



JUNE 2022

FISCAL YEAR 2023

# Unified Planning Work Program



57 YEARS OF SERVICE | SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS





### **The Delaware Valley Regional Planning Commission**

is the federally designated Metropolitan Planning Organization for the Greater Philadelphia region, established by an Interstate Compact between the Commonwealth of Pennsylvania and the State of New Jersey. Members include Bucks, Chester, Delaware, Montgomery, and Philadelphia counties, plus the City of Chester, in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer counties, plus the cities of Camden and Trenton, in New Jersey.

DVRPC serves strictly as an advisory agency. Any planning or design concepts as prepared by DVRPC are conceptual and may require engineering design and feasibility analysis. Actual authority for carrying out any planning proposals rest solely with the governing bodies of the states, local governments or authorities that have the primary responsibility to own, manage or maintain any transportation facility.



**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 mandates 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 usually be made available in alternative languages and formats, if requested. DVRPC's public meetings are always held in ADA-accessible facilities, and held in transit-accessible locations whenever possible. Translation, interpretation, or other auxiliary services can be provided to individuals who submit a request at least seven days prior to a public meeting. Translation and interpretation services for DVRPC's projects, products, and planning processes are available, generally free of charge, by calling (215) 592-1800. All 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 must 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.

FISCAL  
YEAR  
2023

# Unified Planning Work Program

## DVRPC MEMBER GOVERNMENTS

COMMONWEALTH OF PENNSYLVANIA

STATE OF NEW JERSEY

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

NEW JERSEY DEPARTMENT OF TRANSPORTATION

PENNSYLVANIA GOVERNOR'S POLICY OFFICE

NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS

BUCKS COUNTY

BURLINGTON COUNTY

CHESTER COUNTY

CAMDEN COUNTY

DELAWARE COUNTY

GLOUCESTER COUNTY

MONTGOMERY COUNTY

MERCER COUNTY

CITY OF CHESTER

CITY OF CAMDEN

CITY OF PHILADELPHIA

CITY OF TRENTON



190 N Independence Mall West  
8th Floor  
Philadelphia, PA 19106-1520  
215.592.1800 | fax: 215.592.9125  
[www.dvrpc.org](http://www.dvrpc.org)



---

January 27, 2022

On behalf of the Delaware Valley Regional Planning Commission (DVRPC), we are pleased to present the Fiscal Year 2023 Unified Planning Work Program (UPWP) as adopted by the DVRPC Board on January 27, 2022.

This document details work to be completed by DVRPC and our member governments during FY 2023, which runs from July 1, 2022 through June 30, 2023. As the federally designated Metropolitan Planning Organization (MPO) 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. As new regulations and guidance for MPOs are issued from the November 2021 Infrastructure Investment and Jobs Act, DVRPC will update the UPWP, as needed.

The planning activities identified in the FY2023 UPWP allow DVRPC to address a variety of issues in our diverse region. Key issues for the Commission in FY 2023 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 equity. A continuing priority for the Commission in FY 2023 is the enhanced engagement with our stakeholders and general public on the implementation of our long-range plan, the *Connections 2050 Plan for Greater Philadelphia*.

The Commission believes that the FY 2023 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.

**Lou Capelli**  
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 2023 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 2023 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 2022 TIP for New Jersey and the FY 2021 TIP for Pennsylvania as required.
3. Authorizes and directs Barry Seymour, Executive Director, to negotiate the final details of the Board approved and adopted Fiscal Year 2023 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 2023 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 2023 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 2023 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 27th day of January, 2022  
by the Board of the Delaware Valley  
Regional Planning Commission.

I certify that this is a true and correct copy of Resolution No. B-FY22-004.



---

Renee Wise, Recording Secretary

# Master Table of Contents

Chapter 1: Introduction	3
Chapter 2A: DVRPC Program Area Descriptions	43
Chapter 2B: DVRPC Project Descriptions	161
Chapter 3A: PA Supportive Regional Highway Planning Program (SRHPP)	257
Chapter 3B: NJ Supportive Regional Highway Planning Program (SRHPP)	281
Chapter 4A: PA Transit Support Program (TSP)	313
Chapter 4B: NJ Transit Support Program (TSP)	341
Chapter 5: Other Member Government Projects	363
Chapter 6: Continuing Projects	381

## Tables

Table 1: Funding Summary	20
Table 2: Project Funding by Source	21
Table 3: FAST Act Planning Factors	39
Table 4: Long Range Plan Key Principles	40
Table 5: MPO Regional Planning Process Requirement Milestones	41
Table 6: PA Supportive Regional Highway Planning Program	261
Table 7: NJ Supportive Regional Highway Planning Program	285
Table 8: PA Transit Support Program	317
Table 9: NJ Transit Support Program	345
Table 10A: NJDOT Initial No Cost Time Extension List	385
Table 10B: NJDOT Multi-Year Projects	386

## Appendices

Appendix A: NJDOT Funding	A-1
Appendix B: Acronyms	B-1
Appendix C: Approved Work Program Amendments	C-1





CHAPTER 1

# Introduction



# Table of Contents

## Chapter 1: Introduction

Introduction	7
Planning Priorities Facing the Region	8
UPWP Development Process	8
UPWP Document Organization	9
Planning Emphasis Areas	9
Federal Legislation Requirements	15
Coordination with Member Governments and Other Planning Partners	16
Supportive Regional Highway Planning Program (SRHPP), Transit Support Program (TSP), and Geographic Information System (GIS) Pass-Through Funding	17
UPWP Budget and Funding	18
Agency Roles and Responsibilities	23
DVRPC's Working Committees	28
UPWP Program Areas	29
UPWP Linkages	38

### Tables

Table 1: Funding Summary	20
Table 2: Project Funding by Source	21
Table 3: FAST Act Planning Factors	39
Table 4: Long Range Plan Key Principles	40
Table 5: MPO Regional Planning Process Requirement Milestones	41



# Delaware Valley Regional Planning Commission FY 2023 Unified Planning Work Program

## Introduction

The FY 2023 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, 2022 through June 30, 2023. 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. For MPOs such as DVRPC with a population greater than 200,000, a designation of Transportation Management Area (TMA) is assigned. This designation brings with it additional planning requirements. The Delaware Valley Regional Planning Commission (DVRPC) is the federally-designated TMA 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 2023 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 2023 Work Program focused on the following topics: improving the effectiveness of and access to public transit, Transportation Systems Management and Operations, bicycle and pedestrian infrastructure improvements, transportation/land use connections, freight planning, collection of data to enable data-driven analyses, as well as housing, climate change, resiliency, air quality, and healthy communities. These planning priorities track closely with the FAST Act Planning Factors as well as the State Departments of Transportation (DOT's) emphasis areas. During the time that this UPWP was being drafted, the Infrastructure Investment and Jobs Act (IIJA), which reauthorizes the nation's surface transportation legislation (as well as other infrastructure), was signed by the President. Since regulations and guidance for MPOs' development of UPWPs is not yet available from the IIJA, this FY23 UPWP will continue to follow the current regulations and guidelines under the FAST Act, and the FAST Act will continue to be referenced. DVRPC will update the UPWP, as needed, when new regulations, guidelines, and funding for UPWPs become available.

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.

## **UPWP 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 prepare 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.

## **UPWP Document Organization**

The FY 2023 Unified Planning Work Program is divided into six 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 2023. 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 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. Chapter Six provides a summary of New Jersey Transportation Improvement Program (NJ TIP) -funded projects that span over multiple fiscal years due to the scope of work, consultant selection process, and extent of involvement required from various NJ member governments and municipalities. Appendix A contains Schedule 1 which provides a detailed breakdown of funding sources from New Jersey. Appendix B contains a list of acronyms commonly used in DVRPC's regional planning process.

## **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 (PEAs) as identified by our federal and state partners. Planning activities identified in this document strive to incorporate the requirements of the FAST Act, where applicable. New Planning Emphasis Areas were announced by FHWA and FTA in January of 2022, after the FY23 UPWP was drafted. In issuing the new PEAs, the federal agencies recognized the variability of work program development update cycles, and encouraged MPOs to incorporate the new PEAs into the next update cycle of their UPWPs. Although the new PEAs were issued as the draft UPWP was completing its public comment period, DVRPC is well-positioned to address them in FY23 and beyond. Examples of the previous Planning Emphasis Areas that the UPWP was crafted to address are below, followed by a summary of the new PEAs.

- 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 databases 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
- Provide opportunities to develop and complete the East Coast Greenway and Circuit Trails network
- 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.
- Continue to champion truck parking improvements throughout the state.
- Continue to advance rail freight projects, connectivity solutions, and planning initiatives: specifically, enhance regional connectivity in South Jersey through New Jersey and Pennsylvania.
- Investigate the impacts of increased goods delivery from on-line sources with regard to land use and transportation.

- Improve safety as it regards freight related access to warehouses and industrial parks for trucks as well as employees.
- Maximize opportunities for Complete Streets implementation and consider adoption of a Complete Streets Policy.
- 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.
- Invest in compliance and adaptation of Intelligent Transportation Systems (ITS) Regional Architecture in all pertinent and applicable projects.
- Improve traffic operations through Intelligent Transportation System 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 New Jersey Department of Transportation's (NJDOT's) Complete Team, institutionalize an improved process for initiating mobility and freight improvements with an updated, coordinated and streamlined approach to developing and vetting problem statements.
- Implement actions to assist NJDOT Division of Local Aid and Economic Development in expanding outreach and assistance to local public agencies to foster improved 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 and work with NJDOT and NJ TRANSIT in the development of the Statewide Long-Range Transportation Plan.
- 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.
- Continue programs that support communities as they initiate or expand work on transit-oriented development (TOD).

### **New 2022 Planning Emphasis Areas**

#### *Tackling the Climate Crisis – Transition to a Clean Energy, Resilient Future*

Transportation plans and infrastructure investments should help achieve the national greenhouse gas reduction goals of 50-52 percent below 2005 levels by 2030, and net-zero emissions by 2050, and increase resilience to extreme weather events and other disasters resulting from the increasing effects of climate change. The transportation planning process should be used to accelerate the transition toward electric and other alternative fueled vehicles, plan for a sustainable infrastructure system that works for all users, and undertake actions to prepare for and adapt to the impacts of climate change. Appropriate Unified Planning Work Program work tasks could include identifying the barriers to and opportunities for deployment of fueling and charging infrastructure; evaluating opportunities to reduce greenhouse gas emissions by reducing single-occupancy vehicle trips and increasing access to public transportation, shift to lower emission modes of transportation; and identifying transportation system vulnerabilities to climate change impacts and evaluating potential solutions.

#### *Equity and Justice<sup>40</sup> in Transportation Planning*

Federal, state, and regional partners and providers of public transportation should advance racial equity and support for underserved and disadvantaged communities. Ensuring public involvement in the planning process will help plans and strategies reflect various perspectives, concerns, and priorities from impacted areas. The following strategies are encouraged: (1) improve infrastructure for non-motorized travel, public transportation access, and increased public transportation service in underserved communities; (2) plan for the safety of all road users, particularly those on arterials, through infrastructure improvements and advanced speed management; (3) reduce single-occupancy vehicle travel and associated air pollution in communities near high-volume corridors; (4) offer reduced public transportation fares as appropriate; (5) target demand-response service towards communities with higher concentrations of older adults and those with poor access to essential services; and (6) consider equitable and sustainable practices while developing transit-oriented development including affordable housing strategies and consideration of environmental justice populations.

### *Complete Streets*

Federal, state, and regional partners and providers of public transportation should review current policies, rules, and procedures to determine their impact on safety for all road users. This effort should work to include provisions for safety in future transportation infrastructure, particularly those outside automobiles. A complete street is safe, and feels safe, for everyone using the street. Partners should plan, develop, and operate streets and networks that prioritize safety, comfort, and access to destinations for people who use the street network, including pedestrians, bicyclists, transit riders, micro-mobility users, freight delivery services, and motorists. The goal is to provide an equitable and safe transportation network for travelers of all ages and abilities, including those from marginalized communities facing historic disinvestment. This vision is not achieved through a one-size-fits-all solution – each complete street is unique and developed to best serve its community context and its primary role in the network.

### *Public Involvement*

Early, effective, and continuous public involvement brings diverse viewpoints into the decision making process. Partners should increase meaningful public involvement in transportation planning by integrating Virtual Public Involvement (VPI) tools into the overall public involvement approach while ensuring continued public participation by individuals without access to computers and mobile devices. The use of VPI broadens the reach of information to the public and makes participation more convenient and affordable to greater numbers of people. Virtual tools provide increased transparency and access to transportation planning activities and decision making processes. Many virtual tools also provide information in visual and interactive formats that enhance public and stakeholder understanding of proposed plans, programs, and projects. Increasing participation earlier in the process can reduce project delays and lower staff time and costs.

*Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DOD) Coordination*  
Partners should coordinate with representatives from DOD in the transportation planning and project programming process on infrastructure and connectivity needs for STRAHNET routes and other public roads that connect to DOD facilities. According to the Declaration of Policy in 23 U.S.C. 101(b)(1), it is in the national interest to accelerate construction of the Federal-aid highway system, including the Dwight D. Eisenhower National System of Interstate and Defense Highways, because many of the highways (or portions of the highways) are inadequate to meet the needs of national and civil defense. The DOD's facilities include military bases, ports, and depots. The road networks that provide access and connections to these facilities are essential to national security. The 64,200-mile STRAHNET system consists of public highways that provide access, continuity, and emergency transportation of personnel and equipment in times of peace and war. It includes the entire 48,482 miles of the Dwight D. Eisenhower National System of Interstate

and Defense Highways and 14,000 miles of other non-Interstate public highways on the National Highway System. The STRAHNET also contains approximately 1,800 miles of connector routes linking more than 200 military installations and ports to the primary highway system. The DOD's facilities are also often major employers in a region, generating substantial volumes of commuter and freight traffic on the transportation network and around entry points to the military facilities. Stakeholders are encouraged to review the STRAHNET maps and recent Power Project Platform (PPP) studies. These can be a useful resource in the State and MPO areas covered by these route analyses.

#### *Federal Land Management Agency (FLMA) Coordination*

Partners should coordinate with FLMAs in the transportation planning and project programming process on infrastructure and connectivity needs related to access routes and other public roads and transportation services that connect to Federal lands. Through joint coordination, the State DOTs, MPOs, Tribal Governments, FLMAs, and local agencies should focus on integration of their transportation planning activities and develop cross-cutting State and MPO long range transportation plans, programs, and corridor studies, as well as the Office of Federal Lands Highway's developed transportation plans and programs. Agencies should explore opportunities to leverage transportation funding to support access and transportation needs of FLMAs before transportation projects are programmed in the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP).

#### *Planning and Environment Linkages (PEL)*

Partners should implement PEL as part of the transportation planning and environmental review processes. The use of PEL is a collaborative and integrated approach to transportation decision making that considers environmental, community, and economic goals early in the transportation planning process, and uses the information, analysis, and products developed during planning to inform the environmental review process. PEL leads to interagency relationship building among planning, resource, and regulatory agencies in the early stages of planning to inform and improve project delivery timeframes, including minimizing duplication and creating one cohesive flow of information. This results in transportation programs and projects that serve the community's transportation needs more effectively while avoiding and minimizing the impacts on human and natural resources.

#### *Data in Transportation Planning*

Partners should incorporate data sharing and consideration into the transportation planning process, because data assets have value across multiple programs. Data sharing principles and data management can be used for a variety of issues, such as freight, bike and pedestrian planning, equity analyses, managing curb space, performance management,

travel time reliability, connected and autonomous vehicles, mobility services, and safety. Developing and advancing data sharing principles allows for efficient use of resources and improved policy and decision making at the State, MPO, regional, and local levels for all parties.

## 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/Infrastructure Investment and Jobs Act and the Clean Air Act Amendments of 1990 (CAAA). The Infrastructure Investment and Jobs Act bill was passed by the Senate in summer of 2021, and by the House and signed into law by the President in November 2021, and includes a complete transportation reauthorization. The IJJA is a \$1.2 trillion bill that reauthorizes the nation's surface transportation, drinking water, and wastewater legislation and dedicates billions more to programs in transportation, energy transmission, resilience, broadband, and other areas. Many of the Program Areas and Projects set forth in this UPWP work directly to continue the implementation of past reauthorizations, including MAP 21 and the FAST Act, as well as the new IJJA. However, as noted earlier, the FY23 UPWP will continue to follow the current federal regulations and guidelines for MPOs under the FAST Act until IJJA regulations and guidelines for UPWPs become available.

Under the FAST Act 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, 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**.
- 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 (FHWA) and the Federal Transit Administration (FTA) 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 site-visit portion of the next federal certification review is expected to be conducted in the Fall of 2022.

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 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 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 Pennsylvania Department of Transportation (PennDOT) Connects Program and continues energy, climate change and resiliency initiatives in both states that include coordination, analyses, management, tool development, facilitation of joint procurement purchases for energy conservation, 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), Transit Support Program (TSP), and Geographic Information System (GIS) Pass-Through Funding**

In order to support its member governments' participation in the regional planning process, DVRPC passes federal funds to those partners to develop and maintain their planning programs and data as well as to participate in the region's key planning efforts such as development of the Transportation Improvement Program (TIP), Long-Range Plan, Congestion Management Process, Transportation Performance Management activities as well as other regional planning efforts. During FY23, the SRHPP programs in Pennsylvania and New Jersey will be funded by their respective TIPs. The funding source for the PA SRHPP will be the urban allocation of the Surface Transportation Program (STP/STU), while the NJ SRHPP will be funded with funds from the Surface Transportation Block Grant Program (STBGP). Both the PA TSP and the NJ TSP will be funded from DVRPC's allocation of formula based federal Metropolitan Planning (PL) funds. In addition to their core planning functions, the SRHPP and the TSP programs offer a limited amount of funding for

special planning studies to address current areas of need for member governments. DVRPC also passes federal funds to member governments which enables them to expand their GIS capability as necessary to maintain a level of technical sophistication that guarantees interoperability and compatibility among the partners across the region. Both the PA and NJ GIS Programs are funded from their respective TIPs.

SRHPP eligible activities include tasks related to regional planning coordination, and meetings for programs such as the TIP, Long-Range Plan, Congestion Management Process, Transportation Operations Master Plan, and Regional Transportation Safety Action Plan. Detailed scopes of work for each sub-recipient in the SRHPP are found in Chapter Three of this Unified Planning Work Program. Scopes of work may vary but 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 for programs such as TIP, Long-Range Plan, and Congestion Management Process. The detailed scopes for each sub-recipient that receives TSP funds are found in Chapter Four of this Unified Planning Work Program. Scopes vary but must adhere to the comprehensive planning, programming, monitoring, and coordination of transit services within a jurisdiction.

GIS eligible activities include tasks related to the use of GIS in transportation planning including upgrading capabilities and developing and sharing transportation data. A detailed scope is developed for each organization but it must adhere to the project description found in Chapter Five of this Unified Planning Work Program. Scopes may vary to some degree but tasks must relate to the comprehensive planning, programming, and monitoring to promote information sharing and maintenance of regional transportation GIS data.

## **UPWP Budget and Funding**

The total operating budget for the FY2023 Unified Planning Work Program is \$22,090,950 which remains at the same level compared with the operating budget of \$22,103,460 in FY 2022 Unified Planning Work Program. The estimated revenue and funding amount is expected to remain at the same level as FY2022 while more administrative tasks will be taken on by DVRPC staff due to expanded passthrough programs. Total pass-through funding for member governments in FY 2023 is \$11,729,150, nearly doubling the pass-through funding of \$6,392,000 in FY 2022. The increase in pass-through funding is driven by newer programs requested by the local member governments such as Travel Demand Management (TDM), Transportation Travel Options (TOP) Program, and Camden County Guide Rails. Additionally, DVRPC continues to manage the Transportation and Community Development Initiative (TCDI) program along with the New Jersey Local Concept Development Project in FY2023.

In addition to the annual formula planning funds allocated by the Pennsylvania Department of Transportation and New Jersey Department of Transportation, the Commission strives to seek additional competitive funds from many other sources to support the planning activities and programs. The funds 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 (FAA) Funding
- PA/NJ Transportation Improvement Program Funds
- Member Government Contributions
- PennDOT Supplemental Funding
- PennDOT Connects (State Planning and Research) Funding
- PennDOT State Funds
- PA Department of Environmental Protection (PADEP) Funding
- DVRPC Local Initiatives
- William Penn Foundation Grants

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.

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

**Table 1: Funding Summary**

FUNDING SOURCE	GENERAL FUND	HIGHWAY PROGRAM	TRANSIT PROGRAM	COMP PLANNING	OTHER PROGRAMS	TOTAL
MISCELLANEOUS	\$0	\$0	\$0	\$0	\$2,783,775	\$2,783,775
FAA	0	0	0	0	198,000	198,000
PA FTA	0	0	1,830,000	0	106,000	1,936,000
PA FHWA	0	4,848,000	0	0	4,616,912	9,464,912
PA STATE	0	669,000	0	0	449,600	1,118,600
PA OTHER	0	0	0	0	300,000	300,000
PA LOCAL	0	0	0	0	239,000	239,000
NJ FTA	0	0	510,753	0	-	510,753
NJ FHWA	0	2,538,546	0	0	1,526,600	4,065,146
NJ STATE	0	0	0	0	-	0
NJ LOCAL	0	0	0	0	10,000	10,000
<b>PA LOCALS</b>	<b>\$153,127</b>	<b>\$354,000</b>	<b>\$305,500</b>	<b>\$419,324</b>	<b>\$3,055</b>	<b>\$1,235,006</b>
Bucks County	23,471	35,100	36,348	64,272	611	159,802
Chester County	19,400	66,688	48,465	53,126	611	188,290
Delaware County	19,756	56,159	36,348	54,101	611	166,975
Montgomery County	31,095	52,649	48,465	85,150	611	217,970
City of Philadelphia	58,221	140,395	133,278	159,433	611	491,938
City of Chester	1,184	3,009	2,596	3,241	-	10,030
<b>NJ LOCALS</b>	<b>\$60,805</b>	<b>\$0</b>	<b>\$0</b>	<b>\$166,509</b>	<b>\$2,444</b>	<b>\$229,758</b>
Burlington County	16,766	0	0	45,913	611	63,290
Camden County	16,397	0	0	44,903	611	61,911
Gloucester County	10,975	0	0	30,051	611	41,637
Mercer County	10,762	0	0	29,472	611	40,845
City of Camden	2,606	0	0	7,137	-	9,743
City of Trenton	3,299	0	0	9,033	-	12,332
<b>SUBTOTAL DVRPC</b>	<b>\$213,932</b>	<b>\$8,409,546</b>	<b>\$2,646,253</b>	<b>\$585,833</b>	<b>\$10,235,386</b>	<b>\$22,090,950</b>
<b>MEMBER GOVERNMENTS AND TRANSIT OPERATING AGENCIES</b>						
PA FTA	\$0	\$0	\$900,000	\$0	\$0	900,000
PA FHWA	0	0	0	0	\$5,643,120	5,643,120
NJ FTA	0	0	386,600	0	\$0	386,600
NJ FHWA	0	0	0	0	\$2,479,000	2,479,000
PA LOCALS	0	0	225,000	0	\$0	225,000
NJ LOCALS	0	0	96,650	0	\$0	96,650
OTHER	0	0	0	0	\$1,998,780	1,998,780
<b>SUBTOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,608,250</b>	<b>\$0</b>	<b>\$10,120,900</b>	<b>\$11,729,150</b>
<b>GRAND TOTAL</b>	<b>\$213,932</b>	<b>\$8,409,546</b>	<b>\$4,254,503</b>	<b>\$585,833</b>	<b>\$20,356,286</b>	<b>\$33,820,100</b>

**Table 2: Project Funding by Source**

Page	PROJECT NUMBER	PROGRAMS/PROJECTS	FY 2023 BUDGET	HIGHWAY PLANNING	TRANSIT PLANNING	COMPREHENSIVE PLANNING	OTHER
	<b>Chpt. Two-Sect. A</b>						
	<b>DVRPC PROGRAM AREAS</b>						
47	23-23-010	Regional Forum	\$ 302,500	\$ 226,687	\$ 73,313	\$ 2,500	\$ -
49	23-23-020	Work Program Administration	385,000	264,468	85,532	5,000	10,000
51	23-23-030	Public Participation, Involvement and Outreach	414,500	311,316	100,684	2,500	-
55	23-23-040	Title VI and Environmental Justice	211,500	157,925	51,075	2,500	-
59	23-23-050	Data Visualization and Communication	595,000	449,595	145,405	-	-
63	23-23-060	Web Development and Database Management	875,000	661,169	213,831	-	-
65	23-23-070	Data Coordination and Analysis	341,250	256,911	83,089	1,250	-
69	23-23-080	Technical Assistance to Member Governments	331,274	220,412	71,287	19,575	20,000
73	23-33-010	Smart Growth	673,500	454,312	146,930	32,258	40,000
77	23-33-020	Community & Economic Development	606,000	216,108	69,892	45,000	275,000
83	23-33-030	Energy and Climate Change Initiatives	376,508	282,609	91,399	2,500	-
89	23-33-040	Environmental Planning	314,500	259,500	-	55,000	-
95	23-33-050	Geographic Information Systems	339,400	233,789	75,611	30,000	-
97	23-34-010	Long-Range Planning	597,000	417,103	134,897	45,000	-
101	23-34-020	Freight and Aviation Planning	389,500	282,036	91,214	16,250	-
105	23-34-030	Travel and Land Use Modeling	482,250	348,342	112,658	1,250	-
109	23-34-040	Regional Congestion Management Process	232,250	174,549	56,451	1,250	-
113	23-34-050	Air Quality Planning	254,250	191,172	61,828	1,250	-
119	23-34-060	Performance-Based Planning and Asset Management	312,500	217,241	70,259	25,000	-
123	23-34-070	Socioeconomic and Land Use Analytics	225,000	154,903	50,097	20,000	-
127	23-34-080	Transportation Improvement Program (TIP)	661,250	498,711	161,289	1,250	-
131	23-52-010	Regional Transit Planning Program	419,250	-	285,000	44,250	90,000
135	23-52-020	Bicycle and Pedestrian Planning Program	331,750	234,621	75,879	21,250	-
139	23-52-030	Mobility Analysis and Design Program	672,250	476,798	154,202	25,250	16,000
143	23-52-040	Transportation Safety	399,250	300,738	97,262	1,250	-
149	23-52-050	Transportation Operations	572,950	137,297	44,403	1,250	390,000
155	23-52-060	Competitive Program and Project Management	1,254,500	64,500	-	-	1,190,000
157	23-52-070	PA TDM Base Program Administration and Commuter Services	325,000	-	-	-	325,000
159	23-53-010	Travel Monitoring	739,500	594,500	-	-	145,000
		Subtotal	\$ 13,594,382	\$ 8,087,312	\$ 2,603,487	\$ 402,583	\$ 2,501,000
	<b>Chpt. Two-Sect. B</b>						
	<b>DVRPC PROJECTS</b>						
	15-44-300	William Penn-Planning, Design and Construction of Priority Trails**	40,000	-	-	-	40,000
	21-34-080	Regional Aviation System Planning**	45,000	-	-	-	45,000
	21-34-130	Reg. Aviation Plan - 2045**	65,000	-	-	-	65,000
	22-34-080	Regional Aviation System Planning**	80,000	-	-	-	80,000
	22-52-120	Racial Minority Mobility Choices Study**	125,000	-	-	-	125,000
	23-10-010	General Fund	213,932	-	-	-	213,932
165	23-33-100	Regional Transportation GIS Coordination	400,000	-	-	-	400,000
167	23-33-110	Local Technical Assistance Program (LTAP)	30,000	-	-	-	30,000
169	23-33-120	Pennsylvania Coastal Zone Management Implementation Program	50,000	-	-	-	50,000
173	23-33-130	Healthy Communities Planning	137,500	79,340	25,660	6,500	26,000
177	23-33-140	PA/NJ Local Planning Initiatives	90,000	-	-	40,000	50,000
181	23-33-150	An Investigation into Multi-Municipal Planning to Meet Stormwater Permitting	50,000	-	-	-	50,000
183	23-33-160	Local Government Energy Implementation Strategies and Initiatives	50,000	-	-	-	50,000
185	23-33-200	William Penn Regional Trail Program	89,000	-	-	-	89,000
189	23-34-100	Regional Aviation System Planning	220,000	-	-	-	220,000
191	23-34-110	Central Jersey Transportation Forum	125,000	-	-	-	125,000
193	23-34-120	I-95 Planning Assistance	100,000	-	-	-	100,000
195	23-34-130	Enhance and Maintain Travel Forecasting Tools	665,000	-	-	5,000	660,000

Table 2 Continued

Page	PROJECT NUMBER	PROGRAMS/PROJECTS	FY 2023 BUDGET	HIGHWAY PLANNING	TRANSIT PLANNING	COMPREHENSIVE PLANNING	OTHER
201	23-34-140	District 6 Modeling Assistance	460,000				460,000
203	23-34-150	Philadelphia Trip Generation Model	150,000				150,000
207	23-34-160	I-95 Traffic Forecasts	155,000				155,000
209	23-34-170	PA Air Quality Action Supplemental Services	125,000				125,000
211	23-34-180	NJ Air Quality Action Supplemental Services	50,000				50,000
213	23-34-190	Regional Electric Vehicle Planning Program	150,000				150,000
217	23-52-100	Regional TOP Competitive Program Administration (PA and NJ)	300,000			20,000	280,000
221	23-52-110	ExPo: Experimental Pop-ups Program	200,000				200,000
225	23-52-120	PennDOT Road Diet Prioritization	150,000				150,000
227	23-52-130	Regional Sidewalk Development Program	150,000				150,000
231	23-52-140	Pottstown Area Regional Plan Development	70,000	52,894	17,106		
233	23-52-150	PennDOT Connects Bike-Friendly Resurfacing Program	250,000				250,000
237	23-52-160	Vine Street Cap	200,000				200,000
239	23-52-170	Transportation Systems Management and Operations (TSMO)	554,000				554,000
243	23-52-180	Connectivity Options for US202 Section 200	150,000				150,000
245	23-52-190	Burlington Township / Florence Township Connector Road Planning Study	125,000				125,000
247	23-53-020/025	HPMS and Functional Classification System (PA & NJ)	190,000	190,000			
249	23-53-030	PennDOT District 6-0 Traffic Volume Data	300,000				300,000
251	23-53-035	NJDOT Counting Program	270,000				270,000
253	23-59-700	Member Government Special Studies	991,944				991,944
255	23-59-701	New Projects and Misc. Carryover	818,442				818,442
		Comp. PL reserved match	111,750			111,750	
		Subtotal	8,496,568	322,234	42,766	183,250	7,948,318
		<b>SUBTOTAL DV/RPC PROGRAM</b>	<b>\$ 22,090,950</b>	<b>\$ 8,409,546</b>	<b>\$ 2,646,253</b>	<b>\$ 585,833</b>	<b>\$ 10,449,318</b>
		**Carryover Projects					
<b>MEMBER GOVERNMENT / TRANSIT OPERATING AGENCIES / OTHER PASS-THROUGH</b>							
Chapter Three A & B							
263-280	A: 23-60-010 to 23-60-051	Supportive Regional Highway Planning Program	\$ 698,000				\$ 698,000
287-312	B: 23-61-010 to 23-61-100	NJ Supportive Regional Highway Planning Program	499,000				499,000
		Subtotal	\$ 1,197,000				\$ 1,197,000
Chapter Four A & B							
319-340	A: 23-63-000 to 23-63-010	Transit Support Program	\$ 1,125,000		\$ 1,125,000		
347-362	B: 23-63-020 to 23-63-027	PA Transit Program	483,250		483,250		
		Subtotal	\$ 1,608,250		\$ 1,608,250		
<b>Other Member Government Projects</b>							
	Chpt. Five	William Penn Trail Grants	\$ 1,000,000				\$ 1,000,000
367	23-33-200	Camden County Guidetrails (2 Years)	1,000,000				1,000,000
369	23-53-300	PA/NJ Regional GIS Implementation Coordination	300,000				300,000
371	23-62-100	New Jersey Local Concept Development- (3 Years)	430,000				430,000
373	23-67-100	PA Transportation and Community Development Initiative (TCDI)- (2 Years)	1,200,000				1,200,000
375	23-70-100	PA Transportation Demand Management (TDM) Base Program- (2 Years)	2,200,000				2,200,000
377	23-80-100	Travel Options Program (TOP) Competitive Program (PA and NJ)- (2 Years)	2,793,900				2,793,900
		Subtotal	\$ 8,923,900				\$ 8,923,900
<b>SUBTOTAL MEMBER GOVERNMENTS AND OPERATING AGENCIES</b>			\$ 11,729,150	\$ 1,608,250	\$	\$	\$ 10,120,900
<b>GRAND TOTAL</b>			<b>\$ 33,820,100</b>	<b>\$ 8,409,546</b>	<b>\$ 4,254,503</b>	<b>\$ 585,833</b>	<b>\$ 20,570,218</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 described below.

The coordination of this planning process with the many involved partners and stakeholders is critical to the successful completion and implementation of the region's plans and programs. The member organizations that make up the DVRPC Board were identified in the legislation that originally created DVRPC in 1965.

The DVRPC Board is comprised of eighteen voting members representing the following organizations: Pennsylvania Department of Transportation, New Jersey Department of Transportation, Pennsylvania Governor's Policy and Planning Office, New Jersey Department of Community Affairs, Pennsylvania Governor's Appointee, New Jersey Governor's Appointee, Bucks County, Chester County, Delaware County, Montgomery County, Burlington County, Camden County, Gloucester County, Mercer County, City of Chester, City of Philadelphia, City of Camden, and City of Trenton.

The Commission receives input and guidance from fifteen additional non-voting Board member organizations. They are: Federal Highway Administration – PA Division, Federal Highway Administration - NJ Division, Federal Transit Administration - Region II, Federal Transit Administration - Region III, US Department of Housing and Urban Development, US Environmental Protection Agency - Region II, US Environmental Protection Agency - Region III, PA Department of Environmental Protection, NJ Department of Environmental Protection, NJ Office for Planning Advocacy, PA Department of Community and Economic Development, Southeastern Pennsylvania Transportation Authority, New Jersey Transit Corporation, Delaware River Port Authority, and Port Authority Transit Corporation.

The Board gives direction and oversight to the work of DVRPC, and is responsible for approving and adopting the Transportation Improvement Program, the Long Range Plan, the Unified Planning Work Program, the Public Participation Plan, performance measures and targets, amendments to any of the above, and sometimes approves, adopts, accepts or acknowledges other plans or documents as well.

***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 in the region, funded in part through DVRPC’s Planning Work Program. 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 ensuring 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 other organizations and citizens residing in the region. To accomplish this objective, DVRPC facilitates several committees to address the regional issues of transportation, land use, air quality, housing, airports, goods movement, long range planning, 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. These 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 Analysis & 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.

## **UPWP 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 2023, are highlighted in the Program Area descriptions below. Individual Projects are described within the

document. 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 undertaking significant outreach to member governments and other stakeholders to gather input on the region's planning priorities, refining existing and developing new scopes of work for the selected planning projects that will be conducted in the next fiscal year, and identifying/securing the required funding to support DVRPC and member government staff to undertake the regional planning process.

*Key Products: FY 2024 Unified Planning Work Program.*

### **Public Participation, Involvement, and Outreach**

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'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 FY2022 Annual Report, Monthly e-Newsletter, and agendas and meeting documentation for the Public Participation Task Force.*

### **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. Civil Rights and environmental justice issues are an integral focus of the transportation

planning and programming process. This commitment is reflected in DVRPC's Work Program, products, communications, public involvement efforts, and general operations.

*Key Products: Refined and Updated Indicators of Potential Disadvantage Compliance Tool, ongoing evaluation of Commission's efforts, and updated Title VI Compliance Plan and associated policies.*

### **Data Visualization and Communication**

This effort will provide information and data to the public and decision-makers that is clearly understood and used, by applying graphic design and visualization techniques that explain and enhance the technical analyses and that presents materials in an attractive and accessible format.

*Key Products: campaigns, publication design, graphic resources for staff, ads, web application design, and graphic review for all DVRPC products*

### **Web Development and Database Management**

This project will ensure the DVRPC's website is constantly up-to-date and accessible. Accessing current, reliable, and relevant data is critical to planners and decision-makers. Web applications developed by DVRPC staff provide data visualizations and analyses not possible with traditional print products. As the region's MPO, DVRPC, through our website, provides an immense amount of information and offers a wide variety of products and services.

*Key Products: interactive data and GIS mapping applications, and online content for the DVRPC website*

### **Data Coordination and Analysis**

This program supports new and ongoing internal and 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. 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. Internal coordination efforts aim to: improve communication among staff; identify and support staff stewards of planning data to improve data development, maintenance, and sharing activities; and improve data discovery and dissemination. Additional program tasks include maintaining DVRPC's regional online information data tools; coordinating with the Census Bureau; and administering the Commission's Information Resources Exchange Group (IREG).

*Key Products: Updated data portal and search tools*

### **Socioeconomic and Land Use Analytics**

The Socioeconomic and Land Use Analytics program area includes new and ongoing data analysis in support of the long-range plan and other commission efforts by collecting and assessing data, identifying its importance and relevance, and disseminating the results of that research through reports, web applications, presentations, and other means. This program area supports the Office

of Long-Range Planning’s forecasting and scenario planning efforts, and the use of indicators to track progress on the vision and goals set in the region’s long-range plan.

*Key Products: Updated Tracking Progress indicators, 2020 Land Use Analytical Data Report, Updated UrbanSim platform*

### **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, Data Visualization and Communication, as well as Web Development and Database Management programs.

*Key Products: Updated and new web mapping applications*

### **Smart Growth**

The Smart Growth work program is designed to support communities across the region as they coordinate land use and transportation planning. Through this program, DVRPC strives to advocate and promote support for smart growth principles that can enhance sustainability, housing and transportation choice, community resiliency, urban revitalization, economic development, and public health.

*Key Products: Housing Needs Analysis, Roebling Steel Plant Land Use and Feasibility Study, Updated Smart Growth Project Database*

### **Community and Economic Development**

This program develops local and regional economic and community development strategies for the region through the Comprehensive Economic Development Strategy (CEDs) planning process by convening meetings with economic development and municipal stakeholders, facilitating a municipal grant program (TCDI), developing revitalization strategies through retail and land use analysis, and advancing equity and opportunity for all across the region.

*Key Products: Award and Manage PA TCDI Program, Develop Guidelines and Launch NJ TCDI Program, CEDs Key Regional Economic Development Project Database and Related CEDs Analyses*

### **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: Updated Regional Energy Use and Greenhouse Gas Emissions Inventory, Climate Change Forums, Regional Power Purchase Agreement Partnership, Regional Streetlight Procurement Program Round 3*

### **Environmental Planning**

This program promotes healthy ecological systems, protection of water quality, active transportation, climate change resiliency and the creation of livable communities. More specifically, the program: 1) identifies and highlights key resources such as Connection 2050's planned Greenspace Network and Conservation Focus Areas, agricultural lands, and waterways, and works to protect them by developing and employing strategic planning tools at regional and municipal scales; 2) plans, funds, and develops a connected network of facilities for bicyclists and pedestrians with a focus on the Circuit Trails; and 3) engages partners to identify and develop targeted management practices and policy approaches for increasing resiliency to the impacts of climate change.

*Key Products: Municipal Natural Resource Protection Plans (as contracted), Circuit Trails Project Development Database, Updated Web Pages with trail inventory, trail user data and open space-related data.*

### **Long-Range Planning**

The Long-Range Plan Program Area works with the public and stakeholders to identify a vision to guide growth and development as well as regional 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, *Connections 2050*, was adopted in September 2021.

*Key Products: More Dispatches From the Future scenario report, Updated TIP/LRP Benefit Evaluation Criteria, Amended Connections 2050 Financial Plan*

### **Freight and Aviation Planning**

This program is intended to maximize the Delaware Valley's position in the global economy by promoting cooperation within the local freight and aviation communities and implementing regional strategies in accordance with State DOT and FAST Act guidance. This program will allow staff to continue to maintain and update Philly Freight Finder, enhance aviation planning products, and pursue local technical studies that improve considerations of the economic and transportation impacts of freight and aviation.

*Key Products: Future of Freight Deliveries Scenarios report, Lower Bucks 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 Products: Hunting Park Avenue Safety Study, local technical assistance for Vision Zero planning*

## **Regional Congestion Management Process**

The CMP is a systematic process for managing congestion in the DVRPC region. It analyzes the multimodal transportation system, identifies and prioritizes 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 completed the most recent update of the CMP in January 2020.

*Key Products: Technical report that identifies top intersection bottlenecks, and a select set of specific improvement strategies*

## **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 Products: Transportation Air Quality Conformity Demonstration Report, Technical report to Delaware County identifying sources of transportation emissions and potential mitigation strategies*

## **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 (including meeting minutes and pertinent presentations, research and technical assistance activities). Special short-term studies and quick data collection activities are also included.

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

## **Transportation Improvement Program (TIP)**

This program area provides for transportation financial planning, project development, 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 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 for Pennsylvania and New Jersey, as mandated by federal regulations; identifies, evaluates, and selects transportation projects that address the needs of the region and advance 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 any new requirements of IJIA as they become available and environmental justice concerns, as it relates to this program. Coordination with DOT program development and project development and delivery including PennDOT Connects in Pennsylvania and Local Concept Development in New Jersey will also occur. DVRPC staff along with significant input from our stakeholders will have developed, and our Board will have adopted, a TIP for PA in July of 2022. Also, in FY23, a similar process will be undertaken for the development of a NJ TIP which is expected to be adopted in Fall of 2023.

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

### **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 training, technology, and interagency coordination that will address recurring and non-recurring congestion via a variety of approaches including traffic incident management and upgraded signal re-timing.

*Key Products: continued best-practice trainings via eight traffic Incident Management Task Forces and updated traffic signal retiming implemented along selected corridors*

### **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 reinforced in the FAST Act. This strategic approach sets targets for transportation system condition and performance, and uses real data to measure if these targets are being met. This process then informs investment decisions in order to enhance infrastructure and operations. The US Department of Transportation (USDOT) has implemented new regulations related to Transportation Performance Management (TPM) through the Federal Rulemaking process. Within this Program Area, DVRPC will work closely with our state DOTs, and transit operators to address the transportation performance management requirements by coordinating on and setting performance measure targets.

