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**FY 2020**

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**PLANNING**

**WORK**

**PROGRAM**

***54 Years of Service***

*Serving the Philadelphia, Camden, Trenton, Metropolitan Areas*

JANUARY 2019





**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](http://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](http://www.dvrpc.org/GetInvolved/TitleVI), call (215) 592-1800, or email [public\\_affairs@dvrpc.org](mailto: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.

# FY 2020 PLANNING WORK PROGRAM

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## 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 24, 2019

On behalf of the Delaware Valley Regional Planning Commission (DVRPC), we are pleased to present the Fiscal Year 2020 Unified Planning Work Program (UPWP) as adopted by the DVRPC Board on January 24, 2019.

This document details work to be completed by DVRPC and our member governments during FY 2020, which runs from July 1, 2019 through June 30, 2020. As the federally designated Metropolitan Planning Organization for the Greater Philadelphia Metropolitan Area, DVRPC has the responsibility to undertake a performance-based planning and programming approach to making investments in our transportation system. DVRPC achieves this approach by following the direction and guidance provided by the federal FAST (Fixing America's Surface Transportation) Act and the Clean Air Act Amendments (CAAA), as well as undertaking the region's priority planning initiatives as identified by the DVRPC Board.

The planning activities identified in the FY2020 UPWP allow DVRPC to address a variety of issues in our diverse region. Key issues for the Commission in FY 2020 include providing for the safety, 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 continuing priority for the Commission in FY 2020 is the enhanced engagement with our stakeholders and general public on the implementation of our long-range plan, the *Connections 2045 Plan for Greater Philadelphia*.

The Commission believes that the FY 2020 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.

**Nedia Ralston**

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 2020 UNIFIED PLANNING WORK PROGRAM**

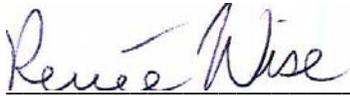
**BE IT RESOLVED**, that the Board of the Delaware Valley Regional Planning Commission (DVRPC):

1. Approves and adopts the Fiscal Year 2020 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 (NJ18-057) and the FY 2019 TIP for Pennsylvania (PA19-15) as required.
3. Authorizes and directs Barry Seymour, Executive Director, to negotiate the final details of the Board approved and adopted Fiscal Year 2020 UPWP with appropriate funding agencies; to prepare and file the required applications; to negotiate, execute, and/or delegate the negotiation and execution of the necessary contracts, grant agreements, and/or 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 2020 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 2020 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 2020 UPWP; and
7. Authorizes and directs Renee Wise, Recording Secretary, and/or her delegate to impress the official seal of the Commission and attest same on all documents as may be required.

Adopted this 24th day of January, 2019  
by the Board of the Delaware Valley  
Regional Planning Commission.

I certify that this is a true and correct copy of Resolution No. B-FY19-002.



Renee Wise, Recording Secretary

# Master Table of Contents

Chapter 1: Introduction	3
Chapter 2A: DVRPC Program Area Descriptions	35
Chapter 2B: DVRPC Project Descriptions	137
Chapter 3A: PA Supportive Regional Highway Planning Program (SRHPP)	233
Chapter 3B: NJ Supportive Regional Highway Planning Program (SRHPP)	255
Chapter 4A: PA Transit Support Program (TSP)	285
Chapter 4B: NJ Transit Support Program (TSP)	311
Chapter 5: Other Member Government Projects	337
Chapter 6: No-Cost Time Extension Projects	347

## Tables

Table 1: Funding Summary	15
Table 2: Project Funding by Source	16
Table 3: FAST Act Planning Factors	32
Table 4: Long Range Plan Key Principles	33
Table 5: PA Supportive Regional Highway Planning Program	237
Table 6: NJ Supportive Regional Highway Planning Program	259
Table 7: PA Transit Support Program	289
Table 8: NJ Transit Support Program	315
Table 9: NJDOT Initial No Cost Time Extension List	351

## Appendix

Appendix: Acronyms	A-1
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*Photo by Derek Lombardi, DVRPC*

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# CHAPTER I

## Introduction

JANUARY 2019

DELAWARE VALLEY  
 **dvrpc**  
REGIONAL  
PLANNING COMMISSION



# Table of Contents

## Chapter 1: Introduction

Introduction	7
Planning Priorities Facing the Region	7
Unified Planning Work Program Development Process	8
Unified Planning Work Program Organization	8
Planning Emphasis Areas	9
Federal Legislation Requirements	11
Coordination with Member Governments and Other Planning Partners	12
Supportive Regional Highway Planning Program (SRHPP) and Transit Support Program (TSP)	13
FY 2020 Unified Planning Work Program Budget and Funding	14
Agency Roles and Responsibilities	18
DVRPC's Working Committees	22
FY 2020 Program Areas	24

### Tables

Table 1: Funding Summary	15
Table 2: Project Funding by Source	16
Table 3: FAST Act Planning Factors	32
Table 4: Long Range Plan Key Principles	33



# Delaware Valley Regional Planning Commission Fiscal Year 2020 Unified Planning Work Program

## Introduction

The Fiscal Year (FY) 2020 Unified Planning Work Program (UPWP) 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, 2019 through June 30, 2020. A Unified Planning Work Program (UPWP) 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. These federal regulations require an MPO to document the metropolitan transportation planning activities performed with funds provided under title 23 U.S.C. in a unified planning work program (UPWP). Each MPO, in cooperation with the State(s) and public transportation operator(s), shall develop a UPWP that includes a discussion of the planning priorities facing the MPO.

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 FY 2020 Unified Planning Work Program.

## Planning Priorities Facing the Region

The metropolitan planning regulations promulgated through the FAST (Fixing America's Surface Transportation) Act stipulate that each MPO shall develop a UPWP that includes a discussion of the

planning priorities facing the metropolitan area. The planning priorities facing the DVRPC region are easily identified by looking at the annual requests for new planning projects as submitted by the DVRPC Board and other stakeholders during the UPWP development process. Many of the requests for planning studies to be included in the FY 2020 Work Program focused on the following topics: improving access to transit, Transportation Systems Management and Operations, bicycle and pedestrian infrastructure improvements, transportation/land use connections, freight planning, and the collection of transportation data to enable data-driven analyses. These planning priorities track closely with the FAST Act Planning Factors as well as the State DOT's emphasis areas.

### **Unified Planning Work Program Development Process**

DVRPC staff initiates the development process in the August/September time period as initial individual coordination meetings are scheduled with the member governments, state DOT's and transit operators. These coordination meetings are a helpful way for the partners to begin thinking about their potential project ideas and how those ideas relate to current projects or other emerging planning issues. Partners are encouraged to consider ideas of a regional nature in addition to ideas for planning studies that address localized issues. Throughout September and mid-October, staff works with our partners to refine and submit brief write-ups of their project ideas considering emerging local and regional priorities as well as continuation of ongoing priority projects. At a Board Work Program Committee meeting in October, project ideas are presented by the partners and priority projects are short-listed for initial selection. During November, staff works with the partners to refine the scopes of the selected projects as they consider potential sources and amounts of funding. In early December, the Draft UPWP document is presented at the Board Meeting. The Board is requested to approve the release of the document for public comment. The public comment period remains open for 30 days; during which time, DVRPC staff prepares a response to all comments submitted by our partners, advocacy organizations, or the general public. Staff presents the comments, responses and final document to the Board for adoption at the January Board meeting. Following Board adoption, staff incorporates responses to comments, editorial corrections, and final funding tables into a final document that is submitted to our funding agencies in March. Work on the adopted UPWP begins on July first.

### **Unified Planning Work Program Organization**

The FY 2020 Unified 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 2020. 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 our member governments and transit operating agencies to support their participation in the regional planning process. Chapter

Five includes other projects funded through the UPWP to be carried out by member governments. Projects initially funded in prior years that will be carried over into FY 2020 are included in Chapter Six of this document. Appendix A 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 Unified Planning Work Program through an amendment process which would require an approval by the DVRPC Board.

### **Planning Emphasis Areas**

The products produced through this UPWP 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, 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 state DOTs 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.
- Work to incorporate automated/connected/electric/shared use vehicles into the planning process, recognizing the challenges, opportunities, and uncertainty associated with these technologies.

- Implement actions that uphold fairness and improved coordination of services, access, and mobility for low income and minority populations, persons with disabilities, and senior citizens.
- Work with willing county and municipal partners for integration of transportation and land use to promote community livability and maximize the efficiency of the transportation system.

## 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 Transportation Improvement Program (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 our Pennsylvania and New Jersey counties 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 tasks of the Program Areas and Projects detailed in Chapter Two of this Unified 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 Metropolitan Planning Regulations also require that MPO's with a population over 200,000 must undergo a certification review conducted jointly by the Federal Highway Administration and the Federal Transit Administration at least every four years to determine if their metropolitan transportation planning process meets the federal planning requirements. Federal certification of the planning process is a prerequisite to the approval of federal funding for transportation projects in their area. DVRPC underwent the site-visit portion of the review in October 2018 and received the Final Certification Review Report in February 2019. With the preparation and distribution of the Final Report, the FHWA and FTA certified DVRPC's metropolitan transportation planning process including DVRPC's successful actions to address one corrective action.

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 violation of the federal clean air standards or impede the region's progress toward meeting those standards.

### **Coordination with Member Governments and Other Planning Partners**

The priority planning activities listed in DVRPC's annual Unified 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 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 (SRHPP) and Transit Support Program (TSP)**

DVRPC passes federal Metropolitan Planning (PL) funds to member governments and operating agencies to support their participation in the regional highway planning process (via SHRPP) and transit planning process (via TSP). These funds can be used by member governments to develop and maintain their planning priorities, programs and data. 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 recipients.

SHRPP eligible activities include tasks related to regional planning coordination and meetings in programs such as TIP, Long-Range Plan, Congestion Management Process, Transportation Operations Master Plan, and Regional Transportation Safety Action Plan. Detailed scopes of work for each recipient in the SRHPP are found in Chapter Three of this document. Scopes of SHRPP work may vary, but they must adhere to the comprehensive planning, programming, monitoring, and coordination of highway and trail networks within a jurisdiction.

TSP eligible activities include tasks related to promoting transit planning and coordination in programs such as TIP, Long-Range Plan, and Congestion Management Process. The detailed scopes for each organization that receives TSP funds are found in Chapter 4 of this document. Scopes among member governments and operating agencies vary for TSP, but they must adhere to the comprehensive planning, programming, monitoring, and coordination of transit services for TSP within a jurisdiction.

## **FY 2020 Unified Planning Work Program Budget and Funding**

The total budget for the FY 2020 Unified Planning Work Program is **\$28,520,253**, a **decrease of \$676,447** from the FY 2019 Unified Planning Work Program. A significant portion of this decrease is attributed to the absence of \$2,250,000 of Transportation and Community Development Initiative (TCDI) Program funds which are awarded on a two-year cycle that started in FY 2019. This difference is offset by slight increases in core formula funds applied to the budgets of the Program Areas, a \$1 million increase in Pass-through funding for regional trail projects, as well as the addition of a new project, Aerial Imagery, with a budget of \$750,000 (mainly for consultant services). This project provides for an update of our aerial photographs which has traditionally been conducted on a five-year cycle since 1959.

Table 1, *Funding Summary*, shows DVRPC's overall revenue by source to be applied to personnel and operating costs associated with UPWP activities and to the pass-through projects associated with member governments and transit operating agencies.

Table 2, *Project Funding by Source*, shows the budget and funding sources for each individual Program Area and Project.

DVRPC receives funding from many sources to support the planning activities and programs of the commission. The funds that DVRPC receives come from varied sources including federal agencies, state agencies, member governments, foundations and private sector organizations. Below is a sample of federal and non-federal sources:

- Federal Highway Administration (FHWA) Metropolitan Planning Funds
- Federal Transit Administration (FTA) Metropolitan Planning Funds
- Federal Aviation Administration Funding
- PA/NJ Transportation Improvement Program Funds
- Member Government Contributions
- PA Supplemental Funding
- PennDOT Connects (State Planning and Research) Funding
- PA State Funds
- PA Department of Environmental Protection Funding
- RideECO Generated Funds
- William Penn Foundation Grants
- Campbell Soup Foundation Grants

Delaware Valley Regional Planning Commission  
 Fiscal Year 2020 | Planning Work Program

**Table 1: Funding Summary**

FUNDING SOURCE	GENERAL FUND	HIGHWAY PROGRAM	TRANSIT PROGRAM	COMP PLANNING	OTHER PROGRAMS	TOTAL
MISCELLANEOUS	\$0	\$0	\$0	\$0	\$3,344,756	\$3,344,756
FAA	0	0	0	0	90,000	90,000
PA FTA	0	0	1,160,000	0	515,000	1,675,000
PA FHWA	0	3,982,000	0	0	4,068,500	8,050,500
PA STATE	0	670,000	0	0	286,025	956,025
PA OTHER	0	0	0	0	1,276,000	1,276,000
LOCAL	0	0	0	0	-	0
NJ FTA	0	0	483,994	0	-	483,994
NJ FHWA	0	2,482,000	0	0	1,288,975	3,770,975
NJ STATE	0	0	0	0	-	0
LOCAL	0	0	0	0	22,500	22,500
<b>PA LOCALS</b>	<b>\$152,448</b>	<b>\$325,500</b>	<b>\$290,000</b>	<b>\$355,120</b>	<b>\$2,220</b>	<b>\$1,125,288</b>
Bucks County	23,782	32,274	34,504	55,399	444	146,403
Chester County	18,964	61,319	46,006	44,177	444	170,910
Delaware County	19,971	51,638	34,504	46,521	444	153,078
Montgomery County	30,413	48,410	46,006	70,846	444	196,119
City of Philadelphia	58,022	129,092	126,516	135,158	444	449,232
City of Chester	1,296	2,767	2,464	3,019	-	9,546
<b>NJ LOCALS</b>	<b>\$61,484</b>	<b>\$0</b>	<b>\$0</b>	<b>\$177,455</b>	<b>\$1,776</b>	<b>\$240,715</b>
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
<b>SUBTOTAL DVRPC</b>	<b>\$213,932</b>	<b>\$7,459,500</b>	<b>\$1,933,994</b>	<b>\$532,575</b>	<b>\$10,895,752</b>	<b>\$21,035,753</b>
<b>MEMBER GOVERNMENTS AND TRANSIT OPERATING AGENCIES</b>						
PA FTA	\$0	\$0	\$900,000	\$0	\$0	900,000
PA FHWA	0	628,000	0	0	\$150,000	778,000
NJ FTA	0	0	386,600	0	\$0	386,600
NJ FHWA	0	0	0	0	\$1,441,250	1,441,250
PA LOCALS	0	157,000	225,000	0	\$0	382,000
NJ LOCALS	0	0	96,650	0	\$0	96,650
OTHER	0	0	0	0	\$3,500,000	3,500,000
<b>SUBTOTAL</b>	<b>\$0</b>	<b>\$785,000</b>	<b>\$1,608,250</b>	<b>\$0</b>	<b>\$5,091,250</b>	<b>\$7,484,500</b>
<b>GRAND TOTAL</b>	<b>\$213,932</b>	<b>\$8,244,500</b>	<b>\$3,542,244</b>	<b>\$532,575</b>	<b>\$15,987,002</b>	<b>\$28,520,253</b>

**Table 2: Project Funding by Source**

Page	PROJECT NUMBER	PROGRAMS/PROJECTS	FY 2020 BUDGET	HIGHWAY PLANNING	TRANSIT PLANNING	COMPREHENSIVE PLANNING	OTHER
	<b>Chapter Two-Section A</b>						
	<b>DVRPC PROGRAM AREAS</b>						
39	20-23-010	Regional Forum	\$ 262,500	\$ 196,287	\$ 53,713	\$ 2,500	\$ 10,000
41	20-23-020	Work Program and Contracts Administration	347,500	263,025	71,975	2,500	10,000
43	20-23-030	Public Participation, Information and Visualization Techniques	342,500	259,099	70,901	2,500	10,000
47	20-23-040	Title VI and Environmental Justice	222,500	164,881	45,119	2,500	10,000
51	20-31-010	Geographic Information Systems	380,000	298,357	81,643	-	-
55	20-32-020	RideECO Marketing	312,500	-	-	-	312,500
57	20-33-010	Smart Growth	690,000	427,907	117,093	45,000	100,000
61	20-33-020	Community & Economic Development	577,500	251,248	68,752	22,500	235,000
65	20-33-030	Energy and Climate Change Initiatives	370,000	163,571	44,760	61,669	100,000
71	20-33-040	Environmental Planning	330,000	250,000	-	80,000	-
77	20-34-010	Long-Range Planning	690,000	412,204	112,796	65,000	100,000
81	20-34-020	Delaware Valley Freight Planning	451,250	337,614	92,386	16,250	5,000
85	20-34-030	Transportation Safety	426,250	329,763	90,237	1,250	5,000
89	20-34-040	Regional Congestion Management Process	246,250	240,000	-	1,250	5,000
93	20-34-050	Air Quality Planning	286,250	219,842	60,158	1,250	5,000
97	20-41-010	Technical Assistance to Member Governments	311,044	227,852	62,311	10,881	10,000
101	20-41-020	Transportation Improvement Program (TIP)	646,250	502,496	137,504	1,250	5,000
105	20-41-030	Transportation Operations	216,250	164,881	45,119	1,250	5,000
109	20-41-040	Performance Based Planning and Asset Management	350,000	176,659	48,341	25,000	100,000
113	20-41-050	Competitive Program and Project Management	1,030,000	70,000	-	-	960,000
115	20-51-010	Travel and Land Use Modeling	496,250	384,723	105,277	1,250	5,000
119	20-52-010	Regional Transit Planning Program	306,250	-	280,000	21,250	5,000
123	20-52-020	Bicycle and Pedestrian Planning Program	336,250	259,099	70,901	1,250	5,000
127	20-52-030	Corridor Planning Program	746,250	565,308	154,692	21,250	5,000
131	20-52-040	Data Coordination and Analysis	406,250	314,060	85,940	1,250	5,000
135	20-53-010	Travel Monitoring	800,000	655,000	-	-	145,000
		Subtotal	\$ 11,579,794	\$ 7,133,876	\$ 1,899,618	\$ 388,800	\$ 2,157,500
	<b>Chapter Two-Section B</b>						
	<b>DVRPC PROJECTS</b>						
	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**	90,000	-	-	-	90,000
	18-33-140	William Penn - DRWI Data/GIS/Modeling Work Group**	90,000	-	-	13,775	76,225
	18-33-200	William Penn - Completing The Circuit **	100,000	-	-	-	100,000
	18-52-090	Regional Sidewalk Inventory- Phase I**	50,000	-	-	-	50,000
	19-34-080	Regional Aviation System Planning**	85,000	-	-	-	85,000
	19-34-130	Reg. Aviation Plan - 2045**	200,000	-	-	-	200,000
	19-51-060	Freight Model Enhancement**	200,000	-	-	-	200,000
	19-52-040	Local Modeling of Proposed New PA Turnpike Interchange (Phased)**	50,000	-	-	-	50,000
	19-52-120	Regional Sidewalk Inventory- Phase II **	20,000	-	-	-	20,000
	20-10-010	General Fund	213,932	-	-	-	213,932
141	20-10-020	Miscellaneous Data Requests	10,000	-	-	-	10,000
143	20-31-020	Regional Transportation GIS Coordination	400,000	-	-	-	400,000
145	20-31-030	Local Asset Data Collection - Southeastern Pennsylvania	100,000	-	-	-	100,000
147	20-31-040	Aerial Imagery	750,000	-	-	-	750,000
149	20-32-010	Commuter Benefit Program: RideECO	380,000	-	-	-	380,000
153	20-32-030	Commuter Services/Mobility Alternatives Program (Share-a-Ride)	251,000	-	-	-	251,000
157	20-33-050	Local Technical Assistance Program (LTAP)	30,000	-	-	-	30,000
159	20-33-060	Pottstown Area Regional Plan Development	60,000	47,109	12,891	-	-
161	20-33-070	Pennsylvania Coastal Zone Management Implementation Program	50,000	-	-	-	50,000
163	20-33-080	Healthy Communities Planning	100,000	78,515	21,485	-	-
167	20-33-090	PA/NJ Local Planning Initiatives	200,000	-	-	30,000	170,000
169	20-33-100	Devon Station Multi Modal Access	180,000	-	-	-	180,000
171	20-33-120	Campbells Soup - Camden City Food Economy	50,000	-	-	-	50,000
173	20-33-130	Tax-Sharing for Local and Regional Projects or Programs in SE PA	120,000	-	-	24,000	96,000

Table 2 Continued

Page	PROJECT NUMBER	PROGRAMS/PROJECTS	FY 2020 BUDGET	HIGHWAY PLANNING	TRANSIT PLANNING	COMPREHENSIVE PLANNING	OTHER
	Chapter Two-Section B	<b>DVRPC PROJECTS</b>					
177	20-33-140	Residential Parking	130,000			26,000	104,000
179	20-33-150	Climate Adaptation Planning & Community Resiliency	50,000				50,000
181	20-34-080	Regional Aviation System Planning	100,000	-	-	-	100,000
183	20-34-090	Central Jersey Transportation Forum	125,000	-	-	-	125,000
185	20-34-100	PA Ozone Action Supplemental Services	125,000	-	-	-	125,000
187	20-34-110	NJ Ozone Action Supplemental Services	50,000	-	-	-	50,000
189	20-41-060	Transportation System Management and Operations (TSMO)	933,500	-	-	-	933,500
195	20-41-070	I-95 Planning Assistance	100,000				100,000
197	20-51-020	Enhance and Maintain Travel Forecasting Tools	640,000	-	-	-	640,000
201	20-51-030	Fast Turn Around Traffic Analysis	50,000	-	-	-	50,000
203	20-51-040	District 6 Modeling Assistance	460,000	-	-	-	460,000
205	20-52-050	Route 422 Operations and Capacity Study	150,000				150,000
209	20-52-060	PennDOT Connects- Philadelphia Bike Friendly Resurfacing Screening Round II	120,000				120,000
211	20-52-070	Interstate 95/276/295 Interchange Impacts Study	150,000				150,000
215	20-52-080	Downingtown Area Transportation Study	120,000				120,000
219	20-52-090	Bus Transportation Center- Philadelphia Mills	150,000			30,000	120,000
223	20-52-100	Trolley Modernization- Routes 11 and 13	100,000			20,000	80,000
225	20-53-020/025	HPMS and Functional Classification System (PA & NJ)	200,000	200,000	-	-	-
227	20-53-030	PennDOT District 6-0 Traffic Volume Data	300,000	-	-	-	300,000
229	20-59-700	Member Government Special Studies	746,200	-	-	-	746,200
231	20-59-701	Carryover and Other Projects	776,327	-	-	-	776,327
		Subtotal	9,455,959	325,624	34,376	143,775	8,952,184
		<b>SUBTOTAL DVRPC PROGRAM</b>	<b>\$ 21,035,753</b>	<b>\$ 7,459,500</b>	<b>\$ 1,933,994</b>	<b>\$ 532,575</b>	<b>\$ 11,109,684</b>
		** Carryover Projects					
		<b>MEMBER GOVERNMENT / TRANSIT OPERATING AGENCIES / OTHER PASS-THROUGH</b>					
	Chapter Three A & B	<b>Supportive Regional Highway Planning Program</b>					
239-254	A-20-60-010 to 20-60-051	PA Supportive Regional Highway Planning Program					
261-284	B-20-61-010 to 20-61-100	NJ Supportive Regional Highway Planning Program					
		PA/NJ Supportive Regional Highway Planning Program	\$ 1,296,250	\$ 785,000	\$ -	\$ -	\$ 511,250
	Chapter Four A & B	<b>Transit Support Program</b>					
291-310	A-20-63-001 to 20-63-010	PA Transit Support Program					
317-335	B-20-63-020 to 20-63-028	NJ Transit Support Program					
		PA/NJ Transit Support Program	\$ 1,608,250	\$ -	\$ 1,608,250	\$ -	\$ -
	Chapter Five	<b>Other Member Government Projects</b>					
	15-44-320	William Penn -- Planning, Design & Construction of Priority Trails Re-Grant Program**	500,000	-	-	-	500,000
	18-33-200	William Penn - Completing The Circuit **	3,000,000	-	-	-	3,000,000
341	20-53-300	PA/NJ Regional GIS Implementation Coordination	300,000	-	-	-	300,000
343	20-62-000	New Jersey Local Concept Development	430,000	-	-	-	430,000
345	20-64-000	New Jersey Signal Retiming Initiative	350,000				350,000
		<b>SUBTOTAL MEMBER GOVERNMENTS AND OPERATING AGENCIES</b>	<b>\$ 7,484,500</b>	<b>\$ 785,000</b>	<b>\$ 1,608,250</b>	<b>\$ -</b>	<b>\$ 5,091,250</b>
		<b>GRAND TOTAL</b>	<b>\$ 28,520,253</b>	<b>\$ 8,244,500</b>	<b>\$ 3,542,244</b>	<b>\$ 532,575</b>	<b>\$ 16,200,934</b>

## **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 and Regional Technical Committee 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.

