

2022-2024

UNIFIED PLANNING WORK PROGRAM FOR SOUTHWESTERN PENNSYLVANIA

July 2022



Southwestern Pennsylvania Commission

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Southwestern Pennsylvania Commission

2022

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SECTION I

SPC PLANNING OVERVIEW

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INTRODUCTION TO SPC

Southwestern Pennsylvania is a ten-county region comprised of Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington and Westmoreland Counties and the City of Pittsburgh.

The region is physically and economically diverse, with urban, suburban and rural development patterns supporting an economic base ranging from world class, high-tech medical and biomedical research facilities to robotics and automation to mineral extraction and agriculture.

Effective planning for a region of this size and diversity requires the cooperation and coordination of many planning partners working together toward a regional vision. SPC serves as the forum for regional planning efforts in the areas of transportation and economic development, working closely with the public, local municipal officials, county planning and development offices, ten transit operators, three Transportation Management Associations (TMAs), the Pennsylvania Department of Transportation (PennDOT) and dozens of other entities on the identification and implementation of a regional vision.

As the Metropolitan Planning Organization (MPO) for the region, SPC is required by federal law to develop and regularly update several transportation planning and programming documents, including a Long Range Plan (LRP), which establishes the long term vision, goals and strategies for the region; the Transportation Improvement Program (TIP), which details the highest transportation project and program priorities of the region over a four-year period; and the Unified Planning Work Program (UPWP), which identifies the regional transportation planning activities to be conducted within each state fiscal year.

SPC uses a continuing, cooperative and comprehensive planning process to fulfill its transportation planning role for the region. Local transportation service providers, transit agencies, airport authorities, maritime operators, rail-freight operators, pedestrian and bicycle advocates, port operators, municipal officials, the business community and the public are all partners in the development and implementation of the regional transportation plan. In addition, PennDOT, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) are important partners in the design, funding and implementation of the TIP for the region.

Recognizing that the transportation system not only provides for the mobility of people and goods, but also affects patterns of growth and economic activity through accessibility to land, the SPC transportation planning process works to identify strategies that advance the long term transportation, community development and economic goals of the region. The integration of transportation and economic development planning requires cooperation with local municipalities, member counties, and other MPOs and planning entities in adjoining regions.

SPC is uniquely positioned to advance this coordinated, comprehensive regional vision. In addition to being the MPO for the region, SPC is also designated by the Economic Development Administration of the U.S. Department of Commerce as the Economic Development District (EDD) for the ten-county region. As the EDD, SPC develops a regional Comprehensive Economic Development Strategy (CEDS) for Southwestern Pennsylvania, assists in implementation strategies, and provides technical assistance to local governments in their economic development activities and programs.

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The counties of Southwestern Pennsylvania are also within the region served by the Appalachian Regional Commission (ARC), a federal-state partnership designed to address the unique economic development and infrastructure development needs of the 200,000 square-mile Appalachian Region. To meet these goals, ARC helps to fund projects such as education and workforce training programs, highway construction, water and sewer system construction, small business start-ups and expansions, and development of healthcare resources. To strengthen local participation and ensure that funds are allocated in accordance with local needs and are used effectively and efficiently, ARC relies on a network of multi-county planning and development organizations, or Local Development Districts (LDDs). SPC is the designated LDD for southwestern Pennsylvania.

SPC's multiple federal designations (as MPO, EDD and LDD for the region) represent an unparalleled opportunity to create a comprehensive program linking transportation, community development and economic vitality initiatives for Southwestern Pennsylvania.

This comprehensive program is reflected in *SmartMoves for a Changing Region*, which ties the regional economic development strategy of the CEDS to the regional long range transportation plan through strategies, actions and projects that focus on the region taking advantage of our considerable existing assets and developing, supporting, and implementing projects and programs that advance our progress. It means investing in regionally-connected, seamless transit and new transit investments in key corridors and networks. It means developing modern support infrastructure that prepares the region not only for current technological advances, but also for the new technology being advanced in this region.

The plan is about creating and connecting people to opportunity. The opportunity can be physical tangible connections like improved regional transit or enhanced broadband connectivity. The opportunity can create connections to training for the jobs of the future that afford the region's workforce family-sustaining job opportunities in new and emerging industries. The opportunity is about the region connecting with opportunities to invest in and take stewardship of our older communities, as well as investing in strategies that protect our environment and address climate change and resiliency.

Where *SmartMoves* sets the Vision for the region, the UPWP, the TIP, and the CEDS are the mechanisms through which the Commission develops short range programs to implement this Vision.

This document, the 2022-2024 Unified Planning Work Program, identifies transportation planning activities to be conducted within the 2022-2023 and the 2023-2024 fiscal years (July 1, 2022 through June 30, 2024) and establishes the priorities of the SPC transportation planning program for fiscal years 2022-2024.

As the region's comprehensive transportation planning program, the UPWP provides a central source of information about all major transportation planning priorities so that decision-makers can base their public investment decisions on the most complete information affecting growth and development within the Southwestern Pennsylvania region.

The 2022-2024 Work Program identifies the individual programs and initiatives to be undertaken within five broad program areas: Transportation Program Development; Multimodal Transportation Planning; Transportation Operations & Safety; Data Systems & Modeling; and, Outreach & Coordination.

