8. Respond to information requests, including those from the public.
9. Perform public participation as appropriate.

Task II - Transportation Improvement Program (TIP)

1. Participate and assist in the TIP update and maintenance processes.
2. Provide feedback to the state and DVRPC on the TIP and Statewide TIP (STIP).
3. Maintain and provide to DVRPC an inventory of project candidates to be considered for inclusion of the local capital improvement program.
4. Maintain channels of communication with DVRPC, NJDOT, and the public regarding TIP project status.
5. Assist with the coordination of DVRPC Work Program projects as necessary (e.g. TCDI grant process).

Task III - Transportation Plan Maintenance

1. Coordinate local governments' land use and transportation policies with the regional and state long-range plans.
2. Prepare modifications, as required to update the county's transportation planning process and coordinate with DVRPC.
3. Monitor and evaluate the impact of existing and proposed residential, commercial, and industrial development in terms of short- and long-range transportation facility improvements, including social, economic and environmental considerations, population growth and business growth.
4. Evaluate proposed Senate and Assembly bills pertaining to highway planning.
5. Estimate future land use activities (e.g. corridor delineation) including identification of high growth areas. Coordinate the activity with the growth center development patterns during the New Jersey State Development and Redevelopment Planning (SDRP) process, and "Smart Growth" grants.
6. Assist with the development and update of CMS corridors and strategies.

Task IV - Transportation Planning Data and Analysis

1. Develop and maintain a GIS-based Highway Asset Management database.
2. Field collection of highway asset data.
3. Attend DVRPC IREG, future Imagery Acquisition, and other steering committee meetings.

Products:

1. Quarterly progress and expenditure reports and invoices.
2. SRHPP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.
3. A federally approved TIP to maintain with DVRPC.
4. Correspondence on meetings and seminars attended related to highway planning.
5. Inventory and status of TIP projects.
6. Aerial photographs, DVRPC CMS and PMS updates, sign and signal management data updates.
7. County project proposals for consideration in next fiscal year's UPWP, if available.

Beneficiaries:

Camden County, municipalities, state, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$69,019				\$69,019
2019	\$72,019				\$72,019
2020	\$69,019				\$69,019
2021	\$69,019				\$69,019

* NJ TIP - DB #X30A - \$44,015 STP-STU Cash- \$28,004 Match
 (\$11,004 for 19-61-020, \$14,000 for 19-61-070, \$3,000 for 19-61-100)

PROJECT: 19-61-030 Gloucester County: Supportive Regional Highway Planning Program

Responsible Agency: Gloucester County Planning Department

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in sub-regional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Attend monthly DVRPC Board and Regional Technical Committee meetings, and other meetings with federal, state, regional, and local transportation agencies.
2. Prepare and submit the Quarterly Progress Reports/Invoices.
3. Participate in the development of the DVRPC Planning Work Program and Gloucester County SRHPP for next fiscal year.
4. Perform general administrative duties, including liaison and interagency coordination.
5. Review transportation reports and correspondence and provide responses.
6. Respond to information requests, including those from the public.
7. Perform public participation as appropriate.

Task II - Transportation Improvement Program (TIP)

1. Participate and assist in the TIP update and maintenance processes.
2. Provide feedback to the state and DVRPC on the TIP and Statewide TIP (STIP).
3. Maintain and provide to DVRPC an inventory of project candidates to be considered for inclusion of the local capital improvement program.
4. Maintain channels of communication with DVRPC, NJDOT, and the public regarding TIP project status.
5. Assist with the coordination of DVRPC Work Program projects as necessary (e.g. TCDI grant process).

Task III - Transportation Plan Maintenance

1. Coordinate county transportation policies with the regional and state long-range plans.

2. Monitor and evaluate impact of proposed land development on existing and proposed highway and transit facilities.
3. Monitor certain state highway improvements and proposals.
4. Update the Gloucester County Official Map.
5. Maintain an update of the functional classification system.
6. Review regional, state, and municipal transportation policies for consistency with the county's plan.

Task IV - Transportation Planning Data and Analysis

1. Prepare and maintain a traffic volume map using data supplied by DVRPC as well as counts taken by the county and share traffic count data with interested parties.
2. Maintain data files supplied by NJDOT as a data source for the transportation efforts.
3. Maintain information on Management Systems such as Bridge, Pavement, Safety, etc.
4. Take traffic counts at selected locations to support transportation studies and to maintain the county's traffic map.
5. Develop and maintain a GIS database for traffic counts.

Products:

1. Quarterly progress and expenditure reports and invoices.
2. Correspondence on meetings and seminars attended related to highway planning.
3. SRHPP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.
4. A federally approved TIP to maintain with DVRPC.
5. A brief report on the activities that were undertaken in the planning/implementation of TIP projects.
6. Current and up-to-date version of the Official Map of County Highways and related transportation planning documents, as necessary.
7. Traffic Information available for public use.
8. Updated traffic counts at selected locations to support transportation planning efforts.
9. County project proposals for consideration in next year's UPWP, if available.

Beneficiaries:

Gloucester County, municipalities, state, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$62,875				\$62,875
2019	\$65,875				\$65,875
2020	\$62,875				\$62,875
2021	\$62,875				\$62,875

* NJ TIP - DB #X30A - \$39,100 STP-STU Cash - \$26,775 Match
(\$9,775 for 19-61-030, \$14,000 for 19-61-080, \$3,000 for 19-61-100)

PROJECT: 19-61-040 Mercer County: Supportive Regional Highway Planning Program

Responsible Agency: Mercer County Planning Department

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in subregional transportation core planning efforts

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Attend monthly DVRPC Board and Regional Technical Committee meetings, and other meetings with federal, state, regional, and local transportation agencies.
2. Prepare and submit the Quarterly Progress Reports/Invoices.
3. Participate in the development of the DVRPC Planning Work Program and Mercer County SRHPP for next fiscal year.
4. Perform general administrative duties, including liaison and interagency coordination.
5. Review transportation reports and correspondence and provide responses.
6. Respond to information requests, including those from the public.
7. Perform public participation as appropriate.

Task II - Transportation Improvement Program (TIP)

1. Participate and assist in the TIP update and maintenance processes.
2. Provide feedback to the state and DVRPC on the TIP and Statewide TIP (STIP).
3. Maintain and provide to DVRPC an inventory of project candidates to be considered for inclusion of the local capital improvement program.
4. Maintain channels of communication with DVRPC, NJDOT, and the public regarding TIP project status.
5. Assist with the coordination of DVRPC Work Program projects as necessary (e.g. TCDI grant process).

Task III - Transportation Plan Maintenance

1. Coordinate local governments' land use and transportation policies with the regional and state long-range plans including activities under the Cross Acceptance

Plan.

2. Communicate with the public about the master plan..
3. Review highway master plans being updated by municipalities to determine their consistency with the county transportation plan and resolve any differences.
4. Prepare modifications as required to the master plan and present to planning board for public hearing and adoption.
5. Review regional, state and local plans, particularly with respect to long-range plans, as required.
6. Monitor and evaluate existing and proposed major developments in terms of impact on short- and long-range transportation facility improvements with regard to social, economic, environmental and energy considerations.

Task IV - Transportation Planning Data and Analysis

1. Review and compile statistical data and inventories as provided by state agencies, DVRPC, and private sources.
2. Obtain traffic counts with county equipment and personnel to supplement outside sources for a specific task.
3. Land use, economic and demographic data compilation and analysis which support transportation planning.
4. Create and update transportation-related maps.

Products:

1. Quarterly progress and expenditure reports and invoices.
2. SRHPP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.
3. A federally approved TIP to maintain with DVRPC.
4. Highway data and analysis to the county and other governmental agencies, developers and citizens.
5. Correspondence on meetings and seminars attended related to highway planning.
6. Highway project analyses as they relate to new highway construction, functional classification and future planning activities.
7. Selective reports and new technical data files.
8. County project proposals for consideration in next fiscal year's UPWP, if available.
9. Maps, data, and/or studies used in planning transportation improvements.

Beneficiaries:

Mercer County, municipalities, state, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$56,662				\$56,662
2019	\$59,662				\$59,662
2020	\$56,662				\$56,662
2021	\$56,662				\$56,662

* NJ TIP - DB #X30A - \$34,130 STP-STU Cash- \$25,532 Match
 (\$8,532 for 19-61-040, \$14,000 for 19-61-090, \$3,000 for 19-61-100)

PROJECT: 19-61-060 City of Camden - Supportive Regional Highway Planning Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in subregional transportation planning efforts.

Description:

Manage and maintain the general administration of the program and maintain coordination and cooperation with federal, state, regional, and local agencies. Maintain public participation in the transportation planning process. Identify, prioritize, and analyze a capital program of federal and state-funded transportation improvements reflecting local input and coordination with state and regional agencies. Monitor implementation of the capital improvements. Assess impact of proposed land use on transportation facilities and recommend Camden City's position on certain regional transportation improvements and programs. Maintain and update data files required for the comprehensive transportation planning effort. Monitor various transportation indicators (e.g., traffic counts and turning movements). Retrieve and disseminate information as required.

Tasks:

Task I - Administration

1. Perform general and contract administrative duties.
2. Prepare quarterly progress reports, expenditure reports, and the annual completion report.
3. Perform public participation as appropriate.
4. Review transportation reports and correspondence and provide feedback.
5. Attend meetings, including DVRPC monthly RTC meetings, quarterly progress report meetings, Planning Work Program meetings, and special meetings as required. Present data to Camden City for its use.
6. Respond to information requests.
7. Conduct interagency liaison and coordination.

Task II - Transportation Improvement Program

1. Monitor Federal Aid and STATE-DVRPC Program progress.
2. Maintain and inventory TIP projects and update project status. Maintain channels of communication with DVRPC, NJDOT, and the public regarding project status.
3. Participate and assist in the TIP update and maintenance processes.

Task III – Transportation Plan Maintenance

1. Monitor and evaluate the impact of proposed land development on existing and

proposed highway and transit facilities.
 2. Monitor certain state improvements.

Task IV - Transportation Planning Data and Analysis

1. Access Plan 4 Safety Crash Analysis tool. Maintain data supplied by NJ DOT as a data source for transportation planning effort.
2. Maintain information on roadways and bridges, such as condition, cartway width, rights of way, age, etc.

Products:

1. Quarterly progress and expenditure reports.
2. Brief reports on meetings and seminars attended related to highway planning.
3. Annual completion report.
4. SRHPP for the subsequent fiscal year.
5. Adopted Transportation Improvement Program
6. City project proposals for consideration in next fiscal year's UPWP, if available.

Beneficiaries:

Camden City, Camden County, residents, businesses, and the region.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$30,000				\$30,000
2019	\$33,000				\$33,000
2020	\$30,000				\$30,000
2021	\$30,000				\$30,000

* NJ TIP - DB #X30A - \$24,000 STP-STU - \$9,000 Match (\$6,000 for 19-61-060, \$3,000 for 19-61-100)

PROJECT: 19-61-070 Camden County - Traffic Counting Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Scott Brady

Project Manager: Charles Henry

Goals:

Obtain data needed for transportation, engineering, and pavement management studies.

Description:

Camden County has requested that DVRPC perform a travel mode counting program. This information will be used for the county's transportation, planning, engineering and pavement management studies. DVRPC will provide vehicular, bicycle, pedestrian and crosswalk count information at locations determined by the county's planning and engineering staff.