***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.

DVRPC's Board voting membership also includes a representative from the PA Governor's Policy and Planning Office and a PA Governor's appointee as well as an NJ Governor's appointee. These voting members provide input into the regional planning process from a guidance and policy development perspective. In addition to the organizations that formally make up the voting members of the DVRPC Board, coordination with several other federal and state partners and operating agencies 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.

***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.

***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 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.

**PhilaPort**, also 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 Unified 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.

**The Futures Group** provides subject matter experts a forum to use exploratory scenario planning to understand how various forces (social, technological, environmental, economic, or political) are shaping the region; and to identify ways to better respond to, or benefit from, those forces.

## **FY 2020 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 Area's concept allows various tasks and initiatives to be emphasized from year to year at the DVRPC Board's direction. Tasks and activities identified within the Program Areas seek to address the planning priorities facing the region. Samples of the key products to be undertaken within the Program Areas, during FY 2020, are highlighted in the Program Area descriptions below. 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.

*Key Products: agendas and minutes of Board and Executive Committee meetings*

### **Work Program Administration**

Preparation of the Unified 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.

*Key Products: FY 2021 Unified Planning Work Program as well as contracts and agreements to support it.*

### **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. DVRPC's current ongoing forum for public involvement is the Public Participation Task Force (PPTF). The mission of the PPTF is to provide ongoing access to the regional planning and decision-making process, to review timely issues, to serve as a conduit for DVRPC information to organizations and communities across the region, and to assist the Commission in implementing public outreach strategies.

*Key Products: DVRPC FY2019 Annual Report and Monthly e-Newsletter*

**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.

*Key Product: Refined and Updated Indicators of Potential Disadvantage Compliance Tool and Title VI/EJ Analysis*

### **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 Coordination and Analysis program.

*Key Products: Updated and new web mapping applications*

### **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.

*Key Product: RideECO program marketing and advertising materials*

## **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.

*Key Product: Shopping Mall Conversion Case Studies and Redevelopment Planning Resources*

## **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.

*Key Products: Technical Memo on Tourism in the Region and US EDA Comprehensive Economic Development Strategy Annual Review and Update*

## **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.

*Key Products: Documents, web pages and on-line tools to support planning for the growth of electric vehicles.*

## **Environmental Planning**

The Environmental Planning Program Area promotes a clean and sustainable environment and implementation of *Connections 2045* by assisting in efforts to preserve the 2045 Greenspace Network and 2045 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. This program will also enable DVRPC staff to work with local communities to identify and develop targeted management practices and policy approaches for increasing resiliency.

*Key Products: final report describing best practices identified in A Resilient Greater Philadelphia – Phase II and an Updated Circuit Trails map and data tables*

## **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. The current Long-Range Plan was adopted in October 2017.

*Key Product: 2050 population and employment forecasts and a Future Forces Technical and Summary Reports*

## **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. This program will allow staff to continue to maintain and update Philly Freight Finder, our freight data portal for the Delaware Valley.

*Key Product: Hunting Park East Freight Access Study*

## **Transportation Safety**

This program supports the goals of DVRPC's Long-Range Plan, Regional Safety Analysis and 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.

*Key Product: safety data and analysis support to PennDOT and NJDOT on their Highway Safety Improvement Programs and support to NJDOT on their Strategic Highway Safety Plan Update*

## **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. Staff initiated the most recent update of the CMP in FY19.

*Key Product: updated CMP Plan and web mapping tool*

## **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.

*Key Product: Transportation Air Quality Conformance Demonstration Report*

### **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.

*Key Products: successful monthly meetings of the Regional Technical Committee and quarterly meetings of the Regional Aviation Committee including the documentation of agendas and minutes*

### **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. DVRPC staff, along with significant input from our stakeholders, developed and our Board adopted a TIP for PA in June of 2018. A similar process will be undertaken for the development of a NJ TIP which is expected to be adopted in Summer 2019.

*Key Products: development of a new TIP for PA and an updated and maintained TIP for NJ*

### **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.

*Key Product: continued facilitation of eight Traffic Incident Management Task Forces*

### **Performance Based Planning and Asset Management**

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. USDOT has implemented new regulations related to Transportation Performance Management (TPM) through the Federal Rulemaking process. This Program Area will allow DVRPC to continue working closely with our state DOT's, and transit operators to address the transportation performance management requirements by coordinating on and setting performance measure targets.

*Key Product: continued coordination with planning partners to address US DOT Transportation Performance Management requirements*

### **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.

*Key Product: successful completion of competitive project selection program and management of selected projects*

### **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.

*Key Product: updated trip-based travel demand model*

### **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.

*Key Product: updated coordinated Human Services Transportation Plan (CHSTP)*

### **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.

*Key Product: use of Bicycle Level of Traffic Stress tool to identify locations of potential bicycle improvements in PennDOT's Resurfacing Program*

### **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.

*Key Product: identification of locations of potential bicycle improvements on roadway corridors in Mercer County's Resurfacing Program*

### **Data Coordination 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).

*Key Products: Regional Data Bulletin, Analytical Data Reports, and Data Snapshots.*

### **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.

*Key Product: collection of approximately 3,000 new vehicle, bicycle, and pedestrian counts and upload those counts into DVRPC's web-based traffic count viewer*

The FY 2020 Unified 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 Unified Planning Work Program and the ten Planning Factors stipulated in the FAST Act, a matrix was developed that shows that linkage (Table 3). 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 UPWP 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 UPWP and the Long-Range Plan, a matrix was developed that shows the linkage between these two core documents (Table 4). Both primary and peripheral associations between the Program Areas and the five key principles of the Long-Range Plan are shown.

**Table 3: 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										
Freight Planning										
Transportation Safety										
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 | ○ N/A

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.

**Table 4: Long Range Plan Key Principles**

DVRPC Program Areas	Develop Livable Communities	Sustain the Environment	Expand the Economy	Advance Equity and Foster Diversity	Create an Intergrated Multimodal Transportation Network
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					
Freight Planning					
Transportation Safety					
Congestion Management Process					
Air Quality Planning					
Data Coordination and Analysis					
Technical Assistance to Member Governments					
Transportation Improvement Program (TIP)					
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 | ○ N/A





*Photo by Amy Verbofsky, DVRPC*

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# CHAPTER 2A

## DVRPC Program Area Descriptions

JANUARY 2019

 **dvrpc**  
REGIONAL  
PLANNING COMMISSION



# Table of Contents

## Chapter 2A: DVRPC Program Area Descriptions

20-23-010	Regional Forum	39
20-23-020	Work Program and Contracts Administration	41
20-23-030	Public Participation, Information and Visualization Techniques	43
20-23-040	Title VI and Environmental Justice	47
20-31-010	Geographic Information Systems	51
20-32-020	RideECO Marketing	55
20-33-010	Smart Growth	57
20-33-020	Community and Economic Development	61
20-33-030	Energy and Climate Change Initiatives	65
20-33-040	Environmental Planning	71
20-34-010	Long-Range Planning	77
20-34-020	Delaware Valley Freight Planning	81
20-34-030	Transportation Safety	85
20-34-040	Regional Congestion Management Process	89
20-34-050	Air Quality Planning	93
20-41-010	Technical Assistance to Member Governments	97
20-41-020	Transportation Improvement Program (TIP)	101
20-41-030	Transportation Operations	105
20-41-040	Performance-Based Planning and Asset Management	109
20-41-050	Competitive Program and Project Management	113
20-51-010	Travel and Land Use Modeling	115
20-52-010	Regional Transit Planning Program	119
20-52-020	Bicycle and Pedestrian Planning Program	123
20-52-030	Corridor Planning Program	127
20-52-040	Data Coordination and Analysis	131
20-53-010	Travel Monitoring	135



**PROJECT: 20-23-010    Regional Forum**

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**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 meetings of the DVRPC Board and Executive Committee and provide agenda, minutes and meeting materials as needed.
9. Schedule 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$240,000	\$188,822	\$51,178		
2020	\$262,500	\$196,287	\$53,713	\$2,500	\$10,000
2021	\$262,500				
2022	\$262,500				

\*PennDOT FTA

**PROJECT: 20-23-020 Work Program and Contracts Administration**

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**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 reports on the ongoing performance and progress of the FY 2020 Work Program. Prepare the draft and final FY 2021 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 2020 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 2020 Work Program.
3. Prepare the draft and final FY 2021 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 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 2020 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 2021 Planning Work Program.

**Beneficiaries:**

Member governments and operating agencies.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$340,000	\$267,498	\$72,502		
2020	\$347,500	\$263,025	\$71,975	\$2,500	\$10,000
2021	\$347,500				
2022	\$347,500				

\*PennDOT FTA

**PROJECT: 20-23-030    Public Participation, Information and Visualization Techniques**

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**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:**

The 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 Commission's Web, Creative and Print 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. To that end, this office is responsible for maintaining several guidance documents, including: the Public Participation Plan, Title VI Compliance Plan, and the Limited-English Proficiency Plan.

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 regularly explores 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 works regularly with Commission leadership to identify training opportunities for staff. This office also administers public comment periods, and

handles public comments, media requests, and 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, Instagram, LinkedIn, YouTube, 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 mission.
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; redesign and enhance Newsroom.
12. Assist Executive Office in managing relationships with stakeholders and coordinating strategic communications.
13. Assist staff with work product creation and distribution, and in particular HTML emails.
14. Respond to Public Comments, general inquiries from the public, and 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 presentation and media requests.
17. Respond to requests for translations, interpretation, and auxiliary services.
18. Hold annual Board Retreat.

### **Products:**

1. Media releases.
2. DVRPC website, including redesigned Newsroom.
3. DVRPC monthly newsletters.
4. Annual Report.
5. Public Participation Task Force: orientation program, presentations, notices,

agendas, and highlights.

6. Public Comment Periods, including Legal Notices.

7. Public Comments on Board Action Items packet.

8. Communications (e-mail blasts, social media, 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.

11. Outreach and communication materials for LRP 2050 outreach.

**Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$320,000	\$251,763	\$68,237		
2020	\$342,500	\$259,099	\$70,901	\$2,500	\$10,000
2021	\$342,500				
2022	\$342,500				

\*PennDOT FTA



**PROJECT: 20-23-040 Title VI and Environmental Justice**

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**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 (OCE) maintains and documents the Commission's Title VI and EJ compliance program. This office routinely evaluates the Commission's: a) Public Participation Plan, b) Limited English-Proficiency Plan, c) Title VI Compliance Plan, d) the Planner's Methodology, and e) Indicators for Potential Disadvantage analysis tool, and regularly explores the potential for other publications, brochures, and outreach tools. This office also supports commission staff in evaluating potential impacts of transportation projects on low-income and minority populations, and evaluating accessibility and mobility for disadvantaged populations. This program area also supports expanded outreach to create opportunities for meaningful engagement for public participation in low-income and minority communities. As such, this program fulfills translation and interpretation requests and proactively translates specific materials as per the Commission's LEP Plan. This program area regularly analyzes how specific demographic groups used in the IPD compliance tool have changed over time.

In collaboration with the Office of Smart Growth, the Office of Transit, Bicycle, and Pedestrian Planning, and the Data Coordination team, OCE will prepare an update to the regional Coordinated Human Services Transportation Plan (CHSTP), also known as Equity Through Access (ETA). Of primary importance will be updating the Equity Through Access Map Toolkit with current data sources and new analyses, and also renewing outreach for the plan update. The policy document - "Gaps and

Bridges" - will be reviewed for any updates to policies and recommendations.

In collaboration with the Office of Long-Range Planning, OCE will research policies, strategies, and actions that further develop the Connections 2045 goal to Advance Equity and Foster Diversity. Such research may result in a new Municipal Implementation Tool Brochure on what municipalities can do to advance equity.

**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 analytical reports, data snapshots, and/or outreach brochures that advance DVRPC's Title VI and EJ program.
3. Work with DVRPC staff to monitor progress toward Title VI, EJ, public participation, and language access goals, and integrate equity throughout the commission's projects.
4. Undertake assessment of the benefits and burdens of programmed and proposed transportation system improvements, working within the LRP and TIP time-frames.
5. Work with other offices to update Equity Through Access (ETA), DVRPC's Coordinated Human Services Transportation Plan. Tasks may include assessing 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, and organizing outreach to affected communities and/or population groups.
6. Research policies, strategies, and actions that further the Connections 2045 goal to Advance Equity. Possibly publish a municipal implementation tool brochure or another type of product.
7. Continue to train staff in Title VI/EJ strategies. Complete responsibilities of the Title VI Compliance Manager, including working with the Administration Division to review DBE goals.
8. Explore opportunities for EJ events for DVRPC stakeholders and the general public.
9. Participate in equal opportunity, nondiscrimination, and DBE training and committees offered by PennDOT, NJDOT, FHWA, FTA, or other planning partners.
10. Participate in any reviews conducted by state transportation agencies or other planning partners.
11. Continue to refine or update the Indicators of Potential Disadvantage (IPD) compliance tool. Explore IPD and other mapping/technology strategies to enhance data gathering, public information, and analysis.
12. Expand DVRPC's language access measures by adding online request forms for translation and interpretation requests, and managing the translation of the Commission's vital documents as identified in the LEP Plan.
13. Continue to support the Commission's healthy communities planning and in particular the Healthy Communities Task Force.
14. Act as a resource for planning partners, counties, subrecipients, etc. in meeting

Title VI, EJ, and public participation mandates.

**Products:**

1. If needed, updated versions of: (a) DVRPC Publication Participation Plan; (b) Limited English Proficiency Plan; (c) Title VI Compliance Plan; and (d) the Planner's Methodology.
2. Contact lists for community organizations and individuals who have expressed interest in Commission's public involvement and outreach activities.
3. Contact lists for community organizations that work with traditionally under-served communities and/or limited English proficiency individuals or groups.
4. Additional analyses and reports as needed.
5. Title VI/EJ Analyses assessing the benefits and burdens of TIP, LRP and other mandated documents.
6. Updated ETA, DVRPC's Coordinated Human Services Transportation Plan.
7. MIT Brochure or another type of product on the Connections 2045 goal of Advancing Equity
8. Refined and updated Indicators of Potential Disadvantage (IPD) compliance tool and expanded equity analysis tools available via online application/webmap.
9. Training materials, presentations, and documentation, if needed, that illustrate the compliance tool and expanded equity analysis tools.
10. Translated documents including the Commission's Public Participation Plan, Title VI Complaint Form, and other vital documents.
11. Supporting materials for any of the other tasks above.

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$210,000	\$165,220	\$44,780		
2020	\$222,500	\$164,881	\$45,119	\$2,500	\$10,000
2021	\$222,500				
2022	\$222,500				

\*PennDOT FTA



**PROJECT: 20-31-010    Geographic Information Systems**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Mark Gatti

**Project Manager:** Christopher Pollard

**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 20-31-030)

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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$380,000	\$298,969	\$81,031		
2020	\$380,000	\$298,357	\$81,643		
2021	\$380,000				
2022	\$380,000				



**PROJECT: 20-32-020 RideECO Marketing**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator:** Stacy Bartels

**Project Manager:** Erin Burke

**Goals:**

The goal of this RideECO project is to help increase usage of the region's transit systems and encourage formation and regular use of vanpools 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 is a partner program to 20-32-010.

This commuter benefit program has been administered by DVRPC since its inception in 1991, rebranded with the name RideECO in 2013. RideECO provides area employers with an easy option to offer employees a transit benefit per federal IRS tax code. Originally instituted under clean air legislation, this program is attractive to employers because it provides a tax break for both client companies and their participating employees. All regional transit providers accept its vouchers and stored value card, as do most third-party vanpool operators. Note that this program also reaches to central Pennsylvania and northern Delaware, and the stored value card can be used nationally. (See 20-32-010 for more program background.)

**Tasks:**

1. Work with contracted design vendor to develop relevant advertising messages and materials for both key target audiences (below, #3).
2. Work with contracted media vendor to find and place advertising in relevant and unique media, with measurement and cost-effectiveness in mind.
3. Promote the program to both main audiences: local employers with worksites accessible by transit, or those where vanpooling is encouraged, and transit-riding commuters.
4. Extend the educational effort, to a degree, to commuters not currently using transit or vanpools but who potentially could.
5. Track analytics from online campaigns and paid social media to help measure impact of schedule.
6. 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 RideECO 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$312,500				\$312,500
2020	\$312,500				\$312,500
2021	\$312,500				\$312,500
2022	\$312,500				\$312,500

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

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

**PROJECT: 20-33-010 Smart Growth**

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**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; encouraging Transportation Demand Management (TDM) strategies, 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 incorporating outreach, education, coordination, advocacy, and overall support for smart growth and livable community principles. This program is designed to support greater understanding of the impacts of various types of development 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 DVRPC's Smart Growth Project Database web mapping application two times per year while continuing to seek new sources of data and partnerships.

Staff will continue to coordinate the Regional Streetlight Procurement Program (RSLPP), begun in FY2016 through which DVRPC worked with 35 municipalities to replace their streetlights with energy-efficient LED lighting. A second round of the RSLPP was launched in FY2019 through which DVRPC is working with an additional 27 municipalities on replacing their streetlights with LED. FY2020 for this work includes management of the round 2 RSLPP through construction and post-construction operation and maintenance services for these 27 municipalities. Additionally, DVRPC will continue to discuss interest and feasibility of a similar RSLPP program catered to municipalities in NJ.

Further, staff will continue to support other DVRPC departments in support of non-energy regional procurement efforts, 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 typically 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 continue to 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 and FY2019, if there is demand and budget.

Staff will research trends related to the redevelopment and/or conversion of shopping malls to other land uses and formats. In the face of increased online competition and evolving shopping preferences, aging mall properties are often candidates for redevelopment that includes multifamily residential. In order to better plan for these potential redevelopments, staff will profile several recent mall conversions and use recently generated demographic multipliers and trip generation rates for multifamily housing to help estimate the potential travel and economic impacts of new residential development.

Staff will assist with the update of the regional Coordinated Human Service Transportation Plan (CHSTP), also known as Equity Through Access (ETA). This work will include renewing outreach and updating the ETA Map Toolkit with new data and analysis.

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's 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, including webinars and MITs.
2. Update the Smart Growth Project Database two times per year and promote through DVRPC newsletters and social media.
3. Manage ongoing RSLPP through construction and post-construction services for Round 1 and 2 communities.
4. Assist municipalities in other non-energy related regional procurement efforts.
5. Expand efforts to manage energy use and support renewable energy development in New Jersey municipalities.
6. Continue to provide technical assistance to municipalities throughout the region on renewable energy ordinances, permitting, and Solarize campaigns, as needed and as budget allows.
7. Develop case studies on shopping mall conversions and analyze potential redevelopment scenarios based on newly created demographic multipliers and statistics.
8. Assist with the update of Equity Through Access, the regional Coordinated Human Service Transportation Plan.
9. Provide technical assistance to numerous partners on livable community efforts.
10. 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 and resources related to regional procurement opportunities and practices.
- 5. Technical assistance on issues related to municipal energy efficiency and renewable energy development.
- 6. Shopping mall conversion case studies and redevelopment planning resources.
- 7. Updated Equity Through Access data, analysis, and resources.
- 8. 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$655,000	\$401,248	\$108,752	\$45,000	\$100,000
2020	\$690,000	\$427,907	\$117,093	\$45,000	\$100,000
2021	\$690,000				
2022	\$690,000				

\*PennDOT FTA

**PROJECT: 20-33-020    Community and Economic Development**

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**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 through 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 multi-modal 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 economic development. Additionally, this program area 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. To reverse these trends, staff will continue community revitalization efforts that strive to implement the goals of Connections 2045.

Community revitalization strategies will be promoted through 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 20 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.

In an effort to understand the evolving retail sector and downtown development, the 2013 online retail tool that highlights 71 different suburban retail districts will be updated. This will be done through data analysis and in-person verification. This data is provided to our municipal partners.

Administration of the 2018 Transportation and Community Development Initiative (TCDI) grant program will continue in FY 2020, including ensuring all 23 projects are completed by June 30, 2020. In addition, solicitation for new projects will be held in the spring of 2020, thus requiring the development of new program guidelines, convening the TCDI committee, updating the TCDI webpage and application system, and working with DVRPC administration to contract with awardees. Individual project managers will be assigned to each funded project to review the final scope of work and final budget, ensure proper procurement procedures, assist with progress reports, and ensure project milestones are met. Overall administration includes maintaining the Smart Growth Grant database and TCDIdirect web portal to oversee communication with grantees. Additional program analysis is provided to the TCDI committee at the start of the new solicitation round.

As tourism is identified as a key planning factor in the FAST Act, staff will continue to identify livability and sustainability strategies to tie the quality and location of transportation facilities to the accessibility of tourist destinations, and employment. Possible tasks for FY 20 include a review of the current TIP and Long-Range Plan to identify accessibility to currently funded projects; using tourist destinations as a factor in TIP project evaluation; working with local communities to make better use of their tourist destinations; and further study on tourism impact districts (TIDs).

As the acting Economic Development District (EDD) for the region, staff will continue to lead, participate, and support local and regional economic development investment strategies in the region, including managing and maintaining the

region's Comprehensive Economic Development Strategy (CEDS), as required by the US EDA. Tasks will include completing and submitting the CEDS annual update to EDA; amending the list of vital projects as appropriate; assisting in grant applications to EDA; and working with regional partners to identify how to best advance the CEDS goals. To promote economic development strategies to our local partners, an MIT will be developed on broadband planning. A new topic will be explored each fiscal year through the MIT series.