*Key Products: continued coordination with planning partners to address US DOT Transportation Performance Management requirements and TPM webpage that reports current targets and transportation system and infrastructure performance relative to them.*

### **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 (and the IIJA greatly increases) funding for nontraditional transportation projects such as multi use trails, streetscapes, historic restorations, alternative fueled vehicles, transportation 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 Products: 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.

*Key Products: Summaries of screenline traffic volumes, VMT, transit ridership, and corridor travel times; Base and future-year highway and transit networks; Average annual growth factors.*

### **Regional Transit Planning Program**

This program supports the conduct of and participation in 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 Products: Information sharing forum on creative warehouse job access pilots*

### **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. This work includes an emphasis on bicycle and pedestrian policy, design and infrastructure that increases personal health, as well as the health of the environment and economic characteristics in the region.

*Key Products: Pedestrian and bicyclist counts for cyclical counting programs, before/after bicycle and pedestrian infrastructure projects, and planning project analysis.*

### **Mobility Analysis and Design Program**

This program seeks to balance the accessibility, efficiency, and safety of the existing transportation network for all modes. Work under this program draws on current best practices in transportation analysis and design, as well as stakeholder and public engagement, to identify context appropriate strategies to address transportation challenges. The process is designed to better inform regional transportation and land use decision making.

*Key Products: concept development for potential bicycle improvements on Mercer County's resurfacing program, connectivity analysis for US 202 Section 200.*

### **PA TDM Base Program Administration and Commuter Services**

This program is new for FY2023, and will support administration of the Transportation Demand Management (TDM) base program for Southeastern PA, including oversight of TDM work conducted by TMAs and prior year Mobility Alternatives Program (MAP) grantees. This includes traditional TDM activities with demonstrated single-occupant vehicle (SOV) trip reduction benefits as well as pilots or experiments for new TDM projects and tools to manage demand and create and cultivate new mobility options for residents and workers. This program also supports DVRPC's direct TDM services for our PA counties, including the regional share-a-ride program, emergency ride home program, and regional TDM marketing.

*Key Products: Oversight of new TDM base program in Southeastern PA.*

### **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 vehicle miles travelled (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 Products: Collection of approximately 3,000 new vehicle, bicycle, and pedestrian counts and upload of those counts into DVRPC’s web-based traffic count viewers*

## **UPWP Linkages**

The FY 2023 Unified Planning Work Program serves as an important implementation tool to achieve the directives of the FAST Act and the new Infrastructure Investment and Jobs 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 three key principles (equity, resiliency and sustainability) of the Long-Range Plan and the four focus areas (Preserve and Restore the Natural Environment; Develop Inclusive, Healthy, and Walkable Communities; Maintain a Safe, Multimodal Transportation Network that Serves Everyone; and Grow an Innovative and Connected Economy with Broadly Shared Prosperity) 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 key principles and focus areas of the Long-Range Plan are shown.

Another key function of the UPWP is its ability to identify and prioritize the tasks that DVRPC will be working on and designate the appropriate resources to undertake and complete those required tasks within the assigned timelines. Table 5 identifies the required Plans/Programs or Activities that DVRPC will undertake as part of the regional planning process and their assigned completion and update cycles.

**Table 3: FAST Act Planning Factors**

	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
<b>DVRPC Program Areas</b>										
Regional Forum										
Work Program and Contract Administration										
Public Participation, Involvement, and Outreach										
Title VI and Environmental Justice										
Data Visualization and Communication										
Web Development and Database Management										
Geographic Information Systems										
Smart Growth										
Community and Economic Development										
Energy and Climate Change Initiatives										
Environmental Planning										
Long-Range Planning										
Freight and Aviation Planning										
Transportation Safety										
Congestion Management Programs										
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										
Mobility Analysis and Design										
Regional Transportation Demand Management (TDM) Program										
Travel Monitoring										
Socio-economic and Land Use Analytics										

● Primary Association | ● Secondary Association | ○ N/A

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

DVRPC Program Areas	Principles			Focus Areas			
	Equity	Resiliency	Sustainability	Preserve and Restore the Natural Environment	Develop Inclusive, Healthy, and Walkable Communities	Maintain a Safe, Multimodal Transportation Network that Serves Everyone	Grow an Innovative and Connected Economy with Broadly Shared Prosperity
Regional Forum							
Work Program and Contract Administration							
Public Participation, Involvement and Outreach							
Title VI and Environmental Justice							
Data Visualization and Communication							
Web Development and Database Management							
Geographic Information Systems							
Smart Growth							
Community and Economic Development							
Energy and Climate Change Initiatives							
Environmental Planning							
Long-Range Planning							
Freight and Aviation 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							
Regional Transportation Demand Management (TDM) Program							
Mobility Analysis and Design							
Travel Monitoring							
Socio-economic and Land Use Analytics							

● Primary Association | ● Secondary Association | ○ N/A

**Table 5: MPO Regional Planning Process Requirement Milestones**

<b>Plan/Program/Activity</b>	<b>Current Adoption/Completion</b>	<b>Next Adoption/Completion</b>
Unified Planning Work Program	January 2021	January 2022
Transportation Improvement Program	July 2020 (PA) September 2021 (NJ)	July 2022 (PA) September 2023 (NJ)
Air Quality Transportation Conformity Determination	September 2021	July 2022
Long-Range Plan	September 2021	September 2025
Title VI Compliance Plan	March 2014	Spring 2022
Public Participation Plan	July 2018	As needed – evaluated annually
Limited English Proficiency Plan	April 2019	April 2024 – evaluated annually
Congestion Management Process	January 2020	January 2024
Transportation Safety Analysis and Plan	January 2019	Spring 2022
Coordinated Human Services Transportation Plan	October 2020	October 2024
CMAQ Performance Plan	September 2020 (interim)	September 2022
US DOT MPO Planning Process Certification Review	October 2018 (site visit) February 2019 (final report)	October 2022 (site visit) February 2023 (final report)





CHAPTER 2A

# DVRPC Program Area Descriptions



# Table of Contents

## Chapter 2A: DVRPC Program Area Descriptions

23-23-010	Regional Forum	47
23-23-020	Work Program Administration	49
23-23-030	Public Participation, Involvement and Outreach	51
23-23-040	Title VI and Environmental Justice	55
23-23-050	Data Visualization and Communication	59
23-23-060	Web Development and Database Management	63
23-23-070	Data Coordination and Analysis	65
23-23-080	Technical Assistance to Member Governments	69
23-33-010	Smart Growth	73
23-33-020	Community & Economic Development	77
23-33-030	Energy and Climate Change Initiatives	83
23-33-040	Environmental Planning	89
23-33-050	Geographic Information Systems	95
23-34-010	Long-Range Planning	97
23-34-020	Freight and Aviation Planning	101
23-34-030	Travel and Land Use Modeling	105
23-34-040	Regional Congestion Management Process	109
23-34-050	Air Quality Planning	113
23-34-060	Performance-Based Planning and Asset Management	119
23-34-070	Socioeconomic and Land Use Analytics	123
23-34-080	Transportation Improvement Program (TIP)	127
23-52-010	Regional Transit Planning Program	131
23-52-020	Bicycle and Pedestrian Planning Program	135
23-52-030	Mobility Analysis and Design Program	139
23-52-040	Transportation Safety	143
23-52-050	Transportation Operations	149
23-52-060	Competitive Program and Project Management	155
23-52-070	PA TDM Base Program Administration and Commuter Services	157
23-53-010	Travel Monitoring	159



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

---

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

**Program Coordinator:** Renee Wise

**Project Manager:** Barry Seymour

**Goals:**

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

**Description:**

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

**Tasks:**

1. Plan, develop, coordinate and schedule all business to be transacted by the Board, Executive Committee and its subcommittees with follow-through to ensure that actions are implemented.
2. Record proceedings and maintain official records of all meetings.
3. Review and coordinate all DVRPC committee agendas.
4. Identify regional issues of significance through involvement with the DVRPC Board, staff, national and regional publications, journals, the media, the internet and other sources.
5. Conduct short-term research, including review of research by other agencies, as well as literature reviews, interviews, and analysis of regional impacts or implications and report the findings to the DVRPC Board and pertinent technical committees.
6. Review pending and proposed federal and state legislation, determine the effects on the region and draft proposed Board or staff position statements.
7. Attend conferences or meetings to coordinate with other agencies and organizations or to gather information for regional action.
8. Schedule 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>
2022	\$297,500	\$227,711	\$57,289	\$2,500	\$10,000
2023	\$302,500	\$226,687	\$73,313	\$2,500	\$0

**PROJECT: 23-23-020    Work Program Administration**

---

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

**Program Coordinator:** Patricia Elkis

**Project Manager:** Alison Hastings, Barry Seymour, Gregory Krykewycz, Karin Morris, Michael Boyer, Najah Jackson

**Goals:**

To ensure intergovernmental coordination by preparing the annual Unified Planning Work Program, and monthly progress reports

**Description:**

Federal regulations, as stipulated in the Infrastructure Investment and Jobs Act (IIJA), require MPOs to document metropolitan transportation planning activities performed with federal transportation funds in a unified planning work program (UPWP). The UPWP must be developed at least on a biennial basis. DVRPC chooses to prepare an annual 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 Metropolitan Planning Area. The UPWP shall identify work proposed by major activity and task (including activities that address the ten planning factors in sufficient detail to indicate who (e.g., MPO, State, public transportation operator, local government, or consultant) will perform the work, the schedule for completing the work, the resulting products, and a summary of the total amounts and sources of Federal and matching funds. Preparation of the Unified Planning Work Program includes DVRPC staff undertaking significant outreach to member governments, public transit operators, and other stakeholders to gather input on the region's planning priorities. DVRPC staff then works with our stakeholders to refine existing and develop new scopes of work for the selected planning projects that will be conducted in the next fiscal year. Subsequently, staff works to identify and secure the required funding to support DVRPC and member government staff to undertake the regional planning process.

**Tasks:**

1. Schedule and conduct outreach to member governments, public transit operators, and other stakeholders
2. Meet with the Board Work Program Committee to prioritize and select projects to include in the FY2024 UPWP
3. Coordinate the development of the Transit Support Program and Supportive Regional Highway Planning Program (Pass-Through projects) for inclusion into the UPWP
4. Prepare the draft Unified Planning Work Program and project budgets based on guidance provided by the Board's Work Program Committee.
5. Release the Draft document for public and agency review and comment
6. Incorporate all appropriate comments into the final FY24 UPWP document and

present to the DVRPC Board for adoption.

7. Negotiate with federal, state and local governments to secure funding to carry out the planning programs.

8. Conduct project review and spending meetings for the FY2023 Work Program. Monitor on a daily basis the implementation of the planning programs.

9. Prepare monthly and semi-annual progress reports and year-end closing report.

**Products:**

- 1. FY24 Unified Planning Work Program
- 2. Monthly and semi-annual progress reports
- 3. Year-end closing report

**Beneficiaries:**

Member governments, operating agencies, state and federal agencies, planning partners,

**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>
2022	\$347,500	\$267,660	\$67,340	\$2,500	\$10,000
2023	\$365,000	\$264,468	\$85,532	\$5,000	\$10,000

\*PennDOT FHWA

**PROJECT: 23-23-030 Public Participation, Involvement and Outreach**

---

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

**Program Coordinator:** Alison Hastings

**Project Manager:** Elise Turner, Shoshana Akins

**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 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. 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.

This office also ensures that Title VI, Environmental Justice (EJ), and other nondiscrimination 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 committed to Virtual Public Involvement (VPI) to encourage more public engagement in all of its work and activities. DVRPC employs VPI strategies to increase the dissemination of public information and collect feedback from a variety of audiences. The Office of Communications & Engagement leads, advises, and reviews most of the Commission's VPI initiatives, from the Commission's robust

website to social media channels, and from crowd-sourced web maps to surveys available in multiple languages.

As local, county, state and federal public health guidance allows, DVRPC plans to hold more public meetings completely online, or in hybrid formats of online and in-person. The hybrid format, while requiring more coordination between professional staff ahead of time, and possibly more audio-visual hardware and software, may overall help the Commission to better utilize its resources and reach more people at a time and location that is convenient for them, such as in their homes, while accommodating people who prefer in-person or do not have access to virtual tools.

### **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 and publish Annual Report.
4. Monitor and report on DVRPC's earned media and social media.
5. Organize and convene Public Participation Task Force: update member handbook; 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's federally mandated programs and projects, including the Long-Range Plan and the TIP; and support and advise 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. Plan and execute annual Board Retreat.
19. Document and evaluate DVRPC's use of public participation strategies on an ongoing basis.
20. Maintain several guidance documents, such as the Public Participation Plan, that inform DVRPC's practices.

**Products:**

1. Media releases.
2. DVRPC website, including redesigned Newsroom.
3. DVRPC monthly newsletters.
4. Annual Report.
5. Public Participation Task Force: handbook, 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 initiatives, completed projects, and public participation opportunities.
9. Translated materials, as needed.
10. Materials to be used and distributed at high profile events, including annual Board Retreat and conferences.

**Beneficiaries:**

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

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2022	\$409,500	\$317,197	\$79,803	\$2,500	\$10,000
2023	\$414,500	\$311,316	\$100,684	\$2,500	\$0



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

---

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

**Program Coordinator:** Alison Hastings

**Project Manager:** Elise Turner, Shoshana Akins

### **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, documents, and carries out the Commission's Title VI Compliance Program. This office routinely evaluates the Commission's: a) Public Participation Plan, b) Limited English-Proficiency Plan, c) Title VI Compliance Plan, and d) Indicators for Potential Disadvantage (IPD) analysis tool, and regularly explores the potential for other publications, brochures, and outreach tools. This office also advises commission staff in evaluating potential impacts of transportation projects on low-income and minority populations, evaluating accessibility and mobility for disadvantaged populations, and outreach techniques to reach diverse audiences. This program area also supports expanded outreach for DVRPC's mandated documents and processes in order to create opportunities for meaningful engagement in low-income and minority communities. This program fulfills translation and interpretation requests and proactively translates specific materials per the Commission's LEP Plan. This program area may analyze how specific demographic groups used in the IPD compliance tool have changed over time.

### **Tasks:**

1. Maintain and update the DVRPC Public Participation Plan, Limited-English Proficiency Plan, and Title VI Compliance Plan and other publications related to

- DVRPC's efforts to create meaningful participation in the regional planning process.
2. Advise DVRPC staff on outreach to low-income and minority communities and using the IPD analysis in projects, plans, and programs.
  3. Explore potential for other analytical reports, data snapshots, and/or outreach brochures that advance DVRPC's Title VI and EJ program.
  4. 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.
  5. Undertake assessment of the benefits and burdens of programmed and proposed transportation system improvements, working within the LRP and TIP time-frames.
  6. Train staff on an ongoing basis regarding Title VI/EJ strategies.
  7. Complete responsibilities of the Title VI Compliance Manager, including carrying out investigations (if needed) and working with the Administration/Operations Division to review Disadvantaged Business Enterprise (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. Regularly update the Indicators of Potential Disadvantage (IPD) compliance tool when new American Community Survey (ACS) data is released. Explore IPD and other mapping/technology strategies to enhance data gathering, public information, and analysis.
  12. Continue to expand DVRPC's language access measures by responding to requests made through online request forms (among other ways), and managing the translation of the Commission's vital documents as identified in the LEP Plan.
  13. Act as a resource for member governments, planning partners, 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; and (c) Title VI Compliance Plan.
2. Contact lists for community organizations and individuals who have expressed interest in Commission's public involvement and outreach activities, and community organizations that work with traditionally under-served communities and/or limited English proficiency individuals or groups.
3. Additional analyses and reports as needed.
4. Title VI/EJ Analyses assessing the benefits and burdens of TIP, Long-Range Plan (LRP) and other mandated documents.
5. Refined and updated Indicators of Potential Disadvantage (IPD) compliance tool.
6. Training materials, presentations, and documentation that on DVRPC's Title VI Compliance Program and EJ considerations.
7. Translated documents including the Commission's Public Participation Plan, Title VI Complaint Form, and other vital documents.
8. Supporting materials for any of the other tasks above.

**Beneficiaries:**

Greater Philadelphia residents, low-income and minority population groups, member governments, transportation agencies and operators, planning partners and community 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>
2022	\$206,500	\$155,003	\$38,997	\$2,500	\$10,000
2023	\$211,500	\$157,925	\$51,075	\$2,500	\$0



## **PROJECT: 23-23-050    Data Visualization and Communication**

---

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

**Program Coordinator:** Kimberly Dean

### **Goals:**

To provide information and data to the public and decision-makers that is clearly understood and used, by applying graphic design and visualization techniques that explain and enhance the technical analyses and that presents materials in an attractive and accessible format.

### **Description:**

Each year, DVRPC produces a wide array of products for a wide variety of audiences. There may be highly technical reports for a small expert audience; broader planning studies that are distributed to community groups and local officials; presentations made at conferences, meetings, and seminars; or information presented via our website, through social media, or in printed format that needs to be accessible and understandable to the widest possible audience.

By preparing information, data, reports and presentations that are clear, attractive, understandable and visually engaging, DVRPC is better able to reach our target audience and ensure that our findings and planning recommendations are both received and used. In particular, for planning studies that may address roadways, transit or bicycle and pedestrian facilities, the use of visualization techniques can illustrate a recommendation or proposal in a way far more effectively than just a written description. By providing specialized project graphics as part of our reports or presentations, decision-makers, community organizations, and citizens are able to fully understand the concepts and imagine the changes on the ground. In this way, all participants in the planning process are working from the same understanding, and are able to move forward toward a decision and implementation.

Some high profile projects that require specialized design include the DVRPC Long-Range Plan (LRP) summary document, the DVRPC annual report; both in print and interactive formats, board retreat materials, Transportation Improvement Projects (TIP) materials, and Unified Planning Work Program (UPWP) materials. Other programs that require specialized project graphics include, but are not limited to: Air Quality Partnership (AQP), Transportation Community Development Initiative (TCDI), Community and Economic Development (CEDS), Regional Transit Planning Program (RTPP), Public Participation Task Force (PPTF), Central Jersey Transportation Forum (CJTf), Delaware Valley Goods Movement Task Force (DVGMTF), Healthy Communities Task Force (HCTF), Regional Safety Task Force (RSTF), Futures Group (FG) and Futures Working Group (FWG), and Transportation Operations Task Force (TOTF).

## **Tasks:**

1. Create materials for DVRPC programs, events, workshops, public outreach, and project studies.
2. Work with project managers, web developers, and GIS on providing graphic design materials.
3. Collaborate with partners, other MPOs, design and planning consultants, vendors, board members, as needed.
4. Provide ongoing design and technical assistance to DVRPC staff members.
5. Design report and PowerPoint templates for staff, and provide technical troubleshooting assistance, as needed.
6. Provide graphic resources for staff.
7. Perform graphic reviews of DVRPC publications, web products, board presentations, graphics and attachments displayed on DVRPC's webpages.

## **Products:**

1. Supporting Graphics, including project graphic and design guidelines, headers, HTML emails, postcards, activity sheets / handouts, Word agenda templates, workshop materials, infographics, charts, Gmail-formatted emails, PowerPoint presentations, promotional materials, event signage, flyers, and posters.
2. Publication Design, including reports, newsletters, annual reports, brochures, handbooks, report cover and page layout design, high profile summary documents, and graphic review for DVRPC publication products.
3. Resources for Staff, including DVRPC logo files and guidelines, photo library, Word and InDesign report templates, DVRPC-branded memo and letterhead, PowerPoint Presentation templates, PowerPoint recommendations, and Word formatting tips & tricks.
4. Advertisements, including DVRPC ads, public transit advertisements, and animated web banners.
5. User Interface/User Experience Design, including design layouts of web pages, interactive web applications, interactive story maps, and monthly e-Newsletter. Also includes Emma emails and graphic review of DVRPC web products.

## **Beneficiaries:**

DVRPC, DVRPC staff, the region, member governments, planning partners, 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>
2022	\$590,000	\$471,401	\$118,599	\$0	\$0
2023	\$595,000	\$449,595	\$145,405	\$0	



## **PROJECT: 23-23-060    Web Development and Database Management**

---

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

**Program Coordinator:** James Strangfeld

**Project Manager:** Elizabeth He, Kris Warner, Will Tsay

### **Goals:**

To ensure the DVRPC's website is up-to-date and accessible. As the region's MPO, DVRPC, through our website, provides an immense amount of information and offers a wide variety of products and services.

### **Description:**

DVRPC provides access to data, some original to the Commission, such as traffic counts, aerial photography and demographic forecasts. Some data is provided by our partners, including the US Census Bureau and other federal agencies. Accessing current, reliable, and relevant data is critical to planners and decision-makers. Web applications provide data visualizations and analysis not possible with traditional print products.

For more information, see the following website: <http://www.dvrpc.org>

### **Tasks:**

1. Develop new designs and improvements for all content on DVRPC's websites using accessible web design practices.
2. Update website for Long Range Plan; TIP; transportation, land use and environment programs; commuter services; and the planning assistance center.
3. Create databases for Unified Planning Work Program (UPWP), all progress reporting, and other DVRPC datasets.
4. Create databases for project managers including programs such as TCDI and other direct projects.
5. Ensure that all content available on DVRPC's website is available to all end users via an accessible, mobile-friendly version. Accommodate all popular end user screen sizes, hardware, and scripting technologies. Review all public offerings to ensure federal accessibility guidelines are met.
6. Assist in data management, processing, and storage, such as efficient processing of large datasets, database design, and configuration for production environments.
7. Staff training in website development and responsive web design software, including Content Management Systems.
8. Coordinate with GIS and other departments to create custom mapping solutions with functionality beyond the scope of ArcGIS online and other off-the-shelf solutions.
9. Continuous innovation by modernizing the technology infrastructure, fostering an integrated, efficient environment based on cross-training and teamwork, and developing high-quality custom engineered solutions.
10. Administer and develop procedures for web product planning, development, review, and launch lifecycles. Implement quality control procedures ensuring high-quality and branded resources for all publically-accessible products and deliverables.

11. Enable and assist other partners and MPOs with similar web products by hosting code, programming, documentation, procedures, and data schemas in an open source fashion.
12. Develop automated systems to periodically run administrative tasks, process updated datasets, and/or supercede manual procedures.
13. Assist in the development of the TIM 3 Activity Based Model maintained by the Office of Travel Trends providing programming and debugging support

**Products:**

1. Web applications, interactive GIS mapping applications, and online content for the DVRPC website.
2. Database of Progress Reports for program areas and project areas.
3. Project Management Database for TIP, Crash Database, Traffic Count, CMAQ, TCDI, TMA Quarterly Report, License Plate Data and various projects.
4. Development, management, administration, and training for enterprise Content Management System for website updates.
5. Custom solutions for staff and program areas to eliminate inefficiencies, automate processes, and increase workplace productivity.
6. Intranet resources for internal staff, management, and administrative functions, including internal portal, online forms, document libraries, and reference and training materials.
7. Tracking, review, and administration of web product development pipeline including project management, development process, launch release coordination, and promotion and outreach scheduling.
8. License plate recognition program to track and identify license plates and vehicles from a video feed. In addition to optical character recognition capabilities for reading license plates, the program will need to be able to identify the issuing state.
9. Tablet based surveying system for commodity cellular connected tablets. The survey software on the tablets will need to work both offline and online and opportunistically sync with a master server.

**Beneficiaries:**

State DOTs, member governments, transit operators, 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>
2022	\$870,000	\$695,116	\$174,884	\$0	\$0
2023	\$875,000	\$661,169	\$213,831	\$0	

**PROJECT: 23-23-070 Data Coordination and Analysis**

---

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

**Program Coordinator:** Kimberly Korejko

**Project Manager:** Benjamin Gruswitz, Christopher Pollard, Elizabeth He, Jared Dobkin

**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 that will allow for providing key insights into the data through analysis, tool development, and visualizations.

**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 critical internal data coordination activities at DVRPC. These activities include providing oversight and guidance to enterprise-level data management efforts including DVRPC's Data Catalog; coordinating with and improving communication between departments about enterprise datasets and related data sharing activities; and creating a shared platform to develop and nurture new ideas, and pursue new efforts around data analyses in a 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. Disseminate Census-related data through DVRPC internal and external resources.
6. Develop and oversee agency wide data coordination activities and adherence towards a formal data management framework and data life cycle practices.
7. Create and enforce metadata standards that support the data management framework.
8. Identify data gaps and needs on an ongoing basis.
9. Research, evaluate, and acquire new data resources as needed to support agency planning activities.
10. Identify opportunities to improve data quality and standardize how data quality is measured.
11. Coordinate special data improvement, data sharing, or data tool development efforts that require interdepartmental collaboration.
12. Create a plan to ensure documentation of available data and publication of DVRPC datasets.
13. Develop, improve, and update datasets that support planning efforts at DVRPC such as National Establishment Time Series (NETS), CoStar, and other regional data resources.
14. Continue to develop strategies for and manage internal Data Round Table and Data Innovation Teams.
15. Continue to improve how data is shared by DVRPC through its online resources.

## **Products:**

1. Meeting materials and records for the IREG committee and subcommittees.
2. Regional data products 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 and external data catalog.
6. 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>
2022	\$331,250	\$259,670	\$65,330	\$1,250	\$5,000
2023	\$341,250	\$256,911	\$83,089	\$1,250	\$0

---



**PROJECT: 23-23-080    Technical Assistance to Member Governments**

---

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

**Program Coordinator:** Patricia Elkis

**Project Manager:** Renee Wise

**Goals:**

To ensure intergovernmental coordination on transportation and other planning 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 and other related planning issues, projects, and plans through monthly meetings of the Regional Technical 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 program area will also allow DVRPC staff to participate in PennDOT planning and programming efforts such as the Annual Planning Partners meetings, PennDOT Connects initiative, and the annual Unified Planning Priorities Work Group. It will also allow staff to prepare for and participate in the NJDOT/MPO Quarterly Collaboration Meetings, NJDOT Statewide Transportation Innovation Council meetings, NJDOT Complete Team meetings, and NJ Statewide Traffic Incident Management Steering Committee.

## **Tasks:**

1. Staff the Regional Technical Committee meetings, including scheduling Action Items and presentations for monthly agendas, minutes, and similar materials related to the Long-Range Plan, Transportation Improvement Program, the Annual Unified Planning Work Program and other transportation and land use issues or projects.
2. Participate on transportation committees at the regional, state, or national levels.
3. At least semiannually, consult with city/county planning directors regarding ongoing projects and short-term needs.
4. Participate on regional or statewide working groups and task forces, as appropriate, to represent DVRPC's interests.
5. Conduct short-term research or prepare policy papers and memoranda in response to member government requests or as a follow-up to on-going or proposed DVRPC initiatives.
6. If required, respond to legal inquiries on previously completed studies.
7. Continue to undertake activities that respond to the new PennDOT Connects initiatives, including development and implementation activities, such as PennDOT Connects Collaboration meetings, completion of and research for Screening Forms and Environmental Screening Tools, and centralized asset management. Other activities will include coordination with PennDOT and communication of the outcome to local, city, and county planners.
8. DVRPC will also coordinate with PennDOT, and the PA Planning Partners on the potential development of new data collection efforts for transportation assets.
9. Coordinate with the Federal Transit Administration with regard to New Start and Small Start applications proposed by member governments and transit operators.
10. DVRPC will continue to monitor US DOT Metropolitan Planning Organization requirements as well as other policy and program initiatives.
11. DVRPC will research the new requirements and opportunities in the Infrastructure Investment and Jobs Act (IIJA), and will work with member governments to pursue new opportunities as warranted.

## **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).
6. Potentially, new grant applications afforded by the IIJA

## **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>
2022	\$295,946	\$215,421	\$54,200	\$16,325	\$10,000
2023	\$331,274	\$220,412	\$71,287	\$19,575	\$20,000

\*PennDOT FHWA



**PROJECT: 23-33-010 Smart Growth**

---

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

**Program Coordinator:** Andrew Svekla

**Project Manager:** Derek Lombardi, Elizabeth Compitello, Karin Morris

**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 "identify livability, sustainability, and resiliency planning strategies to tie the quality and location of transportation facilities and services to broader opportunities such as; access to employment opportunities, affordable housing, quality schools, safe streets, economic development, social equity, and environment conservation," and E to "provide input on any training and planning activities targeted to county and local governments, conservation districts and community stakeholders," on topics such as smart growth, complete streets, implementation tools, transit-oriented development, and healthy community.

This project supports NJDOT's planning priorities of promoting interagency cooperation, supporting community livability through integrated transportation and land use planning, maximizing the efficiency of the transportation system, and assisting NJDOT's Transit Village Initiative and other smart growth strategies. This project continues to support FHWA-NJ Division's planning emphasis areas related to Regional Models of Cooperation and the principles of Ladders of Opportunity, including providing more transportation choices and supporting existing communities.

**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 principles designed to help communities become more economically prosperous, socially equitable, and environmentally sustainable places. This program is designed to help our planning partners better understand the potential local and regional implications of various land uses, development types, and travel patterns. This program also supports the agency's ongoing efforts to encourage and coordinate planning related to transit-oriented development, age-friendly communities, zoning reform, land preservation, urban revitalization, economic development, and climate change resiliency.

Staff will continue to investigate a variety of housing issues in year 2 of DVRPC's

Regional Housing Initiative. Year 1 of this initiative focused on gathering housing data, conducting a regional housing needs assessment, and engaging with a variety of municipal, county, nonprofit, and private sector stakeholders. Year 2 of this initiative will build on key findings and stakeholder feedback to identify and evaluate strategies that can be used to preserve and promote affordable and workforce housing in Greater Philadelphia. Based on the priorities of our planning partners, these strategies may focus on a combination of municipal tools, such as inclusionary zoning, upzoning, and community land trusts, and state-level legislation and policy that influences diversity and character of the region's housing stock. Staff will develop local and national case studies as appropriate to illustrate the applicability of specific tools, including the use of "missing middle housing types" (a range of building types containing multiple units that are appropriate in scale and form with detached single-family homes) that can be used to help revitalize corridors and communities throughout the region. Year 2 of the initiative will also include opportunities for staff and stakeholders to present and discuss findings and recommendations directly with county and municipal officials.

Staff will collaborate with the Office of Community and Economic Development to conduct the Roebing Steel Plant Land Use and Feasibility Study. This study will investigate the potential reuse of the former Roebing Steel Plant in Florence Township. The project team will work with local stakeholders to conduct market research and evaluate potential reuse scenarios that will inform the creation of an eventual master plan for the Roebing Steel Plant site.

Staff will collaborate with the Office of Mobility and Design and the Office of Communications and Engagement to support efforts being undertaken by the City of Philadelphia and a consultant team to evaluate the feasibility of capping all or part of the Vine Street Expressway (I-676) in Center City Philadelphia. DVRPC's tasks will likely focus on helping to lead a stakeholder engagement process that will be designed to identify the needs and priorities of communities along the Vine Street Expressway. These findings will inform future work designed to evaluate the engineering and financial feasibility of the project.

Staff will update DVRPC's Smart Growth Project Database web mapping application once again in FY23 and continue to facilitate discussion with internal staff and external stakeholders to determine potential revisions to the application's purpose, layout, and/or function. Staff will look for opportunities to better align this tool with DVRPC record keeping on the municipal adoption of Smart Growth tools as well as DVRPC's Municipal Implementation Toolbox.

Staff will continue to assist stakeholders understand the findings and implement the recommendations from recently completed or to be completed studies, including Cultural Preservation, Community Impacts of Multifamily Development, SEPTA TOD Policy Research, and Station Area Planning for the King of Prussia Rail. For example, staff will continue to make presentations to interested stakeholder groups and serve as a technical resource for communities interested in discussing the zoning and regulatory implications of DVRPC's multifamily and other housing

research. Staff will also continue to serve on the steering committee for ongoing and future studies related to the development of the King of Prussia Rail Project.

Staff will continue to offer technical assistance and promotion of smart growth principles to national, state, regional and local partners, including such initiatives as the NJDOT Transit Village Task Force, Sustainable NJ committees, AARP Livable Communities Network, Drexel's AgeWell Collaboratory, American Planning Association Pennsylvania and New Jersey chapters, and the Urban Land Institute Philadelphia Chapter Councils.

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

### **Tasks:**

1. Investigate and evaluate municipal strategies and state policies that influence the creation and preservation of affordable and workforce housing in the region.
2. Synthesize key findings from housing research in order to create materials that can be shared with a variety of stakeholders.
3. Conduct analysis of the Roebling Steel Plant site and review development precedents from other similar waterfront sites in our region and throughout the county.
4. Design and conduct stakeholder engagement activities designed to help establish a community vision for the future of the Vine Street Expressway.
5. Update the Smart Growth Project Database and consider how it can be revised to better serve the needs of DVRPC and its planning partners.
6. Continue to support the implementation of recommendations from recently completed Office of Smart Growth studies.
7. Provide technical assistance to numerous partners on various Smart Growth and livable community efforts.
8. Present and promote DVRPC's smart growth studies and products to local, regional, and national audiences, through workshops, seminars, conferences, etc.

### **Products:**

1. Web product designed to share and highlight key housing-related information for communities across Greater Philadelphia.
2. Summary documents and presentations that describe recommendations and strategies that can be used to preserve and promote affordable and workforce housing in Greater Philadelphia.
3. Materials summarizing the market conditions influencing the reuse of the Roebling Steel Plant site.
4. Community engagement activities conducted in support of the Vine Street Expressway Capping Study.
5. Updated Smart Growth Project Database.
6. Updated data, analysis, and presentations in response to stakeholder needs.

7. Smart growth presentations at local, regional, and/or national meetings and conferences.

**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>
2022	\$703,500	\$404,479	\$101,763	\$57,258	\$140,000
2023	\$673,500	\$454,312	\$146,930	\$32,258	\$40,000

\*PennDOT FHWA

**PROJECT: 23-33-020 Community & Economic Development**

---

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

**Program Coordinator:** Karen Cilurso

**Project Manager:** Brian Carney, Karin Morris, Spencer Gober

**Goals:**

To support the key policies of Connections 2050 by ensuring a diverse and competitive regional and local economy by encouraging reinvestment in the region by coordinating regional transportation, land use, redevelopment, and economic development cooperation.

This program area addresses the planning issues identified in the FAST Act, specifically by supporting the economic vitality of the metropolitan area by promoting consistency between transportation improvements and state and local planned growth and economic development initiatives; improving the regional freight network to expand access to national and international trade markets; ensuring equitable and efficient multimodal transportation options with respect to travel and tourism activities; and supporting local and regional economic development.

The Community and Economic Development program area supports PennDOT's Planning Priority (IV) Land Use/Transportation Linkages/Economic Development/Modernization, specifically to identify livability, sustainability, and resiliency planning strategies to tie the quality and location of transportation facilities and services 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 megaproject supports NJDOT's MPO Transportation Priorities, including promoting partnerships and maximizing opportunities for Complete Streets implementation. The work through the Community and Economic Development program also supports NJDOT's MPO Priorities by continuing to engage with the public to strengthen public confidence and participation in the planning process through the use of web/technology, social media, outreach, education, and public forum meetings and working with county and municipal partners for integration of transportation and land use to promote community livability. This project supports the New Jersey Statewide Long Range Transportation Plan.

**Description:**

CEDS: At the regional level, staff will continue to lead, participate, and support economic development investment strategies in the region; including managing and maintaining the region's Comprehensive Economic Development Strategy (CEDS),

as required by the US Economic Development Administration (EDA). Tasks may include completing and submitting the CEDS updates to EDA, amending the list of vital projects as appropriate, assisting in grant applications to EDA, and working with federal and regional partners to identify how to best advance the CEDS goals. To continue to comply with EDA guidelines, staff will explore the region's vulnerability with regard to a major economic downturn caused by natural events, loss of a major employer, pandemic or similar major health crises, or international trends. Staff will continue to engage and build partnerships with US EDA and other economic development practitioners and provide for potential US EDA funding applications. Additional activities may include convening economic development partners for project development and reaching out to county partners outside of the DVRPC service area. Staff will continue to analyze employment and industry data and report on regional trends and any other data requests as part of our economic analyses supporting the long-range plan and CEDS.

**Rating the Region:** Staff will provide updated data and analysis for the regional comparisons report (Rating the Region), as part of our Connections 2050 efforts, by collaborating with long-range planning staff to add the Rating the Region indicators to DVRPC's existing Tracking Progress dashboard. Indicators for the regional CEDS will also be combined with the Tracking Progress indicators to expand the Tracking Progress dashboard's scope. Updates will be made to increase user accessibility and readability.

**Access to Tourist Destinations:** Staff will continue to identify livability and sustainability strategies to tie the quality and location of transportation facilities to multi-modal accessibility of tourist destinations and employment. Tasks may include working with local communities to make better use of their tourist destinations, convening tourism stakeholders in the region, and addressing multi-modal feasibility to tourist destinations.

**Camden County Missing Middle Housing:** Since many of the region's mature communities face social, economic, transportation (motorized and nonmotorized), and infrastructure challenges, staff will continue community development and revitalization efforts that strive to implement Connections 2050, and assist with investment and equitable development strategies at the local level. Specifically, staff will collaborate and assist on the Housing Initiative developing specific case studies in Camden County on missing middle housing. As part of the Housing Initiative, staff will use the Regional Economic Development Forum (RCEDF) to provide outreach to communities highlighted in the identified case studies to discuss the research and best practices.

**Retail Districts:** Staff will continue to monitor community resilience, specifically for the region's identified retail districts and downtowns to address pandemic recovery needs. This may include zoning recommendations, street design flexibility, and/or convening stakeholders. The retail district typology work will continue to be evaluated and enhanced.

Roebing Steel Plant Land Use and Feasibility Study (Florence Township, Burlington County, NJ): Staff will assist on the Roebing Steel Plant Land Use and Feasibility Study to determine the highest and best use of this brownfield transit-oriented development, including market feasibility. Tasks may include land use and zoning research, census and retail data collection, regulatory document research, and outreach including stakeholder interaction and presentations.

Regional Community and Economic Development Forum (RCEDF): Staff will hold a minimum of two but up to four meetings of the Regional Community and Economic Development Forum (RCEDF). At least two meetings will be used for the Housing Initiative case study outreach meetings. 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.

TCDI: Program administration of the Transportation and Community Development Initiative (TCDI) grant program will continue. FY 2023 will include project solicitation for eligible New Jersey communities with project selection in spring 2023. Projects will then be managed by DVRPC staff and this will include all tasks related to procurement, invoicing, progress reports, and outreach meetings, as necessary. Staff will continue to maintain the TCDIdirect (project management) database specifically providing project management for previously awarded FY22 Pennsylvania projects.

Municipal Outreach: Staff will continue municipal outreach through educational events and workshops. These events provide Certification Maintenance (CM) credits for American Institute of Certified Planners (AICP) members. Staff will maintain the Municipal Funding Resource (MFR) which provides a list of grant programs for stakeholders. The MFR is a shared online database with our county partners that enables each to share programs and opportunities.

Completion of this work may require the purchase of equipment and data services.

**Tasks:**

1. Work with EDA and regional stakeholders on the development of the regional CEDS.
2. Maintain the economic development webpage and subpages with current data.
3. Update Tracking Progress interface to include regional and CEDS-related economic development indicators.
4. Analyze multi modal access to tourist destinations.
5. Assist on the Camden County Housing Missing Middle analysis.
6. Identify and engage local stakeholders and community leaders, as well as provide local technical assistance to communities on revitalization strategies through educational events and workshops.
7. Provide analysis on the Roebing Steel Plant Land Use and Feasibility Study.

8. Convene a minimum of two (2) but up to four meetings of the Regional Community and Economic Development Forum (RCEDF). Two meetings specifically for the Housing Initiative outreach and case studies.
9. Develop the FY 23 TCDI Program Guidelines and updated webpage.
10. Maintain the TCDI Direct project management database.
11. Deliver Municipal Outreach presentations as requested.
12. Provide AICP CM credits as requested.
13. Work with county partners to maintain the Municipal Funding Resource Database.

**Products:**

1. CEDS Key Regional Economic Development Project Database.
2. Memos or products as requested by US EDA (as it pertains to our pending Economic Development District (EDD) status), as well as EDA support letters for potential funding applicants.
3. Economic Data bulletins and/or Snapshots.
4. Updated Tracking Progress dashboard that includes metrics to compare regions.
5. Technical memo on increasing multimodal access to tourist destinations.
6. Deliverable/Report on Camden County Missing Middle Housing.
7. Retail District analysis.
8. Roebling Steel Land Use and Feasibility Study deliverable(s).
9. Minutes of the Regional Economic Development Forum Meetings (RCEDF)
10. FY 23 TCDI Program Guidelines and updated webpage.
11. TCDI Direct project management database.
12. Municipal Outreach presentations as requested.
13. AICP CM credit event surveys.
14. Municipal Funding Resource Database.

**Beneficiaries:**

Member governments, nonprofits, developers, the private sector, economic development professionals, and planning professionals

**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>
2022	\$556,000	\$238,497	\$60,003	\$22,500	\$235,000
2023	\$606,000	\$216,108	\$69,892	\$45,000	\$275,000

\*PA TIP - MPMS #115963 - \$170,000 STU/Toll Credit Match for TCDI Admin;

NJ TIP - DB #D0204 - \$105,000 STBGP-PHILA for TCDI Admin;



**PROJECT: 23-33-030 Energy and Climate Change Initiatives**

---

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

**Program Coordinator:** Christopher Linn

**Project Manager:** Elizabeth Compitello

**Goals:**

- Provide leadership to the region on energy and climate change issues, including:
- reducing greenhouse gas (GHG) emissions through energy conservation, energy efficiency, electrification of buildings and vehicles, and switching to low or no-carbon energy sources.
  - increasing the resilience of the region to the impacts of climate change

More specifically, the program aims to:

- Encourage and support municipal, county, regional, and state agencies and officials in developing policies and practices to respond to the ongoing and projected impacts of climate change.
- Develop and disseminate information on the projected 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.
- Encourage and support municipal, county, regional, state agencies and officials in developing policies and practices to reduce energy use and GHG emissions in their activities and operations.
- 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.
- Continue to represent DVRPC's regional/MPO perspective at appropriate policy venues, including PA and NJ state committees/meetings and Transportation Research Board (TRB) -related activities.
- 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 foster a regional approach to addressing these issues.