Tasks:

1. Schedule meetings with Camden County representatives to determine locations for conducting counts.
2. Collect travel data at selected locations, for vehicle volume and intersection turning movement, pedestrian, bicycle and crosswalk counts where required.
3. Process data and develop annual average daily traffic volumes (AADT) based on a continuous 48 hours of an average week (motorized) or annual average daily bicycles (AADB) / annual average daily pedestrians (AADP) based on a week of data for non-motorized travel.
4. Check field data for accuracy.
5. Prepare annual summary data in tabular form and also present data individually by location with counts for individual hours.
6. Present data to Camden County for their use.

Products:

Detailed printouts showing hourly counts, turning movements, and AADT, AADB, or AADP for selected locations.

Beneficiaries:

Camden County, Camden City, NJDOT, residents, and businesses.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$56,000				\$56,000
2019	\$56,000				\$56,000
2020	\$56,000				\$56,000
2021	\$56,000				\$56,000

* NJ TIP - DB #X30A - \$56,000 STP-STU

PROJECT: 19-61-080 Gloucester County Traffic Counting Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Scott Brady

Project Manager: Charles Henry

Goals:

Obtain data needed for transportation, engineering, and pavement management studies.

Description:

The Gloucester County Planning Division has requested that DVRPC continue to perform a traffic counting program within Gloucester County. This information will be used for the county's transportation, planning, engineering, and pavement management studies. DVRPC will provide vehicular, bicycle, pedestrian, and crosswalk count information at locations determined by the county's planning and engineering staff.

Tasks:

1. Schedule meetings with county planning and engineering representatives to determine locations for conducting counts.
2. Collect travel data at selected locations, for vehicle volume and intersection turning movement, pedestrian, bicycle and crosswalk counts where required.
3. Process data and develop annual average daily traffic volumes (AADT) based on a continuous 48 hours of an average week (motorized) or annual average daily bicycles (AADB) / annual average daily pedestrians (AADP) based on a week of data for non-motorized travel.
4. Check field data for accuracy.
5. Prepare annual summary data in tabular form and also present data individually by location with counts for individual hours.
6. Prepare traffic count data for the county's GIS file and prepare traffic count map showing new locations.
7. Update the county's GIS traffic count file and map.

Products:

1. Detailed printouts showing hourly counts, turning movements, and AADT, AADB, or AADP for selected locations.
2. An updated traffic information file and GIS map.

Beneficiaries:

Gloucester County, municipalities, and NJ DOT.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$56,000				\$56,000
2019	\$56,000				\$56,000
2020	\$56,000				\$56,000
2021	\$56,000				\$56,000

* NJ TIP - DB #X30A - \$56,000 STP-STU

PROJECT: 19-61-090 Mercer County Traffic Counting Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Scott Brady

Project Manager: Charles Henry

Goals:

Obtain new traffic count data and compare with existing data in GIS format for transportation, engineering, and pavement management studies.

Description:

To supplement existing counts in the Transportation Development District, the county needs DVRPC to annually collect approximately 200 counts throughout the county.

In addition to vehicular counts, DVRPC will provide requested bicycle, pedestrian and crosswalk count information at locations determined by the county's planning and engineering staff.

Additionally, the county will incorporate developer traffic study count data into the County's GIS system so that the traffic count data collected as a result of this project will be linked to that produced by others. In this way the county will obtain the most accurate representation of traffic flow in the county. Once compiled, this data will be shared with municipalities in order to enhance their transportation study efforts.

Tasks:

1. Schedule meetings with county planning and engineering representatives to determine locations for conducting counts in addition to cyclical vehicle counts.
2. Collect travel data at selected locations, for vehicle volume and intersection turning movement, pedestrian, bicycle and crosswalk counts where required.
3. Process data and develop annual average daily traffic volumes (AADT) based on a continuous 48 hours of an average week (motorized) or annual average annual daily bicycles (AADB) / annual average daily pedestrians (AADP) based on a week of data for non-motorized travel.
4. Check field data for accuracy.
5. In GIS, link new count data with developer traffic study data.

Products:

1. Detailed printouts showing hourly counts, turning movements, and AADT, AADB, or AADP for selected locations.
2. Maps, tables, and text for transportation element of the master plan.

Beneficiaries:

Mercer County; municipalities in which counts are taken; and NJDOT.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$56,000				\$56,000
2019	\$56,000				\$56,000
2020	\$56,000				\$56,000
2021	\$56,000				\$56,000

* NJ TIP - DB #X30A - \$56,000 STP-STU

PROJECT: 19-61-100 Regional Strategy and Best Practices for Bike Share Program Coordination (New Jersey)

Responsible Agency:

Program Coordinator: Betsy Mastaglio

Project Manager: Elizabeth Compitello

Goals:

This project will explore options and good practice for regional coordination of bike share programs. Working with an advisory committee, DVRPC staff will identify current bike share practices at various scales and weigh their applicability to local contexts within the Region. The project will support ongoing dialogue toward a framework under which a regionally-coordinated program could be administered.

Description:

Bike share programs are being introduced across the country, in small and large cities alike. Our region's own Indego program is viewed as a tremendous success. As communities search for more sustainable modes to move people, bike share programs are being explored in places, and by sponsors, we might never have imagined. Within the DVRPC region, a number of bike share practices are being explored for different contexts and operating goals.

This project is the New Jersey portion of a regional project that will develop an appropriate framework for creating a platform for regionally coordinating bike share program(s). This framework will explore the following elements: 1) the development of system specifications and functionality that ensures both an effective system and system interoperability across geographical boundaries; 2) contract standardization between system owners and operators across the system network; and 3) a central management or direction team to coordinate and align system design, development, and implementation.

This project will be performed with two pillars of focus. Tasks for this project support one or both of these focus areas:

- 1) Scanning the Practice: Scanning the Region – including a scan of bike share practices, their necessary context characteristics, and lessons learned; a scan of the various context characteristics within the DVRPC region; and match-making between bike share practice type and DVRPC context. Short case studies will help illustrate service models in various contexts.
- 2) Bike Share Working Group – Convene and facilitate a Bike Share working group to foster information sharing and networking between those that are interested in implementing or continuing a bike share program, and to discuss the platform under which a regionally-coordinated bike share program could be administered.

Tasks:

1. Conduct a survey of planning partners, soliciting interest level and active pursuits of bike share programs, and the characteristics of those systems that are considered to be most desirable.
2. Form an advisory group of interested member governments to serve throughout the project, including to identify system, and system integration, goals of a bike share program, and to vet framework scenarios for administering a regionally-coordinated program.
3. Conduct a bike share program current practice scan, looking at the pros and cons of various practices, understanding the necessary context characteristics to support the practice, and identify key aspects that increase the effectiveness of those systems.
4. Take an inventory of the various contexts within the region that exist; for example, urban centers, suburban corridors, office parks, or close knit municipalities.
5. Apply the necessary context characteristics of bike share practices from Task 3, to the regional context inventory of Task 4, to perform a bike share match-making of the region. This will be supplemented with short case studies as appropriate.
6. Develop various platforms under which a regionally-coordinated bike share program could be organized under one (or more) entities that could assist municipalities or institutions in administering the contracting and procurement process between each municipality and the bike share program suppliers and operators.

Products:

A report, memorandum and/or web-based summary of findings and a platform under which a regionally-coordinated bike share program could be administered.

Beneficiaries:

Municipalities and member governments interested in starting or maintaining a bike share program; members of the general public seeking to use bike share as a more sustainable and active mode of transportation.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$60,000				\$60,000
2020					
2021					

* NJ TIP - DB #X30A - \$60,000 STP-STU



CHAPTER 4

→ **Transit Support
Program (TSP)**

JANUARY 2018

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FISCAL YEAR 2019 PLANNING WORK PROGRAM | CHAPTER 4**

PA Transit Support Program (TSP)

19-63-001	Bucks County Transit Planning and Programming	293
19-63-002	Chester County Transit Planning and Coordination	295
19-63-003	Delaware County Transit Planning and Coordination	297
19-63-004	Montgomery County Transit Planning and Implementation	299
19-63-005	Philadelphia Transit Planning and Programming	301
19-63-006	Philadelphia Short-Range Planning	305
19-63-007	SEPTA Capital Budgeting, Planning, and Transportation Improvement Program	307
19-63-008	Southeastern Pennsylvania Transit Planning and Technical Assistance	309
19-63-009	Safe Routes to Transit Program: Pennsylvania	311
19-63-010	License Plate Surveys of Public Transit Park-and-Rides — Pennsylvania	315

NJ Transit Support Program (TSP)

19-63-020	Burlington County Transit and Ridesharing	319
19-63-021	Camden County: Transit Planning and Programming	321
19-63-022	Gloucester County Transportation Systems Planning & Implementation	323
19-63-023	Mercer County Transit Planning and Programming	325
19-63-024	NJT Transportation Improvement Program and Short Range Planning	327
19-63-025	City of Camden Transit Planning Program	329
19-63-026	New Jersey Transit Survey Program	331
19-63-027	License Plate Surveys of Public Transit Park-and-Rides — New Jersey	333
19-63-028	Safe Routes to Transit Program: New Jersey	335

Table E	FY 2019 PA Transit Support	291
Table F	FY 2019 NJ Transit Support	317

**Delaware Valley Regional Planning Commission
FY 2019 Pennsylvania Transit Support Program**

TABLE E

Core Projects					
Project Number	Agency	Project	FY 2019 Budget		
			Cash	Match	Total
19-63-001	Bucks County	Transit Planning and Programming	\$61,734	\$15,434	\$77,168
19-63-002	Chester County	Transit Planning and Coordination	46,069	11,517	57,586
19-63-003	Delaware County	Transit Planning and Coordination	87,504	21,876	109,380
19-63-004	Montgomery County	Transit Planning and Implementation	77,400	19,350	96,750
19-63-005	Philadelphia Office of Transportation and Infrastructure Systems	Transit Planning and Programming	98,535	24,633	123,168
19-63-006	Philadelphia City Planning Commission	Short-Range Planning	119,758	29,940	149,698
19-63-007	SEPTA	Long-Range Planning/TIP	85,000	21,250	106,250
19-63-008 I.	DVRPC	Transit Planning Technical Assistance	144,000	36,000	180,000
Subtotal			\$720,000	\$180,000	\$900,000
Special Studies					
Project Number	Agency	Project	FY 2019 Budget		
			Cash	Match	Total
19-63-009 II.	DVRPC	Safe Routes to Transit Program	\$100,000	\$25,000	\$125,000
19-63-010 III.	DVRPC	Rolling License Plate Surveys	80,000	20,000	100,000
Subtotal			\$180,000	\$45,000	\$225,000
Program Total			\$900,000	\$225,000	\$1,125,000

- I. Project work will be performed by DVRPC staff to support ongoing SEPTA trolley modernization work and other regional transit planning initiatives. Match will be evenly split and added to the OTIS, PCPC SEPTA and Delaware County agreements and will be noted on the project write-up and reflected in the contract.
- II. Project work will be performed by DVRPC staff. Match will be added to all PA core agreements and will be noted on the project write-up and reflected in the contract.
- III. Project work will be performed by DVRPC staff. Match will be added to all PA core agreements and will be noted on the project write-up and reflected in the contract.

PROJECT: 19-63-001 Bucks County Transit Planning and Programming

Responsible Agency: Bucks County Planning Commission

Program Coordinator: Amy Bernknopf

Goals:

To improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

Examine the need for public transportation services, specifically in areas of rapid traffic volume increases and escalating traffic congestion. Advocate and coordinate the implementation of activities and services that support public transit usage and help improve suburban mobility.