As required by EDA, the CEDS must address economic resilience. Staff will explore the development of a new vulnerability index that measures how the region will fare if faced with a major economic downturn caused by natural events, loss of a major employer, or international trends. Staff will continue to engage and build partnerships with US EDA and other economic development practitioners. Additional activities may include convening economic development partners for project development and reaching out to county partners outside of the DVRPC service area.

As part of economic development coordination, staff will hold 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.

### **Tasks:**

1. Identify and engage local stakeholders and community leaders, as well as provide local technical assistance to communities on revitalization strategies.
2. 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.
3. Contract with qualified consultants on Classic Towns for advertising and website administration.
4. Administer the TCDI program.
5. Maintain the Smart Growth Grants database and TCDIdirect.
6. Develop deliverable for tourism tasks including an updated stakeholder list.
7. Work with regional stakeholders and members of the CEDS Review Committee to evaluate and update performance measures that track progress toward achieving the CEDS goals.
8. Update the DVRPC website with yearly census data for the CEDS measures of distress, performance measures, and cluster analysis.
9. Conduct meetings (as necessary) of the CEDS committee (a subcommittee of the RCEDF) to review and rank projects proposed for inclusion on the CEDS list of vital economic development projects, and amend the list as appropriate.
10. Explore the development of an economic resiliency vulnerability index.
11. MIT on broadband planning.
12. 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.

**Products:**

1. Marketing materials and web-based products including writing for social media outlets for the Classic Towns program.
2. Events and contests for the Classic Towns member communities.
3. Updates to the Classic Towns website.
4. Media ads promoting Classic Towns.
5. Deliverable products as required by each TCDI contract.
6. Smart Growth grants database.
7. TCDI direct management portal.
8. New TCDI program guide for 2020 round
9. Technical memo on tourism topic for the region.
10. MIT on broadband planning.
11. Minutes of CEDS committee meetings and amendments to the CEDS list of vital projects.
12. The US EDA CEDS annual review and update (online).
13. Additional memos or products as requested by US EDA (as it pertains to our Economic Development District status).
14. Highlights from Regional Community and Economic Development Forum (RCEDF) meetings.

**Beneficiaries:**

Member governments, nonprofits, developers, the private sector, economic development professionals, planning professionals, and participating Classic Towns.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$535,000	\$247,829	\$67,171	\$20,000	\$200,000
2020	\$577,500	\$251,248	\$68,752	\$22,500	\$235,000
2021	\$577,500				
2022	\$577,500				

\*PA TIP - MPMS #97311 - \$120,000 STU/Toll Credit Match for TCDI Administration  
 PennDOT FTA - \$10,000  
 NJ TIP - DB #D0204 - \$105,000 STBGP-STU for TCDI Administration

**PROJECT: 20-33-030 Energy and Climate Change Initiatives**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator:** Robert Graff

**Project Manager:** Shawn Megill Legendre

**Goals:**

Provide leadership to the region on energy and climate change issues, including

- increasing the resilience of the region to the impacts of extreme weather
- reducing energy use
- shifting energy use to lower-carbon sources, and
- reducing greenhouse gas (GHG) emissions.

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. This includes shaping the transition to an increasingly electrified transportation system.

- 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.

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, and transportation electrification goals of both Pennsylvania and New Jersey.

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 2015 shows that 88 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 26 percent of the region's energy use, and 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, reducing the GHG intensity of electricity. 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.

In addition, recent years have seen tremendous growth—albeit still at a low level—in the use of electricity in transportation. This includes private passenger vehicles, public transit buses, and delivery vehicles. This transition to electrification of the transportation sector presents a wide range of planning challenges.

### **Tasks:**

1. 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.

2. 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.

3. 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.

4. 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 (20-33-010), will be on energy use and emissions associated with public sector vehicles, lighting, and traffic signals.

5. 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. Some aspects of this work will be coordinated with the Office of Smart Growth (20-33-010)

6. 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 (20-33-040), including coordinating on the Resilient Greater Philadelphia Phase 2 effort that may cover reviewing and summarizing 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 (20-31-020).

7. 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, including those related to electric vehicles. 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.

8. Scenarios and Modeling—In coordination with DVRPC’s Office of Long-Range Planning (20-34-010), 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, including those of electric vehicle charging infrastructure..

9. 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.

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

11. 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 (20-33-020).

12. Working with interested business associations and property -owners, DVRPC is able to provide basic training and resources for energy-efficiency improvements 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.

13. 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, electric vehicle charging infrastructure, 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. Documents, website pages and on-line tools to support planning for the growth of electric vehicles, including use of the tools developed by the Plug-in Hybrid & Electric Vehicle Research Center at UC Davis that model the spatial evolution of electric vehicles.
3. Climate Adaptation Forum. This on-going series of DVRPC-hosted, half-day workshops brings together regional professionals currently engaged in preparing for climate change. DVRPC intends to host three such workshops in FY 2020.
4. Support as needed for efforts related to the Resilient Greater Philadelphia Phase 2 project in the Environmental Planning program area.
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, 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$365,000	\$159,973	\$43,358	\$61,669	\$100,000
2020	\$370,000	\$163,571	\$44,760	\$61,669	\$100,000
2021	\$370,000				
2022	\$370,000				

\*PennDOT FTA



## **PROJECT: 20-33-040 Environmental Planning**

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**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.

The program will also 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 infrastructure on environmental resources, and promote improved stormwater management practices in the 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 to assist communities with the preparation of environmental resource inventories, open space plans, municipal public access plans, master plan conservation elements, farmland preservation plans, etc., with the aim of improving 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.
- **Resilient Greater Philadelphia Phase 2**—Work with member governments, federal and state agencies, non-profit partners and academic institutions to identify and develop targeted management practices and policy approaches for increasing resiliency. Communities are aware of the threats posed by extreme heat, severe storms, and flooding, but the historical patterns upon which they base their planning are expected to change. This effort will build upon Phase 1 of this project which helped local governments understand how climate hazards are predicted to change, along with the relative risks they face. Phase 2 will highlight opportunities and barriers to implementing the general strategies and policies identified in Phase 1 to increase resiliency. Strategies that support existing planning goals around sustainability and environmental quality will be prioritized. Potential strategies and policies 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 policies to increase risk transparency, decrease risk subsidization, and increase incentives for minimizing and eliminating risks posed by floodplain development.

- **General Climate Change Adaptation Initiatives**—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 DVRPC’s Climate Adaptation Forums, participate on the leadership committee of the NJ Coastal Resilience Collaborative (NJCRC) and work with PA DEP to continue to develop Pennsylvania’s coastal resilience planning program. During FY2020, OEP will also continue its support of PennDOT’s FHWA Resiliency Pilot Study.

- Provide guidance, support and technical assistance to help partners meet their water quality goals and support the work of Delaware River Watershed Initiative Partners.

- **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 coordinating 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. Provide technical assistance to DRWI partners on water quality-related projects and initiatives.
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. Organize and host quarterly meetings of the PA East Coast Greenway Committee.
12. Cultivate projects and initiatives that promote active transportation and provide technical assistance as needed to local governments and non-profit partners.
13. 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.
14. Establish a steering committee to guide A Resilient Greater Philadelphia Phase 2
15. Develop a report or on-line resource to document best practices and guidance for implementing strategies to increase community resilience.

### **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.
10. Print or on-line report documenting the findings and describing the best practices identified in A Resilient Greater Philadelphia Phase 2.

**Beneficiaries:**

PA Department of Environmental Protection, PA Department of Conservation and Natural Resources, PA Department of Transportation, NJ Department of Environmental Protection, NJ Department of Transportation, Federal Emergency Management Agency, Pennsylvania Emergency Management Agency, PA Department of Community and Economic Development, counties, municipalities, conservation organizations, land trusts, watershed organizations, sustainability coordinators, trail advocacy groups, the Circuit Coalition, the private sector, and the general public.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$304,000	\$224,000		\$80,000	
2020	\$330,000	\$250,000		\$80,000	
2021	\$330,000				
2022	\$330,000				



## **PROJECT: 20-34-010 Long-Range Planning**

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**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 area. 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 current Plan, Connections 2045, was adopted by the DVRPC Board on October 26, 2017. The LRP unit will continue to implement Connections 2045 by working with planning partners, stakeholders, and the public on taking actions and identifying municipal strategies to bring about the vision.

Work is beginning on the next update to the Plan, which will take it out to the year 2050. Staff will commence this update by working with the Greater Philadelphia Futures Group to create a new set of exploratory scenarios that focus on key issues facing the region. The impact of automated, connected, electric, shared-use, and on-demand vehicles--ranging from scooters to semis--will continue to be a focus of this effort. Further LRP development will include visioning and strategy workshops, an update to the transportation infrastructure investment vision financial plan, including a needs assessment to achieve and maintain a state-of-good repair for all existing transportation infrastructure. The Plan will continue to be developed and implemented through outreach to member governments, stakeholders, and the public.

As part of its long-range planning effort, 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; and producing 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. Complete and publish the Future Forces 2050 report and summary document as an advisory document to the 2050 Long-Range Plan. Work to incorporate scenarios into an updated Choices & Voices platform.
2. Continue a comprehensive public and stakeholder outreach program to identify, prioritize, and implement the vision, policies, strategies, and projects included in the Long-Range Plan.
  - a. Hold a series of visioning workshops throughout the region to inform the Vision of the 2050 Long-Range Plan and its branding title.
  - b. Create a Visioning web survey. i.e. Choices & Voices, to supplement the in-person Visioning meetings and workshops.
  - c. Draft a Vision statement for the 2050 Long-Range Plan as a result of feedback gathered through meetings and workshops, the online web survey, and other stakeholder and public outreach.
3. Work with stakeholder agencies, such as the Pennsylvania State Planning Board, New Jersey Business Action Center, 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.
4. Further develop tools for scenario planning and forecasting, including strategic planning models and land use models.
5. Develop population and employment forecasts, focusing on the years 2015-2050, with the support of tools such as HIS Markit economic forecast, Impacts 2050, RSPM, and/or a land use model; and related efforts, such as Future Forces 2050.
6. Maintain the 'Tracking Progress' indicator data, to gauge the extent to which Long-Range Plan goals are being met and align with state DOT and MPO performance measure targets. Collect and analyze demographic, land use, travel, and other data to determine their impact on the future growth and development of the region.
7. Incorporate US DOT Transportation Performance Management 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.

- 8. Develop any necessary data bulletins, analytical data reports, or data snapshots.
- 9. 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.
- 10. Continue analyzing alternative funding options for transportation investments.

**Products:**

- 1. Future Forces 2050 Technical and Summary Reports
- 2. 2050 Population Forecasts (Analytical Data Report)
- 3. 2050 Employment Forecasts (Analytical Data Report)
- 4. Residential Building Permits, 2010-2019
- 5. Population Estimates, 2010-2019

**Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$675,000	\$416,983	\$113,017	\$45,000	\$100,000
2020	\$690,000	\$412,204	\$112,796	\$65,000	\$100,000
2021	\$690,000				
2022	\$690,000				

\*PennDOT FTA



**PROJECT: 20-34-020 Delaware Valley Freight Planning**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator: Michael Ruane**

**Goals:**

Maximize the DVRPC region'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 Greater Philadelphia region. The region's economic competitiveness is closely tied to the freight network and, from a transportation perspective, freight shipments and supply chains are highly dynamic across all modes. Planning for freight capitalizes on trends and opportunities and also helps promote quality of life, economic, 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, at the same time, 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, air quality planning, 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, on National Highway System connectors serving marine terminals and airports, and on the regional rail freight network.

In FY 2020, 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 Hunting Park East Freight Access Study, support of the Interstate 95/276/295 Interchange Impact Study, and the Railroad GIS Improvement Project.

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 interest 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, 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, Congestion Management Process, Comprehensive Economic Development Strategy, 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 freight associations, special events, and conferences that promote interest and awareness regarding DVRPC (e.g., PA and NJ Motor Truck Associations, and the Traffic Club of Philadelphia).
5. Maintain and update a user-friendly freight page on the DVRPC website with accurate and current information about freight centers and other regional freight network assets and operations.
6. Maintain an ongoing freight data, visualization, and mapping program highlighting facility capacity, freight infrastructure, and activity measures (e.g., vehicle counts by class) through the PhillyFreightFinder tool, leading to assessments of deficiencies and improvement opportunities.
7. Support public sector freight initiatives, freight advisory committees, freight plans, funding programs, multi-state efforts, and staffs from DVRPC member governments, 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 (e.g., truck parking, delivery strategies, truck routes).
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. This technical work includes:
  - a. Hunting Park East Freight Access Study - This study will look into the local transportation implications, economic impacts, and potential conflicts related to freight and industrial development in the Hunting Park East area of the City of Philadelphia. The study will provide recommendations to mitigate conflicts and provide safe, efficient access for all modes.
  - B. Interstate 95/276/295 Interchange Impacts Study - Provide support to this freight related study in Bucks County found under Work Program Project #20-52-070.
  - c. Railroad GIS database - Coordinate inclusion of new State DOT rail data into regional system, update facility attributes, and continue to developed more granular data for regional analysis.

**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. Updated freight page on the DVRPC website.
3. Updated information via the PhillyFreightFinder web mapping application and data platform.
4. Targeted research:
  - a. Hunting Park East Freight Access Study
  - b. Railroad GIS database

**Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$445,000	\$338,307	\$91,693	\$15,000	
2020	\$451,250	\$337,614	\$92,386	\$16,250	\$5,000
2021	\$451,250				
2022	\$451,250				

\*PennDOT FTA



**PROJECT: 20-34-030    Transportation Safety**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator:** Kevin Murphy

**Project Manager:** Marco Gorini

**Goals:**

Improve safety for the region's traveling public through the identification of crash trends and problem locations, and by promoting data-driven solutions and safety best practices that advance DVRPC's long range plan goal of eliminating crash fatalities and serious injuries in the region. This multi-faceted program is a collaborative effort with a wide range of partners seeking to improve safety through advancement of project-level safety countermeasures and policy initiatives. Program elements include crash database management, problem analysis, performance measure tracking, 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. The RSTF's quarterly meeting structure promotes progress toward regional safety goals through facilitated action item development which is continually updated and tracked. Each meeting is focused on a crash safety emphasis area identified in the Transportation Safety and Analysis Plan—the region's guiding document for safety. Staff evaluates progress toward goals and objectives and serves as facilitator to the task force.

**2. Crash Data Management**

Coordinate the acquisition of state crash databases and GIS layers, and ensure quality control. Support analytical best practices, promote data-driven crash safety prioritization of work program tasks, and fulfill data and analysis requests within DVRPC and from partners. Continue to evolve safety data products like the crash data web tool and the safety tools in the DVRPC Data Navigator.

**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 with HSIP and other funds, and tracking progress toward safety objectives. Efforts will continue to better serve municipal partners interested in safety projects. Specific activities include program management, crash analyses to support funding applications, and problem identification via road safety audits and other tools, as needed. This work advances the goals of the Transportation Safety and Analysis Plan, DVRPC's Long-Range Plan, and each DOT's Strategic Highway Safety Plan, and tracks progress of federal safety Transportation Performance Management performance measures. This work is done in collaboration with DVRPC's Office of Capital Programming and the Office of Project Implementation.

#### 4. Special Studies & Coordination Efforts

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 and Analysis Plan and DVRPC's Long-Range Plan, and work on tasks resulting from completed projects from the preceding fiscal year.

#### **Tasks:**

Tasks:

##### 1. Regional Safety Task Force (RSTF)

- a. Prepare for and hold quarterly meetings focused on AASHTO emphasis areas identified in the Transportation Safety and Analysis Plan, and one or more special meetings per cycle, e.g.: via collaboration with another DVRPC task force or committee.
- b. Complete full meeting summaries and DVRPC Board highlights, and maintain an archives of all RSTF work and meetings.
- c. Track progress toward safety objectives and take action to advance a culture of safety, and the goal of zero fatalities and serious injuries in the region.
- d. Manage volunteer action items and other tasks that emerge from RSTF meetings.
- e. Promote safety best practices and partner initiatives via social media.

##### 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; participate in statewide crash records coordinating committees.
- 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.
- d. Continue to develop and maintain the Crash Data and Analysis Web Tool developed in FY '19.

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

- a. Facilitate the New Jersey HSIP Local Safety Program to help county and municipal partners fund data-driven safety projects. This is a cooperative effort with the DVRPC Offices of Project Implementation and Capital Programs. Subtasks include distribution of network screenings and assisting partners in identifying data-driven safety projects, providing support such as crash analysis, countermeasure development assistance, HSM analysis, or sketch planning.
- b. 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, and coordination with county partners to plan for future rounds of statewide HSIP funds and project identification.

- c. Coordinate with state and federal partners on FAST Act Transportation Performance Management safety performance measurement tracking, and support state SHSP updates and advancement of plan priorities.
- d. Collaborate with state, county, and municipal partners to identify data-driven HSIP-eligible systemic safety projects.
- e. Assist with RFP development, proposal review, and project tracking for HSIP-funded consultant led safety improvement projects.

#### 4. Special Studies & Coordination Efforts

- a. Coordinate with PennDOT District 6-0 on next steps resulting from the FY 2019 Street Typology project.
- b. Participate in other studies and efforts, as requested, including the Frankford Avenue intersection study managed by Office of Corridor Planning.
- c. Coordinate with OTBP on small tasks arising from the Trenton Complete Streets project.
- d. Coordinate with other DVRPC offices on possible tasks related to work program partner discussions, e.g.:
  - Delaware Co: traffic calming/speed management project, and immediately named several potential corridors of interest: PA 291, McDade Boulevard, Baltimore Pike, Lancaster Ave, West Chester Pike;
  - Chester Co: PA 896, safety improvements (fatal crash).
- e. If time permits, consider 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.

#### **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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$420,000	\$330,439	\$89,561		
2020	\$426,250	\$329,763	\$90,237	\$1,250	\$5,000
2021	\$426,250				
2022	\$426,250				

\*PennDOT FTA

**PROJECT: 20-34-040    Regional Congestion Management Process**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator:** Thomas Edinger

**Goals:**

Minimize congestion in the DVRPC region 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 data and performance measures to identify and prioritize congested corridors on the regional transportation network. It helps determine the causes of traffic congestion and develops multimodal 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 archived operations data for planning, 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 Environmental Justice. The CMP includes work with the new federal Transportation Performance Management (TPM) requirements, specifically PM3 travel time and freight reliability measures, and continues to evolve as more data and software tools are available to identify and analyze congestion. Following are the focus areas for FY 2020.

Update the PM3 Transportation Performance Measures (TPM) Performance Measures – Coordinate with planning partners in preparing data to calculate performance measures and identifying targets, and monitor progress toward attaining targets.

Update the CMP - Work with the broad CMP Advisory Committee to complete the update of the CMP in Fall Winter 2019. The CMP incorporates improved data sources, TPM, and will assist in analyzing and prioritizing congestion at the facility level.

Use the CMP for Project Development - The CMP helps to link projects to Long-Range Plan goals. It does this through the development of 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 within our resources. 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 TPM requirements. This has been facilitated in part through participation in the I-95 Corridor Coalition.

### **Tasks:**

Implement the Transportation Performance Management (TPM) requirements

1. Review FAST Act regulations and guidance with other DVRPC staff, and with partners within and outside the region, such as DOTs and adjoining 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 any remaining analysis of the performance of the regional transportation roadway network using INRIX, federal PM3, and other performance measures to identify and prioritize congested corridors with the CMP Advisory Committee.
2. Update any remaining CMP subcorridor and facility criteria scoring using new data sources such as TPM, 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. Complete CMP plan, web mapping, and other contents to be published in mid-FY 2020. Hold meetings with the individual partners and the Committee, brief the RTC and others as needed or requested.

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 to NJDOT staff as requested and track results.
  - c. Participate in PennDOT problem statement development process as applicable, which is now partially facilitated through the PennDOT Connects process, and 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 and evaluation criteria 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. Important areas include: calculating travel times and traffic delay from INRIX and other sources; facilitating how estimated traffic counts can be derived; and integrating origin/destination trips data into the CMP to understand where shorter and longer trip patterns are occurring to help in identifying mitigation strategies for difference corridor areas. This can be done in part 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 plan and web mapping for identifying and prioritizing congested corridors using multimodal performance measures, and identifying strategies to mitigate congestion where needed.
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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$230,000	\$230,000			
2020	\$246,250	\$240,000		\$1,250	\$5,000
2021	\$246,250				
2022	\$246,250				

\*PennDOT FTA

**PROJECT: 20-34-050    Air Quality Planning**

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**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:**

DVPRC'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 Programs (TIPs) with air quality goals. The Plan and TIPs 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 on such days — 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. Where practical, DVRPC will serve as the applicant for clean air grants from state and federal sources to facilitate projects in the region to reduce mobile source emissions.

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

### **Tasks:**

#### Transportation Conformity

1. Determine the projects in the Plan and/or TIPs, 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 the MOVES model approved by US EPA, particularly 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 the Conformity Determination meets requirements and deadlines for emerging regulations and updated standards.
7. Coordinate all activities with the Transportation Conformity Interagency Consultation Group (ICG) 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 emissions reduction.
4. Work with other agencies to improve forecasting capabilities and means of delivering forecasts for ozone and fine particulate matter exceedances.
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 TIPs.
5. Demonstrate the air quality benefits of CMAQ-funded projects through air quality analysis using the FHWA CMAQ Analysis Tool and Air Quality Off-Network Estimator for state DOTs.
6. Provide data and information to planning partners and health professionals regarding regional air quality statistics and analysis.
7. Serve on state ICG for project-level conformity hot-spot analysis.
8. Work with DOTs to develop emissions-related CMAQ performance measures and reports.
9. 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.
10. 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 TIPs 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

1. Action items for the RTC and other committees.
2. Papers and presentations on transportation and air quality planning.
3. 10 issues of Alert newsletter on transportation and air quality items of interest.
4. Funding applications for projects to reduce diesel emissions.

#### **Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$280,000	\$220,293	\$59,707		
2020	\$286,250	\$219,842	\$60,158	\$1,250	\$5,000
2021	\$286,250				
2022	\$286,250				

\*PennDOT FTA

**PROJECT: 20-41-010    Technical Assistance to Member Governments**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator:** John Ward

**Project Manager:** Michael Ruane, 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 smaller scale 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 has required DVRPC to contribute to a statewide effort to develop an inventory of locally owned transportation assets, such as roads and bridges. This specific effort was completed in FY19, however DVRPC is poised to work with PennDOT and the State's Planning Partners to coordinate on the development of other transportation asset data collection efforts as deemed appropriate.

This project will also allow DVRPC staff to participate in PennDOT planning and programming efforts such as the Planning Partners meetings, Planning Catalyst Team, 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 meetings, NJDOT Complete Team meetings, NJ Statewide Traffic Incident Management Steering Committee.

