



FISCAL YEAR 2022

Unified Planning Work Program

JUNE 2021 | 56 YEARS OF SERVICE
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS





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



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

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

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

 | FY 2022

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



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January 28, 2021

On behalf of the Delaware Valley Regional Planning Commission (DVRPC), we are pleased to present the Fiscal Year 2022 Unified Planning Work Program (UPWP) as adopted by the DVRPC Board on January 28, 2021.

This document details work to be completed by DVRPC and our member governments during FY 2022, which runs from July 1, 2021 through June 30, 2022. As the federally designated Metropolitan Planning Organization for the Greater Philadelphia 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 FAST (Fixing America's Surface Transportation) Act and the Clean Air Act Amendments (CAAA), as well as undertaking the region's priority planning initiatives.

The planning activities identified in the FY2020 UPWP allow DVRPC to address a variety of issues in our diverse region. Key issues for the Commission in FY 2020 include providing for the safety, and resiliency of the region's transportation infrastructure, increasing the efficiency and operations of our roads and transit systems, strengthening and measuring the performance of our transportation assets, promoting growth and revitalization in our older communities, protecting our air, land, and water resources, and continuing to support programs that will integrate transportation, land use, the environment, economic development, and social equity. The COVID-19 Pandemic and incidences of social unrest across the region during 2020 led the DVRPC Board to prioritize several new planning activities for FY 2022. This UPWP will seek to address systemic racism through new projects such as identifying mobility choices for racial minorities, an equity analysis of SEPTA's regional rail fare structure and impacts of heat islands on disadvantaged neighborhoods. Clearly, the pandemic has impacted how people and goods move about the region. The Board has indicated their desire to understand and accommodate those movements through new projects to document the impacts of the pandemic on regional travel as well as understanding the impacts of e-commerce on warehousing and distribution.

The Commission believes that the FY 2022 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.

Mark Squilla
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 2022 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 2022 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 2020 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 2022 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 2022 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 2022 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 2022 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 28th day of January, 2021
by the Board of the Delaware Valley
Regional Planning Commission.

I certify that this is a true and correct copy of Resolution No. B-FY21-004.



Renee Wise, Recording Secretary

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CHAPTER 1

Introduction

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS



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Delaware Valley Regional Planning Commission FY 2022 Unified Planning Work Program

Introduction

The FY 2022 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, 2021 through June 30, 2022. 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 2022 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 2022 Work Program focused on the following topics: improving access to transit, Transportation Systems Management and Operations, bicycle and pedestrian infrastructure improvements, transportation/land use connections, freight planning, and the collection of transportation data to enable data-driven analyses. These planning priorities track closely with the FAST Act Planning Factors as well as the State Departments of Transportation (DOT's) emphasis areas.

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 prepares a response to all comments submitted by our partners, advocacy organizations, or the general public. Staff presents the comments, responses and final document to the Board for adoption at the January Board meeting. Following Board adoption, staff incorporates responses to comments,

editorial corrections, and final funding tables into a final document that is submitted to our funding agencies in March. Work on the adopted UPWP begins on July first.

UPWP Document Organization

The FY 2022 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 2022. 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 as identified by our federal and state partners. Planning activities identified in this document strive to incorporate the requirements of the most recent federal surface transportation legislation, FAST Act, where applicable.

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

- Continue to collaborate with state DOTs and federal partners to implement provisions of the FAST Act including Performance Measure Targets and freight provisions.
- Continue to support greater coordination with other MPOs, state DOTs, transit agencies, TMAs and counties in mobility and land use planning. This can include Regional Models of Cooperation like the Central Jersey Transportation Forum, grant or technical assistance programs to encourage vibrant, sustainable communities, and developing and maintaining data bases in support of smart growth, and other related activities.
- Implement actions that support Ladders of Opportunity through fairness and improved coordination of services, access and mobility for low income, minority, persons with disabilities and seniors.

- Pursue congestion relief strategies such as Transportation Demand Management (TDM) strategies and low-cost operational improvements at intersections and bottlenecks.
- Implement actions to assist the DOTs with data collection such as Model Inventory of Roadway Elements (MIRE) on county and local roads and data on local-owned road and bridge assets.
- Collect and submit traffic counts to state DOTs.
- Where possible, support the collection of bicycle and pedestrian volume data on county roadways
- 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 NJ DOT 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).

Federal Legislation Requirements

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

Century (MAP-21) and many of the Program Areas and Projects set forth in this UPWP work directly to continue the implementation of those MAP-21 Programs.

The FAST Act authorized \$305 billion in federal highway, transit, safety and rail programs for five years. Under this legislation, the MPO is a partner in the planning for the use of all federal transportation funds allocated within their region. The FAST Act also requires the MPO to produce and oversee a Transportation Improvement Program, 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 federal legislation that created the FAST Act was set to expire on September 30, 2020 but was extended through a Continuing Resolution (CR) by Congress and signed by the president on October 1, 2020. The extension continued original levels of funding for highway and transit programs through September 30, 2021

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

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

The Metropolitan Planning Regulations also require that MPO's with a population over 200,000 must undergo a certification review conducted jointly by the Federal Highway Administration (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 and facilitation, analyses, management, tool development and technical assistance to local governments.

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

Supportive Regional Highway Planning Program (SRHPP), 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 FY22, the SRHP 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. Pennsylvania uses STP/STU funds while New Jersey used STBGP funds.

SHRPP 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 budget for the FY22 Unified Planning Work Program is \$28,495,460, a decrease of \$2,125,071 from the FY 2021 Unified Planning Work Program. Overall pass-through funding for member governments in FY 2022 is \$6,392,000 versus \$8,954,500 in FY 2021 partially driven by the absence of TCDI Program which is a two-year cycle program and no request for NJ Local Concept Development funds in FY22.

In addition to the core formula planning funds allocated by the FAST Act that DVRPC receives, the Commission is fortunate to receive 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.

Delaware Valley Regional Planning Commission
 Fiscal Year 2022 | Unified Planning Work Program

Table 1: Funding Summary

FUNDING SOURCE	GENERAL FUND	HIGHWAY PROGRAM	TRANSIT PROGRAM	COMP PLANNING	OTHER PROGRAMS	TOTAL
MISCELLANEOUS	\$0	\$0	\$0	\$0	\$2,889,275	\$2,769,275
FAA	0	0	0	0	108,000	108,000
PA FTA	0	0	1,222,000	0	621,000	1,843,000
PA FHWA	0	4,724,000	0	0	4,838,500	9,682,500
PA STATE	0	670,000	0	0	303,600	973,600
PA OTHER	0	0	0	0	304,500	304,500
PA LOCAL	0	0	0	0	375,500	375,500
NJ FTA	0	0	544,676	0	-	544,676
NJ FHWA	0	2,538,545	0	0	1,476,600	4,015,145
NJ STATE	0	0	0	0	-	0
NJ LOCAL	0	0	0	0	22,500	22,500
PA LOCALS	\$152,448	\$354,000	\$305,500	\$390,633	\$3,055	\$1,205,636
Bucks County	23,782	35,100	36,348	60,940	611	156,781
Chester County	18,964	66,688	48,465	48,595	611	183,323
Delaware County	19,971	56,159	36,348	51,173	611	164,262
Montgomery County	30,413	52,649	48,465	77,931	611	210,069
City of Philadelphia	58,022	140,395	133,278	148,674	611	480,980
City of Chester	1,296	3,009	2,596	3,320	-	10,221
NJ LOCALS	\$61,484	\$0	\$0	\$195,200	\$2,444	\$259,128
Burlington County	17,068	0	0	54,188	611	71,867
Camden County	16,583	0	0	52,646	611	69,840
Gloucester County	10,963	0	0	34,804	611	46,378
Mercer County	10,704	0	0	33,984	611	45,299
City of Camden	2,939	0	0	9,330	-	12,269
City of Trenton	3,227	0	0	10,248	-	13,475
SUBTOTAL DVRPC	\$213,932	\$8,286,545	\$2,072,176	\$585,833	\$10,944,974	\$22,103,460
MEMBER GOVERNMENTS AND TRANSIT OPERATING AGENCIES						
PA FTA	\$0	\$0	\$900,000	\$0	\$0	900,000
PA FHWA	0	0	0	0	\$848,000	848,000
NJ FTA	0	0	386,600	0	\$0	386,600
NJ FHWA	0	0	0	0	\$1,159,000	1,159,000
PA LOCALS	0	0	225,000	0	\$174,500	399,500
NJ LOCALS	0	0	96,650	0	\$102,250	198,900
OTHER	0	0	0	0	\$2,500,000	2,500,000
SUBTOTAL	\$0	\$0	\$1,608,250	\$0	\$4,783,750	\$6,392,000
GRAND TOTAL	\$213,932	\$8,286,545	\$3,680,426	\$585,833	\$15,728,724	\$28,495,460

Table 2: Project Funding by Source

Page	PROJECT NUMBER	PROGRAMS/PROJECTS	FY 2022 BUDGET	HIGHWAY PLANNING	TRANSIT PLANNING	COMPREHENSIVE PLANNING	OTHER
	Chpt. Two-Sect. A						
		DVRPC PROGRAM AREAS					
43	22-23-010	Regional Forum	\$ 297,500	\$ 227,711	\$ 57,289	\$ 2,500	\$ 10,000
45	22-23-020	Work Program Administration	347,500	267,660	67,340	2,500	10,000
47	22-23-030	Public Participation, Involvement and Outreach	409,500	317,197	79,803	2,500	10,000
51	22-23-040	Title VI and Environmental Justice	206,500	155,003	38,997	2,500	10,000
55	22-23-050	Data Visualization and Communication	590,000	471,401	118,599	-	-
59	22-23-060	Web Development and Database Management	870,000	695,116	174,884	-	-
61	22-23-070	Data Coordination and Analysis	331,250	259,670	65,330	1,250	5,000
65	22-31-010	Geographic Information Systems	339,400	271,175	68,225	-	-
67	22-33-010	Smart Growth	703,500	404,479	101,763	57,258	140,000
71	22-33-020	Community & Economic Development	556,000	238,497	60,003	22,500	235,000
75	22-33-030	Energy and Climate Change Initiatives	341,508	149,017	37,491	55,000	100,000
81	22-33-040	Environmental Planning	309,500	259,500	-	50,000	-
85	22-34-010	Long-Range Planning	582,000	349,156	87,844	45,000	100,000
89	22-34-020	Freight and Aviation Planning	389,500	294,226	74,024	16,250	5,000
93	22-34-030	Transportation Safety	394,250	310,006	77,994	1,250	5,000
99	22-34-040	Regional Congestion Management Process	227,250	176,576	44,424	1,250	5,000
103	22-34-050	Air Quality Planning	249,250	194,153	48,847	1,250	5,000
109	22-34-060	Performance Based Planning and Asset Management	307,500	145,815	36,685	25,000	100,000
113	22-34-070	Socioeconomic and Land Use Analytics	220,000	159,797	40,203	20,000	-
117	22-41-010	Technical Assistance to Member Governments	295,946	215,421	54,200	16,325	10,000
121	22-41-020	Transportation Improvement Program (TIP)	651,250	515,345	129,655	1,250	5,000
125	22-41-030	Transportation Operations	562,950	133,191	33,509	1,250	395,000
131	22-41-050	Competitive Program & Project Management	1,249,500	59,500	-	-	1,190,000
133	22-51-010	Travel and Land Use Modeling	457,250	360,342	90,658	1,250	5,000
137	22-52-010	Regional Transit Planning Program	391,250	-	265,000	41,250	85,000
141	22-52-020	Bicycle and Pedestrian Planning Program	296,750	216,125	54,375	21,250	5,000
145	22-52-030	Mobility Analysis and Design Program	682,250	524,134	131,866	21,250	5,000
149	22-52-040	Regional Transportation Demand Management (TDM) Program	312,500	-	-	-	312,500
153	22-53-010	Travel Monitoring	739,500	594,500	-	-	145,000
		Subtotal	\$ 13,311,054	\$ 7,964,713	\$ 2,039,008	\$ 409,833	\$ 2,897,500
	Chpt. Two-Sect. B						
		DVRPC PROJECTS					
	15-44-300	William Penn-Planning, Design and Construction of Priority Trails**	\$ 80,000	\$ -	\$ -	\$ -	\$ 80,000
	18-33-140	William Penn - DRWI Data/GIS/Modeling Work Group**	25,000	-	-	-	25,000
	18-33-200	William Penn - Completing The Circuit **	40,000	-	-	-	40,000
	21-34-080	Regional Aviation System Planning**	40,000	-	-	-	40,000
	21-34-130	Reg. Aviation Plan - 2045**	125,000	-	-	-	125,000
	21-51-050	Route 422 Operations and Capacity Study**	100,000	-	-	-	100,000
	21-52-040	Regional Transportation Demand Management (TDM) Program**	250,000	-	-	-	250,000
	22-10-010	General Fund	213,932	-	-	-	213,932
159	22-31-020	Regional Transportation GIS Coordination	400,000	-	-	-	400,000
161	22-33-050	Local Technical Assistance Program (LTAP)	30,000	-	-	-	30,000
163	22-33-060	William Penn Regional Trail Program	157,000	-	-	-	157,000
167	22-33-070	Pennsylvania Coastal Zone Management Implementation Program	50,000	-	-	-	50,000
169	22-33-080	Healthy Communities Planning	125,000	79,898	20,102	5,000	20,000
173	22-33-090	PA/NU Local Planning Initiatives	150,000	-	-	40,000	110,000
177	22-33-150	Climate Adaptation Planning and Community Resiliency	50,000	-	-	-	50,000
179	22-33-160	Local Government Energy Implementation Strategies and Initiatives	85,000	-	-	-	85,000
181	22-33-170	TOD Next Steps/Station Screening	100,000	-	-	-	100,000
185	22-33-180	Regional Electric Vehicle Planning Program	150,000	-	-	-	150,000

Table 2 Continued

Page	PROJECT NUMBER	PROGRAMS/PROJECTS	FY 2022 BUDGET	HIGHWAY PLANNING	TRANSIT PLANNING	COMPREHENSIVE PLANNING	OTHER
189	22-34-080	Regional Aviation System Planning	120,000	-	-	-	120,000
191	22-34-090	Central Jersey Transportation Forum	125,000	-	-	-	125,000
193	22-34-100	PA Air Quality Action Supplemental Services	125,000	-	-	-	125,000
195	22-34-110	NJ Air Quality Action Supplemental Services	50,000	-	-	-	50,000
197	22-41-060	Transportation Systems Management and Operations (TSMO)	554,000	-	-	-	554,000
201	22-41-070	I-95 Planning Assistance	100,000	-	-	-	100,000
203	22-51-020	Enhance and Maintain Travel Forecasting Tools	640,000	-	-	-	640,000
207	22-51-040	District 6 Modeling Assistance	460,000	-	-	-	460,000
209	22-51-050	Philadelphia Trip Generation Model	103,700	-	-	-	103,700
213	22-51-060	I-95 Traffic Forecasts	150,000	-	-	-	150,000
215	22-52-050	Regional TDM Program Planning & Administration	320,000	-	-	40,500	279,500
217	22-52-060	Pottstown Area Regional Plan Development	65,000	51,934	13,066	-	-
219	22-52-070	PennDOT Connects Bike-Friendly Resurfacing Program	250,000	-	-	-	250,000
223	22-52-090	Commuter Services/Mobility Alternatives Program (Share-a-Ride)	251,000	-	-	-	251,000
227	22-52-110	ExPo: Experimental Pop-ups Program	200,000	-	-	-	200,000
231	22-52-120	Racial Minority Mobility Choices Study	225,000	-	-	-	225,000
233	22-52-130	Regional Sidewalk Development Program: Pilot Technical Assistance Round	150,000	-	-	40,000	150,000
237	22-52-160	Cecil B. Moore Avenue - Corridor Safety Study and Concept Development	200,000	-	-	-	200,000
239	22-53-020/025	HPMS and Functional Classification System (PA & NJ)	190,000	190,000	-	-	160,000
241	22-53-030	PennDOT District 6-0 Traffic Volume Data	300,000	-	-	-	300,000
243	22-59-700	Member Government Special Studies	901,944	-	-	-	901,944
245	22-59-701	New Projects and Misc. Carryover**	1,140,830	-	-	50,500	1,090,330
		Subtotal	\$ 8,792,406	\$ 321,832	\$ 33,168	\$ 176,000	\$ 8,261,406
		SUBTOTAL DVRPC PROGRAM	\$ 22,103,460	\$ 8,286,545	\$ 2,072,176	\$ 585,833	\$ 11,158,906

** Carryover Projects

MEMBER GOVERNMENT / TRANSIT OPERATING AGENCIES / OTHER PASS-THROUGH

253-270	Chapter Three A & B						
277-300	A: 22-60-010 to 22-60-051	Supportive Regional Highway Planning Program	\$ 872,500	\$ -	\$ -	\$ -	\$ 872,500
	B: 22-61-010 to 22-61-110	PA Supportive Regional Highway Planning Program	511,250	-	-	-	511,250
		Subtotal	\$ 1,383,750	\$ -	\$ -	\$ -	\$ 1,383,750
307-328	Chapter Four A & B						
335-350	A: 22-63-000 to 22-63-010	Transit Support Program	\$ 1,125,000	\$ -	\$ 1,125,000	\$ -	\$ -
	B: 22-63-020 to 22-63-027	PA Transit Support Program	483,250	-	483,250	-	-
		Subtotal	\$ 1,608,250	\$ -	\$ 1,608,250	\$ -	\$ -
		Other Member Government Projects					
	Chpt. Five						
	15-44-320	William Penn- Planning, Design & Construction of Priority Trails**	\$ 1,000,000	-	-	-	\$ 1,000,000
	18-33-200	William Penn - Completing The Circuit **	1,500,000	-	-	-	1,500,000
355	22-53-300	PA/NJ Regional GIS Implementation Coordination	300,000	-	-	-	300,000
357	22-64-000	New Jersey Regional Signal Retiming Initiative Project (2 Years)	220,000	-	-	-	220,000
359	22-65-100	New Jersey Local HSIP Program Assistance (2 Years)	380,000	-	-	-	380,000
		Subtotal	\$ 3,400,000	\$ -	\$ -	\$ -	\$ 3,400,000
		SUBTOTAL MEMBER GOVERNMENTS AND OPERATING AGENCIES	\$ 6,392,000	\$ -	\$ 1,608,250	\$ -	\$ 4,783,750
		GRAND TOTAL	\$ 28,495,460	\$ 8,286,545	\$ 3,680,426	\$ 585,833	\$ 15,942,656

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.

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 assuring transparency and accountability in the expenditure of public funds.

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

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

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

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

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

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

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

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

South Jersey Port Corporation – The South Jersey Port Corporation was created in 1968 to operate marine shipping terminals in the South Jersey Port District which consists of seven counties: Burlington, Camden, Gloucester, Salem, Cumberland, Mercer and Cape May. The SJPC is a quasi-state agency, which reports through the Department of Treasury to the Governor of New Jersey. The SJPC owns and operates the Joseph A. Balzano and Broadway Marine Terminals in the Port of Camden, the Salem Marine Terminal at the Port of Salem, and is constructing the Paulsboro Marine Terminal at the Port of Paulsboro.

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

DVRPC's Working Committees

One of the primary roles of DVRPC is to coordinate its planning programs, and those of its member governments, with 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 Action Plan.

The Transportation Operations Task Force (TOTF) is the focal point of regional ITS and operations coordination. The Task Force is a forum for agencies to share information on ITS deployments, develop a consensus on regional operations issues, and respond to federal and state initiatives. It has the ability to establish subcommittees to tackle specific issues as they arise. As a technical-level group, it informs DVRPC's ITS and Transportation Systems Management and Operations planning activities that in turn support the Task Force.

The Central Jersey Transportation Forum (CJTF) has been meeting since 1999 to address concerns of municipalities in Mercer, Middlesex, and Somerset counties focused on the US 1 corridor. High-level representatives from twenty-five municipalities, three counties, and numerous state agencies and other organizations meet to coordinate and to discuss transportation and land use issues and implement solutions.

The Urban Waterfront Action Group (UWAG) was created in 1980 through the PA Coastal Zone Management (CZM) Program to provide "one-stop" shopping for information about waterfront development permits in the Delaware Estuary in Pennsylvania.

The Healthy Communities Task Force was first convened in 2014 to bring together public health, planning, and related professionals in the Greater Philadelphia area. The Task Force provides a venue for people interested in fostering healthy communities to learn about other communities, both near and far, that are successfully integrating planning and public health including active transportation. It serves as a way for professionals in these fields and stakeholders in our communities to deepen their understanding of healthy communities and build the relationships to achieve them.

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

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 2022, are highlighted in the Program Area descriptions below. Successful completion of these planning activities within these Program Areas and Projects may require the purchase of equipment or services.

Regional Forum

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

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

Work Program Administration

Preparation of the Unified Planning Work Program includes 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 2023 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 FY2021 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 Product: 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 Product: Data Search Tool

Socio-economic 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 Product: Tracking Progress indicators

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: Smart Growth Project Database development examples and implementation techniques, Housing Needs Analysis

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: TCDI and CEDS related 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: Region-wide support for municipal and county fleet electrification, Outreach on mitigating extreme heat impacts, Climate Adaptation Forum

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 2045'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: Comprehensive Trail Inventories and Maps for New Jersey and Pennsylvania, Woolwich Township Farmland Preservation Plan

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 2045*, was adopted in October 2017.

Key Product: Connections 2050 Long-Range Plan Policy Manual and Process Manual

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 Product: Future Impacts of e-Commerce in Greater Philadelphia

Transportation Safety

This program supports the goals of DVRPC's Long-Range Plan, Regional Safety Analysis and Plan, and the DOTs' Strategic Highway Safety Plan. It incorporates the transportation safety Planning Factor, as required by federal metropolitan planning regulations, into the transportation planning process, and seeks to improve the safety of the region's transportation system, while maintaining acceptable levels of accessibility and efficiency. The program addresses transportation safety from a multipronged approach in which coordination and outreach are important factors.

Key Product: City of Trenton Vision Zero Action Plan

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 Product: CMP Supplemental Project Status Memorandum and web site.*

Air Quality Planning

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

Key Product: Transportation Air Quality Conformity Demonstration Report

Technical Assistance to Member Governments

This Program Area ensures intergovernmental coordination, technical evaluation, and regional policy formulation on transportation issues, projects, and plans through monthly meetings of the Regional Technical Committee (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 the requirements of FAST Act 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 developed, and our Board adopted, a TIP for PA in July of 2020. Also, in FY21, a similar process was undertaken for the development of a NJ TIP which is expected to be adopted in Fall of 2021.

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 Product: 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. 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 DOT's, and transit operators to address the transportation performance management requirements by coordinating on and setting performance measure targets.

Key Product: continued coordination with planning partners to address US DOT Transportation Performance Management requirements 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 funding for nontraditional transportation projects such as multiuse trails, streetscapes, historic restorations, alternative fueled vehicles, travel demand management, local highway and bridge projects, as well as projects that contribute to the attainment of the Clean Air Act by reducing emissions from highway sources. Three categories of federal funding that provide broad eligibility for these nontraditional and local transportation projects are: Transportation Alternatives, Congestion Mitigation and Air Quality and the Surface Transportation Program. Capital Program funds are also provided to the counties through the Local Concept Development Program in New Jersey.

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

Travel and Land Use Modeling

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

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

Key Product: updated freight model and travel demand model validation data

Regional Transit Planning Program

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

Key Product: Ongoing support of SEPTA's Trolley Modernization Program

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

Mobility Analysis and Design

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 Product: concept development for potential bicycle improvements on Mercer County's resurfacing program.

Regional Transportation Demand Management Program

This program supports development and oversight of regional Transportation Demand Management (TDM) Initiatives. This includes traditional TDM activities with demonstrated single-occupant vehicle (SOV) trip reduction benefit 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.