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TRANSPORTATION PLANNING PROGRAM OVERVIEW

The UPWP planning activities cover a full range of transportation modes and planning functions. Many of these planning efforts rely on the availability of reliable, accurate and current data, including traffic forecasts and public transit ridership, roadway condition evaluations, congestion assessments or air quality conformity assessments. As such, the acquisition and maintenance of data is a vital element of the SPC work program, and supports many of the UPWP projects identified in this two-year Work Program.

In addition to the federally-required plans and programs (the LRP and TIP) and their companion Air Quality Conformity findings and Environmental Justice analyses, the range of continuing UPWP activities includes active transportation planning, freight planning, transit planning, monitoring and tracking federal performance metrics, regional operations and safety planning, operation of a ridesharing program, planning for Intelligent Transportation Systems (ITS), broadband connectivity planning, public outreach and engagement, and other planning activities. SPC also partners with PennDOT in conducting PennDOT Connects local government outreach and training, collecting traffic and roadway information, participating in PennDOT planning studies, and providing other technical assistance to both PennDOT and local government partners as needed.

The 2022-2024 Work Program document is divided into three sections. This introductory section provides a general description of the UPWP and the regional transportation planning process. Section II, Job Descriptions for Planning Projects, identifies the objectives, activities and products for each planning job. Section III, UPWP Funding Summaries, presents summaries of the sources that provide funding for the planning program as well as the budgets for individual planning projects.

SPC TRANSPORTATION PLANNING RESPONSIBILITIES

SPC has been charged with transportation planning responsibilities for Southwestern Pennsylvania since 1962, when it was created under the Regional Planning Law of May 29, 1956, P.L. 1845, as amended, and Section 3 of the Intergovernmental Cooperation Act, Number 180, July 12, 1972. In 1999, the Southwestern Pennsylvania Regional Planning Commission was renamed the Southwestern Pennsylvania Commission, or SPC.

SPC's role in transportation planning as the Metropolitan Planning Organization (MPO) for southwestern Pennsylvania was strengthened in 1991 with the passage of landmark transportation legislation, called ISTEA, which reinforced the regional LRP, TIP and UPWP as the planning foundations upon which federal transportation funding decisions were to be made. Subsequent transportation reauthorization legislation, TEA-21 (1998) and SAFETEA-LU (2005), and MAP-21 (2012) reaffirmed the key decision-making role of the MPO. Additional responsibilities are directed by the Federal Clean Air Act, which requires SPC to demonstrate that the emissions resulting from its transportation plans and programs will not exceed certain minimum standards.

In 2015, Congress enacted the Fixing America's Surface Transportation (FAST) legislation. The FAST Act expands upon the eight planning factors from MAP-21, adding two additional factors that must be considered in the metropolitan planning program.

PLANNING EMPHASIS AREAS

The ten federal planning factors that must be considered in the metropolitan planning process are:

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

In developing the 2022-2024 Work Program, SPC has identified projects and strategies that address these federal emphasis areas.

STATEWIDE PLANNING INITIATIVES

The Commonwealth of Pennsylvania also provides annual guidance for a number of primary planning activities and special initiatives that SPC incorporates into the annual UPWP. For Fiscal Years 2022-2024, these priority areas include: (1) Plans and Programs; (2) Supporting Planning/Programming Activities; (3) Project Delivery; (4) Land Use/Transportation Linkages/Economic Development/Modernization; (4) Highway Performance Monitoring and Traffic Data Collection; (5) Public Involvement and Outreach; (6) Local Technical Assistance Program (LTAP); and, (7) Program Administration.

These priority areas are included in the planning activities within the appropriate functional area of SPC's transportation department. In some cases such as performance-based planning and programming, the tasks are disbursed through several of the department's functional areas. The planning priority areas being addressed are noted at the beginning of each functional area section.

REGIONAL PRIORITIES IN TRANSPORTATION PLANNING

In fulfilling its commitment to meet the federal and state transportation planning mandates, SPC works with its members and partners to advance the Vision, Goals and Strategies of *SmartMoves for a Changing Region* and the strategies of the regional Comprehensive Economic Development Strategy into a single, multi-year work program that ties local transportation plans to other related plans and policies

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for the benefit of the region (See Exhibit One). *SmartMoves* sets the overall context for all of SPC's planning efforts over the next two years.

During this UPWP, as depicted in the Planning Milestones Table below, SPC will maintain and update the regional Long Range Transportation Plan, begin the TIP, and the regional Freight Plan. SPC will also participate in Federal Certification and FTA Triennial Reviews, which will call upon the expertise of each of SPC's Functional Areas. SPC's work program will also focus on advancing initiatives tied to the Strategies identified in *SmartMoves*, including:

- Regional collaboration and education of local governments in best practices for integrating transportation, environmental and land use planning.
- Employ holistic planning for mobility and accessibility when developing and prioritizing projects. Make transportation improvements fit community context and enhance local quality of life and encourage strong, enforceable, complete streets policies.
- Adapting planning and programming to help address the impacts of extreme weather through resiliency and sustainability and greenhouse gas emission deceleration strategies.
- Improve infrastructure efficiency through technology implementation in project development, design, construction, operation and maintenance.
- Utilize the PennDOT Connects process to ensure holistic planning and context-based street design for each project so that community needs are discussed before projects are programmed on the TIP.
- Reinvestment in our older communities through various projects, programs and educational initiatives.
- Better coordination and collaboration among public and private transportation providers in order to provide more equitable transportation services in the region.
- Work with partners to incorporate new technologies into the transportation network. This may include the continued research and development of smart traffic signals, data collection for operations and maintenance, and improvements to transit through accessibility and efficiency.
- Provide high speed internet connectivity and availability everywhere through public policies, funding or incentives. Use existing transportation corridors to facilitate delivery of broadband throughout the region.