### **Tasks:**

1. Staff the Regional Technical Committee meetings, including preparing 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. Staff the Regional Aviation Committee meetings, including preparing agendas, minutes, and similar materials
3. Participate on transportation committees at the regional, state, or national levels.
4. At least semiannually, consult with city/county planning directors regarding ongoing projects and short-term needs.
5. Participate on regional or statewide working groups and task forces, as appropriate, to represent DVRPC's interests.
6. 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..
7. If required, respond to legal inquiries on previously completed studies.
8. 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.
9. DVRPC will also coordinate with PennDOT, and the PA Planning Partners on the potential development of new data collection efforts for transportation assets.
10. Coordinate with the Federal Transit Administration with regard to New Start and Small Start applications proposed by member governments and transit operators.
11. 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. Program development for potential PennDOT's asset inventory (if requested)

### **Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$294,244	\$231,534	\$62,710		
2020	\$311,044	\$227,852	\$62,311	\$10,881	\$10,000
2021	\$311,044				
2022	\$311,044				

\*PennDOT FTA



**PROJECT: 20-41-020    Transportation Improvement Program (TIP)**

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**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 currently 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. These criteria are being re-visited and re-evaluated to more closely align with long-range plan criteria and performance measures. 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 new 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.
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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$640,000	\$503,526	\$136,474		
2020	\$646,250	\$502,496	\$137,504	\$1,250	\$5,000
2021	\$646,250				
2022	\$646,250				

\*PennDOT FTA



**PROJECT: 20-41-030    Transportation Operations**

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**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 2020, 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, 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$200,000	\$157,352	\$42,648		
2020	\$216,250	\$164,881	\$45,119	\$1,250	\$5,000
2021	\$216,250				
2022	\$216,250				

\*PennDOT FTA

**PROJECT: 20-41-040 Performance-Based Planning and Asset Management**

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**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:**

Increasing 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. USDOT is now implementing new regulations related to Transportation Performance Management (TPM) through the Federal Rulemaking process. Through these regulations, state DOT's, MPO's, and transit operators will all be held to a higher-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 (Plan) and the Transportation Improvement Programs (TIPs). 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 TPM 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 Plan and TIPs. 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 (TIPs) or long-term (Plan). 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. The Pennsylvania Local Asset Data Collection initiative, whereby MPOs assisted PennDOT in establishing an inventory of locally-owned (initially bridges and roadways) assets, also links planning goals and investments. This project contains funds to assist in the development of local transportation asset inventories, if requested.

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 and develop and implement TPM requirements. 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 turnpike authorities):

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 Transportation Performance Management requirements 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 local transportation asset, if requested.
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 USDOT TPM performance measure targets, analyzing current conditions and project likely future conditions, monitor and report on performance over time, and make investments to achieve the targets.

### **Products:**

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

**Beneficiaries:**

Member counties, state DOTs, and transit operators.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$325,000	\$157,352	\$42,648	\$25,000	\$100,000
2020	\$350,000	\$176,659	\$48,341	\$25,000	\$100,000
2021	\$350,000				
2022	\$350,000				

\*PennDOT FTA

**PROJECT: 20-41-050 Competitive Program and Project Management**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** John Coscia

**Project Manager:** Daniel Snyder, Joseph Banks, 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 Set Aside, 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$990,000	\$50,000			\$940,000
2020	\$1,030,000	\$70,000			\$960,000
2021	\$1,030,000				
2022	\$1,030,000				

\*PA TIP - MPMS #66460 - \$568,000 STU/\$142,000 State 581; MPMS #66461 - \$120,000 CMAQ/\$30,000 State 581  
 NJ TIP - DB #X30A - \$100,000 STBGP-STU

## **PROJECT: 20-51-010    Travel and Land Use Modeling**

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**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 VISUM & VISSIM, and DaySim 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$490,000	\$385,512	\$104,488		
2020	\$496,250	\$384,723	\$105,277	\$1,250	\$5,000
2021	\$496,250				
2022	\$496,250				

\*PennDOT FTA



**PROJECT: 20-52-010    Regional Transit Planning Program**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Betsy Mastaglio

**Project Manager:** Amy Bernknopf, Gregory Krykewycz, Thomas Stead

**Goals:**

Perform transit planning work on behalf of DVRPC's member governments that reflects and advances 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 Network Gap Analysis and other tools created through the Regional Transit Priority Setting project, the Transit Signal Priority (TSP) Favorability 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 FTA Section 5307 Urbanized Area Formula Program or state level New Jersey JARC program, and the FTA 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 Equity Through Access (ETA) program.

**Tasks:**

1. In collaboration with the Office of Smart Growth and Office of Communication and Engagement, prepare an update to the regional Coordinated Human Services Transportation Plan (CHSTP), also known as Equity Through Access (ETA). Of primary importance will be updating the Equity Through Access Map Toolkit with current data sources and new analyses. The Board-accepted coordinated plan policy document ("Gaps and Bridges") will be reviewed for any updates to policies and recommendations, informed by additional outreach.
2. Provide collaboration and engagement support to member governments on an as-needed basis for the improvement of public transit options between Camden and Trenton.
3. Provide technical and in-person staff support for ongoing NJ Transit Survey work.
4. 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.
5. Provide ongoing DVRPC participation in and project support for City of Philadelphia-SEPTA "Connect" Transit First efforts, including participation in collaborative committees.
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.
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.
9. Ensure that appropriate technical resources (such as new software) are available for staff use as new best practices develop.
10. Work with state and regional planning partners (PennDOT, SEPTA, PATCO, and NJ TRANSIT) to participate in regional CHSTP project development, prioritization, and selection rounds as appropriate.

**Products:**

- 1. Updated coordinated plan (CHSTP) on website and/or technical report or memorandums related to the plan.
- 2. Member government and planning partner outreach and coordination in identifying, scoping, and conducting new studies in support of partner goals.
- 3. Coordination with planning partners to provide specific expertise in support of planning efforts, including Alternatives Analyses, and other evaluation or project support.
- 4. Planning/policy documents, technical reports, white papers, and/or memorandums with findings and recommendations.
- 5. Data from survey and other data collection efforts in support of agency projects.
- 6. As-needed meetings and communications with the RTAC to develop work tasks and update timetables and statuses.
- 7. 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$300,000		\$280,000	\$20,000	
2020	\$306,250		\$280,000	\$21,250	\$5,000
2021	\$306,250				
2022	\$306,250				

\*PennDOT FTA



## **PROJECT: 20-52-020 Bicycle and Pedestrian Planning Program**

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**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. In collaboration with the Healthy Communities program (20-33-080), provide planning support for the active transportation elements of the Healthy Communities Plan in Brown Mills (Pemberton), NJ.
2. Provide ongoing support and collaboration with regional partners in PA and NJ to advance regional bike share program coordination.
3. Support partner agencies in using the Bicycle LTS and Connectivity Analysis webtool, to interface with related projects and programs, including coordination with PennDOT District 6 in overseeing the bike-friendly resurfacing program for suburban counties.

4. Together with the Office of Travel Monitoring, conduct counts at roughly 1/3 of the locations for the Cyclical Pedestrian Counting program (which includes approximately 90 total locations in the PA counties).
5. Together with the Office of Travel Monitoring, conduct counts at roughly 1/3 of the locations for the regional cyclical bicycle count program (which includes approximately 150 locations across the region) including any technical deliverables.
6. Together with the Office of Travel Monitoring and Office of GIS, reconfigure the platform for the DVRPC bicycle and pedestrian count viewers online with the aim of consolidating tools to make counts more accessible and understandable to the broadest range of planning partners, including NJDOT, PennDOT, counties, municipalities, and the general public working to improve bicycle and pedestrian infrastructure.
7. Work with DVRPC data coordination staff to analyze data and encourage use of the Regional Sidewalk Inventory's Pedestrian Facilities and Planning Portal.
8. Provide capacity and staff support as necessary to complete the Safe Routes to Transit: Bordentown project (20-63-028).
9. 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.
10. 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.
11. Work with the Office of Travel Monitoring to continue to gather bicycle and pedestrian counts throughout the region, as needed.
12. 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.
13. Review bicycle and pedestrian project funding applications as appropriate for programs such as TAP, SRTS, and Pennsylvania's Multimodal Fund.
14. Provide Subject Matter Expert (SME) comment on potential pedestrian and bicycle facilities for PennDOT projects through the PennDOT Connects program.
15. 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$330,000	\$259,631	\$70,369		
2020	\$336,250	\$259,099	\$70,901	\$1,250	\$5,000
2021	\$336,250				
2022	\$336,250				

\*PennDOT FTA



## **PROJECT: 20-52-030 Corridor Planning Program**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** David Anderson

**Project Manager:** Al Beatty, Karen Whitaker

### **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 2020, 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. These are:

1. A continuation of the Local Modeling of proposed New PA Turnpike Interchanges project in Montgomery County (19-52-040), with detailed analysis of improvement scenarios. Specifically, a traffic analysis will be done of the area in the vicinity of the Virginia Drive interchange and its environs in Upper Dublin Township, to quantify the effects on this area if the Virginia Drive interchange is completed and as well as if a new interchange is built at Welsh Road. Specifically, this effort will identify traffic deficiencies, and model transportation solutions to ameliorate conditions or accommodate the vehicular demands in each scenario. Intersections to be analyzed include: Twining Road and Route 63, Dreshertown Road and Route 63, Dreshertown Road and Limekiln Pike, Dreshertown Road and Susquehanna Road, Twining Road and Susquehanna Road, Limekiln Pike and Susquehanna Road; and the ramps to and from the Turnpike interchange at Virginia Drive. For the proposed Henderson Road interchange, planned improvements to the nearby Valley Forge Interchange will be factored into the analysis to determine future year traffic patterns. Additionally, analysis will be done to determine whether traffic volume will increase or decrease from I-76 to Henderson Road as a result of the proposed Henderson Road Interchange. This project will evaluate peak hour traffic conditions in the vicinity of the 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 funding agencies. The project is being undertaken as a one year effort (FY'20). Travel demand modeling (VISUM) will be performed for Current, 2045 No-Build, and 2045 Build conditions, as well as microsimulation modeling (VISSIM) of each scenario to assess AM and PM peak hour traffic conditions and needs.

2. Additional Build scenario analysis for the US 202 Section 200 Operations Study. This will be an extension of the FY 2018 and FY 2019 Work Program efforts. As a continuation of ongoing operations analyses on this corridor, this study will model the impacts of extending the auxiliary merge lane on Route 202 North that begins at the West Chester Pike on-ramp to the PA 100 exit. Creating a longer merge area will reduce conflict between accelerating and decelerating vehicles. The merge lane

carries traffic from West Chester Pike onto Route 202 North, and it currently ends at the Paoli Pike off-ramp. The merge lane is approximately four hundred feet long; therefore, drivers must merge quickly into the two through lanes at high speeds between the on- and off-ramps. This analysis will look at the traffic impacts of making this lane a straight/right exit lane at the Paoli Pike exit and continuing the lane expansion to PA 100 within the existing cartway, if possible. The modeled network would reflect a consistent, three-lane configuration between West Chester Pike and PA 100 on US 202 North.

3. This program area will also supplement a third Pennsylvania project, the Downingtown Area Transportation study (20-52-080) in Chester County. This project will evaluate peak hour traffic conditions in the study area to inform the public and municipal decision makers of the likely impacts of area growth and provide analysis for county and municipal officials to support further study and funding.

In New Jersey, a pilot project on selected Mercer County roadways will identify roads scheduled to be re-paved, and determine their feasibility to be re-stripped with bike lanes as recommended in the new Mercer County Bicycle Plan. DVRPC staff will work with the county in identifying specific locations and will conduct technical work to develop planning-level design concepts. Concept refinement may require capacity analysis to assess the impacts of lane configuration changes on traffic movements.

### **Tasks:**

Typical study tasks include:

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 a public outreach and involvement program.
4. Prepare a complete description of corridor deficiencies within the study area(s). 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. Prepare an implementation strategy for the final recommendations and an action plan to advance them.
8. Document results of the study in a technical report, including existing conditions

and proposed improvements.  
 9. 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 Project Implementation Forms (PIFs) to further develop recommendations from corridor studies. 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$740,000	\$566,467	\$153,533	\$20,000	
2020	\$746,250	\$565,308	\$154,692	\$21,250	\$5,000
2021	\$746,250				
2022	\$746,250				

\*PennDOT FTA

**PROJECT: 20-52-040    Data Coordination and Analysis**

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**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 Resources 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 Round Table and Data Innovation Teams.
18. Develop the DVRPC Data Center, a centralized online platform for data dissemination.
19. Support the FY2020 update of DVRPC's coordinated human service transportation plan (CHSTP), Equity Through Access, with analysis and data development.

### **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 Data Round Table and Data 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$400,000	\$305,140	\$82,704	\$12,156	
2020	\$406,250	\$314,060	\$85,940	\$1,250	\$5,000
2021	\$406,250				
2022	\$406,250				

\*PennDOT FTA



## **PROJECT: 20-53-010 Travel Monitoring**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Joshua Rocks

**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 20-53-020/025). 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 as requested.
10. DVRPC will also coordinate with PennDOT, the counties, and cities on the collection and validation of data on the local transportation asset inventory (as

requested).

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$765,000	\$645,000			\$120,000
2020	\$800,000	\$655,000			\$145,000
2021	\$800,000				
2022	\$800,000				

\*PA TIP - MPMS #104639 - \$145,000 STU/Toll Credit Match



*Photo by Christina Arlt, DVRPC*

# CHAPTER 2B

## DVRPC Project Descriptions

JANUARY 2019

DELAWARE VALLEY  
 **dvrpc**  
REGIONAL  
PLANNING COMMISSION



# Table of Contents

## Chapter 2B: DVRPC Project Descriptions

20-10-020	Miscellaneous Data Requests	141
20-31-020	Regional Transportation GIS Coordination	143
20-31-030	Local Asset Data Collection - Southeastern Pennsylvania	145
20-31-040	Aerial Imagery (2-year)	147
20-32-010	Commuter Benefit Program: RideECO	149
20-32-030	Commuter Services/Mobility Alternatives Program (Share-a-Ride)	153
20-33-050	Local Technical Assistance Program (LTAP)	157
20-33-060	Pottstown Area Regional Plan Development	159
20-33-070	Pennsylvania Coastal Zone Management Implementation Program	161
20-33-080	Healthy Communities Planning	163
20-33-090	PA/NJ Local Planning Initiatives	167
20-33-100	Devon Station Multi-Modal Access	169
20-33-120	Campbells Soup - Camden City Food Economy	171
20-33-130	Tax-Sharing for Local and Regional Projects or Programs in Southeastern Pennsylvania	173
20-33-140	Residential Parking	177
20-33-150	Climate Adaptation Planning and Community Resiliency	179
20-34-080	Regional Aviation System Planning	181
20-34-090	Central Jersey Transportation Forum	183
20-34-100	PA Ozone Action Supplemental Services	185
20-34-110	NJ Ozone Action Supplemental Services	187
20-41-060	Transportation Systems Management and Operations (TSMO)	189
20-41-070	I-95 Planning Assistance	195
20-51-020	Enhance and Maintain Travel Forecasting Tools	197
20-51-030	Fast Turnaround Traffic Analysis	201
20-51-040	District 6 Modeling Assistance	203
20-52-050	Route 422 Operations and Capacity Study	205
20-52-060	PennDOT Connects Philadelphia Bike-Friendly Resurfacing Screening - Round II	209
20-52-070	Interstate 95/276/295 Interchange Impacts Study	211
20-52-080	Downingtown Area Transportation Study	215
20-52-090	Bus Transportation Center - Philadelphia Mills	219
20-52-100	Trolley Modernization - Routes 11 and 13	223
20-53-020/025	HPMS and Functional Classification System (PA & NJ)	225
20-53-030	PennDOT District 6-0 Traffic Volume Data	227
20-59-700	Member Government Special Studies	229
20-59-701	Carryover and Other Projects	231



**PROJECT: 20-10-020      Miscellaneous Data Requests**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Project Manager:** Glenn McNichol

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$10,000				\$10,000
2020	\$10,000				\$10,000
2021	\$10,000				\$10,000
2022	\$10,000				\$10,000

\*Private and Public Sector



**PROJECT: 20-31-020      Regional Transportation GIS Coordination**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Sean Lawrence

**Project Manager:** Christopher Pollard

**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 database that allows for the open 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 its web mapping and data sharing capabilities. Technical support and data maintenance will be provided to the Sidewalk Inventory project efforts in Pennsylvania and New Jersey. 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 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 are integrated into DVRPC's regional database and can be shared among project participants.
6. Maintain transportation data and make that data available through DVRPC's GIS Portal to project participants and the public.
7. Develop and maintain web mapping applications in support of DVRPC's outreach

goals.

8. Provide technical assistance to PennDOT to collect asset data under Local Asset Data Collection project (Project 20-31-030) as requested

9. Provide technical assistance to Energy and Climate Change Initiatives (Project 20-33-030).

10. Provide technical assistance and data maintenance to Sidewalk Inventory (Project 19-52-120).

**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 enhancements and improvements to DVRPCs GIS Portal.

**Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$400,000				\$400,000
2020	\$400,000				\$400,000
2021	\$400,000				\$400,000
2022	\$400,000				\$400,000

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

**PROJECT: 20-31-030      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 asset data in 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 other MPOs and RPOs, DVRPC gathered comprehensive information on the Commonwealth's extensive network of local roads and bridges missing from PennDOT's current inventory. In past years data has been collected for Bucks, Chester, Delaware, and Montgomery counties.

It is expected that DVRPC will continue to provide assistance to PennDOT by participating in data collection and maintenance activities that would benefit PennDOT and member agencies. These activities may include the ongoing maintenance of the local road and bridge features, the continued inventory and maintenance of pedestrian features including sidewalks, ramps, and crosswalks, or other valuable assets to be determined such as traffic signs or guiderails. DVRPC staff will perform the data collection according to established methodology and will monitor progress and perform quality checks on all collected data. The collected data will be shared with PennDOT and member agencies as requested.

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

**Tasks:**

1. Prepare materials necessary to identify the locations of potential features to be collected and/or reviewed, along with all other necessary documentation.
2. Using a two person team, identify and collect field data according to defined procedures.
3. Perform checks on data collected to ensure accuracy and completeness.
4. Share data with PennDOT and member agencies as requested.

**Products:**

1. Updated PennDOT databases with required attribution.
2. Analysis of collected data as requested.

**Beneficiaries:**

PennDOT, counties in southeastern PA, DVRPC.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$100,000				\$100,000
2020	\$100,000				\$100,000
2021	\$0				
2022	\$0				

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

**PROJECT: 20-31-040      Aerial Imagery (2-year)**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Glenn McNichol

**Project Manager:** William Stevens

**Goals:**

To provide a reliable source of current information regarding the region's physical characteristics and development patterns.

**Description:**

This project continues our 5-year aerial imagery acquisition cycle, which dates back to 1965. It offers a unique historical perspective of change throughout the Delaware Valley region. This project provides digital orthoimagery which is integrated into geographic information systems (GIS) and other mapping applications. This orthoimagery is used by DVRPC, our member governments, operating agencies, and the public to create and update spatial data, and for cartographic purposes. It serves as an invaluable resource in support of the region's planning and mapping activities.

Planning for this project involves determining the needs of DVRPC and its member governments with regard to imagery specifications (pixel resolution, file formats, etc.). It is also necessary to evaluate technological and business changes (imagery acquisition advancements, licensed imagery options, supplemental products, etc.) that may affect the project. In addition, if feasible, the project will be coordinated with any similar imagery acquisition efforts that may be undertaken by federal or state agencies, member governments, operating agencies, or other parties.

Acquisition of hardware, software, or training may be required to take full advantage of the data.

**Tasks:**

1. Continue working with member governments to review imagery and supplemental imagery product needs for 2020.
2. Identify preferred imagery characteristics and other potential products such as impervious surface data (includes building footprints), LiDAR, etc. and determine expected costs.
3. Coordinate with other interested parties, if possible.
4. Consider alternative methods for obtaining aerial imagery, such as licensed imagery products.
5. Develop all necessary administrative documents that may be required.
6. Plan for and complete vendor selection process, if required.
7. Seek to upgrade equipment necessary for imagery file distribution (web-based or otherwise), storage and hardcopy reproduction.
8. Upon acceptance of the project deliverables, staff will disseminate to member

governments and operating agencies.

**Products:**

- 1. Request for Proposals, Scope of Services, and/or other administrative documents as required.
- 2. Orthoimagery in designated specifications and file formats.
- 3. Supplementary products such as impervious surface data, LiDAR, etc., if possible.

**Beneficiaries:**

All client groups.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				
2020	\$750,000				\$750,000
2021	\$0				
2022	\$0				

\*PA TIP - MPMS #48203 - \$500,000 STU/TollCredit  
NJ TIP - DB #X30A - \$250,000 STBGP-STU

**PROJECT: 20-32-010      Commuter Benefit Program: RideECO**

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**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 offer employees a transportation fringe 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 (SVC), as do most third-party vanpool operators. Note that this program also reaches to south central Pennsylvania and northern Delaware, 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 fare cards. Through Select, employees can order vouchers, the RideECO stored value card, SEPTA monthly passes and 10-trip rail tickets (until loading of the Key card is enabled), and can load PATCO FREEDOM cards. Employees also have online access to their account and can update deduction/benefit information with less administrative responsibility on 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. (Ensure new fee structure is providing fair and profitable results for DVRPC and vendor.)

#### 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. Coordinate with Accounting to reconcile redemption and bank deposit reports with monthly invoices and sales reports.
5. Maintain a comprehensive database to track inquiries, program participants, sales, and other activities (measure and monitor progress).
6. Evaluate sales and corporate member data figures vs. projections at the end of the fiscal year; work with Accounting to confirm a budget for next FY per actual revenue.

#### 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 20.32.020 for more detail on broader marketing efforts.
4. Oversee work of design and media vendors; obtain internal approvals.

#### 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/regulations.
2. Maintain and increase presence in unit-managed social media outlets; use these as a way to disseminate program information as well as general transit news, and to track interest and action.

#### Sales and Customer Service:

1. Provide materials to employees and employers who request information online. Send emails to appropriate target lists. Follow up with those who have received information to ascertain interest and/or problems (first with email, then phone and/or personal meetings).
2. Meet with interested employers to explain and/or assist with implementation of the program, Set up meetings as requested or proposed.
3. Increase employee participation by attending benefits fairs of existing corporate clients.
4. Work with employer-related groups to reach this target specifically (chambers of commerce, HR associations, professional organizations, etc.); this includes but is not limited to sponsorships of relevant events, articles in member email/publications, etc.. Personal follow up on some efforts is needed.
5. Track effectiveness of various sales and marketing tactics per new companies and/or participants added at current clients.

- 6. Maintenance of sales at current level.
- 7. Keep current clients informed of pertinent, timely issues regarding the program, legislation, and changes regarding transit fares in our region (e.g. SEPTA Key).
- 8. Handle specific issues arising from client order problems or questions involving program set up or employee participation.
- 9. Act as a last resort resource for clients who have issues not addressed promptly by or handled correctly by vendor.