Key Product: TDM initiatives oversight and implementation of at least one additional pilot program.

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

UPWP Linkages

The FY 2022 Unified Planning Work Program serves as an important implementation tool to achieve the directives of the FAST Act. In an effort to highlight the connection between the individual Program Areas in the Unified Planning Work Program and the ten Planning Factors stipulated in the FAST Act, a matrix was developed that shows that linkage (Table 3). Both primary and peripheral associations between the Program Areas and the Planning Factors are shown. As DVRPC develops future work programs, we will continue to strive to meet the key principles of the surface transportation act current at that time.

In addition to addressing the federal legislative requirements, the UPWP serves as an important implementation tool to achieve the future land use and transportation development vision that is set forth in the region's Long-Range Plan. The five key principles of the Long-Range Plan serve as a framework for many of the projects and programs undertaken by DVRPC. In an effort to highlight the connection between the individual Program Areas of the UPWP and the Long-Range Plan, a matrix was developed that shows the linkage between these two core documents (Table 4). Both primary and peripheral associations between the Program Areas and the five key principles of the Long-Range Plan are shown.

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
DVRPC Program Areas										
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	Develop Livable Communities	Sustain the Environment	Expand the Economy	Advance Equity and Foster Diversity	Create an Integrated Multimodal Transportation Network
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

Plan/Program/Activity	Current Adoption/Completion	Next Adoption/Completion
Unified Planning Work Program	January 2021	January 2022
Transportation Improvement Program	July 2020 (PA) September 2019 (NJ)	July 2022 (PA) September 2021 (NJ)
Air Quality Transportation Conformity Determination	July 2020	September 2021
Long-Range Plan	October 2017	September 2021
Title VI Compliance Plan	March 2014	Summer 2021
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 2021
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

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS



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PROJECT: 22-23-010 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$292,500	\$218,750	\$61,250	\$2,500	\$10,000
2022	\$297,500	\$227,711	\$57,289	\$2,500	\$10,000

*PennDOT FTA

PROJECT: 22-23-020 Work Program Administration

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: John Ward

Project Manager: Alison Hastings, Barry Seymour, Elizabeth Schoonmaker, Karin Morris, Michael Boyer, Najah Jackson, Patricia Elkis, William Stevens

Goals:

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

Description:

Federal regulations, as stipulated in the FAST Act, 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 FY2023 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 FY23 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 FY2022 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. FY23 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$347,500	\$261,719	\$73,281	\$2,500	\$10,000
2022	\$347,500	\$267,660	\$67,340	\$2,500	\$10,000

*PennDOT FTA

PROJECT: 22-23-030 Public Participation, Involvement and Outreach

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Alison Hastings

Project Manager: Elise Turner

Goals:

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

Description:

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

DVRPC 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$409,500	\$310,156	\$86,844	\$2,500	\$10,000
2022	\$409,500	\$317,197	\$79,803	\$2,500	\$10,000

*PennDOT FTA

PROJECT: 22-23-040 Title VI and Environmental Justice

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Alison Hastings

Goals:

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

Description:

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

DVRPC's Office of Communications and Engagement (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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$201,500	\$147,656	\$41,344	\$2,500	\$10,000
2022	\$206,500	\$155,003	\$38,997	\$2,500	\$10,000

*PennDOT FTA

PROJECT: 22-23-050 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$590,000	\$460,937	\$129,063		
2022	\$590,000	\$471,401	\$118,599	\$0	\$0

PROJECT: 22-23-060 Web Development and Database Management

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: James Strangfeld

Project Manager: Elizabeth He, Marc Molta, 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$870,000	\$679,687	\$190,313		
2022	\$870,000	\$695,116	\$174,884	\$0	\$0

PROJECT: 22-23-070 Data Coordination and Analysis

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kimberly Korejko

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

Goals:

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

Description:

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

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

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

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

Tasks:

1. Coordinate and communicate with member governments, transit agencies, state and federal agencies, and other traditional partners, while seeking new partnerships

where appropriate to maintain and improve communication and information sharing about agency data.

2. Continue to foster data sharing strategies through the development of memoranda of understanding with appropriate agencies and exploring shared data/tool purchases.
3. Continue to oversee and administer the existing IREG and participate in other ad-hoc committees of DVRPC member governments, as appropriate, to facilitate the coordination of data acquisition, processing, and distribution.
4. Participate as affiliates of the New Jersey and Pennsylvania State Data Centers.
5. 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 data search tool.
6. Catalog of data products that DVRPC publicly shares.
8. Additional materials as appropriate.

Beneficiaries:

All client groups.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$366,250	\$281,250	\$78,750	\$1,250	\$5,000
2022	\$331,250	\$259,670	\$65,330	\$1,250	\$5,000

*PennDOT FTA

PROJECT: 22-31-010 Geographic Information Systems

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Mark Gatti

Project Manager: Christopher Pollard

Goals:

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

Description:

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

This ongoing program enables DVRPC to provide GIS services and technical assistance to its planning staff, our member agencies, and other outside parties. It also includes expanding and improving the geospatial database by creating features and attributes from compiled source documents and obtaining data from member governments and operating agencies and publicly available sources (US Census, NJDEP, 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$334,400	\$261,250	\$73,150		
2022	\$339,400	\$271,175	\$68,225	\$0	\$0

PROJECT: 22-33-010 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 Transportation Demand Management (TDM), maximizing opportunities for Complete Street implementation, encouraging greater coordination in mobility and land use planning, and supporting NJDOT's Transit Village Initiative and other Smart Growth strategies. This project continues to support FHWA-NJ Division's Planning Emphasis Areas of regional coordination on opportunities related to livability, and ladders of opportunity/access to essential services (housing, employment, health care, schools, and recreation).

Description:

The Smart Growth work program will continue DVRPC's work on linking land use and transportation planning, while also incorporating outreach, education, coordination, advocacy, and overall support for smart growth and livable community principles. This program is designed to 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 promote Smart Growth principles related to transit-oriented development, age-friendly communities, zoning reform, land preservation, urban revitalization, economic development, and climate change resiliency.

Staff will begin strategizing on developing a Regional Housing Initiative, including outreach to partners and potential funders. Depending on the funding available, this

multi-year initiative seeks to answer our partners' top questions around affordable and workforce housing, from an equity lens. DVRPC's research will be informed by outreach to the business community and seek to provide data on the composition of the region's existing stock, housing production trends, and projected housing needs. DVRPC will collaborate with stakeholders to identify and evaluate municipal strategies that can be used to preserve and promote affordable and workforce housing. The location of existing and new affordable and workforce housing is also critical, to ensure such housing is proximate to transportation infrastructure, particularly transit access.

If a future round of DVRPC's Safe Routes to Transit Program remains a priority for our transit agency partners, staff will collaborate with DVRPC's Office of Transit, Bicycle, and Pedestrian Planning and external partners as needed to revise the goals of this technical assistance program and solicit candidates for round three of the program. Safe Routes to Transit planning for selected projects would occur during FY2023.

Staff will update DVRPC's Smart Growth Project Database web mapping application once in FY22 and 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 coordinate the Regional Streetlight Procurement Program (RSLPP). FY2021 work includes management of the round 1 and round 2 RSLPP through construction and post-construction operation and maintenance services for the 61 participating municipalities. Staff will launch a third round of the RSLPP, leveraging existing contracts from round 2, if enough interest is generated by counties and municipalities.

Staff will continue to develop additional aggregate procurement opportunities around energy and support other DVRPC departments in support of other non-energy aggregation procurement efforts done at the regional level, 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. This work may require the hiring of a technical consultant(s).

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

Staff will assist the Office of Long Range planning and the development of the Connections 2050 Long Range Plan by drafting report text and providing feedback

on elements related to livable communities such as land use, development, urban design, etc.

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 research. Staff will also continue to serve on the steering committee for the Moore Park King of Prussia (KOP) Master Plan.

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, Delaware Valley Smart Growth Alliance, and the Urban Land Institute Philadelphia Chapter Councils.

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

Tasks:

1. Strategize on development of a multi-year Regional Housing Initiative, including outreach to partners and possible funders.
2. Determine perceptions of the region's top housing challenges and needs, amongst employers.
3. Revise Safe Routes to Transit program criteria and develop solicitation materials.
4. Update the Smart Growth Project Database and consider how it can be revised to better serve the needs of DVRPC and its planning partners.
5. Manage ongoing RSLPP through construction and post-construction services.
6. Assist municipalities and counties in other energy and non-energy related regional procurement efforts.
7. Continue to provide technical assistance to municipalities throughout the region on renewable energy ordinances, permitting, and Solarize campaigns, as needed and as budget allows.
8. Continue to support the implementation of recommendations from recently completed Office of Smart Growth studies.
9. Provide technical assistance to numerous partners on various Smart Growth and livable community efforts.
10. Present and promote DVRPC's smart growth studies and products to local, regional, and national audiences, through workshops, seminars, conferences, etc.

Products:

1. Enhanced Housing webpage, with outreach and campaign strategy summarized.
2. Housing Needs Analysis, if outside funding obtained.
3. Updated Smart Growth Project Database and related promotion.
4. Meeting highlights, PowerPoints, evaluation, guidebooks, or other technical

assistance from RSLPP.

5. Technical assistance and resources related to regional procurement opportunities and practices, energy management, and renewable energy development.

6. Updated data, analysis, and presentations in response to stakeholder needs.

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

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$633,500	\$362,109	\$101,391	\$70,000	\$100,000
2022	\$703,500	\$404,479	\$101,763	\$57,258	\$140,000

*PennDOT FTA \$100,000; PennDOT FHWA \$40,000.

PROJECT: 22-33-020 Community and 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 (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 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:

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 (as requested); 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. 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.

Staff will provide an updated analysis for the Rating the Region report, which compares Greater Philadelphia to other regions, as part of our Connections 2050 efforts.

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

Staff will continue to identify livability and sustainability strategies to tie the quality and location of transportation facilities to accessibility of tourist destinations, and employment. Tasks for FY 22 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.

Since many of the region's mature communities face social, economic, transportation (motorized and nonmotorized), and infrastructure challenges uncharacteristic of more affluent exurban communities, staff will continue community development and revitalization efforts that strive to implement the goals of Connections 2050 and assist with retail/commercial recovery from the pandemic at the local level. Specifically, staff will use retail location analytics to develop recovery strategies to assist with local partners addressing recovery needs. Recovery needs may include zoning recommendations, street design flexibility, and/or convening stakeholders. Staff will focus on the communities located along the Route 30 corridor in Camden County as part of outreach and recovery and facilitate discussion with community leaders to encourage a collaborative recovery approach. The retail district typology work will continue to be enhanced and evaluated based on the results of the retail location analytics data.

Staff will continue to work with local partners to bring together the redevelopment of brownfields and Opportunity Zones to encourage redevelopment and recovery throughout the region. A regional brownfield inventory may be developed (if outside

Environmental Protection Agency (EPA) funding is secured) and staff will work with the City of Chester to close gaps along waterfront parcels to continue with the construction of the region's Circuit.

Administration of the Transportation and Community Development Initiative (TCDI) grant program will continue in FY 2022. Grant administration includes maintaining TCDIdirect (project management) database, communication and coordination with DVRPC administration, attending meetings as necessary, and filling out progress report. Staff will also call the TCDI review committees together to begin discussions about new program guidelines for future solicitations.

Staff will promote outreach with local partners and stakeholders through educational events and workshops. These events provide professional credits for American Institute of Certified Planners (AICP) members.

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

Tasks:

1. 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.
2. Work with the CEDS Review Committee to evaluate indicators to measure the CEDS goals.
3. Maintain the CEDS webpage with current data.
4. Conduct meetings (as necessary) of the CEDS committee to review projects proposed for inclusion on the CEDS list of vital economic development projects, and amend the list as appropriate.
5. Prepare an updated Rating the Region.
6. Convene up to 4 meetings of the Regional Community and Economic Development Forum (RCEDF). Topics to include revitalization and tourism.
7. Develop deliverable for tourism tasks including an updated stakeholder list.
8. Prepare Retail Analytics Analysis.
9. Assist Camden County with economic recovery discussions.
10. Potential brownfields inventory and/or assistance to City of Chester on brownfields issues along the Circuit.
11. Administer the TCDI program.
12. Maintain TCDIdirect.

Products:

1. Minutes of CEDS committee meetings and amendments to the CEDS, as necessary.
2. Key Regional Economic Development Project Database
3. Memos or products as requested by US EDA (as it pertains to our pending Economic Development District (EDD) status).
4. Data updates on census information.
5. Data bulletins and/or snapshots, as requested.

6. Rating the Region
7. Highlights from Regional Community and Economic Development Forum (RCEDF) meetings.
8. Technical memo on Increasing Access to Tourist Destinations Report.
9. Retail analytics analysis and presentation.
10. Potential brownfields inventory.
11. Deliverable products as required by each TCDI contract.
12. TCDIdirect database.

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$543,500	\$207,812	\$58,188	\$42,500	\$235,000
2022	\$556,000	\$238,497	\$60,003	\$22,500	\$235,000

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

PROJECT: 22-33-030 Energy and Climate Change Initiatives

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Robert Graff

Project Manager: Adam Beam

Goals:

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

- increasing the resilience of the region to the impacts of extreme weather
- reducing energy use
- shifting energy use to low or no-carbon sources, and
- reducing greenhouse gas (GHG) emissions.

A key focus of this work will be on energy use, greenhouse gas emissions, and responding to the impacts of climate change as they relate to vehicles, transportation infrastructure including mass transit, and the built environment.

- Encourage and support municipal, county, regional, state, and transit agency officials in developing policies and practices to respond to the ongoing and projected impacts of climate change.
- Encourage and support 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.
- 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.
- 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 prepare the region for the ongoing and anticipated impacts of climate change on the built and natural environment. In addition, it seeks to promote greater energy efficiency, cleaner energy, and lower greenhouse gas emissions within the region.

This program area supports the goals of the State of New Jersey's Global Warming Response Act (2007) of reducing GHG emissions by 80 percent of 2006 levels by 2050. It also supports 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. It will also support the USDOT FAST Act Resilience Performance Factor.

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

Energy use and greenhouse gas emissions are closely related issues: DVRPC's report on regional greenhouse gas emissions in 2015 shows that 88 percent of the region's GHG emissions are attributable to burning fossil fuels for energy. Energy use by the transportation sector (motor vehicles, trains, planes, ships, and other mobile applications) accounted for more than 26 percent of the region's energy use, and 31 percent of its GHG emissions. Essentially all of the energy used for transportation is petroleum imported into the region.

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

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 and conservation, GHG emissions reduction, and preparing for the impacts of climate change on transportation infrastructure, including mass transit infrastructure, and other public goods. Continue to work with local governments, state and federal agencies, neighboring MPOs, and partner organizations such as transit agencies in the region.
2. **Climate Adaptation Forum (CAF)** —In coordination with the Office of Environmental Planning (22-33-040), continue to organize and produce the Climate Adaptation Forum, an ongoing series of half-day workshops, taking place about three times per year. The CAF brings together professionals engaged in preparing for climate change, and one or more professionals presenting and leading a discussion on their activities related to addressing a particular climate change adaptation issue.
3. **Information Collection and Analysis**—Continue to develop and disseminate information on regional energy use, energy costs, and GHG emissions, as well as opportunities for reducing energy use, energy costs, and GHG emissions, at the state, local, and sectoral level. This will include data collection and analysis in preparation for the 2020 Regional GHG and Energy Use Inventory.
4. **Technical Assistance: Climate Change Adaptation Planning**—Continue to assist local government stakeholders and transit agencies in understanding and preparing for the expected impacts of climate change on the region, including providing information on 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," together with use of the role-playing game "The Game of Extremes," which has been used by DVRPC in past outreach efforts to municipalities. Assist in developing strategies to increase resilience and adapt to changing climate conditions.
5. **Technical Assistance: Impact Analysis**—Continue to assist member governments and others in assessing policies and actions appropriate at the regional, county and municipal level in order to identify the most appropriate set of responses from among the many alternatives to reduce energy use and GHG emissions primarily in the transportation sector, including those related to electric vehicles. This selection requires rigorous analysis of the reduction impacts, cost-effectiveness, feasibility, energy savings, and other associated benefits and costs associated with the various options. This will include continued support within the DVRPC region for the PA DEP’s Local Climate Action Planning program for municipalities.
6. **Scenarios and Modeling**—In coordination with DVRPC’s Office of Long-Range Planning (22-34-010), model future regional energy use and GHG emissions scenarios and develop tools for use by individuals, organizations and regional

partners to help decision makers envision the relative GHG emission and energy use impacts of various planning and policy actions, including those of electric vehicle charging infrastructure.

7. Review Place-Based Planning Projects for Climate Change Impact Preparedness—On a pilot basis, select a small number of relevant place-based planning projects carried out by other DVRPC offices to test the value of reviewing such projects for climate impact preparedness.

8. Technical Assistance: Additional Sectors – DVRPC recognizes that other public sector organizations, such as school districts, have tremendous opportunities for energy savings as well as to prepare for the impacts of climate change. DVRPC is prepared to begin a discussion with these sectors to identify ways to adapt and disseminate technical tools we have developed to these sectors, particularly as related to electric school buses.

9. Collaborate with Montgomery County on Heat Vulnerability Analysis and Outreach using information from DVRPC’s Extreme Heat Municipal Implementation Tool (MIT). Collaborate with Montgomery County on fine-tuning urban heat island analysis and heat vulnerability assessment, ensuring that DVRPC and Montgomery County analyses align. Using this analysis, assist Montgomery County in outreach to vulnerable neighborhoods and populations, identifying specific projects and interventions that may alleviate heat vulnerability in most at-risk populations.

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

Products:

1. Day-long workshops in Burlington, Camden, Gloucester, and Mercer Counties, New Jersey on integrating the projected impacts of climate change into hazard mitigation planning. These workshops will incorporate the resources from the Municipal Management in a Changing Climate MIT, The Game of Extremes, The Coastal Effects of Climate Change Story Map (from the Office of Environmental Planning) and will be coordinated with FEMA’s Hazard Mitigation Planning resources. Note that these workshops have been postponed due to restrictions on physical gatherings as well as the closure of DVRPC’s offices due to COVID-19. DVRPC staff is considering options for running these workshops online. However, The Game of Extremes is designed as an in-person activity.

2. Climate Adaptation Forums.

3. Updated website pages and on-line tools to disseminate and support the results of the 2015 Regional Energy Use and GHG Emissions Inventory.

4. Continued development of the GHG Slider Tool, which allows users to explore the GHG implications of various policy decisions.

5. Continued provision of support tools (e.g., MITs, webinars, workshops) for

municipalities and others on preparing for climate change adaptation.

6. Support for Montgomery County’s Heat Vulnerability Analysis and Outreach work.

7. Continued integration of energy use and GHG emissions analysis into DVRPC planning documents.

8. Contributions to local, regional, state, and national efforts to reduce energy use and greenhouse gas emissions, and to build resilience in preparation for climate change. These will include written comments on documents, active participation in meetings, and recommendations for actions. Efforts supported include Drive Electric PA Coalition, the PA DEP Climate Change Advisory Committee, as well as any support needed for the USDOT’s FAST Act Resilience Performance Factor, and PennDOT’s Extreme Weather Vulnerability work.

9. Products related to technical assistance efforts mentioned in tasks will be determined at beginning of fiscal year.

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$333,250	\$134,032	\$37,529	\$61,689	\$100,000
2022	\$341,508	\$149,017	\$37,491	\$55,000	\$100,000

*PennDOT FTA

PROJECT: 22-33-040 Environmental Planning

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher Linn

Project Manager: Amy Verbofsky, Miles Owen, Shawn Megill Legendre

Goals:

This program area will:

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

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

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

Description:

This program area will lead planning efforts to build a sustainable region by maintaining and improving environmental quality, creating new opportunities for active transportation, and making the region more resilient to climate hazards.

Issues addressed include land use, water quality, hazard mitigation and flooding, natural resources, open space preservation, climate change resiliency, active transportation and multi-use trails. To the degree appropriate for a given task or project, work will be approached in an integrated way, drawing on staff expertise across DVRPC offices and partner agencies to best achieve desired outcomes.

The project includes the following components:

- Trail Mapping – Maintain and update database and online map of all established, formal trails in the region, regardless of length, surface or facility type. This database and trails currently mapped are part of the "Circuit Trails", which is composed almost exclusively of regionally-significant, multi-use trail spines.
- Open Space Inventory – Maintain and update database and map of protected public and private open space lands. 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 Environmental Planning will support the Office of Long Range Planning in development of tools related to the Long Range Plan, tracking progress toward plan goals, and carrying out forward-looking scenario planning. This will involve collection, processing, and presentation of data and collaborating on tracking and implementation tools.
- 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 the long-range plan, 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 stormwater management practices through strategies such as the implementation of stormwater utilities. Data gathered and tools developed will be used to strengthen the linkages between environmental stewardship and transportation investments, and streamline the environmental review process. In addition, as requested, assistance may be provided to counties to produce Return on Environment reports, which quantify the economic value of protected open space, including seeking outside funding support.
- Municipal Environmental Planning – Continue Environmental Resource Planning Services for local governments to assist communities with the preparation of environmental resource inventories, open space plans, municipal public access plans, master plan conservation elements, farmland preservation plans, sustainability plans, etc., with the aim of improving land preservation and environmental quality at the local level. 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.

- Climate Change Resiliency Initiatives – Continue to participate in ongoing climate change resiliency efforts at the national, state, and local level to assure the concerns of the region are represented. Environmental Planning staff will continue to participate on the Leadership Committee of the New Jersey Coastal Resilience Collaborative, help organize DVRPC’s Climate Adaptation Forums, work with PA DEP to implement Pennsylvania’s coastal resilience planning program, and continue working with PennDOT and NJDOT to improve the resilience of transportation infrastructure against the impacts of extreme weather and changing climate conditions.

- Trail and Greenway Planning – Support the region’s efforts to implement the Circuit Trails, the East Coast Greenway, and other local active transportation 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 overall Program Development and Project Delivery Process to insure that projects are ultimately completed on time and within budget. The Office of Environmental Planning (OEP) 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 non-motorized access to jobs, housing, recreational activities and cultural amenities.

- 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 climate change adaptation work locally, regionally, and at the state and federal level. OEP 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 data on protected lands and share with counties and other agencies.
2. Gather post-election data on localities initiating or changing their open space funding programs through voter referendums.
3. Update and post open space data and tables to the web.
4. Update and post trail data and maps to the web.
5. Collect, share and disseminate trail-user counting data.
6. Conduct research and data collection to support municipal green infrastructure implementation.
7. Conduct municipal-based environmental planning work to assist local governments.
8. Provide data, research and analysis to and assist the NJ Coastal Resilience Collaborative (NJCRC) with resiliency initiatives in New Jersey.

9. Continue technical assistance to municipalities, counties, state agencies, and non-profits for greenway, open space, climate change adaptation, and environmental planning.
10. Engage regional trail-building partners to provide technical assistance on trail planning, design, construction, funding, marketing, and maintenance.
11. Cultivate projects and initiatives that promote active transportation and provide technical assistance as needed to local governments and non-profit partners.
12. Co-convene the Climate Change Adaptation Forum workshops and other environmental meetings as needed with guest speakers on topical issues and ample time for coordination and collaboration.
13. Organize and host semi-annual meetings of the PA East Coast Greenway Committee.