## **Description:**

This program area leads planning efforts to reduce greenhouse gas emissions within the region by promoting greater energy efficiency, energy conservation, the electrification of buildings and vehicles, and the use of cleaner energy. In addition, it seeks to prepare the region for the ongoing and anticipated impacts of climate change on the built and natural environment.

This program 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 Pennsylvania's 2018 Climate Change Action Plan, Governor Wolf's Executive Order 201-01 "Commonwealth Leadership in Addressing Climate Change and Promoting Energy Conservation and Sustainable Governance", as well as the 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.

Changes in extreme weather events brought on by climate change will have continued impacts throughout the region. As global temperatures increase, the sea level rises, and riverine and nuisance flooding increase, the risk to the region's assets will continue to increase. Managers and planners will need to consider the impacts of climate change on roads, bridges, airports, rail, transit systems, ports, water and wastewater systems, storm water systems and utilities, as well as agricultural activities, land use, public health, and the natural environment. This program area will provide broad support for these efforts..

Energy use is the primary driver of greenhouse gas emissions in the region. At the same time, 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, the electrification of buildings and vehicles, and in zero-carbon, renewable, and lower-carbon energy sources. This program area will build on these changes to accelerate de-carbonization at the regional and local scale.

## **Tasks:**

1. Coordination and Facilitation—Facilitate coordination and discussion among partner organizations within the region. Participate in relevant local, regional, state, and national efforts related to alternative fuel vehicles, energy-efficiency, energy conservation, electrification, GHG emissions reduction, and preparing for the impacts of climate change on transportation 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 Change Forum (CCF) —Organize and produce two to three webinars or workshops focusing on topics relevant to climate change adaptation or mitigation, such as guidance on municipal resilience planning, the impacts of climate change on water or wastewater systems, and building electrification.

3. Information Collection and Analysis—Continue to develop and disseminate information on regional energy use and GHG emissions, as well as opportunities for reducing energy use and GHG emissions, at the state, local, and sectoral level. This will include data collection and analysis for the 2019/2020/2021 Regional GHG and Energy Use Inventory.

4. Technical Assistance: Climate Change Adaptation—Continue to assist local government stakeholders and planning partners in understanding and preparing for the expected impacts of climate change, including providing information on projected impacts on the region's transportation infrastructure, municipalities, residents, and businesses. This work will include outreach using DVRPC's Municipal Implementation Tool #31 "Municipal Management in a Changing Climate." Assist in developing strategies to increase resilience and adapt to changing climate conditions.

5. Technical Assistance: Climate Change Mitigation—Continue to assist member governments and others in assessing policies and actions most appropriate at the regional, county and municipal level to reduce energy use and GHG emissions. This work may include evaluating the cost-effectiveness, feasibility, energy savings, and other associated benefits, costs, and secondary impacts associated with the various options. This will include continued support within the DVRPC region for the PA DEP's Local Climate Action Planning program for municipalities.

6. Continue to manage the Regional Streetlight Procurement Program (RSLPP). FY2023 work includes management of Round 2 through construction and post-construction operation and maintenance services for the 27 participating municipalities, as well as the management of Round 3 launched in 2021 (FY22) with 11 additional municipalities.

7. Continue to manage the Regional Power Purchase Agreement Partnership, a partnership of Bucks, Chester, Delaware, and Montgomery counties to explore opportunities for aggregate procurement of electricity and renewable energy for county operations. The Partnership may expand to include additional parties, such as municipalities and schools. (This will be done in coordination with Local Government Energy Implementation Strategies 23.33.160)

8. Continue to develop additional aggregate procurement opportunities around energy and support other DVRPC departments in facilitating other non-energy aggregation procurement efforts done at the regional level. Staff will do this by: ensuring municipalities and counties have the technical 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 and counties. Examples may include the development of a Regional Electric Vehicle Program (in coordination with the Regional Electric Vehicle Planning Program (23.34.190), or a Regional Energy Manager Program. This work may require the hiring of a technical consultant(s). (This will be done in coordination with Local Government Energy

## Implementation Strategies 23.33.160)

9. Staff may continue to provide technical assistance to municipalities on their efforts to support renewable energy, electrification of vehicles and buildings, and energy efficient development in their communities. This work may include the development of renewable energy and electric vehicle ordinances and permitting processes, support for Solarize campaigns, and engaging the local utility.

10. Evaluate opportunities for developing a regional framework and consensus around actions to reduce greenhouse gas emissions. These opportunities may include the development of a regional climate or energy action plan and facilitation of regional dialogues around best practices and lessons learned from climate action activities in the region that reduce greenhouse gases. The latter could be topics for the Climate Change Forum (task #2). (This may be done in coordination with Local Government Energy Implementation Strategies 23.33.160)

Completion of these tasks may require the purchase of equipment and services.

### **Products:**

1. Climate Change Forums.
2. Regional Energy Use and GHG Emissions Inventory representing data from 2019 or 2021.
3. Continued provision of tools (e.g., MITs, online tools, white papers, webinars,) for municipalities and others to support climate change adaptation and mitigation.
4. Continued integration of energy use and GHG emissions analysis into DVRPC planning documents.
5. 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 the PA DEP Climate Change Advisory Committee, the NJ Climate Change Alliance, the NJ Coastal Resilience Collaborative, DRBC's Advisory Committee on Climate Change, and the Megalopolitan Coastal Transformation (MACH) Hub Collaborative Stakeholder Advisory Panel (CSAP), as well as any support needed for the USDOT's FAST Act Resilience Performance Factor, PennDOT's Extreme Weather Vulnerability work, and NJDOT's ongoing efforts to improve the resiliency of the transportation system
6. Meeting highlights, PowerPoints, evaluation, guidebooks, or other technical assistance from RSLPP.
7. Technical assistance and resources related to regional procurement opportunities and practices, energy management, and renewable energy development.

8. Model ordinances and permitting guides for renewable energy and electrification.

9. More specific products related to technical assistance efforts mentioned in tasks will be determined at the beginning of fiscal year.

**Beneficiaries:**

Member governments; state and federal agencies; transit authorities; municipal officials; nonprofits; 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>
2022	\$341,508	\$149,017	\$37,491	\$55,000	\$100,000
2023	\$376,508	\$282,609	\$91,399	\$2,500	\$0



## **PROJECT: 23-33-040 Environmental Planning**

---

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

**Program Coordinator:** Christopher Linn

**Project Manager:** Amy Verbofsky, Melat Musie, Miles Owen, Shawn Megill Legendre

### **Goals:**

This program area will:

- Provide leadership to the region on protecting open space, maintaining healthy ecological systems, improving water quality, building healthy communities, and incorporating a comprehensive network of bicycle and pedestrian facilities into the current transportation system.
- Increase the level of education and outreach on sustainability planning principles to member governments and the public.
- Develop and disseminate information on growth management, land preservation, watershed protection, storm water management, green infrastructure, active transportation, resiliency, and healthy communities to member governments and the public.

The program will also promote the following goals of PennDOT, NJDOT, and FHWA:

- Support commuting alternatives to single occupancy vehicle (SOV) travel and consider all modes of transportation 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.
- Support land use patterns that promote accessibility, sustainable mobility and transportation choices.
- Maximize opportunities for Complete Streets.
- Implement the Program Development and Project Delivery Process to make the best use of available transportation funds and improve project implementation.
- Expand use of management systems and data-driven tools to inform investment decisions.
- Incorporate environmental stewardship principles into transportation investments.
- Support the environmental review process, including PennDOT Connects.
- Identify and assess programs and strategies to increase resiliency.

### **Description:**

This program area will lead planning efforts to maintain and improve environmental quality, create new opportunities for trails and active transportation, mitigate natural hazards, and build healthy communities.

Issues addressed include land use, water quality, storm water management, flooding, hazard mitigation, natural resources, open space preservation, 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:

- Trail Mapping – Maintain and update the DVRPC Trails Inventory - an online map of all established trails in the region - regardless of length, surface or facility type. This work will provide on-going updates to the NJ and PA inventories compiled in FY20, 21, and 22.

- Trail and Greenway Planning – Support the region’s efforts to implement greenway corridors, multi-use trails, the East Coast Greenway, and other related local initiatives by providing technical assistance, coordination, planning services, evaluation metrics, and by assisting PennDOT, NJDOT and trail sponsors with federal/state trail funding opportunities and the Program Development and Project Delivery Process to insure that projects are ultimately completed on time and within budget. Continue to explore best practices and new approaches to building trails, including various methods and models for implementation and project delivery. This work will include researching various models for regional trail development entities and investigating approaches for evaluating utilitarian trail use. The Office of Climate and Environment (OCE) will also 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 emphasizes implementation of the region’s “Greenspace Corridors” to provide increased opportunities for recreation and protect critical natural resources such as waterways and floodplains.

- Open Space Protection – Provide data, technical assistance, and opportunities for coordination to support county-led open space preservation efforts. Update the inventory of locally funded open space programs in May and November, post primary and general elections. Publish this information on the DVRPC website including maps, tables and narrative.

- Long Range Planning - The Office of Climate and Environment will support efforts to track progress toward meeting Connections 2050 goals. This will involve research, data collection, and processing, and collaboration with the LRP team.

- Regional Environmental Planning – Work with willing partners and build upon on-going efforts to support land conservation, water quality improvements and green infrastructure through projects, programs and plans. Incorporate this work into corridor studies, land use and transportation studies, and PennDOT Connects and New Jersey Capital Program Screening Committee (CPSC) reviews. Focus on helping the region minimize and mitigate the impacts of transportation infrastructure on environmental resources, and promote improved storm water management practices through approaches such as multi-municipal BMP (Best Management Practices) implementation and related strategies. Data gathered and tools developed may be used to strengthen the linkages between environmental

stewardship and transportation investments, and streamline the environmental review process.

- Municipal Environmental Planning – Continue to provide environmental planning services to local governments to assist with the preparation of local planning documents. Services offered will be expanded to include Climate Change-related Hazard Vulnerability Assessments, as required by recent amendments to NJ's Municipal Land Use Law (MLUL). Other planning services may include environmental resource inventories, open space plans, municipal public access plans, master plan conservation elements, farmland preservation plans, sustainability plans, etc. The program is fee-based, but DVRPC can provide a subsidy to communities in Mercer, Burlington, Camden and Gloucester counties to encourage more municipalities to undertake the work.

- Coordination and Facilitation – Facilitate coordination and discussion within the region through meetings, information sharing, websites and other means, and participate in environmental, sustainability, trail-development, and healthy communities work locally, regionally, and at the state and federal level. OCE will partner with local governments, neighboring MPOs, state and federal agencies, and non-profit organizations.

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

### **Tasks:**

1. Update and post new trail data to the current web-based trail inventory.
2. Organize and host semi-annual meetings of the PA East Coast Greenway Committee.
3. Develop a database documenting obstacles (ROW, environmental, utility, safety, public opposition, etc.) that individual Circuit Trail segments must overcome to advance through the PennDOT and NJDOT project delivery processes. The goal is to better understand the path forward for each project, develop a more detailed understanding of costs and timelines, and ultimately assemble a pool of projects than can more readily advanced to the TIP. This work will be conducted in coordination with the Office of Project Implementation, the Office of Capital Programs, the counties, individual project sponsors, and the Circuit Coalition.
4. Conduct background research into the roles and responsibilities and pros and cons of a regional trail development entity dedicated toward completion of the Circuit.
5. Conduct research on how to best evaluate the use of the region's trails for commuting and utilitarian purposes.
6. Review and evaluate applications for the TASA, PennDOT Multi-modal, CMAQ, DCNR C2P2, and related federal and state funding programs. Provide scores and comments.
7. Collect, share and disseminate trail-user counting data.
8. Update the inventory of locally-funded open space programs following elections twice annually.
9. Facilitate coordination of open space preservation and greenway development activities, as needed.

10. Develop data and metrics for Tracking Progress.
11. Evaluate candidate transportation projects for PennDOT Connects and the NJ Capital Program Screening process.
12. Review and provide recommendation letters for PENNVEST candidate projects.
13. Evaluate and rank PECO Green Region applications.
14. Promote and respond to requests for municipal environmental planning services for local governments.
15. Continue broad technical assistance to municipalities, counties, state agencies, and non-profits for greenway, open space, and environmental planning.
16. Update OCE webpages as needed.
17. Provide support for environmental meetings, such as convenings around open space preservation efforts, healthy communities, or environmental justice, as needed, with guest speakers on topical issues and ample time for coordination and collaboration.

### **Products:**

1. Updates to the web-based trail inventory and the Circuit Trails online map.
2. PA East Coast Greenway Committee materials.
3. Circuit Trails project development database.
4. Scores and comments for federal/state competitive funding processes.
5. Tables, data, and narratives describing DVRPC's permanent trail user counting program.
6. Updated map, tables, and webpage for locally-funded open space programs.
7. Data and tables on open space preservation and water quality for Tracking Progress.
8. PennDOT Connects and New Jersey CPSC project reviews.
9. PENNVEST project review letters.
10. PECO Green Region project scores and comments.
11. Scopes of work, budgets, and contracts for municipal environmental planning projects.
12. Meeting materials. notes, maps, and presentations on environmental topics as described above.
13. Updated OCE webpages.

### **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>
2022	\$309,500	\$259,500	\$0	\$50,000	\$0
2023	\$314,500	\$259,500	\$0	\$55,000	\$0



## **PROJECT: 23-33-050    Geographic Information Systems**

---

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

**Program Coordinator:** Mark Gatti

**Project Manager:** Glenn McNichol

### **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, PA Spatial Data Access (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 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. Provide access to 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. Provide data files and technical support to planning efforts of DVRPC, state agencies, county planning organizations, operators, and the private sector, as requested.
8. Coordinate data development with other DVRPC programs and federal, state, and local efforts, whenever possible.
9. Attend training, seminars, and conferences to keep current on the latest industry trends.
10. Expand geospatial data sharing and distribution using current web technologies.
11. Develop and maintain web mapping applications in support of DVRPCs outreach goals.
12. DVRPC will also coordinate with PennDOT, the counties, and cities on the collection and validation of local transportation asset data.
13. Perform activities associated with the local transportation asset inventory.
14. Maintain 2015 land use data and prepare for 2020 land use update.
15. Produce high quality cartographic products for DVRPC programs and planning efforts.

**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>
2023	\$339,400	\$233,789	\$75,611	\$30,000	\$0

## **PROJECT: 23-34-010 Long-Range Planning**

---

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

**Program Coordinator:** Brett Fusco

**Project Manager:** Jackie Davis

### **Goals:**

Develop and implement a long-range vision and plan for Greater Philadelphia by providing guidance for future growth and development in the nine-county region, and ensuring that transportation investments are tied to long-term land use, economic development, environmental, transportation, and equity goals.

### **Description:**

In air-quality nonattainment areas, Metropolitan Planning Organizations (MPOs) are required to prepare and maintain a long-range transportation plan with a minimum 20-year horizon, and 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 both addresses the future of transportation and considers 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-based planning and programming, including FHWA and FTA transportation performance management (TPM) measures, project benefit evaluation criteria for analyzing and selecting transportation projects, and performance measures for gauging progress toward Long-Range Plan goals. The Plan addresses the planning factors required under current FHWA federal planning regulations. It is also compliant and coordinated with state initiatives—both DOTs long-range plans, statewide freight plans, strategic highway safety plans, and transportation asset management plans, along with PennDOT Connects—and member government comprehensive planning efforts. The current Plan, Connections 2050, was adopted by the DVRPC Board on September 23, 2021. The Office of Long-Range Planning (LRP) will continue to implement Connections 2050 by working with planning partners, stakeholders, and the public on taking actions and identifying municipal strategies to bring about the vision. The last component to the Connections 2050 Plan will be completed in FY 23, which is to update the TIP-LRP Project Benefit Evaluation Criteria working with the Office of Capital Programs and the RTC. A major Plan amendment to Connections 2050 may be undertaken in conjunction with the Infrastructure Investment and Jobs Act.

The next update to the region's Long-Range Plan will commence in FY 23. The first task will be to work with DVRPC's Futures Working Group to update the Dispatches from Alternate Futures scenarios. The scenarios will be informed by modeling done using Impacts 2060, UrbanSim, and Vision Eval. The scenarios will inform a

relaunched Choices & Voices version 3.0 interactive financial plan tool, which will be the centerpiece of the next plan's public outreach. The scenarios will also inform other key LRP components, including the vision and goals, strategies, and financial plan, which will be the focus of future work programs.

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

**Tasks:**

1. Work with the Futures Working Group to update the Dispatches from Alternate Futures scenarios.
2. Host 2-3 Futures Group meetings covering key topical issues related to transformative technologies, forces, events, and other issues that may shape the future of Greater Philadelphia.
3. Work with stakeholder agencies, such as PennDOT, NJ DOT, 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. Maintain collaboration with surrounding MPOs as a means to discuss and coordinate on multi-regional issues and best practices on an as-needed basis.
5. Continue to incorporate US DOT Transportation Performance Management performance measures and targets into the long-range planning process.
6. Explore ways to evaluate how the Long-Range Plan has guided decision making at the local, state, and federal levels, potentially through surveys, interviews, and other means.
7. Facilitate Advanced Mobility Partnership meetings and continue to incorporate emerging technologies, such as connected and automated vehicles, into the long-range planning process.
8. Begin work on Choices & Voices version 3.0, using modeling developed for Dispatches from Alternate Futures.
9. Assist other DVRPC offices and program areas on annual work program tasks, as needed.

**Products:**

1. Connections 2050 TIP-LRP Benefit Evaluation Criteria.
2. More Dispatches from the Future scenario report.

3. White paper evaluating Long-Range Plan’s effectiveness in helping to shape regional decisions.

**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>
2022	\$582,000	\$349,156	\$87,844	\$45,000	\$100,000
2023	\$597,000	\$417,103	\$134,897	\$45,000	\$0



**PROJECT: 23-34-020 Freight and Aviation Planning**

---

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

**Program Coordinator:** Michael Ruane

**Project Manager:** Kristen Scudder

**Goals:**

Promote freight and aviation considerations in the planning process to encourage the development and preservation of safe, efficient multimodal transportation systems that maximize Greater Philadelphia's position in the global economy

**Description:**

Freight and aviation movement are critical planning factors for the Greater Philadelphia region. The region's economic competitiveness is closely tied to the freight and aviation network. Freight shipments and supply chains are highly dynamic, impacting nearly every transportation mode as well as land development patterns and employment. Planning for freight and aviation capitalizes on trends and opportunities while promoting and preserving quality of life, economic, safety, environmental, sustainability, and land use goals.

The Freight and Aviation Planning program seeks to improve the visibility and availability of data; educate planners and the public on key freight information; encourage a smart, multimodal transportation system; and inform transportation infrastructure investment. 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, Congestion Management Process, Smart Growth, air quality planning, and in many other aspects of DVRPC's work. The program achieves these objectives through three primary areas of work: engagement and advocacy, regional trends and performance tracking, and local technical studies and education.

Building from the work completed on the Impacts of E-Commerce in Greater Philadelphia (FY22), the Office of Freight and Aviation Planning will explore scenarios for the future of freight deliveries. This work would engage regional stakeholders to identify the possible real-world shifts in land-use, transportation, and employment resulting from the emerging trends in e-commerce and delivery technologies. These scenarios would be leveraged to highlight the potential for changes in how different community types may experience e-commerce and goods deliveries in the future.

The Office of Freight and Aviation Planning will undertake a comprehensive study on freight access and truck routing in Lower Bucks County. With growing pressures of industrial development and the proposal for over 10 million square feet of new distribution center development, maintaining the vitality and quality of life in communities impacted by industrial development in lower Bucks County, but also including adjacent communities such as in Mercer County, will require a broad

understanding of the transportation and workforce demands of these shifting development patterns. This study would seek to expand on two specific areas of concern: truck freight access and workforce access. Documentation of the needs and identification of strategies for addressing these two key concerns will focus on ensuring equitable access and minimizing the community impacts of increased volumes of truck freight activity.

The Office of Freight and Aviation Planning will undertake additional freight planning work in support of key initiatives that reflect the growing interest of DVRPC member governments in freight transportation. These include support of the City of Philadelphia on urban freight initiatives, supporting supply chain research and resiliency planning efforts, and continuation of the New Jersey Freight Rail Market Opportunity Study. This program will also provide support of ongoing aviation planning efforts in the region. This includes supplemental support of the FAA Planning projects for the Regional Aviation System Plan and ongoing Aircraft Counting Program.

Finally, a major objective of the Office of Freight and Aviation is to initiate and sustain meaningful outreach to the local freight and aviation communities and to build awareness and interest among planners and the general public. The Delaware Valley Goods Movement Task Force, the region's freight advisory committee, and the Regional Aviation Committee are the focal point of these efforts. Educational pieces on freight and aviation operations and issues are prepared each year, and many helpful resources are made available on the freight and aviation pages 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. Engagement and advocacy for freight and aviation
  - A. Plan for, conduct, and document quarterly meetings of the Regional Aviation Committee and Delaware Valley Goods Movement Task Force and the Task Force's Executive Committee and membership development efforts.
  - B. Facilitate committee 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.
  - C. Support public sector initiatives, freight advisory committees, freight plans, aviation advisory committees, state aviation system plans, funding programs, multi-state efforts such as The Eastern Transportation Coalition (TETC), and DVRPC member governments, neighboring MPOs, the New Jersey, Pennsylvania, and Delaware DOTs, and FHWA.
  - D. Working with private sector partners, New Jersey and Pennsylvania DOTs, and DVRPC member governments; continue to seek solutions and advance strategies that address truck routing and parking issues.

E. Participate in industry 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).

F. 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.

## 2. Future of Freight Deliveries Scenarios

A. Engage regional stakeholders in the identification of trends and technological forces that will inform freight deliveries in the future

B. Develop scenarios for the likely futures of freight deliveries and e-commerce activity in the region

C. Produce materials highlighting resulting transportation, land use, and community impacts and challenges from the shifts in future freight scenarios

## 3. Lower Bucks Freight Access Plan

A. Analyze the nature of new and proposed development and the trip generation impacts

B. Document existing trip distribution and identify critical truck network components

C. Develop strategies and investments to support growth in truck freight activity that minimize community impacts

D. Convene key stakeholders to identify challenges in workforce access for major developments in Lower Bucks

E. Identify gaps and strategies to improve access through public/private partnerships

## 4. Other local technical studies and coordination

A. Support the City of Philadelphia on Freight Initiatives: Provide technical and analytical support to the City of Philadelphia for various freight planning efforts and initiatives. This may include technical analysis of truck network components, support of supply chain resiliency work through the Office of Emergency Management, and ongoing support on urban freight initiatives as requested.

B. Support other DVRPC offices in freight-related planning efforts including studies incorporating supply chain evaluation and planning.

C. Support regional planning partners through responses to inquiries, surveys, and requests regarding the region's freight and aviation network and provide advisory support on key planning efforts regionally.

D. Complete the final components of the New Jersey Freight Rail Market Opportunity Study (22-34-020) and any outstanding deliverables from the study.

## 6. Regional data and visualization

A. Maintain an ongoing freight data, visualization, and mapping program highlighting facility capacity, freight infrastructure, and activity measures (i.e., vehicle counts by class) through the PhillyFreightFinder tool, leading to assessments of deficiencies and improvement opportunities.

B. Conduct updates and maintenance on the aviation data system to ensure products and data acquired in support of FAA funded projects are available for public and planning partner consumption.

**Products:**

1. Quarterly meetings of the Delaware Valley Goods Movement Task Force and Regional Aviation Committee, meeting highlights, facilitated communication among the Task Force Executive Committee, and quarterly progress reports.

2. Technical reports and memos to include:

A. Process memo and analysis products for City of Philadelphia Urban Freight Initiatives.

B. Future of Freight Deliveries Scenarios report.

C. Lower Bucks Freight Access Study report.

D. Memos and data reports as necessary in response to planning partner data requests.

3. Updated tools and information via the PhillyFreightFinder web mapping application and data platform and the regional aviation data portal.

**Beneficiaries:**

Freight and aviation 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>
2022	\$389,500	\$294,226	\$74,024	\$16,250	\$5,000
2023	\$389,500	\$282,036	\$91,214	\$16,250	\$0

## **PROJECT: 23-34-030    Travel and Land Use Modeling**

---

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

**Program Coordinator:** Matthew Gates

**Project Manager:** Brad Lane

### **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 or any successor 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 data and parameters for UrbanSIM and other land use and economic impact tools, as needed.

### **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-date 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>
2022	\$394,250	\$310,006	\$77,994	\$1,250	\$5,000
2023	\$462,250	\$348,342	\$112,658	\$1,250	\$0

---



## **PROJECT: 23-34-040    Regional Congestion Management Process**

---

**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 Congestion Management Process (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:**

A CMP uses data and performance measures to identify and prioritize congested corridors, intersection bottlenecks, and other facilities on the regional transportation network. It helps determine the causes of 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 a data 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 and Equity. The CMP includes work with the new federal Transportation Performance Management (TPM) requirements, known as PM3 measures, specifically measuring system performance on the National Highway System. This includes PM3 reliability and traffic congestion measures and targets. The CMP continues to evolve as more refined data and software tools are available to identify and analyze congestion.

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, including the TPM requirements and that continues under the Infrastructure Investment and Jobs Act. 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 Eastern Transportation Coalition.

The focus areas for FY 2023 include, implementing the Transportation Performance Management (TPM) requirements, performing ongoing CMP data collection and analysis using archived operational data, using the CMP in project development,

starting the next update of the CMP plan, developing intersection bottleneck improvement strategies, and providing technical assistance for the Mercer County Master Plan Mobility Element.

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

### **Tasks:**

1. Implement the Transportation Performance Management (TPM) requirements.

A. Stay informed of changes to TPM regulations and guidance and continue working with other DVRPC staff, and with planning partners within and outside the region, such as DOTs and adjoining MPOs, to set, monitor, and achieve performance measures targets.

B. Conduct necessary technical efforts with NJDOT, PennDOT, MPOs, and other planning partners on updating, maintaining and using PM3 performance measures and setting 2- and 4-year targets. The reliability measures include Level of Travel Time Reliability (LOTTR) and Truck Travel Time Reliability (TTTR), and the traffic congestion measures include Peak Hour of Excessive Delay (PHED) per Capita and Percent Non-SOV Travel. Coordinate with planning partners in monitoring progress toward attaining the targets and preparing data to report on the road performance for the second 4-year performance period. Review and discuss them with the CMP Advisory Committee, and other planning partners.

2. Perform CMP Data Collection and Analysis

A. Perform ongoing CMP data collection and analysis using INRIX travel time, traffic volumes, and other data to identify trends in system performance across the network. Refine and update strategies to mitigate congestion based on performance measures with guidance from the CMP Advisory Committee.

B. Collect, prepare, and analyze non-recurring congestion events from Regional Integrated Transportation Information System (RITIS) and TRANSCOM databases, such as traffic incidents, adverse weather, and construction to better understand where these events are occurring on the transportation network, and the causes of congestion. Coordinate with PennDOT, NJDOT, planning partners, and other DVRPC staff.

C. Perform before and after traffic evaluation studies of projects intended to mitigate congestion to help understand the effectiveness of the strategies. Incorporate archived operations data, and consult with project stakeholders and the CMP Advisory Committee. Analyze pre- and post-pandemic travel data to monitor shifts in travel.

D. Use existing CMP analysis and other studies to refine CMP strategies to manage congestion by subcorridor, especially TDM and transit strategies.

E. Maintain CMP website mapping and other contents as needed, or requested.

3. Use the CMP in Project Development

A. Help develop and advance problem statements consistent with the CMP.

1. Participate in internal DVRPC processes to implement high priority recommendations from NJDOT problem statement reports. Participate in NJDOT Complete Team, Congested Places, and CMS-21 programs, and conduct field work

or prepare draft problem statements, as necessary, for submission to NJDOT staff as requested and track results.

2. Participate in the PennDOT problem statement development process as applicable for major SOV capacity-adding projects, which is now partially facilitated through the PennDOT Connects process, and work with PennDOT and DVRPC Subject Matter Experts.

B. Review TIP and LRP projects with respect to consistency with the CMP objective measures and perform any other multimodal alternative analyses. Coordinate results using TIP and Long-Range Plan benefit evaluation criteria for prioritizing projects.

C. Facilitate development of supplemental strategies for projects that will add road capacity to get the most long-term value from the investment.

D. Support progress of supplemental CMP projects through coordinating with multimodal partners, and tracking the progress being made in keeping with regulations. Update the CMP Supplemental Projects Status Memorandum report that provides the current status on supplemental project commitments for major SOV capacity-adding projects. Maintain online database that provides access to Supplemental Strategies report information.

4. Start update of the CMP Plan

A. Prepare a list of work tasks for update of the CMP Plan that includes a schedule and staff responsibilities.

B. Prepare GIS and other datasets that will be used in the analysis and mapping of the Plan update.

5. Develop intersection bottleneck improvement strategies

A. Implement an intersection bottleneck screening process to identify and prioritize a select number of locations for improvement strategies.

B. Develop appropriate strategies for bottleneck mitigation that will require collecting traffic signal operation plans, and identifying signal timing and other issues.

C. Work with planning partners, staff, and others to get consensus on prioritized bottleneck locations and improvement strategies.

6. Help provide technical assistance for the Mercer County Master Plan Mobility Element

A. Help convene a steering committee including Mercer County, NJDOT, Greater Mercer TMA, City of Trenton and other stakeholders.

B. Work with steering committee to identify existing and available mobility-related datasets and plans, including updated CMP objective measures, trail and bicycle plans, and equity, transit and vehicular traffic data.

C. Coordinate with the steering committee to develop methods to integrate datasets and prioritize locations for mobility improvements in the Mercer County Master Plan Mobility Element.

7. Stay Current with the Practice of CMP

A. Stay engaged with the fast-evolving use of archived operations and origin/destination 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 from travel time data; creating corridor performance reports; and integrating origin/destination trips data into the CMP to understand better where shorter and longer trip patterns are occurring to help in identifying mitigation strategies for different corridor areas. This can be done in part through engagement with The Eastern Transportation Coalition, and with DOT partners.

B. Continue to improve understanding of the effectiveness of individual CMP strategies through sketch-level models, cost/benefit studies, and before-and-after analysis.

C. Participate in CMP-related efforts by regional and national partners based on invitations and time available.

**Products:**

1. Reporting of PM3 reliability and traffic congestion measures and targets. Coordinate work with DOTs and other planning partners for presentation to the RTC and DVRPC Board, as applicable.
2. Reporting on the latest travel time, speed, and other delay measures by CMP corridor to identify trends in performance by roadways facility and corridor area. Create corridor performance reports to indicate how performance measures are used to identify and prioritize improvements. Publish this and other travel trend information on the COVID-19 web resource page.
3. Reporting on before and after traffic evaluation studies for projects to help understand the effectiveness of the strategies to mitigate congestion.
4. List of tasks and responsibilities for next CMP update, along with the start of some work tasks.
5. Technical report that identifies top intersection bottlenecks, and for a select few specific improvement strategies.
6. Updates to CMP web content, including mapping.
7. Draft CMP-related problem statements, and their status with NJDOT and others.
8. Online resource for documenting the status of supplemental projects.
9. Documented methodology and prioritized geo-enabled list of projects for inclusion in the Mercer Plan Mobility Element.

**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>
2022	\$227,250	\$176,576	\$44,424	\$1,250	\$5,000
2023	\$232,250	\$174,549	\$56,451	\$1,250	\$0

**PROJECT: 23-34-050 Air Quality Planning**

---

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

**Program Coordinator: Sean Greene**

**Goals:**

Improve air quality in the region through coordination of intra- and inter-regional policies, identifying funding opportunities to reduce emissions from transportation sources, public education and outreach, and demonstration of transportation conformity of the region's Long-Range Plan and Transportation Improvement Programs.

**Description:**

DVRPC's air quality program has three main components:

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

Federal requirements mandate that DVRPC must demonstrate the conformity of the region's Long-Range Transportation Plan (LRP) 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 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 PA TDM base program. 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 initiatives. 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.

DVRPC will assist the state DOTs implement the Congestion Mitigation and Air Quality (CMAQ) program. Staff will assist with project eligibility determinations, emissions analysis of proposed projects, and CMAQ project selection. DVRPC will develop CMAQ performance measure reports for the region and coordinate the CMAQ Transportation Performance Management (TPM) process with the state DOTs and other regional stakeholders.

DVRPC will work with state and local governments to assist with identifying local sources of transportation emissions and assist in developing strategies to mitigate those emissions, especially in Environmental Justice communities and communities that show evidence of high incidence of respiratory illness.

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, including testing and preparation for the anticipated update to the MOVES emission model.
3. Prepare input parameters for the regional travel simulation model and for the latest version of the MOVES model approved by US EPA.
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 for conformity determinations 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

8. Convene regular meetings of the Air Quality Partnership Board and any committees it may create. Include representation throughout the nonattainment area.
9. Work with state DEPs to promote the Enviroflash air quality alert system in order to maximize its effectiveness.
10. Raise awareness of the Enviroflash system with the public and the media to extend the reach of the air quality forecast alert system.
11. Develop and produce various products required to promote the program and strategies for air pollution avoidance and emissions reduction.
12. Create and implement effective outreach strategies to educate susceptible populations (Environmental Justice communities, students, and minorities) about protecting public health from air pollution and emissions reductions.
13. Develop educational materials and programs to assist program partners to extend the reach and effectiveness of the program.

## Air Quality Planning Coordination

### 14. Regional Coordination

- A. 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.
- B. Provide literature or presentations to groups requesting information on transportation and air quality programs.
- C. Publish 10 issues of the ALERT newsletter on air quality activities.
- D. Review conformity demonstrations with transportation and air quality committees and present the results of meetings on the Plan and/or TIPs.
- E. 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.
- F. Coordinate CMAQ TPM reports with state DOTs. Submit reports and maintain compliance with CMAQ TPM requirements, including updating the CMAQ Performance Plan.
- G. Review proposed CMAQ projects for cost effectiveness and eligibility.
- H. Provide data and information to planning partners and health professionals regarding regional air quality statistics and analysis.
- I. Work with planning partners to identify sources of emissions, particularly where they impact Environmental Justice communities and communities with high incidence of respiratory illness with the goal of recommending mitigation strategies to reduce congestion and emissions in those areas.
- J. Serve on state ICG for project-level conformity hot-spot analysis.
- K. Assist planning partners to apply for state and federal funding, including but not limited to the Volkswagen Environmental Mitigation Trust and Diesel Emissions Reduction Act (DERA), to reduce emissions from transportation sources.

## 15. Delaware County Air Quality Coordination

- A. Working with the DVRPC Healthy Communities Planning program, convene a stakeholder committee with Delaware County Planning Department, the Delaware County Health Department, Pennsylvania DEP, and others to advise a work plan for this effort which includes identifying sources of data, insight into community needs and conditions, and environmental health expertise.
- B. Identify sources of geographic data regarding incidences of respiratory disease in the county and identify one or more respiratory conditions to use as the benchmark or target condition for the data collections and visualization effort.
- C. Collect and map sources of transportation and point source emissions to associate with health data.
- D. Map and analyze data and develop transportation air quality mitigation and funding recommendations.

### **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.
- 2. Updates to the Conformity webpage.

#### Air Quality Action

- 3. A report on the year's activity submitted to PA DEP.
- 4. Resources for news and editorial outlets for stories on air quality.
- 5. Paid advertisements and promotional literature.
- 6. Public outreach at community and environmental events.
- 7. Educational presentations and materials for use by project partners.

#### Air Quality Planning Coordination

- 8. Action items for the RTC and other committees.
- 9. Papers and presentations on transportation and air quality planning.
- 10. 10 issues of the Alert newsletter on transportation and air quality items of interest.
- 11. Funding applications for projects to reduce transportation related emissions.
- 12. CMAQ TPM reports and web updates as required
- 13. Technical report to Delaware County identifying high congestion areas, goods movement centers, and other likely sources of transportation emissions that includes potential mitigation strategies and potential sources of funding for those efforts.

### **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>
2022	\$249,250	\$194,153	\$48,847	\$1,250	\$5,000
2023	\$254,250	\$191,172	\$61,828	\$1,250	\$0

---



## **PROJECT: 23-34-060 Performance-Based Planning and Asset Management**

---

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

**Program Coordinator:** Brett Fusco

**Project Manager:** Jackie Davis, Jesse Buerk, John Coscia, Thomas Edinger

### **Goals:**

Performance-based planning fulfills and coordinates federal Transportation Performance Management (TPM) requirements by applying performance management principles that measure, evaluate, and report on the impacts of resource allocation decisions on transportation performance of 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 and forward regional and statewide goals. Assets include roads, bridges, rails, transit vehicles and stations, signals, and various roadside features.

### **Description:**

A number of factors are straining our transportation network: increased congestion, more truck travel, growing population, aging infrastructure, higher customer expectations, demands to apply new technologies, and limited funding. 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 and Infrastructure Investment and Jobs 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 TPM through the Federal Rulemaking process. Through these regulations, state DOTs, MPOs, and transit operators are held to a higher-level of performance accountability.

Through the use of TAM systems and engineering and economic analysis tools, the

region, in concert with the infrastructure owners and operators, can more comprehensively view the big picture and evaluate system data to guide performance-based decision making on how limited financial resources can best be deployed in the Long-Range Plan (LRP) and the Transportation Improvement 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 life cycle of the assets at minimum practicable costs; and project selection to help meet TPM performance goals. Focusing business and engineering practices on life cycle costs and benefits will improve decision-making on resource allocation and utilization.

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 (LRP). DVRPC works closely with NJDOT, PennDOT, SEPTA, NJ TRANSIT, and DRPA/PATCO to establish strategic objectives for managing and improving their assets. DVRPC prioritizes system preservation in the Plan, the Congestion Management Process (CMP), and project benefit evaluation criteria for the Plan and TIPs. In New Jersey, the Capital Investment Strategy is the mechanism that NJDOT uses to link asset management to the capital programming process. In Pennsylvania, PennDOT Connects links asset management with the capital programming process.

Staff will work with the DOTs, transit operators, and authorities as they use performance-based planning and programming to advance their TAM plans, safety plans, and develop and implement the 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. DVRPC will continue to provide input and guidance to our partners as they develop and expand on performance-based planning and TAM 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. The commission has built a website, <https://www.dvrpc.org/TPM/>, which tracks the various TPM metrics and performance relative to associated targets. Staff will consider ways to integrate this website with the Tracking Progress dashboard that compares how the region is doing relative to Long-Range Plan goals. Staff will use DOT and transit agency asset management data for system-level investment analysis, as needed.

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 recognize 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.

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.

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

### **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. Engage and coordinate 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 (including safety and system performance) 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 and IJJA. This will include working with state DOTs and transit agencies 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, and member 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 using Lowest Life Cycle Cost (LCCA) approach.
  - E. Coordinate with the CMP, including sharing data and methods.
  - 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 update USDOT TPM performance measures and targets, analyze current conditions and project likely future conditions, monitor and report on performance through DVRPCs TPM webpage.

A. Coordinate with the Office of Safe Streets on the development and adoption of regional safety performance targets.

9. Work with the Office of Capital Programs, Office of Long-Range Planning, and the RTC to update TIP-LRP Project Benefit Evaluation Criteria based on the Connections 2050 Plan.

10. Evaluate proposed transportation projects using the TIP-LRP Project Benefit Evaluation Criteria, as well as using bridge, pavement, and transit asset management system data as part of project selection.

**Products:**

1. New or updated memorandum(s) of agreement with planning partners.
2. Technical Memorandum(s) detailing USDOT TPM performance measures and targets.
3. Update to Transportation Performance Management website, and possible integration into the Tracking Progress dashboard.
4. Updated Connections 2050 TIP-LRP Project Benefit Criteria.
5. Table(s) summarizing application of TIP-LRP Project Benefit Evaluation Criteria for candidate projects, as needed.

**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>
2022	\$307,500	\$145,815	\$36,685	\$25,000	\$100,000
2023	\$312,500	\$217,241	\$70,259	\$25,000	\$0

**PROJECT: 23-34-070 Socioeconomic and Land Use Analytics**

---

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

**Program Coordinator:** Benjamin Gruswitz

**Goals:**

Bolster agency research and analysis in the areas of demographics, economics, real estate development, transportation, equity, and others, using observed data and predictive models. Perform key analytical functions for the long-range plan and other agency needs, including development and maintenance of indicators, socioeconomic and land use forecasts, and scenario modeling. Reflect and advance industry best practices in use of data resources while right-sizing efforts with agency capacity and priorities in mind.

**Description:**

The Socioeconomic and Land Use Analytics program area includes new and ongoing data analysis in support of the long-range plan and other commission efforts. DVRPC strives to deliver value to the region's land use, environment, economic development, equity, and transportation network by: collecting and assessing data, identifying its importance and relevance, and disseminating the results of that research through reports, web applications, presentations, and other means. This program area supports the Office of Long-Range Planning's forecasting and scenario planning efforts, and the use of indicators to track progress on the vision and goals set in the region's long-range plan.

Research and analysis will be based on data available through multiple sources. Publicly available sources from federal statistical agencies (including the U.S. Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis) will provide key information. The program area will monitor developments of data policies at these agencies that may impact analysis for DVRPC and its partners. Proprietary sources of data for program analysis may be acquired by purchase or subscription such as the National Establishments Time Series (NETS) employment database, the CoStar commercial real estate database, or IHS Markit forecasts. Other data sources may be developed in-house or in collaboration with partners, such as DVRPC's five-year aerial photography-based land use data, real estate development pipeline data, and other sources. The program area enhances knowledge of available sources and their appropriate uses at DVRPC.

The Socioeconomic and Land Use Analytics program area develops, enhances, and maintains DVRPC's UrbanSim land use model. UrbanSim is used to develop the population and employment forecasts and allocates the forecast for use in the agency's travel demand model. UrbanSim can be used in corridor and station area plans or to test policy impacts on regional development. This program area may also utilize models such as Impacts 2060, Vision Eval, and others. This research is intended to better understand uncertainties in long-range planning and how to adapt

to them; while highlighting (both quantitatively and qualitatively) the benefits of implementing DVRPC recommendations such as transit-oriented development, reinvestment in older communities, and agricultural and natural resource protection. The program also supports DVRPC staff use of UrbanSim for other commission projects.