SPC continues to focus on project delivery tracking efforts to ensure the region's scarce funding resources are maximized. SPC will continue to proactively engage local project sponsors to ensure their

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projects are being advanced in a timely manner. Benefits to enhanced project tracking include improved ability to monitor project programming and delivery; the ability to more quickly identify project delays; and, enhanced information for local decision-makers and the general public. The project selection process continues to be refined and enhanced to reflect current policies and priorities.

Federal requirements in performance-based planning and programming (PBPP) and transportation performance management (TPM) will continue to be a priority during this work program period. During the previous UPWP, SPC worked collaboratively with its planning partners to establish performance baselines, update planning agreements and adopt performance targets, as well as implement an interactive TPM web portal to track progress and inform the public. Work during this program will continue to focus on updating targets as necessary, enhancing reporting mechanisms to inform partners and the public of the progress being made toward the targets, as well as ensuring the programming of projects works to achieve the region and Commonwealth's adopted performance targets.

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Table 1: Planning Milestones

Southwestern Pennsylvania Commission Transportation Planning Milestone Table			
Planning Activity	Current	Next	
	Adoption/ Completion	Required Adoption	Target
Long Range Plan	Jun-19	Jun-23	Jun-23
Air Quality Conformity	Aug-21	Jun-23	Jun-23
EJ Benefits and Burdens Analysis	Jun-19	Jun-23	Jun-23
Transportation Improvement Program	Jun-20	Jun-22	Jun-22
Air Quality Conformity	Aug-21	Jun-22	Jun-22
EJ Benefits and Burdens Analysis	Jun-20	Jun-22	Jun-22
Annual List of Federal Obligations	Dec-21	Dec-22	Dec-22
Transportation Performance Management Reporting			
PM1 - Safety (annual)	Jan-21		Jan-22
PM2 - Asset Condition (biennial)	Sep-20		Oct-22
PM3 - System Performance & CMAQ (biennial)	Sep-20		Oct-22
Public Participation Plan	Apr-21		Apr-25
Title VI Plan	Mar-17		Mar-22
Limited English Proficiency Plan	Mar-17		Mar-22
Coordinated Transportation Plan (CTP)	Sep-19		Sep-23
Regional Operations Plan	Sep-19		Sep-24
Congestion Management Process	Ongoing		Ongoing
Regional Safety Action Plan	Dec-20		Dec-25
Regional ITS Architecture	Ongoing		Ongoing
Active Transportation Plan	Apr-19		Apr-24
Regional Travel Demand Management Strategic Plan	Dec-19		Dec-24
Regional Freight Plan	Dec-16		Dec-23
Federal Certification Review (FHWA, FTA & EPA)	Jul-21		Jul-25
FTA Triennial Review	Jun-18		Jun-22
Functional Classification/NHS Review	Jun-19		Jun-23

Exhibit 1: The Regional Vision, Goals and Strategies



Vision:

A world-class, safe and well maintained, integrated transportation system that provides mobility for all, enables resilient communities, and supports a globally competitive economy.



Connected Mobility

A world-class, safe and well maintained, integrated transportation system that provides mobility for all.

Mobility for All – Equity Keeps Us Whole

- Integrate multiple forms of public/private transportation to provide increased mobility equitably for all users including those in underserved rural areas and disadvantaged populations.

High Tech Mobility – Connected Systems & Autonomous Vehicles

- Modernize Supporting Infrastructure: Develop and deploy appropriate infrastructure to facilitate safe and efficient use of Connected Infrastructure as well as Connected and Autonomous Vehicles.
- Offset impacts associated with Connected and Autonomous Vehicles on safety, public sector revenue, congestion and local quality of life.

Funding and Financing – Sustainable Funding

- Fund additional transportation infrastructure through private sector partnerships, with user fees, value capture, and other appropriate mechanisms; broaden revenue tools available to local governments to fund infrastructure projects.
- Conduct education on the need for revenue increases as a continuing process, not a “one and done” endeavor; and garner overall understanding of public infrastructure benefits, needs and subsequent support for needed infrastructure revenues.
- Develop a comprehensive regional plan for public transit connections, including the identification of a possible regional source for dedicated public transit funding to facilitate seamless linkages and cooperation across the region.

Prioritize and Streamline – Faster Project Development & Delivery

- Employ holistic planning for mobility and accessibility when developing and prioritizing projects. Make transportation improvements fit community context and enhance local quality of life.
- Streamline federal, state and local project development and delivery across all phases.

Resilient Communities

The revitalization of our communities will make us a magnet for new investment. Intensive investments in connectivity, walkable neighborhoods, and green infrastructure will attract business and residents to newer and older communities alike.