Products:

1. Updated DVRPC website pages containing current maps, tables, and narrative about protected open space lands and funding programs.
2. PennDOT Connects and New Jersey CPSC project reviews.
3. Publication of municipal environmental studies and plans for local governments with which DVRPC has project agreements.
4. Maps, data, and presentations to municipalities and counties with which DVRPC has worked on greenway plans or municipal projects, as needed.
5. Updated Circuit Trails and non-Circuit trails map and data tables.
6. Presentations on environmental- and trail-related topics.
7. Meetings, data, maps and graphics to support development of the Circuit, the East Coast Greenway, and other active transportation projects.
8. Text, graphics, maps and tables for the environmental components of DVRPC’s long-range plan.
9. Climate Change Adaptation Forum meeting materials.
10. PA East Coast Greenway Committee materials.

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$297,000	\$227,000		\$70,000	
2022	\$309,500	\$259,500	\$0	\$50,000	\$0

PROJECT: 22-34-010 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 FHWA and FTA transportation performance management (TPM) measures and uses evaluation criteria for analyzing and selecting transportation projects and performance measures for gauging progress toward Long-Range Plan goals. The Plan addresses the 10 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 2045, was adopted by the DVRPC Board on October 26, 2017. The Long-Range Planning (LRP) unit will continue to implement Connections 2045 by working with planning partners, stakeholders, and the public on taking actions and identifying municipal strategies to bring about the vision.

The Connections 2050 Plan update to the region's Long-Range Plan is nearing completion. Staff will finalize writing the plan, hold a public comment period for the draft document, and will bring it to the DVRPC Board for approval in the Fall of 2021. Public engagement for the 2050 Plan included visioning outreach—public workshops, community conversations, youth engagement, and an online survey—and strategies workshops targeted to key Long-Range Plan topic areas, informed by DVRPC's Dispatches from Alternate Futures scenario planning report. This report was developed in coordination with the Futures Working Group, identifies key driving forces shaping the region including climate change, rising

inequality, and digital technologies (particularly automated, connected, electric, shared-use, and on-demand vehicles—ranging from scooters to semis—in the transportation sector). The Plan’s transportation infrastructure financial plan is being developed closely with DVRPCs Regional Technical Committee. This effort includes a needs assessment vision plan to achieve and maintain a state-of-good repair for all existing transportation infrastructure; a projection of reasonably forecasted revenues; allocation of anticipated revenues to different types of projects; evaluation and selection of major regional projects for inclusion in the fiscally-constrained plan; and identification of local funding options—including administrative structures to oversee it—to help fill the region's transportation funding gap. Once adopted, DVRPC will work to implement the Plan through outreach to member governments, stakeholders, and the public, and will evaluate its long-range planning effort.

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

Tasks:

1. Complete the draft Public Comment and final Board Adopted Connections 2050 Policy and Process manuals. The 2050 Policy Manual will be a short, highly graphic document that highlights results from public engagement, summarizes the Dispatches scenarios, presents a regional vision for growth and development, identifies key strategies for achieving the vision, and summarizes the fiscally-constrained financial plan. The 2050 Process Manual will document the outreach and analysis that went into the plan's development, and will include the detailed financial plan.
2. Hold a minimum 30-day public comment period for the draft version of the Connections 2050 Plan and respond to all public comments received.
3. Update the Connections 2045 Story Map to be consistent with Connections 2050.
4. Work with stakeholder agencies, such as PA and NJ DOTs, transit operating agencies, transportation authorities, and county planning departments to develop, update, and implement their respective strategic and Long-Range Plan documents and ensure consistency across federal, state, regional, county, and local planning processes.
5. Maintain collaboration with surrounding MPOs as a means to discuss and coordinate on multi-regional issues and best practices on an as-needed basis.
6. Incorporate US DOT Transportation Performance Management performance measures and targets into the long-range planning process.
7. Work with the LRP Financial Plan Subcommittee to develop a fiscally-constrained financial plan that: forecasts revenues; develops a transportation infrastructure vision plan (i.e. needs assessment); allocates revenues to project categories; and analyzes alternative local and regional funding options for transportation investments.

8. Update the Municipal Implementation Toolbox, which identifies strategies the region's municipalities can use to implement the Connections 2050 Plan by showcasing regional best practices, model ordinances, and successful case studies.

9. Continue to host quarterly Futures Group meetings covering key topical issues related to transformative technologies, forces, events, and other issues that may shape the future of Greater Philadelphia.

10. 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.

11. Begin to work with the RTC and other regional stakeholders to update TIP-LRP Project benefit criteria based on the Connections 2050 Plan.

12. Explore additional modeling tools for long-range planning analysis, such as the Integrated Transportation and Health Impacts Model (ITHIM) and VisionEval, including how to add in components from the Dispatches scenarios; and use these tools for public engagement.

13. Work with member governments to revise and update the Centers definitions.

14. Amend the Plan as necessary to account for any significant changes.

Products:

1. Connections 2050 Policy Manual and Process Manual.

2. Updated Municipal Implementation Toolbox.

3. Updated Long-Range Plan Explorer Story Map.

4. Updated Connections 2050 TIP-LRP Project Benefit Criteria.

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

6. Memorandum on revised Centers methodology and definitions.

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$633,500	\$393,359	\$110,141	\$30,000	\$100,000
2022	\$582,000	\$349,156	\$87,844	\$45,000	\$100,000

*PennDOT FTA

PROJECT: 22-34-020 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.

The ongoing growth and evolution of retail trade has been a key trend driving freight transportation and development patterns in recent years. Acceleration of this trend in recent years, and most notably during the coronavirus pandemic, has emphasized the need to better understand the local impacts of this evolving market. The Office of Freight and Aviation Planning will undertake a study to explore trends in e-commerce, the supporting supply chain changes, and local impacts that the region must consider to both support this important economic activity and ensure the efficiency of the transportation system that will support these new systems. This work will explore strategies and considerations for accommodating new forms of distribution activity to assist the region and municipalities as they plan for new patterns of development and accommodate shifts in retail activity.

The Office of Freight and Aviation Planning will continue work on the second phase of the Chester County Freight Plan. This plan grew out of recommendations of the

Chester County Planning Commission's Landscapes 3 Comprehensive Plan will refine the objectives established in Phase I, and identify and document strategies to address these objectives. This may include the development of freight performance metrics for tracking the advancement of the plan and tracking of the freight system over time.

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 a southern 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. 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).
 - e. 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 Impacts of e-Commerce in Greater Philadelphia

- a. Document the key trends and future developments in e-commerce retail and distribution that will impact the region.
- b. Identify land use development implications, transportation impacts, and supply chain patterns that will be necessary to inform future investment to support e-commerce in the region.
- c. Develop resources and document strategies for the region and member governments to foster and support the future of e-commerce while minimizing impacts to local communities and transportation systems.

3. Chester County Freight Plan - Phase II

- a. Identify and document strategies that inform and address the county freight system issues and objectives defined in the Phase I effort.
- b. Establish freight performance metrics for tracking the advancement of the plan and freight system over time
- c. Develop a comprehensive freight action plan and supporting deliverables to communicate the key policy and implementation recommendations.

4. Southern New Jersey Freight Rail Market Opportunity Study

- a. Coordinate with the New Jersey Department of Transportation to lead the conduct of the study identifying existing and future trends, evaluating freight rail improvements, and establishing guidance to advance alternative improvements.
- b. Lead and conduct stakeholder outreach and engagement, document analysis of existing freight rail and economic development activity.
- c. Coordinate with NJ DOT to identify market demand and assess improvement alternatives for improved market access by rail.
- d. Develop an action plan to guide the advancement of improvements.

5. Other local technical studies and coordination

- a. Support to the City of Philadelphia on Urban Freight Initiatives: Provide technical and analytical support to the City of Philadelphia Office of Transportation, Infrastructure, and Sustainability (oTIS) on the exploration and implementation of urban freight strategies. This may include support on the development of a citywide truck route network.
- 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.

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:
 1. Process memo and analysis products for City of Philadelphia Urban Freight Initiatives.
 2. Future Impacts of e-Commerce in Greater Philadelphia report.
 3. Phase II of a Chester County Freight Plan technical report.
 4. Southern New Jersey Freight Rail Market Opportunity Study.
 5. Memos and data reports as necessary in response to planning partner data requests.
 6. 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$384,500	\$283,789	\$79,461	\$16,250	\$5,000
2022	\$389,500	\$294,226	\$74,024	\$16,250	\$5,000

*PennDOT FTA

PROJECT: 22-34-030 Transportation Safety

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kevin Murphy

Project Manager: Marco Gorini

Goals:

The Office of Safe Streets has a simple goal: to eliminate killed and severe injury crashes and reduce the total number of all crashes in the Delaware Valley. Advancing this goal requires identification of crash trends and problem locations, promoting data-driven solutions and safety best practices, exploring policy initiatives, and establishing non-traditional partnerships; combined these effort advance a safety culture that embraces vision zero. This objective is consistent with DVRPC's Long-Range Plan goal of eliminating crash fatalities and serious injuries in the region. Program elements include crash database management, problem analysis, performance measure tracking, assisting partners identify and advance safety projects, and helping to raise our collective consciousness to understand the connections between crash safety and health.

Description:

The Regional Safety Task Force (RSTF) is a multi-modal partnership of agencies and organizations that work together to improve transportation safety which 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 and Analysis 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 GIS layers, and ensures quality control. This work promotes analytical best practices, data-driven crash safety prioritization of work program tasks, and satisfies data and analysis requests within DVRPC and from partners. This work also advances data products like the crash data web tool and the safety tools in DVRPC's Data Navigator.

The Office of Safe Streets also provides assistance to 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; efforts will continue to better serve municipal partners interested in safety projects. Specific activities include program management, crash analyses to support funding applications, and problem identification. This work advances 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 crash safety increases in priority among our partners and the public, The Office of Safe Streets receives an increasing number of invitations to participate in and conduct both traditional and non-traditional analyses. Some of these efforts are with outside partners to advance safety programs and projects that are consistent with the goals of the Transportation Safety and Analysis Plan and DVRPC's Long-Range Plan, and work on tasks resulting from completed projects from the preceding fiscal year.

The City of Trenton seeks to raise the priority of crash safety through the development of a Vision Zero Action Plan. Following the lead of cities across the nation, including the City of Philadelphia, Trenton has asked DVRPC to lead the City in a comprehensive Vision Zero effort which will begin with development of a policy, followed by the establishment of a data-driven high injury network (HIN), identification of priorities for intervention and investment, and a field guide for assessing infrastructure elements. This project is consistent with the advancement of a regional safety culture.

Under PennDOT's direction, DVRPC developed street typologies that allow greater flexibility in the application of traffic calming and speed management techniques on arterial roadways in the City of Philadelphia. These typologies and their accompanying guidance have been embraced by PennDOT's Central Office and help PennDOT and Philadelphia promote the safe and efficient movement of people and goods throughout the City, and promote advancement of the City's Vision Zero effort. As needed, data collection is needed to better understand the speed, capacity, and safety implications of various traffic calming improvements. DVRPC will be assisting the District and The City with data collection as new installations are advanced.

Tasks:

1. Regional Safety Task Force

A. Prepare for and hold quarterly meetings focused on the American Association of State Highway and Transportation Officials (AASHTO) emphasis areas identified in the Transportation Safety and Analysis Plan, and one or more special meetings per cycle (i.e., via collaboration with another DVRPC task force or committee). Staff will build on the safety culture aspirations of the FY 2021 meeting cycle to promote findings and lessons learned, and explore ideas for continuing the advancement of a regional safety culture via the RSTF.

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 take action to advance a culture of

- safety, and the goal of zero fatalities and serious injuries in the region.
- D. Manage volunteer action items and other tasks that emerge from RSTF meetings.
 - E. Promote safety best practices and partner initiatives via social media.

2. Crash Data Management System

- A. Coordinate the refinement and maintenance of the crash databases, stay engaged with state partner crash data systems, and consider opportunities for efficient coordination.
- B. Coordinate the crash data updates to DVRPC's databases, GIS layers and data navigator, and coordinate with DOTs on quality issues; participate in statewide crash records coordinating committees.
- C. Respond to data, mapping, and analysis requests from inside and outside of DVRPC providing the high-quality service for partners and other agencies.
- D. Continue to develop and maintain the Crash Data and Analysis Web Tool.

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

- A. Facilitate the New Jersey HSIP Local Safety Program to help county and municipal partners fund data-driven safety projects. This is a cooperative effort with the DVRPC Offices of Project Implementation and Capital Programs that includes distribution of network screenings and assisting partners in identifying data-driven safety projects, providing support such as crash analysis, countermeasure development assistance, HSM analysis, and/or sketch planning.
- B. Provide support to PennDOT District 6-0 to advance their HSIP program, and provide special services as needed (i.e., safety data mapping, HSIP project tracking, and coordination with county partners to plan for future rounds of statewide HSIP funds and project identification).
- C. Coordinate with state and federal partners on FAST Act Transportation Performance Management safety performance measurement tracking, and support state SHSP updates and advancement of plan priorities.
- D. Collaborate with state, county, and municipal partners to identify data-driven HSIP-eligible systemic safety projects.
- E. Assist with RFP development, proposal review, and project tracking for HSIP-funded consultant led safety improvement projects.

4. City of Trenton Vision Zero Action Plan

- A. Research City of Philadelphia and similar cities for VZ plan development best practices.
- B. Draw on research findings to assist Trenton in development and advancement of a VZ policy.
- C. Conduct a data-driven analysis to establish a city-wide high injury network (HIN).
- D. Referencing best practices and implications from the HIN, develop a list of improvement priorities designed to advance the policy.

5. PennDOT Speed Management and Arterial Roadway Typologies Data Collection Support

In collaboration with District 6-0 and City of Philadelphia safety partners, collect traffic volume, vehicle speeds, and possibly other data as needed for future traffic calming and speed management installations.

6. Special Studies & Coordination Efforts

- A. Coordinate with the Office of Transit, Bike, and Pedestrian Planning on small tasks arising from the Trenton Complete Streets project and Morton Safe Routes to Transit.
- B. Coordinate with other DVRPC offices on tasks related to work program partner discussions.
- C. Work with the various committees of the Long-Range Plan on advancing its safety goals.
- D. Collaborate as time permits with the Congestion Management program staff on an exploration of traffic, speed, and crash trends resulting from the COVID-19 travel restrictions, and lessons learned.
- E. Participate in other studies and efforts as requested.

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. Trenton Vision Zero Action Plan milestone updates, research results, data layers, HIN, summary document, and presentations.
5. PennDOT Speed Management and Arterial Roadway Typologies data collection and mapping.

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$384,250	\$295,312	\$82,688	\$1,250	\$5,000
2022	\$394,250	\$310,006	\$77,994	\$1,250	\$5,000

*PennDOT FTA

PROJECT: 22-34-040 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 an 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. 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 2022 include, implementing the Transportation Performance Management (TPM) requirements, perform ongoing CMP data collection and analysis, and using the CMP in project development.

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

Tasks:

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

- A. Review FAST Act regulations and guidance with other DVRPC staff, and with partners within and outside the region, such as DOTs and adjoining MPOs, to establish performance measures and targets. Stay informed of related regulations.
- 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 of the last year of the 4-year performance period. Also, start preparing baseline data for the second 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 and NJDOT, 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. 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. Documentation of the generation and analysis of updated 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. Update 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. Document COVID-19 impacts on travel trends in the region.
3. Before and after traffic evaluation studies for projects to help understand the effectiveness of the strategies to mitigate congestion.
4. Updates to CMP web content, including mapping.
5. Draft CMP-related problem statements, and their status.
6. Update of CMP Supplemental Projects Status Memorandum report.
7. Refined online resource for understanding status of supplemental projects in a Memorandum report.

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$222,250	\$168,750	\$47,250	\$1,250	\$5,000
2022	\$227,250	\$176,576	\$44,424	\$1,250	\$5,000

*PennDOT FTA

PROJECT: 22-34-050 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:

DVPRC's air quality program has three main components:

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

Federal requirements mandate that DVRPC must demonstrate the conformity of the region's Long-Range Transportation Plan (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 Mobility Alternatives Program (MAP). 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.
- 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. Trenton Air Quality Coordination

- A. Working with the DVRPC Healthy Communities Planning program, convene a

stakeholder committee with the City of Trenton, Community Health Organizations, New Jersey 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 City of Trenton 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 the City of Trenton 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, county, and municipal governments, DOTs, and residents of the region.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$244,250	\$185,937	\$52,063	\$1,250	\$5,000
2022	\$249,250	\$194,153	\$48,847	\$1,250	\$5,000

*PennDOT FTA

PROJECT: 22-34-060 Performance-Based Planning and Asset Management

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Brett Fusco

Project Manager: Jackie Davis, John Coscia

Goals:

Performance-based planning 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. 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, the PennDOT Connects initiative is a key mechanism that links asset management to 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. 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. 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.
 - 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, and make investments to achieve the targets.

9. Evaluate proposed projects using the TIP and LRP Project Benefit Criteria as a part of the project selection processes.

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.
4. Application of TIP and LRP Project Benefit Selection Criteria as needed, and update criteria based on Connections 2050.

Beneficiaries:

Member counties, state DOTs, and transit operators.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$327,500	\$158,203	\$44,297	\$25,000	\$100,000
2022	\$307,500	\$145,815	\$36,685	\$25,000	\$100,000

*PennDOT FTA

PROJECT: 22-34-070 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, however 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's 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 produces the population and employment forecast 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 policies' impacts on regional sustainability. 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.
- 2) Manage and oversee the 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 Socioeconomic and Land Use Committee (SLUAC) on model components such as a regional real estate development pipeline, and demographic and employment statistics.
- 4) Develop and publish 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) Evaluate 2020 Census data and consider working with the SLUAC to develop 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.
- 7) Work with Office of Travel Modeling to integrate UrbanSim and TIM travel demand models.
- 8) 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.
- 9) Work with DVRPC staff on studies and products involving UrbanSim modeling, socioeconomic, and other data analysis, as needed.
- 10) Respond to socioeconomic and other data requests from planning partners, media, and public.
- 11) Monitor developments and policy changes at statistical and planning partner agencies; and participate in collaborative efforts of peer agencies and partners.
- 12) 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) Tracking Progress indicator website, including downloadable data such as regional Residential Building Permits and annual Population Estimates from the U.S. Census Bureau.
- 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$220,000	\$159,797	\$40,203	\$20,000	\$0

PROJECT: 22-41-010 Technical Assistance to Member Governments

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: John Ward

Project Manager: Michael Ruane, Renee Wise

Goals:

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

Description:

Ensure intergovernmental coordination, technical evaluation, and regional policy formulation on transportation issues, 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, 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.

Products:

1. Policy papers, memoranda, and brief research reports as required.
2. Meeting agendas, minutes and related materials as required.
3. Data and other research materials related to the investigation of legal issues involving specific transportation improvement proposals or projects.
4. Summary of coordination and outreach activities related to PennDOT Connects as required.
5. Program development for potential PennDOT's asset inventory (if requested)

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$286,104	\$207,188	\$58,035	\$10,881	\$10,000
2022	\$295,946	\$215,421	\$54,200	\$16,325	\$10,000

*PennDOT FTA

PROJECT: 22-41-020 Transportation Improvement Program (TIP)

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Elizabeth Schoonmaker

Project Manager: Kwan Hui, Richard Murphy

Goals:

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

Description:

This project provides for transportation financial planning, 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; evaluate new project proposals using the TIP Benefit 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 FAST ACT and Environmental Justice concerns.
6. Provide opportunities for public comment on the capital program and prepare a summary of public comments and agency responses for Board consideration prior to adoption of the TIP.
7. According to constraints of financial guidance and in consultation with the counties/cities, DOTs, transit operators, and the RTC, develop a draft TIP (in printed and electronic form), prepare an administrative version of the TIP (following Board adoption) with supporting documentation for submission to state DOTs to be included in the STIP for transmittal to the federal agencies, and prepare a final document for general use (in printed and electronic form).
8. Prepare financial summaries for each TIP (Pennsylvania and New Jersey); monitor actual funding of these programs; maintain project data; monitor projects; and provide periodic reports and summaries to DVRPC committees and Board.
9. 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. Develop financial estimates for the transportation element of the Long-Range Plan, when appropriate.
13. Participate in special project solicitations (e.g., CMAQ, HSIP, Local Bridges, Local Concept Development).

- 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$646,250	\$500,000	\$140,000	\$1,250	\$5,000
2022	\$651,250	\$515,345	\$129,655	\$1,250	\$5,000

*PennDOT FTA

PROJECT: 22-41-030 Transportation Operations

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher King

Project Manager: Paul Carafides

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 (22-41-060) 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. As transportation operations activities tend to be short-term oriented, tasks listed under technical assistance are likely to change as new needs arise.

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 Post-Incident debriefings, 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 Project). 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 2022 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, 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. Coordinate with PennDOT District 6-0 Traffic Operations, and assist them with maintaining their Regional Operations Plan (ROP)
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.
7. Perform other activities as requested by NJDOT, PennDOT, operating agencies, or other member governments.

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.
4. Technical assistance to agencies.

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$552,950	\$122,422	\$34,278	\$1,250	\$395,000
2022	\$562,950	\$133,191	\$33,509	\$1,250	\$395,000

*PennDOT FTA; PA TIP - MPMS #114967 - \$208,000 CMAQ/\$52,000 State 581; NJ TIP DB#D02004 \$130,000 STBGP-PHILA; PennDOT FTA- \$5,000

PROJECT: 22-41-050 Competitive Program and Project Management

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: John Coscia

Project Manager: Daniel Snyder, Joseph Banks, Ryan Gallagher

Goals:

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

Description:

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

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

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

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

Tasks:

1. For each program, as appropriate, establish a Steering Committee and develop a process for project application and selection.
2. Develop project application and guidance materials in coordination with the DOTs. Establish evaluation criteria and process. Solicit, screen, and evaluate candidate

projects.

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

Products:

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

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$1,249,500	\$59,500			\$1,190,000
2022	\$1,249,500	\$59,500	\$0	\$0	\$1,190,000

*PA TIP - MPMS #66460 - \$712,000 STU/\$178,000 State 581; MPMS #66461 - \$120,000 CMAQ/\$30,000 State 581; NJ TIP - DB #X30A - \$150,000 STBGP-PHILA

PROJECT: 22-51-010 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-data travel model documentation.

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$447,250	\$344,531	\$96,469	\$1,250	\$5,000
2022	\$457,250	\$360,342	\$90,658	\$1,250	\$5,000

*PennDOT FTA

PROJECT: 22-52-010 Regional Transit Planning Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Betsy Mastaglio

Project Manager: Amy Bernknopf, 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 thinking and analysis more accessible to local partners and the public.

Description:

The Regional Transit Planning Program funds a coordinated program of transit planning projects requested annually by DVRPC's member governments, including evaluations of proposed services or facilities, corridor level transit analysis, evaluations of enhancements to transit access, studies to improve bicycle and pedestrian connectivity with transit, and examinations of the relationship between land use and transit for specific sites or corridors. To the degree appropriate for a given task or project, work will be approached in an integrated way, drawing on staff expertise across DVRPC offices or partner agencies to best meet the needs of the planning partner. Work tasks may range from data/quantitative analysis to concept-level facility and service design and visualization. Some of these activities may also require DVRPC to purchase equipment and/or services to meet program goals. During FY2022, this program area will specifically support project work on the Overbrook Intermodal Center Study (22-63-009) and SEPTA Regional Rail Fare Equity and Restructure Analysis project (22-63-007) as needed.