The program area assists with and complements related agency efforts of the Data Coordination program, the Data Innovation Team, Information Technology, and other agency staff in the areas of data development, management, and dissemination, advising on DVRPC data efforts and policies as appropriate.

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

### **Tasks:**

- 1) Maintain and develop the Tracking Progress indicator website, which contains more than 20 criteria related to the goals set in the long-range plan. Update, as needed, in light of Connections 2050. Explore integrating the dashboard with Rating the Region and Transportation Performance Management datasets. Integrate with the CKAN Data Catalog as appropriate.
- 2) Manage and oversee the Socioeconomic and Land Use Committee (SLUAC) made up of county planning partners.
- 3) Maintain and update UrbanSim platform based on new data and ongoing improvements to the model's capabilities. Work with the SLUAC on model components such as a regional real estate development pipeline, and demographic and employment statistics.
- 4) Develop and publish the 2020 Land Use Inventory report, as data is made available.
- 5) Improve ability to model long-range plan scenarios through development of VisionEval and/or Integrated Transportation and Health Impacts Model (ITHIM) models.
- 6) Model the Dispatches scenarios in Impacts 2060, UrbanSim, and Vision Eval, and provide outputs that can be used in both the report and an updated Choices & Voices outreach tool.
- 7) Evaluate 2020 Census data and consider working with the SLUAC to develop additional population and employment forecasts, focusing on the years 2020-2050, in light of the 2020 Census and other future observed data from the COVID-19 pandemic.
- 8) Work with Office of Travel Modeling to integrate UrbanSim and TIM travel demand models.
- 9) Assist with CEDS update, as appropriate.
- 9) Aid and advise on agency data needs and efforts in collaboration with the Data Coordination program, the Data Innovation Team, Information Technology, and other agency staff.
- 10) Work with DVRPC staff on studies and products involving UrbanSim modeling, socioeconomic, and other data analysis, as needed.
- 11) Respond to socioeconomic and other data requests from planning partners, media, and public.

- 12) Monitor developments and policy changes at statistical and planning partner agencies; and participate in collaborative efforts of peer agencies and partners.
- 13) Oversee procurement and contracts of data and data tools that serve the program and agency in conjunction with Data Coordination program and appropriate staff. Plan for procurement of next employment data update, considering alternative sources to the NETS database.

**Products:**

- 1) Connections 2050 Update to Tracking Progress and ongoing data updates.
- 2) UrbanSim land use model.
- 3) Land Use 2020 Inventory Analytical Data Report (ADR).
- 4) Population and Employment Forecast ADR(s), as appropriate.
- 5) Point-based employment database, as appropriate.

**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>
2023	\$225,000	\$154,903	\$50,097	\$20,000	\$0



**PROJECT: 23-34-080    Transportation Improvement Program (TIP)**

---

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

**Program Coordinator:** Jesse Buerk

**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, project development, 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 the 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: Safety, Facility/Asset Condition and Maintenance, Reliability and Congestion, Centers and the Economy, Multimodal Use, Equity, and the Environment. 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 are held to further review costs and schedules, vet concerns, and negotiate. A constrained draft program is released for a 30-day public comment period prior to presenting to the DVRPC Board for adoption.

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; work with DOTs to analyze, maintain, and incorporate bridge and pavement asset management data in project selection processes; evaluate new project proposals using the TIP-LRP Benefit Evaluation Criteria and assist the RTC in prioritizing new projects; and perform an equity analysis on the program.
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 current transportation legislation and Environmental Justice/Title VI 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. Maintain the current TIP and 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. Assist in developing 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, Local Concept Development), including consideration of federal performance measure targets and equity considerations.
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. Evaluations regarding Performance Based Planning and Programming and Equity Analyses.
5. Regional Transportation Improvement Program.
6. Periodic amendments and modifications to the TIP.
7. Periodic status reports.
8. 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>
2023	\$661,250	\$498,711	\$161,289	\$1,250	\$0



## **PROJECT: 23-52-010    Regional Transit Planning Program**

---

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

**Program Coordinator:** Amy Bernknopf

**Project Manager:** Logan Axelson, Reuben MacMartin, 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 and an emphasis on inclusion. Leverage the technical capabilities of DVRPC to develop and share planning tools that make good-practice planning 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. During FY2023, this program area will support a regional effort to learn and share research and information about micro-mobility options to areas underserved by transit.

Central to this program is the development of data-driven tools to inform investment decisions and local decision making 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 Screening Platform 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 information about 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. Convene a regional partner forum to share best practices in the region on research and practical experience for micro-mobility job access options to areas underserved by transit, with a focus particularly on disadvantaged urban community access to outlying warehouse jobs.
2. Provide technical and coordination support for transit agencies as they endure and recover from the drop in ridership throughout the Coronavirus global pandemic.
3. Provide technical and in-person staff support for NJ TRANSIT passenger 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. 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.
8. Ensure that appropriate technical resources (such as new software) are available for staff use as new best practices develop.
9. Work with state and regional planning partners (PennDOT, SEPTA, PATCO, and NJ TRANSIT) to participate in regional CHSTP project development, prioritization, and selection rounds as appropriate.

### **Products:**

1. Memorandum summarizing regional examples of micro-mobility options to areas underserved by transit.
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 member governments to coordinate transit projects and initiatives throughout the region.

**Beneficiaries:**

Member governments, regional TMAs, 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>
2022	\$391,250	\$0	\$265,000	\$41,250	\$85,000
2023	\$419,250	\$0	\$285,000	\$44,250	\$90,000

\*PennDOT FHWA



## **PROJECT: 23-52-020    Bicycle and Pedestrian Planning Program**

---

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

**Program Coordinator:** Cassidy Boulan

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

### **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 priority of this program is 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 analysis and design necessary 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.

This work includes an emphasis on bicycle and pedestrian policy, design and infrastructure that increases personal health, as well as the health of the environment and economic vitality in the region. That might include a focus on work in areas with a greater degree of disadvantage or where better connections can be made to public transportation. Some of these activities may also require DVRPC to purchase equipment or services to meet program goals. Projects may be jointly funded, and conducted collaboratively, with the Regional Transit Planning Program.

### **Tasks:**

1. Provide ongoing support to regional partners with technical analysis and facilitation with stakeholders as they pursue planning and implementation of pedestrian and bicycle networks in the region.
2. Convene regional partners interested in, or already engaged in, running bike share or bike library systems to share best practices on program management, expansion and coordination across municipal and county boundaries.
3. Support the use and application of DVRPC's regional sidewalk inventory data and network connectivity analysis to address sidewalk gaps in the region.
4. Support partner agencies in using DVRPC pedestrian and bicycle planning tools

such as the Bicycle Level of Traffic Stress (LTS) and Connectivity Analysis webtool.

5. Provide additional funding support for the Trenton Bicycle Plan, 23.61.110.

6. Together with the Office of Travel Monitoring, continue bicycle and pedestrian count work including:

- Conduct counts at roughly 1/5 of the locations for the Cyclical Pedestrian Counting program in the PA counties
- Conduct counts at roughly 1/3 of the locations for the regional cyclical bicycle count program

- Conduct project counts throughout the region, as needed and as capacity permits.

- Conduct bicycle and pedestrian counts in Gloucester County, as requested, and/or in support of other data gathering needs and projects.

- Provide periodic summaries of trends, before/after, and other relevant summaries analyzed from DVRPC's bicycle and pedestrian count program with the aim of making count data 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. Participate and support 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, and support member government efforts in Complete Streets, Vision Zero, green stormwater infrastructure, and placemaking.

- Working through the NJ BPAC, convene NJ MPOs and NJ DOT to clarify guidance around bicycle and pedestrian facilities at and around highway interchanges.

8. Review bicycle and pedestrian project funding applications as appropriate for programs such as Transportation Alternatives Set-Aside (TASA), Safe Routes to School (SRTS), and Pennsylvania's Multimodal Transportation Fund (PA MTF).

9. Provide Subject Matter Expert (SME) review and comment on potential pedestrian and bicycle facilities for PennDOT projects through the PennDOT Connects program.

### **Products:**

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

2. Memorandums of Understanding, Requests for Proposals, and other appropriate outreach templates for bike share program(s) within the region.

3. Memorandums of Understanding, advertisement for sidewalk grant funding or other supportive materials to address sidewalk gaps in the region.

4. Survey and data collection in support of agency projects.

5. 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>
2022	\$296,750	\$216,125	\$54,375	\$21,250	\$5,000
2023	\$331,750	\$234,621	\$75,879	\$21,250	



## **PROJECT: 23-52-030    Mobility Analysis and Design Program**

---

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

**Program Coordinator:** Sarah Moran

**Project Manager:** Aaron Frait, Kelsey McElduff

### **Goals:**

The purpose of this Program is to support DVRPC's Long-Range Plan, Connections 2050, 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 balance accessibility, efficiency, and safety of the existing transportation network for all modes. Work under this program draws on current best practices in transportation analysis and design, as well as stakeholder and public engagement, to identify context appropriate strategies to address transportation challenges.

### **Description:**

This program is the nexus between the Long-Range Plan and project development. Mobility Analysis and Design projects take needs that are identified in the Long-Range Plan and congestion management process (CMP), refine the understanding of those needs, and evaluate 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 and local areas, 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 for all modes, improve mobility and safety, and manage congestion. The Mobility Analysis and Design Program includes providing both technical and policy guidance on best practices addressing mobility, access, growth, development, zoning, and community design. Study areas to be evaluated are based on long range plan and CMP determinations, as well as county and state recommendations.

With an eye towards implementation, this program will support DVRPC's participation in the PennDOT Connects process to improve the coordination and efficiency of project implementation and make the best use of available transportation funds. DVRPC will continue to assist PennDOT with project screenings through the Project Initiation Form (PIF) process. In New Jersey, DVRPC will continue to work with Mercer County, as outlined in the task below, to identify locations where existing infrastructure presents challenges in the implementation of bicycle improvements and develop concepts to work through these challenges. Efforts under this program may require the purchase of hardware, software, equipment, and/or services.

## **Tasks:**

1. Mercer County has expressed interest in making investments to improve their bicycle network. In some locations, however, the existing infrastructure cannot physically or safely accommodate bicycle-related improvements within the roadway right-of-way. DVRPC staff will work with the county in identifying these problematic locations and will conduct technical work to develop planning-level design concepts that improve safety and connectivity of the current multimodal network. Concept refinement may require capacity analysis to assess the impacts of lane configuration changes on traffic movements. Specific tasks may include:

- a. Identify study locations for analysis by DVRPC staff.
- b. Perform a crash analysis, speed study, and conduct field work as appropriate to better understand existing issues.
- c. Conduct turning movement traffic counts at key intersections to be used in modeling efforts.
- d. Identify and document existing or planned transportation infrastructure (roadway geometry, signals, transit) in the area.
- e. Prepare a microsimulation model including roadway and intersection geometry, traffic control and signal timing plans.
- f. Determine potential alternatives for analysis and concept design.
- g. Evaluate the impact of proposed treatments on traffic flow, producing performance measures such as delay/level of service and queuing.
- h. Evaluate the impact of proposed treatments on multimodal network accessibility, safety, and quality.
- i. Develop conceptual plans and diagrams for roadway configuration alternatives and other treatments that incorporate bicycle striping and other infrastructure.
- j. Prepare planning-level cost estimates for proposed treatments.
- k. Identify opportunities for implementation, including funding opportunities and stakeholder/agency roles.

## 2. Hunting Park Corridor Safety Study and Concept Development

As part of the City's Vision Zero 2025 plan, The City identified priority corridors and intersections for future improvement under a Vision Zero Capital Plan. Hunting Park Avenue, from Germantown Avenue to Broad Street, was identified as a top ten corridor and DVRPC is completing a conceptual study surrounding Hunting Park and Broad St. Working in collaboration with the Office of Safe Streets, OMAD will be responsible for traffic analysis, concept development, and basic cost estimation. The goal is to have plans ready to progress to preliminary engineering and grant applications. Tasks include:

- a. Assemble a steering committee including relevant agencies and community groups, and convene the committee regularly to guide concept development.
- b. Work with steering committee to identify appropriate outreach methods to involve a wide range of residents and businesses. Determine if a community leaders committee is appropriate given the context
- c. Conduct public outreach to engage the local community and learn about their

needs and ideas for improvements.

d. Analyze crash data to identify crash trends.

e. Conduct a road safety audit with stakeholders to identify possible causes and brainstorm potential solutions to crash issues.

f. Building on public and stakeholder input, crash analysis, and road safety audit, develop alternatives for roadway redesign and engage stakeholders and the public to evaluate tradeoffs and determine a preferred alternative.

g. Conduct operations analysis using the most appropriate software for the alternatives that are developed (Synchro, SimTraffic, and/or VISSIM) to evaluate alternatives, and collect traffic data as necessary to support this analysis.

h. Engage stakeholders and the public to evaluate tradeoffs and determine a preferred alternative.

i. Develop a detailed conceptual design for the preferred alternative, including cost estimates.

j. Write a report summarizing results of tasks a-i and outlining information necessary for preliminary engineering and grant applications.

### 3. Mercer County Master Plan Mobility Element Technical Assistance

Goal: Identify and prioritize future project inclusion in an update of the Mercer County Master Plan Mobility Element.

The DVRPC/NJDOT crash screening for Highway Safety Improvement Program funding and the DVRPC Congestion Management Process have identified many locations where improvements may be justified. The County's 2020 Bicycle Master Plan and the Greater Mercer TMA's Greater Mercer Trail Plan add locations where multimodal and intermodal improvements may be justified. This project will integrate these datasets and, in coordination with Mercer County staff, develop a method to priority-rank improvement locations and apply the method to prioritize projects for listing in the Mobility Element update. This work will be completed in collaboration with DVRPC's Regional Congestion Management Program.

a. Convene a steering committee including Mercer County, NJDOT, Greater Mercer TMA, the City of Trenton, and interested and relevant stakeholders

b. Work with the steering committee to identify existing and available mobility-related datasets and plans, including updated CMP objective measures, trail and bicycle plans, and equity, transit, and vehicular traffic data

c. Coordinate with the steering committee to develop methods to integrate datasets and prioritize locations for potential mobility improvements

d. Apply this method to prioritize projects for inclusion in Mercer County's Mobility Element update.

Deliverable: Documented methodology and prioritized, geo-enabled list of projects for inclusion in the Mercer Plan Mobility Element update.

4. This program area will also supplement the Pottstown Area Regional Plan Development project (FY23 PART Improvement Study) in support of the Pottstown Metropolitan Regional Planning Committee (PMRPC).

**Products:**

1. Corridor or area study memorandums and reports that identify deficiencies and an implementation strategy to address them. The steering committee and public participation processes will also be documented.
2. Coordination of 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 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>
2022	\$682,250	\$524,134	\$131,866	\$21,250	\$5,000
2023	\$672,250	\$476,798	\$154,202	\$25,250	\$16,000

\*PennDOT FHWA

## **PROJECT: 23-52-040    Transportation Safety**

---

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

**Program Coordinator:** Kevin Murphy

**Project Manager:** Marco Gorini

### **Goals:**

The Office of Safe Streets has one goal: eliminate killed and severe injury crashes in the Delaware Valley. With the adoption of Connections 2050, DVRPC's long-range plan, this goal was formalized as Regional Vision Zero 2050. Advancing Vision Zero requires identification of crash trends and problem locations, promoting data-driven solutions and safety best practices, exploring policy initiatives, and promoting a positive safety culture by strengthening existing partnerships and establishing new ones. The Safe Streets work program includes crash data management, problem analysis, performance measure tracking, helping partners identify and advance safety projects, and efforts designed to explore the connections between crash safety, health and equity.

### **Description:**

The Regional Safety Task Force (RSTF), a multi-modal partnership of agencies and organizations that work together to improve transportation safety, is coordinated by the Office of Safe Streets staff. 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 typically focused on a crash safety emphasis area identified in the Transportation Safety Analysis and Plan—the region's guiding document for safety. Staff actively manages the course of the RSTF and its progress toward meeting goals and objectives, and serves as facilitator to the task force.

Crash data is the foundation of much of the work of the Office of Safe Streets, and is used in most planning and engineering studies undertaken by DVRPC. Staff coordinates the acquisition of state crash databases and production of GIS crash data layers, ensures quality control, and assists planning staff in the use and interpretation of crash data. This work promotes analytical best practices, data-driven crash safety prioritization of work program tasks, and satisfies data and analysis requests from within DVRPC and from outside partners. This work also supports development of the TSAP—the region's safety analysis plan, and advances data products like the DVRPC Crash Data Viewer web tool and DVRPC's Data Navigator.

The Office of Safe Streets provides assistance to city, county and state partners in developing and advancing safety projects with federal Highway Safety Improvement Program (HSIP) and other funds, and tracks progress toward safety objectives. Specific activities include program management, crash analyses to support funding

applications, and problem identification. This work advances Regional Vision Zero 2050, the goals of DVRPC's 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 measures. This work is done in collaboration with DVRPC's Offices of Capital Programming, Long-Range Planning, and Project Implementation.

As part of the City's Vision Zero 2025 plan, The City identified priority corridors and intersections for future improvement under a Vision Zero Capital Plan. Hunting Park Avenue, from Germantown Avenue to Broad Street, was identified as a top ten corridor, and DVRPC is completing a conceptual study for Fiscal Year 2021 (21-33-100) surrounding Hunting Park Ave. and Broad St (Improving Access to the Hunting Park Broad Street Line Station. Working in collaboration with the Office of Mobility Analysis and Design, DVRPC will continue work for Hunting Park through the Hunting Park Corridor Safety Study and Concept Design project. Safe Streets will be responsible for the stakeholder and local community engagement tasks, and all safety-related work including a road safety audit of the corridor. The goal is to have plans ready to progress to preliminary engineering and grant applications.

DVRPC will continue to support PennDOT District 6 in their pursuit of safety through the Regional Road Diet Prioritization project. This project ( 23-52-120) is funded separately; the Transportation Safety Program Area will provide supplemental funding to support the tasks included to identify regional locations and screening for road diets on PennDOT corridors.

As crash safety increases in priority among our partners and the public, Safe Streets receives an increasing number of invitations to participate in and conduct both traditional and non-traditional safety-focused analyses, and to collaborate on safety culture-focused engagement efforts. Some of these opportunities are conducted in collaboration 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, others involve work on tasks resulting from completed projects from preceding fiscal years, e.g.: City of Trenton Vision Zero, PennDOT Street Typology and Speed Management Decision Making Framework. Safe Streets welcomes the opportunity to provide support for both short and long term safety efforts as time and capacity allow.

Work within this program area may require the purchasing of equipment or services in order to complete tasks.

### **Tasks:**

#### 1. Regional Safety Task Force

A. In collaboration with the RSTF co-chairs, prepare for and hold quarterly meetings focused on the American Association of State Highway and Transportation Officials (AASHTO) emphasis areas identified in the 2021 Transportation Safety Analysis and Plan story map, and hold one or more special meetings per cycle (i.e., via

- collaboration with another DVRPC task force or committee) as deemed appropriate.
- B. Complete full-meeting summaries and DVRPC Board highlights, and maintain an archive of all RSTF work and meetings.
- C. Track progress toward safety objectives and manage volunteer action items and other tasks that emerge from RSTF meetings.
- D. Continue to use the RSTF to promote a positive safety culture and advance Regional Vision Zero 2050 by promoting safety in all projects, highlighting equity considerations, and prioritizing a focus on vulnerable users.
- E. Promote safety best practices and partner initiatives via social media.

## 2. Crash Data Management System

- A. Coordinate the crash data updates to DVRPC's databases, GIS safety layers, and the DVRPC data navigator, and coordinate with DOTs on data quality issues.
- C. Participate in statewide crash records coordinating committees, and stay engaged with state partner crash data systems like NJDOT's Safety Voyager.
- C. Respond to data, mapping, and analysis requests from inside and outside of DVRPC providing high-quality service for partners and other agencies.
- D. Continue to expand the functionality of the DVRPC Crash Data Viewer web tool, and coordinate the integration of new data and maintenance as needed.

## 3. Safety Project Support and Coordination with Regional Partners on HSIP Priorities

- 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 that includes sharing and interpreting network screenings, identifying data-driven safety projects, crash analysis, countermeasure development assistance, and HSM analysis support.
- B. Support PennDOT District 6-0 in advancing their HSIP program through safety data mapping, liaison with county partners to advance safety projects for both the HSIP regional line item and the competitive set-aside program, work with District partners to track HSIP spending and plan for out years, and facilitate collaboration between District 6 and PennDOT Central Office to advance regional and statewide safety goals.
- C. Coordinate with state and federal partners on FAST Act Transportation Performance Management safety performance measure tracking, support state SHSP updates and advancement of plan priorities, and map the path forward for achieving Regional Safety Targets including the advancement of safety in all projects.
- D. Collaborate with state, county, and municipal partners to identify data-driven HSIP-eligible systemic safety projects.
- E. As needed, assist with RFP development, proposal review, and project tracking for HSIP-funded consultant led safety improvement projects.
- F. Map out next steps to advance Regional Vision Zero 2050, including development of a regional High Injury Network, and updating and institutionalizing Crashes and Communities of Concern.

## 4. Hunting Park Corridor Safety Study and Concept Development

- a. Assemble a steering committee including relevant agencies and community

- groups, and convene the committee regularly to guide concept development.
- b. Work with steering committee to identify appropriate outreach methods to involve a wide range of residents and businesses. Determine if a community leaders committee is appropriate given the study area context.
  - c. Conduct public outreach to engage the local community and learn about their needs and ideas for improvements.
  - d. Analyze crash data to identify crash trends.
  - e. Conduct a road safety audit with stakeholders to identify possible causes and brainstorm potential solutions to crash issues.
  - f. Building on public and stakeholder input, crash analysis, and road safety audit, develop alternatives for roadway redesign and engage stakeholders and the public to evaluate tradeoffs and determine a preferred alternative.
  - g. Conduct operations analysis using the most appropriate software for the alternatives that are developed (Synchro, SimTraffic, and/or VISSIM) to evaluate alternatives, and collect traffic data as necessary to support this analysis.
  - h. Engage stakeholders and the public to evaluate tradeoffs and determine a preferred alternative.
  - i. Develop a detailed conceptual design for the preferred alternative, including cost estimates.
  - j. Write a report summarizing results of tasks a-i and outlining information necessary for preliminary engineering and grant applications.

5. Provide supplemental funding support for the Regional Road Diet Prioritization project as needed.

#### 6. Special Studies & Coordination Efforts

- A. Coordinate with the Office of Transit, Bike, and Pedestrian Planning to provide continuing support to the City of Trenton as needed to advance tasks arising from the Vision Zero project of FY 2022.
- B. Support PennDOT District 6 as needed with coordination and analysis (e.g.: collect traffic data) to help implement traffic calming and speed management techniques on arterial roadways in the City of Philadelphia.
- C. Drawing on experience gained from the City of Trenton Vision Zero project, and in assisting with Philadelphia Vision Zero, provide support to counties and cities in the region interested in pursuing their own Vision Zero plans, and possibly leading to FY 2024 planning support projects.
- D. Coordinate with other DVRPC offices on tasks related to work program partner discussions.
- E. Work with the various committees of the Long-Range Plan on advancing its safety goals.

#### **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. Final report for the Hunting Park Corridor Safety Study and Concept Development.
5. Methodology document and GIS layer for the Regional Road Diet Prioritization.

**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>
2023	\$399,250	\$300,738	\$97,262	\$1,250	



**PROJECT: 23-52-050    Transportation Operations**

---

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

**Program Coordinator:** Christopher King

**Project Manager:** Justin Neff

**Goals:**

Promote more efficient and cost-effective use of the existing transportation network and services through enhanced coordination and integration of Intelligent Transportation Systems (ITS) and Transportation Systems Management and Operations (TSMO) strategies in order to create more reliable traffic flow, improved safety, reduced congestion, less wasted fuel, cleaner air, and more efficient use of resources including facilities and funding.

**Description:**

Federal metropolitan planning regulations require MPO's to incorporate transportation operations into their transportation planning processes. DVRPC addresses that requirement through the conduct of two long-standing related initiatives. The Transportation Operations Program Area and the Transportation Systems Management and Operations Project (23-52-170) highlight key activities undertaken by these programs. The Transportation Operations Program incorporates Transportation Systems Management and Operations (TSMO) strategies to help proactively manage the transportation system by addressing recurring and non-recurring congestion which results in trip reliability, emissions reductions, improved safety, and efficiency. These principles are integrated into DVRPC's planning processes.

This year's work program is divided into four major components: Traffic Incident Management (TIM), Regional Traffic Signal Retiming, Transportation Operations Task Force (TOTF), TSMO planning efforts and technical assistance.

DVRPC implements Traffic Incident Management (TIM) by providing a series of focused, best-practice training and resource-sharing Traffic Incident Management sessions for incident emergency responders comprised of relevant transportation departments including Pennsylvania and New Jersey Department of Transportation, Pennsylvania Turnpike Commission, Pennsylvania and New Jersey State Police, City of Philadelphia, local law enforcement, local fire departments, emergency medical services, county 911 communications, public works departments, towing and recovery companies, hazardous materials clean-up contractors, and other appropriate regional agencies. These sessions termed Incident Management Task Forces (IMTF) are held quarterly for 8 different groups that were established based on high traffic corridors in the region. In addition to the eight Incident Management Task Forces, DVRPC supports other efforts in the region as needed, and serves as the regional clearinghouse for regional incident management activities. IMTFs implement the planned and coordinated multi-disciplinary process to detect, respond to, and clear traffic incidents so that emergency responder safety issues

are addressed, traffic flow is restored as quickly and efficiently as possible thereby reducing the duration and impacts of traffic incidents and non-recurring congestion, incident management responses are improved, and interagency coordination is fostered. Typical activities include incident after action reviews, specialized training on the detection, response, and recovery of traffic incidents, and a feedback-loop for relevant construction projects and ITS deployment.

In Pennsylvania, the Philadelphia IMTF includes 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 also continues to manage the IMTF's in Bucks County, Chester County, Delaware County and Montgomery County (with special outreach as needed for the I-76 Integrated Corridor Management and I-476 Travel Management Projects). 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 hold a Regional IMTF Conference in FY 2023 with support from regional IMTF leaders, as well as hold topical specialized training session(s) to be determined.

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. 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 and reduce emissions. It improves the mobility and safety of the street system, and decreases congestion and delay while improving travel time and travel time reliability.

DVRPC will continue to support the Pennsylvania Regional Signal Retiming Initiative effort by working with PennDOT District 6 and the counties to choose corridors for retiming, provide cost/benefit emissions benefit data, 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.

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. The Task Force is a forum for agencies to share information on various TSMO and ITS deployments and incident management programs, develop a consensus on regional ITS issues and respond to federal

initiatives. As a technical-level group, it may often guide DVRPC's Transportation Operations planning activities that in turn support the Task Force members.

As an ongoing TSMO planning 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, and PennDOT District 6-0 Regional Operations Plan.

As part of project development, staff review and make recommendations for DOT infrastructure projects to incorporate ITS and TSMO operational improvements. In FY 2022, DVRPC will continue to produce periodic bulletins to highlight incident management and transportation operations data as available. DVRPC will continue to provide planning and technical assistance on transportation operations for partners as requested. 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 to manage and implement resource sharing for the 5 Pennsylvania (Bucks, Chester, Delaware, Montgomery and Philadelphia County) and 3 New Jersey (Burlington, Mercer and NJ SAFR) Traffic Incident Management Task Forces as an on-going training program.
2. Prepare notices for each session, identify and line up speakers, develop agendas, and prepare summaries and training materials and distribute to all stakeholders.
3. At each session, conduct Post-Incident debriefings a.k.a. After Action Reviews (AARs) which examine events that occurred in the past in order to review and assess the process, procedures and actions performed, and to identify best practices, lessons learned, and potential new protocols which will reduce delay.
4. Work with the task forces to address operational and traffic management issues as needed that may include ITS equipment deficiencies, detour routes, traffic management plans, incident management plans, incident management policy and procedures, communications, severe weather preparedness and work zone traffic management.
5. Educate Responders regarding Active Traffic Management strategies, including working with PennDOT project managers to bring responders and design consultants together to engage responders in identifying issues to consider in the final design of relevant capital projects and ITS deployment.
6. Construction Project Coordination Discussions bring together responders and construction projects managers and implementers to review construction and work zone stages, address incident response zones and identify different ways to access a crash in a work zone if needed.
7. TIM Performance Measure Data Analysis. Work with partner agencies and collect TIM data regarding time of lane closures, and incident duration. These measures will be tracked and measured over time and will be presented and or produced in

periodic data bulletins.

8. Promote and provide the PA and NJ Statewide Responder Training sessions, specialized training session(s) to be determined, and various online TIM Training efforts.

9. Social Media awareness campaigns for quick clearance

10. Hold Regional TIM Conference. Identify topics and speakers, prepare all materials, and arrange training demonstration.

11. Participate in New Jersey's Statewide Traffic Incident Management Program and Pennsylvania's PennTime Program and any other TIM programs initiated by state agencies and other agencies.

12. Provide technical support, including mapping services, GIS, and other assistance as requested.

#### 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 Operation Task Force

1. Host the quarterly Transportation Operations Task Force. Prepare notices, agendas, identify specialized topics, arrange speakers, prepare and distribute summary materials

2. Support multimodal planning efforts and coordination with various transportation agencies

3. Promote and educate regional agencies and public on TSMO strategies such as active traffic management principles and issues.

4. Continue the regional construction coordination efforts to minimize traffic impacts of overlapping construction projects.

5. Provide a feedback loop to DOT's and other transportation operators on design and operational issues for relevant construction projects and ITS deployment.

#### TSMO Planning Efforts

1. 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.

2. Update and/or maintain the Transportation Systems Management and Operations Master Plan as needed in coordination with the Long Range Plan updates.

3. Perform as needed any data collection and analysis of various travel data to

identify trends in system performance across the network.

4. As part of project development, staff review and make recommendations for DOT infrastructure projects to incorporate ITS and TSMO operational improvements.
5. Continue to incorporate TSMO, including ITS investments, into the transportation planning process. Evaluate capital projects for their consistency with the Transportation Systems Management and Operations Master Plan and assist agencies to advance projects identified in the Plan, PennDOT's Regional Operations Plan, or in the Regional ITS Architecture.
6. Monitor federal ITS programs, regulations, and initiatives to identify which ones may impact projects in the region.

### **Products:**

#### Transportation Operations Task Force Products

1. Transportation Operations Task Force meeting agendas, summaries, and meeting materials.
2. Regional Operating Agency Contact List
3. Provide topical specialized training session(s) to be determined.

#### Incident Management Task Force Products

1. Incident management task force training session's agendas, summaries, and resource materials.
2. IMTF policy and procedures guidelines, training aids, maps depicting response areas, and other relevant materials identified by IMTF members.
3. AARs summaries for distribution to all task force members to inform them of best practices, lessons learned, and possible new protocols to reduce traffic delay.
4. Conduct expanded Formal After Action Reviews and prepare reports
5. Traffic congestion analysis
6. Incident Duration and lane closure tracking analysis
7. Produce periodic bulletins to highlight incident management and transportation operations data as available.
8. Roster and contact information of regional emergency agencies
9. Marketing Materials such as the Social Media Campaign Tool Kit for Quick Clearance and Move Over Laws

#### Traffic Signal Optimization Products

1. Products developed for both the Pennsylvania and New Jersey Signal Retiming Programs.
2. MOU and concept of operations for each corridor when necessary.
3. Proposed and final signal timing plans
4. Implementation of Optimized Signal Timing Plans
5. Technical Memorandum which can include Performance Measures such as Travel Time, Delay, stops and fuel consumption.
6. Corridor Summary fact sheets

#### TSMO Planning Efforts

1. Maintenance of the ITS Regional Architecture.
2. Maintenance of the TSMO Master Plan.

3. Implementations of programs to foster interagency cooperation.

**Beneficiaries:**

Member governments and agencies, including PennDOT, NJDOT, transit agencies, 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>
2023	\$572,950	\$137,297	\$44,403	\$1,250	\$390,000

---

\*PennDOT FTA; PA TIP - MPMS #115964 - \$208,000 CMAQ/\$52,000 PA State 581; NJ TIP - DB #D02004 - \$130,000 STBGP-PHILA

**PROJECT: 23-52-060 Competitive Program and Project Management**

---

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

**Program Coordinator:** John Coscia

**Project Manager:** Cleonie Meraz, Daniel Snyder, Joseph Banks, Joseph Natale,  
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, Local Lead, 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. Completion of this work may require the purchase of equipment or services.

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 online Mapping.
6. Completed Design and 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>
2022	\$65,000	\$51,934	\$13,066	\$0	\$0
2023	\$1,254,500	\$64,500	\$0	\$0	\$1,190,000

\*PA TIP - MPMS #115965 - \$712,000 STU/\$178,000 PA State 581; MPMS #115966 - \$120,000 CMAQ/\$30,000 PA State 581 NJ TIP - DB #X30A - \$150,000 STBGP-PHILA

**PROJECT: 23-52-070 PA TDM Base Program Administration and Commuter Services**

---

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

**Program Coordinator:** Stacy Bartels

**Project Manager:** Amy Bernknopf

**Goals:**

To manage the work of TMAs and contractors that serve employers implementing commute alternatives programs and encourage commuters to choose travel alternatives to the single-occupancy vehicle (SOV). The programs include educational programming, promotional materials and relevant services and programming within specific service areas through the tasks listed below, serving to help reduce traffic congestion and improve accessibility to a variety of safe and affordable modes of travel in the region.

**Description:**

The Transportation Management Associations (TMAs) and other related partners in southeastern Pennsylvania have helped promote Transportation Demand Management (TDM) options and programs for over two decades, in the form of two grants funded by PennDOT – the TMA Assistance Grant (one available to all TMAs in PA), and the Mobility Alternatives Program (MAP) grant (available only in SE PA). For FY2023, DVRPC and PennDOT have developed a new TDM grant program that combines these two “legacy” grants into one new “base” TDM grant for each organization previously funded through one or both of the legacy grants. Each organization will be awarded an amount of funding to perform activities like education and outreach on TDM options, TDM strategies, and the advantages for both employers and employees to implement or use these options. DVRPC will contract with and oversee the work program development and approval for each subrecipient receiving these grants and work with their respective county planning department(s) as well as PennDOT (Central Office and District 6) and FHWA in this development and in tracking progress and results from their efforts.

This program supports DVRPC staff activities for planning, marketing, procurement and accounting, as well as funding to lease software for and manage the regional Share-A-Ride (SAR) ride match program, the Emergency Ride Home (ERH) program and provide necessary materials, schedules and tools to help contractors promote TDM with a unified message in the SE PA region. This program is part of the larger coordinated regional TDM effort that includes the Travel Options Program (TOP) competitive grant program. Completion of this work may require the purchase of equipment or services.

**Tasks:**

- 1. Work with TMAs/Contractors to develop Work Programs for “base” TDM efforts.
- 2. Ensure this work involves outreach to both employers and the general commuting public.
- 3. Oversee TMA/Contractor TDM education and outreach efforts and development and placement of relevant materials; encourage cooperative efforts whenever possible.
- 4. Operation of the Share-A-Ride (SAR) ride match program, including annual software lease agreements, database management and quarterly reporting, registrant communications and training.
- 5. Creation and administration of contracts with each of nine subrecipients.
- 6. Review and payment of monthly or quarterly invoices and reports for each of nine subrecipients.

**Products:**

- 1. Contractor Work Programs.
- 2. Regional outreach and advertising materials and plans.
- 3. SAR software lease and updates; ERH program administration.
- 4. Contracts for/with each organization.
- 5. Quarterly activity summaries and year-end report.

**Beneficiaries:**

Residents and employers within and/or commuters travelling within or into the SE PA region; municipalities, counties or combination thereof; related county planning commissions/departments; 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>
2023	\$325,000	\$0	\$0	\$0	\$325,000

\*PA TIP - MPMS # 117930 - \$325,000 STU/Toll Credit

## **PROJECT: 23-53-010    Travel Monitoring**

---

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

**Program Coordinator:** Joshua Rocks

**Project Manager:** Jonathan Ferullo

### **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 ongoing regional program 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 Vehicle Miles Traveled (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. Traffic count information from the database may be queried at

<https://www.dvrpc.org/webmaps/TrafficCounts/>. The program is supported by funding from various sources. Because this is a regional program, the federal PL funds help support the operations and infrastructure required as base elements to run a travel monitoring program region wide. These base elements include the leases on a fleet of travel monitoring vehicles, operations and maintenance of those vehicles, an inventory of data collection and safety equipment, editing, processing and uploading of the count data into the database system which feeds the count viewers on the DVRPC website

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, NJDOT, and member governments to review traffic count locations.
2. DVRPC will conduct traffic counts for PennDOT at assigned locations, with at least 40% of assigned locations being classification counts, if the total assignment cannot be reached then the percentage of classification counts will be increased until total assignment amount is reached even with 100% of assigned locations being classification counts.
3. Establish weekly schedules, staff assignments, and control procedures.
4. Collect traffic data at approximately 3,000 selected locations.
5. Process counts, edit for quality control, upload data into the DVRPC Traffic Count Database.
6. Maintain and further automate traffic data systems and procedures to enhance

- productivity, including data obtained by third parties via remote sensors, etc.
7. Submit counts collected during the year electronically by specific deadlines established by PennDOT and member governments.
  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 and NJDOT, the counties, and cities on the collection and validation of data on the local transportation asset inventory (as requested).

**Products:**

1. Database containing new and historic traffic counts.
2. Webviewer of all traffic counts accessible at <https://www.dvrpc.org/webmaps/TrafficCounts/>
3. Transmittals of traffic data to DOTs, member governments and interested parties.

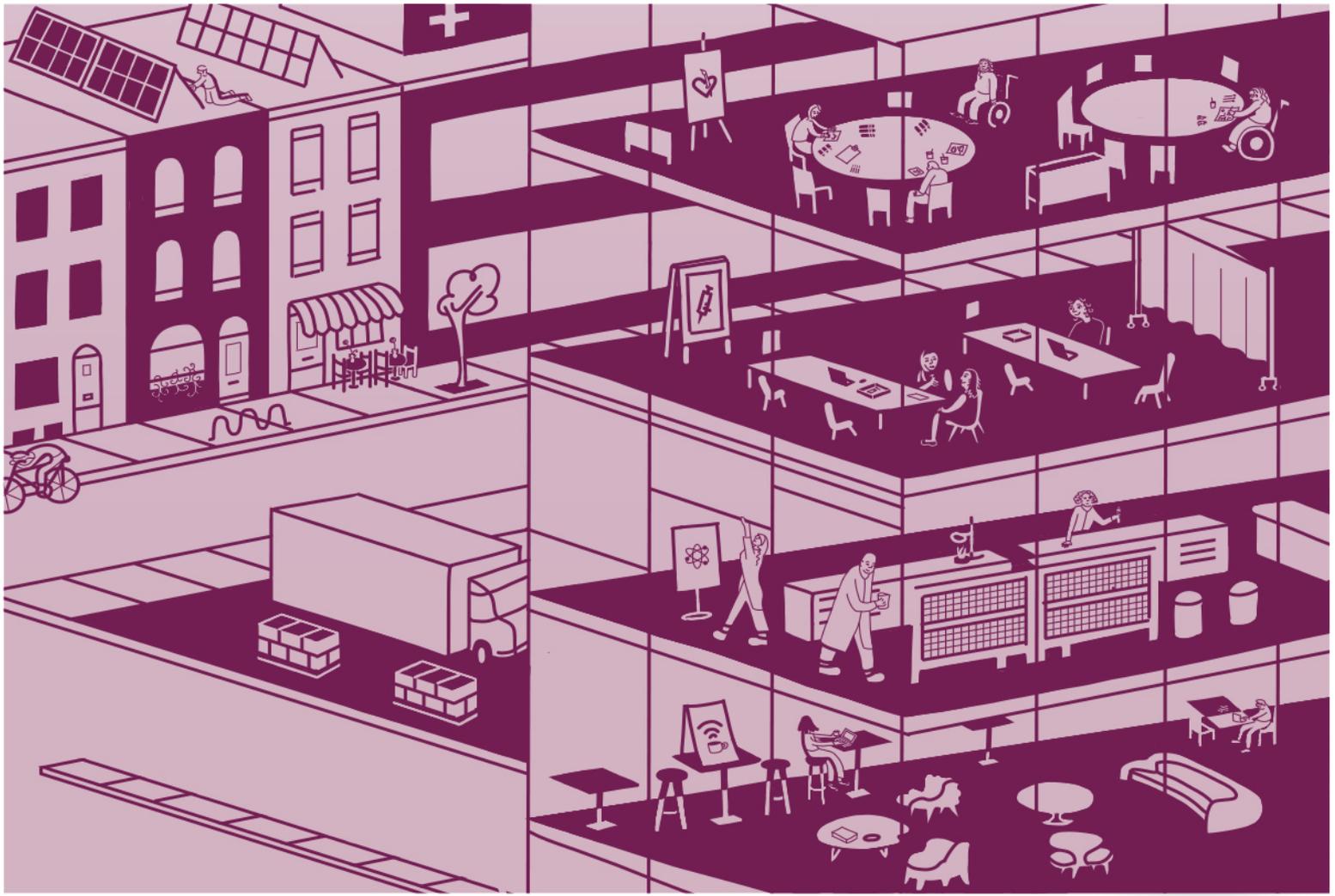
**Beneficiaries:**

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>
2022	\$739,500	\$594,500	\$0	\$0	\$145,000
2023	\$739,500	\$594,500	\$0	\$0	\$145,000

\*PA TIP - MPMS #115968 - \$145,000 STU/Toll Credit



## CHAPTER 2B

# DVRPC Project Descriptions



# Table of Contents

## Chapter 2B: DVRPC Project Descriptions

23-33-100	Regional Transportation GIS Coordination	165
23-33-110	Local Technical Assistance Program (LTAP)	167
23-33-120	Pennsylvania Coastal Zone Management Implementation Program	169
23-33-130	Healthy Communities Planning	173
23-33-140	PA/NJ Local Planning Initiatives	177
23-33-150	An Investigation into Multi-Municipal Planning to Meet Stormwater Permitting Requirements	181
23-33-160	Local Government Energy Implementation Strategies and Initiatives	183
23-33-200	William Penn Regional Trail Program	185
23-34-100	Regional Aviation System Planning	189
23-34-110	Central Jersey Transportation Forum	191
23-34-120	I-95 Planning Assistance	193
23-34-130	Enhance and Maintain Travel Forecasting Tools	195
23-34-140	District 6 Modeling Assistance	201
23-34-150	Philadelphia Trip Generation Model	203
23-34-160	I-95 Traffic Forecasts	207
23-34-170	PA Air Quality Action Supplemental Services	209
23-34-180	NJ Air Quality Action Supplemental Services	211
23-34-190	Regional Electric Vehicle Planning Program	213
23-52-100	Regional TOP Competitive Program Administration (PA and NJ)	217
23-52-110	ExPo: Experimental Pop-ups Program	221
23-52-120	PennDOT Road Diet Prioritization	225
23-52-130	Regional Sidewalk Development Program	227
23-52-140	Pottstown Area Regional Plan Development	231
23-52-150	PennDOT Connects Bike-Friendly Resurfacing Program	233
23-52-160	Vine Street Cap	237
23-52-170	Transportation Systems Management and Operations (TSMO)	239
23-52-180	Connectivity Options for US202 Section 200	243
23-52-190	Burlington Township / Florence Township Connector Road Planning Study	245
23-53-020/025	HPMS and Functional Classification System (PA & NJ)	247
23-53-030	PennDOT District 6-0 Traffic Volume Data	249
23-53-035	NJDOT Counting Program	251
23-59-700	Member Government Special Studies	253
23-59-701	New Projects and Misc. Carryover	255



**PROJECT: 23-33-100      Regional Transportation GIS Coordination**

---

**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. Efforts are being coordinated with NJDOT, PennDOT, member governments, and operating agencies to maximize the investments made in technology and data.