**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. Records of banking information and evaluation of revenue from sales, fees and slippage.
- 7. Updated databases.
- 8. Revised fee schedules, as mentioned above. (CY19)

**Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$450,000				\$450,000
2020	\$380,000				\$380,000
2021	\$380,000				\$380,000
2022	\$380,000				\$380,000

\*\$364,000 RideECO Generated Funds, \$16,000 Pa Public Transit Assistance Funds



**PROJECT: 20-32-030      Commuter Services/Mobility Alternatives Program  
(Share-a-Ride)**

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**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 work commutes during the peak travel 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 perform outreach to businesses in their specific service areas, informing employers of the benefits - to their employees and to the company - of encouraging and supporting 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 adapted and used by TMAs in their outreach efforts.

DVRPC works with the TMAs, PennDOT and the PA TMA Policy Committee (PC) in developing specific MAP-related and TMA Assistance grant work programs each fiscal year, along with reviewing progress reports and reporting measurements. FY20 administration will also include oversight of the competitive grant program

implemented in FY19.

**Tasks:**

1. Work with PennDOT and the PA TMA Policy Committee (PC) 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. Ensure county planning partners are involved in work program development and in setting common measurable goals through the PA TMA Policy Committee.
3. Meet quarterly with contractors and PC (at least two joint meetings or conference calls per FY).
4. Ensure MAP contractors are reporting activities via narratives attached to invoices (monthly or quarterly) and quarterly quantitative data reports in a timely fashion. Compile and summarize quarterly reports on progress, per their submissions, for PC review.
5. Develop a marketing strategy brief and annual budget.
6. Develop regional media strategies and schedule, as appropriate and as budget allows.
7. Produce outreach and marketing materials for all contractors to use, as necessary.
8. Maintain websites and databases for use by TMAs and the public.
9. Maintain contract and licenses with software company for SAR; provide training for contractors.
10. Utilize database of SAR applicants to report on increases in participation, estimate any mode changes, and communicate with applicants as needed.
11. Manage the ERH database and review and reimburse as applicable any submissions for use of the ERH program by registered participants.
12. Coordinate promotional, outreach and implementation efforts between MAP contractors and Commute with Enterprise (formerly Enterprise Rideshare), the selected vanpool provider for PennDOT's new Vanpool Incentive Program (PVIP) - 3-year subsidy program for new vanpools - which began in FY18; establish several new vanpools in this region; and monitor progress on this effort. Continue to offer and manage the gas card incentive program for new carpools.
13. Participate in any national or statewide TDM efforts (ex. ACT and MPO TDM Roundtable), as allowable; continue to hold a place as an officer on the PPTA Rideshare Committee.
14. 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 for PC.

**Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$251,000				\$251,000
2020	\$251,000				\$251,000
2021	\$251,000				\$251,000
2022	\$251,000				\$251,000

\*PA TIP - MPMS #110460 - \$201,000 CMAQ/ \$50,000 State 581/RideECO Cash



**PROJECT: 20-33-050      Local Technical Assistance Program (LTAP)**

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**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 33 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 2018, 545 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$30,000				\$30,000
2020	\$30,000				\$30,000
2021	\$30,000				\$30,000
2022	\$30,000				\$30,000

\*PA FHWA - PL/SPR/Toll Matched

**PROJECT: 20-33-060      Pottstown Area Regional Plan Development**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator:** David Anderson

**Project Manager:** Karen Whitaker

**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, multi-use trail network development, and an areawide transportation study over FYs 2018 and 2019. This year's focus will be to work with the members of the PMRPC to continue work on analyses stemming from that project.

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$60,000	\$47,206	\$12,794		
2020	\$60,000	\$47,109	\$12,891		
2021	\$60,000				
2022	\$60,000				

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$50,000				\$50,000
2020	\$50,000				\$50,000
2021	\$50,000				\$50,000
2022	\$50,000				\$50,000

\*PA DEP

**PROJECT: 20-33-080      Healthy Communities Planning**

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**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 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; and (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. DVRPC has undertaken healthy community planning to support greater community wellbeing, improve health outcomes, and increase livability across our region.

This year DVRPC will a) continue to convene the Healthy Communities Task Force (and may continue racial equity training workshops); b) work with Pemberton Township staff, community stakeholders, healthcare partners, and residents to develop a healthy community plan for Browns Mills; 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 Browns Mills Healthy Communities Planning Effort:**  
Browns Mills, home to over 10,000 residents, is located within Pemberton Township, Burlington County. Situated within the Pinelands National Reserve, it has an abundance of natural amenities that offer many scenic and recreational opportunities. Browns Mills is also located adjacent to Joint Base McGuire-Dix-Lakehurst, which employs almost 30,000 military and civilian personnel. Additionally, Browns Mills is home to Deborah Heart and Lung Center, a large healthcare institution and employer. Despite these resources, Browns Mills still faces some challenges. With higher levels poverty and unemployment and lower levels of educational attainment than both the County and the state, the 2016 Deborah Community Health Needs Assessment noted a need to address social determinants of health in Browns Mills. Additionally, data from a number of South Jersey hospitals showed that more than half of Burlington County hospital visits related to chronic diseases (obesity, asthma, diabetes, heart disease, etc.) were driven by residents who live in only 8 zip codes—one of which was Browns Mills.

Based on the identified needs as well as the ongoing planning efforts within Browns Mills, DVRPC proposes to work with Township staff, community stakeholders, healthcare partners, and residents to develop a Healthy Community Plan. The specific issues to be addressed in the plan will be identified through a community engagement process, and could include a number of health and built environment factors such as walkability, parks and open space, healthy food access, and aging in place. The plan will prioritize strategies that the Township and partners can take to support greater well-being for Browns Mills residents and, where possible, identify funding sources and next steps.

Community engagement and plan development for the Browns Mills effort is estimated to take approximately 18 months.

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,

including assessing interest and budget to support additional racial equity training workshops.

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.

#### Tasks for the Browns Mills Healthy Community Plan:

1. Form a study advisory committee to guide the work, made up of representatives from Pemberton Township, community organizations, health care providers, social service providers, open space and active transportation organizations, and others as identified. Committee will meet 3-4 times over the course of the project.

2. Develop an outreach strategy to engage community residents in the development of the Healthy Community Plan. An outreach strategy could include:

a. Key stakeholder interviews;

b. Tabling/activities at public-facing events and festivals;

c. Public workshops to discuss existing findings, solicit ideas, and/or finalize recommendations;

d. Surveys;

e. Youth engagement; and

f. Providing residents with a stipend to conduct outreach.

3. Gather and analyze existing conditions data for Browns Mills, possibly including demographic and social characteristics, economic conditions, education, health conditions, land use and employment, transportation, food systems, safety, housing, and environmental health.

4. Using the results of the community engagement process and existing conditions analysis, develop vision and strategies for a healthy Browns Mills. This will likely blend into the next fiscal year's work.

#### **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 and stakeholders.

4. Healthy communities and food system planning webpages.

5. Browns Mills Healthy Communities Plan - materials related to community engagement, existing conditions, and draft of plan.

#### **Beneficiaries:**

State DOTs, FHWA, member governments and citizens, health care and public

health community, Browns Mills, Pemberton Township, Burlington County, and local residents and businesses.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$100,000	\$78,676	\$21,324		
2020	\$100,000	\$78,515	\$21,485		
2021	\$100,000				
2022	\$100,000				

**PROJECT: 20-33-090      PA/NJ Local Planning Initiatives**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Project Manager:** Christopher Linn, Patricia Elkins

**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. Digital version of the document and 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$200,000			\$42,450	\$157,550
2020	\$200,000			\$30,000	\$170,000
2021	\$200,000				
2022	\$200,000				

\*PA/NJ Local Governments

**PROJECT: 20-33-100      Devon Station Multi-Modal Access**

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**Responsible Agency:**

**Program Coordinator:** Andrew Svekla

**Project Manager:** Betsy Mastaglio

**Goals:**

Develop and evaluate multimodal access concepts for the Devon Regional Rail Station and the larger Devon Center.

Identify transit-supportive land use and development strategies for Devon Center that support the community's vision for this district.

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."

**Description:**

The Devon Regional Rail Station (SEPTA Paoli/Thorndale Line) is one of two train stations in Easttown Township, and a key destination in Devon Center, a mixed-use district that straddles Lancaster Avenue/Route 30 in the northeastern area of the Township. Capital improvements are being planned for the station building and platforms in the coming years. However, access to the station and general mobility in the larger station area is constrained by an inconsistent sidewalk network, challenging intersections, confusing driveway access, and a lack of bicycle facilities.

Improving pedestrian and cyclist mobility was one of the key themes to emerge in Easttown Township's 2018 Comprehensive Plan. This study will build on the recommendations and strategies presented in that document by inventorying existing conditions, engaging with local stakeholders, and developing multimodal access and circulation concepts for the station area based on the Pedestrian and Bicyclist Mobility Map included in the Comprehensive Plan.

This study will further build on the Township's Comprehensive Plan by facilitating discussions with local stakeholders about transportation, land use, and design strategies that support the community's vision for a distinctive, mixed-use Devon Center.

The development of transportation and land use strategies appropriate for the Devon Station Area will require input from key stakeholders including Easttown Township, Chester County, SEPTA, PennDOT, local business and property owners, and local residents.

**Tasks:**

1. Form a project steering committee comprised of representatives from Easttown Township, Chester County, SEPTA, PennDOT, and other stakeholders as appropriate to guide the work of DVRPC staff.
2. Gather data on current conditions as necessary to evaluate the existing network of pedestrian and bicycle infrastructure and the land use and development context.
3. Facilitate a stakeholder workshop designed to discuss existing conditions and solicit feedback on potential land use and transportation concepts.
4. Develop multimodal concepts and recommendations designed to enhance pedestrian and bicycle access to and throughout Devon Center.
5. Develop approximate cost estimates and implementation strategies for transportation strategies that emerge from the planning process.
6. Outline transit-supportive land use and design strategies that can complement future transportation improvements while helping to establish the desired character of Devon Center.

**Products:**

1. Report summarizing station area planning process, recommendations, and implementation strategies.

**Beneficiaries:**

Easttown Township, Chester County, SEPTA, PennDOT

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				
2020	\$180,000				\$180,000
2021	\$0				
2022	\$0				

\* PennDOT Connects

**PROJECT: 20-33-120      Campbells Soup - Camden City Food Economy**

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**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 and where they go to be healthy. 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 Year Three (FY2019), DVRPC worked with local residents and community groups in Camden to support DVRPC's ongoing regional sidewalk inventory.

In FY20, DVRPC will continue to work with our Healthy Communities partners and Camden residents to address issues around access to health-promoting

**Tasks:**

1. Continue to engage with transportation providers and key stakeholders to support the implementation of transportation access solutions identified in the Road to Health Workshop and through conversations with residents and partners.
2. Continue to 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.

4. Attend monthly Campbell's Healthy Communities Investee meetings.

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$50,000				\$50,000
2020	\$50,000				\$50,000
2021	\$50,000				\$50,000
2022	\$50,000				\$50,000

\*Campbells Soup Company

**PROJECT: 20-33-130      Tax-Sharing for Local and Regional Projects or Programs in Southeastern Pennsylvania**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Andrew Svekla

**Project Manager:** Brett Fusco

**Goals:**

Research policies that can help promote fiscal equity and efficient development practices at the metropolitan or county scale.

This project supports regional planning priorities related to the greater coordination of mobility and land use planning and the promotion of regional models of cooperation.

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."

**Description:**

Local governments throughout the country rely on local property taxes and, in some states, local income and sales taxes to fund their general operation. This arrangement understandably results in land use policy and development decisions based on the revenue-generating characteristics of new development. Often referred to as fiscal zoning, many communities in highly fragmented metropolitan areas face significant pressures to compete for development that will expand their tax bases. In addition to distorting land-use planning decisions, these pressures can encourage sprawl and increase economic and social disparities.

Because of the location and/or patterns of metropolitan change and investment, some local governments are winners and others are losers when government services are tied to a local tax base. The fiscal disparities that arise based on the revenue-raising capacity of local governments can put some municipalities at a serious disadvantage when competing for new residents and business. Over time, these disparities can contribute to cycles of disinvestment that result in the concentration of poverty and the destabilization of schools and neighborhoods.

In response to these local tax equity issues, some metropolitan areas have studied and/or enacted tax-base sharing programs designed to improve both the equity and

efficiency of regional fiscal systems. In such a system, a portion of local tax base (usually a percentage of growth) is put into a regional pool which is then redistributed back to local areas based on some criteria other than their contributions to the pool.

Furthermore, some states have authorized local governments to enter into interlocal agreements to share revenues from development. These agreements are intended to encourage intergovernmental cooperation on issues related to service provision, economic development, and environmental preservation through the sharing of various types of tax revenues, including property, local income, and local sales tax.

Tax base sharing programs and similar arrangements have been implemented around the country with the goal of

- Reducing incentives for localities to compete with each other for tax-base;
- Reducing inequalities in tax-base, tax rates and local public services;
- Encouraging joint regional or multi-jurisdictional economic development efforts; and
- Promoting regional land-use planning efforts.

The Twin Cities Fiscal Disparities Program (Minneapolis/St. Paul, Minnesota) is the best example of a regional tax base sharing program. This study will research this program and other examples of these types of arrangements, while exploring the potential applicability of these programs to counties and/or multimunicipal networks within Southeastern Pennsylvania.

This work will build on research compiled for DVRPC's Municipal Implementation Tool #25: Implementing Shared Services (June 2013).

### **Tasks:**

1. Form a project steering committee comprised of representatives from DVRPC's Pennsylvania counties as well as relevant subject matter experts as needed to guide the research of DVRPC staff.
2. Research existing and proposed tax base and revenue sharing agreements from around the United States. Interview administrators of these programs as needed.
3. Summarize the relevant legislation that frames the potential implementation of tax base sharing programs in Pennsylvania.
4. Outline the types and potential benefits of tax-base sharing programs that may be applicable to communities and counties in Southeastern Pennsylvania.

### **Products:**

1. White paper summarizing the potential benefits of and challenges to implementing tax based sharing and other similar programs in Southeastern Pennsylvania.

### **Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				
2020	\$120,000			\$24,000	\$96,000
2021	\$0				
2022	\$0				

\*PA Supplemental Land Use



**PROJECT: 20-33-140 Residential Parking**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Project Manager:** Andrew Svekla

**Goals:**

Research and identify policy options and best practices for managing and regulating the supply and demand of parking in urban residential neighborhoods.

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."

**Description:**

Parking is an important asset to cities and towns throughout Greater Philadelphia. However, like any land use or piece of transportation infrastructure, parking must be managed properly to ensure it works efficiently and adds value to the community. In recent years, cities throughout the country have reexamined parking policies in an effort manage supplies, reduce traffic, cut pollution, lower housing costs, and improve urban vitality.

The Philadelphia City Planning Commission is currently studying a variety of parking-related issues in the downtown areas of Center City and University City. DVRPC's FY2020 study will build on this effort and past studies, such as *The Automobile at Rest: Toward Better Parking Policies in the Delaware Valley* (2008), by analyzing parking issues in residential neighborhoods outside of the largely commercial Center City and University City neighborhoods.

Already a contentious issue in many neighborhoods, increasing rates of development, density, and vehicle ownership, have resulted in some neighborhoods pushing up against the limits of their parking capacity. This study will analyze demographic and development trends shaping demand for parking throughout Philadelphia's residential neighborhoods and explore parking policy strategies that may help the City better manage this demand.

Potential areas of investigation may include revisions to the City's residential permit parking system, strategies designed to mitigate parking conflicts along neighborhood commercial corridors, the creation of parking benefit districts, potential adjustments to parking requirements for various types of development, and

the potential impacts of autonomous vehicles on neighborhood parking dynamics.

Although this study will focus on residential areas of Philadelphia, the research, findings, and strategies generated by this study will be applicable to many of the core cities and developed communities throughout Greater Philadelphia.

**Tasks:**

1. Form a project steering committee comprised of representatives from the Philadelphia City Planning Commission, Philadelphia Parking Authority, Office of Transportation, Infrastructure, and Sustainability, Department of Commerce, Streets Department, PennDOT, and potential others.
2. Gather data on the demographic, employment, and development conditions that are shaping demand for parking in the residential neighborhoods of Philadelphia.
3. Prepare neighborhood case studies that illustrate a range of parking issues and potential conflicts.
4. Research best practices on residential parking management strategies from around the United States.
5. Outline potential residential parking policies that will help communities better manage their existing parking supplies while meeting other transportation, land use, and community objectives.

**Products:**

1. Report summarizing baseline conditions and potential strategies for improving parking policy in Philadelphia and other urban portions of the region.

**Beneficiaries:**

Philadelphia City Planning Commission, Philadelphia Parking Authority, Office of Transportation, Infrastructure, and Sustainability, Department of Commerce, Streets Department, PennDOT, Core Cities and Developed Communities throughout the region

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				
2020	\$130,000			\$26,000	\$104,000
2021	\$0				
2022	\$0				

\*PA Supplemental Land Use

**PROJECT: 20-33-150      Climate Adaptation Planning and Community Resiliency**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Project Manager:** Amy Verbofsky

**Goals:**

Work with the PA Coastal Resources Management (CRM) Program to continue to build municipal capacity to assess climate vulnerability and plan for climate adaptation and resiliency throughout the Delaware Estuary Coastal Zone.

**Description:**

DVRPC will continue to work with municipalities in the Delaware Estuary Coastal Zone (DECZ) to build capacity in assessing climate vulnerability and planning for climate adaptation and resiliency. Specifically, DVRPC will provide municipalities with information regarding climate change resiliency, mitigation, and adaptation in our region. This will include an interactive web-based story map that addresses current and future vulnerabilities, current and future flood hazard zones, and adaptive steps that could be taken to reduce flooding and coastal hazard risks. DVRPC will work to promote the story map as a tool for communities. We will also provide technical assistance to help municipalities incorporate information from the map, like climate change projections and adaptation strategies, into municipal plans and ordinances.

This program will help local governments understand why climate change matters to their community and identify strategies to increase resilience. Strategies that support existing planning goals will be prioritized.

**Tasks:**

1. Continue to engage with municipalities and other partners in the DECZ, focusing on flooding issues, climate science, vulnerability, resilience, adaptation, and hazard mitigation.
2. Provide municipalities and counties with tailored information, including mapping, on climate change and its impacts on coastal areas. Use the story map to communicate why climate change matters to their community and provide municipal leaders with recommendations for actions to prepare for and respond to flooding and other climate change impacts.
3. Investigate potential savings for DECZ municipalities if they participate in FEMA's Community Rating System program, and communicate potential costs and benefits from participation in this program to municipalities.
4. Provide outreach to municipalities on case studies for municipal actions and potential municipal ordinances to address increased coastal and climate change related hazards.
5. Promote the story map as a tool to DECZ counties municipalities through social media and other channels, as necessary. These efforts may include a broader public education campaign to help better inform the public on climate change's project

impacts to their community or may focus specifically on outreach to municipal officials.

- 6. Provide technical assistance to a select number of municipalities on how to best integrate climate change data and adaptation strategies into their municipal plans and ordinances, like Master Plans, Hazard Mitigation Plans, Stormwater Management Plans, zoning ordinances, and floodplain ordinances.
- 7. Provide other technical assistance to municipalities and counties, as identified through previous outreach, to support their efforts to become more resilient.
- 8. Submit documentation and data to PA CRM.

**Products:**

- 1. Documentation and summaries of outreach activities, including identified needs and information gaps.
- 2. Interactive web-based story map that includes sea level rise and other flooding impacts to our region.
- 3. Data collected, including mapping and GIS, if applicable.
- 4. Strategies and tools for adapting to climate change and becoming more resilient to coastal hazards.
- 5. Outreach materials to promote the story map.
- 6. Recommendations for next steps and further actions.

**Beneficiaries:**

Counties, municipalities, PADEP, NOAA, FEMA, PEMA, PennDOT, non-profit organizations, and the general public.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				
2020	\$50,000				\$50,000
2021	\$50,000				\$50,000
2022	\$0				

\*PA DEP

**PROJECT: 20-34-080      Regional Aviation System Planning**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator:** Michael Ruane

**Goals:**

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

**Description:**

Aviation Systems Planning is an important ongoing effort designed to support the Delaware Valley's network of airports and heliports and regional air travel. Objectives and tasks include the collection of aircraft operations counts at non-towered airports; the provision of technical assistance to various stakeholders; and the identification of continuing and new studies.

The primary component 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 rotating schedule, with greatest emphasis placed on those airports which are designated National Plan of Integrated Airport Systems (NPIAS) facilities.

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

**Tasks:**

1. Provide assistance to states, local governments, operators, and consultants in preparing state system plans and other planning documents and policies.
2. Continue annual operations counting at selected regional general aviation airports.
  - A. Working closely with the identified airports, develop a target counting schedule for each airport by season.
  - B. Based on the pre-determined schedule, set up and collect the 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.

**Products:**

1. Policy input and technical assistance to PennDOT, NJDOT, and DeIDOT, and DVRPC member governments regarding airport development, plans, and studies.
2. Airport operations counting report for selected airports.

**Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$100,000				\$100,000
2020	\$100,000				\$100,000
2021	\$100,000				\$100,000
2022	\$100,000				\$100,000

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

**PROJECT: 20-34-090      Central Jersey Transportation Forum**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator:** 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 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 the 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 Strategic Plan, last updated in the spring of 2018. Membership meets three to four times per year. Before a meeting, the Steering Committee convenes to develop the agenda. A Joint Action Team will meet separately on an as-needed basis when there are additional tasks that Forum members must discuss. The 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 Joint Action Team by arranging meetings, preparing materials, tracking progress on the prescribed actions in the Strategic Plan, and expand and maintain web pages.

- 2. Continue implementation of the Strategic Plan – Assist the Steering Committee and Joint 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. Support the implementation of a new planning study to update the Rt 1 Regional Growth Strategy following the Steering Committee’s initiative.
- 4. Continue to provide meaningful technical contents that help the Forum advance toward its goal.
- 5. Increase communication between members, and to the public through social media and an updated website with a unique URL address, separate from DVRPC branding.
- 6. 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 updated branding and graphics.

**Beneficiaries:**

NJDOT, New Jersey Transit, New Jersey Business Action Center, Transportation Management Associations (Greater Mercer TMA and Keep Middlesex Moving), counties (Mercer, Middlesex, and Somerset) and municipalities (15 voting plus 9 eligible), the residents and employees of Central Jersey.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$150,000				\$150,000
2020	\$125,000				\$125,000
2021	\$125,000				\$125,000
2022	\$125,000				\$125,000

\* NJ TIP - DB #X30A - \$125,000 STBGP-STU

**PROJECT: 20-34-100 PA Ozone Action Supplemental Services**

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**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 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 organization 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$125,000				\$125,000
2020	\$125,000				\$125,000
2021	\$125,000				\$125,000
2022	\$125,000				\$125,000

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

**PROJECT: 20-34-110 NJ Ozone Action Supplemental Services**

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**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 organization 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$50,000				\$50,000
2020	\$50,000				\$50,000
2021	\$50,000				\$50,000
2022	\$50,000				\$50,000

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

**PROJECT: 20-41-060      Transportation Systems Management and Operations  
(TSMO)**

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**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 2020, 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 SPATEL 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, PennDOT District 6-0 Regional Operations Plan Regional ITS Infrastructure Inventory, and DVRPC's Interactive Detour Route Mapping (IDRuM) application.