One element that is central to this program is the development of new data-driven tools to inform investment decisions and local decisionmaking by making technical concepts more accessible to nontechnical audiences. Prior examples of this type of work include: the Network Gap Analysis and other tools created through the Regional Transit 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 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. If a new program round remains a priority for transit agency partners, and as capacity permits, shape the criteria and advertise for a new round of Safe Routes to Transit (SRTT), a DVRPC program providing technical planning assistance to communities wanting to expand bicycle and pedestrian access to public transportation. SRTT planning for selected projects would occur during FY2023.
2. This program area will provide supplemental funding for the Overbrook Intermodal Center Study (22-63-009) as needed. This project will develop concept plans for improvements at Overbrook Station that would increase ridership and enhance connectivity on multiple SEPTA modes
3. This program area will provide supplemental funding for the SEPTA Regional Rail Fare Equity and Restructure Analysis project (22-63-007) as needed. This project will assist SEPTA in taking a fresh look at fare structures and service patterns to evaluate ways for Regional Rail to serve more types of trips and riders, more equitably in the future.
4. Provide technical and coordination support for transit agencies as they endure and recover from the drop in ridership during the Coronavirus global pandemic.
5. Provide technical and in-person staff support for NJ TRANSIT passenger survey work.
6. 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.
7. Provide ongoing DVRPC participation in and project support for City of Philadelphia-SEPTA "Connect"/Transit First efforts, including participation in collaborative committees.
8. Provide Subject Matter Expert (SME) review for potential transit facilities and connections for PennDOT projects through the PennDOT Connects program.
9. 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.
10. Ensure that appropriate technical resources (such as new software) are available for staff use as new best practices develop.
11. 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. Advertisement and selection for the next round of Safe Routes to Transit, as capacity permits and partner prioritization warrants.
2. Support project deliverables for the Overbrook Intermodal Center Study (22-63-009) and SEPTA Regional Rail Fare Equity and Restructure Analysis project (22-63-007) as needed.
3. Member government and planning partner outreach and coordination in identifying, scoping, and conducting new studies in support of partner goals.
4. Coordination with planning partners to provide specific expertise in support of planning efforts, including Alternatives Analyses, and other evaluation or project support.
5. Planning/policy documents, technical reports, white papers, and/or memorandums with findings and recommendations.
6. Data from survey and other data collection efforts in support of agency projects.
7. As-needed meetings and communications with member governments to coordinate transit projects and initiatives throughout the region.

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$276,250		\$250,000	\$21,250	\$5,000
2022	\$391,250	\$0	\$265,000	\$41,250	\$85,000

*PennDOT FTA \$5,000; PennDOT FHWA \$80,000

PROJECT: 22-52-020 Bicycle and Pedestrian Planning Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Betsy Mastaglio

Project Manager: Cassidy Boulan, Sarah Moran

Goals:

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

Description:

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

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

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. 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.

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. Provide ongoing support and collaboration with regional partners to encourage bike share program coordination across municipal and county boundaries, as industry circumstances and program capacity permit.
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. Together with the Office of Travel Monitoring, continue bicycle and pedestrian count work including:
 - Conduct counts at roughly 1/3 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
 - 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.
 - Conduct project counts throughout the region, as needed and as capacity permits.
6. 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.
7. Review bicycle and pedestrian project funding applications as appropriate for programs such as the Transportation Alternatives Program (TAP), Safe routes to School (SRTS), and Pennsylvania's Multimodal Transportation Fund (PA MTF).
8. Provide Subject Matter Expert (SME) review and comment on potential pedestrian and bicycle facilities for PennDOT projects through the PennDOT Connects program.
9. Projects may be jointly funded, and conducted collaboratively, with the Regional Transit Planning Program.

Products:

1. Complete planning/policy documents, technical reports, white papers, and/or memorandums with findings and recommendations, as appropriate.
2. Memorandums of Understanding, Requests for Proposals, and other appropriate outreach templates for soliciting bike share vendor(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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$361,750	\$219,141	\$61,359	\$1,250	\$80,000
2022	\$296,750	\$216,125	\$54,375	\$21,250	\$5,000

*PennDOT FTA

PROJECT: 22-52-030 Mobility Analysis & Design Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Sarah Moran

Project Manager: Aaron Frint, Al Beatty, Camden Palvino, Kelsey McElduff

Goals:

The purpose of this Program is to support DVRPC's Long-Range Plan, Connections 2045, the DOTs' land use and transportation linkage initiatives, and member government planning and implementation activities; explore innovative approaches to help implement the long-range land use and transportation plan; and help communities plan for a sustainable future. This program seeks to 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. The process is designed to better inform regional transportation and land use decision making.

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. This program area will supplement the Delaware County Bicycle Commuting Network Demonstration Project as needed. This project will prepare conceptual plans for a portion of a selected corridor(s) to demonstrate how on-road facilities and off-road trails could be designed and interconnected. This effort would provide experience that could be transferable to other corridor locations so that facilities in the remainder of the corridor and other corridors across the County could be completed.

3. This program area will also supplement the Pottstown Area Regional Plan Development project 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$672,250	\$504,687	\$141,313	\$21,250	\$5,000
2022	\$682,250	\$524,134	\$131,866	\$21,250	\$5,000

*PennDOT FTA

PROJECT: 22-52-040 Regional Transportation Demand Management (TDM) Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Stacy Bartels

Project Manager: Amy Bernknopf

Goals:

This work program supports the implementation of a new regional Transportation Demand Management (TDM) Program, with strategic planning and coordination tasks funded separately under project 22-52-050. This program's purview includes traditional TDM activities with demonstrated single-occupant vehicle (SOV) trip reduction benefit, as well as pilots for new TDM projects and tools to manage demand, as well as help create and cultivate new mobility opportunities for residents and workers. DVRPC will also manage several new TDM-specific efforts, as appropriate, which may involve the cooperation of and coordination with current and other potential partners to implement. This is the second year of a two-year pilot effort.

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 single-occupant vehicle (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.

DVRPC is taking a fresh approach to TDM in the region. 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 and Transportation Control Measures (TCM), such as variable road pricing, trip-reduction plans, and transit benefit ordinance requirements. All of these conditions warrant novel consideration of which TDM or TCM strategies can work most effectively in the greater Philadelphia region.

Although DVRPC has long included TDM as an element in many individual projects and efforts, there has not yet been a formal, coordinated TDM program for the full

DVRPC service region. This new coordinated program of projects and activities will help DVRPC and its planning partners better address growing transportation-related needs and challenges, particularly the need 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.

CMAQ-funded activities carried out through this program are eligible under FHWA's 2013 CMAQ Guidance VII.F.5. Transportation Control Measures; VII.F.8. Travel Demand Management; and VII.F.9. Public Education and Outreach Activities. Additional Innovative Projects, to be determined, may also be eligible for the use of CMAQ funding under section VII.F.16.

Tasks:

1. With planning and administrative tasks funded under project 22-52-050, DVRPC will work with partners as appropriate to solicit and implement one or two additional TDM initiatives in this second year, showing demonstrable air quality benefits in both states. This may include managing vendor/provider contracts.
2. Pursue at least one (but could be more) of the following new pilot projects for trial, evaluation, and growth – as the budget allows. All projects listed below are eligible and consistent with FHWA's 2013 CMAQ Guidance. Possible efforts for this second FY are dependent upon what COVID restrictions might still be in place, and could include (but are not limited to):
 - a. Newly-framed and/or -targeted efforts to educate the public, local elected officials, municipalities and businesses about transportation mode choices, focusing on those programs that reduce congestion and improve air quality;
 - b. A pilot program to address first/last mile transit access issues and solutions;
 - c. A pilot subsidizing non-SOV travel in fringe markets for fixed-route transit, such as shared ride-hailing trips or short-trip vanpools;
 - d. A pilot program funding traffic calming treatments and other elements to create low-stress bike and/or pedestrian routes on neighborhood streets that parallel congested corridors, in order to make bicycling and walking more attractive as commute options;
 - e. A trial program for commute tracking to encourage alternate commutes and track the impact of those who participate.
3. Request and record relevant data to support analysis of each activity's impact on AQ.

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 air quality impact for new initiatives and pilots

Beneficiaries:

DOTs; State, County, and City partners; transit agencies; TMAs; employers; commuters; residents.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$312,500				\$312,500
2022	\$312,500	\$0	\$0	\$0	\$312,500

*PA TIP - MPMS # 114939 - \$200,000 CAQ/State 581- \$50,000; NJ TIP- DB# D02005- \$50,000 CMAQ, \$12,500 DVRPC Local Fund

PROJECT: 22-53-010 Travel Monitoring

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Joshua Rocks

Project Manager: Charles Henry

Goals:

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

Description:

This 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 <http://www.dvrpc.org/traffic>. 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 and member governments to review traffic count locations.
2. Establish weekly schedules, staff assignments, and control procedures.
3. Collect traffic data at approximately 3,000 selected locations.
4. Upload data into the DVRPC Traffic Count system, process counts, edit for quality control, and develop annual average daily traffic volumes.
5. Maintain and further automate traffic data systems and procedures to enhance productivity, including data obtained by third parties via remote sensors, etc.
6. Submit counts collected during the year electronically by specific deadlines established by PennDOT and member governments.
7. Input traffic count data files into the comprehensive regional GIS-T database for sharing over the Internet.
8. Maintain an inventory of data collection and safety equipment, including purchasing new equipment with enhanced technology and capability, purchasing

needed supplies such as road tube, and procuring necessary repairs if existing equipment gets damaged.

9. Collect travel data from non-highway modes, including pedestrian, bicycle and public transportation travel system characteristics and user traits as requested.

10. DVRPC will also coordinate with PennDOT, the counties, and cities on the collection and validation of data on the local transportation asset inventory (as requested).

Products:

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

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$734,500	\$589,500			\$145,000
2022	\$739,500	\$594,500	\$0	\$0	\$145,000

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

CHAPTER 2B

DVRPC Project Descriptions

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS



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PROJECT: 22-31-020 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.

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

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

Tasks:

1. Coordinate regional database development with project participants, including PennDOT and NJDOT.
2. Provide technical assistance to member governments, as requested, to identify and address IT, GIS, and data issues and opportunities.
3. Facilitate meetings with project participants to discuss transportation-related issues and developments as needed.
4. Acquire additional hardware, software, and training, as appropriate.
5. Ensure that geospatial data developed by NJDOT, PennDOT, and member governments are integrated into DVRPC's regional database and can be shared among project participants.
6. Maintain transportation data and make that data available through DVRPC's GIS Portal to project participants and the public.
7. Develop and maintain web mapping applications in support of DVRPC's outreach goals.
8. Provide technical assistance to Energy and Climate Change Initiatives (Project 21-33-030).

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$400,000				\$400,000
2022	\$400,000	\$0	\$0	\$0	\$400,000

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

PROJECT: 22-33-050 Local Technical Assistance Program (LTAP)

Responsible Agency: Delaware Valley Regional Planning Commission

Project Manager: 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 offers 39 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 held 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$30,000				\$30,000
2022	\$30,000	\$0	\$0	\$0	\$30,000

*PA FHWA - PL/SPR/Toll Credit

Responsible Agency: Delaware Valley Regional Planning Commission**Program Coordinator:** Christopher Linn**Project Manager:** 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.

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. If appointed, serve on the Pennsylvania Trails Advisory Committee.

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

18. 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. Maintained web map of Circuit Trails and their status.
- 2. Maintained 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$157,000	\$0	\$0	\$0	\$157,000

*William Penn Foundation

Responsible Agency: Delaware Valley Regional Planning Commission**Program Coordinator:** Christopher Linn**Project Manager:** Amy Verbofsky**Goals:**

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

Description:

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

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

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

Tasks:

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

Products:

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

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$50,000				\$50,000
2022	\$50,000	\$0	\$0	\$0	\$50,000

*PA DEP

PROJECT: 22-33-080 Healthy Communities Planning

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Amy Verbofsky

Project Manager: Karin Morris, Patricia Elkis

Goals:

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

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

Description:

The Centers for Disease Control and Prevention defines Healthy Places as "those designed and built to improve the quality of life for all people who live, work, worship, learn, and play within their borders — where every person is free to make choices amid a variety of healthy, available, accessible, and affordable options." Healthy communities planning encompasses a broad range of built environment issues that have the ability to impact an individual's well-being, including land use, active transportation, air quality, safety, complete streets, food systems, and open space. Healthy communities planning strives to integrate design, programmatic, and policy strategies to improve public health outcomes and increase livability within our region. NJDOT's Complete Streets Policy is an example policy that can be implemented to improve public health outcomes. Additionally, healthy community planning supports important environmental justice/ladders of opportunity work. DVRPC has undertaken healthy community planning to support greater community wellbeing, improve health outcomes, and increase livability across our region.

This year DVRPC will a) continue to convene the Healthy Communities Task Force; b) work with DVRPC's Air Quality Program, the City of Trenton, and local stakeholders to identify transportation sources of air pollution and develop potential

mitigation efforts to improve health outcomes; c) continue to work with Pemberton Township staff, community stakeholders, healthcare partners, and residents to finalize a healthy community plan for Browns Mills; d) provide coordination and technical assistance to stakeholders and municipal/county constituents; and e) represent DVRPC on local healthy communities-related working groups.

City of Trenton Air Quality and Public Health Proposal:

Respiratory illness as a result of air pollution is a serious concern for the City of Trenton. The City's Natural Resources Inventory lists diesel particulate matter, formaldehyde, carbon tetrachloride, and benzene as air toxins that are posing the greatest hazards for Mercer County residents. The County is a designated nonattainment area for ground level ozone, exposure to which is known to be associated with serious chronic diseases. The County was also a nonattainment area for particulate matter 2.5 until 2013. The draft Health and Wellness Plan for Trenton lists asthma and other respiratory illnesses as issues requiring further study in order to identify strategies to combat them. To that end, DVRPC staff will assist the City of Trenton to identify transportation sources of air pollution that may be impacting the respiratory health of Trenton residents and develop potential mitigation efforts to reduce the health impacts of these sources on Trenton residents.

Background on Browns Mills Healthy Communities Planning Effort:

In FY21, DVRPC began its healthy community planning efforts with Browns Mills, including hosting meetings with Township staff and key community stakeholders, conducting an existing conditions analysis, and drafting much of the plan. In Year Two of the project, DVRPC will work with stakeholders to finalize and publish the plan. The plan will prioritize strategies that the Township and partners can take to support greater well-being for Browns Mills residents and, where possible, identify funding sources and next steps.

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 City of Trenton Air Quality and Public Health Project:

1. Convene a stakeholder committee with the City of Trenton, Community Health Organizations, New Jersey 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 City of Trenton 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.

Tasks for the Browns Mills Healthy Community Plan:

1. Continue to convene the study advisory committee to guide the work.
2. Work with stakeholders to prioritize strategies and actions.
3. Finalize and publish Browns Mills Healthy Community Plan.

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 the City of Trenton identifying areas with high rates of respiratory disease and likely sources of transportation emissions, such as high congestion areas and goods movement centers. Report will include potential mitigation strategies and identify potential sources of funding for those efforts.
6. Browns Mills Healthy Communities Plan - materials related to community engagement, existing conditions, and draft of plan.

Beneficiaries:

State DOTs, FHWA, member governments and citizens, health care and public health community, City of Trenton, Mercer County, Browns Mills, Pemberton Township, Burlington County, and local residents and businesses.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$95,000	\$74,219	\$20,781		
2022	\$125,000	\$79,898	\$20,102	\$5,000	\$20,000

*PennDOT FHWA

PROJECT: 22-33-090 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, smart growth, and livability planning initiatives. Additionally, assist local governments by providing planning services on a contractual basis, particularly where matching grant or local funding support exists.

Description:

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

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

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

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

Tasks:

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

Products:

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

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$150,000			\$26,255	\$123,745
2022	\$150,000	\$0	\$0	\$40,000	\$110,000

*PA/NJ Local Governments

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

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

Description:

DVRPC will continue to work with municipalities in the Delaware Estuary Coastal Zone (DECZ) to build capacity in assessing climate vulnerability and planning for climate adaptation and resiliency. To date, DVRPC has engaged municipal stakeholders in the DECZ to better understand their specific concerns and provide technical assistance. DVRPC developed the Coastal Effects of Climate Change in Southeastern PA story map, which details projected sea level rise impacts to DECZ communities and potential benefits of joining FEMA's Community Rating System (CRS) program.

In FY22, DVRPC seeks to enhance the Coastal Effects of Climate Change in Southeastern PA story map by assessing and depicting the climate vulnerability of communities in the DECZ. We will do this by researching and visualizing data on environmental exposures, population sensitivity, and adaptive capacity. We will conduct a literature review to determine the appropriate indicators for each of the categories and use established, publicly available indices (ie. DVRPC's Equity Analysis for the Greater Philadelphia region and CDC's Social Vulnerability Index) where available. We will create maps, charts, and other graphics to visualize the different indicators across the region. We may create a weighted, composite climate vulnerability score that can be compared across the region. This resource will be different from other publicly available resources in that it will attempt to quantify communities' adaptive capacity alongside their climate change risk and social vulnerability.

This program will help local governments understand why climate change matters to their community, identify which communities may be the most vulnerable to climate change, and help to prioritize strategies to increase resilience.

Tasks:

1. Research and visualize data on the environmental exposures, population sensitivity, and adaptive capacity of DECZ communities;
2. Conduct a literature review to determine indicators for each of the categories, using established, publicly available indices where available. Possible indicators may include:
 - Environmental Exposure: sea level rise, air quality (PM2.5), air quality (ozone),

extreme heat days;

-Population Sensitivity: older adults, youth, low-income, disabled, limited English proficiency, unemployment, racial minority; and

-Adaptive Capacity: access to transportation, pervious surfaces, tree canopy, access to green space, flood insurance.

3. Create maps, charts, and other graphics to visualize the different indicators across the region;

4. Create a weighted, composite climate vulnerability score that can be compared across the region.

5. Submit documentation and data to PA CRM.

Products:

1. Web-based tool or extension of existing story map that displays data on the environmental exposures, population sensitivity, and adaptive capacity of DECZ communities.

2. Outreach materials to promote the final product.

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$50,000	\$0	\$0	\$0	\$50,000

*PA DEP

PROJECT: 22-33-160 Local Government Implementation Strategies

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Karin Morris

Project Manager: 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 and conservation measures at municipal facilities. 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.

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).

Products:

1. At least three workshop webinars.
2. RFPs for products and services.
3. Program deliverables such as audit reports

Beneficiaries:

Counties of Bucks, Chester, Delaware and Montgomery, and all municipalities within those counties.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$85,000	\$0	\$0	\$0	\$85,000

*DVRPC's local initiatives revenue

PROJECT: 22-33-170 TOD Next Steps/Station Screening

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Andrew Svekla

Project Manager: Amy Bernknopf, Karin Morris

Goals:

Assess the transit-oriented development (TOD) potential of SEPTA-owned land at and near SEPTA stations.

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

Description:

In recent years, transit agencies have come to view agency support for TOD as a promising strategy to address declining ridership levels and the prospect of decreasing public funding. DVRPC recently conducted research and analysis to evaluate strategies that SEPTA can employ to enhance its support for TOD in Greater Philadelphia. One of the key topics addressed in SEPTA TOD Policy Research (DVRPC Publication #18031) is the opportunity for SEPTA to partner on and/or sponsor TOD projects on agency-owned land.

Joint development is the term for the process through which a transit agency partners with the private sector to develop agency-owned land. Joint development provides SEPTA with the opportunity to lead the development process in select situations where its TOD objectives align with market, political, and financial realities.

Not all transit stations will have joint development opportunities, and not all opportunities will be economically feasible at a given point in time. Accordingly, one of the first steps SEPTA must take in establishing a joint development program is assessing the TOD potential of agency-owned properties. The goal of these assessments is to create a data-driven approach to managing SEPTA's real estate holdings.

The process of screening properties will be multifaceted because the appropriateness of sites for joint development is dependent on several factors, including market conditions, community input, local regulations, and SEPTA

resources and objectives. These factors will ultimately provide the basis for establishing priority sites, project implementation strategies, and the creation of any site-specific development guidelines.

The first step in the evaluation should be designed to evaluate the potential outcomes and trade-offs between preserving SEPTA properties exclusively for current and future railroad needs and allowing potential commercial leases and joint development projects on the property. In some cases, these evaluations will be simple and straightforward. No development project should interfere with SEPTA's ability to safely operate and maintain transportation facilities on its properties. As such, many SEPTA properties can immediately be ruled out because they host transit facilities or equipment or are otherwise essential to transit operations.

However, in other cases, the tradeoffs between transit needs and longer-term development opportunities will be less clear. In these cases, this study will seek to develop screening criteria to help staff assess the potential local impacts of development on service operations, station access, and maintenance needs. Key considerations include:

- Would the development of a site allow sufficient right-of-way to meet SEPTA's operational needs?
- Would development impede connecting buses and shuttles or negatively impact local pedestrian and bicycle routes to the station?
- How would a potential development affect the visibility of a station or the visual cues that help customers find the station?
- How would the development of a site impact the supply of commuter parking and, in turn, ridership levels at a station?

In addition to these important operational considerations, the success of any individual TOD proposal is influenced by a variety of practical, economic, and regulatory factors. DVRPC's 2017 Building on our Strengths study provides a tiered assessment of the TOD potential of transit stations areas throughout Greater Philadelphia. Like similar studies that have been conducted for other regions, this effort evaluated station areas based on their "transit orientation" and "market potential." Transit orientation refers to a variety of physical, demographic, and transit characteristics that correlate with TOD. Market potential refers to a blend of the real estate market conditions and political context that are suggestive of development opportunities. Ultimately, these types of assessments can help SEPTA evaluate the ability of any proposed project to generate transit ridership, fare revenue, lease payments, parking revenues, and/or cost savings.

Based on the extensive size of SEPTA's network and the complexity of land ownership issues at some stations, this evaluation of TOD potential may be conducted over the course of two fiscal years.

Tasks:

1. Revise and update transit orientation and market potential TOD station area criteria established in 2017 DVRPC study Building on our Strengths.
2. Collaborate with SEPTA staff to develop operational criteria that can be used to evaluate the development potential of specific SEPTA-owned parcels. Operational factors to consider may include:
 - a. Parcel size and shape
 - b. Existing easements and land agreements
 - c. Maintenance and access needs
 - d. Connecting transit opportunities, and
 - e. Existing and future parking demand.
3. Work with relevant SEPTA staff to develop priority list of SEPTA stations to include in analysis.
4. Apply screening criteria to SEPTA-owned properties
5. Organize the results of TOD screening to highlight those properties with the greatest potential for development.

Products:

1. Final report summarizing project background, methodology, and results.
2. Digital spreadsheet containing data and analysis used in TOD screening.

Beneficiaries:

SEPTA, Bucks County, Montgomery County, Chester County, Delaware County, Southeastern Pennsylvania municipalities that host SEPTA transit stations

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$100,000	\$0	\$0	\$0	\$100,000

*PennDOT Connects

PROJECT: 22-33-180 Regional Electric Vehicle Planning Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Robert Graff

Project Manager: Adam Beam

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
- developing and disseminating 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.
- developing and disseminating information on regional energy use, energy costs, and GHG emissions. 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—albeit still at a low level—in the use of electricity in transportation. This includes private passenger vehicles, public transit buses, and delivery vehicles. This transition to electrification of the transportation sector presents a wide range of planning challenges. 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, through the Office of Energy and Climate Change Initiative's (OECCI) megaproject, DVRPC has worked with the Plug-in Hybrid & Electric Vehicle Research Center at University of California, Davis, 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. OECCI has also developed a web-based resource on EVs for municipalities, and has served 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. 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.
3. Provide advice and technical assistance as requested from counties and municipalities in the region.
4. 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.
5. 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.

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. Up to date 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 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. Active participation 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.
7. Coordination as needed with NJTPA to assure that messaging in NJ counties is consistent.
8. Active participation in meetings and activities related to the "Multi-State Medium- and Heavy-Duty Zero-Emission Vehicle Memorandum of Understanding."
9. Organize, moderate, and provide notes for monthly Interagency Battery Electric Bus Dialogue calls.