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.

**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>
2022	\$400,000	\$0	\$0	\$0	\$400,000
2023	\$400,000	\$0	\$0	\$0	\$400,000

\*PA TIP - MPMS #115969 - \$200,000 STU/Toll Credit; NJ TIP - DB #X30A - \$200,000 STBGP-PHILA

**PROJECT: 23-33-110      Local Technical Assistance Program (LTAP)**

---

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

**Program Coordinator:** Linda McNeffer

**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 offer 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.

Currently, all classes are being held either on-site or virtually and they are scheduled by Pennsylvania State Association of Township Supervisors (PSATS).

**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, Montgomery and Philadelphia 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>
2022	\$30,000	\$0	\$0	\$0	\$30,000
2023	\$30,000				\$30,000

\*PA FHWA - PL/SPR/Toll Credit

**PROJECT: 23-33-120      Pennsylvania Coastal Zone Management  
Implementation Program**

---

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

**Program Coordinator:** Christopher Linn

**Project Manager:** Amy Verbofsky

**Goals:**

Assist the Pennsylvania Coastal Zone Management Implementation (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 organize and host up to 12 Urban Waterfront Action Group (UWAG) meetings to offer “one-stop shopping” for information about waterfront development permits in the Delaware River Estuary. They provide an opportunity for applicants to meet with the regulatory agencies that provide environmental permits with the goal of identifying and hopefully resolving permitting issues before the applicant invests in detailed engineering for their project.

DVRPC will also partner with the Coastal Resources Management (CRM) 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. 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 twelve meetings of the Urban Waterfront Action Group (UWAG).
7. Provide technical and administrative services on permitting to the Urban Waterfront Action Group (UWAG).
8. Coordinate with PADEP on coastal climate change resiliency planning.
9. 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. Agendas and meeting minutes for up to twelve UWAG meetings.
5. 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>
2022	\$50,000	\$0	\$0	\$0	\$50,000
2023	\$50,000	\$0	\$0	\$0	\$50,000

---

\*PA DEP



**PROJECT: 23-33-130      Healthy Communities Planning**

---

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

**Program Coordinator:** Amy Verbofsky

**Project Manager:** Karin Morris, Patricia Elkis

**Goals:**

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

This project supports PennDOT's Planning Priority of (IV) Land Use/Transportation Linkages/Economic Development/Modernization, specifically (B) to identify livability, sustainability, and resiliency planning strategies to tie the quality and location of transportation facilities and services to broader opportunities such as: access to employment opportunities, affordable housing, quality schools, safe streets, economic development, social equity, and environment conservation. and (E) provide input to PennDOT in efforts to identify any training and planning activities targeted to county and local governments, conservation districts and community stakeholders. The project supports the NJDOT MPO Transportation Priority "Equity, Public Health, and Outreach" 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; b) work with DVRPC's Air Quality Program, Delaware County, and local stakeholders to identify transportation sources of air pollution and develop potential mitigation efforts to improve health outcomes; c) provide coordination and technical

assistance to stakeholders and municipal/county constituents; and d) represent DVRPC on local healthy communities-related working groups.

#### Delaware County Air Quality Coordination Proposal:

Air quality, both indoor and outdoor, is very important to human health. Numerous scientific studies have linked ozone and particle pollution to chronic respiratory diseases, lung cancer, asthma attacks, cardiovascular disease, kidney disease, and even premature death. Depending on the specific pollutant, air toxins can lead to increased risks of cancer, neurological, reproductive, and immune system damage, respiratory irritation, and developmental problems. Additionally, certain populations, including those of a vulnerable age or people who frequently exercise or work outdoors, are particularly vulnerable to the effects of air pollution. Delaware County is a designated nonattainment area for ground level ozone and was a nonattainment areas for particulate matter 2.5 until 2019.

To better understand the intersection between the transportation system, industry, air quality, and health, DVRPC staff will assist Delaware County to identify outdoor sources of air pollution that may be impacting the respiratory health of residents and develop potential mitigation efforts to reduce the health impacts of these sources.

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

#### **Tasks:**

1. Provide technical assistance to member governments and stakeholders on an ongoing basis.
2. Continue to convene the Healthy Communities Task Force on a regular basis.
3. Represent DVRPC and provide support and content to other projects, such as the Healthy Communities in PA Task Force, the Collaborative Opportunities to Advance Community Health (COACH) Group, Camden Coalition of Healthcare Providers' Accountable Health Communities Advisory Committee, and the Drexel University Dornsife School of Public Health Practice Council.
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 Delaware County Air Quality Coordination Proposal:

1. Working with the DVRPC Air Quality Planning program, convene a stakeholder committee with the Delaware County, the county Health Department, Pennsylvania DEP, and others to advise a work plan for this effort which includes identifying sources of data, insight into community needs and conditions, and environmental health expertise.
2. Identify sources of geographic data regarding incidences of respiratory disease in the county and identify one or more respiratory conditions to use as the benchmark or target condition for the data collections and visualization effort.

- 3. Collect and map sources of transportation and point source emissions to associate with health data.
- 4. Map and analyze data and develop transportation air quality mitigation and funding recommendations.

**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, age-friendly communities and food system planning webpages.
- 5. Technical report to Delaware County identifying high congestion areas, goods movement centers, and other likely sources of transportation emissions that includes potential mitigation strategies and identifies potential sources of funding for those efforts.

**Beneficiaries:**

State DOTs, FHWA, member governments and citizens, health care and public health community, Delaware 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>
2022	\$125,000	\$79,898	\$20,102	\$5,000	\$20,000
2023	\$137,500	\$79,340	\$25,660	\$6,500	\$26,000

\*PennDOT FHWA



**PROJECT: 23-33-140      PA/NJ Local Planning Initiatives**

---

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

**Program Coordinator:** Patricia Elkis

**Project Manager:** Christopher Linn

**Goals:**

Partner with New Jersey and Pennsylvania non-profits and local governments on environmental, climate change, resiliency, 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.

The funds under this code are generally intended to be used to provide subsidies to municipalities within the nine DVRPC counties for the below fee-for-service projects, conducted by DVRPC staff. Projects may also include assistance in obtaining funding through grant proposals for part of the costs of the projects. Specific projects may include:

- Master Plan Climate Change Hazard Vulnerability Assessment Elements
- 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
- Community Forestry Plans

In addition to providing subsidies for the above mentioned municipal environmental services projects, these funds may also be used as match to other grants awarded to DVRPC, as available, and as needed.

This project also provides for DVRPC to partner with non-profit organizations for projects that implement the Long-Range Plan.

**Tasks:**

1. Advertise the program to municipal leaders, especially environmental commissions/environmental advisory councils, sustainability teams, public works departments, and planning boards.
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. Write and produce a printed summary document, plan, implementation brochure, etc., for distribution by the municipality, including publication on its local website.
5. Participate in municipal public hearings pertaining to the projects, as needed.
6. Provide technical support to the municipality on obtaining and processing data to support planning analysis.
7. Include the municipality in DVRPC-sponsored education programs on natural resource protection, open space/farmland preservation, climate change mitigation and adaptation, and livability initiatives.
8. 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>
2022	\$150,000	\$0	\$0	\$40,000	\$110,000
2023	\$90,000	\$0	\$0	\$40,000	\$50,000

\*PA/NJ Local Governments



**Responsible Agency:** Delaware Valley Regional Planning Commission**Program Coordinator:** Amy Verbofsky**Goals:**

To help municipalities meet their stormwater permitting requirements and improve water quality throughout the Delaware Estuary Coastal Nonpoint Pollution area, DVRPC will investigate the potential for multi-municipal MS4 planning and implementation.

**Description:**

A municipal separate storm sewer system (MS4) is a water conveyance system owned or operated by a public entity that does not connect to the sanitary sewer system and does not lead to a water treatment plant. A MS4 typically collects stormwater that runs off of streets and buildings and discharges it into local waterways. The federal Clean Water Act of 1972 requires that certain owners of MS4s obtain an National Pollutant Discharge Elimination System (NPDES) permit for their stormwater discharges, implement a Stormwater Management Plan, and put measures in place to prevent discharges of pollutants in stormwater runoff. In Pennsylvania, the PA Department of Environmental Protection (PADEP) manages the MS4 program. In addition to MS4 requirements noted above, PADEP also requires municipalities to prepare Pollutant Reduction and Total Maximum Daily Load Plans for each of their impaired streams.

Municipalities within the Delaware Estuary Coastal Nonpoint Pollution area may struggle to meet some of the MS4 requirements. For some elements of stormwater management, particularly the design and installation of larger stormwater BMPs, it may make more sense to implement on a multi-municipal scale. In other words, while an individual stormwater BMP may be located in one municipality, both the time and cost and the pollution reductions achieved by the BMP would be shared among multiple municipalities. This type of multi-municipal cooperation can achieve economies of scale and result in cost saving, which may be even more important than usual due to the strains of the Covid-19 pandemic.

To help municipalities meet their stormwater permitting requirements and improve water quality throughout the Delaware Estuary Coastal Nonpoint Pollution area, DVRPC will investigate the potential for multi-municipal MS4 planning and implementation. DVRPC will interview municipalities to determine their stormwater regulation needs and appetite to undertake shared projects. We will research other collaborative efforts and make recommendations for ways that municipalities can work together to satisfy their MS4 requirements. We envision this as Phase 1 of a multi-year project that could involve joint procurement for professional services to design and implement green stormwater infrastructure in future years.

**Tasks:**

- 1. Develop an interview guide and identifying stakeholders to interview.
- 2. Conduct interviews with key stakeholders, which may include representatives of municipalities, watershed organizations, and/or environmental groups.
- 3. Research existing models for multi-municipal collaboration to satisfy MS4 requirements.
- 4. Document findings in a short memo, including recommendations for municipalities.

**Products:**

- 1. Interview guide.
- 2. Short memo that documents interview and research findings and recommendations for municipalities.
- 3. Project summary report for PADEP.

**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>
2023	\$50,000				\$50,000

\*PA DEP

**Responsible Agency:** Delaware Valley Regional Planning Commission**Program Coordinator:** Elizabeth Compitello**Goals:**

This project will develop and deliver programs that enable counties and municipalities in southeastern PA to develop and implement energy-efficiency, renewable energy, climate adaptation and resiliency projects for their facilities and operations. Programs and their associated projects will result in quantifiable reductions in operational cost of energy use and reductions in greenhouse gas emissions. The programs will pursue multi-municipal/county approaches to allow local governments to achieve economies of scale in purchasing, decision-making, contracting, technical assistance, and finance. These programs will also demonstrate lower upfront cost and improved decision making relative to individually sought development and implementation by counties and municipalities. This work builds off of DVRPC's Regional Streetlight Procurement Program models.

This project supports Pennsylvania's 2018 Climate Change Action Plan, Governor Wolf's Executive Order 201-01 "Commonwealth Leadership in Addressing Climate Change and Promoting Energy Conservation and Sustainable Governance", as well energy use, GHG emissions, and regional resilience goals of DVRPC's Long-Range Plan.

**Description:**

Aggregation programs for local governments' operations allow counties and municipalities to implement projects more cost-effectively and efficiently, and can alleviate significant implementation barriers such as lack of technical or financial support. DVRPC will identify energy implementation needs at the county and municipal operational level that are appropriate for aggregation. Examples include municipal street lighting, renewable energy procurement for county or municipal operations, and implementation of energy efficiency, conservation, and electrification measures for municipal facilities and fleets. DVRPC's programs will provide the necessary legal, technical, contracting, procurement, and financing elements to make the process as "turnkey" as possible for participating local governments. Implementation funding will not be provided to local governments, but DVRPC will seek to arrange financing and other funding sources to enable local governments to implement projects. DVRPC may use this program area funding to pay for the DVRPC staff time, some of the upfront costs of legal, financial, and technical support to the program may be covered by this program area, if necessary, but these would be recouped later through program user fees. (DVRPC is unable to recoup costs associated with staff time). By recouping DVRPC's consultant fee investment in the project, DVRPC will be able to fund further implementation programs for local government operations as demand allows.

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

**Tasks:**

1. Conduct outreach and engagement to local governments on program concepts and program models.
2. Issue necessary RFPs to execute projects.
3. Manage the provision of turn-key technical, legal, and financial support to facilitate program success.
4. Manage overall program decisions, timeline, deliverables, and outreach to participants
5. Engage or recruit necessary stakeholders for program success (e.g. utilities, financial partners).
6. Ensure that these programs are included in any regional climate action framework developed (in coordination with Energy and Climate Change Initiatives 23-33-030)

**Products:**

1. Fact sheets, workshops, and webinars for on-boarding new program participants.
2. Fact sheets, workshops, webinars, and facilitated meetings to support program participants.
3. RFPs for products and services.
4. Template Contracts and Resolutions to allow program participants to move through program.
5. Program deliverables such as audit reports, bills of material, term sheets, project or program-level data.
7. Program summaries, lessons learned, and best practices in the form of guides, presentations, or reports.

**Beneficiaries:**

Counties of Bucks, Chester, Delaware and Montgomery, and all municipalities within those 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>
2023	\$50,000				\$50,000

\*DVRPC's local initiatives revenue

**PROJECT: 23-33-200 William Penn Regional Trail Program**

---

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

**Program Coordinator:** Christopher Linn

**Project Manager:** Melat Musie, Shawn Megill Legendre

**Goals:**

The Regional Trail Program's chief aim is to support the development of a region-wide multi-use trail network, popularly known as the Circuit Trails. Development of the Circuit Trails is identified as a regional priority in the region's long-range transportation plan. By their nature, the Circuit Trails are not only a transportation network, but also support economic development and tourism, enhance cyclist and pedestrian safety, and reduce global warming pollution and improve air quality by supporting active transportation. They also support improvements in public health, connect people to natural areas and waterways, and promote smart growth through the provision of cyclist- and pedestrian-supportive infrastructure. Individual trails and the Circuit Trails network generally fall along waterways and historic transportation corridors, supporting centers-based investment as well as providing linkages between the region's historic downtowns and main streets.

Funding for the Regional Trails Program is provided by the William Penn Foundation. As part of the Regional Trails Program, funding is set aside, as documented here, for technical assistance and intra- and inter-agency collaboration to advance the Circuit Trails network. Program staff coordinate with a wide set of offices at DVRPC and with transportation and natural resource agencies in New Jersey and Pennsylvania to promote implementation of multi-use trails as well as to enhance the co-benefits of trail development as described above. Staff also provide data, information, and direct technical assistance to trail development partners, including counties, municipalities, and non-profits.

**Description:**

This program area will support development of a region-wide multi use trail network, the Circuit Trails, as well as provide integration with and support of DVRPC's other program areas, including smart growth, community and economic development, multi-modal transportation, environmental conservation, sustainability, and resiliency.

Specifically, this program area will:

- Provide data, information, and direct technical assistance to trail development partners, including counties, municipalities, and non-profits.
- Coordinate with the Office of Community and Economic Development on tourism and economic development initiatives, including efforts to advance brownfield development for trails and other uses and to foster tourism in downtowns and commercial centers near trails.
- Coordinate with the Office of Transit, Bicycle, and Pedestrian Planning to advance bicycle and pedestrian transportation networks and facilities and to ensure

integration of on-road facilities with the multi-use trail network.

- Coordinate with the Office of Long-Range Planning to provide data and information for the region's long range transportation plan as well as for related tracking tools.
- Coordinate with the Office of Travel Monitoring to provide data on trail use and integrate this data into broader travel monitoring efforts in the DVRPC region.
- Coordinate with the Office of Capital Programs to ensure integration of trail facilities in major capital projects in accordance with the region's long-range transportation plan.
- Coordinate with the Office of Capital Programs and Office of Project Implementation to review applications for federal and state funds.
- Coordinate within the Office of Environmental Planning to ensure trail development supports environmental conservation and the sustainability and resiliency of the DVRPC region.

This program area will be supported by the technical resources and expertise of the Office of GIS, Creative and Print Services, Web services, and the Office of Communications and Engagement.

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

**Tasks:**

1. Respond to requests for technical assistance from multi-use trail development partners, including counties, municipalities, and non-profits.
2. Develop publications, webinars, and other forms of assistance for trail development partners.
3. As requested, serve on multi-use trail project steering and advisory committees for counties, municipalities, or non-profits.
4. Review and recommend modifications of the existing and planned Circuit Trails network.
6. Collect and compile data on trail completions and trail funding.
7. With the Office of Geographic Information Systems and Web Services, maintain an updated shapefile and web map of the Circuit Trails and their status.
8. With the Office of Travel Monitoring, monitor data collected by permanently installed bicycle and pedestrian counters on multi-use trails, maintain a web viewer for bicycle and pedestrian counts, integrate the counts into broader travel monitoring efforts at DVRPC, and respond to inquiries from trail development and funding partners.
9. With the Office of Capital Programs, review PennDOT Connects and NJ Capital Program Screening Committee projects for opportunities to integrate trails and other bicycle and pedestrian facilities.
10. For the Office of Capital Programs and Office of Project Implementation, respectively, review and provide comments on applications for Congestion Mitigation and Air Quality and Transportation Alternative Set-Aside funding. Provide comments as requested for other funding programs, including the PA Department of Conservation and Natural Resources' Community Conservation Partnership Program, PennDOT's Multimodal Transportation Fund, and the PA Department of

Community and Economic Development's Multimodal Transportation Fund.

11. Coordinate with the Office of Community and Economic Development on tourism and economic development initiatives, including efforts to advance brownfield development for trails and other uses and to foster tourism in downtowns and commercial centers near trails.

12. Coordinate with the Office of Transit, Bicycle, and Pedestrian Planning to advance bicycle and pedestrian transportation networks and facilities and to ensure integration of on-road facilities with the multi-use trail network.

13. With the Office of Communications and Engagement, respond to media inquiries regarding multi-use trails, publicize completions and other major accomplishments, and support trail development partners in their engagement activities.

14. Seek out opportunities and respond to requests to present on the Circuit Trails, DVRPC's role in multi-use trail development, funding for trails, bicycle and pedestrian counts on multi-use trails, and other relevant topics.

15. Co-chair the Pennsylvania Committee for the East Coast Greenway, participate in the New Jersey Committee for the East Coast Greenway, and participate in the East Coast Greenway Alliance's Greenway Council.

16. Serve on the Association of Pedestrian and Bicycle Professionals (APBP) Delaware Valley Chapter board.

17. Attend meetings of the the Circuit Trails Coalition Steering Committee, the full Circuit Trails Coalition, the New Jersey Circuit Trails Council, and other subsidiary bodies.

### **Products:**

1. Web map of Circuit Trails and their status.
2. Web viewer of trail use counts, including monthly and annual totals.
3. Publications, webinars, and other materials as appropriate to assist trail development partners.

### **Beneficiaries:**

PA Department of Transportation, PA Department of Conservation and Natural Resources, PA Department of Community and Economic Development, NJ Department of Transportation, NJ Department of Environmental Protection, counties, municipalities, non-profit trail developers, the Circuit Trails 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>
2023	\$89,000				\$89,000

---

\*William Penn Foundation

**PROJECT: 23-34-100      Regional Aviation System Planning**

---

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

**Program Coordinator:** Michael Ruane

**Project Manager:** Ian Schwarzenberg

**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 regional effort designed to support Greater Philadelphia'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. This counting cycle will conduct counts for New Garden (N57), Trenton-Robbinsville (N87), Brandywine (OQN), South Jersey Regional (VAY), Cross Keys (17N), Doylestown (DYL), Heritage (PTW), and Quakertown (UKT) airports.

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. Deploy and monitor aircraft counting equipment in consult with airport operators.
  - B. Review interim data and provide regular updates on counting activity to partners and airports throughout the count 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. Collect relevant weather, based aircraft, facility inventory, and helicopter activity data for 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, and update existing aviation database and web portal with outputs.

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 the identified airports.
3. Updated operations data to the aviation database and online tool.

**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>
2023	\$220,000	\$0	\$0	\$0	\$220,000

\*FAA-\$176,000; Local \$17,500; PA Aviation \$4,500

**PROJECT: 23-34-110      Central Jersey Transportation Forum**

---

**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 convening a wide range of public, non-profit, and private organizations to facilitate a regional, cooperative approach to solving land use and transportation problems in the Central Jersey area. The Forum has held well-attended meetings for over 20 years. It meets to address concerns of municipalities in Mercer, Middlesex, and Somerset counties located along the US 1, US 130, and US 206 corridors. The geographic area spans from Trenton to New Brunswick and Robbinsville to Hillsborough. It includes 24 municipalities in the three counties, all of which are eligible for membership in the Forum. An eligible entity must provide a signed letter from its chief elected official naming a representative and up to two alternates.

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 is supported by an ad-hoc Action Team as needs arise. The Steering Committee consists of the Forum Chair; Action Team co-Chairs; 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 goals through an agreed upon Strategic Plan, last adopted by voting members in the spring of 2018. Membership meets three to four times per year. Before each meeting, the Steering Committee convenes to develop the agenda and address any recent legislation, projects or issues that might require additional action. An Action Team will meet separately on an as-needed basis when there are additional tasks for Forum members to take on.

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

**Tasks:**

1. Support the Forum, Steering Committee, and Action Team by arranging meetings, preparing materials, and coordinating with other organizations for content.

- 2. Assist the Steering Committee in continuing to implement the Strategic Plan through identified strategies and by setting appropriate agendas for regular Forum meetings. Continue to build municipal and county ownership of the Forum by facilitating delegation of tasks to committee members.
- 3. Continue to expand communications via the new website (<https://centraljerseytf.org/>) and Twitter ([https://twitter.com/CJTF\\_NJ](https://twitter.com/CJTF_NJ)) pages, and through monthly email digests containing timely news, legislation, events, resources, and funding opportunities..
- 4. Provide meaningful technical contents that help the Forum advance toward its goals.
- 5. Communicate with Forum participants and serve as a liaison to related projects as requested and as time allows.

**Products:**

- 1. Meeting materials and highlights.
- 2. Website and social media content.
- 3. Monthly email digests.

**Beneficiaries:**

NJDOT; NJ TRANSIT New Jersey Business Action Center; Transportation Management Associations (Greater Mercer TMA, Ridewise, and Keep Middlesex Moving); counties (Mercer, Middlesex, and Somerset); municipalities (15 voting plus 9 additional eligible); state and regional organizations; and businesses, residents and employees of Central Jersey. A complete list of partner organizations that benefit from participation in the Forum can be found at <https://centraljerseytf.org/resources/partner-orgs>.

**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>
2023	\$125,000	\$0	\$0	\$0	\$125,000

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

**PROJECT: 23-34-120      I-95 Planning Assistance**

---

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

**Program Coordinator:** 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.
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.
15. Assist with coordination related to other transportation and land development projects in the corridor, as requested.

**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>
2022	\$100,000	\$0	\$0	\$0	\$100,000
2023	\$100,000				\$100,000

\*PA TIP# 115972 \$80,000 NHPP, \$20,000 PA State 581

**PROJECT: 23-34-130      Enhance and Maintain Travel Forecasting Tools**

---

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

**Program Coordinator:** Fang Yuan

**Project Manager:** Benjamin Loeb

**Goals:**

Support the economic vitality of the region, improve accessibility and mobility for people, goods and services, 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 the requirements associated with the FTA New Starts program, FHWA conformity demonstration and NEPA requirements, and EPA clean air amendments and other environmental regulations. Updating and enhancing travel simulation models is especially important in the era of changing travel behaviors (post-COVID) and emerging travel technologies (e.g. autonomous vehicles). Major activities in the Travel Modeling work program area include updating the highway and transit networks to reflect current conditions; enhancing the demand modeling methods to better present real-world travel behaviors and emerging travel technologies; calibrating and re-validating the models with current data; integrating emerging computer and software technology and new data sources to enhance the efficiency and credibility of the models; and supporting model applications to evaluate the impacts and benefits of various transportation investment and planning scenarios.

In FY 2022, DVRPC started updating its travel simulation models, including the conventional trip-based model (TIM2x) and the new activity-based model (TIM3x), from the 2015 base-year conditions to the 2019 (pre-COVID) base-year conditions, and migrating its modeling platform from VISUM 18 to VISUM 2022. The base-year model inputs, including transportation networks, transit schedules, road tolls, parking charges, transit fares, zonal demographic and employment data, and the model validation targets, including VMT, transit ridership, highway volume, and travel speed, have been collected for the 2019 conditions. The trip-based model, still the faster production model, was first updated and re-validated to a 2019 base year. The TIM25 model software and scripts were also upgraded to VISUM 2022 and Python 3 to take advantages of new software development. In FY 2023, additional sensitivity tests of TIM2.5 in different forecasting scenarios will be conducted to better understand the elasticity and inelasticity of travel demand forecasting in response to increasing future uncertainty.

In FY 2023, the activity-based model will be fully updated and re-validated to the 2019 base year. The 2019 model data were transferred from TIM2x to TIM3x, and

additional data will be collected and developed specifically for TIM3x, including 2019/20 microzone data, PUMA data, population control totals for population synthesizer, and other inputs for DaySim. TIM3x model tools (PopSim and NetBuffer) and scripts will be updated and revamped as transitioning to VISUM 2022 and Python 3. New scripts will be developed for preparing Census data for population synthesizer and microzones in TIM3x, and for visualizing simulated activity and tour patterns in VISUM. In addition to highway and transit travel statistics, re-validation of TIM3x will include a wider range of measures, including daily activity patterns by population type and activity purpose, destination choice by tour purpose, mode choice by tour purpose, time of day patterns of tour purpose, and tour patterns within the region, based on household travel surveys, new Census data, and commercial travel data. TIM3x model will also be tested for its sensitivity to different travel behavioral assumptions, such as increasing work-from-home activities and non-motorized travel choices, and its elasticity of demand forecasts in response to these behavioral changes. Theoretically, TIM3x model offers improved capacity to model these behavioral changes at the personal level and household level (with better coordination within households), which are likely changing after COVID. Therefore, testing and enhancing TIM3x for modeling these emerging travel trends is an important task in FY 2023.

In FY 2022, a new tour-based truck model development was completed, using the 2017/18 INRIX data and the FAF5 data (with a 2017 base year). The new truck model was still validated to the 2015 conditions, with a focus on heavy and medium trucks due to the nature and limitation of data sources. In FY 2023, the tour-based truck model will also be updated and re-validated to the 2019 base year. The 2019 employment estimates, truck tolls, truck counts, truck speeds, and estimated truck VMTs will be collected and used for the truck model updates. Additional model improvement, re-calibration, and validation will be needed, with more focuses on light trucks considering the increasing truck activities due to e-commerce. Data purchase may be required for improving the light truck model. The new truck model uses the FAF data as inputs to truck tour generation from ports and externals. The FAF5 forecasts (2020- 2025) will be collected, as they become available in 2022, and disaggregated from FAF zones to the port zones and externals in the regional models. The tour-based truck models will be integrated with new 2019-based TIM2.5 and TIM3.2 models. Scripts and tools will be developed for visualizing truck activity and tour patterns in VISUM 2022. Sensitivity tests will be also conducted after the 2019 model updates and revalidation.

In FY 2023, all other travel demand components in the regional models will also be fully updated to the 2019 base year, including the fully implemented bike and pedestrian models, the airport model, and external-internal travel model. The bike and pedestrian trip tables are estimated in DaySim, and available for assignment in VISUM, but the trip tables and assignment results have not been validated. It will be important to implement bike and/or pedestrian assignments and validate the non-motorized share and assignment results. This work will be conducted in conjunction to the TIM3.2 updates and re-validation for highway and transit travels, to ensure accurate mode choices across all modes. The airport model update will include

collecting new airport passenger and freight data, parking data, and new highway and transit counts, and integrating the tour-based truck model and the FAF5 data for airports. With transitioning to VISUM 2022 and Python 3, it is also necessary to update or revamp other software tools and processes used by DVRPC, including EPA's air quality model (MOVES3.0), FTA's user benefits model (STOPS), VISSIM microsimulation, and DVRPC's new land use model.

DVRPC will continuously monitor COVID-related travel and behavior changes and collect data as needed. While updating and revalidating the models to the 2019 (pre-COVID) conditions is the most viable approach to keep the model inputs up to date, it will be critical to adjust the model more frequently, as travel behaviors is likely changing in a more permanent way since COVID. Re-collecting traffic counts at key screenline locations, continuously collecting travel time data on main corridors in the region, and conducting travel survey in a small scale (before the next household travel survey at the regional level) are effective ways to understand the extent of travel changes and recovery, and provide necessary basis to adjust models for short-term and long-term forecasting. In FY 2023, data collection of these types will be evaluated and conducted at discretion, and model re-calibration and adjustments will be made as needed, to reflect long-term changes in work-from-home patterns, land use, trip rates by purpose, the diurnal distribution of travel, destination choices, and mode choices including non-motorized modes. Future-year socio-economic forecasts and transportation projects from DVRPC's 2050 Long Range Plan will be incorporated into VISUM's Scenario Manager for use in both the trip- and activity-based models and anticipated opening years will be adjusted when necessary to reflect up-to-date project schedules. New Synthetic Populations for 2019, 2020, 2025, 2030, 2035, 2040, 2045, and 2050 will be developed for the AB model. Conformity Determinations will be made for the 2050 LRP each time it is amended.

Last but not least, updated model data will be integrated and published using the TIM viewer, a web tool for planning partners to access and visualize the model data (inputs, outputs, and validation data) outside the VIUSM platform. The TIM viewer was tested for presenting the 2015 TIM data and special applications such as the Philadelphia Trip Generation model. It will be further improved and used for sharing the new 2019 data in the regional level.

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. Migrate 2019 model data from TIM2.5 to TIM3.2
2. Collect and integrate 2019/20 microzone and PUMS data for TIM3.2
3. Develop 2019 control targets for population synthesizer (PopSim)
4. Collect and develop 2019 inputs for DaySim

5. Transition TIM3.2 to VISUM 2022, including all its scripts and tools (PopSim and NetBuffer) to work with Python 3.
6. Validate activity-based TIM3.2 model to 2019 conditions
7. Conduct sensitivity tests with TIM3.2
8. Update TIM3 model documentation and validation report
9. Collect 2019 truck counts for tour-based truck model validation
10. Collect and disaggregate FAF5 forecasts for tour-based truck models
11. Validate the tour-based truck models to 2019 conditions
12. Conduct sensitivity tests with the updated truck tour model.
13. Develop visualization tool for the tour-based truck model and data.
14. Update truck tour model documentation and validation report
15. Monitor COVID-related travel changes, collect data and adjust mode assumptions as needed
16. Update VISUM Scenario Manager for 2050 Long Range Plan
17. Develop demographic and employment forecasts based on 2050 LRP.
18. Develop synthetic population for 2019, 2020, 2025, 2030, 2035, 2040, 2045 and 2050.
19. Transition MOVES3 postprocessor with VISUM 2022 and Python 3.
20. Update the airport model with 2019 data
21. Update TIM viewer.

### **Products:**

1. Validated ABM model with 2019 base year.
2. Validated tour-based truck model with 2019 base year, integrated with TIM 2.x and 3.x
3. Visualization tools for tour-based passenger and truck models and data.
4. Updated tools to interact with MOVES3.0, User Benefits, and Land Use model
5. Updated VISUM Scenario Manger for 2050 Long Range Plan.
6. Updated model documents

### **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>
2022	\$640,000	\$0	\$0	\$0	\$640,000
2023	\$665,000			\$5,000	\$660,000

\* PA TIP - MPMS #115973 - \$454,400 STU/Toll Credit; PA FHWA \$20,000  
NJ TIP - DB #X30A - \$185,600 STBGP-PHILA



**PROJECT: 23-34-140      District 6 Modeling Assistance**

---

**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 dedicate two-person years of DVRPC modeling staff time to prepare traffic forecasts throughout the I-95 corridor in Pennsylvania and on other District 6 projects as required. The staff members 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 average weekday daily traffic (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.

11. Continue supporting PennDOT's consultants for US 422 and the Market Street Bridge Closure modeling efforts.

12. Provide daily traffic forecasts the six proposed movements at the I-95 and PA Turnpike interchange.

**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>
2022	\$460,000	\$0	\$0	\$0	\$460,000
2023	\$460,000				\$460,000

\*PA TIP MPMS # 115974 - \$368,000 NHPP, \$92,000 PA State 581

**PROJECT: 23-34-150 Philadelphia Trip Generation Model**

---

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

**Program Coordinator:** Matthew Gates

**Project Manager:** Brad Lane, Fang Yuan

**Goals:**

Develop a tool that can accurately quantify impacts of new, mixed-use developments in terms of total person-trips generated and mode shares of vehicular, transit, bicycle, and pedestrian; collect necessary data and apply and validate the tool for Philadelphia County.

**Description:**

There is a widespread belief that the available tools for estimating travel demand from urban development are not as accurate as they could be, particularly at the individual site level. The implications are that cities may be hindered in developing appropriate travel impact mitigations; that cities lack good information to communicate to existing residents regarding potential travel impacts of proposed development; and that cities, with better tools, would be able to make stronger policy based on more reliable understandings of travel demand and development impacts.

Assessments of the impact of new land use development on the transportation network often rely on the Institute of Transportation Engineers (ITE) Trip Generation and Parking Generation informational reports. Current ITE rates generally represent travel behavior for separated, single-use developments in low-density suburban areas. However, a more compact urban form, access to transit, and a greater mix of uses are known to generate fewer and shorter vehicle trips. This project will develop multimodal trip generation rates that better reflect the relationship between land use, transportation, and travel demand for specific land use types located in heavily urbanized settings. The research conducted for this project will account for how the built environment (e.g., both land use and transportation) influences travel behavior (number of trips, trip length, mode choice), and determine trip and parking rates that reflect the entire activity spectrum of different development/place typologies. The research will also account for the relationship between parking and trip generation.

This project is inspired by a similar tool that was built for Washington, DC. However, their approach will be modified in order to leverage several existing DVRPC tools, datasets, and studies. These include DVRPC's TIM Data Viewer, its Bicycle Level of Traffic Stress application, its sidewalk inventory and other GIS datasets, its Transit Score methodology, the Co-Star real estate and NETS Employment databases, and its recent work to develop Trip Generation Rates for Smart Growth and Transit-Oriented Developments.

The project will be undertaken in three phases. The first phase will design and build the tool's software and user interface, assemble various transportation and land use

datasets, and create a data collection plan and tablet-based survey instrument. It is assumed that the software will be an extension and modification of DVRPC's TIM data viewer and the geographic level of analysis will be the travel models Traffic Analysis Zones (eg, Census Block Groups in Philadelphia).

Phase II will focus on site selection and data collection. This phase will be deferred until FY2023 to avoid any temporary travel behavior changes due to the COVID-19 pandemic. The final phase will analyze the collected data, develop the relationships between input and output variables, and validate the tool for mixed-use developments in Philadelphia. A User's Guide with instructions for using the tool will be written as part of Phase III. This phase will begin in FY2023 and continue into FY2024. Later phases could be added to extend the tool to urban areas in other counties in the DVRPC region.

This project may require the purchase of goods and/or services, including temporary survey workers.

### **Tasks:**

#### Phase I – Software Development Tasks:

1. Coordinate with Philadelphia Planning Commission and Office of Transportation, Infrastructure, and Sustainability to identify the tool's functions and outputs.
2. Review relevant literature on adjustments to ITE Trip Generation Rates.
3. Specify software design including functionality, interface, background layers and tiles, input data, calculations to perform, output data, graphics and reports, and results for download and export results.
4. Prepare GIS and other existing datasets including retail employment, accessibility measures, transit score, distance to transit stations, parking availability and cost, occupied housing units, land-use mix/entropy variable, level of bicycle traffic stress, sidewalk connectivity, density, and real estate characteristics.
5. Prepare ITE Trip Generation Rate and TIM3.1 travel model data for comparisons to model outputs.
6. Populate PostGRES database by exporting GIS and VISUM datasets.
7. Modify TIM Data Viewer and add functions to view existing input datasets, to modify input data to account for proposed developments, and to calculate and report person trips by vehicular, transit, bicycle, and pedestrian modes for AM and PM peak periods.
8. Modify Data Viewer's Tile Server to display additional layers.
9. Create Python scripts to facilitate data import and calculations.
10. Modify zonal reporting, downloading, and exporting functions.

#### Phase II – Data Collection Tasks:

1. Coordinate with Philadelphia Planning Commission and Office of Transportation, Infrastructure, and Sustainability to identify candidate sites to survey. Coordinate with neighborhood groups and improvement districts on outreach to building owners and managers.
2. With assistance from PCPC and oTIS, create data collection plan, specify site

- characteristics, and identify candidate sites.
3. Interview, hire, and train temporary surveyors.
  4. Prepare data collection schedules and itineraries.
  5. Create intercept survey form and code survey onto tablet computers.
  6. Execute Survey
  7. Tabulate and process survey data, clean data, and expand survey results.

Phase III – Model Estimation and Validation Tasks:

1. Perform regression analyses and other calculations to determine AM and PM peak period person trip rates for mixed-use developments in Philadelphia as a function of location, dwelling units, parking supply, and retail employment.
2. Perform regression analyses and other calculations to determine AM and PM peak period mode shares for vehicular, transit, bicycle, and pedestrian trips.
3. Incorporate calculated relationships into Philadelphia Trip Generation Tool
4. Configure Tool to be hosted on City of Philadelphia’s server and website..
5. Test and validate tool’s predictions by predicting trip rates for additional sites, collecting data at those sites, and comparing predicted to observed results.
6. Modify model as needed.
7. Prepare User’s Guide and Instructions.

**Products:**

1. Philadelphia Trip Generation Tool.
2. User’s Guide

**Beneficiaries:**

Philadelphia County, commercial developers, public

**Project Cost and Funding:**

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2023	\$150,000				\$150,000

\* PA TIP - MPMS #117935 - \$150,000 STU/Toll Credit



**PROJECT: 23-34-160 I-95 Traffic Forecasts**

---

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

**Program Coordinator:** Matthew Gates

**Goals:**

To support the implementation of all I-95 and I-295 Projects by providing traffic data, modeling and forecasting services throughout the I-95/I-295 corridor, and along other facilities as needed.

**Description:**

PennDOT is currently undertaking a long-term, multi-phase initiative to reconstruct and improve Interstates 95 and 295 in Pennsylvania. Projects are underway that will reconstruct approximately eight miles of I-95 north of Center City Philadelphia, known as Sector A. These projects include the Cottman/Princeton Interchange area, the Bridge Street Interchange area, the Betsy Ross Bridge/Aramingo Avenue Interchange area, the Allegheny Avenue Interchange area, and the Girard Avenue Interchange area. Planning and design work is proceeding for Sector B between the Girard Point Bridge and Spring Garden Street to improve the Broad Street, Walt Whitman Bridge, and Penn's Landing area interchanges. Additional planning activities are occurring in both Sector C (Delaware State line to Girard Point Bridge) and Sector D (Academy Road to NJ State line).

Over the last several years, DVRPC prepared traffic data and forecasts throughout the I-95/I-295 corridor to analyze the traffic volume impacts of alternative interchange configurations, support the screening of construction staging and closure alternatives, mitigate congestion along detour routes, address community concerns, and support point-of-access studies.

During the next several years, new traffic data and forecasts will be needed for additional tasks, as planning, design, and construction occurs throughout the corridor. A wide range of data collection, analysis, and forecasting is anticipated. These include collecting traffic volumes, compositions, and travel times; processing origin-destination data; analyzing freight movements; preparing travel model inputs to micro-simulation models; updating traffic forecasts with new long-range demographic and employment projections; preparing transit ridership forecasts; analyzing local street network impacts associated with I-95/I-295 construction; and providing data collection and forecasting services to support coordination and planning activities associated with the Philadelphia International Airport, Sports Complex, Navy Yard, and waterfront ports.

This is an annual project may require the purchase of goods or services.

**Tasks:**

1. Coordinate with PennDOT and their consultants on all aspects of the project. Attend meetings and make presentations as needed.