Rapid development and minimal public transportation services have led to an overburdened highway network in Bucks County. The county's geographic location between the New Jersey to New York corridor to the east, Philadelphia to the south, and the Allentown-Bethlehem-Easton areas to the north guarantees that development pressures will continue. Bucks County's comprehensive plan aims to guide and coordinate development to minimize its adverse impacts.

This project will allow staff to examine opportunities to minimize traffic impacts and enhance suburban mobility through an expanded public transportation system. Public transportation objectives will be pursued through coordination with local governments, the business community, and area service providers.

Tasks:

Task 1: Administration

1. Program administration and inter-agency coordination to include general program correspondence and public information requests.

Task 2: Planning and Programming

1. Assist the business community in identifying unique transportation needs and provide information as to public transportation alternatives.
2. Review existing and proposed development to identify areas capable of supporting public transportation services or areas in particular need of expanded transit services.
3. Review county and municipal growth management policies to ensure that access to public transportation services are included where feasible.
4. Review existing paratransit services for evaluation and compliance with ADA Requirements.

Task 3: Coordination

1. Maintain liaison with the Bucks County Transportation Management Association.

Products:

1. Monthly and quarterly progress reports.
2. Quarterly invoices.
3. Expanded and/or modified transit service proposals.
4. Recommendations for improving transit services throughout the county.
5. Proposed TSP Work Program for next fiscal year.

Beneficiaries:

Operating agencies and utilities; economic development agencies; private sector; and municipalities.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$82,168		\$82,168		
2019	\$83,596		\$83,596		
2020	\$77,168		\$77,168		
2021	\$77,168		\$77,168		

\$61,734 Cash - \$21,862 Match
(\$15,434 for 19-63-001, \$3,571 for 19-63-009, \$2,857 for 19-63-010)

PROJECT: 19-63-002 Chester County Transit Planning and Coordination

Responsible Agency: Chester County Planning Commission

Program Coordinator: Amy Bernknopf

Goals:

To improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

The purpose of this project is to provide comprehensive planning, programming, monitoring, and coordination of transit services in Chester County. It provides for staff support to respond to requests for technical and policy assistance on regional public transportation issues and projects. It enables staff to coordinate with PennDOT, SEPTA, TMACC, GVFTMA, Amtrak, and other public transit service providers and stakeholders.

Tasks:

Task 1: Administration

1. Prepare quarterly progress reports and invoices.
2. Participate in DVRPC's Annual Planning Work Program development.
3. Perform general administration and respond to information requests.

Task 2: Planning and Programming

1. Monitor existing transit services and evaluate the need and potential for new public transportation services. Participate in various transportation study advisory committees related to public transit.
2. Participate in developing and amending the Transportation Improvement Program (TIP).
3. Review and provide input to SEPTA's capital budget, operating budget, and annual service plan. Monitor service changes and capital projects.
4. Monitor transportation funding programs and opportunities.

Task 3: Coordination

1. Participate in meetings of regional or multi-county interest to discuss issues related to public transportation services or policies. Coordinate with DVRPC, SEPTA, Amtrak, PennDOT, TMACC, and other organizations that plan or provide transit and paratransit services.
2. Provide technical assistance and policy input to the county commissioners and SEPTA board members.
3. Participate in meetings and activities of the TMA of Chester County and Greater Valley Forge TMA.

Products:

1. Quarterly progress reports and invoices.
2. Proposed TSP Work Program for next fiscal year.

Beneficiaries:

State, county, municipalities, transit operating agencies, the private sector, and Chester County residents and employees.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$62,586		\$62,586		
2019	\$64,014		\$64,014		
2020	\$57,586		\$57,586		
2021	\$57,586		\$57,586		

\$46,069 Cash - \$17,945 Match
(\$11,517 for 19-63-002, \$3,571 for 19-63-009, \$2,857 for 19-63-010)

PROJECT: 19-63-003 Delaware County Transit Planning and Coordination

Responsible Agency: Delaware County Planning Department

Program Coordinator: Amy Bernknopf

Goals:

To improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

This project will enhance the mobility of the residents of Delaware County by providing comprehensive planning, programming, monitoring, and coordination of transit services in the county.

Tasks:

1. Administer project and prepare required invoices, progress reports, and completion reports.
2. Continue to build and maintain a transit database/needs improvement inventory.
3. Monitor transit service through performance analysis and service improvement requests.
4. Provide input to SEPTA operating budgets and determine impacts on fares, subsidies, and levels of service.
5. Provide input to SEPTA and PennDOT capital budgets and monitor capital projects and subsidies.
6. Promote transit initiatives through marketing strategies, service planning, and travel demand management.
7. Prepare public transit components of County Comprehensive Plan and municipal comprehensive plans.
8. Review land development proposals and provide recommendations for improved public transit access.
9. Plan and coordinate paratransit services.
10. Maintain liaison with SEPTA, PennDOT, Community Transit, The Delaware County TMA, and private providers.

Products:

1. Quarterly progress reports
2. Quarterly invoices
3. Closing report
4. TSP Work Program for next fiscal year

Beneficiaries:

Member governments, operating agencies, the private sector, and citizens.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$114,380		\$114,380		
2019	\$124,808		\$124,808		
2020	\$109,380		\$109,380		
2021	\$109,380		\$109,380		

\$87,504 Cash - \$37,304 Match
 (\$21,876 for 19-63-003, \$9,000 for 19-63-008, \$3,571 for 19-63-009,
 \$2,857 for 19-63-010)

PROJECT: 19-63-004 Montgomery County Transit Planning and Implementation

Responsible Agency: Montgomery County Planning Commission

Program Coordinator: Amy Bernknopf

Goals:

To improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

The purpose of this project is to partially fund staff participation in transit planning with SEPTA, DVRPC, and Pottstown Area Rapid Transit (PART). It will fund planning activities dealing with route and service modifications, new route planning, capital and operating budget review, policy development, and data gathering and analysis.

Tasks:

Task 1: Administration

1. Prepare TSP submittal and participate in DVRPC's annual Planning Work Program development.
2. Prepare quarterly progress and financial reports and general correspondence and respond to public information requests.

Task 2: Planning and Programming

1. Provide policy analysis and liaison with county commissioners and SEPTA board Members.
2. Review new or modified transit service proposals and review subdivision and land development plans for transit access.
3. Implement the county comprehensive plan.

Task 3: Coordination

1. Participate in the activities of the Greater Valley Forge and The Partnership TMAs.
2. Provide inter-agency coordination with DVRPC, SEPTA and PART.
3. Participate in various transportation study task forces.
4. Participate in the development of new transit services.
5. Establish and communicate the county's capital priorities for SEPTA and PART.
6. Participate in the development of the Transportation Improvement Program.
7. Review SEPTA and PART operating and capital budgets.

Products:

1. Monthly progress and financial reports.
2. Route and service plans.
3. County transportation plan update.
4. TSP Work Program for inclusion in next year's DVRPC Planning Work Program.

5. County project proposals for annual UPWP.

Beneficiaries:

Operating agencies, the private sector, county, and municipalities.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$101,750		\$101,750		
2019	\$103,178		\$103,178		
2020	\$96,750		\$96,750		
2021	\$96,750		\$96,750		

\$77,400 Cash - \$25,778 Match

(\$19,350 for 19-63-004, \$3,571 for 19-63-009, \$2,857 for 19-63-010)

PROJECT: 19-63-005 Philadelphia Transit Planning and Programming

Responsible Agency: Office of Transportation and Infrastructure Systems

Program Coordinator: Amy Bernknopf

Goals:

To improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

The major purpose of this program is to reimburse the Philadelphia Office of Transportation and Infrastructure for expenses incurred as a result of its input and participation in the regional transit planning and capital programming processes.

Tasks:

Task 1: Administration

1. Participate in DVRPC's annual Planning Work Program development.
2. Prepare TSP quarterly progress and financial reports.

Task 2: Planning and Programming

1. Manage, analyze, develop, and evaluate the City of Philadelphia's short-range low-capital-intensive transportation projects that are under various stages of implementation, with emphasis on coordination with the city's neighborhood and commercial corridor improvement programs.
2. Prepare necessary inputs into the regional transportation plan.
 - a. Assist in the development and coordination of city and regional transit plans.
 - b. Assist in planning for compliance with, and implementation of, strategies related to the Clean Air Act Amendments and the Americans with Disabilities Act.
 - c. Participate in the development of regional TSM planning.
 - d. Review and evaluate short-range transit plans.
 - e. Participate in the Commission's transit planning projects.
 - f. Participate in SEPTA's transit planning technical studies and projects such as route analysis.
 - g. Participate in transit planning studies sponsored by other agencies, such as the Delaware River Port Authority, New Jersey Transit, PennDOT, and the Center City Philadelphia TMA.
3. Make field trips to examine sites as required.
4. Identify and resolve issues requiring coordination with the Commission and member agencies.
5. Collect data for each city transit improvement project, including purpose, justification, physical description, status, and implementation schedule.
6. Prepare and review the City of Philadelphia's long-range Capital Budget and Program for transit projects.
7. Update and present to the Commission and member agencies the City's portion

of the regional TIP updates and updates to the state Twelve Year Transit Capital Program.

Task 3: Coordination

1. Long-Range Transit Planning Process: Assist in updating and/or modifying the transportation elements of DVRPC's Long- Range Plan Update.
2. Attend transportation-planning-related meetings and conferences sponsored by FTA, PennDOT, APTA, TRB, PTI, NACTO, IMPACTS, or other transportation organizations.
3. TIP Coordination and Development:
 - a. Review and analyze the current regional TIP, including the status of the current budget year and the two- to six-year program of the City of Philadelphia's Transportation Capital Budget and Program.
 - b. Coordinate the TIP's progress and status with the Commission and member agencies.
4. Review and analyze the draft regional TIP in light of the long-range plan.
5. Prioritize and stage the elements of the TIP within fiscal funding constraints.
6. Make suggestions to improve and revise the city's and SEPTA's Transit Capital budgeting process.
7. Participate in the preparation and coordination of city submissions for Transportation Enhancements, CMAQ, TCDI, and TCSP funding.
8. Provide assistance to the Commission's staff in analyzing the City of Philadelphia's TIP projects and implementation thereof.

Products:

1. Transit Capital Project element of the city's long-range Capital Budget and Program.
2. TSP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.

Beneficiaries:

City of Philadelphia, Pennsylvania, SEPTA, PATCO, and NJ Transit.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$140,168		\$140,168		
2019	\$138,596		\$138,596		
2020	\$123,168		\$123,168		
2021	\$123,168		\$123,168		

\$98,535 Cash - \$40,061 Match
 (\$24,633 for 19-63-005, \$9,000 for 19-63-008, \$3,571 for 19-63-009,
 \$2,857 for 19-63-010)

PROJECT: 19-63-006 Philadelphia Short-Range Planning

Responsible Agency: Philadelphia City Planning Commission

Program Coordinator: Amy Bernknopf

Goals:

To support the City Planning Commission's transportation planning and programming efforts at both city and regional levels, and to develop recommendations on specific issues as needed.