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$150,000	\$0	\$0	\$0	\$150,000

*PA TIP - MPMS #115939 - \$75,000, NJ TIP- DB# X30A- \$75,000

PROJECT: 22-34-080 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 Chester County (MQS), Pennridge (CKZ), Summit (EVY), and Wings Field (LOM) 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 DelDOT, 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$115,000				\$115,000
2022	\$120,000	\$0	\$0	\$0	\$120,000

*FAA-\$108,000; Local \$7,500; PA Aviation \$4,500

PROJECT: 22-34-090 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 bringing together a wide range of public, non-profit, and private organizations to facilitate a regional, cooperative approach to solving transportation problems. The Forum has held well-attended meetings for over 20 years. It meets to address concerns of municipalities in Mercer, Middlesex, and Somerset counties focused on the US 1, US 130, and US 206 corridors. The geography is from Trenton to New Brunswick, and Robbinsville to Hillsborough, and includes 24 municipalities in the three counties.

The Forum has a formal voting structure to speak as a strong and effective regional voice for central New Jersey. Membership elects its own chair from among its municipal and county voting members, is guided by a Steering Committee, and 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) pages, and through monthly email digests containing timely news, legislation, events, resources, and funding opportunities..
4. Continue to 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$125,000				\$125,000
2022	\$125,000	\$0	\$0	\$0	\$125,000

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

PROJECT: 22-34-100 PA Air Quality Action Supplemental Services

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Sean Greene

Goals:

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

Description:

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

Advertisements will educate the public about ozone and PM 2.5 pollution and encourage actions to reduce activities that contribute to air pollution, especially on days that are forecast 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$125,000				\$125,000
2022	\$125,000	\$0	\$0	\$0	\$125,000

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

PROJECT: 22-34-110 NJ Air Quality Action Supplemental Services

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Sean Greene

Goals:

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

Description:

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

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

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$50,000				\$50,000
2022	\$50,000	\$0	\$0	\$0	\$50,000

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

PROJECT: 22-41-060 Transportation Systems Management and Operations (TSMO)

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher King

Project Manager: Paul Carafides

Goals:

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

Description:

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 (22-41-030) and the Transportation Systems Management and Operations Project highlight key activities undertaken by these programs. The Transportation Systems Management and Operations (TSMO) Program 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 useable data for RIMIS users, but was a critical project for the

Philadelphia Traffic Management Center. DVRPC has continued to roll out RIMIS to regional transportation agencies, county 911/emergency management centers, local police and fire departments in major corridors, and counties' engineering/public works departments in New Jersey as requested. Assistance in using RIMIS in local municipalities for Integrated Corridor Management purposes is offered, especially with respect to the I-76 Integrated Corridor Management (ICM) Project in Pennsylvania.

In FY 2022, 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 FY21 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$554,000				\$554,000
2022	\$554,000	\$0	\$0	\$0	\$554,000

* PA TIP - MPMS #72738 - \$310,400 STU/\$77,600 State 581; NJ TIP - DB #01300 - \$166,000 STBGP-PHILA

PROJECT: 22-41-070 I-95 Planning Assistance

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Elizabeth Schoonmaker

Project Manager: Jesse Buerk

Goals:

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

Description:

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

Tasks:

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

to the I-95 reconstruction projects.

10. Assist with coordination of historical preservation efforts related to the I-95 reconstruction projects.
11. Coordinate with freight industry representatives on construction activities, detour routes, long range planning, and general coordination.
12. Provide mapping and Geographic Information Systems (GIS) support as requested.
13. Provide support in coordinating and developing legal agreements, as needed.
14. Assist with identifying and cataloging transportation infrastructure projects within the corridor.

Products:

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

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$100,000				\$100,000
2022	\$100,000	\$0	\$0	\$0	\$100,000

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

PROJECT: 22-51-020 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 and freight, protect the environment, enhance connectivity between modes, and promote the efficient management and operation of the existing transportation system by updating DVRPC's travel simulation models to state-of-the-art standards and updating the data used in the model.

Description:

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

A significant model enhancement effort was the development of an activity-based (AB) model. AB models treat travel demand as derived from the individuals' need to participate in various spatially dispersed activities. AB models are more behaviorally based and suitable for modeling a wide variety of transportation policy and planning options than the conventional trip-based models. In FY 2021, the AB model (TIM3.1) was further calibrated and validated at a more comprehensive level, including these long-time choice model components, park-and-ride model, other behavioral aspects of the AB model, based on travel survey and other public or private data sources. Sensitivity tests were also performed to ensure that the TIM 3.1 model responds to changes in socio-economics, transportation system operation and cost, intuitively and consistent with historical data and findings in literature.

Improving the efficiency and productivity with the TIM 3.1 model, which requires a longer run time and a much greater data preparation effort than the trip based model, will continue in FY 2022. The tasks include developing tools for preparing Census data for population synthesizer and base-year microzones (MAZ), tools for updating the study-area skims/accessibility measures and smartly synchronizing with existing network data elsewhere, Python scripts for summarizing DaySim

outputs, and tools for visualizing the AB model results, in terms of daily activity and tour patterns and assignment analysis. In FY 2022, model integration will also continue between TIM 3.1 (personal travel model), other auxiliary travel models (tour-based truck model, and updated external-internal model), and other software tools and processes used by DVRPC, including EPA's MOVES air quality model, FTA's user benefits model (STOPS), VISSIM microsimulation, and DVRPC's ongoing land use model development. In FY 2022, TIM3.1 will be tested and compared with TIM2.4 on real-world applications, in addition to various sensitivity tests conducted in FY 2021 and 2022.

In addition to the AB model, the trip-based TIM 2.x model has been continuously updated and improved, as it is still the production model at DVRPC and offers a faster run time. In FY 2021, the TIM 2.x model included fundamental changes on the model's trip distribution, balance, value of time assumptions, non-motorized model, trip-based truck model and park-and-ride model. Additional model calibration was conducted after these major changes and available newer travel statistics. The model validation for a 2015 base year used commercial data, such as INRIX trip data recently purchased at DVRPC.

In FY 2022, DVRPC will update and re-validate its trip-based model for a 2019 (pre-COVID) base year. Tolls, fares, parking charges and auto operating costs will be updated from 2015 to 2019 values. New zonal data from the 2019 ACS, 2020 Census, and a newer version of DVRPC's employment database (NETS). Highway and transit networks will be updated, based on new OSM and GTFS data. Validation targets include VMT by county, functional class, and time-of-day, transit ridership by operator, line, station, and time-of-day, screenline crossings for highway and transit, highway link volumes and travel speeds by time of day, and truck VMT by county. A re-validation of the TIM2x model for a 2019 base year will be initiated in FY 2022, and completed in FY 2023. The new 2019 zonal and network data will also be migrated from TIM2x to TIM3x.

DVRPC will also monitor COVID-related travel and behavior changes and collect data as needed. Updates will be made to its travel models 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 forthcoming 2050 Long Range Plan will be incorporated into VISUM's Scenario Manager for use in both the trip- and activity-based models. New Synthetic Populations for 2019, 2020, 2025, 2030, 2035, 2040, 2045, and 2050 will be developed for the AB model. A Conformity Determination will be made for the 2050 LRP. DVRPC's PostProcessor for Air Quality will be updated to work with both the trip- and activity-based models and EPA's new MOVES3.0 model.

In FY 2021, DVRPC completed the development of a tour-based truck model. The tour-based truck model is similar to the AB model, representing the freight and

commercial truck movements through a daily scheduling approach including truck stops along the delivery and service tours. In FY 2022, the tour-based truck model will be validated with truck counts and estimated truck VMT and will be fully integrated with both trip-based and activity-based models. Sensitivity test of the tour-based truck model will also be conducted in FY 2022. Visualization tools for truck tours and trips will be developed in a similar way as for visualizing household activity and travel tours for the ABM. That allows the visualization of not only simulated model results but also acquired INRIX data.

Along all these model updates, it has been a long request to have an easier way for planning partners to access and visualize the model data (inputs, outputs, and validation data) outside the VIUSM platform. A beta version of web tool--TIM viewer was implemented and received feedback previously. An updated and fully functional web viewer of the model data will be developed in FY 2022.

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. Integrate AB Model with MOVES.
2. Integrate AB Model with STOPS.
3. Integrate AB Model with tour-based truck model
4. Enhance data management tools for AB Model.
5. Update VISUM network from 2015 to 2019.
6. Update fares, tolls, parking charges, and auto operating costs to 2019.
7. Update base year zonal data from 2015 to 2019.
8. Collect highway and transit validation data.
9. Validate trip-based model for 2019 and migrate the model data to AB model.
10. Update model documentation and validation report for trip-based model.
11. Update model documentation and validation report for AB model.
12. Monitor COVID-related travel changes; collect data as needed.
13. Update trip-based and AB Models to reflect long-term changes.
14. Prepare VISUM Scenario Manager for 2050 Long Range Plan.
15. Code 2050 LRP highway and transit projects into Scenario Manger.
16. Update zonal demographic and employment forecasts based on 2050 LRP.
17. Prepare synthetic population, and employment forecasts, for 2019, 2020, 2025, 2030, 2035, 2040, 2045 and 2050.
18. Update PostProcessor for MOVES3.0
19. Conduct sensitivity test with tour-based truck model.
20. Update TIM viewer.
21. Conduct sensitivity test of tour-based truck model.
22. Develop visualization tool for the tour-based truck model and data.

Products:

1. Validated trip-based model for 2019 base year
2. Updated ABM model with 2019 base year.
3. Updated model documentation and validation report.
4. Validated and sensitivity tested tour-based truck model, integrated with TIM 2.x and 3.x
5. Visualization tools for trip and tour based models and data.
6. Tie-ins with MOVES, User Benefits, and Land Use model
7. VISUM Scenario Manger for 2050 Long Range Plan.

Beneficiaries:

State DOTs, transit operators, member governments.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$640,000				\$640,000
2022	\$640,000	\$0	\$0	\$0	\$640,000

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

PROJECT: 22-51-040 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.

Products:

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

Beneficiaries:

PennDOT

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$460,000				\$460,000
2022	\$460,000	\$0	\$0	\$0	\$460,000

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

PROJECT: 22-51-050 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 *
2022	\$103,700	\$0	\$0	\$0	\$103,700

* PA TIP - MPMS #115913 - \$103,700 STU/Toll Credit

PROJECT: 22-51-060 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$150,000	\$0	\$0	\$0	\$150,000

* PA TIP - MPMS #115985 - \$150,000 STP-IM/Toll Credit

PROJECT: 22-52-050 Regional TDM Program Planning & Administration

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Stacy Bartels

Project Manager: Amy Bernknopf

Goals:

This project allocates local funds to support DVRPC strategic planning and priority-setting work for the Regional Transportation Demand Management (TDM) Program (22-52-040), which will fund implementation of pilot TDM projects using Pennsylvania and New Jersey Congestion Mitigation and Air Quality (CMAQ) funds. The larger program also provides a platform and guidance for incorporating TDM more frequently into DVRPC and partner plans and projects, and encourages cooperation among partners on these efforts—contributing to more efficient use of our region’s multimodal transportation infrastructure for improved regional air quality overall.

Description:

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 may include development and oversight of competitive or RFI and project submission process(es), and establishing tracking procedures for measuring the Air Quality impact of the program's projects and tasks.

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.

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 pilot programs and reporting.
3. Based on the outcomes of the pilot programs and relevant TDM news nationally, further develop and prioritize strategies and pilot programs for testing in the DVRPC region, as well as ways to measure performance (data needed to support AQ analysis). 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.

5. Review and revise, if necessary, the 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. A “living” strategic plan for regional TDM activities, that can be updated as needed and required.
- 3. Managing possible RFI/Application development, releases, and evaluation.
- 4. Managing and updating the program’s microsite 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$50,000				\$50,000
2022	\$320,000	\$0	\$0	\$40,500	\$279,500

*DVRPC local -\$117,500; PennDOT FHWA- \$56,000; PennDOT FTA \$106,000

PROJECT: 22-52-060 Pottstown Area Regional Plan Development

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Sarah Moran

Project Manager: Kelsey McElduff

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.

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.

Pending approval by the PMRPC, this year's project will focus on a 4+ mile segment of PA 663 with the goal of recommending improvements that will optimize traffic flow and multimodal mobility while accommodating new and proposed developments.

Tasks:

1. Finalize project selection with PMRPC.
2. Work with MCPC and PMRPC to develop a Steering Committee.
3. Collect existing conditions data relevant to the study to identify issues.
4. Prepare any necessary microsimulation models and evaluate the impact of proposed recommendations.
5. Present interim and final results to steering committee through memos and meetings.

Products:

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

Beneficiaries:

Montgomery County; Pottstown Metropolitan Regional Planning Committee; and local residents and businesses.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$60,000	\$46,875	\$13,125		
2022	\$65,000	\$51,934	\$13,066	\$0	\$0

PROJECT: 22-52-070

PennDOT Connects Bike-Friendly Resurfacing Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Gregory Krykewycz

Project Manager: Al Beatty, Jesse Buerk, Sarah Moran, 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. Due to the success of these programs in past years and the somewhat larger design program allocated in the most recent TIP update (MPMS #63406), capacity for additional analysis will be added for FY2022.

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.

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 3-5 locations) 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.
- 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.
- 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 creating a more user-friendly web interface.

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. Consensus suburban projects with demonstrated benefit and local support for use in preparing 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$200,000				\$200,000
2022	\$250,000	\$0	\$0	\$0	\$250,000

*PennDOT Connects

**PROJECT: 22-52-090 Commuter Services/Mobility Alternatives Program
(Share-a-Ride)**

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Stacy Bartels

Goals:

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

Description:

The Mobility Alternatives Program (MAP) is an education effort directed to employers located in southeastern Pennsylvania. DVRPC partners with local transportation management associations (TMAs) and other organizations as contractors who perform this outreach to businesses in their specific service areas, informing employers of the benefits - to their employees and to the company - of encouraging and supporting various alternative commutes; employers are educated on the menu of Transportation Demand Management (TDM) options to consider and/or implement. Services are free to interested employers within the 5-county SE PA region. This program was initiated to fill the gap when the federal Employer Trip Reduction Program (ETRP) was rescinded in 1995. As this program is largely educational-focused, behavior change and participation levels are challenging to evaluate; contractors are required to report effort, both qualitative and quantitative, while also maintaining data on activities and mode change outcomes.

Two components of MAP can be utilized by employers but are also available directly to commuters who work in SE PA:

- 1) Share-A-Ride (SAR) is an internet-based ride-match service that includes transit, car and van pool, and even bicycling matches.
- 2) the Emergency Ride Home (ERH) program serves as a "safety net" for those commuters who commit to an alternate commute at least three days a week; ERH can help eliminate one of the main concerns of commuters who currently do not use transit or pooling as a way to work by offering a ride in case of a personal emergency. (Details for all programs related to MAP are on the DVRPC website.)

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

DVRPC works with the TMAs, PennDOT and the PA TMA Policy Committee (PC) in developing specific MAP-related and TMA Assistance grant work programs each fiscal year, along with reviewing progress reports and reporting measurements. FY2022 administration will also include collaboration with PennDOT, FHWA, the PA

TMA Policy Committee, and the Regional TDM Advisory Committee to recommend, develop and implement a new direction for TDM activities in both the NJ and PA parts of the DVRPC region for FY23 and beyond. Some of these activities may also require DVRPC to purchase equipment and/or services to meet program goals.

Tasks:

1. Review monthly contractor progress reports and data input on TMA/Contractor outreach and education activities. (Note: PennDOT Central Office and each corresponding County Planning Commission/Department (CPC) receives, reviews and approves monthly invoices; contracts are directly with PennDOT).
2. Ensure county planning partners are involved in project and work development and in setting common measurable goals through the PA TMA Policy Committee.
3. Meet three times a year with contractors and Policy Committee (at least one joint meeting during the FY).
4. Ensure MAP contractors are reporting activities via narratives attached to invoices (monthly or quarterly) and quarterly quantitative data reports in a timely fashion. Compile and summarize quarterly reports on progress, per their submissions, for Policy Committee review.
5. Develop a marketing strategy brief and annual budget; produce outreach and marketing materials for all contractors to use, as necessary.
6. Develop regional media strategies and schedule, as appropriate and as budget allows.
7. Maintain websites and databases for use by TMAs and the public.
8. Maintain contract and licenses with a software company for SAR; provide periodic training for contractors.
9. Use the database of SAR applicants to report on increases in participation, estimate any mode changes, and communicate with applicants, as needed.
10. Review and reimburse as applicable any submissions for use of the ERH program by registered participants.
11. Coordinate promotional, outreach and implementation efforts between MAP contractors and Commute with Enterprise (formerly Enterprise Rideshare), establish new vanpools in this region as health regulations allow, and monitor progress on this effort. Continue to offer and manage the gas card incentive program for new carpools.
12. Participate in any national or statewide TDM efforts and training (ex. Association for Commuter Transportation (ACT) and MPO TDM Roundtable), as appropriate and allowable; continue to participate on the PPTA Rideshare Committee.
13. Assist with air quality efforts as requested.

Products:

1. Annual marketing brief and budget.
2. Media plan.
3. Marketing and informational materials, as needed.
4. Databases for SAR and ERH. Communication with applicants, as needed. Analysis of impact of media placements on website traffic and SAR applications.
5. Training on ride-match software and other TDM options, as needed.

6. Periodic aggregate progress reports for the Policy Committee.

Beneficiaries:

Employers with worksites in, and commuters who work in, southeastern Pennsylvania, TMAs, Pennsylvania member governments, and PennDOT.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$251,000				\$251,000
2022	\$251,000	\$0	\$0	\$0	\$251,000

*PA TIP - MPMS #110460 - \$201,000 CAQ/ \$34,000 State 581/ \$16,000
DVRPC Local Fund

PROJECT: 22-52-110 ExPo: Experimental Pop-ups Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Betsy Mastaglio

Project Manager: 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. In other cases, DVRPC may 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. 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). At least one pilot will occur in both PA and NJ.
2. For each selected community partnership: determine project goals and objectives, identify a stakeholder group of project partners prepare planning-level conceptual designs, facilitate, availability of materials, pilot staging, insurance, and permit requirements, create promotional and educational materials, identify performance measures which may include intercept surveys, on-line polling, vehicle, pedestrian or bicyclist counts, or speed measurements, advise during project temporary installation, create pilot summary documenting design, schedule and cost, materials, photos and performance measure outcomes.
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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$200,000				\$200,000
2022	\$200,000	\$0	\$0	\$0	\$200,000

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

PROJECT: 22-52-120 Racial Minority Mobility Choices Study

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Gregory Krykewycz

Project Manager: Alison Hastings, Jesse Buerk, Matthew Gates, Thomas Stead

Goals:

Examine transportation mode choice amongst racial minorities in the region or in targeted sub-areas using surveys and interviews to better understand why people from those groups choose the modes that they do and which other modes they would prefer to use, if they are different.

Description:

This project seeks to better understand how racial minority populations travel in the DVRPC region, and what physical, social, or structural forces shape those mobility choices. Groups that are covered by Title VI or EJ (which include racial minorities) often have fewer transportation options due to low incomes, inaccessible or unsafe infrastructure, lack of transit service, or poor transit frequency. Bolstering mobility options for these groups has the potential to positively impact their social mobility and quality of life. To better understand and serve these communities, DVRPC wants to collect additional data about their mobility needs and preferences.

To do this, DVRPC will begin by reviewing and synthesizing findings from prior regional surveys that shed some light on this question; identifying and evaluating existing regional datasets, researching other local and national best practice examples for surveys of this type, and discussing approaches with academic partners and/or a vendor with expertise in sampling and interviewing. The project will then conduct a regional survey (method TBD based on initial research; anticipated to require support from one or more surveying vendors), that gathers general information about decision factors and values affecting mode choices from a regionally representative cross section of individuals. This will be followed up with more detailed interviews with individuals that answered the survey and identify as a racial minority. The survey and interviews will seek to answer questions like the following:

- Why do individuals use the modes of travel that they do?
- Which modes of travel would they use if they had access to them or the appropriate infrastructure to use them safely?
- Why does the mode or modes of travel they use feel like the best or safest option for them?
- Why do other modes not feel like the best or safest option to them?
- Do individuals travel less frequently because of infrastructure, service or safety needs?

Participants will be paid for their participation and translation will be provided as needed. Data will be transcribed, tabulated, and analyzed to identify trends and

potential recommendations. Staff will develop a written deliverable discussing the methodology and findings of the outreach, make recommendations for how these findings can be applied to DVRPC’s planning and programming, and create shareable datasets and/or web deliverables as appropriate to the nature of the findings. Some of these activities may require DVRPC to purchase equipment and/or services to meet project goals.

Tasks:

- 1) Conduct a peer practice assessment to identify similar studies, and discuss project approach with academics or experts from other partner agencies.
- 2) Gather and synthesize findings from prior regional surveys that shed light on this topic.
- 3) Review and analyze available datasets, including use of the travel model as appropriate to calculate accessibility measures by mode from the illustrative neighborhoods to employment and/or other land uses.
- 4) Issue a request for proposals to secure a vendor with experience in sampling and interviewing.
- 5) Work with the vendor to develop and implement a phone or mail survey about transportation preferences that reflects the geographic, economic, and racial diversity of the region.
- 6) Conduct in depth interviews with the respondents of the survey that identify as a racial minority to identify the physical, policy, and social context behind their mode choices.
- 7) Analyze data, write up findings, and develop sharable datasets and/ or web deliverables as appropriate.

Products:

Share findings through a report, white paper, and/or web deliverable.

Beneficiaries:

Counties, Municipalities, transit agencies, DOTs, Service Agencies, pedestrians, bicyclists, transit riders, and communities of color.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$225,000	\$0	\$0	\$0	\$225,000

*PA TIP - MPMS #115960 - \$150,000 STU/Toll Credit, NJ TIP- DB# X30A-\$75,000 STBGP-Trenton

Responsible Agency: Delaware Valley Regional Planning Commission**Program Coordinator:** Gregory Krykewycz**Project Manager:** Logan Axelson**Goals:**

Develop and conduct a pilot screening and technical assistance round 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 local sidewalk projects into 'design and shovel ready' candidates for typical competitive grant programs (Transportation Alternatives Set Aside Program, Multimodal Transportation Fund, Safe Routes to School, others).

Description:

Over the last several years, DVRPC completed version 1.0 of our regional sidewalk inventory, and we are presently conducting a regional network analysis of that data to map, evaluate, and prioritize sidewalk gaps. 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.

At the same time, and in collaboration with Southeastern PA planning partners, staff developed and have overseen the PennDOT Connects Bike-Friendly Resurfacing Program, which screens roadways on PennDOT's maintenance plan to identify segments with regional bicycle network connectivity benefit, county and municipal motivation, and technical feasibility for a facility to be installed within a resurfacing scope, as a pipeline for design and then construction (through PennDOT paving projects) of high priority improvements.

This project will develop and conduct a pilot screening and technical assistance round for sidewalk projects, with a similar program structure. DVRPC will solicit local sidewalk project candidates for a technical assistance/development pipeline, with any segment that shows as a priority through FY2021's regional gap analysis, or any segment established as a local or county priority, being eligible. DVRPC will coordinate with county partners to evaluate and prioritize candidate projects as necessary. 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. We will also seek to partner with at least one

other organization in an effort to create a direct handoff to an established funding pipeline for local sidewalk construction, such as a county Community Development Block Grant (CDBG) program, for at least a portion of this pilot round’s technical assistance work. Some of these activities may also 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. Design and reach agreement on a pilot program structure for FY2022, generally modeled on the PennDOT Connects Bike Friendly Resurfacing Program for the suburban Pennsylvania counties.
3. Conduct a program solicitation for 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.