2. Collect ATR and turning movement traffic counts, as needed, at selected locations along I-95, I-295, their interchanges, and local streets and arterials throughout the corridor.
3. Collect, tabulate, and/or process origin-destination and travel time data, as needed.
4. Focus and calibrate regional travel demand model on the I-95/I-295 corridor.
5. Prepare updated travel demand model inputs for 2045 and 2050 horizon years.
6. Prepare average weekday daily traffic (AWDT) traffic volumes for I-95 mainline, ramps, and selected facilities, as needed.
7. Prepare AM and PM peak hour traffic forecasts, including intersection turning movements, as needed.
8. Prepare forecasts to evaluate the impact of new or improved transit connections on I-95/I-295 travel patterns, volumes, and interchange operations, as needed.
9. Prepare forecasts to evaluate the impacts of new redevelopment on I-95/I-295 travel patterns, volumes, and interchange operations, as needed.
10. Coordinate with freight industry representatives on construction activities and detour routes.
11. Prepare maps, tables, and figures for transmittal of the data and forecasts to PennDOT and their consultants.
12. Prepare technical memorandums documenting the results of the travel forecasts, as needed.

**Products:**

1. Maps, tables, and figures displaying traffic volumes and forecasts.
2. Technical memorandums.

**Beneficiaries:**

PennDOT; Member Governments; SEPTA, Residents, and Businesses in the Corridor.

**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>
2023	\$155,000				\$155,000

\* PA TIP - MPMS #115985 - \$155,000 STP-IM/Toll Credit

**PROJECT: 23-34-170 PA Air Quality Action Supplemental Services**

---

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

**Program Coordinator:** Sean Greene

**Project Manager:** Stacy Bartels

**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.

This project will support partner efforts to discourage idling and promote the use of the air quality index particularly at schools and community centers through the Flags for School program and efforts to install anti-idling signage.

**Tasks:**

1. Contract for the design and production of advertisements and promotional literature such as brochures, posters, flags, anti-idling signage, and educational materials.
2. Contract for the placement of advertising on radio, television, web, place-based, or newspapers.

**Products:**

1. Advertisements and educational literature.
2. Materials to support the Flags for Schools and anti-idling initiatives
3. Event and organization sponsorships.

**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>
2022	\$125,000	\$0	\$0	\$0	\$125,000
2023	\$125,000	\$0	\$0	\$0	\$125,000

\* PA TIP - MPMS #115970 - \$100,000 CMAQ/\$25,000 PA DEP State Match

**PROJECT: 23-34-180 NJ Air Quality Action Supplemental Services**

---

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

**Program Coordinator:** Sean Greene

**Project Manager:** Stacy Bartels

**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.

This project will support partner efforts to discourage idling and promote the use of the air quality index particularly at schools and community centers through the Flags for School program and efforts to install anti-idling signage.

**Tasks:**

1. Contract for the design and production of advertisements and promotional literature such as brochures, posters, flags, anti-idling signage, and educational materials.
2. Contract for the placement of advertising on radio, television, online, or newspapers.

**Products:**

1. Advertisements and educational literature.
2. Materials to support the Flags for Schools and anti-idling initiatives
3. Event and organization sponsorships.

**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>
2022	\$50,000	\$0	\$0	\$0	\$50,000
2023	\$50,000	\$0	\$0	\$0	\$50,000

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

**PROJECT: 23-34-190      Regional Electric Vehicle Planning Program**

---

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

**Program Coordinator: Sean Greene**

**Goals:**

Provide leadership to the region on the transition to an electrified transportation system, including:

- providing guidance, advice, and assistance to local government fleets on transitioning to electric vehicles
- providing guidance, advice and assistance to municipalities on how to effectively and efficiently support residents, business, and visitors to their municipalities in their use of electric vehicles
- encouraging and supporting municipal, county, regional, state, and transit agency officials in developing policies and practices to reduce energy use and GHG emissions in their activities and operations
- assist in developing and disseminating information on the projected impacts of climate change within the region, in regards to electric vehicles, as well as how to prepare for those impacts. This information will be provided at the local and sectoral level where feasible.
- assist in developing and disseminating information on regional energy use, energy costs, and GHG emissions in regards to electric vehicles. This information will be provided at the local and sectoral level where feasible.
- continuing to represent DVRPC's regional/MPO perspective at appropriate policy venues, including PA and NJ state committees/meetings and TRB-related activities.
- facilitating 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 project leads planning efforts to prepare the region for the anticipated increase in the number of battery electric vehicles (EVs) in the DVRPC region.

The past few years have seen tremendous growth 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. DVRPC has supported this transition through several projects, including developing an EV readiness plan ("Ready to Roll!") funded by a US Department of Energy grant. In addition, DVRPC has worked with the Plug-in Hybrid & Electric Vehicle Research Center at University of California, Davis (UCD), to develop the "Planning for Electric Vehicles - Mapping Vehicle Distribution and Workplace Charging Demand" tool to help planners understand the locations where electric vehicle charging demand will be greatest. A

web-based resource on EVs for municipalities has also been developed, and DVRPC staff serve on numerous EV advisory groups in PA and NJ.

This project supports the goals of the State of New Jersey P.L. 2019, c. 362, which sets specific goals for the rapid growth of EVs and EV charging stations in New Jersey by 2025, 2035, and 2050. These goals include specific goals for state owned light duty vehicles. In addition, the law includes specific goals for the electrification of NJ Transit's bus fleet. The project also supports the many PennDOT and PA DEP programs and policies that serve to increase electric vehicles on Pennsylvania's roads. In addition, this project supports SEPTA's goal of increasing the role of battery electric buses in its fleet.

Both Pennsylvania and New Jersey have dedicated significant resources to vehicle electrification, and in addition have significant resources available to them due to the Volkswagen Clean Air Act Civil Settlement.

### **Tasks:**

Tasks:

1. Maintain and update the "Planning for Electric Vehicles - Mapping Vehicle Distribution and Workplace Charging Demand" tool. This includes updating the vehicle registration data and updating the behavioral and vehicle variables underlying the analysis.
2. Explore the potential to provide contracts and services for maintaining and updating data analysis, webhosting, and mapping for the "Planning for Electric Vehicles - Mapping Vehicle Distribution and Workplace Charging Demand" tool with external partners (i.e., UC Davis).
3. Maintain and update the on-line EV guidance for municipalities. This includes expanding and updating the cases studies, updating information on financial and other resources, and expanding the scope of the resource as appropriate.
4. Provide advice and technical assistance as requested from counties and municipalities in the region.
5. Carry out countywide EV charging infrastructure analyses for DVRPC counties. These analyses will use the "Planning for Electric Vehicles - Mapping Vehicle Distribution and Workplace Charging Demand" tool.
6. Deliver county-level workshops to municipalities on electric vehicles, building on the information in the "Planning for Electric Vehicles - Mapping Vehicle Distribution and Workplace Charging Demand" tool and the on-line EV guidance for municipalities.
6. Coordination and facilitation with counties and states—Facilitate coordination and discussion among partner organizations within the region. Participate in relevant local, regional, state, and national efforts related to electric vehicles and electric vehicle charging, including work with PA DEP, PennDOT, NJ DEP, NJ DOT, and NJ BPU. Coordinate as needed with NJTPA to assure that messaging in NJ counties is consistent.
7. Participate in conversations regarding implementation of the "Multi-State Medium- and Heavy-Duty Zero-Emission Vehicle Memorandum of Understanding," signed by the governors of Pennsylvania and New Jersey.

8. Continue managing the Interagency Battery Electric Bus Dialogue. This dialogue, launched in 2019 in coordination with SEPTA and NJ Transit, brings together in a monthly call ten of the largest transit agencies in the US to share their challenges and successes with battery electric buses.

9. Investigate mechanisms for cooperative procurement of municipal EVs and charging stations. Share case studies and recommendations for procurement with county and municipal partners.

Completion of these tasks may require the purchase of equipment or services.

**Products:**

1. An up-to-date "Planning for Electric Vehicles - Mapping Vehicle Distribution and Workplace Charging Demand" tool.
2. Updated on-line EV guidance for municipalities.
3. Responses to advice and technical assistance requests from counties and municipalities in the region.
4. EV charging infrastructure analyses for DVRPC counties.
5. County-level workshops for municipalities on electric vehicles, building on the information in the "Planning for Electric Vehicles - Mapping Vehicle Distribution and Workplace Charging Demand" tool and the on-line EV guidance for municipalities.

**Beneficiaries:**

Member governments; 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>
2023	\$150,000				\$150,000

\*PA TIP - MPMS #117936 \$75,000 STU/Toll Credit; NJ TIP- DB# X30A-\$75,000 STBGP-PHILA



**PROJECT: 23-52-100      Regional TOP Competitive Program Administration  
(PA and NJ)**

---

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

**Program Coordinator:** Stacy Bartels

**Project Manager:** Amy Bernknopf

**Goals:**

This project supports ongoing administration, strategic planning, and priority-setting work for the regional competitive Travel Options Program (TOP), which funds implementation of TDM projects in Southeastern PA and NJ. This program also supports efforts to incorporate TDM more frequently into DVRPC and partner plans and projects, and encourages cooperation among partners on these efforts—contributing to more efficient and affordable use of our region’s multimodal transportation infrastructure for improved access and equity overall.

**Description:**

In FY2021, DVRPC convened a new Regional TDM Advisory Committee with relevant partner agencies, which developed and help staff reach consensus on goals, objectives, and an initial Vision Statement for this new regional approach to prioritizing TDM strategies in the DVRPC region, and incorporating new efforts. This Committee also helped develop and prioritize strategies to guide the selected pilot projects for testing, and helped determine ways to measure performance and impact. This planning and administration work also includes ongoing peer/best practice assessment for successful historic and current TDM plans and programs, here and in other regions, and evaluation of current plans and data that can be used to inform new priorities.

This project can include development and oversight of competitive expression of interest (EOI) and project application process(es), and establishing tracking procedures for measuring the impact of the program's projects and tasks. It may include outreach on release of the EOI and subsequent updates on selected projects. DVRPC also manages the contracts and invoicing activities with each of the selected grantees under this program.

A performance-based and outcome-driven approach to developing, evaluating, selecting, and undertaking projects will help staff and stakeholders strengthen existing TDM programs, and determine new longer-term initiatives that can serve as a foundation for the regional TDM portfolio in future years. Completion of this work may require the purchase of equipment or services.

**Tasks:**

1. Convene regular meetings and/or workshops of the Regional TDM Advisory Committee, comprised of DVRPC member governments, State DOTs, transit

- agencies, partner MPOs and others, as appropriate, to continue providing input to and support for the Regional TDM Program.
2. Manage administrative functions associated with grants and reporting, as well as contract management and accounting activities.
  3. Based on the outcomes of funded projects, including pilot programs, and relevant TDM practice nationally, further develop and prioritize strategies and pilot programs for testing in the DVRPC region, as well as ways to measure performance. Document historic and ongoing TDM activities, in our region and nationally, as applicable, and consider relevant, available plans and data that can be used to inform new regional priorities for action.
  4. In collaboration with multiple departments across DVRPC, continue to monitor and report on COVID-related travel and behavior changes and their implications for TDM strategies, as relevant.
  5. Review and revise, if necessary, the Regional TDM Plan (vision, goals, outcomes, and strategies) for our approach to TDM in the DVRPC region. Maintain a living strategic plan of priority TDM projects that builds on current activities and success, and also cultivates new strategies for trial, evaluation, and growth.
  6. Based on the outcome of initial pilot projects, continue to develop proposed 'early action' projects for advisory committee consideration, with programs added to PA and NJ TIPs as appropriate.

**Products:**

1. Progress reports; meeting summaries; technical briefs/white papers.
2. Maintain the strategic plan for regional TDM activities, that can be updated as needed and required.
3. Application materials, releases, and evaluation materials.
4. Contracting and reporting materials as appropriate.
5. Ongoing updates to the program's web pages on the DVRPC web site for applicants to view information on upcoming applications and previous projects and case studies.

**Beneficiaries:**

DOTs; State, County, and City partners; transit agencies; TMAs; employers; commuters; 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>
2022	\$320,000	\$0	\$0	\$40,500	\$279,500
2023	\$300,000			\$20,000	\$280,000

\*PA TIP - MPMS # 117931 - \$50,000 STU/Toll Credit, NJ TIP- DB# D02005- \$50,000 STBGP-PHILA, DVRPC local -\$100,000; PennDOT FHWA- \$80,000;



**PROJECT: 23-52-110      ExPo: Experimental Pop-ups Program**

---

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

**Program Coordinator:** Betsy Mastaglio

**Project Manager:** Cassidy Boulan, Logan Axelson

**Goals:**

Assist communities (counties, municipalities, community/neighborhood groups, or partnerships therein) in the region in implementing innovative solutions to transportation problems through demonstration, or pop-up projects. The program will work with communities to design, implement, and measure projects that apply various pedestrian, bicycle, transit, and roadway strategies that address safety and placemaking in their respective communities.

**Description:**

Communities are increasingly moving toward planning and engineering projects that can be implemented without undue project delays and costs. These projects, sponsored by community groups, activists and municipalities, aim to raise awareness of safety, mobility, or placemaking goals by demonstrating a proposed design in context. By piloting projects, project sponsors can:

- Test a design strategy;
- Innovate and further understand new design interventions;
- Engage and educate stakeholders;
- Spark attention and conversation around a civic issue;
- Shorten project delivery timelines;
- Minimize disruption and cost; and
- Develop data-driven analysis and community support for funding applications.

DVRPC staff will work with selected community partnerships to advance a design intervention that addresses safety, mobility, and/or placemaking goals. DVRPC assistance will take shape in a number of ways. Staff may work directly with community partnerships to provide technical assistance in developing concept design(s) for the project, identifying and coordinating with appropriate agencies, assisting with public outreach, creating educational and promotional materials, identifying performance measures, and creating and implementing data collection through intercept surveys, online polling, and/or multimodal traffic counts. In some cases, DVRPC will lead a project through each of these tasks on a singular project. Following the project, DVRPC will summarize the project in an easy-to-understand summary, either as a webpage, webmap/story map, slide show, handout, or brochure. Summaries can be used by project sponsors to determine whether to pursue permanent installation of the piloted solution and to share with other regional partners that may be considering similar strategies. DVRPC may also take an advisory or participatory role and assist with one or two project tasks while the project is led by others.

These pilots and their outcomes will engage and educate the public, agency staff, and elected leaders throughout the DVRPC region so that they may advance their own pedestrian, bicyclist, and placemaking strategies. This program aims to become a long-term program that best serves the region. To that end, DVRPC will establish a lending library of materials in which DVRPC purchases both reusable materials (like flex posts or movable curb) and materials that can only be used once (like paint, spray chalk) to execute selected projects. Once procured, DVRPC will coordinate the lending of materials with communities that share the program's objectives of advancing short term designs with safety, mobility or placemaking goals. Part of DVRPC's role will also be to share lessons learned from regional projects with or without DVRPC's involvement, in order to increase awareness of demonstration projects. Some of these activities may also require DVRPC to purchase materials and supplies or other services to meet program goals.

### **Tasks:**

1. Identify at least two community partnerships in which DVRPC can provide technical assistance from project start to finish aiming for one pilot in both PA and NJ.. Projects must: have a motivated project sponsor, have a direct transportation or placemaking solution to be tested/piloted, and can be designed and implemented within 6-9 months with available community/stakeholder resources (materials and funding).
2. As capacity and interest among communities warrants, provide support to regional demonstration projects through design and process feedback, travel monitoring counts, marketing and sharing of resources.
3. Identify and purchase materials that can be reused and are most apt to be needed in regional transportation and placemaking demonstrations in order to create a lending library.
4. Share lessons learned from regional projects that summarize demonstration project processes and outcomes.

### **Products:**

Pilot summaries including plans, photos, and performance measures of projects. Memorandums, webinars, presentations or a dedicated web page sharing regional demonstration project processes and outcomes.

### **Beneficiaries:**

DVRPC partners, community and arts groups, traveling public, residents, and local 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>
2022	\$200,000	\$0	\$0	\$0	\$200,000
2023	\$200,000				\$200,000

\*PennDOT Connects \$100,000, NJ TIP DB #X30A \$100,000 STBGP-PHILA



## **PROJECT: 23-52-120 PennDOT Road Diet Prioritization**

---

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

**Program Coordinator:** Kevin Murphy

**Project Manager:** Marco Gorini, Sarah Moran

### **Goals:**

The Road Diet is an FHWA Proven Safety Countermeasure which is used to improve safety, calm traffic, and provide better mobility and access for all road users. A classic Road Diet converts a four-lane undivided roadway to a three-lane roadway, which according to the FHWA can yield a total crash reduction of between 19 and 47 percent. By repositioning pavement markings, Road Diets create space needed to accommodate bicyclists, reduce the number of conflict points for drivers, and shorten crossing distances for pedestrians. The three-lane diet configuration can provide a dedicated two-way left turning lane for drivers to queue in, removing them from the through traffic flow while also making left turns easier and safer.

With the adoption of the region's long-range plan Connections 2050, which includes the Regional Vision Zero 2050 safety goal, this project seeks to advance both safety and multi-modalism by adding value to existing programs. Also, in their current Strategic Highway Safety Plan (SHSP) PennDOT has identified Road Diets as an effective tool for advancing safety for pedestrians, at intersections, and in reducing lane departure crashes, in their pursuit of eliminating fatal and serious injury crashes.

### **Description:**

This one-year project will identify roadway corridors and segments suitable for a road diet to address crash safety while preserving mobility and promoting multi-modalism in DVRPC's Pennsylvania subregion. Building on the successes of the Regional Roundabout Analysis and Bike Friendly Resurfacing Program, this project will analyze PennDOT's roadway network within the five counties against established criteria to create a hierarchy of candidate corridors for consideration. This list will be cross-referenced with appropriate PennDOT maintenance schedules in search of potential opportunities to make travel safer via a Road Diet as a value add to planned work. DVRPC will also manage a stakeholder committee to assist with municipal and county coordination and communicating Road Diet benefits to the public. This will be a collaborative effort of DVRPC's Offices of Safe Streets and Mobility Analysis and Design. This project may require the purchasing of equipment or services to complete the identified tasks.

### **Tasks:**

1. Establish a steering committee.
2. Review PennDOT standards for Road Diets, as well as Road Diet national best practices.
3. In collaboration with PennDOT develop suitability criteria based on available data including but not limited to infrastructure characteristics, land use, traffic volumes,

crash statistics, and DVRPC long range plan goals.

4. Convert results to a spreadsheet and GIS layer for integration into the PennDOT D6 Safety Web Map.
5. Cross-reference with appropriate PennDOT maintenance schedules.
6. Work with the steering committee to create a hierarchy of candidate locations.
7. Determine criteria to flag candidates that would require a capacity analysis before being approved for a road diet, and which types of results would be deemed feasible.
8. Collect traffic counts and conduct a capacity analysis for a short list of candidates, as capacity allows, to measure practical impacts on local networks.
9. Support District 6 implementation with local coordination as needed.

**Products:**

1. Methodology and findings documentation.
2. GIS layer of candidate locations for integration in the PennDOT D6 Safety Web map.
3. Creation of a Road Diets project web page for sharing data and related information.

**Beneficiaries:**

PennDOT D6, Pennsylvania counties and cities of the DVRPC region, 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>
2023	\$150,000				\$150,000

\*PennDOT Connects

**PROJECT: 23-52-130      Regional Sidewalk Development Program**

---

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

**Program Coordinator:** Logan Axelson

**Project Manager:** Aaron Frait, Betsy Mastaglio

**Goals:**

Provide technical assistance for sidewalk projects with important local and regional connectivity benefits. Conduct planning and engineering feasibility screening on issues of topography, right-of-way, ownership, etc. and refine selected sidewalk construction projects into “design and shovel ready” candidates for typical competitive grant programs. Identify opportunities for project bundling or other cost saving strategies for sidewalk repair and maintenance programs.

**Description:**

In recent years, DVRPC has developed a regional sidewalk inventory and associated sidewalk gap analyses. We and other regional stakeholders have used this data to map, evaluate, and prioritize gaps in the sidewalk network and other barriers to pedestrian connectivity. The purpose of this work has been to elevate the consideration of pedestrian facilities in local and regional planning processes, and ultimately help to get more important sidewalk projects designed and built. Also in recent years, our NJDOT (2016) and PennDOT (2019) partners developed new statewide pedestrian and bicycle master plans, which provide guidance on effective use of federal, state, and local resources to implement bike and pedestrian initiatives.

In Fiscal Year 2022, DVRPC is using this robust data, analysis, and bi-state partner support to begin a pilot round of technical assistance. Starting in fall 2021, we have worked with the Montgomery County Planning Commission (MCPC) and Montgomery County municipalities to identify high-priority sidewalk construction and repair projects, and to screen those candidate projects for planning and engineering feasibility. This county-level pilot is coordinated with MCPC’s Montco 2040 Implementation Grant Program, a grant program for projects, such as sidewalk development, that complement Montgomery County’s comprehensive plan goals. In winter and spring 2022, we plan to coordinate with applicants for Safe Routes to School and TA Set Aside funding in New Jersey, for similar technical assistance. Building on this experience, DVRPC staff will regionalize this technical assistance program with help from a steering committee of county and agency representatives from around the region.

This project will continue Fiscal Year 2022’s screening and technical assistance tasks for sidewalk programs. DVRPC staff will use the existing sidewalk gap analysis to identify high-priority sidewalk gap closure candidates, and will work with regional stakeholders to select local or county priorities as appropriate. Factors in prioritization may include social equity, connectivity, constructibility, and other factors as appropriate. Projects that are selected to enter the sidewalk development

pipeline will receive technical assistance support from DVRPC planning and engineering staff on issues of feasibility, topography, right of way, ownership, etc., and through this program will be refined into highly competitive candidates for design and competitive grant program funding for construction.

In collaboration with the steering committee, DVRPC staff will also work to identify appropriate funding sources to support prioritized sidewalk projects, including existing competitive grant sources for local stakeholders and/or grant funding opportunities to be applied for and distributed by DVRPC or other regional stakeholders. Staff will also explore opportunities to support local sidewalk maintenance and repair programs through cost sharing, grant programs, or other means.

Some of these activities may require DVRPC to purchase equipment and/or services to meet program goals.

### **Tasks:**

1. Form a steering committee comprised of relevant stakeholders, including county, PennDOT, NJDOT (Office of Bicycle and Pedestrian Programs), TMA, and private organizations as appropriate.
2. Develop a selection process for candidate sidewalk development projects.
3. Solicit local candidate projects for technical assistance, and evaluate/prioritize projects for selection this year.
4. Conduct planning and engineering feasibility assessments for several local projects that are prioritized by a selection committee, with the number of projects being determined in part by their scale and complexity on submittal.
5. Create a handoff package with details on refined sidewalk improvements for design and/or construction funding applications.
6. Identify appropriate program structure and opportunities for funding local sidewalk maintenance projects.

### **Products:**

Memoranda, planning level design drawings, cost estimates, and other documents as appropriate for local sidewalk projects.

### **Beneficiaries:**

Pennsylvania and New Jersey counties, municipalities, and residents and workers throughout the DVRPC 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>
2023	\$150,000				\$150,000

\*PA TIP - MPMS #117932 - \$75,000 STU/Toll Credit, NJ TIP- DB# X30A- \$75,000 STBGP-PHILA



**PROJECT: 23-52-140 Pottstown Area Regional Plan Development**

---

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

**Program Coordinator:** Sarah Moran

**Project Manager:** Betsy Mastaglio

**Goals:**

Assist municipal officials in developing and implementing transportation policies and plans that enhance the region's transportation network and support the implementation of the goals outlined in the Pottstown Metropolitan Regional Comprehensive Plan, adopted in 2015. Specifically, PART Improvement Study goals include:

- Identify and prioritize bus stop and access improvements
- Improve overall branding of PART through uniform signage and design
- Identify potential funding sources for shelters, signage, and accessibility updates

**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 complete.

FY23 will be the second and final year of a 2-year study examining Pottstown Area Rapid Transit (PART) service. PART routes traverse seven of the eight Pottstown Metropolitan Region municipalities. In January 2020, the routes were expanded to provide service to Boyertown and Gilbertsville. This service change was a direct result of a Transit Development Plan conducted by PART and Michael Baker International. The plan evaluated existing service and identified opportunities for its streamlining with the intent to increase efficiency and better connect riders to regional destinations. Since this study's completion, both Pottstown and the Pottstown Metropolitan Regional Planning Committee have expressed interest in increasing ridership on PART through bus shelter maintenance, marketing, and accessibility. Tasks within this project may require purchasing equipment, software and/or services.

**Tasks:**

1. Building on the existing conditions analysis and bus stop inventory conducted in FY22, continue analysis and design work.
  - a. Develop stop area typologies to guide specific improvement recommendations
  - b. Draft signage and information branding concepts
  - c. Prioritize stops for improvements
2. Engage the public through pop-up events to collect feedback from riders, local residents, and property owners on draft recommendations
3. Finalize recommendations based on public engagement and feedback from the steering committee

- 4. Research funding sources to help implement recommendations
- 5. Develop final report document and final branding/signage materials

**Products:**

- 1. Meeting materials for Steering Committee and public meetings
- 2. Summary report
- 3. Other data sharing, graphics, or memorandums as appropriate

**Beneficiaries:**

Montgomery County; Chester County; Pottstown Metropolitan Regional Planning Committee; Pottstown Borough; Douglass Township; East Coventry Township; Lower Pottsgrove Township; North Coventry Township; Upper Pottsgrove Township; West Pottsgrove Township; and local residents, institutions, 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>
2023	\$70,000	\$52,894	\$17,106	\$0	\$0

**PROJECT: 23-52-150 PennDOT Connects Bike-Friendly Resurfacing Program**

---

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

**Program Coordinator:** Sarah Moran

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

**Goals:**

Review PennDOT's 5-year resurfacing program for locations in Southeastern Pennsylvania that are bicycle network priorities. Screen segments in suburban counties for priority and feasibility. Conduct capacity analysis on suburban segments where necessary. Conduct concept development and capacity/technical analysis on selected Philadelphia segments 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 and the surrounding suburban counties an opportunity to re-evaluate the operations, safety, and striping configurations of state roads. This project supports two parallel, ongoing PennDOT Connects project development pipelines: one in the City of Philadelphia, and one in the suburban counties. Design for suburban projects is funded through a TIP line item (MPMS #63406).

In the City of Philadelphia, DVRPC will support continued expansion of the 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. Staff will collect data about existing conditions through traffic counts and fieldwork, which will be used to inform model calibration. Depending on the characteristics of a given corridor, concept refinement typically requires capacity analysis in Synchro to assess the impacts of lane configuration changes on traffic movements, and sometimes network analysis to assess the likely impact of 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.

In the suburban counties, DVRPC will continue to support PennDOT District 6 in coordinating communication between the District, county planners, the Bicycle Coalition of Greater Philadelphia (BCGP), and municipalities to identify, prioritize, and screen segments for bike-friendly improvements. DVRPC will also work with

program partners to identify segments that require more detailed analysis to determine the traffic impact of the proposed bike-friendly treatments. For selected segments, DVRPC will collect data and provide traffic analysis and modeling support to evaluate these impacts. DVRPC will also assist PennDOT and the counties with outreach to municipalities to facilitate the process of submitting an official request to implement bike-friendly improvements. Some of these activities may also require DVRPC to purchase equipment and/or services to meet program goals.

Learning from previous rounds of this program, DVRPC staff will work with PennDOT and the counties to develop and refine a more proactive, potentially regional, approach to identifying segments for bike-friendly improvements. Rather than solely relying on the dynamic 5-year District resurfacing plan, and limiting feasible improvements to those possible via restriping alone, a more proactive approach would include analysis of existing bike network plans to develop a list of prioritized future projects which will be ready when the segments are planned for resurfacing. This will not only allow for more time to conduct municipal outreach for the suburban program, but will also build in time to pursue minor improvements that are sometimes necessary for bike-friendly resurfacing projects to be feasible.

### **Tasks:**

#### 1. City of Philadelphia Program

- a. Work with City and PennDOT staff to identify candidates for bike-friendly redesign on PennDOT's 5-year paving plan.
- b. Work with City and PennDOT staff to develop initial concept plans or build scenarios for these candidate corridors.
- c. Collect data and provide traffic analysis and modeling support to evaluate the facility and network-level traffic impacts of the initial concepts, as necessary.
- d. Refine initial concepts as appropriate based on traffic analysis findings.
- e. Prepare memos for City and PennDOT staff review and documentation of each evaluated corridor's proposed configuration, traffic impacts, and anticipated benefits.

#### 2. Suburban Program

- a. Coordinate priority and feasibility screening process with PennDOT District 6, county planners, the BCGP, and DVRPC staff for segments on PennDOT's 5-year resurfacing program.
- b. Work with program partners to identify segments (depending on scale and complexity, this project is expected to accommodate one location in each County) in need of traffic modeling to determine whether bike-friendly improvements that would impact vehicle capacity will result in acceptable levels of service in the corridor. If a County has no pressing need for a road diet analysis based on the current screening round, they have the option to identify a segment of PennDOT owned roadway for analysis, in an effort to have results ready to support future repaving efforts.
- c. For selected segments, collect data and provide traffic analysis and modeling

support to evaluate the facility and network level traffic impacts of the concepts.

d. Assist PennDOT and counties with outreach to municipalities and coordination with projects as needed. Develop tools and collect information to assist with these efforts.

e. Enhance project tracking database based on user feedback and evolving program needs.

3. Support partner agencies in using the Bicycle LTS and Connectivity Analysis webtool, and enhance the tool by developing ways to improve LTS assignment and connectivity analysis. If time and capacity allow, this analysis could be re-focused to support a more proactive project identification and prioritization approach.

**Products:**

1. Continued maintenance of suburban project tracking database.
2. For segments selected for capacity analysis, memoranda documenting each evaluated corridor’s proposed configuration, traffic impacts, and anticipated benefits, as appropriate.
3. Identification of resurfacing projects, with demonstrated benefit and local support, that are good candidates for new striping plans funded by MPMS #63406, “Retrofit for Bike Lanes and Shoulders” prior to resurfacing.

**Beneficiaries:**

PennDOT, 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>
2022	\$250,000	\$0	\$0	\$0	\$250,000
2023	\$250,000				\$250,000

\*PennDOT Connects



**PROJECT: 23-52-160      Vine Street Cap**

---

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

**Program Coordinator:** Aaron Fraint

**Project Manager:** Kelsey McElduff, Marco Gorini, Sarah Moran

**Goals:**

Study the feasibility of capping all or part of the Vine Street Expressway (I-676) in order to spur economic development, provide community amenities, and increase the amount of green space available to the Chinatown community

**Description:**

DVRPC will support The City of Philadelphia to develop an integrated design, planning, and feasibility study for an expressway cap over all or part of I-676 in the Chinatown area.

The vision of capping I-676 has gained continued community support as demonstrated in a number of planning initiatives, including the Philadelphia 2035 Central District Plan (2011), U.S. Department of Transportation (USDOT) Every Place Counts Design Challenge (2016), Chinatown Connections—Safe Routes to School (2017), Chinatown Neighborhood Plan (2017), and DVRPC’s Reviving Vine Study (2018). During Philadelphia Chinatown Development Corporation’s Chinatown Future Histories project in 2019, the community identified the negative impacts of Vine Street as an example of inequity, which created barriers for neighborhood growth and impaired residents’ quality of life.

The study will be a community-based process combined with engineering and financial feasibility analysis. The findings will inform the final scope and design of the expressway cap.

**Tasks:**

DVRPC’s tasks will be finalized as the consultant scope is developed, but could include a combination of some of the following tasks:

- Community engagement to confirm needs and priorities
- Coordination and facilitation of stakeholder input from relevant groups and agencies such as PCDC, the City of Philadelphia, the Pennsylvania Department of Transportation, and SEPTA.
- Developing a vision that meets community desires and is feasible
- Collecting transportation and engineering data
- Exploring potential transportation, community, economic, environmental and financial benefits and impacts on the neighborhood and with the project’s stakeholders
- Use traffic modeling to explore the impacts of the project’s concept on the local transportation network

**Products:**

Meeting summaries, memorandums of understanding and technical reports as needed, pending final task list

**Beneficiaries:**

City of Philadelphia; the Chinatown neighborhood; 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>
2023	\$200,000				\$200,000

\*PennDOT Connects

**PROJECT: 23-52-170      Transportation Systems Management and Operations (TSMO)**

---

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

**Program Coordinator:** Christopher King

**Project Manager:** Justin Neff

**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:**

Federal metropolitan planning regulations require MPOs to incorporate transportation operations into their transportation planning processes. DVRPC addresses that requirement through the conduct of two longstanding related initiatives. The Transportation Operations Program Area (23-52-050) and the Transportation Systems Management and Operations Project highlight key activities undertaken by these programs. The Transportation Systems Management and Operations (TSMO) Project incorporates strategies to help proactively manage the transportation system by addressing recurring and nonrecurring congestion. Strategies such as traffic incident management, traveler information services, safety service patrols, work zone management, and freight management improve system efficiency, enhance public safety, help reduce traveler delays and improve information access. Successful integration of these and other TSMO strategies will help to make the region more cohesive, and enhance communications and collaboration among transportation partners.

DVRPC's TSMO program encompasses a wide range of activities including the coordination of multi-agency regional initiatives. 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 usable 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 (ICM) purposes is offered, especially with respect to the I-76 ICM Project in Pennsylvania.

In FY 2023, 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.

Other focus areas of DVRPC's TSMO program include updating DVRPC's Interactive Detour Route Mapping (IDRuM) application, providing training programs for ITS operators and emergency response personnel, monitoring performance measures, security planning, and providing technical assistance to agencies.

IDRuM is being enhanced and updated into a new online web version. IDRuM is designed to give emergency responders access to the detour routes that allow them to be prepared when an incident occurs on a nearby highway. Typically traffic is diverted off the highway onto the arterial network and those arterials often become congested. By planning these routes and identifying key control points, local police can provide traffic control assistance to help ease the flow of traffic in their communities. The new online version was rolled out for Pennsylvania detours in FY2021 and work continues this year to incorporate the New Jersey detour routes.

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 tell us that conditions are better or worse than in the past. 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 RIMIS 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 and expand initiatives to enhance interagency information sharing and cooperation. Activities include providing technical assistance to operating agencies.
2. 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.
3. Continue the regional construction coordination efforts to minimize traffic impacts of overlapping construction projects.
4. Continue to maintain the region's ITS Infrastructure Inventory.
5. 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.
6. Continue to promote and provide training programs on TSMO and ITS strategies. 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.

- 7. Continue coordination and participation with local and regional partners and their committees, such as The Eastern Transportation Coalition, Southeastern Pennsylvania Regional Task Force and the Philadelphia Local Emergency Planning Committee.
- 8. 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.

**Products:**

- 1. Operation and maintenance of RIMIS software.
- 2. Management of RIMIS software vendor.
- 3. Operation and maintenance of IDRUM.
- 4. Implementations of programs to foster interagency cooperation.
- 5. Technical assistance to agencies.

**Beneficiaries:**

ITS operators, emergency responders, motorists, and transit users. Member governments and agencies, including PennDOT, NJDOT, transit operators, 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>
2022	\$554,000	\$0	\$0	\$0	\$554,000
2023	\$554,000				\$554,000

\* PA TIP - MPMS #115971 - \$310,400 STU/\$77,600 PA State 581; NJ TIP - DB #01300 - \$166,000 STBGP-PHILA

**PROJECT: 23-52-180      Connectivity Options for US202 Section 200**

---

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

**Program Coordinator:** Sarah Moran

**Goals:**

Develop conceptual alignments to directly connect US 202 (between Boot Road and the US 322 Bypass) to adjacent land uses. Revisit the US 202/322 interchange completion concept and assess the local impact of these connections.

**Description:**

Continuing the previous DVRPC modelling work that has been done for the US 202 corridor Sections 100 and 200, we would like to analyze the potential to better connect US 202 with the land uses adjacent to the corridor between the US 322 Bypass interchange to the south and Boot Road interchange to the north. Current access to the adjacent land uses is indirect and creates additional congestion and damage to the local roadways required to access these locations. This study would include developing conceptual alignments to directly connect with the business and employment centers right next to the corridor, and to revisit the concept of completing the partial US 322 / 202 interchange. DVRPC published the US 322/202 Interchange Completion Study in January 2008 which concluded that the land use within the primary impact area would build out regardless of whether or not the interchange improvements would be made. These business parks have seen some redevelopment but would greatly benefit from direct access to the highway system, which would reduce congestion on local roads, spur redevelopment and intensification of the business parks, improve travel times, make it easier for businesses to attract employees and new tenants, and reduce air pollution.

**Tasks:**

1. Convene a steering committee composed of municipal officials, Chester County Planning Commission, PennDOT District 6-0, and others to be identified as necessary.
2. Work with the steering committee to identify and prioritize existing, proposed, and potential land uses adjacent to US 202 where direct connections would be desirable.
3. Conduct public outreach to engage the local community and business owners to learn about their needs and ideas for improvements.
4. Develop concepts for direct connections between US 202 and prioritized adjacent properties.
5. Collect traffic counts and perform traffic operational modeling for the AM and PM peak traffic hours for current and future year (2050) No-Build conditions.
6. Identify traffic deficiencies, and model transportation solutions to ameliorate conditions or accommodate the vehicular demands in each scenario. This may include up to 3 future year alternatives exploring different connection options to and from US 202.
7. Prepare a reporting document that summarizes the undertakings and findings of

the study.

**Products:**

Steering committee meeting presentations, materials, and minutes. Technical report with findings and recommendations.

**Beneficiaries:**

Chester County Planning Commission, PennDOT, Chester County motorists and 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>
2023	\$150,000				\$150,000

---

\*PA TIP- MPMS # 117973

**NOTE: This project has been changed through UPWP amendment; see Appendix C for replacement project details.**

**PROJECT: 23-52-190      Burlington Township / Florence Township Connector Road Planning Study**

---

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

**Program Coordinator:** Aaron Fraint

**Project Manager:** Sarah Moran

**Goals:**

Improve freight mobility to/from industrial areas near Burlington and Florence Townships, while also alleviating traffic congestion and eliminating industrial traffic along residential roads.

**Description:**

There is the need to study the feasibility and effectiveness of providing a connector road from River Road (CR 656) in Burlington Township through industrial properties to US Route 130 in Florence Township. The route of the connector road would traverse from River Road through industrial properties to Daniels Way, John Galt Way and ultimately to US Route 130. The purpose of the connector road is to alleviate growing traffic pressures on Dulty's Lane (a newly designated county road) at US Route 130 in Burlington Township and to eliminate industrial traffic along residential roads Front Street and Delaware Avenue in Florence Township and Neck Road in Burlington Township. The region that the connector road would serve is a significant freight-movement center that has experienced tremendous industrial growth that generates significant car and truck traffic. This traffic negatively affects local residential roads as well as overwhelms the existing road system in the industrial area. There is a need to study the traffic impacts to local roads under "no build" and "build" scenarios for the connector road. This study would lay the foundation for the two municipalities and Burlington County to adopt master plan elements to their circulation plans for implementation of the connector road by public and private sectors. Some activities may require DVRPC to purchase equipment and/or services to meet project goals.

**Tasks:**

1. Convene a steering committee of municipal, county, state, and regional officials, and others as needed, including representatives from nearby industrial developments and commercial properties
2. Identify the parameters of the "no build - pipeline" and "no build - full development potential" scenarios, including the extent of the study area road network. The "no-build - pipeline" scenario will include nearby developments that are scheduled to be finished by the future year, and the "no build - full development potential" scenario will include all potential developments that are allowed by existing zoning regulations. Each of these two scenarios will also have its own "build" scenario, which will include everything in its "no-build" scenario along with the proposed connector roadway.
3. Collect traffic counts and perform traffic operational modeling for the AM and PM

peak traffic hours for current conditions. Use regional model outputs to account for new travel patterns that will inform future year “pipeline” and “full development potential” models.

4. Identify traffic deficiencies, and model transportation solutions to ameliorate conditions or accommodate the vehicular demands in each scenario.

5. Conduct a public open house meeting to gauge reaction to the transportation plans and proposals.

6. Prepare a reporting document that summarizes the undertakings and findings of the study

**Products:**

Steering committee meeting presentations, materials, and minutes. Technical report with findings and recommendations.

**Beneficiaries:**

Burlington County; Burlington and Florence Townships; NJDOT; 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>
2023	\$125,000				\$125,000

\*NJ TIP- DB# D2301 STBGP-PHILA

---

**PROJECT: 23-53-020/025 HPMS and Functional Classification System (PA & NJ)**

---

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

**Program Coordinator:** Joshua Rocks

**Project Manager:** Jonathan Ferullo

**Goals:**

Improve efficiency of the region's transportation system by providing an updated Highway Performance Monitoring System and Functional Classification System to meet FHWA requirements and determine improvement.

**Description:**

This project will collect and update traffic characteristics of the HPMS links and Highway Functional Classification System. HPMS is a database system designed to annually assess the physical and operational characteristics of approximately 300 selected non-interstate highway links. This and other urban area information will be used at the national level to assess system condition and usage and to allocate highway funding.

The Highway Functional Classification is a system of highway designations by area type and facility type. One use of a link's classification is to determine federal funding eligibility for improvement projects. DVRPC works with member governments and state DOTs in updating the highway classifications to reflect changing conditions.

**Tasks:**

1. Collect traffic information, geometric, and operational characteristics for approximately 300 sample links of the HPMS network in the Pennsylvania portion of the region.
2. Gather volume/classification counts for 100 non-interstate links.
3. Prepare field forms and collect traffic counts for 40 links on the New Jersey portion of the region.
4. Enter counts collected during the year into the DVRPC Traffic Count system.
5. Transmit data to PennDOT and NJDOT by specified dates.
6. Review, coordinate, and process requests for functional classification changes from state, county, and local governments.
7. Revise the functional classification system based on these requests.

**Products:**

1. Updated HPMS data files of physical and operational characteristics.
2. Database of counts taken in New Jersey and Pennsylvania.
3. Record of requests for functional classification changes.
4. Updated functional classification maps.

**Beneficiaries:**

States, counties, and cities.