Description:

The City of Philadelphia's Home Rule Charter requires that the City Planning Commission prepare an annual Capital Program and Budget. This work also provides input into development of the regional TIP. Support is needed for the proper analysis, ranking, and determination of cross-functional priorities of the projects submitted for review, as well as for continued capital program maintenance. The Planning Commission is also required by the Charter to prepare and maintain a Comprehensive Plan for the City. Staff supports the integration of inter-departmental transportation needs and priorities into the citywide and district-level stages of this work. Support is also needed for analyses of proposed developments, as well as the development of transportation improvement proposals for immediate implementation. This project will also include participation in the regional planning process.

Tasks:

Task 1: Administration

1. Develop, prepare, and submit quarterly invoices and progress reports for TSP.
2. Participate in DVRPC's annual Planning Work Program development.

Task 2: Planning and Programming

1. Evaluate requested transportation projects and make recommendations about their inclusion and level of funding in the city's Capital Budget and Program.
2. Develop supporting data, tables, and text for the Capital Program and contribute to Capital Program maintenance, including the evaluation and processing of Amendments.
3. Review and make recommendations regarding studies and plans for transportation capital projects.
4. Work with the Transit First Subcommittee in its efforts to improve the effective operation of surface transit.
5. Continue nonmotorized transportation planning activities, particularly as they relate to transit access.
6. Evaluate proposed development projects for potential impacts on transportation systems.

Task 3: Coordination

1. Participate in the development and maintenance of the transportation elements of the city's comprehensive plan and district plans.
2. Provide City Planning Commission input to DVRPC's transportation planning projects, including the maintenance of the long-range plan.
3. Attend transportation-planning-related meetings and conferences sponsored by organizations such as PennDOT, FTA, and TRB.
4. Review plans and participate in planning efforts of other agencies, including SEPTA, the Streets Department, PennDOT, PATCO, and the Central Philadelphia TMA.
5. Participate in the Regional Technical Committee of DVRPC and the SEPTA city-county meetings.
6. Participate in the development and maintenance of the regional Transportation Improvement Program.

Products:

1. Recommended Capital Budget and Program.
2. Final Capital Program Report.
3. Memos and reports on individual transportation issues.
4. TSP Work Program for inclusion in subsequent year DVRPC Planning Work Program.

Beneficiaries:

General Public/Citizens, DVRPC, and SEPTA.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$166,698		\$166,698		
2019	\$165,126		\$165,126		
2020	\$149,698		\$149,698		
2021	\$149,698		\$149,698		

\$119,758 Cash - \$45,368 Match
 (\$29,940 for 19-63-006, \$9,000 for 19-63-008, \$3,571 for 19-63-009,
 \$2,857 for 19-63-010)

PROJECT: 19-63-007 SEPTA Capital Budgeting, Planning, and Transportation Improvement Program

Responsible Agency: Southeastern Pennsylvania Transportation Authority

Program Coordinator: Amy Bernknopf

Goals:

To improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

Prepare the SEPTA Capital Budget, Program and Comprehensive Plan and provide the required input to the Regional Transportation Improvement Program (TIP). Prepare SEPTA's responses to any new federal guidelines and rule making. Provide for short-range planning studies and long range planning. Provide support to other departments in developing work programs for DVRPC sponsored projects and FTA demonstration programs, and represent SEPTA at regional forums and provide technical assistance and coordination for various regional studies.

Tasks:

Task 1: Administration

1. Prepare TSP submittal and participate in DVRPC's annual Planning Work Program development.
2. Prepare quarterly progress and financial reports and general correspondence and respond to public information requests.

Task 2: Planning and Programming

1. Program and produce SEPTA's One-Year Capital Budget and Twelve-Year Capital Program.
2. Provide ridership, parking utilization, and other relevant data as appropriate to support DVRPC planning and forecasting work on behalf of SEPTA.
3. Research and analyze capital and long range planning options.
4. Perform generalized planning and analysis in order to prioritize capital projects.

Task 3: Coordination

1. Provide assistance to DVRPC, the Counties and local governments on planning studies.
2. Provide DVRPC with SEPTA's portion of the Regional TIP by analyzing the SEPTA Capital Budget and Twelve-Year Capital Program, and in assimilating this information into the regional TIP.
3. Submit to DVRPC amendments and modifications to the Regional Transportation Improvement Program.
4. Participate in the budget process for Bucks, Chester, Delaware and Montgomery Counties, and the City of Philadelphia. Develop SEPTA's request for local matching

funds.

5. Respond to information requests from federal, state, and local funding agencies.

Products:

- 1. SEPTA’s One-Year Capital Budget, Twelve-Year Capital Program and Comprehensive Plan, and input SEPTA capital projects into the DVRPC Regional TIP document.
- 2. Reports and recommendations to be used in support of the short and long range planning program and development of work programs for various internal and external studies.
- 3. Quarterly Invoices and Progress Reports.
- 4. TSP Work Program for subsequent fiscal year's DVRPC Planning Work Program

Beneficiaries:

Member Governments, State, Operating Agencies.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$123,250		\$123,250		
2019	\$121,678		\$121,678		
2020	\$106,250		\$106,250		
2021	\$106,250		\$106,250		

\$85,000 Cash - \$36,678 Match
 (\$21,250 for 19-63-007, \$9,000 for 19-63-008, \$3,571 for 19-63-009,
 \$2,857 for 19-63-010)

PROJECT: 19-63-008 Southeastern Pennsylvania Transit Planning and Technical Assistance

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Betsy Mastaglio

Project Manager: Logan Axelson, Matthew Gates

Goals:

Support transit planning, design, and analysis work for transit agencies and member governments in Southeastern Pennsylvania.

Description:

Work conducted under this program will help to implement the planning goals and policies of Connections 2045, the region's adopted long range plan, while assisting southeastern Pennsylvania public transit agencies in the implementation of their planning and project agendas. Work under this program may include tasks or projects in their entirety, and may also supplement transit planning work by DVRPC staff for projects funded under other programs, including those selected by the Regional Transit Advisory Committee (RTAC).

Project tasks may include existing conditions analysis, identification of potential transit improvements through conceptual design or evaluations of multimodal access improvements, as well as feasibility studies and ridership forecast modeling. DVRPC will take advantage of skills and expertise from across the agency in a collaborative effort to best meet the needs of the primary project beneficiary and to further the goal of establishing an increasingly-multimodal transportation system for Southeastern Pennsylvania. Completion of this project may require the purchase of equipment or services.

Tasks:

1. Provide continuing support to SEPTA and other local partners on issues related to SEPTA's trolley modernization program for the City of Philadelphia and Delaware County, including coordination assistance related to other DVRPC work efforts such as the Route 15 Trolley Modernization project (18-52-060).
2. Provide planning staff and funding support as necessary to conduct technical asks related to Pennsylvania projects funded other the Regional Transit Planning Program (19-52-010).

Beneficiaries:

Pennsylvania member governments, SEPTA, and the transit-riding public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$144,000		\$144,000		
2019	\$144,000		\$144,000		
2020					
2021					

PROJECT: 19-63-009 Safe Routes to Transit Program: Pennsylvania

Responsible Agency:

Program Coordinator: Andrew Svekla, Betsy Mastaglio

Project Manager: Joseph Banks

Goals:

Identify municipalities within the DVRPC region that are interested in improving active transportation connections to transit (first- and last-mile connections) through applications for competitive funding programs (TA Set-Aside in PA, NJ TAP, PennDOT/DCED Multimodal Fund, or others). Assist selected municipalities in identifying candidate bicycle and pedestrian projects that improve first- and last-mile connections to transit stations. Furnish the selected municipalities with significant project information so as to assist in the preparation of grant applications.

Description:

This is the Pennsylvania portion of an ongoing regional technical assistance program that supports expansion of active transportation access to SEPTA's rail stations. A parallel portion focuses on access to NJ Transit and PATCO stations in New Jersey.

Expanding active transportation access to rail stations allows transit agencies to increase ridership at stations where parking does not exist or cannot/should not be expanded, and promotes sustainability goals for the region. This project will build on DVRPC's previous Safe Routes to Transit projects that focus on quick but impactful implementation strategies to improve bicycle and pedestrian access to transit. DVRPC staff will first work with SEPTA, NJ Transit and PATCO to identify municipalities within the region that are motivated to pursue the implementation of pedestrian and bicycle facilities that improve first- and last-mile connections to rail stations. To that end, the project will be framed around preparing selected municipalities with sufficient project details to prepare grant and funding applications that directly link to design and construction money to implement recommendations.

DVRPC will work with SEPTA, NJ Transit, PATCO, and each DVRPC county to author a call for entries—one for Pennsylvania and one for New Jersey—to be considered by municipalities, together with their county, to submit expressions of interest and a suggested rail station. Once submitted, DVRPC will select up to two (2) stations in the SEPTA service area for focus (with selections being determined by the level of interest and complexity of projects deemed compelling by the advisory committee). For each station area, potential tasks could include: existing conditions inventory and documentation, conceptual design, stakeholder coordination, design recommendations, cost estimates, or implementation steps. Project deliverables will support the municipality's (or other local stakeholders') future application for upcoming funding opportunities, or help set priorities within

their capital programs.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Coordinate with SEPTA, NJ Transit and DRPA on authoring a call for projects which may ask project sponsors to include:
 - Identification of candidate rail line(s) or station(s).
 - Evidence of a demand for additional pedestrian and bicycle facilities around transit stations.
 - Demonstration of a proven track record for implementing planning recommendations.
 - Statement of commitment of staff time and resources to work with the DVRPC SRTT team.
 - Statement of commitment to pursue project implementation if selected for technical assistance.
2. Review entries and select no more than two (2) rail stations within the SEPTA service area for a focused study.
3. Conduct an existing conditions analysis of the mode and patterns related to accessing each station, service schedules, and the pedestrian, bicycle, land use, safety, and street connectivity between the stations and the surrounding area.
4. Develop short term, low-cost scenarios for strengthening the physical and perceptual connectivity between each station and its surrounding community, including elements such as:
 - Improved pedestrian and bicycle accommodations.
 - Informational and directional signage between station sites.
 - Other improvements as appropriate.
5. Coordinate with DVRPC Project Implementation staff on potential funding programs for each project and review programmatic requirements for those programs with the local sponsor.
6. Identify recommendations for short-term implementation, scaled and tailored to stakeholder capital programs and for discretionary funding rounds found to be appropriate and satisfactory to the local project sponsor.
7. Support sponsor during application process and design phase, as appropriate.

Products:

Products could include a summary of each study area's existing conditions and recommendations, letter(s) of support from relevant organizations (if applicable), and relevant funding sources and timeline. These may be packaged as a single report or as individual memorandums as deemed appropriate by the advisory committee and local project sponsor.

Beneficiaries:

SEPTA and selected counties, municipalities, rail commuters, and pedestrians and bicyclists in the vicinity of each station.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$100,000		\$100,000		
2020					
2021					

PROJECT: 19-63-010 License Plate Surveys of Public Transit Park-and-Rides — Pennsylvania

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Amy Bernknopf

Project Manager: Betsy Mastaglio

Goals:

To understand rider park-and-ride origins at SEPTA stations for planning purposes.

Description:

In partnership with SEPTA and PennDOT, DVRPC has a longstanding program to assess rail station market areas by surveying license plates of the vehicles that are parked at each station and mapping the addresses that are associated with those plates. By exploring the distribution of mapped records, DVRPC can get a sense of where a given station's highest concentrations of park-and-ride customers are located, as well as typical drive-access distances.