Products:

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

Beneficiaries:

Pennsylvania and New Jersey counties, municipalities, and residents and workers throughout the DVRPC region.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$150,000	\$0	\$0	\$0	\$150,000

*PA TIP - MPMS #115961 - \$75,000 STU/Toll Credit, NJ TIP- DB# X30A-\$75,000 STBGP-Trenton

PROJECT: 22-52-140 Delaware County Bicycle Corridor Action Plan

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Sarah Moran

Project Manager: Aaron Frait

Goals:

Through an applied example on 1-2 corridors, develop Delaware County's capacity to plan, design, and implement the bicycle corridors and multi-use trails recommended in the county's 2035 Transportation Plan.

Description:

Delaware County's 2035 Transportation Plan recommends a comprehensive network of new bicycle corridors and multi-use trails to provide connectivity to a wide variety of origins and destinations across the county and larger region. This project will focus on one or two high-priority corridors from this plan, demonstrating the process of developing conceptual plans for bicycle facilities. Each step in the process will be documented, resulting in an action plan that the county will be able to use as a blueprint to implement the remainder of the proposed network. Some of these activities may also require DVRPC to purchase equipment and/or services to meet program goals.

Tasks:

1. Work with Delaware County to screen potential corridors and identify one long corridor (or two shorter corridors) to focus on. Decision factors may include:
 - Regional Level-of-Traffic-Stress scores
 - PennDOT's resurfacing pipeline
 - Connectivity between the street and multi-use trail networks
 - Municipal interest
2. Analyze collision data along selected corridor to understand safety issues that should be addressed with the new design.
3. Catalog/inventory any existing built-environment factors that would influence bicycle facility design (e.g. roadbed width, lane configurations, curb cuts, driveways, transit stops, etc.)
4. As appropriate, break the corridor into a series of subcorridors based on context/facility type, and develop alternative alignments and facility types for each candidate alignment.
5. In collaboration with county, municipal, and other partner staff as appropriate, conduct public outreach on facility ideas and priorities.
6. If needed, develop a Synchro-based traffic model to test the impact of bicycle facility designs that reduce motor vehicle capacity. Collect traffic counts as needed to support such modeling.
7. Identify a preferred alignment alternative that proves most feasible, and design a connected bicycle corridor that achieves the goals of the 2035 Transportation Plan while also addressing any existing issues identified in earlier tasks.

8. Document the entire process in an action plan that illustrates how the applied example of a single corridor can be generalized to all of the remaining sections of the proposed bicycle network.

9. [OPTIONAL TASK; would be supported by ExPo Program (22-52-110)] Use temporary materials to create a tactical-urbanism-style “pop up” bicycle facility that allows the public to test out the new facility design prior to the permanent implementation.

Products:

Conceptual plans for the selected corridor(s)

A “Bicycle Network Action Plan”, which documents the existing conditions analysis, traffic modeling, and design process in a way that can be generalized to other priority bicycle corridors on the county’s planned network.

Beneficiaries:

Delaware County, relevant municipalities, and the traveling public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$80,000	\$0	\$0	\$0	\$80,000

*PennDOT Connects

This project has been withdrawn and will not be funded.

Responsible Agency: Delaware Valley Regional Planning Commission**Program Coordinator:** Sarah Moran**Project Manager:** Al Beatty, Marco Gorini**Goals:**

Develop a conceptual plan for safety improvements on Cecil B. Moore Avenue from Willington Street to 10th Street, including planning-level cost estimates, for use in preliminary engineering and grant applications.

Description:

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. Cecil B Moore Avenue from Willington Street to 10th Street was identified as a top ten corridor. This project would build on the high level crash analysis completed by WSP as part of the capital plan, engage the local community and other local stakeholders to collaboratively conduct a safety audit of the corridor, and then develop a concept plan and basic cost estimates, so they are ready to progress to preliminary engineering and for a grant application. Some of these activities may also require DVRPC to purchase equipment and/or services to meet program goals.

Tasks:

1. Assemble a steering committee including relevant agencies and community groups, and convene the committee regularly to guide concept development.
2. Work with steering committee to identify appropriate outreach methods to involve a wide range of residents and businesses.
3. Conduct public outreach to engage the local community and learn about their needs and ideas for improvements.
4. Build on previous crash analysis with updated data to identify crash trends.
5. Conduct a road safety audit with stakeholders to identify possible causes and brainstorm potential solutions to crash issues.
6. 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.
7. 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.
8. Engage stakeholders and the public to evaluate tradeoffs and determine a preferred alternative.
9. Develop a detailed conceptual design for the preferred alternative, including cost estimates.
10. Write a report summarizing results of tasks 1-8 and outlining information necessary for preliminary engineering and grant applications.

Products:

1. Report with design concept and cost estimates
2. Public engagement materials
3. Periodic steering committee update memos
4. Roadway safety audit and crash analysis

Beneficiaries:

City of Philadelphia, SEPTA, local residents, businesses, visitors, and the traveling public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$200,000	\$0	\$0	\$40,000	\$160,000

*PennDOT Connects

PROJECT: 22-53-020/025 HPMS and Functional Classification System (PA & NJ)

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Joshua Rocks

Project Manager: Charles Henry, Jonathan Ferullo

Goals:

Improve efficiency of the region's transportation system by providing an updated Highway Performance Monitoring System and Functional Classification System to meet FHWA requirements and determine improvement.

Description:

This project will collect and update traffic characteristics of the HPMS links and Highway Functional Classification System. HPMS is a database system designed to annually assess the physical and operational characteristics of approximately 300 selected non-interstate highway links. This and other urban area information will be used at the national level to assess system condition and usage and to allocate highway funding.

The Highway Functional Classification is a system of highway designations by area type and facility type. One use of a link's classification is to determine federal funding eligibility for improvement projects. DVRPC works with member governments and state DOTs in updating the highway classifications to reflect changing conditions.

Tasks:

1. Collect traffic information, geometric, and operational characteristics for approximately 300 sample links of the HPMS network in the Pennsylvania portion of the region.
2. Gather volume/classification counts for 100 non-interstate links.
3. Prepare field forms and collect traffic counts for 40 links on the New Jersey portion of the region.
4. Enter counts collected during the year into the DVRPC Traffic Count system.
5. Transmit data to PennDOT and NJDOT by specified dates.
6. Review, coordinate, and process requests for functional classification changes from state, county, and local governments.
7. Revise the functional classification system based on these requests.

Products:

1. Updated HPMS data files of physical and operational characteristics.
2. Database of counts taken in New Jersey and Pennsylvania.
3. Record of requests for functional classification changes.
4. Updated functional classification maps.

Beneficiaries:

States, counties, and cities.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$185,000	\$185,000			
2022	\$190,000	\$190,000	\$0	\$0	\$0

PROJECT: 22-53-030 PennDOT District 6-0 Traffic Volume Data

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Joshua Rocks

Project Manager: Charles Henry, Jonathan Ferullo

Goals:

Improve efficiency of the region's transportation 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$300,000				\$300,000
2022	\$300,000	\$0	\$0	\$0	\$300,000

*PA State Appropriation 582 Funds

PROJECT: 22-59-700 Member Government Special Studies

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: John Ward

Project Manager: John Ward

Goals:

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

Description:

Through the Supportive Regional Highway Planning Program (SRHPP) and Transit Support Program (TSP), DVRPC passes through federal 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 (22-60-051)
2. Camden County Traffic Counting Program (22-61-070)
3. Gloucester County Traffic Counting Program (22-61-080)
4. Mercer County Traffic Counting Program (22-61-090)
5. Comprehensive Trail Network Action Plan (22-61-100)
6. Southeastern Pennsylvania Transit Planning and Technical Assistance - Philadelphia Transit Plan/Chester County Public Transportation Plan (22-63-008)
7. SEPTA Regional Rail Equity and Fare Structure (22-63-007)
8. Overbrook Intermodal Center Study (22-63-009)
9. Rolling License Plate Surveys – PA (22-63-010)
10. Evaluating Ferry Service (22-63-024)
11. NJTRANSIT Transit Survey Program (22-63-026)
12. Rolling License Plate Surveys - NJ (22-63-027)

Products:

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

Beneficiaries:

Member governments and other agencies.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$853,944				\$853,944
2022	\$901,944	\$0	\$0	\$0	\$901,944

*TSP and SRHPP special studies projects

PROJECT: 22-59-701 New Projects and Misc. Carryover

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: John Ward

Project Manager: John Ward

Goals:

Improve the efficiency of the region's infrastructure by preparing special studies for collecting data, improving the existing transportation system and other infrastructure, environmental clearance process, and related planning and coordination needs as required.

Description:

This project represents work that was initiated in FY21 and will carryover into FY22 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$888,701			\$40,000	\$848,701
2022	\$1,060,830	\$0	\$0	\$90,500	\$970,330

* Projects to be defined

CHAPTER 3A

PA Supportive Regional Highway Planning Program (SRHPP)

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS



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Table 6: PA Supportive Regional Highway Planning Program

Core Projects					
Project Number	Agency	Project	FY 2022 Budget		
			Cash	Match	Total
22-60-010	Bucks County	Supportive Regional Highway Planning	\$94,200	\$23,550	\$117,750
22-60-020	Chester County	Supportive Regional Highway Planning	\$136,300	\$34,075	\$170,375
22-60-030	Delaware County	Supportive Regional Highway Planning	\$68,200	\$17,050	\$85,250
22-60-040	Montgomery County	Supportive Regional Highway Planning	\$141,700	\$35,425	\$177,125
22-60-050	City of Philadelphia Streets Department	Supportive Regional Highway Planning	\$207,600	\$51,900	\$259,500
22-60-051 ¹	City of Philadelphia/ DVRPC	Traffic Counts	\$50,000	\$12,500	\$62,500
Program Total			\$698,000	\$174,500	\$872,500

1. Project work will be performed by DVRPC Staff. An in-kind match (\$12,500) will be added to Project 22-60-050.

PROJECT: 22-60-010 Bucks County: Supportive Regional Highway Planning Program

Responsible Agency: Bucks County Planning Commission

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in sub-regional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs, and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Participate in the development of DVRPC's Planning Work Program and Bucks County SRHPP for next fiscal year.
2. Review transportation reports and correspondence and provide responses.
3. Perform general administrative duties, including liaison and interagency coordination.
4. Perform contract administration, including the preparation and submission of Quarterly Progress Reports/Invoices.
5. Attend monthly DVRPC Board and Regional Technical Committee meetings and other meetings with federal, state, and local transportation agencies.
6. Respond to information requests, including those from the public.
7. Perform public participation as appropriate.

Task II - Transportation Planning Data and Analysis

1. 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.

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$105,000	\$84,000			\$21,000
2022	\$117,750	\$0	\$0	\$0	\$117,750

*PA TIP- MPMS# 115962 \$94,200 STU; Local SILOC Match \$23,550

PROJECT: 22-60-020 Chester County: Supportive Regional Highway Planning Program

Responsible Agency: Chester County Planning Commission

Program Coordinator: Kwan Hui

Goals:

Improve the efficiency of the region's transportation network by participating in subregional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Perform contract administration, including the preparation and submission of Quarterly Progress Reports/Invoices.
2. Participate in the development of the DVRPC Planning Work Program and Chester County SRHPP for next fiscal year.
3. Perform general administrative duties, including liaison and interagency coordination.
4. Attend monthly DVRPC Board and Regional Technical Committee meetings and other meetings with federal, state, and local transportation agencies.
5. Respond to information requests, including those from the public.
6. Perform public participation as appropriate.
7. Review transportation reports and correspondence and provide responses.

Task II - Transportation Improvement Program (TIP)

1. Maintain an inventory of proposed transportation improvements in Chester County for the TIP.
2. Review and evaluate new 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.

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$152,000	\$121,600			\$30,400
2022	\$170,375	\$0	\$0	\$0	\$170,375

*PA TIP- MPMS# 115962 \$136,300 STU; Local SILOC Match \$34,075

PROJECT: 22-60-030 Delaware County: Supportive Regional Highway Planning Program

Responsible Agency: Delaware County Planning Department

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in subregional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I – Program Administration and Coordination

1. Perform contract administration, including the preparation and submission of Quarterly Progress Reports/Invoices.
2. Participate in the development of 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.
3. Inventory and prioritize all existing and new projects for the TIP.
4. Survey municipalities every two years for potential TIP funded projects.
5. Participate and assist in the update and maintenance of the DVRPC TIP and PennDOT Twelve Year Program.
6. Monitor transportation funding programs and opportunities, inform municipalities of funding programs and provide assistance to them, and advocate Delaware

County's position on this issue.

7. Provide programming information to county council, county executive director, legislative delegation, and municipal officials.
8. Coordinate with PennDOT, municipalities, and other project sponsors on the implementation of programmed improvements.
9. Participate and assist PennDOT and DVRPC with PennDOT Connects.

Task III – Transportation Plan Maintenance

1. Participate in the process to update the DVRPC Long-Range Plan.
2. Prepare highway/bicycle/pedestrian components of Delaware County Comprehensive Plan.
3. Prepare highway, bicycle, and pedestrian mobility components of municipal comprehensive plans (under contract with municipalities); review highway/bicycle/pedestrian components of draft municipal comprehensive plans (under Act 247 reviews).
4. Review land developments and traffic impact studies and provide comments on highway, bicycle, and pedestrian access to the Delaware County Planning Commission.
5. Participate in Delaware County, DVRPC, PennDOT, and municipal highway, bicycle, and pedestrian studies and planning efforts.
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. Update 2009 Delaware County Bicycle Plan, including a point-to-point bicycle map with DVRPC assistance.

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. Updated County Bicycle Plan with Point-to-Point Map.

Beneficiaries:

Delaware County, municipalities, state, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$76,000	\$60,800			\$15,200
2022	\$85,250	\$0	\$0	\$0	\$85,250

*PA TIP- MPMS# 115962 \$68,200 STU; Local SILOC Match \$17,050

PROJECT: 22-60-040 Montgomery County: Supportive Regional Highway Planning Program

Responsible Agency: Montgomery County Planning Commission

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in sub-regional transportation planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs, and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I – Program Administration and Coordination

1. Perform general administrative duties, including liaison and interagency coordination.
2. Review transportation reports and correspondence and provide responses.
3. Perform contract administration, including the preparation and submission of Quarterly Progress Reports/Invoices.
4. Participate in the development of the DVRPC Planning Work Program and Montgomery County SRHPP for next fiscal year.
5. Respond to information requests, including those from the public.
6. Attend monthly DVRPC Board and Regional Technical Committee meetings and other meetings with federal, state, and local transportation agencies.
7. Perform public participation as appropriate.

Task II – Transportation Improvement Program (TIP)

1. Maintain an inventory of proposed transportation improvements in Montgomery County for the TIP.
2. Review and evaluate new 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.
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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$158,000	\$126,400			\$31,600
2022	\$177,125	\$0	\$0	\$0	\$177,125

*PA TIP- MPMS# 115962 \$141,700 STU; Local SILOC Match \$35,425

PROJECT: 22-60-050 Philadelphia: Supportive Regional Highway Planning Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve efficiency of the region's transportation network by participating in subregional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs, and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I: Program Administration and Coordination

1. Review and comment on the Commission's staff reports.
2. Continue development of Certification Acceptance or Modified Certification Acceptance documents, standards, and/or procedures.
3. Identify and resolve differences among city and regional highway planning agencies.
4. Develop a work program for future "pass through" funds.
5. Participate in the development of the Philadelphia SRHPP and DVRPC Planning Work Program for 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$244,000	\$185,200			\$58,800
2022	\$272,000	\$0	\$0	\$0	\$272,000

*PA TIP- MPMS # 115962 \$207,600; Local SILOC Match \$64,000 (\$51,900 for 22-60-050, \$12,500 for 22-60-051)

PROJECT: 22-60-051 City of Philadelphia Traffic Counts

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Joshua Rocks

Project Manager: Charles Henry

Goals:

Obtain data needed for transportation, engineering, and pavement management studies.

Description:

The City of Philadelphia has requested that DVRPC perform a travel mode counting program. This information will be used for the city's transportation, planning, engineering and pavement management studies. DVRPC will provide vehicular, bicycle, pedestrian and crosswalk count information as well as speed studies at locations determined by the City's planning and engineering staff. 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 printouts 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.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$50,000	\$50,000			
2022	\$50,000	\$0	\$0	\$0	\$50,000

*PA TIP- MPMS# 115962- \$50,000 STU/SILOC

CHAPTER 3B

NJ Supportive Regional Highway Planning Program (SRHPP)

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS



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Table 7: NJ Supportive Regional Highway Planning Program

Core Projects					
Project Number	Agency	Project	FY 2022 Budget		
			Cash	Match	Total
22-61-010	Burlington County	Supportive Regional Highway Planning	\$39,755	\$9,939	\$49,694
22-61-020	Camden County	Supportive Regional Highway Planning	\$44,015	\$11,004	\$55,019
22-61-030	Gloucester County	Supportive Regional Highway Planning	\$39,100	\$9,775	\$48,875
22-61-040	Mercer County	Supportive Regional Highway Planning	\$34,130	\$8,532	\$42,662
22-61-060	City of Camden	Supportive Regional Highway Planning	\$24,000	\$6,000	\$30,000
Subtotal			\$181,000	\$45,250	\$226,250
Special Studies					
Project Number	Agency	Project	FY 2021 Budget		
			Cash	Match	Total
22-61-070 ¹	Camden County /DVRPC	Traffic Counting Program	\$60,000	\$15,000	\$75,000
22-61-080 ²	Gloucester County /DVRPC	Traffic Counting Program	\$60,000	\$15,000	\$75,000
22-61-090 ³	Mercer County /DVRPC	Traffic Counting Program	\$60,000	\$15,000	\$75,000
22-61-100 ⁴	Trenton/DVRPC	Comprehensive Trail Network Action Plan	\$48,000	\$12,000	\$60,000
Subtotal			\$228,000	\$57,000	\$285,000
Program Total			\$409,000	\$102,250	\$511,250

1. Project work will be performed by DVRPC staff. An in-kind match (\$15,000) will be added to Project 22-61-020.
2. Project work will be performed by DVRPC staff. An in-kind match (\$15,000) will be added to Project 22-61-030.
3. Project work will be performed by DVRPC staff. An in-kind match (\$15,000) will be added to Project 22-61-040.
4. Project work will be performed by DVRPC staff. A cash match (\$12,000) will come from the William Penn Foundation Regional Trail Program Funding.

PROJECT: 22-61-010 Burlington County: Supportive Regional Highway Planning Program

Responsible Agency: Burlington County - Land Development

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in sub-regional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs, and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Attend monthly DVRPC Board and Regional Technical Committee meetings, and other meetings with federal, state, regional, and local transportation agencies.
2. Prepare and submit 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$55,694				\$55,694
2022	\$49,694	\$0	\$0	\$0	\$49,694

* NJ TIP - DB #X30A - \$39,755 STBGP-PHILA; \$9,939 SILOC Match

PROJECT: 22-61-020 Camden County: Supportive Regional Highway Planning Program

Responsible Agency: Camden County - Department of Public Works - Division of Planning

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

To improve the efficiency of the region's transportation network by participating in subregional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Attend monthly DVRPC Board and Regional Technical Committee meetings, and other meetings with federal, state, regional, and local transportation agencies.
2. Prepare and submit the Quarterly Progress Reports/Invoices.
3. Participate in the development of the DVRPC Planning Work Program and Camden County SRHPP for next fiscal year.
4. Perform general administrative duties, including liaison and interagency coordination.
5. Review transportation reports and correspondence and provide responses.
6. Respond to information requests, including those from the public.
7. Perform public participation as appropriate.

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. Attend DVRPC IREG, future Imagery Acquisition, and other steering committee meetings.

Products:

1. Quarterly progress and expenditure reports and invoices.
2. SRHPP Work Program for inclusion in next fiscal year's DVRPC Planning Work Program.
3. A federally approved TIP to maintain with DVRPC.
4. Correspondence on meetings and seminars attended related to highway planning.
5. Inventory and status of TIP projects.
6. Aerial photographs, DVRPC CMS and PMS updates, sign and signal management data updates.

Beneficiaries:

Camden County, municipalities, state, region, and public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$70,019				\$70,019
2022	\$70,019	\$0	\$0	\$0	\$70,019

* NJ TIP - DB #X30A - \$44,015 STBGP-PHILA; \$26,004 SILOC Match

(\$11,004 for 22-61-020, \$15,000 for 22-61-070)

PROJECT: 22-61-030 Gloucester County: Supportive Regional Highway Planning Program

Responsible Agency: Gloucester County Planning Department

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region’s transportation network by participating in sub-regional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities, and provides technical assistance to local governments on regional, state and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Attend monthly DVRPC Board and Regional Technical Committee meetings, and other meetings with federal, state, regional, and local transportation agencies.
2. Prepare and submit the Quarterly Progress Reports/Invoices.
3. Participate in the development of the DVRPC Planning Work Program and Gloucester County SRHPP for next fiscal year.
4. Perform general administrative duties, including liaison and interagency coordination.
5. Review transportation reports and correspondence and provide responses.
6. Respond to information requests, including those from the public.
7. Perform public participation as appropriate.

Task II - Transportation Improvement Program (TIP)

1. Participate and assist in the TIP update and maintenance processes.
2. Provide feedback to the state and DVRPC on the TIP and Statewide TIP (STIP).
3. Maintain and provide to DVRPC an inventory of project candidates to be considered for inclusion of the local capital improvement program.
4. Maintain channels of communication with DVRPC, NJDOT, and the public regarding TIP project status.
5. Assist with the coordination of DVRPC Work Program projects as necessary (e.g. TCDI grant process).
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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$69,875				\$69,875
2022	\$63,875	\$0	\$0	\$0	\$63,875

* NJ TIP - DB #X30A - \$39,100 STBGP-PHILA; \$24,775 SILOC Match(\$9,775 for 22-61-030, \$15,000 for 22-61-080)

PROJECT: 22-61-040 Mercer County: Supportive Regional Highway Planning Program

Responsible Agency: Mercer County Planning Department

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in subregional transportation core planning efforts.

Description:

This is a continuing project that provides for county participation in the regional transportation planning process and the maintenance of county-level plans, programs and data to support the regional transportation planning effort. It ensures local government and citizen coordination of regional and county planning activities and provides technical assistance to local governments on regional, state, and county-level transportation projects.

Tasks:

Task I - Program Administration and Coordination

1. Attend monthly DVRPC Board and Regional Technical Committee meetings, and other meetings with federal, state, regional, and local transportation agencies.
2. Prepare and submit the Quarterly Progress Reports/Invoices.
3. Participate in the development of the DVRPC Planning Work Program and Mercer County SRHPP for next fiscal year.
4. Perform general administrative duties, including liaison and interagency coordination.
5. Review transportation reports and correspondence and provide responses.
6. Respond to information requests, including those from the public.
7. Perform public participation as appropriate.

Task II - Transportation Improvement Program (TIP)

1. Participate and assist in the TIP update and maintenance processes.
2. Provide feedback to the state and DVRPC on the TIP and Statewide TIP (STIP).
3. Maintain and provide to DVRPC an inventory of project candidates to be considered for inclusion of the local capital improvement program.
4. Maintain channels of communication with DVRPC, NJDOT, and the public regarding TIP project status.
5. Assist with the coordination of DVRPC Work Program projects as necessary (e.g. TCDI grant process).
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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$57,662				\$57,662
2022	\$57,662	\$0	\$0	\$0	\$57,662

* NJ TIP - DB #X30A - \$34,130 STBGP-PHILA; \$23,532 SILOC Match(\$8,532 for 22-61-040, \$15,000 for 22-61-090)

PROJECT: 22-61-060 City of Camden - Supportive Regional Highway Planning Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kwan Hui

Project Manager: John Ward

Goals:

Improve the efficiency of the region's transportation network by participating in subregional transportation planning efforts.