**Project Cost and Funding:**

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2022	\$190,000	\$190,000	\$0	\$0	\$0
2023	\$190,000	\$190,000	\$0	\$0	\$0

**PROJECT: 23-53-030 PennDOT District 6-0 Traffic Volume Data**

---

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

**Program Coordinator:** Joshua Rocks

**Project Manager:** Jonathan Ferullo

**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 : (a) video or manual intersectional vehicle turning movements recorded in 15-minute time increments; (b) 48-hour portable traffic recorder counts by hour; (c) video or manual truck classification hourly counts; and (d) weeklong bicycle/pedestrian counts in 15-minute time increments.
3. Review, process, and tabulate field count data. Convert recorder counts to average annual daily traffic (AADT) (motorized) and average annual daily bicycles (AADB) and average annual daily pedestrians (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>
2022	\$300,000	\$0	\$0	\$0	\$300,000
2023	\$300,000				\$300,000

\*PA State Appropriation 582 Funds

**PROJECT: 23-53-035 NJDOT Counting Program**

---

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

**Program Coordinator:** Joshua Rocks

**Project Manager:** Jonathan Ferullo

**Goals:**

To collect traffic data on assigned roadways and locations for NJDOT.

**Description:**

This ongoing program collects and processes travel data, the primary form being traffic counts, including hourly and 48-hour traffic volumes, for selected locations on New Jersey's highway system. Data collected will provide input to Vehicle Miles Traveled (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. Traffic count information from the database may be queried at <https://www.dvrpc.org/webmaps/TrafficCounts/>. The program is supported by funding from NJDOT and To facilitate uninterrupted data collection, it will be necessary to procure new counting equipment, supplies, repairs, or services as needed.

**Tasks:**

1. Coordinate with NJDOT and member governments to review traffic count locations.
2. Establish weekly schedules, staff assignments, and control procedures.
3. Collect traffic data at selected locations.
4. Process counts, edit for quality control, upload data into the DVRPC Traffic Count Database.
5. Submit counts collected during the year electronically by specific deadlines established by NJDOT and member governments.
6. Maintain an inventory of data collection and safety equipment; this includes purchasing new equipment with enhanced technology and capability, purchasing needed supplies such as road tube, and procuring necessary repairs if existing equipment gets damaged.
7. Collect travel data from non-highway modes, including pedestrian, bicycle and public transportation travel system characteristics and user traits as requested.

**Products:**

1. Database containing new and historic traffic counts.
2. Webviewer of all traffic counts accessible at <https://www.dvrpc.org/webmaps/TrafficCounts/>
3. Transmittals of traffic data to NJDOT, member governments and interested parties.

**Beneficiaries:**

NJDOT, 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>
2023	\$270,000				\$270,000

---

\*NJDOT - District (TBD)

**PROJECT: 23-59-700      Member Government Special Studies**

---

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

**Program Coordinator:** Patricia Elkis

**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 funds to member governments 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. City of Philadelphia Traffic Counting Program (23-60-051)
2. Camden County Traffic Counting Program (23-61-070)
3. Gloucester County Traffic Counting Program (23-61-080)
4. Mercer County Traffic Counting Program (23-61-090)
5. Burlington County Traffic Counting Program (23-61-100)
6. Southeastern Pennsylvania Transit Planning and Technical Assistance - Philadelphia Transit Plan Continuation (23-63-008)
7. Reimaging Regional Rail Support Services (23-63-007)
8. Route 34 End of Line Site Screening and Preferred Alternative Study (23-63-009)
9. Rolling License Plate Surveys – PA (23-63-010)
10. NJT Safe Routes to Transit (23-63-024)
11. NJTRANSIT Transit Survey Program (23-63-026)
12. Rolling License Plate Surveys - NJ (23-63-027)

**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>
2022	\$901,944	\$0	\$0	\$0	\$901,944
2023	\$991,944				\$991,944

\*TSP and SRHPP special studies projects

**PROJECT: 23-59-701      New Projects and Misc. Carryover**

---

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

**Program Coordinator:** Patricia Elkis

**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 FY22 and will carryover into FY23 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:**

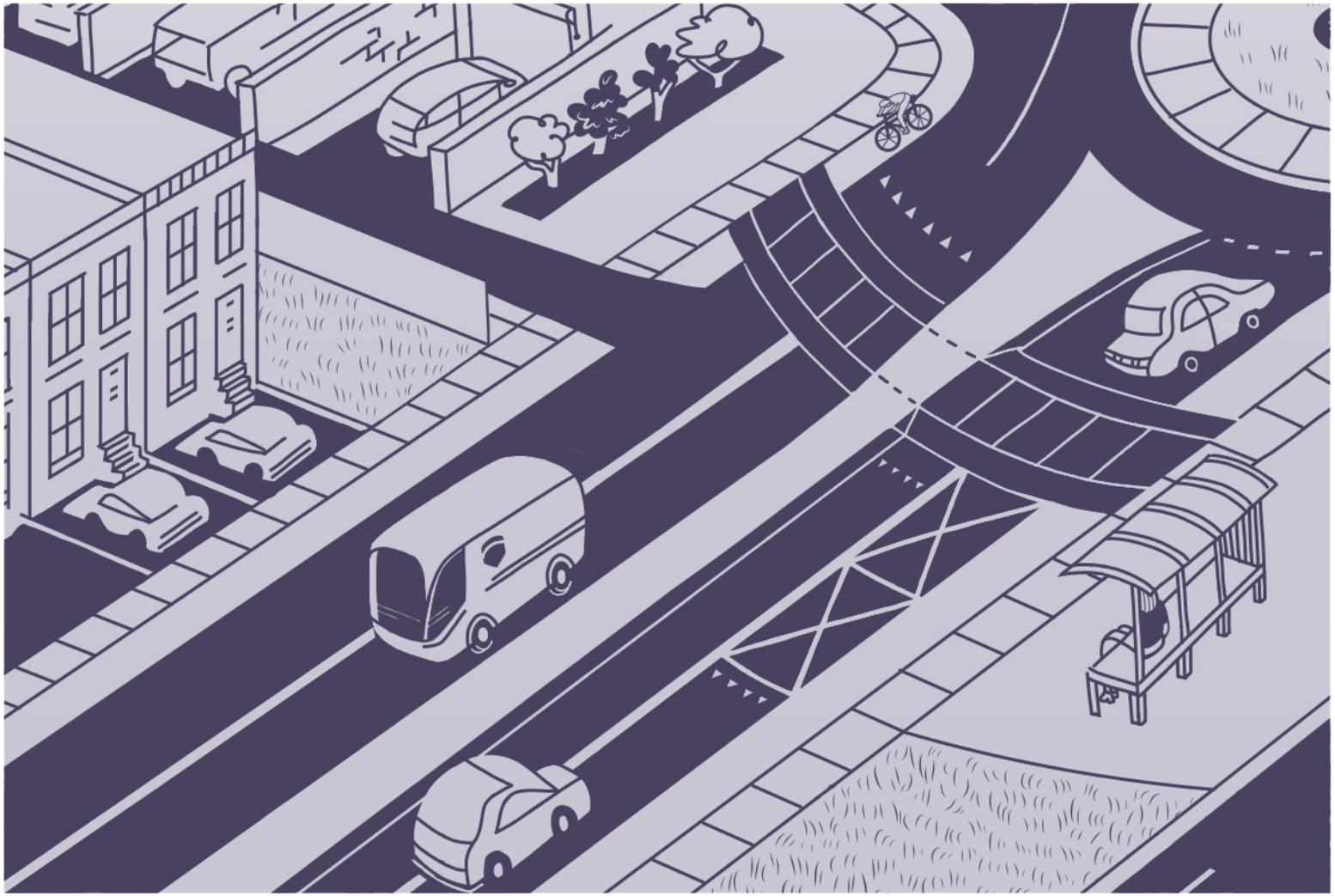
---

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2022	\$1,060,830	\$0	\$0	\$90,500	\$970,330
2023	\$818,442				\$818,442

---

\* Projects to be defined





CHAPTER 3A

# PA Supportive Regional Highway Planning Program (SRHPP)



## Table of Contents

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

23-60-010	Bucks County: Supportive Regional Highway Planning Program	263
23-60-020	Chester County: Supportive Regional Highway Planning Program	267
23-60-030	Delaware County: Supportive Regional Highway Planning Program	269
23-60-040	Montgomery County: Supportive Regional Highway Planning Program	273
23-60-050	Philadelphia: Supportive Regional Highway Planning Program	275
23-60-051	Philadelphia Traffic Counting Program	279

#### Table

Table 6: PA Supportive Regional Highway Planning Program	261
--	-----



**Table 6: PA Supportive Regional Highway Planning Program\***

<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>Amount</b>
23-60-010	Bucks County	Supportive Regional Highway Planning	\$94,200
23-60-020	Chester County	Supportive Regional Highway Planning	\$136,300
23-60-030	Delaware County	Supportive Regional Highway Planning	\$68,200
23-60-040	Montgomery County	Supportive Regional Highway Planning	\$141,700
23-60-050	City of Philadelphia Streets Department	Supportive Regional Highway Planning	\$207,600
23-60-051 <sup>1</sup>	City of Philadelphia/DVRPC	Traffic Counts	\$50,000
<b>Program Total</b>			<b>\$698,000</b>

**\*Note:** Starting FY2023, the PA Supportive Regional Highway Planning Program will no longer require In-Kind Service Matches. This change is reflected in the table above.

<sup>1</sup> Project work will be performed by DVRPC staff.



**PROJECT: 23-60-010 Bucks County: Supportive Regional Highway Planning Program**

---

**Responsible Agency:** Bucks County Planning Commission

**Program Coordinator:** Kwan Hui

**Project Manager:** Patricia Elkis

**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. Maintain the online Transportation-related GIS Interactive Mapping Applications, and provide periodic maintenance of these Mapping Applications.
5. Attend DVRPC IREG, future Imagery Acquisition, and other steering committee meetings.
6. Assist with local asset data collection, as requested.

**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 or existing 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.
9. Participate in competitive project selection and evaluation processes, as appropriate.

#### 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.

**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>
2022	\$117,750	\$0	\$0	\$0	\$117,750
2023	\$94,200	\$0	\$0	\$0	\$94,200

\*PA TIP- MPMS# 117912 \$94,200 STU/Toll Credit



**PROJECT: 23-60-020    Chester County: Supportive Regional Highway Planning Program**

---

**Responsible Agency:** Chester County Planning Commission

**Program Coordinator:** Kwan Hui

**Project Manager:** Patricia Elkis

**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 and/or existing 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.

8. Participate in competitive project selection and evaluation processes, as appropriate.

**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 impact studies, land development plans, zoning changes, and Comprehensive Plans that impact the county and regional transportation plans.
5. Assist with local asset data collection, as requested.

**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>
2022	\$170,375	\$0	\$0	\$0	\$170,375
2023	\$136,300	\$0	\$0	\$0	\$136,300

\*PA TIP- MPMS# 117912 \$136,300 STU/Toll Credit

**PROJECT: 23-60-030 Delaware County: Supportive Regional Highway Planning Program**

---

**Responsible Agency:** Delaware County Planning Department

**Program Coordinator:** Kwan Hui

**Project Manager:** Patricia Elkis

**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 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 or existing proposals for inclusion in the TIP, and participate in competitive project selection and evaluation processes, as appropriate
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 DVRPC Long-Range Plan discussions, as needed.
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.
6. Assist with local asset data collection, as requested.
7. Develop a Complete Streets model ordinance and work with municipalities to customize to their needs.
8. Prepare an Active Transportation Plan.

### **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.
9. Model Complete Streets Ordinance.
10. Active Transportation Plan

### **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>
2022	\$85,250	\$0	\$0	\$0	\$85,250
2023	\$68,200	\$0	\$0	\$0	\$68,200

\*PA TIP- MPMS# 117912 \$68,200 STU/Toll Credit



**PROJECT: 23-60-040    Montgomery County: Supportive Regional Highway Planning Program**

---

**Responsible Agency:** Montgomery County Planning Commission

**Program Coordinator:** Kwan Hui

**Project Manager:** Patricia Elkis

**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 or existing 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 and competitive project selection and evaluation processes, as appropriate
3. Enforce the county comprehensive plan, as well as Walk Montco and Bike Montco plans.
4. Assist with local asset data collection, as requested.
5. Organize and lead meetings among departments to implement the county's Complete Streets policy.

**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>
2022	\$177,125	\$0	\$0	\$0	\$177,125
2023	\$141,700	\$0	\$0	\$0	\$141,700

\*PA TIP- MPMS# 117912 \$141,700 STU/Toll Credit

**PROJECT: 23-60-050 Philadelphia: Supportive Regional Highway Planning Program**

---

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

**Program Coordinator:** Kwan Hui

**Project Manager:** Patricia Elkis

**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 the 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.
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.
9. Attend DVRPC IREG, future Imagery Acquisition, and other steering committee meetings.
10. Assist with local asset data collection, as requested.

#### **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 any updated transportation facility data, functional class revisions, or other transportation system changes.
7. County project proposals for consideration in next fiscal year's UPWP, if available.
8. Quarterly progress reports, closing report, and invoices.
9. 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>
2022	\$272,000	\$0	\$0	\$0	\$272,000
2023	\$207,600	\$0	\$0	\$0	\$207,600

\*PA TIP- MPMS # 117912 \$207,600 STU/Toll Credit

**PROJECT: 23-60-051 Philadelphia Traffic Counting Program**

---

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

**Program Coordinator:** Joshua Rocks

**Project Manager:** Jonathan Ferullo

**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. This program also supports ongoing equipment needs and maintenance costs for permanent bicycle and pedestrian counting stations in the City of Philadelphia.

**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. Prepare and send count data to Philadelphia City Planning Commission, Streets Department, and Office of Transportation, Infrastructure, and Sustainability.

**Products:**

1. Detailed tables showing hourly counts, turning movements, and AADT, AADB, or AADP for selected locations.

**Beneficiaries:**

Philadelphia City Planning Commission, City of Philadelphia Streets Department, City of Philadelphia Office of Transportation, Infrastructure, and Sustainability (OTIS), PennDOT, residents, and businesses, and DVRPC project managers.

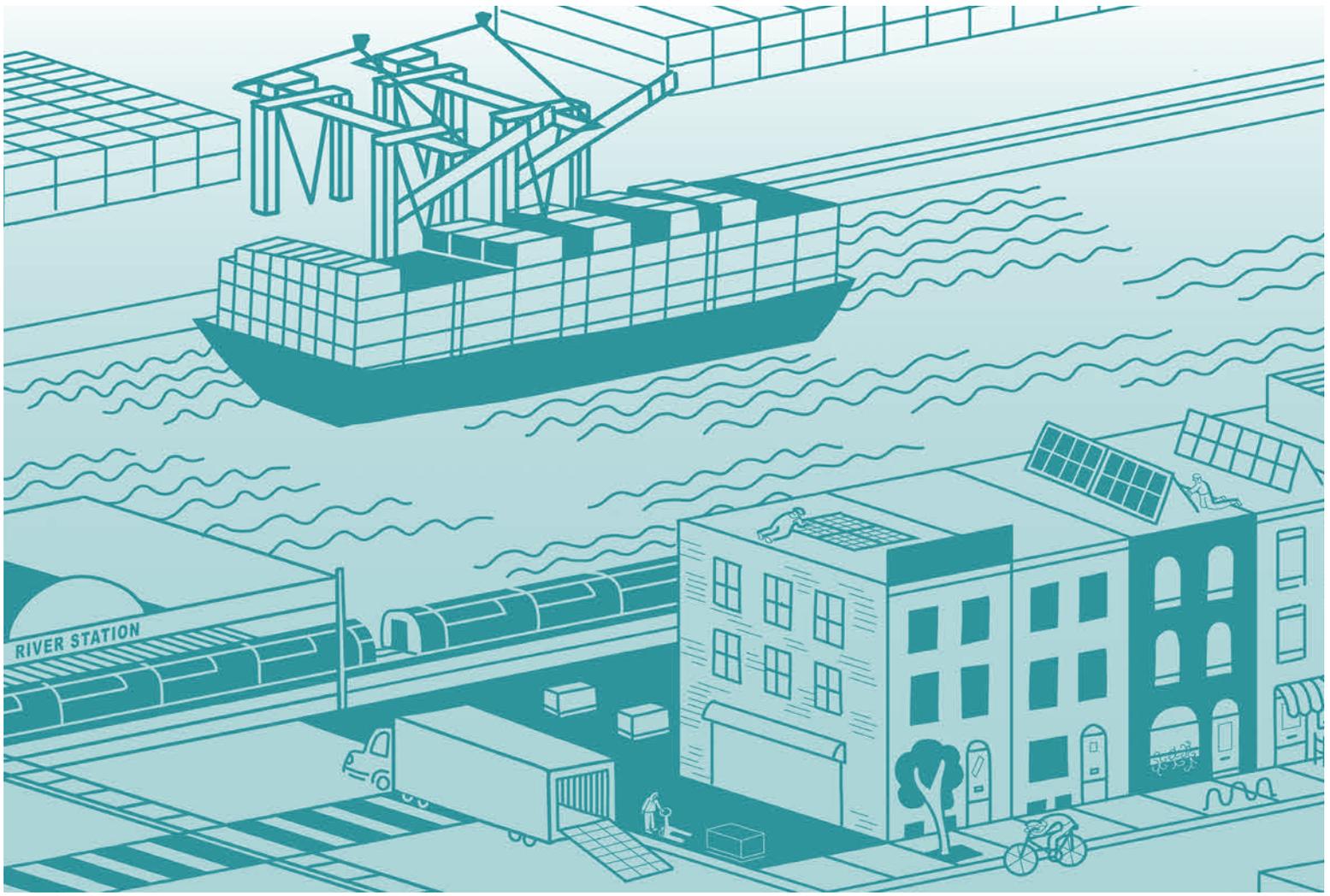
**Project Cost and Funding:**

---

<b>FY</b>	<b>Total</b>	<b>Highway Program</b>	<b>Transit Program</b>	<b>Comprehensive Planning</b>	<b>Other *</b>
2022	\$50,000	\$0	\$0	\$0	\$50,000
2023	\$50,000	\$0	\$0	\$0	\$50,000

---

\*PA TIP- MPMS# 117912- \$50,000 STU/Toll Credit



CHAPTER 3B

# NJ Supportive Regional Highway Planning Program (SRHPP)





# Table of Contents

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

23-61-010	Burlington County: Supportive Regional Highway Planning Program	287
23-61-020	Camden County: Supportive Regional Highway Planning Program	291
23-61-030	Gloucester County: Supportive Regional Highway Planning Program	293
23-61-040	Mercer County: Supportive Regional Highway Planning Program	297
23-61-060	City of Camden - Supportive Regional Highway Planning Program	301
23-61-070	Camden County Traffic Counting Program	303
23-61-080	Gloucester County Traffic Counting Program	305
23-61-090	Mercer County Traffic Counting Program	307
23-61-100	Burlington County Traffic Counting Program	309
23-61-110	Trenton Bicycle Plan	311

<b>Table</b>		
Table 7: NJ Supportive Regional Highway Planning Program		285



**Table 7: NJ Supportive Regional Highway Planning Program\***

<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>Amount</b>
23-61-010	Burlington County	Supportive Regional Highway Planning	\$39,755
23-61-020	Camden County	Supportive Regional Highway Planning	\$44,015
23-61-030	Gloucester County	Supportive Regional Highway Planning	\$39,100
23-61-040	Mercer County	Supportive Regional Highway Planning	\$34,130
23-61-060	City of Camden	Supportive Regional Highway Planning	\$24,000
<b>Subtotal</b>			<b>\$181,000</b>
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>Amount</b>
23-61-070 <sup>1</sup>	Camden County/DVRPC	Traffic Counting Program	\$60,000
23-61-080 <sup>1</sup>	Gloucester County/DVRPC	Traffic Counting Program	\$60,000
23-61-090 <sup>1</sup>	Mercer County/DVRPC	Traffic Counting Program	\$60,000
23-61-100 <sup>1</sup>	Burlington County/DVRPC	Traffic Counting Program	\$60,000
23-61-110 <sup>1</sup>	Trenton/DVRPC	Trenton Bicycle Plan	\$78,000
<b>Subtotal</b>			<b>\$318,000</b>
<b>Program Total</b>			<b>\$499,000</b>

**\*Note:** Starting FY2023, the NJ Supportive Regional Highway Planning Program will no longer require In-Kind Service Matches. This change is reflected in the table above.

<sup>1</sup> Project work will be performed by DVRPC staff.



**PROJECT: 23-61-010 Burlington County: Supportive Regional Highway Planning Program**

---

**Responsible Agency:** Burlington County - Land Development

**Program Coordinator:** Kwan Hui

**Project Manager:** Patricia Elkis

**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 Biannual 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).
6. Review and provide feedback on NJDOT Capital Program Screening Committee (CPSC) and Capital Program Committee (CPC) project requests
7. Participate in project selection and evaluation processes, as appropriate, including DVRPC competitive programs.

### 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.
4. Attend DVRPC IREG, future Imagery Acquisition, and other steering committee meetings.

### **Products:**

1. Biannual 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>
2022	\$49,694	\$0	\$0	\$0	\$49,694
2023	\$39,755	\$0	\$0	\$0	\$39,755

\* NJ TIP - DB #X30A - \$39,755 STBGP-PHILA;



**PROJECT: 23-61-020 Camden County: Supportive Regional Highway Planning Program**

---

**Responsible Agency:** Camden County - Department of Public Works - Division of Planning

**Program Coordinator:** Kwan Hui

**Project Manager:** Patricia Elkis

**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).
6. Review and provide feedback on NJDOT Capital Program Screening Committee (CPSC) and Capital Program Committee (CPC) project requests
7. Participate in project selection and evaluation processes, as appropriate, including DVRPC competitive programs.

### 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. Participate in DVRPC IREG, future Imagery Acquisition, and other steering committee meetings, as needed.

### **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.

### **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>
2022	\$70,019	\$0	\$0	\$0	\$70,019
2023	\$44,015	\$0	\$0	\$0	\$44,015

\* NJ TIP - DB #X30A - \$44,015 STBGP-PHILA

**PROJECT: 23-61-030 Gloucester County: Supportive Regional Highway Planning Program**

---

**Responsible Agency:** Gloucester County Planning Department

**Program Coordinator:** Kwan Hui

**Project Manager:** Patricia Elkis

**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).
6. Review and provide feedback on NJDOT Capital Program Screening Committee (CPSC) and Capital Program Committee (CPC) project requests
7. Participate in project selection and evaluation processes, as appropriate, including DVRPC competitive programs.

### Task III - Transportation Plan Maintenance

1. Coordinate county transportation policies with the regional and state long-range plans.
2. Monitor and evaluate the 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.
6. Attend DVRPC IREG, future Imagery Acquisition, and other steering committee meetings.

### **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>
2022	\$63,875	\$0	\$0	\$0	\$63,875
2023	\$39,100	\$0	\$0	\$0	\$39,100

\* NJ TIP - DB #X30A - \$39,100 STBGP-PHILA



**PROJECT: 23-61-040 Mercer County: Supportive Regional Highway Planning Program**

---

**Responsible Agency:** Mercer County Planning Department

**Program Coordinator:** Kwan Hui

**Project Manager:** Patricia Elkis

**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).
6. Review and provide feedback on NJDOT Capital Program Screening Committee (CPSC) and Capital Program Committee (CPC) project requests
7. Participate in project selection and evaluation processes, as appropriate, including DVRPC competitive programs.

### 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 the regional transportation system.
5. Prepare modifications as required to the master plan and present to the planning board for public hearing and adoption.
6. Review regional, state and local plans, particularly with respect to long-range plans, as required.

### 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. Compile and analyze land use, economic and demographic data to support transportation planning.
4. Create and update transportation-related maps.
5. 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. 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>
2022	\$57,662	\$0	\$0	\$0	\$57,662
2023	\$34,130	\$0	\$0	\$0	\$34,130

\* NJ TIP - DB #X30A - \$34,130 STBGP-PHILA



**PROJECT: 23-61-060     City of Camden - Supportive Regional Highway Planning Program**

---

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

**Program Coordinator:** Kwan Hui

**Project Manager:** Patricia Elkis

**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, annual completion report, and participate in the development of the DVRPC Planning Work Program and Camden City SRHPP for the next fiscal year.
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.
8. Attend Training Modules, Workshop, and Seminars – CEU opportunities.

**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.
4. Review and provide feedback on NJDOT Capital Program Screening Committee

(CPSC) and Capital Program Committee (CPC) project requests  
 5. Participate in project selection and evaluation processes, as appropriate.

**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. NJDOT’s Safety Voyager or NJDHTS’s Numetric Crash Analysis tool. Maintain data supplied by NJDOT 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.
3. Attend DVRPC IREG, future Imagery Acquisition, and other steering committee meetings.

**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>
2022	\$30,000	\$0	\$0	\$0	\$30,000
2023	\$24,000	\$0	\$0	\$0	\$24,000

\* NJ TIP - DB #X30A - \$24,000 STBGP-PHILA

**PROJECT: 23-61-070 Camden County Traffic Counting Program**

---

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

**Program Coordinator:** Joshua Rocks

**Project Manager:** Jonathan Ferullo

**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. Prepare and send data to Camden County for their use.

**Products:**

1. Detailed tables showing hourly counts, turning movements, and AADT, AADB, or AADP for selected locations.

**Beneficiaries:**

Camden County, Camden City, NJDOT, residents, businesses, and DVRPC project managers.

**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>
2022	\$60,000	\$0	\$0	\$0	\$60,000
2023	\$60,000	\$0	\$0	\$0	\$60,000

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

**PROJECT: 23-61-080 Gloucester County Traffic Counting Program**

---

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

**Program Coordinator:** Joshua Rocks

**Project Manager:** Jonathan Ferullo

**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 and send 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 tables 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, NJDOT, residents, businesses, and DVRPC project managers.

**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>
2022	\$60,000	\$0	\$0	\$0	\$60,000
2023	\$60,000	\$0	\$0	\$0	\$60,000

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

**PROJECT: 23-61-090 Mercer County Traffic Counting Program**

---

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

**Program Coordinator:** Joshua Rocks

**Project Manager:** Jonathan Ferullo

**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. Update the county's GIS traffic count file and map.
6. Prepare and send count data for the county's GIS file and prepare traffic count map showing new locations.

**Products:**

- 1. Detailed tables 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, NJDOT, residents, businesses, and DVRPC project managers.

**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>
2022	\$60,000	\$0	\$0	\$0	\$60,000
2023	\$60,000	\$0	\$0	\$0	\$60,000

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

**PROJECT: 23-61-100 Burlington County Traffic Counting Program**

---

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

**Program Coordinator:** Joshua Rocks

**Project Manager:** Jonathan Ferullo

**Goals:**

Obtain data needed for transportation, engineering, and pavement management studies.

**Description:**

Burlington 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 Burlington County.

**Tasks:**

1. Schedule meetings with Burlington 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. Prepare and send data to Burlington County for their use.

**Products:**

Detailed tables showing hourly counts, turning movements, and AADT, AADB, or AADP for selected locations.

**Beneficiaries:**

Burlington County, NJDOT, residents, businesses, and DVRPC project managers.

**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>
2023	\$60,000	\$0	\$0	\$0	\$60,000

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

## **PROJECT: 23-61-110 Trenton Bicycle Plan**

---

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

**Program Coordinator:** Cassidy Boulan

**Project Manager:** Amy Bernknopf, Marco Gorini

### **Goals:**

Synthesize existing plans and recommendations and supplement with additional corridors and facilities to create a comprehensive bicycle network for Trenton that will further assist in implementing the Complete Streets Design Handbook.

### **Description:**

In the last several years individual projects and plans have examined different parts of the on and off road bicycle network in the City of Trenton. Recent work around implementing the Complete Streets ordinance and the Trenton Complete Streets Design Handbook has highlighted the need for the city to have an up-to-date network of planned bicycle facilities for the entire city. This project will examine and vet existing plans and recommendations, update recommendations or facilities as needed, and examine the parts of the city and the network that have yet to be studied. The project will also include outreach and engagement with existing complete streets stakeholders in Trenton and with the public around important origins and designations and preferred location and types of facilities. The end product will be a plan that the city can implement through routine maintenance and capital improvements and can be referenced for any future road design projects. This project may include purchasing of equipment or services to complete tasks.

### **Tasks:**

1. Work with city and stakeholders to develop goals and priorities for the plan.
2. Inventory existing plans and recommendations for on and off road bicycle facilities in Trenton. Examples include the plan for Perry Street, Mercer County Bike Plan, the Trenton Trails Plan, the Downtown Trenton Bicycle and Pedestrian Plan and the Trenton Transit Center Plan.
3. Research available trip generation data sources, including from data gathered through DVRPC's Equity Through Access project.
4. Identify gaps and desire lines in the existing/planned bike network, what is recommended in the Trenton Complete Streets Design Handbook, and tradeoffs of alternatives for addressing them. Evaluate parking implications for any facility recommendation that would result in the removal of parking.
5. Work with stakeholders to design method(s) for public feedback on alternatives, including routes, types of facilities, and modal priorities on different corridors.
6. Finalize recommendations and summarize them and the development process in a final document and GIS files.

**Products:**

- 1. A document summarizing the on-road and off-road existing and recommended bicycle facilities in Trenton.
- 2. GIS files of facility recommendations that can be used by City of Trenton staff.

**Beneficiaries:**

City of Trenton, those bicycling in, around and through Trenton, other entities who own roads in Trenton.

**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>
2023	\$78,000	\$0	\$0	\$0	\$78,000

\* NJ TIP - DB #X30A - \$78,000 STBGP-PHILA



CHAPTER 4A

# PA Transit Support Program (TSP)



# Table of Contents

## Chapter 4A: PA Transit Support Program

23-63-001	Bucks County Transit Planning and Programming	319
23-63-002	Chester County Transit Planning and Coordination	321
23-63-003	Delaware County Transit Planning and Coordination	323
23-63-004	Montgomery County Transit Planning and Implementation	325
23-63-005	Philadelphia Transit Planning and Programming	327
23-63-006	Philadelphia Short-Range Planning	331
23-63-007	Reimagining Regional Rail Support Services	333
23-63-008	Southeastern Pennsylvania Transit Planning and Technical Assistance	335
23-63-009	Route 34 End-of-Line Study	337
23-63-010	Rolling License Plate Surveys - PA	339

**Table**  
Table 8: PA Transit Support Program 317



**Table 8: PA Transit Support Program**

<b>Core Projects</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2023 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
23-63-001	Bucks County	Transit Planning and Programming	\$61,734	\$15,434	\$77,168
23-63-002	Chester County	Transit Planning and Programming	\$46,069	\$11,517	\$57,586
23-63-003	Delaware County	Transit Planning and Programming	\$87,504	\$21,876	\$109,380
23-63-004	Montgomery County	Transit Planning and Implementation	\$77,400	\$19,350	\$96,750
23-63-005	Philadelphia Office of Transportation, Infrastructure, and Sustainability	Transit Planning and Programming	\$98,535	\$24,633	\$123,168
23-63-006	Philadelphia City Planning Commission	Short-Range Planning	\$119,758	\$29,940	\$149,698
23-63-008 <sup>1</sup>	DVRPC	Southeast PA Transit Planning and Technical Assistance (Phila. Transit Plan, Regional Rail Support)	\$144,000	\$36,000	\$180,000
<b>Subtotal</b>			<b>\$635,000</b>	<b>\$158,750</b>	<b>\$793,750</b>
<b>Special Studies</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2023 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
23-63-007 <sup>2</sup>	SEPTA/DVRPC	Reimagining Regional Rail Support Services	\$100,000	\$25,000	\$125,000
23-63-009 <sup>2</sup>	SEPTA/DVRPC	Route 34 End-of-Line Site Screening and Preferred Alternative Study	\$100,000	\$25,000	\$125,000
23-63-010 <sup>2</sup>	DVRPC	Rolling License Plate Surveys (PA)	\$65,000	\$16,250	\$81,250
<b>Subtotal</b>			<b>\$265,000</b>	<b>\$66,250</b>	<b>\$331,250</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. Philadelphia's Transit Plan budget amount is \$112,500 which includes \$90,000 cash and a \$22,500 in-kind match. The in-kind match will be evenly split between Project 23-63-005 (\$11,250) and Project 23-63-006 (\$11,250). Regional Rail Support budget amount is \$67,500 which includes \$54,000 cash and a \$13,500 in-kind match. The match amount (\$13,500) will be provided by DVRPC.

<sup>2</sup> Project work will be performed by DVRPC staff. An in-kind match (\$11,042) will be added to all PA core agreements.



**PROJECT: 23-63-001 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>
2022	\$88,210	\$0	\$61,734	\$0	\$26,476
2023	\$88,210		\$61,734		\$26,476

\*\$26,476 Local Match (\$15,434 for 23-63-001, \$11,042 for special studies projects)

**PROJECT: 23-63-002 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, TMA, 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, TMA, 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>
2022	\$82,128	\$0	\$46,069	\$0	\$36,059
2023	\$68,628	\$0	\$46,069	\$0	\$22,559

\*\$22,559 Local Match (\$11,517 for 23-63-002, \$11,042 for special studies projects)

**PROJECT: 23-63-003 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.
11. Management of County Employee Transportation Programs: develop a strategy for how the DCPD Transportation Planning staff could assist with the management of County employee transportation programs for employees working in Media, including streamlining the RideECO enrollment process and providing relevant transit information through transit fairs, new employee packets, etc.

**Products:**

1. Quarterly progress reports
2. Quarterly invoices
3. Closing report
4. TSP Work Program for next fiscal year
5. Strategy for how the DCPD Transportation Planning staff could assist with the

management of County employee transportation programs for employees working in Media

**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>
2022	\$120,422	\$0	\$87,504	\$0	\$32,918
2023	\$120,422	\$0	\$87,504	\$0	\$32,918

\*\$32,918 Local Match (\$21,876 for 23-63-003, \$11,042 for special studies projects)

**PROJECT: 23-63-004    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 BikeMonto 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 and improved facilities.
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.
8. Organize and lead meetings among departments to implement the county's Complete Streets policy.

**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>
2022	\$107,792	\$0	\$77,400	\$0	\$30,392
2023	\$107,792	\$0	\$77,400	\$0	\$30,392

\*\$30,392 Local Match (\$19,350 for 23-63-004, \$11,042 for special studies projects)

**PROJECT: 23-63-005 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, Infrastructure, and Sustainability (OTIS) 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 and Transportation Improvement Program (TIP)
  - 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 and comprehensive bus network redesign.
  - 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.
  - H. Participate in the development of a City of Philadelphia transit plan and subsequent planning work.
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.
8. Assist with local asset data collection, as requested.

#### 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.
3. Updated regional TIP.

#### **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>
2022	\$145,459	\$0	\$98,535	\$0	\$46,924
2023	\$145,459	\$0	\$98,535	\$0	\$46,924

\*\$46,924 Local Match (\$24,633 for 23-63-005, \$11,250 for 23-63-008, \$11,042 for special studies projects)



**PROJECT: 23-63-006 Philadelphia Short-Range Planning**

---

**Responsible Agency: Philadelphia City Planning Commission**

**Program Coordinator:** Amy Bernknopf

**Goals:**

To support the Philadelphia City Planning Commission's (PCPC) 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 the 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 City 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 and regional Transportation Improvement Program (TIP).
2. Develop supporting data, tables, and text for the Capital Program and contribute to Capital Program maintenance, including the evaluation and processing of Modifications and 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 non-motorized transportation planning activities, including updates to the Pedestrian & Bicycle Plan, Trail Master Plan and projects like the Wissahickon Gateway and Poquessing Creek Trail Feasibility Study, particularly as they relate to transit access.
6. Evaluate proposed development projects for potential impacts on transportation systems, through Complete Streets Reviews for Civic Design Review cases.

- 7. Data collection and technical analysis for existing internal multimodal projects.
- 8. Assist with providing existing local asset data collection, as appropriate.
- 9. Evaluate transportation related projects for consistency with the city’s comprehensive plan and provide letters of plan compliance for grant funded projects.
- 10. APA and AICP individual membership for David Kanthor to help meet program tasks and goals.

**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, Urbanism Next, NACTO, and TRB.
- 4. Review plans and participate in planning efforts of other agencies, including SEPTA, the Streets Department, OTIS, PennDOT, PATCO, Clean Air Council, 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.
- 5. Updated regional TIP.
- 6. SEPTA Comprehensive Bus Network Redesign

**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>
2022	\$171,989	\$0	\$119,758	\$0	\$52,231
2023	\$171,989	\$0	\$119,758	\$0	\$52,231

\*\$52,231 Local Match (\$29,940 for 23-63-006, \$11,250 for 23-63-008, \$11,042 for special studies projects)

**PROJECT: 23-63-007 Reimagining Regional Rail Support Services**

---

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

**Program Coordinator:** Betsy Mastaglio

**Project Manager:** Aaron Frait

**Goals:**

Strengthen the regional benefits of SEPTA's Reimagining Regional Rail's long-term vision and strategies.

**Description:**

SEPTA is currently developing a Regional Rail Master Plan (“Reimagining Regional Rail”) as an important imitative of SEPTA Forward and efforts to create a Lifestyle Transit Network that serves all types of trips, not just 9-to-5 commuters. This effort is being coordinated closely with DVRPC’s FY2022 Work Program project 22-63-007 “SEPTA Regional Rail Fare Equity and Restructure Analysis”.

Reimagining Regional Rail will lay out a long-term vision with shorter-term implementation strategies. SEPTA and their consultant team's process will continue beyond DVRPC's FY2022 Work Program. By expanding DVRPC's role on Reimagining Regional Rail into FY2023 to match that of the overall plan process it will enable staff to contribute to additional and more detailed studies that stem from the forthcoming priorities of the vision. DVRPC's unique role in Reimagining Regional Rail positions staff to be able to support the overall plan in any one of the following ways: more detailed land use and equity impacts analysis of alternatives, focused station studies, operations analysis of a corridor, or more detailed modeling support. Some activities may require DVRPC to purchase equipment and/or services to meet project goals.

**Tasks:**

1. Participate as a stakeholder on SEPTA's Planning Advisory Committee (PAC) and provide appropriate materials produced by DVRPC.
2. Together with SEPTA, determine appropriate DVRPC tasks in support of the Reimagining Regional Rail priorities.
3. Conduct analysis for one or more of following tasks: more detailed land use and equity impacts analysis of alternatives, focused station studies, operations analysis of a corridor, or more detailed modeling support.

**Products:**

Memoranda, white papers, briefings, and slide decks for SEPTA internal and/or stakeholder use that summarize the study’s findings.

**Beneficiaries:**

SEPTA, PA counties, and transit riders in Philadelphia, 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>
2023	\$100,000	\$0	\$100,000	\$0	\$0

---

**PROJECT: 23-63-008 Southeastern Pennsylvania Transit Planning and Technical Assistance**

---

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

**Program Coordinator:** Amy Bernknopf

**Project Manager:** Aaron Frait, Reuben MacMartin

**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 2050, 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.

Project tasks may include existing conditions analysis, identification of potential transit improvements through conceptual design or evaluations of multimodal access improvements, as well as evaluations of feasibility and network operations impacts of proposed interventions. DVRPC will take advantage of skills and expertise from across the agency in a collaborative effort to best meet the needs of the project sponsor 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. This project will provide technical analysis to support the City of Philadelphia's transit plan and provide supplemental funding to support SEPTA's Reimagining Regional Rail Support Services (23-63-007). Work conducted under this program may require the purchasing of materials or equipment.

**Tasks:**

1. Provide technical analysis in support of Philadelphia's transit plan. This project will involve collaborating closely with City of Philadelphia staff (OTIS and PCPC) to identify, evaluate, and prioritize street-level improvements to transit performance in one priority corridor. Staff will develop and evaluate alternative concepts for the selected corridor, ultimately refining it to a preferred concept with input from partner agencies and stakeholders. The work will result in a detailed conceptual plan, with dimensions and material call outs, that upon project completion, enables the city to move directly to preliminary engineering and pursue grant funding. Staff will provide materials from the project that support the outreach and community engagement work for the corridor.
2. Perform technical analysis of proposed changes to SEPTA's Regional Rail

operations as identified in the Reimagining Regional Rail project. Tasks will assist SEPTA in evaluating ways for Regional Rail to serve more types of trips and riders, more equitably in the future.

**Products:**

1. Planning/policy documents, datasets, maps, 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>
2022	\$144,000	\$0	\$144,000	\$0	\$0
2023	\$144,000	\$0	\$144,000	\$0	\$0

**NOTE: This project has been changed through UPWP amendment; see Appendix C for replacement project details.**

**PROJECT: 23-63-009    Route 34 End-of-Line Study**

---

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

**Program Coordinator:** Amy Bernknopf

**Project Manager:** Betsy Mastaglio, Logan Axelson

**Goals:**

To identify an end-of-line location for SEPTA Trolley Route 34 that promotes transit connectivity, increases ridership, and improves operational functionality.

**Description:**

SEPTA's Trolley Route 34, serving West Philadelphia and Center City, ends its route at 61st Street and Baltimore Avenue, near the city line with Delaware County. This end-of-line location, known as Angora Loop, is small with limited space for vehicle layover, operator facilities, and passenger amenities.

SEPTA is in the planning stages of Trolley Modernization, a complete replacement of its trolley fleet with modern, ADA-compliant streetcars. Trolley Modernization will bring many more changes than new vehicles, including new in-street stations, service improvements, and operational changes.

Angora Loop will not be large enough to accommodate SEPTA's new, larger trolleys along with accessible station platforms, operator facilities, and other amenities needed for an end-of-route station. Angora Loop's geographic location also presents challenges. The loop straddles the 100-year and 500-year floodplains of nearby Cobbs Creek—a condition expected to worsen in coming decades due to climate change. East of the loop is a dense rowhouse neighborhood already served by Route 34, but, west of the loop, Cobbs Creek Park and the adjacent Fernwood Cemetery limit this end-of-line location's ridership base and connectivity to the regional transit network.

To unlock the full utility, connectivity, and ridership potential of Route 34, SEPTA must consider new end-of-line locations beyond Angora Loop. This study will identify sites in eastern Delaware County for a new end-of-line facility for Route 34. These sites will be screened to identify ridership-supportive destinations and opportunities to connect to other SEPTA services, such as bus, trolley, and Regional Rail service. The study will also consider the merits of potential rights-of-way to reach proposed end-of-line locations, including opportunities to use SEPTA-owned or other publicly owned real estate, length of each route extension, and space needs at the end-of-line location. The screening process will result in the selection of a preferred new end-of-line location. Design will advance in a subsequent study or as a part of the overall Trolley Modernization design and engineering process. Some activities may require DVRPC to purchase equipment and/or services to meet project goals.