This ongoing program will identify rider origins for the current total of 152 SEPTA rail stations that have commuter parking. This data determines the geographic areas from which park-and-ride customers originate. Rider origins are obtained from license plates, address matched by PennDOT, and mapped. The resulting station catchment area information, from which personally identifiable information is removed, provides clear and accurate data used to support planning functions by SEPTA, suburban counties, the City of Philadelphia, and local municipalities for changes in marketing, route operations, and capital planning (such as expansion of parking and station facilities).

Approximately 30 stations will be analyzed (one fifth of all stations with parking) during each fiscal year, so that no station will have data older than five years.

Prior to this project getting underway, SEPTA, PA suburban counties, and City of Philadelphia staff will be given an opportunity to review and confirm that the proposed locations are their priorities for data collection and analysis this year.

Tasks:

1. Reach out to partners where license plate surveys are scheduled to be collected. Confirm with them that no new construction or capital projects have taken place and that there are other locations that are priorities.
2. Perform license plate surveys for approximately 30 rail stations, enter data, and geocode resulting origin patterns for each selected station.
3. Add collected data to license plate survey database and update online mapping tool.
4. Send full point datasets to each participating partner.

Products:

Datasets that will be shared online (aggregated to a geographic area) as well as with the project partners.

Beneficiaries:

Bucks County, Chester County, Delaware County, Montgomery County, City of Philadelphia, SEPTA, Pennsylvania transportation management associations (TMAs), existing and new SEPTA customers.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$140,000		\$140,000		
2019	\$80,000		\$80,000		
2020					
2021					

**Delaware Valley Regional Planning Commission
FY 2019 New Jersey Transit Support Program
TABLE F**

Core Projects					
Project Number	Agency	Project	FY 2019 Budget		
			Cash	Match	Total
19-63-020	Burlington County	Transit & Ridesharing	\$37,392	\$9,348	\$46,740
19-63-021	Camden County	Transit Planning & Programming	41,500	10,375	51,875
19-63-022	Gloucester County	Transportation Systems Planning	38,680	9,670	48,350
19-63-023	Mercer County	Transit Planning & Programming	33,284	8,321	41,605
19-63-024	New Jersey Transit	TIP and Short Range Planning	70,744	17,686	88,430
19-63-025	Camden City	Transit Planning Program	20,800	5,200	26,000
Subtotal			\$242,400	\$60,600	\$303,000
Special Studies					
Project Number	Agency	Project	FY 2019 Budget		
			Cash	Match	Total
19-63-026 I.	NJTRANSIT/ DVRPC	NJTRANSIT: Transit Survey Program	78,200	19,550	97,750
19-63-027 II.	DVRPC	Rolling License Plate Surveys	16,000	4,000	20,000
19-63-028 III.	DVRPC	Safe Routes to Transit Programs	50,000	12,500	62,500
Subtotal			\$144,200	\$36,050	\$180,250
Program Total			\$386,600	\$96,650	\$483,250

- I. Project work will be performed by DVRPC staff. Match will be added to the New Jersey Transit core agreement and will be noted on the project write-up and reflected in the contract.
- II. Project work will be performed by DVRPC staff. Match will be added to all NJ core agreements and will be noted on the project write-up and reflected in the contract.
- III. Project work will be performed by DVRPC staff. Match will be added to all NJ core agreements and will be noted on the project write-up and reflected in the contract.

PROJECT: 19-63-020 Burlington County Transit and Ridesharing

Responsible Agency: Burlington County - Land Development

Program Coordinator: Amy Bernknopf

Goals:

Carry out a comprehensive local transit planning program to improve the efficiency of the region's transportation network.

Description:

Identify, provide, promote, and maintain transit and ridesharing opportunities within Burlington County by encouraging patterns that link use with transit. Work with NJ Transit, NJDOT, the Cross County Connection TMA, developers, large employers, and other agencies to promote and implement various types of transit and ridesharing. These may include, but are not limited to: transit buses, local buses, park and rides, and van or car pooling in areas of the county with severe congestion problems and little or no transit. Make recommendations to NJ Transit, employers, and developers for new services.

Tasks:

Task 1: Administration

1. Participate in DVRPC's annual Planning Work Program development.
2. Prepare TSP quarterly progress and financial reports.

Task 2: Planning and Programming

1. Assist NJ Transit in efforts to establish legal bus stops and install shelters throughout the county.
2. Make recommendations to NJ Transit on sites and corridors with potential transit ridership.
3. Work with large employers, developers, municipalities, the county government, and CCCTMA to develop and encourage alternatives to the single occupancy vehicle.
4. Work with municipalities, county government, and other appropriate agencies to review, evaluate, and implement transportation control measures appropriate for the county and the region in response to the Clean Air Act Amendments of 1990.
5. Review municipal master plans to ensure that transit services are considered and are compatible with the regional transportation system.
6. Implement the transit portion of the Burlington County Transportation Master Plan.
7. Serve on the executive committee of the CCCTMA.

Task 3: Coordination

1. Coordinate programs with local, county, state, and regional agencies.
2. Draft regulations and sample ordinances that would implement TCMs at county and municipal levels.
3. Coordinate with the operators of light rail transit in Burlington County.

Products:

1. Quarterly progress reports.
2. Approved legal bus stop and shelter locations.
3. Recommendations and implementation of improvements in the moving of people within the transportation system, including preparation of the final report.
4. Transit section of Burlington County Transportation Master Plan.
5. TSP Work Program for subsequent fiscal year.

Beneficiaries:

Burlington County, local governments, private citizens, developers, transportation engineers, and NJDOT.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$46,740		\$46,740		
2019	\$49,490		\$49,490		
2020	\$46,470		\$46,470		
2021	\$46,470		\$46,470		

\$37,392 Cash - \$12,098 Match (\$9,348 for 19-63-020, \$667 for 19-63-027, \$2,083 for 19-63-028)

PROJECT: 19-63-021 Camden County: Transit Planning and Programming

Responsible Agency: Camden County - Department of Public Works - Division of Planning

Program Coordinator: Amy Bernknopf

Goals:

To improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

Maintain current local and regional transportation activities and provide the means to develop future public transportation plans that meet changing local and regional transportation needs. Do research and prepare reports on public transportation matters as required, etc. Coordinate with Cross County Connection TMA, other counties and state agencies. Serve on various corridor study task forces.

Tasks:

Task 1: Administration

1. Administer the project, which includes submission of a progress report, final billing and report.

Task 2: Planning and Programming

1. Keep abreast of NJ Transit service within the county.
2. Assist communities in identifying their transportation needs and provide information as to their transportation alternatives through participation in TMA activities.
3. Provide technical assistance and program coordination with local, regional, and New Jersey state agencies.
4. Participate in transportation planning meetings and conferences.
5. Develop and maintain GIS to include the development and update of asset management data on county roadways.

Task 3: Coordination

1. Coordinate planning activities with various county and state agencies.
2. Provide technical support to the CMAQ Subcommittee of the DVRPC RTC.
3. Develop the Camden County Work Program for inclusion in the DVRPC Unified Planning Work Program.
4. Respond to public information requests.

Products:

1. TOD GIS data and reports.
2. Progress reports and final report.
3. Work Programs for DVRPC UPWP.

Beneficiaries:

Citizens, private sector, and operating agencies.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$51,875		\$51,875		
2019	\$54,625		\$54,625		
2020	\$51,875		\$51,875		
2021	\$51,875		\$51,875		

\$41,500 Cash - \$13,125 Match (\$10,375 for 19-63-021, \$667 for 19-63-027, \$2,083 for 19-63-028)

PROJECT: 19-63-022 Gloucester County Transportation Systems Planning & Implementation

Responsible Agency: Gloucester County Planning Department

Program Coordinator: Amy Bernknopf

Goals:

Improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

Improve the efficiency of the region's public transportation network by carrying out a comprehensive local transit planning program to maintain current local and regional public transportation activities and to provide the means to develop future public transportation plans that meet changing local and regional needs. Serve on steering committees and the Local Citizens Transportation Advisory Committee. Conduct research and prepare reports on public transportation matters as required. Attend meetings, seminars, and public hearings related to public transportation.

Tasks:

Task 1: Administration

1. Administer project, which will include submission of quarterly progress reports, quarterly invoices, and final report.

Task 2: Planning and Programming

1. Monitor NJ Transit service within the county, perform detailed analysis, and submit recommendations to NJ Transit.
2. Continue regional marketing and marketing activities.
3. Provide technical assistance and program coordination with regional, state and local agencies.

Task 3: Coordination

1. Participate in transportation meetings, and conferences.
2. Respond to public information requests.
3. Assist NJDOT, NJ Transit, and DVRPC in the investigation of potential transportation improvements.
4. Assist the business community in identifying their transportation needs and provide information as to their transportation alternatives.

Products:

1. Service improvement recommendations.
2. Quarterly reports and billings and final report.
3. TSP Work Program for next fiscal year's DVRPC Planning Work Program.

Beneficiaries:

Gloucester County, municipalities, the private sector, and citizens.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$48,350		\$48,350		
2019	\$51,100		\$51,100		
2020	\$48,350		\$48,350		
2021	\$48,350		\$48,350		

\$38,680 Cash - \$12,420 Match (\$9,670 for 19-63-022, \$667 for 19-63-027, \$2,083 for 19-63-028)

PROJECT: 19-63-023 Mercer County Transit Planning and Programming

Responsible Agency: Mercer County Planning

Program Coordinator: Amy Bernknopf

Goals:

Carry out a comprehensive local transit planning program to improve the efficiency of the region's transportation network.

Description:

Identify, provide, promote and maintain transit and ridesharing opportunities within Mercer County by encouraging patterns that link use with transit. Work with NJ Transit, NJDOT, the Greater Mercer TMA, developers, large employers and other agencies to promote and implement various types of transit and ridesharing. These may include, but are not limited to: transit buses, local buses, park and rides, and van or car pooling in areas of the county with severe congestion problems and little or no transit. Make recommendations to NJ Transit, employers, and developers for new services including light rail where possible.

Tasks:

Task 1: Administration

1. Participate in DVRPC's annual Planning Work Program development.
2. Prepare TSP quarterly progress and financial reports.

Task 2: Planning and Programming

1. Assist NJ Transit in efforts to establish legal bus stops and install shelters throughout the county.
2. Make recommendations to NJ Transit on sites and corridors with potential transit ridership.
3. Work with large employers, developers, municipalities, the county government, and GMTMA to develop and encourage alternatives to the single occupancy vehicle.
4. Work with municipalities, county government, and other appropriate agencies to review, evaluate, and implement transportation control measures appropriate for the county and the region in response to the Clean Air Act Amendments of 1990.
5. Review municipal master plans to ensure that transit services are considered and are compatible with the regional transportation system.

Task 3: Coordination

1. Coordinate programs with local, county, state, and regional agencies.

Products:

1. Quarterly progress reports and invoices.
2. Approved legal bus stop and shelter locations.
3. Recommendations and implementation of improvements in the moving of people

within the transportation system including preparation of the final report.
 4. TSP Work Program for inclusion in next year's DVRPC Planning Work Program.