Description:

Manage and maintain the general administration of the program and maintain coordination and cooperation with federal, state, regional, and local agencies. Maintain public participation in the transportation planning process. Identify, prioritize, and analyze a capital program of federal and state-funded transportation improvements reflecting local input and coordination with state and regional agencies. Monitor implementation of the capital improvements. Assess impact of proposed land use on transportation facilities and recommend Camden City's position on certain regional transportation improvements and programs. Maintain and update data files required for the comprehensive transportation planning effort. Monitor various transportation indicators (e.g., traffic counts and turning movements). Retrieve and disseminate information as required.

Tasks:

Task I - Administration

1. Perform general and contract administrative duties.
2. Prepare quarterly progress reports, expenditure reports, 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.

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, including DVRPC competitive programs.

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$30,000				\$30,000
2022	\$30,000	\$0	\$0	\$0	\$30,000

* NJ TIP - DB #X30A - \$24,000 STBGP-PHILA; \$6,000 SILOC Match

PROJECT: 22-61-070 Camden County - Traffic Counting Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Joshua Rocks

Project Manager: Charles Henry

Goals:

Obtain data needed for transportation, engineering, and pavement management studies.

Description:

Camden County has requested that DVRPC perform a travel mode counting program. This information will be used for the county's transportation, planning, engineering and pavement management studies. DVRPC will provide vehicular, bicycle, pedestrian and crosswalk count information at locations determined by the county's planning and engineering staff. This program also supports ongoing equipment needs and maintenance costs for permanent bicycle and pedestrian counting stations in Camden County.

Tasks:

1. Schedule meetings with Camden County representatives to determine locations for conducting counts.
2. Collect travel data at selected locations, for vehicle volume and intersection turning movement, pedestrian, bicycle and crosswalk counts where required.
3. Process data and develop annual average daily traffic volumes (AADT) based on a continuous 48 hours of an average week (motorized) or annual average daily bicycles (AADB) / annual average daily pedestrians (AADP) based on a week of data for non-motorized travel.
4. Check field data for accuracy.
5. Prepare annual summary data in tabular form and also present data individually by location with counts for individual hours.
6. Prepare and send data to Camden County for their use.

Products:

1. Detailed printouts showing hourly counts, turning movements, and AADT, AADB, or AADP for selected locations.

Beneficiaries:

Camden County, Camden City, NJDOT, residents, and businesses.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$60,000				\$60,000
2022	\$60,000	\$0	\$0	\$0	\$60,000

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

PROJECT: 22-61-080 Gloucester County Traffic Counting Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Joshua Rocks

Project Manager: Charles Henry

Goals:

Obtain data needed for transportation, engineering, and pavement management studies.

Description:

The Gloucester County Planning Division has requested that DVRPC continue to perform a traffic counting program within Gloucester County. This information will be used for the county's transportation, planning, engineering, and pavement management studies. DVRPC will provide vehicular, bicycle, pedestrian, and crosswalk count information at locations determined by the county's planning and engineering staff. This program also supports ongoing equipment needs and maintenance costs for permanent bicycle and pedestrian counting stations in Gloucester County.

Tasks:

1. Schedule meetings with county planning and engineering representatives to determine locations for conducting counts.
2. Collect travel data at selected locations, for vehicle volume and intersection turning movement, pedestrian, bicycle and crosswalk counts where required.
3. Process data and develop annual average daily traffic volumes (AADT) based on a continuous 48 hours of an average week (motorized) or annual average daily bicycles (AADB) / annual average daily pedestrians (AADP) based on a week of data for non-motorized travel.
4. Check field data for accuracy.
5. Prepare annual summary data in tabular form and also present data individually by location with counts for individual hours.
6. Prepare 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 printouts showing hourly counts, turning movements, and AADT, AADB, or AADP for selected locations.
2. An updated traffic information file and GIS map.

Beneficiaries:

Gloucester County, municipalities, and NJ DOT.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$60,000				\$60,000
2022	\$60,000	\$0	\$0	\$0	\$60,000

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

PROJECT: 22-61-090 Mercer County Traffic Counting Program

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Joshua Rocks

Project Manager: Charles Henry

Goals:

Obtain new traffic count data and compare with existing data in GIS format for transportation, engineering, and pavement management studies.

Description:

To supplement existing counts in the Transportation Development District, the county needs DVRPC to annually collect approximately 200 counts throughout the county.

In addition to vehicular counts, DVRPC will provide requested bicycle, pedestrian and crosswalk count information at locations determined by the county's planning and engineering staff.

Additionally, the county will incorporate developer traffic study count data into the County's GIS system so that the traffic count data collected as a result of this project will be linked to that produced by others. In this way the county will obtain the most accurate representation of traffic flow in the county. Once compiled, this data will be shared with municipalities in order to enhance their transportation study efforts.

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

Tasks:

1. Schedule meetings with county planning and engineering representatives to determine locations for conducting counts in addition to cyclical vehicle counts.
2. Collect travel data at selected locations, for vehicle volume and intersection turning movement, pedestrian, bicycle and crosswalk counts where required.
3. Process data and develop annual average daily traffic volumes (AADT) based on a continuous 48 hours of an average week (motorized) or annual average annual daily bicycles (AADB) / annual average daily pedestrians (AADP) based on a week of data for non-motorized travel.
4. Check field data for accuracy.
5. 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 printouts showing hourly counts, turning movements, and AADT, AADB, or AADP for selected locations.
2. Maps, tables, and text for transportation element of the master plan.

Beneficiaries:

Mercer County; municipalities in which counts are taken; and NJDOT.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$60,000				\$60,000
2022	\$60,000	\$0	\$0	\$0	\$60,000

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

PROJECT: 22-61-100 Comprehensive Trail Network Action Plan for Trenton

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher Linn

Project Manager: Shawn Megill Legendre

Goals:

Existing and proposed multi-use trails in the City of Trenton fall within the jurisdictional responsibility of a variety of governmental entities, including, but not necessarily limited to, state agencies, Mercer County, and the City. In addition, a variety of non-governmental organizations can and do play an active role in trail development. This action plan will examine the opportunities for and challenges faced in constructing and coordinating several major trail corridors in the City of Trenton, identify new opportunities for multi-use trails, and develop an approach to implementation in the short-, medium-, and long-term. The action plan will also look at the challenges faced by existing facilities and will recommend solutions. The primary intent of this action plan is to formalize an off-road trail and on-road connector network in the City of Trenton and foster coordination between various governmental and non-governmental partners in the further development and maintenance of the network.

Description:

The Office of Environmental Planning will work with the City of Trenton, the NJDOT Office of Bicycle and Pedestrian Programs, and other stakeholders to develop a trail network action plan for the City of Trenton. DVRPC will utilize the New Jersey Statewide Bicycle and Pedestrian Master Plan's guidance on the use of federal, state, and local resources to implement bike and pedestrian facilities during the development of this action plan.

Specifically this plan will:

- identify and map existing trails and on-road connectors in the City, including by key characteristics, such as jurisdictional responsibility;
- identify and map currently planned and new opportunities for trail connections;
- identify specific problem spots and barriers and develop conceptual solutions;
- recommend strategies for implementation, including construction phasing guidelines and recommended priority segments and funding for planning, acquisition (where needed), design, and construction;
- recommend strategies for ongoing coordination between the various governments and non-governmental organizations;
- compile best management practices for network branding, wayfinding, and publicity; and
- formalize the network for coordination in within the city.

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

Tasks:

1. Map existing and currently planned trails, including a formalized network
2. Review existing plans for trails and other bicycle infrastructure in the City of Trenton and adjoining municipalities
3. Inventory and analyze crash data to identify problem areas
4. Inventory and analyze pedestrian and bicycle counts to understand current use and potential future use
5. Assess current levels of traffic stress to identify low stress "islands" that could be connected via trail facilities
6. Identify points of interest, transit facilities, origins, and destinations that could be served by trails
7. Perform field visits and use aerial photography to assess particular problem points and potential trail alignments
8. Make recommendations for construction phasing and priority segments
9. Estimate implementation costs where possible
10. Identify possible funding sources for trail development
11. Compile best practices for coordination across multi-jurisdictional trail networks and make recommendations appropriate to the Trenton trail network
12. Compile best practices for network branding, wayfinding, and publicity and make recommendations appropriate for the Trenton trail network
13. Assemble and meet regularly with a project steering committee
14. Solicit input from the public, including via public meetings, surveying, or other techniques as appropriate throughout planning process
15. Make recommendations for any further study as needed
16. Produce final report

Products:

1. A published plan documenting findings and recommendations
2. Maps, tables, and data
3. Meeting materials and summaries

Beneficiaries:

City of Trenton, Mercer County, NJ DEP (Div. of Parks & Forestry), non-governmental organizations developing trails, trail users, and the public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$60,000	\$0	\$0	\$0	\$60,000

* NJ TIP - DB #X30A - \$48,000 STBGP-PHILA; \$12,000 William Penn Foundation

CHAPTER 4A

PA Transit Support Program (TSP)

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS



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Table 8: PA Transit Support Program

Core Projects					
Project Number	Agency	Project	FY 2022 Budget		
			Cash	Match	Total
22-63-001	Bucks County	Transit Planning and Programming	\$61,734	\$15,434	\$77,168
22-63-002	Chester County	Transit Planning and Coordination	\$46,069	\$11,517	57,586
22-63-003	Delaware County	Transit Planning and Coordination	\$87,504	\$21,876	\$109,380
22-63-004	Montgomery County	Transit Planning and Implementation	\$77,400	\$19,350	\$96,750
22-63-005	Philadelphia Office of Transportation, Infrastructure, and Sustainability	Transit Planning and Programming	\$98,535	\$24,633	\$123,168
22-63-006	Philadelphia City Planning Commission	Short-Range Planning	\$119,758	\$29,940	\$149,698
22-63-008 ¹	DVRPC	Southeast PA Transit Planning and Technical Assistance (Phila. Transit Plan, Ches. Co Transit Plan)	\$144,000	\$36,000	\$180,000
Subtotal			\$635,000	\$158,750	\$793,750
Special Studies					
Project Number	Agency	Project	FY 2022 Budget		
			Cash	Match	Total
22-63-007 ²	SEPTA/DVRPC	SEPTA Regional Rail Equity and Fare Structure	\$100,000	\$25,000	\$125,000
22-63-009 ²	SEPTA/DVRPC	Overbrook Intermodal Center Study	\$100,000	\$25,000	\$125,000
22-63-010 ²	DVRPC	Rolling License Plate Surveys (PA)	\$65,000	\$16,250	\$81,250
Subtotal			\$265,000	\$66,250	\$331,250
Program Total			\$900,000	\$225,000	\$1,125,000

1. 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 22-63-005 (\$11,250) and Project 22-63-006 (\$11,250). Chester Co.'s Transit Plan budget amount is \$67,500 which includes \$54,000 cash and a \$13,500 in-kind match. The match amount (\$13,500) will be added to Project 22-63-002.

2. Project work will be performed by DVRPC staff. An in-kind match (\$11,042) will be added to all PA core agreements.

PROJECT: 22-63-001 Bucks County Transit Planning and Programming

Responsible Agency: Bucks County Planning Commission

Program Coordinator: Amy Bernknopf, Kwan Hui

Goals:

To improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

Examine the need for public transportation services, specifically in areas of rapid traffic volume increases and escalating traffic congestion. Advocate and coordinate the implementation of activities and services that support public transit usage and help improve suburban mobility.

Rapid development and minimal public transportation services have led to an overburdened highway network in Bucks County. The county's geographic location between the New Jersey to New York corridor to the east, Philadelphia to the south, and the Allentown-Bethlehem-Easton areas to the north guarantees that development pressures will continue. Bucks County's comprehensive plan aims to guide and coordinate development to minimize its adverse impacts.

This project will allow staff to examine opportunities to minimize traffic impacts and enhance suburban mobility through an expanded public transportation system. Public transportation objectives will be pursued through coordination with local governments, the business community, and area service providers.

Tasks:

Task 1: Administration

1. Program administration and inter-agency coordination to include general program correspondence and public information requests.

Task 2: Planning and Programming

1. Assist the business community in identifying unique transportation needs and provide information as to public transportation alternatives.

2. Review existing and proposed development to identify areas capable of supporting public transportation services or areas in particular need of expanded transit services.

3. Review county and municipal growth management policies to ensure that access to public transportation services are included where feasible.

4. Review existing paratransit services for evaluation and compliance with ADA Requirements.

Task 3: Coordination

1. Maintain liaison with the Bucks County Transportation Management Association.

Products:

1. Monthly and quarterly progress reports.
2. Quarterly invoices.
3. Expanded and/or modified transit service proposals.
4. Recommendations for improving transit services throughout the county.
5. Proposed TSP Work Program for next fiscal year.

Beneficiaries:

Operating agencies and utilities; economic development agencies; private sector; and municipalities.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$88,210		\$61,734		\$26,476
2022	\$88,210	\$0	\$61,734	\$0	\$26,476

*\$26,476 Match (\$15,434 for 22-63-001, \$11,042 for special studies projects)

PROJECT: 22-63-002 Chester County Transit Planning and Coordination

Responsible Agency: Chester County Planning Commission

Program Coordinator: Amy Bernknopf, Kwan Hui

Goals:

To improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

The purpose of this project is to provide comprehensive planning, programming, monitoring, and coordination of transit services in Chester County. It provides for staff support to respond to requests for technical and policy assistance on regional public transportation issues and projects. It enables staff to coordinate with PennDOT, SEPTA, TMACC, GVFTMA, Amtrak, and other public transit service providers and stakeholders.

Tasks:

Task 1: Administration

1. Prepare quarterly progress reports and invoices.
2. Participate in DVRPC's Annual Planning Work Program development.
3. Perform general administration and respond to information requests.

Task 2: Planning and Programming

1. Monitor existing transit services and evaluate the need and potential for new public transportation services. Participate in various transportation study advisory committees related to public transit.
2. Participate in developing and amending the Transportation Improvement Program (TIP).
3. Review and provide input to SEPTA's capital budget, operating budget, and annual service plan. Monitor service changes and capital projects.
4. Monitor transportation funding programs and opportunities.

Task 3: Coordination

1. Participate in meetings of regional or multi-county interest to discuss issues related to public transportation services or policies. Coordinate with DVRPC, SEPTA, Amtrak, PennDOT, TMACC, and other organizations that plan or provide transit and paratransit services.
2. Provide technical assistance and policy input to the county commissioners and SEPTA board members.
3. Participate in meetings and activities of the TMA of Chester County and Greater Valley Forge TMA.

Products:

1. Quarterly progress reports and invoices.
2. Proposed TSP Work Program for next fiscal year.

Beneficiaries:

State, county, municipalities, transit operating agencies, the private sector, and Chester County residents and employees.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$68,628		\$46,069		\$22,559
2022	\$82,128	\$0	\$46,069	\$0	\$36,059

*\$36,059 Match (\$11,517 for 22-63-002, \$13,500 for 22-63-008, \$11,042 for special studies projects)

PROJECT: 22-63-003 Delaware County Transit Planning and Coordination

Responsible Agency: Delaware County Planning Department

Program Coordinator: Amy Bernknopf, Kwan Hui

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$120,422		\$87,504		\$32,918
2022	\$120,422	\$0	\$87,504	\$0	\$32,918

*\$32,918 Match (\$21,876 for 22-63-003, \$11,042 for special studies projects)

PROJECT: 22-63-004 Montgomery County Transit Planning and Implementation

Responsible Agency: Montgomery County Planning Commission

Program Coordinator: Amy Bernknopf, Kwan Hui

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$107,792		\$77,400		\$30,392
2022	\$107,792	\$0	\$77,400	\$0	\$30,392

*\$30,392 Match (\$19,350 for 22-63-004, \$11,042 for special studies projects)

PROJECT: 22-63-005 Philadelphia Transit Planning and Programming

Responsible Agency: Office of Transportation and Infrastructure Systems

Program Coordinator: Amy Bernknopf, Kwan Hui

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$152,210		\$98,535		\$53,675
2022	\$145,459	\$0	\$98,535	\$0	\$46,924

*\$46,924 Match (\$24,633 for 22-63-005, \$11,250 for 22-63-008, \$11,042 for special studies projects)

PROJECT: 22-63-006 Philadelphia Short-Range Planning

Responsible Agency: Philadelphia City Planning Commission

Program Coordinator: Amy Bernknopf, Kwan Hui

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$178,740		\$119,758		\$58,982
2022	\$171,989	\$0	\$119,758	\$0	\$52,231

*\$52,231 Match (\$29,940 for 22-63-006, \$11,250 for 22-63-008, \$11,042 for special studies projects)

PROJECT: 22-63-007 SEPTA Regional Rail Fare Equity and Restructure Analysis

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Betsy Mastaglio

Project Manager: Aaron Frait, Joe Flood

Goals:

Commuter rail systems like SEPTA’s Regional Rail are known for bringing suburban professionals into urban employment centers during peak hours. Typically, the rider base for this service pattern is different, far whiter and wealthier, than the rest of the transit system. As the region and SEPTA strive to become more equitable and address systemic racism, amidst structural challenges presented by COVID-19 for the commute pattern and market served by Regional Rail, there is an opportunity for a fresh look at fare structures and service patterns to evaluate ways for Regional Rail to serve more types of trips and riders, more equitably in the future. This project will provide an initial screening assessment of ridership and equity opportunities and tradeoffs; strategies found promising could advance into feasibility analysis.

Description:

Public transportation has the potential to increase affordable access to opportunity throughout the region. The DVRPC region is rich with transit service, and our region’s transit agencies seek to provide quality, affordable service to a diverse population, balanced within operating and capital budget constraints. Service options that meet those objectives are more widely available for surface (bus) transportation. Buses can be rerouted to meet changing needs. Unlike buses, Regional Rail is fixed with heavy infrastructure of tracks and stations which aren’t likely to move, but service and fares can be structured to prioritize some types of trips over others. Service has traditionally served suburban populations commuting to high paying jobs in urban centers, primarily under a park-and-ride access model, with higher fares than other modes of transit.

This study will build upon analysis recently undertaken by SEPTA for Philadelphia residents in the SEPTA FY 2021-2023 Fare Proposal: Equity Impacts for Philadelphia Residents. That study looked at proposals to change the fare structure across SEPTA’s city transit division in Philadelphia. A 2019 study by the Pew Charitable Trust, found that while SEPTA has some of the lowest fares compared to peer cities, public transit costs make up a greater percentage of riders’ income, because of Philadelphia’s low average income. And a 2018 ULI Philadelphia Technical Assistance Panel (TAP) report for North Philadelphia Station noted that while outbound Regional Rail service timed to serve reverse commute work trips is relatively limited, city riders primarily use it to access suburban opportunities- 90% of that station’s weekday boardings are outbound.

The Regional Rail Fare Equity and Service Analysis project will evaluate some of

the analysis and recommendations made by these recent studies, as well as those raised by community groups and transit advocates within the city that have built support for a reconsideration of Regional Rail service patterns and fare. This study will also document the demographics of the SEPTA's Regional Rail service area, and compare it with that of surface transit and the region as a whole. SEPTA Key data will be used to inform the study of SEPTA's specific ridership demographics. The Steering Committee will identify equity-oriented changes to Regional Rail for different service pattern and fare change scenarios. The study will model up to four scenarios to evaluate ridership using a pre-COVID base year. Scenarios could include at minimum, changes to fares such as an alternative with fare parity for 'Zone 1' Regional Rail with city transit, service pattern changes to Regional Rail and overlapping bus service such as increases or decreases in frequencies or express versus local service, and assumptions on the length of time for proposed stops. The Steering Committee may consider more granular changes for conceptual evaluation purposes, such as the closing of existing stations or addition of new stations (by zone) that could have equity benefits. Regional Rail timetables for these planning scenarios would be developed at a conceptual level to test outcomes in the travel demand model, without being constrained by infrastructure constraints or operational feasibility. The project will evaluate equity and access implications under each scenario. Findings from the study will inform ongoing internal SEPTA strategic planning and related projects like Philadelphia's City Transit Plan.

Tasks:

1. Form a steering committee comprised of representatives from multiple SEPTA departments and southeastern PA counties.
2. Document existing service area characteristics of populations served by line and by station.
3. Discuss and reach steering committee agreement on the four fare/service scenarios to be tested using the regional travel demand model.
4. Prepare conceptual timetables in GTFS format for each of these planning scenarios, as inputs to the travel demand model.
5. Conduct forecasts and summarize findings, with recommendations for next steps.

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$100,000	\$0	\$100,000	\$0	\$0

PROJECT: 22-63-008 Southeastern Pennsylvania Transit Planning and Technical Assistance

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Betsy Mastaglio

Project Manager: Amy Bernknopf, 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 2045, the region's adopted Long Range Plan, while assisting southeastern Pennsylvania public transit agencies in the implementation of their planning and project agendas. Work under this program may include tasks or projects in their entirety, and may also supplement transit planning work by DVRPC staff for projects funded under other programs.

Project tasks may include existing conditions analysis, identification of potential transit improvements through conceptual design or evaluations of multimodal access improvements, as well as feasibility studies and ridership forecast modeling. DVRPC will take advantage of skills and expertise from across the agency in a collaborative effort to best meet the needs of the 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.

Tasks:

1. Continue to provide technical analysis in support of a new transit plan for the City of Philadelphia. This project will involve collaborating closely with City of Philadelphia staff (OTIS and PCPC) to evaluate and prioritize street-level improvements to transit performance in one priority corridor. Staff will develop alternative concepts for the selected corridor ultimately refining it to a preferred concept. 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 an update of the Chester County 2014 Public Transportation Plan for Landscapes³. Staff will revise the vision and performance measures for current conditions and the future plans of Chester County's transit service providers, which have changed significantly in the past 5 years. DVRPC staff will work closely with Chester County planning staff throughout the project to ensure the work is comprehensive and meets their goals for this project.

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$144,000		\$144,000		
2022	\$144,000	\$0	\$144,000	\$0	\$0

PROJECT: 22-63-009 Overbrook Intermodal Center Study

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Betsy Mastaglio

Project Manager: Logan Axelson

Goals:

Develop concept plans for improvements at Overbrook Station that would increase ridership and enhance connectivity on multiple SEPTA modes.

Description:

Overbrook Station, in Philadelphia on its border with Montgomery County, serves 1,500 passengers per day on SEPTA's Paoli-Thorndale line. With a 126-space parking lot, most of Overbrook Station's passengers arrive via transfer by bus, as pedestrians, as cyclists, or are dropped off by vehicle.

The station has a strong reverse-commute ridership base, with passengers commuting to suburban job centers along the Paoli-Thorndale line. Located along the busy City Avenue corridor, Overbrook Station serves dense urban and suburban residential areas, such as Overbrook, Wynnefield, and Merion, as well as large institutions, such as Saint Joseph's University and Lankenau Medical Center.

Overbrook Station is owned by Amtrak and leased by SEPTA. SEPTA achieves ADA-compliance at Overbrook with "mini-high" platforms but the station is not fully accessible. The station buildings are on the local and national historic registers. The station hosts the end-of-line for patterns of bus routes G and 65.

SEPTA's Trolley Route 10 trolley ends its trips approximately one-half mile south of Overbrook at the 63rd/Malvern Loop. SEPTA is currently in the planning stage of Trolley Modernization, its complete replacement of its trolley fleet with state-of-the-art, accessible light-rail vehicles. To meet this program's goals of ADA compliance and increased ridership, SEPTA is considering extending Route 10 from its current end-of-line location to a new location that would facilitate ridership growth through better transit connectivity, and would offer space for accessible station facilities.

This project will identify improvements at Overbrook Station and the surrounding area that would improve connectivity for multiple modes of transportation and increase ridership. Some of these activities may also require DVRPC to purchase equipment and/or services to meet program goals.

Tasks:

1. Convene a project steering committee including staff from SEPTA, the City of Philadelphia, Montgomery County, Lower Merion Township, Amtrak, and other stakeholders as appropriate.