Resilient Communities – Elevate Community

- Promote institutional investment in older communities, repurposing versus demolition, and ensure that affordable housing is retained utilizing best practice models in the region for land use, vacant properties, and environmental strategies.
- Provide municipal education on land use best practices, “Smart Growth” principles, community development, transportation planning, and on existing mechanisms to leverage private sector development.
- Promote strategic infrastructure investment in communities that reduces physical exposure and vulnerability from natural hazards, including flooding and landslides.
- Embrace emerging infrastructure innovations & technologies including planning, design, materials and construction processes for an adaptable and resilient built environment.

Tackle Climate Change, Air & Water – The Earth Sustains Us

- Invest in strategies that adapt to and decelerate the impacts of climate change. This includes investment in disaster preparedness, response, and recovery, as well as, creating awareness about climate change, its projected impacts, and regional strategies.
- Conservation of the region’s natural resource assets & key tracts of land that enhance environmental quality, natural land connectivity, habitat corridors, agricultural lands preservation & provides recreational opportunities for residents and tourists.
- Promote and support sustainable regional water resource management and planning for water topics, such as, stormwater, flooding, water quantity, water quality, and infrastructure systems.
- Support and encourage transportation projects or programs that will contribute to attainment or maintenance of the national ambient air quality standards (NAAQS) for ozone, carbon monoxide (CO), and particulate matter (PM).

Globally Competitive Economy

Strategic infrastructure investments and workforce training will make the region recognized as a global leader in technology and innovation.

Grow, Train and Retrain – Workforce for Change

- Grow job candidate market through initiatives such promoting the benefits of skilled labor positions, workforce reintegration of individuals with minor criminal records or previous drug use, recruitment & retention, and immigration.
- Train and/or retrain employees and new college graduates for the jobs in the region, as well as training for emerging technology opportunities, like Additive Manufacturing and Artificial Intelligence.
- Prioritize soft skills in training curriculums and provide flexible and easy to use funding for an “on the job training” approach geared to emerging and new technologies.

Prioritize, Improve, Support – Infrastructure Supports Us

- Prioritize infrastructure projects based upon their regional economic benefits, with emphasis on projects that promote the local utilization of energy and industry output.
- Improve infrastructure efficiency through technology implementation in the development, design, construction, operation and maintenance.
- Support the identification and development of an “Appalachian Storage Hub” to promote the local use of locally derived ethane feedstock.

Partner and Deploy – Technology Advances Us

- Utilize public-private partnerships to leverage private sector participation to identify, track, develop and deploy new technology advancements across the region. This includes communications, manufacturing and mobility.
- Provide High speed internet connectivity and availability everywhere through public policy, either funding or incentives. Use existing transportation corridors to facilitate delivery of broadband through the region.

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SPC COMPOSITION

SPC membership consists of Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington and Westmoreland Counties and the City of Pittsburgh. The ten member counties and the City of Pittsburgh each appoint five voting members to the Commission. In addition to the local government members, four state agencies, the Port Authority of Allegheny County, and a representative from the SPC Transit Operators Committee are voting members of the Commission. Five other federal government agency representatives are active, non-voting participants.

The SPC Commissioners are responsible for the adoption of the three federally mandated transportation planning documents: the region's long range plan, the Unified Planning Work Program and the Transportation Improvement Program.

To stay abreast of issues in the more than 7,100 square-mile region, SPC engages several key committees and forums, as well as an active public engagement program.

SPC COMMITTEES & FORUMS

EXECUTIVE COMMITTEE - The committee has a representative from each member jurisdiction, and is chaired by the SPC Chairman. There are three at-large representatives from the Commission membership, and a representative from each of the following state offices: Pennsylvania Department of Transportation, the office of the Governor and the Department of Community and Economic Development.

REGIONAL POLICY ADVISORY COMMITTEE – The Regional Policy Advisory Committee has an advisory role to the Commission, and is charged with making recommendations on policy issues and projects as requested by the Executive Committee. Membership mirrors the voting membership of the Commission, as appointed by the members, including other participants as requested by the Executive Committee to discuss special topics.

TRANSPORTATION TECHNICAL COMMITTEE (TTC) - The TTC deals exclusively with technical issues relating to transportation, and makes recommendations to SPC on a range of matters including the Transportation Improvement Program (TIP); transportation-related air quality plans; and, transportation issues. The TTC meets each month in advance of Commission meetings, and, as needed, creates sub-committees tasked with specific assignments. The TTC includes the planning directors of the ten SPC member counties and the City of Pittsburgh, and representatives of PennDOT Central Office, Pennsylvania DEP, and the Port Authority of Allegheny County. Non-voting members of the Committee include PennDOT District Offices, FHWA, FTA, EPA, TMAs, and the Allegheny County Bureau of Air Pollution Control.

TRANSIT OPERATORS COMMITTEE (TOC) - The TOC develops transit components and performance measures for the region's long range transportation plan; develops and maintains the transit component of the Transportation Improvement Program; tracks the use of funds programmed on the TIP; and, addresses other common transit issues of regional interest. The TOC meets as needed. The TOC is chaired by a member of the Commission as elected by the TOC. The members include designated Transportation Management Associations and all recipients of federal and state transit assistance in the

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region. Current members are the Port Authority of Allegheny County, Beaver County Transit Authority, Westmoreland County Transit Authority, Mid Mon Valley Transit Authority, Freedom Transit, Fayette Area Coordinated Transportation, Green County Human Services, Indiana County Transit Authority, Butler City-Township Joint Municipal Transit Authority, Town & Country Transit Authority, SPC's CommuteInfo Program, New Castle Area Transit Authority, Oakland Transportation Management Association, Airport Corridor Transportation Management Association and the Pittsburgh Downtown Partnership.