Beneficiaries:

Mercer County, Local Governments, Private Citizens, Developers, Transportation Engineers and NJDOT.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$41,605		\$41,605		
2019	\$44,355		\$44,355		
2020	\$41,605		\$41,605		
2021	\$41,605		\$41,605		

\$33,284 Cash - \$11,071 Match (\$8,321 for 19-63-023, \$667 for 19-63-027, \$2,083 for 19-63-028)

PROJECT: 19-63-024 NJT Transportation Improvement Program and Short Range Planning

Responsible Agency: New Jersey Transit

Program Coordinator: Amy Bernknopf

Goals:

To improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

This project continues NJ Transit's ongoing support and coordination of regional planning activities in the DVRPC region. NJ Transit will assist in the development of the regional Transportation Improvement Program and maintain and utilize a computerized database for capital projects. This project will provide for continued NJ Transit representation at DVRPC meetings and regional forums, such as RTC, Board, Air Quality Conformity, Congestion Management System, Jobs Access and Reverse Commute, and other meetings involving transit planning and projects. NJ Transit will provide technical assistance and coordination for regional forums and regional studies pertaining to NJ Transit.

Tasks:

Task 1: Administration

1. Continue to develop, maintain, and apply the project information database.
2. Participate in DVRPC's annual Planning Work Program development.
3. Prepare TSP quarterly progress and financial reports.

Task 2: Planning and Programming

1. Provide capital project descriptions and project ratings according to DVRPC project selection criteria.
2. Program and produce NJ Transit's one-year and five-year capital programs.
3. Analyze new federal, state, and local regulations concerning planning and development guidelines.
4. Provide technical assistance to NJ Transit departments in the pursuit of FTA program funds.

Task 3: Coordination

1. Participate in the development of the Regional Transportation Improvement Program.
2. Support DVRPC in the analysis of NJ Transit's capital program and in the preparation of the regional transit element of the DVRPC TIP.
3. Support the preparation of the capital program and priorities within NJ Transit.
4. Provide NJ Transit capital project information to state, county, and local agencies and staff.

5. Maintain an ongoing dialogue with county and local officials regarding capital project problem statements, programs, and progress.
6. Support the continued development and refinement of the Congestion Management/Intermodal Systems.
7. Support the refinement and continued development of the regional and statewide long-range transportation plans.
8. Represent NJ Transit at regional planning forums and provide technical assistance and coordination for county or local transportation studies.
9. Oversight and administrative support for community mobility programs and subrecipients in the DVRPC region.

Products:

1. NJ Transit's annual capital program, five-year capital plan, and transit element of the DVRPC Regional TIP.
2. Quarterly Progress Reports and invoices.
3. NJ Transit TSP Work Program for next fiscal year.

Beneficiaries:

Member governments and operating agencies.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$124,480		\$124,480		
2019	\$110,730		\$110,730		
2020	\$88,430		\$88,430		
2021	\$88,430		\$88,430		

\$70,744 Cash - \$39,986 Match (\$17,686 for 19-63-024, \$19,550 for 19-63-026, \$667 for 19-63-027, \$2,083 for 19-63-028)

PROJECT: 19-63-025 City of Camden Transit Planning Program

Responsible Agency: City of Camden

Program Coordinator: Amy Bernknopf

Goals:

To improve efficiency of the region's public transportation network by carrying out a comprehensive local transit planning program.

Description:

This project will enhance the mobility of the residents of the City of Camden by providing comprehensive planning, programming, monitoring, and coordination of transit services in Camden.

Tasks:

Task 1: Administration:

1. Administer the project and prepare required invoices and progress reports.

Task 2: Planning and Programming

1. Monitor and provide input for NJ Transit and PATCO capital projects within the City of Camden.
2. Promote transit initiatives in the City of Camden as they pertain to residents, employees, employers, developers, and event spaces.
3. Evaluate upcoming land development and recommend measures to increase transit use.

Task 3: Coordination

1. Provide input into NJ Transit operating budgets and determine impacts on fares, subsidies, and levels of service.
2. Participate in activities of the Cross County Connection TMA.
3. Maintain liaison with NJ Transit, PATCO, NJDOT, and other transit service providers in the City of Camden.

Products:

1. Quarterly progress reports and invoices.
2. Closing report.
3. TSP Work Program for next fiscal year.

Beneficiaries:

New Jersey TMAs, NJDOT, and commuters in the DVRPC region in New Jersey.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$26,000		\$26,000		
2019	\$28,750		\$28,750		
2020	\$26,000		\$26,000		
2021	\$26,000		\$26,000		

\$20,800 Cash - \$7,950 Match (\$5,200 for 19-63-025, \$667 for 19-63-027, \$2,083 for 19-63-028)

PROJECT: 19-63-026 New Jersey Transit Survey Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Matthew Gates

Project Manager: Joshua Rocks

Goals:

This project is part of a continuing multi-year project performing ridership survey work on NJ Transit bus routes in order to update older surveys, assess and identify future issues or needs, and assist in meeting Title VI requirements.

Description:

The purpose of this project is to collect and analyze survey data on select NJ Transit local bus routes. This would provide data to update New Jersey Transit's previous on-board surveys, and would support identification of travel patterns, customer preferences, and operational issues or needs, and help meet Title VI requirements. The data will also be utilized by DVRPC staff in support of travel simulation modeling, calibration and other transit data inquiries. DVRPC will work with NJ Transit to identify bus routes to be surveyed, but may include the following: 403, 404, 405, 407, 409, 413, 417, 418, 419, and 554 (or 551), and the Atlantic City Rail line. It is possible that this survey will need to be phased into the following year. DVRPC will work with NJ Transit to finalize route choice, and to design both the sampling plan and the survey instrument. Efforts will be made to ensure that the data can be integrated into the 2010-2011 DVRPC Transit on-board survey database. Collected data will be processed and cleaned to ensure high data quality. This project may involve the purchase of goods and or services.

Tasks:

1. Complete any outstanding survey work that began in FY 2018.
2. Survey selected NJT Bus routes.
3. Enter and aggregate the data in accordance with NJT guidance.
4. Write up summary of method and conduct of the survey, including some data summary.
5. Conveyance of the finished data set to NJT in an agreed upon electronic format

Products:

1. Process memorandum or technical memorandum summarizing work and findings and MS PowerPoint presentation materials detailing study process, findings, and results.
2. Data-base of survey results.

Beneficiaries:

New Jersey Transit, municipalities, and commuters.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$144,200		\$144,200		
2019	\$78,200		\$78,200		
2020					
2021					

**PROJECT: 19-63-027 License Plate Surveys of Public Transit Park-and-Rides —
New Jersey**

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Amy Bernknopf

Project Manager: Betsy Mastaglio

Goals:

To understand rider park-and-ride origins at NJT and PATCO transit parking lots for planning purposes.

Description:

In partnership with NJT, DRPA, and NJDOT, DVRPC has a program to assess transit station market areas by surveying license plates of the vehicles that are parked at each station and mapping the addresses that are associated with those plates. By exploring the distribution of mapped records, DVRPC can get a sense of where a given station's highest concentrations of park-and-ride customers are located, as well as typical drive-access distances.

This ongoing program will identify rider origins for the current total of 34 transit stations that have commuter parking (approximately 7-8 stations annually). This data determines the geographic areas from which park-and-ride customers originate. Rider origins are obtained from license plates, address matched by NJDOT, and mapped. The resulting station catchment area information, from which personally identifiable information is removed, provides clear and accurate data used to support planning functions by NJT, suburban counties, and local municipalities for changes in marketing, route operations, and capital planning (expansion of parking and station facilities).

Approximately 7-8 stations will be analyzed (one fifth of all stations with parking) during each fiscal year, so that no station will have data older than five years.

Prior to this project getting underway, NJ Transit, PATCO, and NJ counties' staff will be given an opportunity to review and confirm that the proposed locations are their priorities for data collection and analysis this year.

Tasks:

1. Reach out to partners where license plate surveys are scheduled to be collected. Confirm with that no new construction or capital projects have taken place and that there are other locations that are priorities.
2. Perform license plate surveys for approximately 7-8 rail stations, enter data, and geocode resulting origin patterns for each selected station.
3. Add collected data to license plate survey database and update online mapping

tool.

4. Send full point datasets to each participating partner.

Products:

Datasets that will be shared online (aggregated to a geographic area) as well as with the project partners.

Beneficiaries:

Camden County, Gloucester County, Mercer County, Burlington County, NJ Transit, DRPA, New Jersey transportation management associations (TMAs), existing and new NJT and DRPA customers.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$16,000		\$16,000		
2020					
2021					

PROJECT: 19-63-028 Safe Routes to Transit Program: New Jersey

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Andrew Svekla, Betsy Mastaglio

Project Manager: Joseph Banks

Goals:

Identify municipalities within the DVRPC region that are interested in improving active transportation connections to transit (first- and last-mile connections) through applications for competitive funding programs (TA Set-Aside in PA, NJ TAP, PennDOT/DCED Multimodal Fund, or others). Assist selected municipalities in identifying candidate bicycle and pedestrian projects that improve first- and last-mile connections to transit stations. Furnish the selected municipalities with significant project information so as to assist in the preparation of grant applications.

Description:

This is the New Jersey portion of an ongoing regional technical assistance program that supports expansion of active transportation access to NJ Transit and PATCO (DRPA) rail stations. A parallel portion focuses on access to SEPTA stations in Pennsylvania.

Expanding active transportation access to rail stations allows transit agencies to increase ridership at stations where parking does not exist or cannot/should not be expanded, and promotes sustainability goals for the region. This project will build on DVRPC's previous Safe Routes to Transit projects that focus on quick but impactful implementation strategies to improve bicycle and pedestrian access to transit. DVRPC staff will first work with SEPTA, NJ Transit, and PATCO to identify municipalities within the region that are motivated to pursue the implementation of pedestrian and bicycle facilities that improve first- and last-mile connections to rail stations. To that end, the project will be framed around preparing selected municipalities with sufficient project details to prepare grant and funding applications that directly link to design and construction money to implement recommendations.

DVRPC will work with SEPTA, NJ Transit, PATCO, and each DVRPC county to author a call for entries—one for Pennsylvania and one for New Jersey—to be considered by municipalities, together with their county, to submit expressions of interest and a suggested rail station. Once submitted, DVRPC will select up to two (2) stations in the combined NJ Transit and PATCO service area for focus (with selections being determined by the level of interest and complexity of projects deemed compelling by the advisory committee). For each station area, potential tasks could include: existing conditions inventory and documentation, conceptual design, stakeholder coordination, design recommendations, cost estimates, and implementation steps. Project deliverables will support the municipality's (or other local stakeholders') future application for upcoming funding opportunities, or help

set priorities within their capital programs.

Completion of this project may require the purchase of equipment or services.

Tasks:

1. Coordinate with SEPTA, NJ Transit and DRPA/PATCO on authoring a call for projects which may ask project sponsors to include:
 - Identification of candidate rail line(s) or station(s).
 - Evidence of a demand for additional pedestrian and bicycle facilities around transit stations.
 - Demonstration of a proven track record for implementing planning recommendations.
 - Statement of commitment of staff time and resources to work with the DVRPC SRTT team.
 - Statement of commitment to pursue project implementation if selected for technical assistance.
2. Review entries and select no more than two (2) rail stations within the combined NJ Transit and PATCO service area for a focused study.
3. Conduct an existing conditions analysis of the mode and patterns related to accessing each station, service schedules, and the pedestrian, bicycle, land use, safety, and street connectivity between the stations and the surrounding area.
4. Develop short term, low-cost scenarios for strengthening the physical and perceptual connectivity between each station and its surrounding community, including elements such as:
 - Improved pedestrian and bicycle accommodations.
 - Informational and directional signage between station sites.
 - Other improvements as appropriate.
5. Coordinate with DVRPC Project Implementation staff on potential funding programs for each project and review programmatic requirements for those programs with the local sponsor.
6. Identify recommendations for short-term implementation, scaled and tailored to stakeholder capital programs and for discretionary funding rounds found to be appropriate and satisfactory to the local project sponsor.
7. Support sponsor during application process and design phase, as appropriate.