2. Gather and inventory data on existing conditions in the Overbrook Station area, including recent and current transit ridership, parking demand, prior planning efforts, land use/zoning, and transportation changes. Supplement with field data collection as necessary.
3. Prepare an existing conditions summary for the station and its surroundings, including a preliminary assessment of needs and opportunities.
4. In collaboration with the steering committee, develop concept plans for Overbrook Station that consider:
 - a. Fully ADA-compliant station facilities,
 - b. End-of-line facilities for Trolley Route 10 and existing or anticipated bus routes,
 - c. Transit-oriented development opportunities,
 - d. Pedestrian and bicycle infrastructure and amenities,
 - e. Parking facilities, and
 - f. Nearby intersection improvements.
5. Develop a phasing plan for items included in the concept plans.
6. Prepare an order-of-magnitude ridership growth estimate based on the study's concept plans using DVRPC's regional travel demand model or other estimation tools as appropriate.
7. Prepare an order-of-magnitude cost estimate based on the study's concept plans.

Products:

A report summarizing the project's findings.

Beneficiaries:

SEPTA, Philadelphia, Lower Merion Township, Montgomery County, Amtrak, Major employers in the station area

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$100,000	\$0	\$100,000	\$0	\$0

PROJECT: 22-63-010 Rolling License Plate Surveys (Pennsylvania)

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Amy Bernknopf

Project Manager: Betsy Mastaglio, Thomas Stead

Goals:

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

Description:

In partnership with SEPTA and PennDOT, DVRPC has a program to assess rail station market areas by surveying license plates of the vehicles that are parked at each station and mapping the addresses that are associated with those plates. By exploring the distribution of mapped records, DVRPC can get a sense of where a given station's highest concentrations of park-and-ride customers are located, as well as typical drive-access distances.

This ongoing program will identify rider origins for the current total of 152 SEPTA rail stations that have commuter parking. The resulting station catchment area information, from which personally identifiable information is removed, provides clear and accurate data used to support planning functions by SEPTA, suburban counties, the City of Philadelphia, and local municipalities for changes in marketing, route operations, and capital planning (such as expansion of parking and station facilities).

Approximately 30 stations will be analyzed (one fifth of all stations with parking) during each fiscal year, so that no station will have data older than five years.

Prior to this project getting underway, SEPTA, PA suburban counties, and City of Philadelphia staff will be given an opportunity to propose, review, and confirm locations that are their priorities for data collection and analysis this year. 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.

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$65,000		\$65,000		
2022	\$65,000	\$0	\$65,000	\$0	\$0

CHAPTER 4B

NJ Transit Support Program (TSP)

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS



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Delaware Valley Regional Planning Commission
 Fiscal Year 2022 | Unified Planning Work Program

Table 9: NJ Transit Support Program

Core Projects					
Project Number	Agency	Project	FY 2022 Budget		
			Cash	Match	Total
22-63-020	Burlington County	Transit & Ridesharing	\$37,392	\$9,348	\$46,740
22-63-021	Camden County	Transit Planning & Programming	\$41,500	\$10,375	\$51,875
22-63-022	Gloucester County	Transportation Systems Planning	\$38,680	\$9,670	\$48,350
22-63-023	Mercer County	Transit Planning & Programming	\$33,284	\$8,321	\$41,605
22-63-025	Camden City	Transit Planning Program	\$20,800	\$5,200	\$26,000
Subtotal			\$171,656	\$42,914	\$214,570
Special Studies					
Project Number	Agency	Project	FY 2022 Budget		
			Cash	Match	Total
22-63-024 ¹	NJ Regional/DVRPC	Evaluating Ferry Service	\$89,000	\$22,250	\$111,250
22-63-026 ¹	NJTRANSIT/DVRPC	NJTRANSIT: Transit Survey Program	\$90,944	\$22,736	\$113,680
22-63-027 ¹	NJ Regional/DVRPC	Rolling License Plate Surveys (NJ)	\$35,000	\$8,750	\$43,750
Subtotal			\$214,944	\$53,736	\$268,680
Program Total			\$386,600	\$96,650	\$483,250

1. Project work will be performed by DVRPC staff. An in-kind match (\$10,747) will be added to all NJ Core agreements.

PROJECT: 22-63-020 Burlington County Transit and Ridesharing

Responsible Agency: Burlington County - Land Development

Program Coordinator: Amy Bernknopf, Kwan Hui

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.

Products:

1. Quarterly progress reports.
2. Approved legal bus stop and shelter locations.
3. Recommendations and implementation of improvements in the moving of people within the transportation system, including preparation of the final report.
4. Transit section of Burlington County Transportation Master Plan.
5. TSP Work Program for subsequent fiscal year.

Beneficiaries:

Burlington County, local governments, private citizens, developers, transportation engineers, and NJDOT.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$57,487		\$37,392		\$20,095
2022	\$57,487	\$0	\$37,392	\$0	\$20,095

*\$20,095 Match (\$9,348 for 22-63-020, \$10,747 for special studies projects)

PROJECT: 22-63-021 Camden County: Transit Planning and Programming

Responsible Agency: Camden County - Department of Public Works - Division of Planning

Program Coordinator: Amy Bernknopf, Kwan Hui

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$62,622		\$41,500		\$21,122
2022	\$62,622	\$0	\$41,500	\$0	\$21,122

*\$21,122 Match (\$10,375 for 22-63-021, \$10,747 for special studies projects)

PROJECT: 22-63-022 Gloucester County Transportation Systems Planning & Implementation

Responsible Agency: Gloucester County Planning Department

Program Coordinator: Amy Bernknopf, Kwan Hui

Goals:

Improve the efficiency of the region's transportation network by carrying out a comprehensive local transit planning program.

Description:

Improve the efficiency of the region's public transportation network by carrying out a comprehensive local transit planning program to maintain current local and regional public transportation activities and to provide the means to develop future public transportation plans that meet changing local and regional needs. Serve on steering committees and the Local Citizens Transportation Advisory Committee. Conduct research and prepare reports on public transportation matters as required. Attend meetings, seminars, and public hearings related to public transportation.

Tasks:

Task 1: Administration

1. Administer project, which will include submission of quarterly progress reports, quarterly invoices, and final report.

Task 2: Planning and Programming

1. Monitor NJ Transit service within the county, perform detailed analysis, and submit recommendations to NJ Transit.
2. Continue regional marketing and marketing activities.
3. Provide technical assistance and program coordination with regional, state and local agencies.

Task 3: Coordination

1. Participate in transportation meetings, and conferences.
2. Respond to public information requests.
3. Assist NJDOT, NJ Transit, and DVRPC in the investigation of potential transportation improvements.
4. Assist the business community in identifying their transportation needs and provide information as to their transportation alternatives.

Products:

1. Service improvement recommendations.
2. Quarterly reports and billings and final report.
3. TSP Work Program for next fiscal year's DVRPC Planning Work Program.

Beneficiaries:

Gloucester County, municipalities, the private sector, and citizens.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$59,097		\$38,680		\$20,417
2022	\$59,097	\$0	\$38,680	\$0	\$20,417

*\$20,417 Match (\$9,670 for 22-63-022, \$10,747 for special studies projects)

PROJECT: 22-63-023 Mercer County Transit Planning and Programming

Responsible Agency: Mercer County Planning

Program Coordinator: Amy Bernknopf, Kwan Hui

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$52,352		\$33,284		\$19,068
2022	\$52,352	\$0	\$33,284	\$0	\$19,068

*\$19,068 Match (\$8,321 for 22-63-023, \$10,747 for special studies projects)

**PROJECT: 22-63-024 Improving Multi-Modal Access to Tourist Destinations:
Evaluating Ferry Service**

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Karen Cilurso

Project Manager: Brian Carney, Camden Palvino, Spencer Gober

Goals:

Explore and analyze the feasibility of seasonal ferry service, between Philadelphia and interesting points along the Delaware River in Burlington, Camden, and Gloucester counties, as an option to address transportation challenges in accessing tourist attractions.

Description:

Communities along the Delaware River are rich with history and interesting places for potential tourists to visit. Local officials often look to increase the tax base by promoting tourism and recreational activities to outside tourists. However, according to an initial report done in February 2019, Tourism and Transportation: Evaluating Access to Tourist Attractions in Greater Philadelphia, at least 32 percent of the region's attractions have transportation challenges.

To address these transportation challenges and increase access to destinations, staff will analyze the feasibility of seasonal ferry service that will serve Philadelphia with connections to interesting points along Burlington, Camden, and Gloucester counties. This feasibility will analyze existing and potential ferry locations, costs, frequency of trips, and additional infrastructure required. Connections to other modes of transportation will also be explored. The analysis will rely on existing tourist numbers collected pre-pandemic, as well as trip pattern information from DVRPC's Household Travel Survey and the regional travel demand model. Staff will use existing forums (RCEDF) and economic development/tourism professionals to guide the study to ensure that any outside plans or feasibility studies for similar service within the region is incorporated.

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

Tasks:

1. Use tourist data (pre-pandemic) to determine the top ten tourist destinations in each of the three counties.
2. Use DVRPC's Household Travel Survey and regional travel demand modal to determine feasibility.
3. Research and evaluate similar services.
4. Produce a white paper.

Products:

1. White paper.
2. Meeting minutes.
3. Presentation (s) as required.

Beneficiaries:

Burlington, Camden, Gloucester counties, economic development professionals, tourism stakeholders, municipal officials, CVBs, transit authorities

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$89,000	\$0	\$89,000	\$0	\$0

PROJECT: 22-63-025 City of Camden Transit Planning Program

Responsible Agency: City of Camden

Program Coordinator: Amy Bernknopf, Kwan Hui

Goals:

To improve efficiency of the region's public transportation network by carrying out a comprehensive local transit planning program.

Description:

This project will enhance the mobility of the residents of the City of Camden by providing comprehensive planning, programming, monitoring, and coordination of transit services in Camden.

Tasks:

Task 1: Administration:

1. Administer the project and prepare required invoices and progress reports.

Task 2: Planning and Programming

1. Monitor and provide input for NJ Transit and PATCO capital projects within the City of Camden.
2. Promote transit initiatives in the City of Camden as they pertain to residents, employees, employers, developers, and event spaces.
3. Evaluate upcoming land development and recommend measures to increase transit use.

Task 3: Coordination

1. Provide input into NJ Transit operating budgets and determine impacts on fares, subsidies, and levels of service.
2. Participate in activities of the Cross County Connection TMA.
3. Maintain liaison with NJ Transit, PATCO, NJDOT, and other transit service providers in the City of Camden.

Products:

1. Quarterly progress reports and invoices.
2. Closing report.
3. TSP Work Program for next fiscal year.

Beneficiaries:

New Jersey TMAs, NJDOT, and commuters in the DVRPC region in New Jersey.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$36,747		\$20,800		\$15,947
2022	\$36,747	\$0	\$20,800	\$0	\$15,947

*\$15,947 Match (\$5,200 for 22-63-025, \$10,747 for special studies projects)

PROJECT: 22-63-026 NJTRANSIT 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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$55,000		\$55,000		
2022	\$90,944	\$0	\$90,944	\$0	\$0

PROJECT: 22-63-027 Rolling License Plate Surveys (New Jersey)

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Amy Bernknopf

Project Manager: Betsy Mastaglio, Thomas Stead

Goals:

To understand rider park-and-ride origins at 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.

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:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$24,000		\$24,000		
2022	\$35,000	\$0	\$35,000	\$0	\$0

CHAPTER 5

Other Member Government Projects

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS



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PROJECT: 22-53-300 PA/NJ Regional GIS Implementation Coordination

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: William Stevens

Project Manager: William Stevens

Goals:

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

Description:

This project enables the regional planning partners to expand their GIS capability as necessary to maintain a level of technical sophistication that guarantees interoperability and compatibility between NJDOT, PennDOT, DVRPC, and other member governments. A regional transportation database continues to be developed and enhanced by integrating data from both DOTs and member governments. Each planning partner will be asked to contribute transportation data as needed. Updates to this database and subsequent data sharing are critical to continued effective decision-making throughout the planning process. Completion of this project may require the purchase of equipment or services.

Tasks:

1. Attend meetings as needed and provide input as it relates to project direction and focus.
2. Submit quarterly progress reports, including updated budgets and receipts.
3. Acquire and maintain GIS hardware, software, and training as approved for use in the project.
4. Augment in-house staff as necessary to complete tasks.
5. Contribute existing transportation-related data as necessary.
6. Assist in development of new transportation-related data as required.
7. Ensure that all contributing data meets project standards.
8. Share methodologies related to effective and innovative use of transportation data to project participants as requested.

Products:

1. Quarterly progress reports.
2. Hardware, software, and training necessary for project participation.
3. Regional transportation-related data available to all project participants to support their GIS programs.

Beneficiaries:

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

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$300,000				\$300,000
2022	\$300,000	\$0	\$0	\$0	\$300,000

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

**PROJECT: 22-64-000 New Jersey Regional Signal Retiming Initiative Project
(2 Years)**

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Christopher King

Project Manager: Paul Carafides

Goals:

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

Description:

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

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

Tasks:

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

Products:

1. MOU and Concept of Operations for each corridor
2. Proposed and final signal timing plans
3. Implementation of signal timing plans
4. A technical memorandum documenting the signal optimization analysis with appropriate recommendations

Beneficiaries:

Various Counties and Cities in New Jersey DVRPC Region, NJDOT, DVRPC, and motorists

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2021	\$350,000				\$350,000
2022	\$380,000	\$0	\$0	\$0	\$380,000

*NJ TIP # D1601 \$350,000 CMAQ; \$30,000 STBGP Trenton

PROJECT: 22-65-100 New Jersey Local HSIP Program Assistance (2 Years)

Responsible Agency: Delaware Valley Regional Planning Commission

Program Coordinator: Kevin Murphy

Goals:

DVRPC's Offices of Safe Streets and Capital Programs, in collaboration with New Jersey counties and cities, have been working together to address the challenges of securing federal Highway Safety Improvement Program (HSIP) funding for local safety projects in New Jersey. The New Jersey Local HSIP Program Assistance project will provide analysis expertise needed by county and city applicants to advance roadway safety projects. This project will make federal safety funds easier for local roadway owners to access—a critical step in addressing the rising trend of fatal and serious injury crashes in the region.

Description:

This project will provide planning assistance and analysis to help New Jersey county and city partners seeking to improve roadway safety with federal HSIP funding. The New Jersey Department of Transportation makes the HSIP funds available to local roadway owners through an application based competitive program conducted annually and facilitated by New Jersey's MPOs. The Local Safety Program (LSP) application is comprehensive as it approximates the state's concept development process. Each application requires an analysis of the proposed project using the Highway Safety Manual (HSM) to objectively gauge the safety benefit. Created and maintained by the American Association of State Highway and Transportation Officials (AASHTO), the HSM is the premier guidance document for estimating the safety performance of various improvement types within unique contexts, and has been embraced by state DOTs across the U.S., including New Jersey. Among the types of support this contract will provide to New Jersey county and city applicants is HSM analyses for prospective safety projects seeking HSIP funds through the LSP program, and support for projects seeking design and construction funding.

Tasks:

1. Conduct an RFP process to select a qualified consulting firm that has experience with New Jersey's Local Safety Program, performing HSM analyses, and in providing general LSP development assistance.
2. Coordinate and oversee the consultant in their specific tasks assisting county and city partners.
3. Serve as liaison between all involved parties: NJDOT, New Jersey counties and cities, and the consultant.

Products:

Completed Local Safety Program support products to be used to satisfy the requirements of NJDOT's Local Safety Program including application elements and

HSM analyses.

Beneficiaries:

New Jersey county and city partners in the DVRPC region; the traveling public.

Project Cost and Funding:

FY	Total	Highway Program	Transit Program	Comprehensive Planning	Other *
2022	\$220,000	\$0	\$0	\$0	\$220,000

*NJ TIP DB # 2016 \$110,000 STBGP-PHILA/ \$110,000 STBGP-TRENTON

CHAPTER 6

Continuing Projects

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS



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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. Table 10A: NJDOT Initial No Cost Time Extension List and Table 10B: NJDOT Multi-Year Projects are provided below.

NJDOT Initial No Cost Time Extension List

These are continuing studies that were originally funded in FY 2021 or earlier, and will be carried over into FY 2022. 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 2022 | 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
21-52-040	Regional Transportation Demand Management (TDM) Program	\$ 50,000	\$ 40,000	6/30/2021	6/30/2022	PL-DV-21-01	M400D00S396
21-53-300	Regional GIS Implementation Coordination	\$ 150,000	\$ 34,000	6/30/2021	6/30/2022	PL-DV-21-01	Z230D00S389
20-62-000	New Jersey Local Concept Development (2 years)	\$ 430,000	\$ 380,000	6/30/2021	6/30/2022	PL-DV-20-01	Z230D00S297
20-64-000	NJ Regional Signal Retiming Initiative	\$ 350,000	\$ 140,000	6/30/2021	6/30/2022	PL-DV-20-01	Z400D00S299
19-62-000	New Jersey Local Concept Development (3 years)	\$ 1,500,000	\$ 150,000	6/30/2021	6/30/2022	PL-DV-19-01	NJ State Funds

*Task orders from prior years that will continue into DVRPC's Fiscal Year 2022 (July 1, 2021- June 30, 2022).

NJDOT Multi-Year Projects

These projects are either initiated in the current Unified Planning Work Program (FY 2022 UPWP) or on-going projects that are expected to be carried over into FY 2022. Table 10B provides a listing of multi-year projects from the FY 2022 UPWP, and projects that started in previous fiscal years that will continue into Fiscal Year 2022. 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 2022 | Unified Planning Work Program

Table 10B: NJDOT Multi-Year Projects

FY 2022 UPWP

Fiscal Year	Project Number	Project Title	Funding Amount	Current Project End Date	Requested Project End Date
2022	21-64-000	New Jersey Signal Retiming (2 years)	\$ 380,000	6/30/2023	N/A
2022	21-65-000	New Jersey Local HSIP Program Assistance (2 Years)	\$ 220,000	6/30/2023	N/A

FY 2021 and Prior (Continuing Task Orders)

Fiscal Year	Project Number	Project Title	Funding Amount	Current Project End Date	Requested Project End Date
2021	21-52-040	Regional Transportation Demand Management (TDM) Program	\$ 50,000	6/30/2021	6/30/2022
2021	21-53-300	Regional GIS Implementation Coordination	\$ 150,000	6/30/2021	6/30/2022
2021	21-62-000	New Jersey Local Concept Development (2 years)	\$ 1,150,000	6/30/2022	N/A
2021	21-64-000	New Jersey Signal Retiming (2 years)	\$ 350,000	6/30/2022	N/A
2021	21-66-000	PA/NJ Transportation and Community Development Initiatives (2 years)	\$ 750,000	6/30/2022	N/A
2020	20-62-000	New Jersey Local Concept Development (2 years)	\$ 430,000	6/30/2021	6/30/2022
2020	20-64-000	NJ Regional Signal Retiming Initiative	\$ 350,000	6/30/2021	6/30/2022
2019	19-62-000	New Jersey Local Concept Development (3 years)	\$ 1,500,000	6/30/2021	6/30/2022

APPENDIX A

NJDOT Funding

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS



Schedule A: NJDOT Funding Summary

STIP:		X30A	X30A	X30A	X30A	#D2016	#D1601	#D1601	#D1601	#D0204	#D0407	#D2004	#D2005	TOTAL FEDERAL FUNDS AMOUNT	Local Match	
TOTAL AVAILABLE FUNDS \$6,117,248		FY21 FHWA-PL	FY21 FTA-PL FLEX*	21 STBGP-phi	STBGP/HSIP Program Assistance	CNAQ SIGNAL RETIMING	CNAQ SIGNAL RETIMING	STBGP-SIGNAL RETIMING	STBGP/TSMO	STBGP/TCDI	CNAQ/OZONE	STBGP/TRANS. OPERATIONS	CMAQ/Regional TDM			
TOTAL DVRPC PROGRAM & BUDGET FOR FY22 UPWP:																
CENTRAL STAFF	Various Programs and Projects	\$ 2,538,545	\$ 931,276	\$ 1,600,000	\$ 220,000	\$ 350,000	\$ 30,000	\$ 166,000	\$ 105,000	\$ 40,000	\$ 130,000	\$ 50,000	\$ 3,083,221			
		\$ 2,538,545	\$ 544,676											\$ 3,083,221		
NJ Local Concept Development Admin/Competitive Program & Project Mgmt	22-41-050			\$ 150,000										\$ 150,000		
NJ Regional GIS	22-31-020			\$ 200,000										\$ 200,000		
NJ Regional GIS Impl Coordination (Chapter 5)	22-53-300			\$ 150,000										\$ 150,000		
Central Jersey Transportation Forum	22-34-090			\$ 125,000										\$ 125,000		
Enhance and Maintain Travel Forecasting Tools	22-51-020			\$ 185,600										\$ 185,600		
EXPo: Experimental Pop-Ups Program	22-52-110			\$ 100,000										\$ 100,000		
Regional Electric Vehicle Planning Program	22-33-180			\$ 75,000										\$ 75,000		
Racial Minority Mobility Choices Study	22-52-120			\$ 75,000										\$ 75,000		
Regional Sidewalk Development Program: Pilot Technical Assistance Round	22-52-130			\$ 75,000										\$ 75,000		
Transp Syst Mngmt & Ops (TSMO)	22-41-060							\$ 166,000						\$ 166,000		
NJ REG SIGNAL TIMING INIT (2 years)	22-64-000					\$ 350,000	\$ 30,000							\$ 380,000		
Community and Economic Development (TCDI Administration)	22-33-020								\$ 105,000					\$ 105,000		
TRANSPORTATION OPERATIONS	22-41-030											\$ 130,000		\$ 130,000		
NJ LOCAL HSIP PROG ASSISTANCE	22-34-150				\$ 220,000									\$ 220,000		
NJ Supp Reg. Hwy Plan Prog. (SRHPP)	Project # 22-61-010 to 22-61-100 (Chapter 3B)			\$ 409,000										\$ 409,000		
(+MATCH)														\$ 102,250	\$ 102,250	
REGIONAL TDM PLANNING	22-52-040												\$ 50,000	\$ 50,000	\$ 12,500	
(+MATCH)														\$ 12,500	\$ 12,500	
NJ AIR QUALITY	22-34-110									\$ 40,000				\$ 40,000	\$ 10,000	
(+MATCH)														\$ 10,000	\$ 10,000	
NJ Transit Support	Project # 22-63-020 to 22-63-027 (Chapter 4B)			\$ 386,600										\$ 386,600		
(+MATCH)														\$ 386,600	\$ 96,650	
		\$ 6,326,821	\$ 931,276	\$ 1,544,600	\$ 220,000	\$ 350,000	\$ 30,000	\$ 166,000	\$ 105,000	\$ 40,000	\$ 130,000	\$ 50,000	\$ 6,105,421	\$ 6,105,421	\$ 221,400	

APPENDIX B

Acronyms

FY 2022 | UNIFIED PLANNING WORK PROGRAM
SERVING THE PHILADELPHIA, CAMDEN, TRENTON, METROPOLITAN AREAS

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

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

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

TOTF – Transportation Operations Task Force

TPM – Transportation Performance Measures

TPM – Transportation Performance Management

TRID – Transit Revitalization Investment District

TRB – Transportation Research Board

TSM – Transportation Systems Management

TSMO – Transportation Systems
Management and Operations

TSP – Transit Support Program

TSP – Transit Signal Priority

UPWP – Unified Planning Work
Program

US DOT – US Department of
Transportation

US EDA – US Economic Development
Administration

US EPA – US Environmental
Protection Agency

UWAG – Urban Waterfront Action
Group

VOC – Volatile Organic Compound

VMT – Vehicle Miles Traveled

Fiscal Year 2022 Unified Planning Work Program

Publication Number: 22002

Date Published: June 2021

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 2022 as passed by the DVRPC Board in January 2021.

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