ACTIVE TRANSPORTATION FORUM - This advisory group meets on topics related to active transportation needs and issues in the region. The group facilitates SPC's efforts to maintain intermodal accessibility throughout the region by providing localized information on pedestrian and bicycle needs and accommodations within the regional transportation system.

TRANSPORTATION OPERATIONS & SAFETY FORUM – SPC provides a central forum to coordinate transportation operations and safety planning in the region, including planning for Intelligent Transportation Systems (ITS) and efforts to reduce transportation-related deaths Toward Zero. The availability of a broad regional Transportation Operations & Safety Forum has helped to integrate these topics; improve communication between regional stakeholder groups in different specialty areas; and reinforce SPC's role as the regional champion for transportation operations and ITS.

TRAFFIC INCIDENT MANAGEMENT (TIM) LEADERSHIP COUNCIL – To help regional organizations enhance the delivery of services and products for the purpose of improving responder safety, clearing incidents from the roadway as quickly and safely as possible, and improving the availability and reliability of interoperable incident communications, SPC facilitates a dialogue between leadership and practitioners including crash and homicide investigators, emergency medical services, fire and rescue, hazardous material handlers, law enforcement, media, medical examiners, road maintenance, service patrols, towing and recovery, traffic management centers, transportation, utilities, and others.

FREIGHT FORUM – The SPC Freight Forum provides a venue for air cargo, railroad, trucking and waterway freight service companies to discuss issues that impact the movement and handling of goods within the region. SPC staff uses information obtained at these meetings to better integrate freight and goods movement into regional transportation plans and programs, including the Transportation Improvement Program, Long Range Transportation Plan, Congestion Management Process, Congestion Mitigation and Air Quality Program and other regional initiatives.

The members' planning and development directors, other advisory groups, and ad hoc committees are established to guide special initiatives or planning studies as needed.

UPWP DEVELOPMENT PROCESS

SPC's 2022-2024 UPWP builds upon the region's long range transportation and development plan – *SmartMoves for a Changing Region*. *SmartMoves* contains 24 Strategies and associated action items intended on advancing the Regional Vision and Goals of the plan. This framework provides the overall guidance for tasks to be completed over the next two years by SPC and its planning partners.

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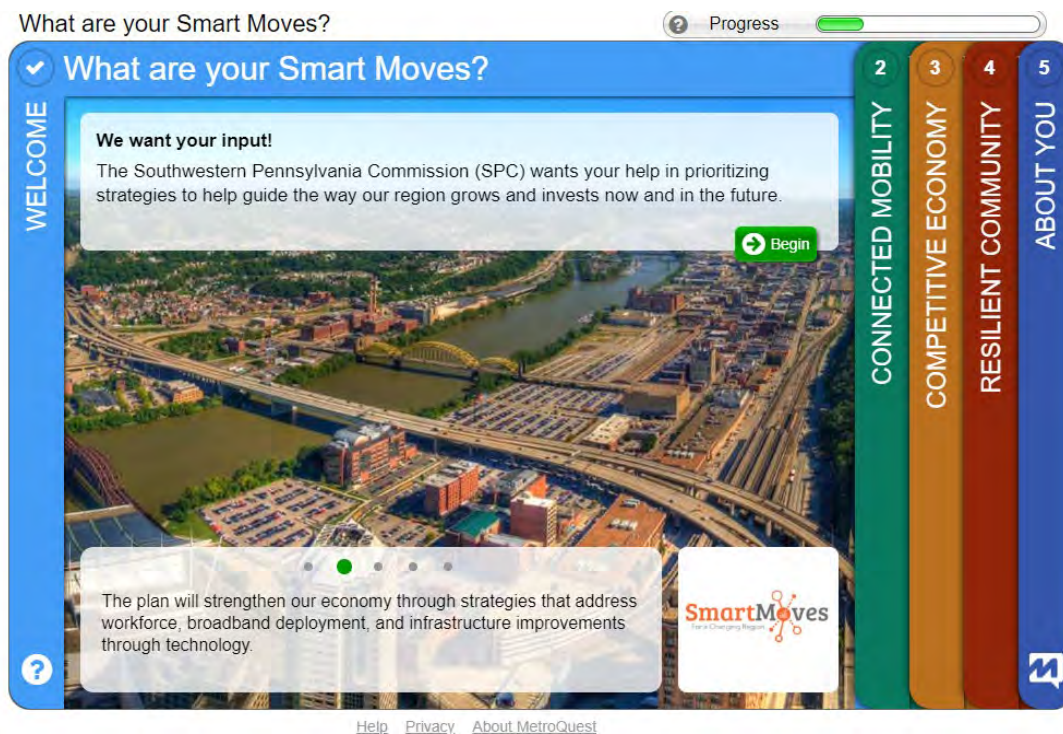
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SmartMoves employed a broad and robust public engagement campaign to help set the direction of the plan, the region, and activities to be undertaken by SPC and its planning partners across the region.

The campaign resulted in over 22,000 points of engagement from the public, the business community and partners. This engagement was instrumental in developing the plan and subsequently the tasks described in this Unified Planning Work Program that will ultimately work to advance and implement *SmartMoves*.