Products:

Products may include a summary of each study area’s existing conditions and recommendations, letter(s) of support from relevant organizations (if applicable), or relevant funding sources and timeline. These may be packaged as a single report or as individual memorandums as deemed appropriate by the advisory committee and local project sponsor.

Beneficiaries:

NJ Transit, PATCO, and selected Counties, municipalities, rail commuters, and pedestrians and bicyclists in the vicinity of each station.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$50,000		\$50,000		
2020					
2021					



CHAPTER 5

→ **Other Member
Government Projects**

JANUARY 2018

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FISCAL YEAR 2019 PLANNING WORK PROGRAM | CHAPTER 5**

Other Member Government Projects

15-44-320	William Penn-Planning, Design and Construction of Priority Trails	343
18-33-200	William Penn - Completing the Circuit	345
19-53-300	PA/NJ Regional GIS Implementation Coordination	347
19-62-000	New Jersey Local Concept Development	349
19-66-000	PA and NJ Transportation and Community Development Initiative	351

PROJECT: 15-44-320 William Penn-Planning, Design and Construction of Priority Trails

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher Linn

Project Manager: Ryan Gallagher, Shawn Megill Legendre

Goals:

To continue a grant program to support implementation of the Circuit, Greater Philadelphia's regional multi-use trails network. The program will make grants to construct, design, and plan multi-use trails to close gaps in the network. In so doing, it will continue to build project management and stewardship capacity within governmental and non-profit trail-related organizations.

Description:

In December 2014 DVRPC applied for and was awarded a three-year \$7 million grant from the William Penn Foundation to assist with the planning, design and construction of multi-use trails comprising the Circuit.

Of the \$7 million:

- \$6,500,000 will be re-granted to counties, municipalities, non-profits and others to construct, design, or plan for trails that comprise the Circuit
- \$500,000 will support the following: DVRPC administration of the grant program, coordination and outreach to the counties, DVRPC project management for awarded grants, and events, projects and programs to coordinate activities and promote the Circuit.

The grant program has emphasized final design and engineering to prepare Circuit projects for future rounds of federal construction funding. Implementation of the Circuit is identified as a regional priority in Connections 2040: Plan for Greater Philadelphia.

It is expected that all grant funds will be disbursed by the end of FY17. DVRPC will continue to manage the on-going work of grant recipients under this project in FY18 and continue to provide technical assistance to trail project sponsors.

Tasks:

1. Issue contracts for approved projects.
2. Manage awarded projects: Oversee the timely completion of planning, design, and construction projects.
3. Provide technical assistance to member governments and Circuit Coalition partners
4. Submit narrative reports to update the Foundation on progress toward achieving the grant milestones.

Products:

- 1. Contracts with project sponsors.
- 2. Press releases and media outreach.
- 3. Management of awarded projects to assure timely delivery of project deliverables.

Beneficiaries:

Counties, state DOTs, municipalities, PA DCNR, NJDEP, active transportation and trail advocates, bicyclists, pedestrians and the commuting public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2016	\$3,600,000				\$3,600,000
2017	\$3,000,000				\$3,000,000
2018	\$2,000,000				\$2,000,000
2019	\$500,000				\$500,000

*Funding provided by the William Penn Foundation

PROJECT: 18-33-200 William Penn - Completing the Circuit

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher Linn

Project Manager: Ryan Gallagher, Shawn Megill Legendre

Goals:

To continue a grant program to support implementation of the Circuit Trails, Greater Philadelphia's regional multi-use trails network. The program will make grants to construct, design, and plan multi-use trails to close gaps in the network.

Description:

In November 2017 DVRPC applied for and was awarded a three-year \$6.6 million grant from the William Penn Foundation to assist with the planning, design and construction of multi-use trails comprising the Circuit Trails.

Of the \$6.6 million, \$6,095,000 will be re-granted to construct, design, or plan Circuit Trails and \$505,000 will support DVRPC administration of the grant program, management of awarded grants, and continuing efforts to provide technical assistance to the larger trail-building community. The grant program will emphasize final design and engineering to prepare Circuit trail projects for future rounds of federal construction funding. Implementation of the Circuit is identified as a regional priority in Connections 2045: Plan for Greater Philadelphia.

Tasks:

1. Continue on-going conversations and coordination with county and regional partners to develop lists of candidate projects that meet program criteria.
2. Conduct site visits and field views to review proposed projects.
3. Process and select projects for funding: Review and prioritize proposals and select grantees based upon program criteria, partner input, project readiness, and fiscal constraints.
4. Coordinate with DCNR and the DVRPC PA and NJ TIP update committees to leverage sources and secure funding for design and construction.
5. Present recommendations to the DVRPC Regional Technical Committee and Board.
6. Issue contracts for approved projects.
7. Manage awarded projects: oversee the timely completion of planning, design, and construction projects.
8. Provide technical assistance to local governmental and non-profit partners on design and planning issues and coordinate activities among partners.
9. Track and monitor completion of Circuit trail projects and funding awards from all sources.
10. Promote, publicize and present on the accomplishments of the Regional Trails

Program and the status of the Circuit Trails.

11. Submit narrative reports to update the Foundation on progress toward achieving the grant milestones

Products:

1. Grants for construction, design, and planning of multi-use trails.
2. Contracts with project sponsors.
3. Press releases, status reports, and media outreach.
4. Maps and tables charting the status of the Circuit Trails network.
5. Management of awarded projects to assure timely delivery of project deliverables.

Beneficiaries:

Counties, state DOTs, municipalities, PA DCNR, NJDEP, active transportation and trail advocates, bicyclists, pedestrians and the commuting public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$1,200,000				\$1,200,000
2019	\$2,000,000				\$2,000,000
2020	\$2,200,000				\$2,200,000
2021	\$1,200,000				\$1,200,000

*Funding Provided by the William Penn Foundation

PROJECT: 19-53-300 PA/NJ Regional GIS Implementation Coordination

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Patricia Elkis

Project Manager: William Stevens

Goals:

Ensure integrated and coordinated planning and promote information sharing through the continued development and maintenance of regional transportation GIS data.

Description:

This project enables the regional planning partners to expand their GIS capability as necessary to maintain a level of technical sophistication that guarantees interoperability and compatibility between NJDOT, PennDOT, DVRPC, and other member governments. A regional transportation database has been developed by integrating data from both DOTs and member governments. Each planning partner will be asked to contribute transportation data as needed as updates to this database are critical to continued effective decision-making throughout the planning process. This regional transportation data can thus be shared between the counties, DVRPC and both DOTs to improve planning and decision-making. Completion of this project may require the purchase of equipment or services.

Tasks:

1. Attend meetings as needed and provide input as it relates to project direction and focus.
2. Submit quarterly progress reports, including updated budgets and receipts.
3. Acquire and maintain GIS hardware, software, and training as approved for use in the project.
4. Augment in-house staff as necessary to complete tasks.
5. Contribute existing transportation-related data as necessary.
6. Assist in development of new transportation-related data as required.
7. Ensure that all contributing data meets project standards.
8. Share methodologies related to effective and innovative use of transportation data to project participants as requested.

Products:

1. Quarterly progress reports.
2. Hardware, software, and training necessary for project participation.
3. Regional transportation-related data available to all project participants to support their GIS programs.

Beneficiaries:

State DOTs, member governments and operating agencies, and DVRPC.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$300,000				\$300,000
2019	\$300,000				\$300,000
2020	\$300,000				\$300,000
2021	\$300,000				\$300,000

* PA TIP - MPMS #48202 - \$150,000 STU/Toll Credit Match
NJ TIP - DB #X30A - \$150,000 STP-STU

PROJECT: 19-62-000 New Jersey Local Concept Development

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: John Coscia

Goals:

Improve the efficiency of the region's transportation network by providing federal funds to the New Jersey subregions to advance projects through New Jersey Local Concept Development.

Description:

The purpose of this program is to provide federal funds directly to member subregions for the advancement of projects through the Concept Development (CD) phase. The CD Phase involves drafting a well-defined and well-justified Purpose and Need Statement focusing on the primary transportation need to be addressed. CD Phase elements include, but are not limited to, data collection, coordination with New Jersey Department of Transportation (NJDOT) Subject Matter Experts/local stakeholders, risk identification, development of a reasonable number of sensible and practical conceptual alternatives and investigation of all aspects of a project. These aspects may include environmental, right of way, access, utilities, design, community involvement, and constructability.

The major objectives of the CD Phase are to identify and compare reasonable alternatives and strategies that address the Purpose and Need Statement and select a Preliminary Preferred Alternative.

The CD Phase will provide the information to determine whether or not the study can be advanced to the next phase of the Project Delivery Process and to procure a designer to take the potential project through PE, Final Design (FD) and Construction (CON). The CD Phase provides the framework for advancing the project into the PE phase.

New projects for Concept Development include:

1. Trenton Transit Center Circulation Improvement (Trenton).
2. Mill Street Bridge Rehabilitation/Replacement (Burlington).
3. Parkers Creek Bridge (Burlington)
4. Traffic Signal Improvements (Camden City)
5. Broadway Roadway Improvements (Camden)
6. Almonesson Creek Bridge (Gloucester)
7. North Olden Avenue (CR 622) Access & Safety (Mercer)
8. Additionally approved projects as needed.

Tasks:

1. Kickoff meetings.
2. Stakeholder Meetings.
3. Public meetings.
4. Perform data collection: traffic/crash data, management systems, utility identification, etc.
5. Complete Environmental Screening. Initiate early coordination with SHPO, if appropriate.
6. Perform analysis of collected data, review data, prepare collision diagram, and other needed engineering analysis.
7. Develop Conceptual Plans for Preliminary Preferred Alternative (PPA).
8. Confirm the environmental document that will be obtained in PE.
9. Develop Construction Cost Estimates of various alternatives.
10. Prepare CD Report.

Products:

1. Clearly defined Purpose and Need Statement for each project.
2. Concept Development Report for each project.

Beneficiaries:

Member and local governments and the traveling public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018	\$430,000				\$430,000
2019	\$1,500,000				\$1,500,000
2020	\$430,000				\$430,000
2021	\$430,000				\$430,000

* NJ State Funds- \$1,500,000 TTF

PROJECT: 19-66-000 PA and NJ Transportation and Community Development Initiative

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: Karen Cilurso

Goals:

Implement Connections 2045 Plan for Greater Philadelphia by supporting early stage local government planning initiatives that advance the plan's five principles: Sustain the Environment, Develop Livable Communities, Expand the Economy, Advance Equity and Foster Diversity, and Create an Integrated, Multimodal Transportation Network. All projects must also enhance the region's multi-modal transportation infrastructure.

Description:

The Transportation and Community Development Initiative (TCDI) is an opportunity for the Delaware Valley Regional Planning Commission (DVRPC) to support growth in the individual municipalities of the Delaware Valley through initiatives that implement the region's long range plan, Connections 2045 Plan for Greater Philadelphia. Central to the effort is the objective to enhance quality of life choices by providing and maintaining essential infrastructure, supporting local and regional economic development, and linking land use and transportation planning.