**Tasks:**

1. Convene a project steering committee including staff from SEPTA, the City of Philadelphia, Delaware County, and other stakeholders as appropriate.
  
2. Gather and summarize existing conditions data on Route 34, Angora Loop, and the surrounding study area, including recent and current ridership trends, transfer activity, land use, environmental constraints. Supplement this data with field data collection as necessary.
  
3. Identify up to three proposed end-of-line locations for screening by the project team and steering committee. The screening process will consider:
  - a. Physical space needs for trolley operations, station infrastructure, and operator facilities;
  - b. Connectivity to the regional transportation network;
  - c. Transit-supportiveness of nearby land uses;
  - d. Accessibility of the proposed location and surrounding area for people with mobility challenges;
  - e. Each location’s potential to improve mobility for vulnerable populations, including racial minorities, low-income populations, and others; and
  - f. Necessary right-of-way to connect to a proposed end-of-line, including opportunities for limited-access or trolley-only right-of-way.
  
4. In collaboration with the steering committee, select a preferred end-of-line location.
  
5. Summarize the study’s findings in a final report.

**Products:**

A report summarizing the project’s findings

**Beneficiaries:**

SEPTA, Philadelphia, Delaware County, Yeadon, East Lansdowne, Upper Darby, Lansdowne

**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>
2023	\$100,000	\$0	\$100,000	\$0	\$0

**PROJECT: 23-63-010 Rolling License Plate Surveys - PA**

---

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

**Program Coordinator:** Amy Bernknopf

**Project Manager:** 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. Some of these activities may also require DVRPC to purchase equipment or services to meet program goals.

**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.
5. Continue discussion about new data collection techniques and resources that could relay more information about how the riders are using the system.

**Products:**

1. Datasets that will be shared online (aggregated to a geographic area) as well as with 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>
2022	\$65,000	\$0	\$65,000	\$0	\$0
2023	\$65,000	\$0	\$65,000	\$0	\$0



CHAPTER 4B

# NJ Transit Support Program (TSP)



# Table of Contents

## Chapter 4B: NJ Transit Support Program

23-63-020	Burlington County Transit and Ridesharing	347
23-63-021	Camden County: Transit Planning and Programming	349
23-63-022	Gloucester County Transportation Systems Planning & Implementation	351
23-63-023	Mercer County Transit Planning and Programming	353
23-63-024	Off-Street Bicycle and Pedestrian Access to New Jersey Transit	355
23-63-025	City of Camden Transit Planning Program	357
23-63-026	NJ Transit Survey Program	359
23-63-027	Rolling License Plate Surveys - NJ	361

### Table

Table 9: NJ Transit Support Program	345
-------------------------------------	-----



**Table 9: NJ Transit Support Program**

<b>Core Projects</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2023 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
23-63-020	Burlington County	Transit and Ridesharing	\$37,392	\$9,348	\$46,740
23-63-021	Camden County	Transit Planning and Programming	\$41,500	\$10,375	\$51,875
23-63-022	Gloucester County	Transportation Systems Planning	\$38,680	\$9,670	\$48,350
23-63-023	Mercer County	Transit Planning and Programming	\$33,284	\$8,321	\$41,605
23-63-025	Camden City	Transit Planning Program	\$20,800	\$5,200	\$26,000
<b>Subtotal</b>			<b>\$171,656</b>	<b>\$42,914</b>	<b>\$214,570</b>
<b>Special Studies</b>					
<b>Project Number</b>	<b>Agency</b>	<b>Project</b>	<b>FY 2023 Budget</b>		
			<b>Cash</b>	<b>Match</b>	<b>Total</b>
23-63-024 <sup>1</sup>	NJ Regional/DVRPC	Off-Street Bicycle and Pedestrian Access to New Jersey Transit	\$90,944	\$22,736	\$113,680
23-63-026 <sup>1</sup>	NJTRANSIT/DVRPC	NJTRANSIT: Transit Survey Program	\$89,000	\$22,250	\$111,250
23-63-027 <sup>1</sup>	NJ Regional/DVRPC	Rolling License Plate Surveys (NJ)	\$35,000	\$8,750	\$43,750
<b>Subtotal</b>			<b>\$214,944</b>	<b>\$53,736</b>	<b>\$268,680</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. An in-kind match (\$10,747) will be added to all NJ Core agreements.



**PROJECT: 23-63-020 Burlington County Transit and Ridesharing**

---

**Responsible Agency: Burlington County - Land Development**

**Program Coordinator:** Amy Bernknopf

**Goals:**

Carry out a comprehensive local transit planning program to improve the efficiency of the region's transportation network.

**Description:**

Identify, provide, promote, and maintain transit and ridesharing opportunities within Burlington County by encouraging patterns that link use with transit. Work with NJ Transit, NJDOT, the Cross County Connection TMA, developers, large employers, and other agencies to promote and implement various types of transit and ridesharing. These may include, but are not limited to: transit buses, local buses, park and rides, and van or car pooling in areas of the county with severe congestion problems and little or no transit. Make recommendations to NJ Transit, employers, and developers for new services

**Tasks:**

Task 1: Administration

1. Participate in DVRPC's annual Planning Work Program development.
2. Prepare TSP bi-annual 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>
2022	\$57,487	\$0	\$37,392	\$0	\$20,095
2023	\$57,487		\$37,392		\$20,095

\*\$20,095 Local Match (\$9,348 for 23-63-020, \$10,747 for special studies projects)

**PROJECT: 23-63-021 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.
5. Continue to work with transit agencies to ensure that barrier free access and ADA compliance is maintained around transit stops and shelters.

**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>
2022	\$62,622	\$0	\$41,500	\$0	\$21,122
2023	\$62,622		\$41,500		\$21,122

\*\$21,122 Local Match (\$10,375 for 23-63-021, \$10,747 for special studies projects)

**PROJECT: 23-63-022 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>
2022	\$59,097	\$0	\$38,680	\$0	\$20,417
2023	\$59,097		\$38,680		\$20,417

\*\$20,417 Local Match (\$9,670 for 23-63-022, \$10,747 for special studies projects)

**PROJECT: 23-63-023 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.
- 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>
2022	\$52,352	\$0	\$33,284	\$0	\$19,068
2023	\$52,352		\$33,284		\$19,068

\*\$19,068 Local Match (\$8,321 for 23-63-023, \$10,747 for special studies projects)

**PROJECT: 23-63-024    Off-Street Bicycle and Pedestrian Access to New Jersey Transit**

---

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

**Program Coordinator:** Betsy Mastaglio

**Project Manager:** Cassidy Boulan, Thomas Stead

**Goals:**

Support the safe and coordinated planning for shared bicycle and transit corridors to advance Complete Streets implementation in New Jersey.

**Description:**

Complete Streets planning in New Jersey has gained much momentum in the last decade as we recognize the need for corridors to safely accommodate all modes - vehicles, deliveries, transit, pedestrians and bicyclists. As more and more communities implement bicycle facilities on corridors, transit agencies like New Jersey Transit (NJ Transit) need to design with or around bicyclists in order to ensure the safety of pedestrians, cyclists and passengers boarding and alighting at stops. In places with extra wide sidewalks, or that have proximity to regional trail destination, off-street bicycle connections to transit service can boost both transit ridership and active transportation.

This study would identify corridors with NJ Transit service that have the physical space and/or desirable safety or trail connectivity context to support an off-street bicycle (sidepath) facility. The study will include the identification of potential sidepath locations and solicit a partnering municipality to take part in a case study that outlines operational and conceptual design of bus-bicycle interactions. Some activities may require DVRPC to purchase equipment and/or services to meet project goals.

**Tasks:**

1. Conduct a GIS analysis to determine which corridors in the NJ Transit service area already have, or likely to soon have, bicycle facilities and bus service. These corridors may be identified by: a high rate of bicycle crashes, proximity to trails such as the region's Circuit Trails, or for having a known bicycle plan or upcoming implementation of bicycle facilities.
2. Work with NJ Transit to identify which municipality to partner with for a case study to look at a conceptual design for transit access via a sidepath. This could be done by soliciting multiple municipalities or by direct invite with the intention of finding a municipal partner that's motivated to implement Complete Streets.
3. Develop a conceptual design for the right-of-way that addresses the safety of bus operations and bicycle mobility along with next steps for pursuing design and funding for implementation.

**Products:**

- 1. A list or map of corridors where bus and bicycles are or are likely to coexist.
- 2. A case study for conceptual design of an off-street bicycle facility connection to a NJT corridor shown in plan, section and/or sketches that illustrate: bus operations, bicycle mobility, pedestrian boarding and alighting, and the accommodation of each mode at intersections.

**Beneficiaries:**

NJ Transit passengers, bicyclists, motorists and pedestrians traveling in NJ Transit's service area.

**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>
2023	\$90,944	\$0	\$90,944	\$0	

**PROJECT: 23-63-025 City of Camden Transit Planning Program**

---

**Responsible Agency:**

**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>
2023	\$36,747		\$20,800		\$15,947

---

\*\$15,947 Local Match (\$5,200 for 23-63-025, \$10,747 for special studies projects)

**PROJECT: 23-63-026 NJ Transit Survey Program**

---

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

**Program Coordinator:** Joshua Rocks

**Project Manager:** Betsy Mastaglio, 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 bus and rail 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 transit routes to be surveyed, but may include the following: 403, 404, 405, 407, 409, 413, 417, 418, 419. 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. 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 transit 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>
2022	\$90,944	\$0	\$90,944	\$0	\$0
2023	\$89,000	\$0	\$89,000	\$0	

**PROJECT: 23-63-027 Rolling License Plate Surveys - NJ**

---

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

**Program Coordinator:** Amy Bernknopf

**Project Manager:** Thomas Stead

**Goals:**

To understand rider park-and-ride origins at NJ TRANSIT and PATCO transit parking lots for planning purposes.

**Description:**

In partnership with NJ TRANSIT, DRPA, and NJDOT/DMV, 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 NJ TRANSIT, 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. Some of these activities may also require DVRPC to purchase equipment or services to meet program goals.

**Tasks:**

1. Collect, review, and confirm license plate survey locations with NJ TRANSIT, PATCO, and NJ Counties.
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.

5. Continue discussion about new data collection techniques and resources that could relay more information about how the riders are using the system.

**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/PATCO, New Jersey transportation management associations (TMAs), existing and new NJ TRANSIT and DRPA/PATCO 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>
2022	\$35,000	\$0	\$35,000	\$0	\$0
2023	\$35,000	\$0	\$35,000	\$0	



## CHAPTER 5

# Other Member Government Projects



# Table of Contents

## Chapter 5: Other Member Government Projects

23-52-220	Camden County Guiderails (2 Years)	367
23-53-300	PA/NJ Regional GIS Implementation Coordination	369
23-62-100	New Jersey Local Concept Development (3 Years)	371
23-67-100	Pennsylvania Transportation and Community Development Initiative (TCDI) - 2 Years	373
23-70-100	Pennsylvania Transportation Demand Management (TDM) Base Program (2 Years)	375
23-80-100	Travel Options Program (TOP) Competitive Program (PA and NJ)	377



**PROJECT: 23-52-220 Camden County Guiderails (2 Years)**

---

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

**Program Coordinator: John Coscia**

**Goals:**

To develop a GIS-based Asset Management component of the existing Asset Management System that contains a comprehensive guiderail inventory, condition assessment, compliance assessment, and priority ranking analysis for over 404 centerline miles of Camden County-owned routes, and County-owned NBIS bridges and approaches.

**Description:**

Camden County, as part of their ongoing asset management program, will be implementing a Guiderail Inventory component. The intent of the project is to develop an Asset Management Guiderail Inventory that is GIS based and includes attribute data for all County-owned Bridges and approaches and currently-installed Guiderail on approximately 406 centerline miles of roads in Camden County, New Jersey. The resulting data layer will assist the County in evaluating, prioritizing, scheduling, and implementing the maintenance, repairs and/or replacement activities of guiderail based on deficiencies and non-compliance.

The County intends to hire a consultant to develop a database, catalog all existing guiderail, and create a prioritized maintenance schedule. The consultant will also train the County on the use of the Guiderail Management System and provide technical support. The training will include database maintenance and updating by the County to record emergency guiderail repairs and replacements under County Roadway Safety grants. The Consultant will conduct a Needs Assessment and develop a System Design and Reporting system that will provide recommendations to the County on guiderail maintenance or replacements needed to the various guiderail components cataloged in the Management System.

A Video Log Viewing System will be integrated with the Guiderail Management System. The video log will be a series of computerized movies stored on a server that can be viewed for any guiderail installation and its surrounding area. This project entails a significant amount of data collection and coordination so a 2-year cycle for expenditure of these funds is required. Completion of this work may require the purchase of equipment or services.

**Tasks:**

1. Select Consultant
2. Needs Assessment/System Design
3. Software Acquisition
4. Data Acquisition - Collecting GPS locations and capturing required characteristics of the guiderail will be performed.
5. Develop a Guiderail Inventory

- 6. Video Log Viewing System
- 7. Guiderail Management System Implementation (Priority Ranking)
- 8. Training
- 9. Project Management

**Products:**

- 1. System Design Report
- 2. Software
- 3. Base Map Data
- 4. Database Design
- 5. Installation of Guiderail Management System
- 6. Video Log Database
- 7. System Training

**Beneficiaries:**

Camden County, DVRPC, 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>
2023	\$1,000,000				\$1,000,000

\*NJ TIP- DB #D2302 STBGP-PHILA

**PROJECT: 23-53-300 PA/NJ Regional GIS Implementation Coordination**

---

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

**Program Coordinator:** Christopher Pollard

**Project Manager:** Mark Gatti, Sean Lawrence

**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. Submitted purchase invoices and 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>
2023	\$300,000	\$0	\$0	\$0	\$300,000

\* PA TIP - MPMS #115969 - \$150,000 STU/Toll Credit Match NJ TIP - DB #X30A - \$150,000 STBGP-PHILA

**PROJECT: 23-62-100 New Jersey Local Concept Development (3 Years)**

---

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

**Program Coordinator:** John Coscia

**Project Manager:** Kwan Hui

**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 by consultant forces. 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 constructibility.

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

Current/New projects for Concept Development include:

1. Floodgate Road, Bridge over Repaupo Creek, Gloucester County

**Tasks:**

1. Select Consultant
2. Kickoff meetings
3. Stakeholder Meetings
4. Public meetings

5. Perform data collection: traffic/crash data, management systems, utility identification, etc.
6. Complete Environmental Screening. Initiate early coordination with SHPO, if appropriate.
7. Perform analysis of collected data, review data, prepare collision diagram, and other needed engineering analysis.
8. Perform HSM Analysis (when required)
9. Develop Conceptual Plans for Preliminary Preferred Alternative (PPA)
10. Confirm the environmental document that will be obtained in PE
11. Develop Construction Cost Estimates of various alternatives
12. Prepare CD Report
13. Project Management

**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>
2023	\$430,000	\$0	\$0	\$0	\$430,000

\*NJ TIP- DB #- X30A STBGP-PHILA

**PROJECT: 23-67-100    Pennsylvania Transportation and Community  
Development Initiative (TCDI) - 2 Years**

---

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

**Program Coordinator:** Karen Cilurso

**Project Manager:** Spencer Gober

**Goals:**

Implement Connections 2050 Plan for Greater Philadelphia by supporting early stage planning projects that advance the long-range plan and enhance the region's multi-modal transportation infrastructure.

**Description:**

The Transportation and Community Development Initiative (TCDI) is a grant program that supports smart growth in the individual municipalities of the Delaware Valley through initiatives that implement the region's long-range plan, Connections 2050 Plan for Greater Philadelphia. Central to the effort is the objective to enhance quality of life choices by providing and maintaining essential infrastructure, supporting local and regional economic development, and linking land use and transportation planning.

TCDI provides a mechanism for our planning partners to undertake locally-directed actions to improve their communities, which in turn implements their local county comprehensive plans and supports the goals and vision of the region's long-range plan. This grant program seeks to support and leverage state and county programs, by providing funding to undertake planning, analysis or early-stage design projects which improve the efficiency of the regional transportation system.

Through a competitive selection process, DVRPC will award \$1.2 million to select projects in the 5-county Pennsylvania region which includes the counties of Bucks, Chester, Delaware, Montgomery and Philadelphia.

**Tasks:**

1. Distribute \$1.2 million dollars to selected projects within Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties.

**Products:**

1. Contracts with selected consultants/project sponsors as a result of the competitive selection process.
2. Progress reports from the selected consultants/project sponsors.

**Beneficiaries:**

Counties, municipalities, transit agencies, transportation professionals, community development professionals, and economic development agencies, private sector

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>
2023	\$1,200,000				\$1,200,000

---

\*PA TIP- MPMS #- 117904

**PROJECT: 23-70-100    Pennsylvania Transportation Demand Management  
(TDM) Base Program (2 Years)**

---

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

**Program Coordinator:** Stacy Bartels

**Project Manager:** Amy Bernknopf

**Goals:**

To fund and guide the TMAs and contractors that will work with employers and encourage commuters to choose travel alternatives to the single-occupancy vehicle (SOV) through educational programming and relevant products and services within specific service areas, through the tasks listed below. These tasks will result in improved accessibility to a variety of safe and affordable travel modes and a reduction in SOV travel during peak commute times that will lead to reduced traffic congestion and improved air quality in the region.

**Description:**

The Transportation Management Associations (TMAs) and other related partners in Southeastern Pennsylvania have helped promote Transportation Demand Management (TDM) options and programs for over two decades, in the form of two grants funded by PennDOT – the TMA Assistance Grant (one available to all TMAs in PA), and the Mobility Alternatives Program (MAP) grant (available only in Southeastern PA). For FY2023, DVRPC and PennDOT have created a TDM grant program that combines these two “legacy” grants into one new “base” TDM grant for each organization previously funded through one or both of the legacy grants. Each TMA/Contractor will contract and collaborate with DVRPC on work program development and implementation, along with their respective county planning department(s), PennDOT (Central Office and District- 6), and FHWA, to ensure relevant TDM issues and needs are addressed. Completion of this work may require the purchase of equipment or services.

**Tasks:**

1. TDM education and outreach to the general public.
2. TDM education and outreach to employers and municipalities.
3. TDM education and outreach to other commute-related groups, professional organizations, community groups, etc.
4. Promotion of and assistance with the Share-A-Ride (SAR) ride match program and the Emergency Ride Home (ERH) program.
5. Locally-based projects that enhance commuters’ ability to choose a mode other than driving alone to work.

**Products:**

1. Educational materials (adapted from DVRPC’s existing MAP portfolio or newly created for a specific employer, group, or TMA service area).
2. Outreach and marketing plans and media.

3. Eligible expenses related to TDM-specific events and programs.
4. (At least) quarterly activity summaries and invoices, and year-end report.
5. Project completion (if applicable).

**Beneficiaries:**

Residents and employers within and/or commuters traveling into a service area, municipality, county or combination thereof; related county planning commission; 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>
2023	\$2,200,000				\$2,200,000

\*PA TIP MPMS #- 117929 \$1,760,000 STU/Toll Credit; \$440,000 TMA SILOC match

**PROJECT: 23-80-100 Travel Options Program (TOP) Competitive Program (PA and NJ)**

---

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

**Program Coordinator:** Stacy Bartels

**Project Manager:** Amy Bernknopf

**Goals:**

This work program supports the delivery of the regional transportation demand management (TDM) program for both PA and NJ counties within DVRPC's service area (with administration and coordination tasks funded separately under project 23-52-100). This program's purview includes an application and grant award program (Travel Options Program or TOP) to fund traditional TDM activities with demonstrated reduction of single-occupant vehicle (SOV) trips, develop pilots for new TDM projects and tools to manage SOV demand, as well as help to create and cultivate new mobility opportunities for residents and workers. This program will fund a two-year project round over FYs 2023-2024.

**Description:**

TDM focuses on the many options available to residents to travel to and from work, as well as to get around our region for other purposes, in a coordinated, cost-effective, and environmentally-positive way. It involves the strategies that more efficiently distribute travel demand across all modes, and especially reduce SOV travel. An important element of TDM is providing education and outreach to commuters, employers, residents, and visitors within our region about available travel options, and providing a mix of incentives to encourage behavior change toward more efficient use of the regional transportation system.

Recent major technological developments have changed the way the public considers and makes transportation choices. Mapping applications in wide use, like Waze and Google Maps, are themselves a form of TDM, enabling a more efficient use of transportation networks, but they don't necessarily reduce SOV demand. New mobility options like ride-hailing services (uber, lyft, etc.), bike share, and e-bike and e-scooter rentals are being developed and evolving rapidly, and are increasingly linked into shared scheduling and trip purchasing platforms – "mobility as a service (MaaS)." These new technologies and modes, and the changes to travel patterns they have enabled, have also led to more exploration of larger TDM-related policy initiatives such as variable road pricing, trip-reduction plans, and transportation benefit ordinance requirements. All of these conditions warrant novel consideration of which TDM strategies can work most effectively in the greater Philadelphia region; therefore a Regional TDM Plan was developed and is used as a guide for these efforts.

Although DVRPC has long included TDM as an element in many individual projects and efforts, there was not a formal, coordinated TDM program for the full DVRPC

service region until FY21. This new competitive and coordinated program of projects and activities helps DVRPC and its planning partners better address growing transportation-related needs and challenges, particularly the need to provide connections to various safe and affordable transportation modes, and to reduce congestion and improve air quality. In coordination with the development of the Commission's 2050 Long-Range Plan, new regional TDM direction and efforts will allow for a broader, more strategic approach to TDM in the region, which differs from the service area-based approach used now.

A uniform, performance-based and outcome-driven approach to evaluating and undertaking projects will help staff and stakeholders strengthen existing TDM programs, and pilot new initiatives that can serve as a foundation for the future regional TDM portfolio. Completion of this work may require the purchase of equipment or services. Beginning in FY23, this program will be funded largely with Surface Transportation Block Grant funds (also called STU in PA), instead of Congestion Mitigation Air Quality (CMAQ) funds; however, some projects in DVRPC's NJ counties (especially outside of the Philadelphia Urbanized Area) will continue to be partially funded with CMAQ dollars. Staff are familiar with the eligibility requirements for CMAQ funds from the previous TOP funding cycle, so can properly evaluate any projects submitted in the geographic areas that will require CMAQ instead of STBG funds; FHWA-NJ will also be consulted.

### **Tasks:**

1. With planning and administrative tasks funded under project 23-52-100, DVRPC will work with partners as appropriate to solicit and deliver projects showing demonstrable results related to the five principles in the Regional TDM Plan, in both PA and NJ. This may include managing vendor/provider contracts.
2. Obtain and record relevant data to support analysis of each activity's impact; strategy effectiveness will inform subsequent program rounds.

### **Products:**

1. Implementation of new pilot programs under the regional TDM program umbrella
2. Progress reports, as required; technical briefs/white papers on results
3. Data to measure impact of new initiatives and pilots

### **Beneficiaries:**

DOTs; State, County, and City partners; transit agencies; TMAs; employers; commuters; 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>
2023	\$2,793,900	\$0	\$0	\$0	\$2,793,900

\*NJ TIP DB# D2005: \$100,000 CMAQ, \$300,000 STBGP-PHILA, Local Match (\$100,000) PA TIP MPMS#- 117928: \$1,835,120, \$458,780 Local Match







# Table of Contents

## Chapter 6: Continuing Projects

Introduction	385
--------------	-----

---

### Tables

Table 10A: NJDOT Initial No Cost Time Extension List	385
--	-----

---

Table 10B: NJDOT Multi-Year Projects	386
--------------------------------------	-----

---



## Introduction

This chapter provides a summary of NJ TIP funded projects that span over multiple fiscal years due to the scope of work, consultant selection process, and extent of involvement required from various NJ member governments and municipalities. DVRPC staff continues to work with various stakeholders to provide administrative support including: competitive consultant selection, partner coordination and project management to ensure the project objectives are met timely and within budget. These multi-year projects consist of Local Concept Development (LCD) studies, NJ Regional Signal Retiming projects, Transportation and Community Development Initiatives (TCDI), and other planning studies.

### NJDOT Initial No Cost Time Extension List

These are continuing studies that were originally funded in FY 2022 or earlier, and will be carried over into FY 2023. Unlike ongoing staff activities that take place during each fiscal year, these projects are driven by consultant planning studies in collaboration with member governments from New Jersey counties. Due to unforeseen delays, these projects require additional time beyond the original established expiration date to ensure adequate completion of the approved scope of work. Table 10A provides a summary of these projects including project number, project title, task order number, agreement number, funding amount, carryover estimate, current project end date and requested project end date.

Delaware Valley Regional Planning Commission  
Fiscal Year 2023 | Unified Planning Work Program

**Table 10A: NJDOT Initial No Cost Time Extension List\***

Project Number	Project Title	Funding Amount	Carryover Estimate	Current Project End Date	Requested Project End Date	Task Order Number	Agreement Number
21-62-000	NJ Local Concept Development (2 years)	\$1,150,000	\$600,000	6/30/2022	6/30/2023	PL-DV-21-01	Z230D00S389
21-64-000	NJ Regional Signal Retiming Initiative Project (2 years)	\$350,000	\$200,000	6/30/2022	6/30/2023	PL-DV-21-01	Z400D00S391
20-62-000	New Jersey Local Concept Development (2 years)	\$430,000	\$200,000	6/30/2022	6/30/2023	PL-DV-20-01	Z230D00S297
19-62-000	New Jersey Local Concept Development (3 years)	\$1,500,000	\$300,000	6/30/2022	6/30/2023	PL-DV-19-01	NJ State Funds
<b>Total:</b>		<b>\$3,430,000</b>	<b>\$1,300,000</b>				

\*Task orders from prior years that will continue into DVRPC's Fiscal Year 2023 (July 1, 2022 - June 30, 2023).

## NJDOT Multi-Year Projects

These projects are either initiated in the current Unified Planning Work Program (FY 2023 UPWP) or on-going projects that are expected to be carried over into FY 2023. Table 10B provides a listing of multi-year projects from the FY 2023 UPWP, and projects that started in previous fiscal years that will continue into Fiscal Year 2023. The listing contains fiscal year, project number, project title, funding amount, current project end date and requested project end date.

Note: To ensure Table 10B contains a comprehensive list of all NJ multi-year projects, continuing task orders on Table 10B contain carryover projects that are noted on the Table 10A: NJDOT No Cost Time Extension.

Delaware Valley Regional Planning Commission  
Fiscal Year 2023 | Unified Planning Work Program

### Table 10B: NJDOT Multi-Year Projects

#### FY 2023 UPWP

Fiscal Year	Project Number	Project Title	Funding Amount	Current Project End Date	Requested Project End Date
2023	23-52-220	Camden County Guiderrails (2 Years)	\$1,000,000	6/30/2024	N/A
2023	23-62-100	New Jersey Local Concept Development (3 Years)	\$430,000	6/30/2025	N/A
2023	23-80-100	Travel Options Program (TOP) Competitive Program (NJ) (2 Years)	\$400,000	6/30/2024	N/A
Subtotal:			\$1,830,000		

#### FY 2022 and Prior (Continuing Task Orders)

Fiscal Year	Project Number	Project Title	Funding Amount	Current Project End Date	Requested Project End Date
2022	22-64-000	NJ Regional Signal Retiming Initiative Project (2 years)	\$380,000	6/30/2023	N/A
2022	22-65-100	NJ HSIP (2 years)	\$220,000	6/30/2023	N/A
2021	21-62-000	NJ Local Concept Development (2 years)	\$1,150,000	6/30/2022	6/30/2023
2021	21-64-000	NJ Regional Signal Retiming Initiative Project (2 years)	\$350,000	6/30/2022	6/30/2023
2020	20-62-000	New Jersey Local Concept Development (2 years)	\$430,000	6/30/2022	6/30/2023
2019	19-62-000	New Jersey Local Concept Development (3 years)	\$1,500,000	6/30/2022	6/30/2023
Subtotal:			\$4,030,000		
<b>Grand Total:</b>			<b>\$5,860,000</b>		





**Schedule A: NJDOT Funding Summary**

STIP:		X30A	X30A	X30A	X30A	X30A	#DB: D2301/02	#D2005	#D2005	#D2005	#D0204	#D0407	#D2004	#D2005	TOTAL FEDERAL FUNDS AMOUNT	Local Match
		FY22 FHWA-PL	FY22 FTA-PL FLEX*	STBGP-PHILA	STBGP-PHILA	STBGP-PHILA	STBGP-PHILA /TSMO	CMAQ / Regional TOP	CMAQ / Regional TOP	STBGP-PHILA /TSMO	STBGP-PHILA /TCOI	CMAQ / OZONE	STBGP-PHILA/ TRANSP. OPERATIONS	STBGP-PHILA/ Regional TOP Admin		
<b>TOTAL AVAILABLE FUNDS:</b>		\$2,538,546	\$897,353	\$1,989,600	\$ 1,125,000	\$ 100,000	\$ 300,000	\$ 100,000	\$ 105,000	\$ 166,000	\$ 105,000	\$ 40,000	\$ 130,000	\$ 50,000	\$ 3,049,299	
<b>TOTAL DVRPC PROGRAM &amp; BUDGET FOR FY23 UPWP:</b>																
CENTRAL STAFF	Various Programs and Projects	\$ 2,538,546	\$ 510,753												\$ 3,049,299	
NJ Regional GIS	23-33-100			\$ 200,000											\$ 200,000	
NJ Regional GIS Impl Coordination	23-53-300 (Chapter 5)			\$ 150,000											\$ 150,000	
Central Jersey Transportation Forum	23-34-110			\$ 125,000											\$ 125,000	
Enhance and Maintain Travel Forecasting Tools	23-34-130			\$ 185,600											\$ 185,600	
NJ Local Concept Development Admin/Competitive Program & Project Mgmt	23-52-060			\$ 150,000											\$ 150,000	
ExPo: Experimental Pop-Ups Program	23-52-110			\$ 100,000											\$ 100,000	
Regional Sidewalk Development Program: Pilot Technical Assistance Round	23-52-130			\$ 75,000											\$ 75,000	
Local Concept Development Projects (Floodgate Road, Bridge over Reapaupo Creek (Bridge 3-D-1))	23-62-100			\$ 430,000											\$ 430,000	
Community and Economic Development (TCDI Administration)	23-33-020								\$ 105,000						\$ 105,000	
Regional Electric Vehicle Planning Program	23-34-190			\$ 75,000											\$ 75,000	
Transportation Operations	23-52-050												\$ 130,000		\$ 130,000	
Transp Syst Mngmt & Ops (TSMO)	23-52-170						\$ 166,000								\$ 166,000	
Burlington/Florence Connector Road Study DB#: D2301	23-52-190				\$ 125,000										\$ 125,000	
Camden County Guiderail Management System DB#: D2302	23-52-220				\$ 1,000,000										\$ 1,000,000	
Regional TOP Projects	23-80-100						\$ 300,000								\$ 400,000	\$100,000
NJ Supp Reg. Hwy Plan Program* (SRHPP)	Project # 23-61-010 to 23-61-110 (Chapter 3B)			\$ 499,000											\$ 499,000	
Regional TOP Competitive Program	23-52-100												\$ 50,000	\$ 50,000	\$ 50,000	0
NJ AIR QUALITY (+MATCH)	23-34-180											\$ 40,000			\$ 40,000	\$10,000
NJ Transit Support (+MATCH)	Project # 23-63-020 to 23-63-027 (Chapter 4B)			\$ 386,600											\$ 386,600	
																\$96,650
	<b>Total Project Costs</b>	\$7,648,149	\$897,353	\$1,989,600	\$ 1,125,000	\$ 100,000	\$ 300,000	\$ 100,000	\$ 105,000	\$ 166,000	\$ 105,000	\$ 40,000	\$ 130,000	\$ 50,000	\$7,441,499	\$206,650

\*Note: NJ SRHPP no longer requires In-Kind Service Match.





APPENDIX B

# Acronyms



# 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

DBE – Disadvantaged Business Enterprise

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

IJA – Infrastructure Investment and Jobs Act

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 21st Century

MIRE – Model Inventory of Roadway Elements

MIT – Municipal Implementation Tools

MOVES – Motor Vehicles Emissions Simulator

MPMP – Multimodal Project Management System

MPO – Metropolitan Planning Organization

NAAQS – National Ambient Air Quality Standards

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

PEAs – Planning Emphasis Areas

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

SILOC – Services in Lieu of Cash

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

TOP – Travel Options Program

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



APPENDIX C

# Approved Work Program Amendments



**Responsible Agency:** Delaware Valley Regional Planning Commission**Program Coordinator:** Sarah Moran**Goals:**

Evaluate existing pedestrian and bicycle facilities in three downtown areas in Burlington County and develop recommendations for improving multimodal accessibility and safety for all road users.

**Description:**

With increased development and activity in the urban, village-type areas within Burlington County, the County has recognized a need to ensure the roads are safe and comfortable for all road users, particularly pedestrians and bicyclists. The County seeks an evaluation of existing pedestrian and bicycle facilities in the identified downtown areas and identification of improvements to enhance safety and accessibility. The downtown areas to be evaluated include: Marlton (Evesham), Maple Shade, and Columbus (Mansfield).

**Tasks:**

1. Work with Burlington County and other steering committee members to develop overarching goals for the plans as a whole and to define the extent of each of the three study areas.
2. Using available data and site visits, conduct a detailed existing conditions analysis for each study area, focusing on bicycle and pedestrian facilities and highlighting gaps and opportunities for improvements.
3. Coordinate and facilitate localized public outreach, engaging the communities and business owners in each study area separately to learn about the needs and desires of each community.
4. Building on community input, BCHMP, and best practices, develop plans for bicycle and pedestrian improvements, including maps and prioritization of improvements, as well as potential funding opportunities.
5. Coordinate and facilitate another round of outreach in each study area to share preliminary recommendations and gather feedback.
6. Incorporate feedback as appropriate and prepare a final report document with plans for each study area.

**Products:**

Steering committee and public open house meeting presentations and materials. Summary report, including graphics and concepts, showing findings and recommendations.

**Beneficiaries:**

Burlington County; Marlton (Evesham), Maple Shade, Columbus (Mansfield); 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>
2023	\$125,000				\$125,000

---

\*NJ TIP- DB# D2301 STBGP-PHILA

**PROJECT: 23-63-009     Corridor Based Transit Supportive Community  
Development Land Use Analysis**

---

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

**Program Coordinator:** Amy Bernknopf

**Project Manager:** Betsy Mastaglio, Logan Axelson

**Goals:**

To promote transit supportive land use along select SEPTA transit corridors by identifying key zoning, roadway design, and operational strategies.

**Description:**

SEPTA is committed to creating a lifestyle network. A lifestyle network is easily used for any sort of trip—whether that be commuting, everyday errands, or leisure activities. Transit does the most good when it is convenient and reliable enough to be relied upon for a variety of needs, connecting more people to more jobs, reducing carbon emissions, making car ownership unnecessary, and improving quality of life. While SEPTA can enable this through creating coordinated, convenient, frequent, accessible, and easy-to-use stations, stops, and service design, a large piece of creating a lifestyle network is complementary land use.

SEPTA is influencing land use by creating a Transit Supportive Community Development (TSCD) Program that advances appropriate development of SEPTA's properties and promotes transit-oriented development generally. SEPTA's TSCD program expands the definition of traditional transit-oriented development (TOD) by applying TOD principles to high-frequency surface transit corridors, including both trolley and bus lines, that typically have closer stop/station spacing, higher frequencies, and more transit network connectivity than Regional Rail.

To support SEPTA's TSCD work, DVRPC will undertake an analysis of land use and zoning along high frequency trolley and bus corridors. This analysis will be generalizable to transit corridors across SEPTA's network.

**Tasks:**

1. Form an advisory committee of SEPTA staff and external stakeholders as necessary.
2. In collaboration with SEPTA, identify a corridor for land use and zoning analysis, and note several other corridors where future versions of this process could be applied.
3. Perform a land use and zoning analysis on one existing high frequency corridor.
  - a. Map existing land use and zoning along a corridor.
  - b. Identify mismatches between existing land use, existing zoning, and desired land use.

- c. Using SEPTA’s TSCD guidelines as goals, identify where existing land use and/or zoning could be changed to make this corridor more transit supportive.
- d. Propose a generalized land use and zoning analysis process that could be applied to SEPTA’s high frequency transit corridors to share this information with local key stakeholders.

4. Identify up to 8 common features of zoning codes in SEPTA’s service area that are not transit supportive, and propose a generalized solution to each based on best practices.

- a. Identify up to 8 key transit-unsupportive issues, which may include curb cuts, slip lanes, utility conflicts, etc. Work with SEPTA to determine this list.
- b. Identify a proposed intervention for each key transit-unsupportive issue based on peer practice and other research using SEPTA provided examples
- c. Propose a generalized process that SEPTA may use on its high frequency transit corridors to achieve these proposed interventions, and note key stakeholders to be involved.

5. Present findings to SEPTA staff and external stakeholders as necessary.

**Products:**

A memo or full report summarizing the project’s findings

**Beneficiaries:**

SEPTA, Bucks County, Chester County, Delaware County, Montgomery County, Philadelphia, residents, employees, and business owners along trolley corridors

**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>
2023	\$100,000	\$0	\$100,000	\$0	\$0

**PROJECT Name: FTA Transit-Oriented Development Grant - Norristown High Speed Line – King of Prussia Extension Value Capture/Multimodal Accessibility Study**

---

**Responsible Agency:** Southeastern Pennsylvania Transportation Authority

**Program Coordinator:** Brian McFadden, SEPTA

**Project Manager:** Ryan Judge, SEPTA

**Goals:**

To study the potential for Value Capture (VC) and the recommended multimodal accessibility network for stations along the Norristown High Speed Line -- King of Prussia Extension (KOP Extension).

**Description:**

The KOP Extension is a four-mile, five station extension that would extend fixed guideway rail service through Upper Merion Township in Montgomery County, PA. The existing NHSL has characteristics of both heavy and light rail transit and serves destinations between 69th Street in Upper Darby and the Norristown Transportation Center. The KOP Extension recently completed 15% preliminary design and is currently in the 30% design phase. The project received environmental approval in January 2021 and entered the Project Development phase of the Federal Transit Administration New Starts Capital Investment Grant Program in September 2021.

The five stations along the KOP extension serve a range of land uses from one of the largest enclosed malls on the east coast to business parks and a hotel/casino.

This study is being funded by a grant through the Federal Transit Administration's Pilot Program for Transit Oriented Development. SEPTA is the direct recipient of the funding for the project and will oversee the work of a consultant. DVRPC is not conducting this work, and the funding is not passing-through DVRPC. Amending the DVRPC UPWP to include the project is a requirement of the FTA grant program.

**Tasks:**

1. To update the 2015 market study to provide greater detail at each of the corridor's station areas. It would explore each station areas' past demographic, economic, and real estate market trends as well as regional forecasts in order to estimate each station's future market-supportable development. It would also examine current real estate market conditions and assess future market demand for office, housing, local-serving retail, and hotels. The region's economic outlook, competing urban and suburban centers throughout the region would be considered as part of the assessment. In addition, the study would highlight the requirements needed to successfully navigate the many issues that arise in both developing on vacant land or redeveloping existing structures at each station area. Deliverables include a draft and final Real Estate Market Study.

2. Identify and assess the conditions needed for successful use of VC, including real estate market strength, development potential, limited number of property owners, property owner interest, sizable scale of development, municipal finance strength, ability to secure debt, local government support, level of projected VC revenues and availability of additional funding sources. The analysis would include developer and property owner interviews. Performance measures would be developed for each precondition for success. If the VC Assessment indicates the necessary conditions for success are lacking, the VC measures can be reassessed following completion of the study to measure progress towards improving opportunities for VC. The screening results and performance measures would be shared for feedback with a Working Group comprised of local government representatives, the KOP District, DVRPC, and SEPTA. Deliverables include a draft and final VC Conditions Assessment.

3. Task 3 will result in strategies and recommendations to address constraints to using VC in the corridor based on results of Tasks 1 & 2. The Success Strategy will identify an implementation plan including roles and responsibilities of key participants. Deliverables include a draft and final VC Success Strategy.

4. Assess alternative types of VC for potential use on the corridor and determine the potential order of magnitude revenue anticipated over a 20-year period for investment in multimodal accessibility infrastructure. Deliverables include a draft and final VC Tools and Financial Assessment.

5. Identify the recommended multimodal network improvements that can be leveraged through VC throughout the corridor. The plan will be based on three rounds of public and Working Group involvement to identify existing issues and opportunities, develop and assess alternative concepts, and recommend a preferred framework for implementation.

**Products:** A full report summarizing the study's findings.

**Beneficiaries:** SEPTA, DVRPC, Bucks County, Chester County, Delaware County, Montgomery County, Philadelphia, residents, employees, and business owners along the Norristown High Speed Line and KOP Rail extension corridor.

**Project Cost and Funding:**

Total project cost: \$450,000 (Federal Transit Agency Pilot Program for Transit Oriented Development grant of \$360,000 to SEPTA, plus SEPTA match of \$90,000)

# Fiscal Year 2023 Unified Planning Work Program

**Publication Number:** 23002

**Date Published:** June 2022

**Geographic Area Covered:**

The nine county Delaware Valley Regional Planning Commission region including Bucks County, Chester County, Delaware County, Montgomery County, City of Philadelphia, Burlington County, Camden County, Gloucester County, and Mercer County.

**Key Words:**

Unified Planning Work Program

**Abstract:**

This document contains all of the projects and related funding for FY 2023 as passed by the DVRPC Board in January 2022.

---

**Staff Contact:**

Patty Elkis  
Deputy Executive Director  
215.238.2838  
pelkis@dvrpc.org



190 N Independence Mall West  
8th Floor  
Philadelphia, PA 19106-1520  
215.592.1800 | fax: 215.592.9125  
www.dvrpc.org

---



190 N INDEPENDENCE MALL WEST  
8TH FLOOR  
PHILADELPHIA, PA 19106-1520  
215.592.1800 | FAX: 215.592.9125  
WWW.DVRPC.ORG

**CONNECT WITH US!**