An integral part of this public and stakeholder engagement was a MetroQuest survey that was conducted to gauge the public's priority in addressing the plan's 24 Strategies (Exhibit 2). This survey was used as one point of input to inform the tasks included in this Work Program.

Exhibit 2: *SmartMoves* MetroQuest Survey



Considering input from *SmartMoves* as well as input and feedback from planning partners and SPC Leadership, SPC staff has developed a robust work program for the next two years that address our state and federal requirements while also integrating and advancing local priorities.

It should be noted, as depicted in Table 1, that *SmartMoves* will be updated in 2023, therefore, year two of this work program will contain many of the activities required for conducting the *SmartMoves* update.

Table 2 depicts the collaborative process used to develop the UPWP that advances the regional transportation planning and programming process for the 10-county Southwestern Pennsylvania region.

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Table 2: UPWP Development Schedule

2022-2024 UPWP Development Schedule	
August 10	Memo to project managers requesting UPWP design input: identify PennDOT and SPC guidance, resource materials, and design schedule. Assign job write-ups for ongoing projects.
Aug. 10 – Sept. 10	Project Manager strategy / direction setting sessions
August-September	<p>Coordinate input from SPC committees and external sources as appropriate</p> <ul style="list-style-type: none"> • August TTC – Requested initial input from partners • August – Meeting with Port Authority of Allegheny County • September TTC – Present draft UPWP to solicit feedback • September – Meetings with District Planners • September SPC Executive Committee - Present draft UPWP to solicit feedback
By September 27	<p>Project managers submit draft job descriptions and budgets for ongoing projects for the two-year program.</p> <p>Begin Executive Director review of the completed preliminary report before PennDOT/FHWA/FTA submission.</p>
By October 8	Submit the preliminary 2022-2024 UPWP to PennDOT Central Office for review.
By November 1	Submit the preliminary 2022-2024 UPWP to FHWA and FTA in accordance with the PennDOT Guidance.
End of November	<p>FHWA/FTA will respond with written comments by the end of November, expecting that their comments will be integrated into the planning partner UPWP before MPO/RPO Board approval.</p> <p>Identify Candidates for Supplemental Funding. Assign to project managers for further development.</p>
By December 3	<p>Memo to project managers from the Transportation Director, requesting updates to UPWP project budgets for the current 2020-2021 fiscal year (anticipated).</p> <p>Review 2020-2021 project budgets and revise as necessary.</p>
By December 13	<p>Submit Revised Budget Worksheets for current 2020-2021 UPWP projects.</p> <p>Commission brief on Draft 2022-2024 UPWP</p>
December 20	<p>New candidate projects, job descriptions and budgets are due as assigned.</p> <p>Project managers may submit revised project budgets for the two-year program (changes from the October submission) for ongoing projects.</p>
By January 3	UPWP narrative updated to respond to FHWA/FTA comments. Budget tables fiscally balanced to available revenues, responding to project manager budget revisions

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2022-2024 UPWP Development Schedule

	Submit Final Draft UPWP for review by Executive Director, including a fiscally-balanced draft budget table.
January 31	Request Commission approval of Draft UPWP for submission to funding agencies (PennDOT, FHWA, and FTA).

UPWP ADMINISTRATION

UPWP design and administration requires a high degree of federal, state and local intergovernmental cooperation. SPC and its members identify regional needs and implement the planning activities. The SPC UPWP identifies these activities for review and approval by the funding agencies.

The federal government, through the USDOT, provides regulatory guidance and approximately 80% of the UPWP funds. State and local governments provide the remaining funds as a required local match of the federal funds. PennDOT, SPC member governments, the Port Authority of Allegheny County, and other local transit operators provide the majority of the remaining local matching funds. In-kind and private foundation contributions provide the remaining match where possible.

SECTION II
JOB DESCRIPTIONS FOR PLANNING
PROJECTS

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TRANSPORTATION PROGRAM DEVELOPMENT

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TRANSPORTATION PROGRAM DEVELOPMENT – OVERVIEW

The Program Development Group of SPC’s Transportation Department focuses on the processes that shape and implement the region’s long range plan (LRP), as well as the development and maintenance of the region’s Transportation Improvement Program (TIP).

The long range plan is a performance-based, 25-year transportation and development plan that sets the policy and investment foundation for all of SPC’s initiatives. The plan is required to be updated every four years, in air quality nonattainment and maintenance areas, in order to confirm the transportation plan’s validity and consistency with current and forecasted transportation land use conditions and trends.

The TIP is a short-range program, listing highest priority surface transportation projects and programs that will be undertaken over the next four years in the 10-county SPC region. The TIP is developed by a continuing, comprehensive and cooperative transportation programming process that involves various planning partners, local project sponsors, stakeholders and the public, and is the main implementation vehicle to advance the Vision, Goals and Strategies found in the LRP. In addition to the LRP implementation efforts undertaken by the Program Development Group, initiatives undertaken by the Operations and Safety Group, Multimodal Planning Group, and the Data and Modeling Group, as outlined and described in other sections of the 2022-2024 Work Program, all play vital roles in the advancement of the LRP.