TCDI provides a mechanism for local governments to undertake locally-directed actions to improve their communities, which in turn implements their local county comprehensive plans and supports the goals and vision of the region's long-range plan. PA and NJ, as well as a number of counties within the region, have current programs to support community development. TCDI seeks to support and leverage those state and county programs, by providing funding to undertake planning, analysis or design initiatives which implement the long-range plan and enhance or improve the efficiency of the regional transportation system.

DVRPC will prepare, manage and implement a program to provide funding, on a competitive basis, to qualifying municipalities in Bucks, Chester, Delaware, Montgomery, Philadelphia, Burlington, Mercer, Camden and Gloucester counties. Eligible activities include planning, analysis or design initiatives related to planning and growth management, reuse and revitalization, and transportation and infrastructure. DVRPC will assist communities with project applications, coordinate a review committee to select project priorities, develop contracts and award funding based on completed work, and monitor project progress.

Tasks:

1. Award and administer contracts to projects as approved by the DVRPC Board. DVRPC administrative staff will manage contracting and invoicing, and DVRPC planning staff will act as project managers, overseeing the communities' implementation of their awards.
2. Develop detailed scope of work for each project as selected by DVRPC Board.
3. Review project products and provide payment based on completion of deliverable products and accounting of costs.
4. Monitor and evaluate project progress and report to Steering Committee and Board regarding problems, successes, and lessons learned.

Products:

1. Recommended list of projects selected for funding.
2. Project deliverables as defined by selected projects.
3. Evaluation report of completed projects.

Beneficiaries:

Counties, municipalities, State transportation, community development, and economic development agencies, private sector and public

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2018					
2019	\$2,250,000				\$2,250,000
2020					
2021	\$2,250,000				\$2,250,000

New Jersey - NJ TIP DB # D0204 \$600,000 , \$150,000 Local Match

Pennsylvania - PA TIP MPMS # 64652 1,200,000 , \$300,000 Local Match



APPENDIX A

→ Continuing PennDOT
& NJDOT Projects

JANUARY 2018

3/1/2018

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
FY 2019 PLANNING WORK PROGRAM
TABLE G: PennDOT CONTINUING PROJECTS

There are no PennDOT Continuing Projects

**TABLE G DELAWARE VALLEY REGIONAL PLANNING COMMISSION
 FY 2019 PLANNING WORK PROGRAM
 TABLE G: NJDOT CONTINUING TASK ORDERS***

Project Number	Project Title	Task Order Number	Federal Funding Agreement	Funding	Current Task Order End Date	Requested Task Order End Date
15-62-000	NJ Local Concept Development	PL-DV-15-01	L230C00S635	\$ 455,000	6/30/2019	
16-62-000	NJ Local Concept Development	PL-DV-16-01	M230C00S791	430,000	6/30/2018	6/30/2019
16-62-010	NJ Pavement Management System	PL-DV-16-01	M23EC00S787	2,000,000	6/30/2019	
16-62-020	Mercer County Guiderail	PL-DV-16-01	n/a State Funds	1,000,000	6/30/2019	
17-62-001	HSIP LCD Mt. Ephraim Ave in City of Camden	PL-DV-17-01	MS3EC00S938	300,000	6/30/2019	
17-62-100	NJ Local Concept Development	PL-DV-17-01	Z230C00S937	430,000	6/30/2019	6/30/2020
17-64-000	NJ Regional Signal Retiming Initiative	PL-DV-17-01	H400C00S928	350,000	6/30/2019	6/30/2020
17-64-100	NJ Curve Inventory and Assessment	PL-DV-17-01	Z230C00S955/ MS3EC00S955	500,000 500,000	6/30/2020	
18-41-060	Transportation Systems Management & Operations (TSMO)	PL-DV-18-01	Z230D00S063	233,375	6/30/2018	6/30/2019
18-51-020	Enhanced Travel Forecast	PL-DV-18-01	Z230D00S062	185,600	6/30/2018	6/30/2019
18-52-090	Regional Sidewalk Inventory	PL-DV-18-01	Z230D00S062	100,000	6/30/2018	6/30/2019
18-53-300	Regional Transportation GIS Coordination	PL-DV-18-01	Z230D00S062	350,000	6/30/2018	6/30/2019
18-62-000	NJ Local Concept Development	PL-DV-18-01	Z230D00S062	430,000	6/30/2018	6/30/2020
18-64-000	NJ Regional Signal Retiming Initiative	PL-DV-18-01	M400D00S072	350,000	6/30/2018	6/30/2020

* Task orders from prior years that will continue into FY2019.



APPENDIX B

→ **Commonly Used Terms
in DVRPC's Regional
Planning Process**

JANUARY 2018

Acronyms

Commonly Used Terms in DVRPC's Regional Planning Process

AADB – Annual Average Daily Bicycles

AADP - Annual Average Daily Pedestrians

AABT - Annual Average Daily Traffic

ACS – American Community Survey

ADA – Americans with Disabilities Act

AQP – Air Quality Partnership

BCTMA – Bucks County Transportation Management Association

BID – Business Improvement District

BRT – Bus Rapid Transit

CAAA – Clean Air Act Amendments

CAC – Clean Air Council

CBD – Central Business District

CCCTMA - Cross County Connection Transportation Management Association

CD – Concept Development

CDC – Community Development Corporation

CEDS – Comprehensive Economic Development Strategy

CHSTP – Comprehensive Human Services Transportation Plan

CJTF – Central Jersey Transportation Forum

CMAQ – Congestion Mitigation and Air Quality Improvement Program

CMP – Congestion Management Process

CPTMA – Central Philadelphia Transportation Management Association

CR – County Route

CTPP – Census Transportation Planning Package

CZM – Coastal Zone Management

DCTMA – Delaware County Transportation Management Association

DRPA – Delaware River Port Authority

DVGMTF – Delaware Valley Goods Movement Task Force

ECG – East Coast Greenway

EJ – Environmental Justice

ERH – Emergency Ride Home

ETA – Equity through Access

FAA – Federal Aviation Administration

FAST Act – Fixing America’s Surface Transportation Act

FASTLANE - Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies

FHWA – Federal Highway Administration

FTA - Federal Transit Administration

GHG – Greenhouse Gas

GIS – Geographic Information Systems

GMTMA – Greater Mercer Transportation Management Association

GVFTMA – Greater Valley Forge Transportation Management Association

HDV – Heavy-duty Diesel Vehicle

HSIP – Highway Safety Improvement Program

HOV – High Occupancy Vehicle

IDRuM – Interactive Detour Route Mapping

IMTF – Incident Management Task Force

IPD – Indicators of Potential Disadvantage

IREG – Information Resources Exchange Group

ITS – Intelligent Transportation Systems

JARC – Job Access Reverse Commute

LED – Light Emitting Diode

LEP – Limited English Proficiency

LOS – Level of Service

LRP – Long-Range Plan

LTAP – Local Technical Assistance Program

MAP – Mobility Alternatives Program

MAP-21 – Moving Ahead for Progress in the 21st Century

MIRE – Model Inventory of Roadway Elements

MIT – Municipal Implementation Tools

MOVES – Motor Vehicles Emissions Simulator

MPMP – Multimodal Project Management System

MPO – Metropolitan Planning Organization

NAAQS – National Ambient Air Quality Standards

NAICS – North American Industry Classification System

NEPA – National Environmental Protection Act

NETS – National Establishment Time Series

NHS – National Highway System

NHSL – Norristown High Speed Line

NJ BPAC – NJ Bicycle and Pedestrian Advisory Council

NJ DCA – NJ Department of Community Affairs

NJ DEP – NJ Department of Environmental Protection

NJ DOT – NJ Department of Transportation

NJ OPA – NJ Office for Planning Advocacy

NJ SAFR – NJ Southern Area First Responders

NJT – New Jersey Transit

NJTA – NJ Turnpike Authority

NJTPA – North Jersey Transportation Planning Authority

OMB – Office of Management and Budget

oTIS – Philadelphia Managing Director's office of Transportation and Infrastructure Systems

PA DCED – PA Department of Community and Economic Development

PA DEP – PA Department of Environmental Protection

PART – Pottstown Area Rapid Transit

PA SDC – PA State Data Center

PATCO – Port Authority Transit Corporation

PennDOT – PA Department of Transportation

PM 2.5 – Particulate Matter 2.5 microns

PMC – Program Management Committee

PMRPC – Pottstown Metropolitan Regional Planning Commission

PPAC – Pedalcycle and Pedestrian Advisory Committee

PPTA – PA Public Transportation Association

PPTF – Public Participation Task Force

PSATS – PA State Association of Township Supervisors

PTC – PA Turnpike Commission

PTMA – Partnership Transportation Management Association

PWP – Planning Work Program

RAC – Regional Aviation Committee

RASP – Regional Aviation System Plan

RCEDF – Regional Community and Economic Development Forum

RCRS – Road Condition Reporting System

RideECO – Ride Easy Commute Options

RIMIS – Regional Integrated Multimodal Information Sharing

ROW – Right-of-Way

RPO – Rural Planning Organization

RSTF – Regional Safety Task Force

RTAC – Regional Transit Advisory Committee

RTC – Regional Technical Committee

RTSAP – Regional Transportation Safety Action Plan

SAR – Share-a-Ride

SDRP – State Development and Redevelopment Plan

SEPTA – Southeastern Pennsylvania Transportation Authority

SHSP – Strategic Highway Safety Plan

SIP – State Implementation Plan

SJCATF – Sustainable Jersey Climate Adaptation Task Force

SJTPO – South Jersey Transportation Planning Organization

SOS – Strategies for Older Suburbs

SOV – Single Occupant Vehicle

SRHPP – Supportive Regional Highway Planning Program

SRTS – Safe Routes To School

STIP - State Transportation Improvement Program

STOPS – Simplified Trips-On-Projects Software

STP – Surface Transportation Program

STU – STP Funds Allocated to Urban Areas

TAMP – Transportation Asset Management Plan

TAP – Transportation Alternatives Program

TCDI – Transportation and Community Development Initiative

TCRP – Transit Cooperative Research Program

TDM – Transportation Demand Management

TDM – Travel Demand Model

TE – Transportation Enhancements

TIM2 – Travel Improvement Model Version 2

TIM3 – Travel Improvement Model Version 3

TIP – Transportation Improvement Plan

TMA – Transportation Management Association

TMACC - Transportation Management Association of Chester County

TMP – Traffic Management Plan

TOD – Transit Oriented Development

TOTF – Transportation Operations Task Force

TPM – Transportation Performance Measures

TRID – Transit Revitalization Investment District

TRB – Transportation Research Board

TSM – Transportation Systems Management

TSMO – Transportation Systems Management and Operations

TSP – Transit Support Program

TSP – Transit Signal Priority

UPWP – Unified Planning Work Program

US DOT – US Department of Transportation

US EDA – US Economic Development Administration

US EPA – US Environmental Protection Agency

UWAG – Urban Waterfront Action Group

VOC – Volatile Organic Compound

VMT – Vehicle Miles Driven

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Publication Number 19002
Date Published January 2018
Geographic Area Covered The nine county Delaware Valley Regional Planning Commission region including Bucks County, Chester County, Delaware County, Montgomery County, City of Philadelphia, Burlington County, Camden County, Gloucester County, and Mercer County.

Key Words Planning Work Program

Abstract This document contains all of the projects and related funding for FY 2019 as passed by the DVRPC Board in January 2018.

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