As part of PennDOT's statewide TSMO efforts, their Regional Traffic Management Centers are being asked to update their Regional Operation Plans (ROP) which help to identify, define, and prioritize operationally-focused projects (short and long term) that are consistent with regional and statewide operations objectives. DVRPC will assist District 6-0 Traffic Operation staff to update their ROP and identify the selected corridors throughout the region, and will assist in developing a full range of recommendations and specific TSMO strategies and projects.

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 2020, 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). Work toward developing a new web version of IDRuM program, including using GIS to make necessary updates to the detours to reflect changes to any routes or construction activity.
8. Coordinate with PennDOT District 6-0 Traffic Operations, and assist them with updating their Regional Operations Plan (ROP) that will identify selected corridors, and define and prioritize operationally-focused projects..
9. Conduct intersection turning movement counts in select locations within Gloucester County.
10. 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
11. 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.
12. Continue coordination with I-95 Corridor Coalition programs. These activities may include sharing information about and partnering on ITS-related projects.
13. 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.
14. 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.
15. 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$933,500				\$933,500
2020	\$933,500				\$933,500
2021	\$933,500				\$933,500
2022	\$933,500				\$933,500

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



**PROJECT: 20-41-070 I-95 Planning Assistance**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Elizabeth Schoonmaker

**Project Manager:** 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 as needed. Assist with design coordination and implementation of congestion mitigation strategies.
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, PennDOT, and other agencies, including multiple agencies/departments within the City of Philadelphia.
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, detour routes, long range planning, and general coordination.

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

**Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				\$0
2020	\$100,000				\$100,000
2021	\$100,000				\$100,000
2022	\$100,000				\$100,000

\*PA TIP# 106708 \$80,000 NHPP \$20,000 State 581

**PROJECT: 20-51-020      Enhance and Maintain Travel Forecasting Tools**

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**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 FY 2017, the TIM 3.0 model was validated for a 2010 base year. In FY 2018 and 2019, the AB TIM 3.0 model was updated with 2015 network and zonal data, new population synthesizer, re-estimated coefficients, scripts, and data management procedure for performance improvement, and moved to the VISUM 17 platform. The new TIM 3.1 model has been 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; and comparing the simulated county-to-county work flow against the ACS and CTPP data. Further validation, testing, and improving of the TIM 3.1 model will continue in FY 2020, including these long-time choice model components, park-and-ride model, other behavioral aspects of the AB model in comparison to the survey, and the application results in comparison to the trip based model.

In FY 2020, more 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, integration 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 other tools as required. Furthermore, improving the efficiency and productivity with the AB model, which requires a longer run time and a much larger data preparation effort than the trip based model, will be the task for FY 2020. An overall vision along with a more effective data preparation and management process was designed and implemented in FY 2019; it will be further tested and revised with the support of the consultant and the software vendor. Tools for visualizing the AB model results, in terms of daily activity and tour patterns and assignment analysis, will also be developed and tested in FY 2020. Documentation and user guides will be updated for not only the TIM 3.1 model but also tools involved for the modeling and data preparation process.

In addition to the AB model, the trip based TIM 2.x model has been continuously updated and improved, as it is still the production model at DVRPC and offers a faster run time. In FY 2018, the TIM 2.3 model update was completed with a base year of 2015, preliminary for new network and zonal data as well as calibration and validation required. In FY 2019 and FY 2020, the TIM 2.4 model update will include more fundamental changes on the model's trip distribution, balance, value of time assumptions, non-motorized model, and trip-based truck model. Additional model calibration will be conducted after these major changes and available newer travel statistics, e.g. 2017 VMT (to compare with the 2015 VMT used for TIM 2.3 validation, which showed a different trend, and to adjust the model as necessary for forecasting). The TIM 2.4 model will also integrate with the newly updated airport model and implemented with multiclass assignment after the truck model update.

The new bike model will be fully tested, with bike data collected. The model validation will also use commercial OD trip data, if it becomes available to DVRPC in FY 2020.

At the other hand, DVRPC has started a tour-based truck model in FY 2019, and will continue the model development in FY 2020. The tour-based truck model is similar to the AB model, representing the freight and commercial truck movements through a daily scheduling approach including truck stops along the delivery and service tours. The tour-based truck model will be fully integrated with both AB TIM3.1 and trip-based TIM2.4 model in FY 2020. Sensitivity test of the tour-based truck model will also be conducted in FY 2020. Visualization tools for truck tours will be developed in a similar way as for visualizing household activity and travel tours for the ABM.

Another task that will be undertaken by this project will be the development of a visualization tool for the model data (inputs, outputs, and validation data). It has been a long request to have an easier way for planning partners to access and visualize these day outside the VIUSM platform. The modeling group has vision to develop a web viewer for this purpose. A beta version was implemented and received feedback in FY 2019. An updated and fully functional web viewer of the model data will be developed in FY 2020.

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. Fully validate and test the AB TIM 3.1 model.
2. Conduct sensitivity tests and back-casting exercise with TIM 3.1 model.
3. Improve visualization tool and data management for AB TIM 3.1.
4. Update population forecasts, including synthetic population at microzone level, and employment forecasts, for 2020, 2025, 2030, 2035, 2040 and 2045.
5. Update all TIP and Long Range Plan projects in the VISUM Scenario Manager.
6. Update and validate the TIM 2.4 model with 2017 data.
7. Update model documentation and validation report for TIM 3.1 and TIM 2.4.
8. Conduct sensitivity test with tour-based truck model.
9. Develop visualization tool for the tour-based truck model and data.
10. Integrate tour-based truck model with TIM 3.1 and TIM 2.4.
11. Develop the web viewer for visualizing the model data and outputs.
12. Develop tie-in between TIM 3.0 and MOVES2014 or successor models.

### **Products:**

1. Validated and improved TIM 3.1 model.
2. Validated and improved TIM 2.4 model.
3. Updated TIM 3.1 and TIM 2.4 model documentation and validation report.
4. Tie-ins with MOVES, User Benefits, and DREAM.
5. Integration with tour-based truck model.

- 6. VISUM Scenario Manger for 2045 Long Range Plan.
- 7. TIM Viewer.

**Beneficiaries:**

State DOTs, transit operators, member governments.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$640,000				\$640,000
2020	\$640,000				\$640,000
2021	\$640,000				\$640,000
2022	\$640,000				\$640,000

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

**PROJECT: 20-51-030      Fast Turnaround Traffic Analysis**

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**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 Systems.
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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$50,000				\$50,000
2020	\$50,000				\$50,000
2021	\$50,000				\$50,000
2022	\$50,000				\$50,000

\*Funding from the City of Philadelphia

**PROJECT: 20-51-040      District 6 Modeling Assistance**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Matthew Gates

**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 two 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 Travel Trends and Forecasts, and work with other 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$220,000				\$220,000
2020	\$460,000				\$460,000
2021	\$460,000				\$460,000
2022	\$460,000				\$460,000

\*PA TIP MPMS # 110127 - \$368,000 NHPP , \$92,000 State 581

**PROJECT: 20-52-050      Route 422 Operations and Capacity Study**

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**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 were collected on every on-ramp and off-ramp along US 422 and at selected locations along the mainline in FY2019. Additional traffic volume and travel time data may be collected in FY2020. Daily volumes will also be reported in order to calibrate the travel demand model. A sample of vehicle classification counts will be used 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.
2. Calibrated VISSIM traffic operations model of the US 422 Corridor.

**Beneficiaries:**

PennDOT, Chester County Planning Commission, Montgomery County Planning Commission

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$150,000				\$150,000
2020	\$150,000				\$150,000
2021	\$150,000				\$150,000
2022					

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



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

Review PennDOT's 5-year resurfacing program for locations in Philadelphia that are 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, 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 2-4 projects to be evaluated in detail during the course of the fiscal year.

**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 or build scenarios 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.

**Products:**

- 1. Memorandums documenting each evaluated corridor’s proposed configuration, traffic impacts, and anticipated benefits.

**Beneficiaries:**

City of Philadelphia, PennDOT District 6-0.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$120,000				\$120,000
2020	\$120,000				\$120,000
2021	\$0				
2022	\$0				

\* PennDOT Connects

**PROJECT: 20-52-070 Interstate 95/276/295 Interchange Impacts Study**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator:** David Anderson

**Project Manager:** Al Beatty

**Goals:**

Understand and manage growth within the Lower Bucks County region that may arise as a result of the new I-95/I-276/I-295 interchange. Identify transportation improvement projects to improve traffic circulation and mobility, especially to accommodate freight service in the area.

**Description:**

The purpose of this study is to examine the impact of the recently-completed interchange between I-95 and the Pennsylvania Turnpike on freight services and local mobility in Bristol Township, Bristol Borough, and the Lower Bucks County region. The objective is to develop a plan that would balance community needs and desires with the uses that the area transportation infrastructure can support. The construction of the I-95/I-276/I-295 interchange will have a dramatic effect on the travel costs and regional market attractiveness of the Lower Bucks County region. The new connection has the potential to modify development patterns, including population and employment growth as well as traffic patterns. The new connection will also influence how freight shippers and carriers access neighboring markets.

The study area generally extends from Tullytown in the north to Street Road in Bensalem in the south. The Delaware River will be the easternmost extent while the area in the vicinity of the interchange would form the western extent. Traffic analysis will be conducted primarily along PA 413 and US 13 as well as important local connectors.

The Bristol Township TCDI Study (2018) will provide the basis for this effort. Over the past decades the study area has undergone periodic land use transformations and shifts in the retail and industrial market. DVRPC staff will look at underutilized areas and identify potential adaptive reuse, infill development, or redevelopment opportunities, informed by development concepts explored in the TCDI study. An important component to this development/redevelopment vision will be an assessment of the transportation network and planned improvements including signalized intersections, and other improvement projects that provide access to and from regional freight centers.

This project will examine traffic using operational modeling for current conditions, 2045 No-Build, and 2045 Build conditions. Each scenario will assess peak hour traffic conditions and needs. Public workshops or open houses will be held for the study area. This project will also engage members of the freight community to help identify strategies, policies, and locations to improve freight access, interconnectivity

and mobility on the area road system, with the goal of attracting, retain, and expand industries and jobs while protecting and enhancing community quality of life.

While this current effort will examine the impact of the current interchange design, future analysis could evaluate potential future impacts when the remaining six uncompleted movements of the interchange are constructed.

**Tasks:**

1. Form a project steering committee comprised of municipal representatives and staff from the Bucks County Planning Commission and PennDOT to finalize a project approach and more detailed scope of work.
2. Conduct ATR and peak period Turning Movement Traffic Counts on specific roadways including PA 413, US 13, and Street Road as well as on highway ramps.
3. Identify and document major transportation infrastructure improvements (roads, bridges and transit) planned for the area.
4. Conduct a public open house meeting to introduce the project and get input.
5. Convene a logistics summit for freight operators in the area to determine advantages and challenges experienced by these operators in the area.
6. If capacity permits, conduct a current and future year qualitative air quality analysis to estimate the impact of the new highway connection on air quality.
7. Identify major commercial and residential developments planned for the study area as well as large parcels that could be repurposed as a result of the area becoming more attractive due to improved accessibility and reduced travel time to major highways.
8. Prepare a calibrated current year regional model and regional-model subcut for the study area. Include roadway and intersection geometry, traffic control and signal timing plans in the detailed study-area networks for integrated connection to microsimulation models.
9. Meet with the steering committee at the conclusion of the No-Build model to discuss and prepare Build scenarios.
10. Conduct a second public open house meeting to gauge reaction to Build scenarios and initial recommendations.
11. Identify traffic deficiencies, and model transportation solutions (short term and long term capital improvements) to ameliorate conditions or accommodate the vehicular demands in each scenario. Special attention will be placed on quantifying induced demand generated by the new connection.
12. Perform traffic operational modeling for the AM and PM peak traffic hours for current, Year 2045 No-Build, and Year 2045 Build conditions.
13. Prepare a reporting document that summarizes the undertakings and findings of the study.

**Products:**

- 1.Meeting materials, draft and final report, and transportation operational models.

**Beneficiaries:**

Traveling public, Bristol Township, Bristol Borough, Bucks County, PennDOT, and PA Turnpike Commission.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				
2020	\$150,000				\$150,000
2021	\$0				
2022	\$0				

\*PennDOT Connects



**PROJECT: 20-52-080      Downingtown Area Transportation Study**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** David Anderson

**Goals:**

Identify and quantify areas of existing and future transportation bottlenecks within the Downingtown area of southwest Chester County. Quantify the impact of new development on traffic circulation and mobility and lay the basis for improvements needed to establish a modern transportation system.

**Description:**

The Borough of Downingtown and the surrounding municipalities have experienced significant growth in recent years along with an attendant increase in traffic congestion. Several large private developments are planned, promising to create additional transportation challenges. Additionally, a number of significant Transportation Improvement Program (TIP) projects, including several bridge replacements, are slated for the coming years, which will disrupt overall operations in different ways at different times. This study will assess current AM and PM peak hour conditions on major roads and other specified locations as selected by municipal representatives. Future year volumes will be determined by assessing the trip-generating impacts of the specific large developments already planned as well as the area's general estimated growth. This project will evaluate peak hour traffic conditions in the study area to inform the public and municipal decision makers of the likely impacts of area growth and provide analysis for county and municipal officials to support further study and capital project development and funding.

The project is being undertaken as a one-year effort (FY2020). It will involve data collection, including an inventory of planned developments and their estimated impact on traffic volumes, and traffic operational modeling to assess peak hour traffic conditions and needs. Current and 2045 No-Build conditions will be modeled. One public information meeting will be held for the study. Based on this project's findings, additional work in subsequent fiscal years may be appropriate to develop and test improvements to solve problems identified in FY2020.

**Tasks:**

1. Form a project steering committee comprised of municipal representatives, and staff from the Chester County Planning Commission, Amtrak, SEPTA, and PennDOT.
2. With the consensus of the steering committee, finalize the extent of the study area and develop a more detailed scope of work.
3. Compile and analyze area transportation data including ATR and peak period Turning Movement Traffic Counts (TMTCs), and observe traffic patterns in the field.
4. Identify major commercial and residential developments planned for the study area.
5. Identify major transportation infrastructure improvements (roads, bridges, and

transit) as well as multimodal improvements (including bike lanes and trails) planned for the area.

6. If necessary, prepare a calibrated current year regional-model subnetwork for the study area for microsimulation inputs. Prepare a detailed microsimulation network for focused portions of the study area with roadway and intersection geometry, traffic control, and signal timing plans.
7. Perform microsimulation modeling to assess traffic operations in the AM and PM peak traffic hours for existing conditions.
8. Conduct a public open house meeting to introduce the project, share existing conditions findings, and receive input.
9. Perform trip generation using ITE methods or the regional travel demand model for the study area to supply AM Peak Period and PM Peak Period traffic forecasts, and microsimulation model inputs for the Year 2045 No-Build scenario.
10. Perform microsimulation modeling to assess traffic operations in the AM and PM peak traffic hours for Year 2045 No-Build conditions.
11. Meet with the steering committee to discuss Existing and 2045 No-Build scenarios.
12. Prepare a reporting document that summarizes the undertakings and findings of the study.

Project work undertaken through this project will assess existing and future conditions and needs based on current travel patterns, planned developments and growth, and programmed transportation improvements. Based on this project's findings, additional work may be appropriate to develop and test improvements to solve problems identified in FY2020. The following tasks could be performed if a second phase of continuing work is prioritized by member governments:

Upon completion of the tasks for FY2020, the steering committee may determine it is necessary to identify improvements based on the findings. In a potential project Phase II (FY2021), microsimulation modeling could be performed to assess traffic operations in the AM and PM peak traffic hours for Year 2045 Build conditions. In Phase II, traffic deficiencies would be identified and transportation solutions (short-term and long-term capital improvements) modeled. The objective for Phase II work would be to identify transportation improvements that ameliorate conditions or accommodate future vehicular demands in the study area. Two steering committee meetings would be held to reach consensus on proposed improvements and discuss traffic impacts. One public open house meeting would be held to gauge reaction to the final transportation plans and proposals. The main deliverable for Phase II would be a reporting document that summarizes the recommended improvements and modeling results for the 2045 Build conditions.

### **Products:**

1. Meeting materials, draft and final report, and existing and 2045 No-Build transportation operational models.

**Beneficiaries:**

Traveling public, Downingtown Borough, Caln Township, East Brandywine Township, Uwchlan Township, West Whiteland Township, West Bradford Township, East Bradford Township, Chester County, PennDOT, Amtrak, and SEPTA.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				
2020	\$120,000				\$120,000
2021	\$0				
2022	\$0				

\*PennDOT Connects



**PROJECT: 20-52-090      Bus Transportation Center - Philadelphia Mills**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Betsy Mastaglio

**Project Manager:** Amy Bernknopf

**Goals:**

Focusing transit service at transportation centers can expand the usefulness of it by encouraging connections between routes, and strengthening transit service competitiveness across boundaries. This study will identify operational, programmatic, and physical characteristics for a new transportation center at/near Philadelphia Mills Mall with the aim of improving the overall reliability and quality of transit service.

**Description:**

As SEPTA and the City of Philadelphia advance simultaneous efforts to improve the reliability and quality of transit service (Comprehensive Bus Network Redesign and the City of Philadelphia Transit Plan, respectively), both will rely on the recommendations that stem from the Philadelphia Bus Network Choices Report completed by Jarrett Walker + Associates for SEPTA. The report recommends strengthening the role of transportation centers in SEPTA's network, such as adding infrastructure to accommodate existing service at these locations and encouraging connections between routes.

Today, transportation centers are not always located on SEPTA property. By not being on SEPTA property, these "de facto" transportation centers have an uncertain future fate and their capacity and amenities are limited for both customers and operators. In particular, shopping malls are major SEPTA customer destinations, with sufficient space for bus operations and existing rest areas for operators. In Philadelphia, they also tend to be located in places where development transitions from urban to suburban land uses, creating ideal locations to end bus routes on the urban grid, and to begin suburban bus routes.

Similar to DVRPC's recent work looking at a South Philadelphia Transportation Center, this study will look at the needs for a new transportation center, focusing on the vicinity of the Philadelphia Mills as one such existing de facto transportation center. Philadelphia Mills is served by bus routes 20, 50, 67, 84, 129, and 130; some routes layover while others provide through service. On an average weekday these routes combined make 562 trips to Philadelphia Mills and serve over 1,100 customers at Philadelphia Mills bus stops. These routes provide key connections between suburban and city routes, east-west service that feeds bus service on the Roosevelt Boulevard including the Boulevard Direct, directly connect to the Market-Frankford Line at Frankford Transportation Center, and connect City residents to suburban job centers.

Staff will identify a new dedicated facility that considers future provision of service, increasing reliability, and enhancements to transit service. Recommendations will

be both site specific and set principles that can then be applied to transportation centers throughout the service area. This study will consider future transit needs and will dovetail with the Comprehensive Bus Network Redesign that SEPTA is undertaking.

**Tasks:**

1. Form a steering committee of SEPTA staff from multiple departments, the City of Philadelphia, and other stakeholders as needed.
2. Convene Stakeholders to identify general principles for Transportation Centers that meet the physical and operational needs SEPTA requires.
3. Inventory and analyze service on Bus routes 20, 50, 67, 84, 129, and 130 and make recommendations to improve the operations for each route.
4. Inventory baseline conditions of the surrounding roadway and parking lot area around the Philadelphia Mills and assess the best route for buses, pedestrians, bicycles and cars to access a central station area for all bus routes.
5. Develop 2-3 Transportation Center siting alternatives that will improve the ability of this location to increase reliability and enhance transit service. Alternatives will conceptually explore bus routing options, access, and general boarding and layover areas. Collect feedback on alternatives from stakeholders.
6. Develop a site plan for a preferred transportation center that includes design and operational improvements. Site design might include: pedestrian and bicycle access, bicycle parking, passenger drop off, layover areas for buses, boarding areas, wayfinding, SEPTA Key kiosks, passenger furnishings and amenities, rest area facilities for operators, ingress and egress of buses, and permeable/green stormwater management areas. Convene stakeholders to review Transportation Center site plan.
7. Revise Transportation site plan and outline bus operation recommendations.
8. Prepare a final report summarizing the results of the project.

**Products:**

- 1.A technical report detailing the projects findings.

**Beneficiaries:**

SEPTA, the City of Philadelphia, and transit riders in the city and surrounding suburbs.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				
2020	\$150,000			\$30,000	\$120,000
2021	\$0				
2022	\$0				

\*PennDOT Connects



**PROJECT: 20-52-100      Trolley Modernization - Routes 11 and 13**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Betsy Mastaglio

**Project Manager:** Logan Axelson

**Goals:**

SEPTA is preparing for their upcoming trolley vehicle fleet replacement and related infrastructure and operational requirements that will come with it. These changes, called “Trolley Modernization” in short, will complicate service along trolley routes even as it is improved. This study will develop service and operational recommendations to maximize route 11 and 13 service effectiveness to Darby Transportation Center and the boroughs of Darby, Yeadon, and Colwyn.

**Description:**

SEPTA is preparing for a complete replacement of its trolley fleet, Trolley Modernization. More than a simple vehicle replacement, the Trolley Modernization program will fundamentally change the way SEPTA’s eight trolley routes operate. New vehicles will also trigger changes to the trolley system as a whole, including streetscape alterations, construction of new accessible stations, and consolidation of existing stop locations. DVRPC has assisted SEPTA with Trolley Modernization analysis in several projects in recent years.

This project focuses specifically on the portions of trolley routes 11 and 13 in Delaware County. These two routes begin in Center City Philadelphia’s trolley tunnel, providing subway access to the region’s economic and transportation hub, and terminate at Darby Transportation Center (DTC), in Darby Borough. Route 11 passes through Darby and Colwyn boroughs en route to Philadelphia, and Route 13 passes through Darby and Yeadon boroughs en route to Philadelphia. Darby Transportation Center offers connections between trolley routes 11 and 13 and bus routes 113, 114, and 115, three of SEPTA’s most popular suburban bus routes. This makes DTC a critical connection between SEPTA’s urban and suburban transit networks.

Trolley Route 13 has several operational qualities that set it apart from SEPTA’s other trolley routes, requiring special planning attention. Track geometry prevents SEPTA from providing round-trip service between Darby Transportation Center and Center City Philadelphia. As a result, the majority of Route 13 trips terminate at the Yeadon Loop, in Yeadon Borough. The rest end their passenger service just outside Darby Transportation Center before continuing on to the Elmwood Depot storage and maintenance facility. Route 13 also runs on parallel one-way streets through Darby Borough.

Trolley Modernization will require ongoing cooperation with county and municipal officials in communities where SEPTA trolleys operate. While initial Trolley Modernization efforts have introduced the program to local stakeholders, this project

is an opportunity to coordinate at a finer level of detail by identifying optimal station locations, documenting operational constraints related to new trolley vehicles, and recommending service and/or frequency improvements.