SmartMoves for a Changing Region’s Goals and Strategies are implemented through SPC’s programs such as the Regional Traffic Signal Program, Congestion Mitigation and Air Quality (CMAQ) Program, the Transportation Alternatives Set-Aside (TA Set-Aside) and Livability through Smart Transportation Program (SMART), the CommuteInfo Program and the SPC Water Resource Center as well as roadway, bridge, transit and other multimodal investments. Included throughout the plan is the consideration of sustainability and resiliency in the system.

The PennDOT Connects process continues to play an important role in implementing the Vision, Goals and Strategies set forth in the LRP. PennDOT Connects is intended to consider community priorities, as defined by adopted community plans, as well as contextual elements of the project area early in the project development process, before funds are programmed onto the TIP. PennDOT Connects will help to shape future LRP updates by providing a sustained, collaborative effort which will result in better defined local priorities, projects and ultimately better communities.

The Program Development Group develops and provides oversight to a number of planning programs and initiatives, all of which are directly related to the advancement and implementation of the LRP and TIP. These programs and initiatives, their objectives, planning activities, work products, and yearly budgets are further described in detail in this section of the 2022-2024 Work Program.

STATEWIDE PLANNING PRIORITY AREAS

The tasks found in this section of the UPWP address the following priority areas:

- **I-Plans and Programs:** Long Range Plan (LRP) and Transportation Improvement Program (TIP) administration and development, Performance-Based Planning and Programming (PBPP), Transportation Performance Management (TPM), asset management conditions and needs, performance measure development, PennDOT Connects, project development, additional funding, MPO website linkages to PennDOT TIP Visualization applications, and Annual Obligation Reports for TIP Highway and Transit Projects.
- **II-Supporting Planning/Programming Activities:** Performance measures and targets, TA Set-Aside program administration, functional classification, technical assistance, process reviews, modernization/technology improvements, and asset management inventories.
- **III-Project Delivery:** TIP/LRP fiscal constraint, PennDOT Connects/scoping field views, Multimodal Transportation Fund (MTF) project review and application assistance, project cash flow, and innovative finance.
- **IV-Land Use/Transportation Linkages/Economic Development/Modernization:** sustainability and resiliency strategies, via the SMART program and regional collaboration; training and best practices for local governments, Extreme Weather Vulnerability Assessment, and integrated/strategic corridor planning.
- **VI-Public Involvement and Outreach:** Expand Environmental Justice (EJ) beneficiaries, EJ analysis on LRP and TIP, Title VI review and improvements, expanded MPO use of website for program information.

ROLES

- **Federal Highway Administration (FHWA)/Federal Transit Administration (FTA):** Provide technical assistance as well as general oversight, review and approval of the Metropolitan Planning Process for Southwestern Pennsylvania.
- **SPC:** In the LRP and TIP development processes, the role of SPC is to establish and facilitate a cooperative process for program development; the SPC adopts the documents for the region. Through the regional Transportation Technical Committee (TTC) monthly meetings, administers current TIP modifications. LRP amendments undergo a public review process and the TTC also reviews and recommends amendments to SPC. SPC takes a lead role in implementing the LRP with broad collaboration among the region's planning partners, stakeholders and the public.
- **PennDOT Center for Program Development:** In TIP development, the role of the PennDOT CPDM is to ensure that statewide procedural and fiscal guidance for TIP development is adhered to. PennDOT CPDM makes all Spike/Discretionary decisions and reviews the Draft TIP. PennDOT CPDM develops and updates the Statewide Interstate Maintenance Program. The PennDOT CPDM reviews and transmits the region's LRP to federal partners for review and approval. SPC looks to the CPDM for supplemental funding, project delivery guidance and technical assistance in implementing the region's LRP.

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- **PennDOT Districts:** In TIP and LRP development, the Districts' role is to share information regarding asset conditions, safety conditions, and traffic operations presenting an advanced list of priority needs for the operation, preservation, and reconstruction of the state highway and bridge system within the District. The District Programming Units conduct and present carryover analysis and best fit optimization of new project candidates that have been prequalified for the TIP. Districts take the lead in coordinating and conducting PennDOT Connects activities.
- **Member Planning Departments:** In LRP and TIP development, the county/city planning departments' role is to communicate the priority needs regarding maintenance and upgrade of the transportation network in the county/city, including on state, county and municipal infrastructure assets. Member planning departments are to provide input on changes and status of county/city and municipal comprehensive plans, zoning ordinances, and planned development to determine their effects on early transportation planning decision-making and subsequent TIP programming.

TRANSPORTATION PROGRAM DEVELOPMENT – RESULTS FROM CURRENT PROGRAM

The current long range transportation and development plan, *SmartMoves for a Changing Region*, was adopted on June 24, 2019. The plan, which was developed through a robust public involvement process, developed a series of regional strategies.

SmartMoves continues to emphasize investment in the maintenance and preservation of the existing transportation system, a theme that is also the top priority in the current 2021-2024 TIP and the draft 2023-2026 TIP. Other significant investments are made in safety and operations, as well as improvements that foster economic growth, enhance livability, mobility and connectivity in communities throughout the region, and provide residents with sustainable, multimodal transportation choices.