**Tasks:**

1. Form a steering committee of representatives from SEPTA, Delaware County, and Darby, Yeadon, and Colwyn Boroughs.
2. Document existing service operations and identify limitations of service based on known trolley modernization impacts. Convene with stakeholders to identify limitations such as: property access or ownership, track and switch constraints, and right-of-way limitations.
3. Develop alternatives for:
  - Locations and footprints for Route 11 and 13 stations in Delaware County;
  - One-way street routing of the Route 13 in Darby Borough;
  - End-of-line service for the Route 13;
  - Overcoming track and switch constraints and Darby Transportation Center; and,
  - Route patterns, service levels, and vehicular needs based upon these alternatives.

**Products:**

1. A white paper summarizing the study’s findings.

**Beneficiaries:**

SEPTA, Delaware County, Darby, Yeadon and Colwyn Boroughs, SEPTA’s trolley passengers

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				
2020	\$100,000			\$20,000	\$80,000
2021	\$0				
2022	\$0				

\*PA Supplemental Transit

## **PROJECT: 20-53-020/025 HPMS and Functional Classification System (PA & NJ)**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Joshua Rocks

**Project Manager:** Charles Henry, 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$200,000	\$200,000			
2020	\$200,000	\$200,000			
2021	\$200,000	\$200,000			
2022	\$200,000	\$200,000			

**PROJECT: 20-53-030 PennDOT District 6-0 Traffic Volume Data**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Joshua Rocks

**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. This program also supports ongoing equipment needs and maintenance costs for permanent bicycle and pedestrian counting stations.

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$300,000				\$300,000
2020	\$300,000				\$300,000
2021	\$300,000				\$300,000
2022	\$300,000				\$300,000

\*PA State Appropriation 582 Funds

**PROJECT: 20-59-700      Member Government Special Studies**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Project Manager:** John Ward

**Goals:**

Improve the efficiency of the region's transportation network by preparing special sub-regional studies to supplement core planning efforts.

**Description:**

Through the Supportive Regional Highway Planning Program (SRHPP) and Transit Support Program (TSP), DVRPC passes through federal highway and transit planning funds to member governments and transit operating agencies to support their core planning functions and 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, and Congestion Management Process. In addition to providing direct support, both programs offer a limited amount of funding for special planning studies to address current areas of need for the recipients. In some cases, the recipients pass back the Special Study funding and request that the studies be conducted by DVRPC staff because of some specific expertise or staff capacity. Detailed individual scopes of work for each Special Study are found in Chapters Three and Four of this document. This project represents the tasks and combined budgets of those Special Studies.

**Tasks:**

1. Camden County Traffic Counting Program.
2. Gloucester County Traffic Counting Program.
3. Mercer County Traffic Counting Program.
4. New Jersey Regional Trail Map
5. Safe Routes to Transit: Morton
6. Rolling License Plate Surveys – PA
7. NJTransit Transit Survey Program
8. Rolling License Plate Surveys - NJ
9. Safe Routes to Transit: Bordentown

**Products:**

1. Technical memo, database, mapping or report for each study.

**Beneficiaries:**

Member governments and other agencies.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				\$0
2020	\$746,200				\$746,200
2021	\$746,200				\$746,200
2022	\$746,200				\$746,200

\* Projects to be defined

**PROJECT: 20-59-701      Carryover and Other Projects**

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**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 as required.

**Description:**

This project represents work that was initiated in FY19 and will carryover into FY20 as well as new projects that come in during the year after the final UPWP has been approved by the DVRPC Board. Each new project that comes in, includes a specific funding source which is additional funding to DVRPC's budget and is presented to the RTC and Board for approval as a Work Program amendment. These projects may include development of traffic forecasts on a specific facility, a grant from a federal agency that supports a federal program, or a grant from a non-profit organization to provide technical services or guidance.

**Tasks:**

1. Conduct studies or provide services as required.

**Products:**

1. Technical memo or report for each study.

**Beneficiaries:**

Member governments and other agencies.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019					
2020	\$776,327				\$776,327
2021					
2022					

\* Projects to be defined





*Photo by Karen Whitaker, DVRPC*

# CHAPTER 3A

## PA Supportive Regional Highway Planning Program (SRHPP)

JANUARY 2019

DELAWARE VALLEY  
 **dvrpc**  
REGIONAL  
PLANNING COMMISSION



## Table of Contents

### Chapter 3A: PA Supportive Regional Highway Planning Program

20-60-010	Bucks County: Supportive Regional Highway Planning Program	239
20-60-020	Chester County: Supportive Regional Highway Planning Program	243
20-60-030	Delaware County: Supportive Regional Highway Planning Program	245
20-60-040	Montgomery County: Supportive Regional Highway Planning Program	247
20-60-050	Philadelphia: Supportive Regional Highway Planning Program	249
20-60-051	City of Philadelphia Traffic Counts	253

#### Table

Table 5: PA Supportive Regional Highway Planning Program	237
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**Table 5: PA Supportive Regional Highway Planning Program**

<b>Core Projects</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2020 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
20-60-010	Bucks County	Supportive Regional Highway Planning	\$84,000	\$21,000	\$105,000
20-60-020	Chester County	Supportive Regional Highway Planning	\$121,600	\$30,400	\$152,000
20-60-030	Delaware County	Supportive Regional Highway Planning	\$60,800	\$15,200	\$76,000
20-60-040	Montgomery County	Supportive Regional Highway Planning	\$126,400	\$31,600	\$158,000
20-60-050	City of Philadelphia Streets Department	Supportive Regional Highway Planning	\$185,200	\$46,300	\$231,500
20-60-051 <sup>1</sup>	City of Philadelphia Traffic Counts	Supportive Regional Highway Planning	\$50,000	\$12,500	\$62,500
<b>Program Total</b>			<b>\$628,000</b>	<b>\$157,000</b>	<b>\$785,000</b>

<sup>1</sup> Project work will be performed by DVRPC Staff. Match will be added to the City of Philadelphia Streets Department Core Agreement



**PROJECT: 20-60-010 Bucks County: Supportive Regional Highway Planning Program**

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**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. Monitor traffic count data.
2. Disseminate transportation information and data.
3. Integrate traffic information into GIS databases. Provide periodic maintenance of these databases.
4. Develop online Transportation-related GIS Interactive Mapping Applications. Provide periodic maintenance of these Mapping Applications.

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 databases and Mapping Applications.
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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$114,195	\$114,195			
2020	\$105,000	\$105,000			
2021	\$105,000	\$105,000			
2022	\$105,000	\$105,000			

\$84,000 Cash - \$21,000 Match



**PROJECT: 20-60-020     Chester County: Supportive Regional Highway Planning Program**

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**Responsible Agency: Chester County Planning Commission**

**Program Coordinator:** Kwan Hui

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$165,313	\$165,313			
2020	\$152,000	\$152,000			
2021	\$152,000	\$152,000			
2022	\$152,000	\$152,000			

\$121,600 Cash - \$30,400 Match

**PROJECT: 20-60-030 Delaware County: Supportive Regional Highway Planning Program**

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**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$82,656	\$82,656			
2020	\$76,000	\$76,000			
2021	\$76,000	\$76,000			
2022	\$76,000	\$76,000			

\$60,800 Cash - \$15,200 Match

**PROJECT: 20-60-040    Montgomery County: Supportive Regional Highway Planning Program**

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**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. Enforce the county comprehensive plan, as well as Walk Montco and Bike Montco plans.

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$171,838	\$171,838			
2020	\$158,000	\$158,000			
2021	\$158,000	\$158,000			
2022	\$158,000	\$158,000			

\$126,400 Cash - \$31,600 Match

**PROJECT: 20-60-050 Philadelphia: Supportive Regional Highway Planning Program**

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**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.

3. Assist in developing project descriptions.
4. 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 various competitive funding programs.
5. Coordinate candidate projects with other city agencies to ensure that transportation capital projects are consistent with overall city and regional goals and objectives.
6. Develop a prioritization of projects and facilities under consideration for inclusion in the Capital Program.
7. Review and comment on the TIP with federal, state and regional agencies.
8. Coordinate city involvement for PennDOT's Twelve-Year Program.
9. Monitor and update the TIP as it relates to county and regional transportation objectives.
10. Coordinate and review projects with implementing agencies, including PennDOT and DVRPC.
11. Review certain "milestone" data for city federal-aid projects and provide updates to PennDOT.
12. Review and coordinate project cost estimates and breakdowns for programming with the PennDOT Program Management Committee (PMC).
13. Monitor funding programs and opportunities, and provide programming information to city officials and legislators.
14. 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 competitive grant awards.

#### 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 facility data and put such information into an easily accessible and usable form.
4. Process 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. Perform technical coordination of studies, plans, committee reports, analyses, etc. concerning the city's highways and highway program.

#### **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. Advancement of high-priority TSMO projects.
6. A plan showing the updated systems.
7. A plan showing any updated transportation facility data, functional class revisions, or other transportation system changes.
8. County project proposals for consideration in next fiscal year's UPWP, if available.
9. Quarterly progress reports, closing report, and invoices.
10. A program TIP document for use by the Commission and others.

#### **Beneficiaries:**

City of Philadelphia, state, region, and public.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$257,249	\$257,249			
2020	\$244,000	\$244,000			
2021	\$244,000	\$244,000			
2022	\$244,000	\$244,000			

\$185,200 Cash, \$58,800 Match (\$46,300 for 20-60-050, \$12,500 for 20-60-051)

**PROJECT: 20-60-051 City of Philadelphia Traffic Counts**

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**Responsible Agency: Delaware Valley Regional Planning Commission**

**Program Coordinator:** Joshua Rocks

**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 city'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:**

1. 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$50,000	\$50,000			
2020	\$50,000	\$50,000			
2021	\$50,000	\$50,000			
2022	\$50,000	\$50,000			



*Photo by Karen Whitaker, DVRPC*

# CHAPTER 3B

## NJ Supportive Regional Highway Planning Program (SRHPP)

JANUARY 2019

 **dvrpc**  
REGIONAL  
PLANNING COMMISSION



## Table of Contents

### Chapter 3B: NJ Supportive Regional Highway Planning Program

20-61-010	Burlington County: Supportive Regional Highway Planning Program	261
20-61-020	Camden County: Supportive Regional Highway Planning Program	265
20-61-030	Gloucester County: Supportive Regional Highway Planning Program	267
20-61-040	Mercer County: Supportive Regional Highway Planning Program	271
20-61-060	City of Camden - Supportive Regional Highway Planning Program	275
20-61-070	Camden County - Traffic Counting Program	277
20-61-080	Gloucester County Traffic Counting Program	279
20-61-090	Mercer County Traffic Counting Program	281
20-61-100	New Jersey Regional Trail Map	283

#### Table

Table 6: NJ Supportive Regional Highway Planning Program	259
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**Table 6: NJ Supportive Regional Highway Planning Program**

<b>Core Projects</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2020 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
20-61-010	Burlington County	Supportive Regional Highway Planning	\$39,755	\$9,939	\$49,694
20-61-020	Camden County	Supportive Regional Highway Planning	\$44,015	\$11,004	\$55,019
20-61-030	Gloucester County	Supportive Regional Highway Planning	\$39,100	\$9,775	\$48,875
20-61-040	Mercer County	Supportive Regional Highway Planning	\$34,130	\$8,532	\$42,662
20-61-060	City of Camden	Supportive Regional Highway Planning	\$24,000	\$6,000	\$30,000
<b>Subtotal</b>			<b>\$181,000</b>	<b>\$45,250</b>	<b>\$226,250</b>
<b>Special Studies</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2020 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
20-61-070 <sup>1</sup>	Camden County/DVRPC	Traffic Counting Program	\$56,000	\$14,000	\$70,000
20-61-080 <sup>2</sup>	Gloucester County/DVRPC	Traffic Counting Program	\$56,000	\$14,000	\$70,000
20-61-090 <sup>3</sup>	Mercer County/DVRPC	Traffic Counting Program	\$56,000	\$14,000	\$70,000
20-61-100 <sup>4</sup>	NJ Regional/DVRPC	New Jersey Regional Trail Map	\$60,000	\$15,000	\$75,000
<b>Subtotal</b>			<b>\$228,000</b>	<b>\$57,000</b>	<b>\$285,000</b>
<b>Program Total</b>			<b>\$409,000</b>	<b>\$102,250</b>	<b>\$511,250</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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: 20-61-010 Burlington County: Supportive Regional Highway Planning Program**

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**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$52,694				\$52,694
2020	\$52,694				\$52,694
2021	\$49,694				\$49,694
2022	\$49,694				\$49,694

\* NJ TIP - DB #X30A - \$39,755 STBGP-STU Cash- \$12,939 Match  
(\$9,939 for 20-61-010 , \$3,000 for 20-61-100)



**PROJECT: 20-61-020 Camden County: Supportive Regional Highway Planning Program**

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**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.

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$72,019				\$72,019
2020	\$72,019				\$72,019
2021	\$69,019				\$69,019
2022	\$69,019				\$69,019

\* NJ TIP - DB #X30A - \$44,015 STBGP-STU Cash- \$28,004 Match (\$11,004 for 20-61-020, \$14,000 for 20-61-070, \$3,000 for 20-61-100)

**PROJECT: 20-61-030 Gloucester County: Supportive Regional Highway Planning Program**

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**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$65,875				\$65,875
2020	\$65,875				\$65,875
2021	\$62,875				\$62,875
2022	\$62,875				\$62,875

\* NJ TIP - DB #X30A - \$39,100 STBGP-STU Cash - \$26,775 Match  
(\$9,775 for 20-61-030, \$14,000 for 20-61-080, \$3,000 for 20-61-100)



**PROJECT: 20-61-040 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. Develop and maintain a master plan for improvements to transportation facilities under County jurisdiction.

2. Coordinate local governments' land use and transportation policies with the regional and state long-range plans.
3. Communicate with the public about the master plan.
4. Review master plans being updated by municipalities to determine their consistency with the county transportation plan and resolve any differences, and ensure alternative modes of transportation are considered and compatible with regional transportation system.
5. Prepare modifications as required to the master plan and present to planning board for public hearing and adoption.
6. Review regional, state and local plans, particularly with respect to long-range plans, as required.
7. 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.
8. Work with regional partners to promote travel demand management, such as ridesharing, van-or carpooling and cycling

#### 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. Manage enterprise GIS to support transportation planning, transportation asset management, and land use planning.
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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$59,662				\$59,662
2020	\$59,662				\$59,662
2021	\$56,662				\$56,662
2022	\$56,662				\$56,662

\* NJ TIP - DB #X30A - \$34,130 STBGP-STU Cash- \$25,532 Match  
(\$8,532 for 20-61-040, \$14,000 for 20-61-090, \$3,000 for 20-61-100)



**PROJECT: 20-61-060 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$33,000				\$33,000
2020	\$33,000				\$33,000
2021	\$30,000				\$30,000
2022	\$30,000				\$30,000

\* NJ TIP - DB #X30A - \$24,000 STBGP-STU - \$9,000 Match (\$6,000 for 20-61-060, \$3,000 for 20-61-100)

**PROJECT: 20-61-070 Camden County - Traffic Counting Program**

---

**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Joshua Rocks

**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. This program also supports ongoing equipment needs and maintenance costs for permanent bicycle and pedestrian counting stations in Camden County.

**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:**

1. 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$56,000				\$56,000
2020	\$56,000				\$56,000
2021	\$56,000				\$56,000
2022	\$56,000				\$56,000

\* NJ TIP - DB #X30A - \$56,000 STBGP-STU

**PROJECT: 20-61-080 Gloucester County Traffic Counting Program**

---

**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Joshua Rocks

**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. This program also supports ongoing equipment needs and maintenance costs for permanent bicycle and pedestrian counting stations in Gloucester County.

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$56,000				\$56,000
2020	\$56,000				\$56,000
2021	\$56,000				\$56,000
2022	\$56,000				\$56,000

\* NJ TIP - DB #X30A - \$56,000 STBGP-STU

**PROJECT: 20-61-090 Mercer County Traffic Counting Program**

---

**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Joshua Rocks

**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.

This program also supports ongoing equipment needs and maintenance costs for permanent bicycle and pedestrian counting stations in Mercer County.

**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$56,000				\$56,000
2020	\$56,000				\$56,000
2021	\$56,000				\$56,000
2022	\$56,000				\$56,000

\* NJ TIP - DB #X30A - \$56,000 STBGP-STU

**PROJECT: 20-61-100 New Jersey Regional Trail Map**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Christopher Linn

**Goals:**

Create a map and GIS database of all existing trail resources in the 4-county New Jersey planning area.

**Description:**

This project will build on DVRPC's existing GIS trail data to develop a comprehensive map of all existing trails in the 4-county south Jersey planning area. The map will focus on existing multi-use trails and existing on-road bicycle facility improvements. The project may or may not include an inventory of existing dirt and earthen trails, depending upon data availability. Proposed off-road trails whose locations are known and well-defined and regional in scope will also be included. The map will not include proposed sub-regional on-road facilities or municipal trails. This mapping effort will expand upon trails currently mapped as part of the "Circuit", which is composed almost exclusively of regionally-significant off-road trail spines.

The project will gather data from county planning partners, existing regional plans and studies, available mapping platforms like Google, and local governments where applicable.

The project will help to integrate the four New Jersey County's existing trails and close gaps across county boundaries. The map would also assist in the creation of a continual trail network throughout the four counties.

**Tasks:**

1. Form a steering committee composed of representatives of the 4-county south Jersey planning area, the Circuit Coalition, and NJDOT.
2. Gather existing baseline information.
3. Ground-truth data in the field and gather additional trail attribute information like width, surface type, and condition.
4. Produce draft paper maps and finalize the inventory.
5. Produce final paper display maps for each county and the region (size and scale to be determined).
6. Build an on-line mapping viewing portal, similar to DVRPC's existing Circuit Trails Google-based on-line map.

**Products:**

1. Trail database with attribute information
2. Final paper display maps
3. On-line mapping application

**Beneficiaries:**

New Jersey counties, NJDOT, Circuit Coalition members, and the general public

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				\$0
2020	\$60,000				\$60,000
2021	\$0				\$0
2022	\$0				\$0

\* NJ TIP - DB #X30A - \$60,000 STBGP-STU



Photo by Meijun Liu, DVRPC

# CHAPTER 4A

## PA Transit Support Program (TSP)

JANUARY 2019

DELAWARE VALLEY  
 **dvrpc**  
REGIONAL  
PLANNING COMMISSION



# Table of Contents

## Chapter 4A: PA Transit Support Program

20-63-001	Bucks County Transit Planning and Programming	291
20-63-002	Chester County Transit Planning and Coordination	293
20-63-003	Delaware County Transit Planning and Coordination	295
20-63-004	Montgomery County Transit Planning and Implementation	297
20-63-005	Philadelphia Transit Planning and Programming	299
20-63-006	Philadelphia Short-Range Planning	301
20-63-007	SEPTA Capital Budgeting, Planning, and Transportation Improvement Program	303
20-63-008	Southeastern Pennsylvania Transit Planning and Technical Assistance - Philadelphia Transit Plan	305
20-63-009	Safe Routes to Transit: Morton	307
20-63-010	Rolling License Plate Surveys (Pennsylvania)	309

**Table**  
Table 7: PA Transit Support Program 289



**Table 7: PA Transit Support Program**

<b>Core Projects</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2020 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
20-63-001	Bucks County	Transit Planning and Programming	\$61,734	\$15,434	\$77,168
20-63-002	Chester County	Transit Planning and Coordination	\$46,069	\$11,517	\$57,586
20-63-003	Delaware County	Transit Planning and Coordination	\$87,504	\$21,876	\$109,380
20-63-004	Montgomery County	Transit Planning and Implementation	\$77,400	\$19,350	\$96,750
20-63-005	Philadelphia Office of Transportation and Infrastructure Systems	Transit Planning and Programming	\$98,535	\$24,633	\$123,168
20-63-006	Philadelphia City Planning Commission	Short-Range Planning	\$119,758	\$29,940	\$149,698
20-63-007	SEPTA	Long-Range Planning/TIP	\$85,000	\$21,250	\$106,250
20-63-008 <sup>1</sup>	DVRPC	Transit Planning Technical Assistance	\$144,000	\$36,000	\$180,000
<b>Subtotal</b>			<b>\$720,000</b>	<b>\$180,000</b>	<b>\$900,000</b>
<b>Special Studies</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2020 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
20-63-009 <sup>2</sup>	Delaware County/DVRPC	Safe Routes to Transit: Morton	\$120,000	\$30,000	\$150,000
20-63-010 <sup>3</sup>	DVRPC	Rolling License Plate Surveys	\$60,000	\$15,000	\$75,000
<b>Subtotal</b>			<b>\$180,000</b>	<b>\$45,000</b>	<b>\$225,000</b>
<b>Program Total</b>			<b>\$900,000</b>	<b>\$225,000</b>	<b>\$1,125,000</b>

<sup>1</sup> Project work will be performed by DVRPC staff to support work on the City Transit Plan – Technical Analysis. Match will be evenly split and added to the OTIS, PCPC, and SEPTA core agreements and will be noted on the project write-up and reflected in the contract.

<sup>2</sup> Project work will be performed by DVRPC staff. Match will be added to the Delaware County core agreement and will be noted on the project write-up and reflected in the contract.

<sup>3</sup> 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: 20-63-001 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$83,596		\$83,596		
2020	\$79,311		\$79,311		
2021	\$77,168		\$77,168		
2022	\$77,168		\$77,168		

\$61,734 Cash - \$17,577 Match  
(\$15,434 for 20-63-001, \$2,143 for 20-63-010)

**PROJECT: 20-63-002    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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$64,014		\$64,014		
2020	\$59,729		\$59,729		
2021	\$57,586		\$57,586		
2022	\$57,586		\$57,586		

\$46,069 Cash - \$13,660 Match  
(\$11,517 for 20-63-002, \$2,143 for 20-63-010)

**PROJECT: 20-63-003 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$124,808		\$124,808		
2020	\$141,523		\$141,523		
2021	\$109,380		\$109,380		
2022	\$109,380		\$109,380		

\$87,504 Cash - \$54,019 Match

(\$21,876 for 20-63-003, \$30,000 for 20-63-009, \$2,143 for 20-63-010,

**PROJECT: 20-63-004    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. Enforce the county comprehensive plan, and WalkMontco and BikeMontco plans.

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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$103,178		\$103,178		
2020	\$98,893		\$98,893		
2021	\$96,750		\$96,750		
2022	\$96,750		\$96,750		

\$77,400 Cash - \$21,493 Match  
(\$19,350 for 20-63-004, \$2,143 for 20-63-010)

**PROJECT: 20-63-005 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$138,596		\$138,596		
2020	\$137,311		\$137,311		
2021	\$123,168		\$123,168		
2022	\$123,168		\$123,168		

\$98,535 Cash - \$38,776 Match  
(\$24,633 for 20-63-005, \$12,000 for 20-63-008,  
\$2,143 for 20-63-010)

**PROJECT: 20-63-006 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 CONNECT: 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.
7. Data collection and technical analysis for existing internal multimodal projects.

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, NACTO, and TRB.
- 4. Review plans and participate in planning efforts of other agencies, including SEPTA, the Streets Department, PennDOT, PATCO, the Central Philadelphia TMA, and University City 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$165,126		\$165,126		
2020	\$163,841		\$163,841		
2021	\$149,698		\$149,698		
2022	\$149,698		\$149,698		

\$119,758 Cash - \$44,083 Match  
(\$29,940 for 20-63-006, \$12,000 for 20-63-008, \$2,143 for 20-63-010)

**PROJECT: 20-63-007 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$121,678		\$121,678		
2020	\$120,393		\$120,393		
2021	\$106,250		\$106,250		
2022	\$106,250		\$106,250		

\$85,000 Cash - \$35,393 Match  
(\$21,250 for 20-63-007, \$12,000 for 20-63-008, \$2,143 for 20-63-010)

**PROJECT: 20-63-008     Southeastern Pennsylvania Transit Planning and  
Technical Assistance - Philadelphia Transit Plan**

---

**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Betsy Mastaglio

**Project Manager:** Amy Bernknopf, Sarah Moran

**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 work undertaken through this program may require the purchase of equipment or services.

**Tasks:**

1. Conduct technical analysis to support development of a new transit plan for the City of Philadelphia. This project will involve collaborating closely with City of Philadelphia staff (OTIS and PCPC) to support the advancement of their Connect: Philadelphia's Strategic Transportation Plan. Development of the new transit plan is expected to coincide with SEPTA's upcoming Comprehensive Bus Network Redesign (CBNR) program. This plan will evaluate and prioritize street-level improvements to transit performance in priority corridors. Staff will provide technical support to the City and SEPTA through Transit First analysis such as: mapping transit dependent communities, making recommendations and ranking priorities for SEPTA's Tiered Frequency Network, and considering capacity changes that may be achieved through recommended treatments. Work will be conducted collaboratively and in support of various and ongoing other City Transit Plan efforts.

**Products:**

1. Planning/policy documents, technical reports, white papers, and/or memorandums with findings and recommendations, as appropriate.

**Beneficiaries:**

Pennsylvania member governments, SEPTA, and the transit-riding public.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$144,000		\$144,000		
2020	\$144,000		\$144,000		
2021	\$144,000		\$144,000		
2022	\$144,000		\$144,000		

**PROJECT: 20-63-009 Safe Routes to Transit: Morton**

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**Responsible Agency:**

**Program Coordinator:** Kevin Murphy

**Project Manager:** Betsy Mastaglio

**Goals:**

To understand and evaluate vulnerable user access to Morton Station, and present prioritized, consensus-driven improvement recommendations.

**Description:**

Building on the TCDI-funded Morton Connects study, This planning study will help to advance identified improvements for possible TIP funding. Focused on Morton Station, the study would explore safe access for vulnerable users (pedestrians, bicyclists, transit riders) within the area, specifically including the intersection of the Media-Elwyn regional rail line crossing, Kedron Avenue, Morton Avenue, and Yale Avenue in downtown Morton. This project will be led by the Office of Transportation Safety with support from DVRPC's Office of Transit, Bicycle, and Pedestrian planning.

**Tasks:**

1. Manage project tasks and schedule; facilitate all meetings.
2. Convene a stakeholder steering committee (e.g.: municipal elected officials, county representatives, transit providers, local residents and/or business community).
3. Conduct an analysis of existing conditions.
4. Conduct crash analysis, gather and consider near miss data, and identify all constraints to safe pedestrian bicyclist access to the station.
5. Hold stakeholder engagement event/meeting.
6. Conduct a SWOT analysis and collaborate with steering committee on specifics.
7. Facilitate a consensus building process to identify recommendations.
8. Develop conceptual pedestrian and bicycle recommendations.
9. Estimate implementation costs where possible, and identify possible funding sources for improvements
10. Produce final report.

**Products:**

1. Meeting materials and summaries
2. Final report.

**Beneficiaries:**

Residents and visitors of Morton and Rutledge boroughs, and the Morton Station transit users.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$0				
2020	\$120,000		\$120,000		
2021	\$0				
2022	\$0				

**PROJECT: 20-63-010 Rolling License Plate Surveys (Pennsylvania)**

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**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Amy Bernknopf

**Project Manager:** Betsy Mastaglio, Thomas Stead

**Goals:**

To understand rider park-and-ride origins at SEPTA stations for planning purposes.

**Description:**

In partnership with SEPTA and PennDOT, DVRPC has a 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. 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 propose, review and confirm locations that are their priorities for data collection and analysis this year.

**Tasks:**

1. Collect, review, and confirm license plate survey locations with SEPTA, PA suburban counties, and City of Philadelphia staff.
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:**

1. 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$80,000		\$80,000		
2020	\$60,000		\$60,000		
2021	\$0				
2022	\$0				



*Photo by Amy Verbofsky, DVRPC*

# CHAPTER 4B

## NJ Transit Support Program (TSP)

JANUARY 2019

DELAWARE VALLEY  
 **dvrpc**  
REGIONAL  
PLANNING COMMISSION



# Table of Contents

## Chapter 4B: NJ Transit Support Program

20-63-020	Burlington County Transit and Ridesharing	317
20-63-021	Camden County: Transit Planning and Programming	319
20-63-022	Gloucester County Transportation Systems Planning & Implementation	321
20-63-023	Mercer County Transit Planning and Programming	323
20-63-024	NJT Transportation Improvement Program and Short Range Planning	325
20-63-025	City of Camden Transit Planning Program	327
20-63-026	New Jersey Transit Survey Program	329
20-63-027	Rolling License Plate Surveys (New Jersey)	331
20-63-028	Safe Routes to Transit: Bordentown	333

**Table**

Table 8: NJ Transit Support Program	315
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**Table 8: NJ Transit Support Program**

<b>Core Projects</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2020 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
20-63-020	Burlington County	Transit & Ridesharing	\$37,392	\$9,348	\$46,740
20-63-021	Camden County	Transit Planning & Programming	\$41,500	\$10,375	\$51,875
20-63-022	Gloucester County	Transportation Systems Planning	\$38,680	\$9,670	\$48,350
20-63-023	Mercer County	Transit Planning & Programming	\$33,284	\$8,321	\$41,605
20-63-024	New Jersey Transit	TIP and Short Range Planning	\$70,744	\$17,686	\$88,430
20-63-025	Camden City	TSP Core Work Program	\$20,800	\$5,200	\$26,000
<b>Subtotal</b>			<b>\$242,400</b>	<b>\$60,600</b>	<b>\$303,000</b>
<b>Special Studies</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2020 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
20-63-026 <sup>1</sup>	NJTRANSIT/ DVRPC	NJTRANSIT: Transit Survey Program	\$78,200	\$19,550	\$97,750
20-63-027 <sup>2</sup>	NJ Regional/ DVRPC	Rolling License Plate Surveys	\$16,000	\$4,000	\$20,000
20-63-028 <sup>3</sup>	Burlington County/ DVRPC	Safe Routes to Transit: Bordentown	\$50,000	\$12,500	\$62,500
<b>Subtotal</b>			<b>\$144,200</b>	<b>\$36,050</b>	<b>\$180,250</b>
<b>Program Total</b>			<b>\$386,600</b>	<b>\$96,650</b>	<b>\$483,250</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Project work will be performed by DVRPC staff. Match will be added to the Burlington County core agreement and will be noted on the project write-up and reflected in the contract.



**PROJECT: 20-63-020 Burlington County Transit and Ridesharing**

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**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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$49,490		\$49,490		
2020	\$59,907		\$59,907		
2021	\$46,470		\$46,470		
2022	\$46,470		\$46,470		

\$37,392 Cash - \$22,515 Match (\$9,348 for 20-63-020, \$667 for 20-63-027, \$12,500 for 20-63-028)

**PROJECT: 20-63-021 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$54,625		\$54,625		
2020	\$52,542		\$52,542		
2021	\$51,875		\$51,875		
2022	\$51,875		\$51,875		

\$41,500 Cash - \$11,042 Match (\$10,375 for 20-63-021, \$667 for 20-63-027)

**PROJECT: 20-63-022 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$51,100		\$51,100		
2020	\$49,017		\$49,017		
2021	\$48,350		\$48,350		
2022	\$48,350		\$48,350		

\$38,680 Cash - \$10,337 Match (\$9,670 for 20-63-022, \$667 for 20-63-027)

**PROJECT: 20-63-023 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. Attend DVRPC Board and Regional Technical Committee (RTC) meetings, RTC Subcommittee meetings, and other meetings with federal, state, regional, and local transportation agencies.
2. Prepare TSP quarterly progress and financial reports.
3. Perform general administrative duties, including liaison and interagency coordination.
4. Review transportation reports and correspondence and provide responses.
5. Respond to information requests, including those from the public.
6. Perform public participation as appropriate.

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 transit specific transportation control measures appropriate for the county and the region in response to the Clean Air Act Amendments of 1990.
5. Ensure that transit services are considered and are compatible with the regional transportation system by reviewing municipal master plans and state, county, and/or

local roadway projects.

6. Work with municipalities, county government, and other appropriate agencies to plan for bicycle and pedestrian improvements that are along or within 5 miles of the existing transit network.

7. Participate in the development and maintenance of DVRPC’s annual Planning Work Program, NJ TIP, TIP Evaluation Criteria, and DVRPC LRP.

8. Participate in CMP project meetings as appropriate.

9. Assist DVRPC with license plate survey data collection at NJTransit park-and-ride lots.

**Task 3: Coordination**

1. Coordinate programs with local, county, state, and regional agencies.

2. Coordinate bi-annual CMAQ flex amounts for county paratransit services.

**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, NJ Transit and NJDOT.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$44,355		\$44,355		
2020	\$42,272		\$42,272		
2021	\$41,605		\$41,605		
2022	\$41,605		\$41,605		

\$33,284 Cash - \$8,988 Match (\$8,321 for 20-63-023, \$667 for 20-63-027)

**PROJECT: 20-63-024 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$110,730		\$110,730		
2020	\$108,647		\$108,647		
2021	\$88,430		\$88,430		
2022	\$88,430		\$88,430		

\$70,744 Cash - \$37,903 Match (\$17,686 for 20-63-024, \$19,550 for 20-63-026, \$667 for 20-63-027)

**PROJECT: 20-63-025 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$28,750		\$28,750		
2020	\$26,667		\$26,667		
2021	\$26,000		\$26,000		
2022	\$26,000		\$26,000		

\$20,800 Cash - \$5,867 Match (\$5,200 for 20-63-025, \$667 for 20-63-027)

**PROJECT: 20-63-026 New Jersey Transit Survey Program**

---

**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Joshua Rocks

**Project Manager:** Matthew Gates

**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 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, to design both the sampling plan and the survey instrument, and survey agent schedules. 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 2019.
2. Survey selected NJT Bus routes.
3. Enter and aggregate the data in accordance with NJT guidance.
4. Conveyance of the finished data set to NJT in an agreed upon electronic format

**Products:**

1. Data-base of survey results.

**Beneficiaries:**

New Jersey Transit, municipalities, and commuters.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$78,200		\$78,200		
2020	\$78,200		\$78,200		
2021	\$78,200		\$78,200		
2022	\$78,200		\$78,200		

**PROJECT: 20-63-027 Rolling License Plate Surveys (New Jersey)**

---

**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Amy Bernknopf

**Project Manager:** Betsy Mastaglio, Thomas Stead

**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/DMV, 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 no 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$16,000		\$16,000		
2020	\$16,000		\$16,000		
2021	\$16,000		\$16,000		
2022	\$16,000		\$16,000		

**PROJECT: 20-63-028 Safe Routes to Transit: Bordentown**

---

**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Betsy Mastaglio

**Project Manager:** Cassidy Boulan

**Goals:**

Assist the City of Bordentown in improving active transportation connections throughout the city, and prioritizing access to the Bordentown RiverLINE station (first- and last-mile connections). The project will identify candidate bicycle and pedestrian projects that improve citywide connections to the Bordentown station, identify a prioritization of implementation, and furnish the City with significant project information so as to assist in the preparation of grant applications.

**Description:**

This project is an expanded version of technical assistance provided through DVRPC's Safe Routes to Transit (SRTT) program offered for New Jersey counties that supports the expansion of active transportation access to NJ Transit and PATCO (DRPA) rail stations. Like DVRPC's previous Safe Routes to Transit project approaches, this project will focus on quick but impactful implementation strategies to improve bicycle and pedestrian access to transit. To that end, the project will provide sufficient project details to prepare grant applications to fund design and construction to implement recommendations.

Typically these SRTT projects are concentrated on near-term recommendations within a few blocks of a station. This project will expand the study area to include key access along corridors that provide connections to the train station, such as along Park, Crosswicks, and Elizabeth streets and at the intersection of US 130 and US 206. The project team will work with stakeholders to identify the most critical gaps in safe access that can advance quickly because they can be part of an existing capital plan or are suitable for competitive grant funding.

DVRPC will work with the City of Bordentown, Burlington County, and NJ Transit to identify critical safety improvements for bicycle and pedestrian access to the station. Potential tasks include: existing conditions inventory and documentation, conceptual design, stakeholder coordination, design recommendations, cost estimates, and implementation steps. Project deliverables will support a future application for upcoming funding opportunities, and/or help set priorities within their capital programs.

Completion of this project may require the purchase of equipment or services. This project will also receive funding and staff support as necessary from the Bicycle and Pedestrian Planning Program (20-52-020).

### **Tasks:**

1. Conduct an existing conditions analysis including: the street connectivity between the station and adjacent land uses, crash analysis with a focus on those involving pedestrians and cyclists, locations of existing and proposed destinations, and gaps in the sidewalk network.
2. Convene a group of stakeholders including NJ Transit, the City of Bordentown, Burlington County, and other identified stakeholders to identify the most critical corridors and conflict areas for bicyclists and pedestrians throughout the city. Determine up to three (3) locations (corridors or intersections) upon which to focus recommendations.
3. For each of the (up to 3) selected locations, develop alternatives to strengthen the physical and perceptual connectivity between the station and its surrounding community that focuses on short-term, low-cost scenarios, including elements such as:
  - Improved pedestrian and bicycle accommodations.
  - Informational and directional signage to and from the station.
  - Other improvements as appropriate.
4. Coordinate with DVRPC Project Implementation staff on potential funding programs for recommended concepts and review programmatic requirements for those programs with stakeholders.
5. Convene stakeholders to review alternatives and potential funding for each of the selected locations.
6. Document recommendations for short-term implementation, scaled and tailored into discrete projects by location/corridor into stakeholder capital programs or for discretionary funding rounds found to be appropriate and satisfactory to stakeholders.
7. Outline next steps including projects for engineering design, capital programming, and preparation of grant applications.

### **Products:**

A technical report or memorandums documenting the project's findings and recommendations.

### **Beneficiaries:**

The City of Bordentown, Burlington County, NJ Transit, River LINE commuters, and pedestrians and bicyclists in Bordentown.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$50,000		\$50,000		
2020	\$50,000		\$50,000		
2021	\$0				
2022	\$0				





*Photo by Karin Morris, DVRPC*

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# CHAPTER 5

## Other Member Government Projects

JANUARY 2019





# Table of Contents

## Chapter 5: Other Member Government Projects

20-53-300	PA/NJ Regional GIS Implementation Coordination	341
20-62-000	New Jersey Local Concept Development (2-year)	343
20-64-000	New Jersey Regional Signal Retiming Initiative Project (2-year)	345



**PROJECT: 20-53-300 PA/NJ Regional GIS Implementation Coordination**

---

**Responsible Agency: Delaware Valley Regional Planning Commission**

**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 continues to be developed and enhanced by integrating data from both DOTs and member governments. Each planning partner will be asked to contribute transportation data as needed. Updates to this database and subsequent data sharing are critical to continued effective decision-making throughout the planning process. 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$300,000				\$300,000
2020	\$300,000				\$300,000
2021	\$300,000				\$300,000
2022	\$300,000				\$300,000

\* PA TIP - MPMS #48202 - \$150,000 STU/Toll Credit Match  
NJ TIP - DB #X30A - \$150,000 STBGP-STU

**PROJECT: 20-62-000 New Jersey Local Concept Development (2-year)**

---

**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** John Coscia

**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. Considerable Coordination among parties requires a 3-year cycle for expenditure of these funds.

Current/New projects for Concept Development include:

1. Trenton Transit Center Circulation Improvement (Trenton).
2. Mill Street Bridge Rehabilitation/Replacement (Burlington).
3. Broadway Roadway Improvements (Camden)
4. 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:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2019	\$1,500,000				\$1,500,000
2020	\$430,000				\$430,000
2021	\$430,000				\$430,000
2022	\$430,000				\$430,000

\* NJ TIP - DB #X30A - \$430,000 STBGP-STU

**PROJECT: 20-64-000 New Jersey Regional Signal Retiming Initiative Project (2-year)**

---

**Responsible Agency:** Delaware Valley Regional Planning Commission

**Program Coordinator:** Christopher King

**Project Manager:** Paul Carafides

**Goals:**

Reduce congestion and improve air quality by optimizing progression on signalized 500 and 600 routes in DVRPC's New Jersey counties.

**Description:**

Traffic signals play an important role in the transportation network, and county and local arterial roadways are increasingly being called upon to carry more users. FHWA estimates that many signals on these arterials could be improved by updating equipment or by simply adjusting and updating the timing plans. Outdated or poor traffic signal timing accounts for a significant portion of traffic delay on arterials and traffic signal retiming is one of the most cost effective ways to improve traffic flow and is one of the most basic strategies to help mitigate congestion, improve the mobility and safety of the street system, and contribute environmental benefits. This type of improvement also promotes an integrated corridor management approach, which looks at corridors as multimodal systems and makes operational decisions for the benefit of the corridors as a whole, regardless of who owns the signals.

The New Jersey Regional Signal Retiming Initiative Project will be used to make improvements to the transportation network by optimizing select traffic signal systems on signalized 500 and 600 routes in DVRPC's New Jersey counties. The chosen consultant will make improvements based on traffic data, observed conditions, and input from stakeholders. Implementation of the proposed timing plans is included with this project, but hardware upgrades are not. After implementation, signal system owner-operators will be responsible for maintaining the timing plan and implementing related physical improvements, if recommended.

**Tasks:**

1. Form project teams for selected corridors.
2. Perform data acquisition and analysis.
3. Develop proposed signal timing plans.
4. Perform "before" and "after" analyses.
5. Implement signal timing plans.
6. Project management.





*Photo by Jesse Strangfeld, DVRPC*

# CHAPTER 6

## No-Cost Time Extension Projects

JANUARY 2019

 **dvrpc**  
REGIONAL  
PLANNING COMMISSION



# Table of Contents

## Chapter 6: No-Cost Time Extension Projects

Introduction	351
--------------	-----

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### Table

Table 9: NJDOT Initial No-Cost Time Extension List	351
--	-----

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## Introduction

This chapter contains a summary table of projects relating to local concept development and other planning studies that were initiated in a previous fiscal year, are on-going, and are expected to be carried over into FY2020. These projects are funded by NJDOT for consultant work on new planning studies that are prioritized and selected by the New Jersey member governments. DVRPC staff provides administrative support including: consultant selection, partner coordination and project management to insure the project objectives are met timely and within budget.

**Table 9: NJDOT Initial No-Cost Time Extension List\***

1/5/2019

Project Number	Project Title	Task Order Number	Federal Funding Agreement	Funding	Current Task Order End Date	Requested Task Order End Date
17-62-001	HSIP LCD Mt. Ephraim Ave in City of Camden	PL-DV-17-01	MS3EC00S938	300,000	6/30/2019	6/30/2020
17-62-100	NJ Local Concept Development	PL-DV-17-01	Z230C00S938	430,000	6/30/2019	6/30/2020
18-64-000	NJ Regional Signal Retiming Initiative	PL-DV-18-01	M400D00S072	350,000	6/30/2019	6/30/2020

\*Task orders from prior years that will continue into FY2020.





*Photo by Greg Krykewycz, DVRPC*

# APPENDIX

## Acronyms

JANUARY 2019



# Acronyms

## Commonly Used Terms in DVRPC's Regional Planning Process

AADB – Annual Average Daily Bicycles

AADP - Annual Average Daily Pedestrians

AADT - Annual Average Daily Traffic

AASHTO – American Association of State Highway and Transportation Officials

AB Model – Activity-Based Model

ACS – American Community Survey

ACT - American Communities Survey

ADA – Americans with Disabilities Act

APTA – American Public Transportation Association

AQA – Air Quality Action

AQP – Air Quality Partnership

ATR – Automatic Traffic Recorder

AV – Autonomous Vehicle

AWDT – Average Weekday Daily Traffic

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

CBNR – Comprehensive Bus Network Redesign

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

CZAC – Coastal Zone Advisory Committee

CZM – Coastal Zone Management

DCA – Department of Community Affairs

DCTMA – Delaware County Transportation Management Association

DECZ – Delaware Estuary Coastal Zone

DEP – Department of Environmental Protection

DOT – Department of Transportation

DRPA – Delaware River Port Authority

DRWI – Delaware River Watershed Initiative

DVGMTF – Delaware Valley Goods Movement Task Force

ECG – East Coast Greenway

EDD – Economic Development District

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

FEMA – Federal Emergency Management Agency

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

HAV – Highly Autonomous Vehicle

HCTF – Healthy Communities Task Force

HDV – Heavy-duty Diesel Vehicle

HOV – High Occupancy Vehicle

HPMS – Highway Performance Monitoring System

HSIP – Highway Safety Improvement Program

HSM – Highway Safety Manual

HUD – US Department of Housing and Urban Development

ICG – Interagency Consultation Group

ICM – Integrated Corridor Management

IDRuM – Interactive Detour Route Mapping

IMTF – Incident Management Task Force

IPD – Indicators of Potential Disadvantage

IREG – Information Resources Exchange Group

ITE – Institute of Transportation Engineers

ITS – Intelligent Transportation Systems

JARC – Job Access Reverse Commute

LCD – Local Concept Development

LED – Light Emitting Diode

LEED – Leadership in Energy and Environmental Design

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 21<sup>st</sup> 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

NACTO – National Association of City Transportation Officials

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

NJBPU – New Jersey Board of Public Utilities

NJCRC – New Jersey Coastal Resilience Collaborative

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 Sustainability

PA DCED – PA Department of Community and Economic Development

PA DCNR – Pennsylvania Department of Conservation and Natural Resources

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

POA – Point of Access

PPA – Preliminary Preferred Alternative

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

RSLPP – Regional Streetlight Procurement Program

RSTF – Regional Safety Task Force

RTAC – Regional Transit Advisory Committee

RTC – Regional Technical Committee

RTSAP – Regional Transportation Safety Analysis and 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

SJTA – South Jersey Transportation Authority

SJTPO – South Jersey Transportation Planning Organization

SME – Subject Matter Experts

SOS – Strategies for Older Suburbs

SOV – Single Occupant Vehicle

SRHPP – Supportive Regional Highway Planning Program

SRTS – Safe Routes to School

SRTT – Safe Routes to Transit

STIP - State Transportation Improvement Program

STOPS – Simplified Trips-On-Projects Software

STP – Surface Transportation Program

STU – STP Funds Allocated to Urban Areas

SVC – Stored Value Card

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

TPM – Transportation Performance Management

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 Traveled



# Fiscal Year 2020 Unified Planning Work Program

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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.

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**Abstract:**

This document contains all of the projects and related funding for FY 2020 as passed by the DVRPC Board in January 2019.

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# FY 2020 PLANNING WORK PROGRAM

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