The following is a sample of plan implementation activities that were advanced in the 2020-2022 Work Program:

- Processed several amendments to the *SmartMoves* long range plan, including addition of Federal BUILD grant funds to advance the Gateway 228 projects in Butler County.
- Continued LRP implementation through use of SPC's committee structure, including Freight Forum, Active Transportation Forum, Regional Operations & Safety Forum, Transit Operators Committee and Transportation Technical Committee.
- Continued use, enhancement, and development of Planning and Environmental Linkage tools including SPC's partnership with the Western PA Conservancy to update the natural heritage inventories for the SPC counties.
- Completed work on the SR 28 Kittanning to I-80 Regional Corridor Study, in conjunction with the Northwest PA Commission and the North Central PA Commission.
- Completed or assisted the development of several applications for competitive federal grant opportunities.
- Processed requested CMAQ program modifications to advance the Pittsburgh BRT project.
- Completed work on the Brodhead Road Corridor Planning Study in Beaver County.

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During fiscal years 2020-2022, SPC maintained the 2021-2024 TIP and also developed the draft 2023-2026 TIP. These documents depict a clear linkage between the investment policies and regional goals set forth in the LRP. For example, the priority of properly maintaining the existing transportation system was maintained as a top priority in the TIP.

In 2018, the target setting process for the federally-mandated transportation performance measures, instituted in MAP-21, has begun to be set in place by state DOTs and MPOs throughout the United States. SPC is closely collaborating with PennDOT and our planning partners to comply with the target setting and performance measure implementation requirements. This effort will continue into the 2022-2024 Work Program and beyond. The practice of performance-based planning and programming will continue to play a vital role in how state and federal transportation funds are allocated in the Commonwealth and in the region.

The following is a sample of the TIP implementation activities that were advanced in the 2020-2022 Work Program to maintain the 2021-2024 TIP and to develop the 2023-2026 TIP:

- Monitored and maintained fiscal constraint of the 2021-2024 TIP, provided review of modification requests, documented amendments and administrative changes to the TIP, and provided materials for regular TOC and TTC meetings.
- Participated in multiple PennDOT-led, local and statewide planning efforts, including numerous PennDOT Connects meetings and project scoping field views.
- Coordinated and synthesized early public input for the draft 2021-2024 TIP with the Twelve Year Program (TYP) update conducted by the State Transportation Commission.
- SPC conducted and facilitated 15 Project Development Work Group meetings as part of development of the 2023-2026 TIP, participated in Connects processes for candidate projects, developed an interactive mapping program and mapped all TIP candidate projects, and screened all new candidate TIP projects against the adopted performance measures in the LRP.
- Held two rounds of Public Participation Panel (PPP) meetings to gather input into the TIP development process.
- Completed the solicitation, evaluation and selection of projects for the SPC Congestion Mitigation and Air Quality Program, the SPC Transportation Alternatives Set-Aside program (TA Set-Aside), and the Livability through Smart Transportation (SMART) program.
- Used Decision Lens® in the technical evaluation of projects to assist in the decision-making process for the CMAQ, TA Set-Aside and SMART Programs.
- Conducted a virtual regional workshop to educate and aid local project sponsors in potential state and federal funding programs open to local sponsors and in delivering federal and state funded transportation improvement projects.
- Participated in both the statewide Financial Guidance and General and Procedural Guidance Work Groups.
- Conducted a Benefits and Burdens Analysis on the 2023-2026 TIP in accordance with federal Environmental Justice and Title VI requirements.

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- Completed an Air Quality Conformity Analysis of the 2023-2026 TIP as required by USDOT and the US Environmental Protection Agency.
- Completed a 30-day public comment of the 2023-2026 draft TIP and processed all related comments.
- Adopted a fiscally constrained 2023-2026 Transportation Improvement Program for the Southwestern Pennsylvania region.

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LONG RANGE PLAN IMPLEMENTATION

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$451,253	\$443,148
Federal Transit Administration	\$110,347	\$118,852
PennDOT	\$39,412	\$38,736
SPC/Other	<u>\$100,988</u>	<u>\$101,764</u>
Total	\$702,000	\$702,500

TASK DESCRIPTIONS

SmartMoves for a Changing Region contains Goals and Strategies for a wide breadth of community and economic development topics that are interrelated with the transportation system, as it directly supports and enables our communities and our economy to prosper. This plan continues to focus on core transportation investments such as maintaining our current system; optimizing our system through operational improvements; working toward Vision Zero by investing in safety for all system users; and providing equitable mobility options for all users through improvements in public transit and pedestrian and bicycle infrastructure. The plan describes the overall strategic Vision for the region’s transportation system and also, as required by federal regulations, the specific projects and investments that can be advanced with revenues that are reasonably expected to be available during the life of the plan.

SmartMoves also established a performance-based foundation for regional transportation investment decisions consistent with current federal guidance. The Moving Ahead for Progress in the 21st Century Act (MAP-21) introduced requirements for performance-based planning and integrated performance management into many federal-aid transportation programs. Under MAP-21, states and regions were required to establish measurable performance targets in support of national goals for Safety, Infrastructure Condition, Congestion Reduction, System Reliability, Freight Movement and Economic Vitality, Environmental Sustainability, and Reducing Delays in Project Delivery. These requirements continue with the FAST Act.

National performance measures associated with these federal goals are under development via a multi-year intergovernmental process. As federal performance measures become effective, states and MPOs will define and adopt performance targets for each performance category (Safety, Asset Management and System Performance). Progress on achieving these targets will be reported every two years by the states (yearly for safety). MPOs are to report on the performance measures, the targets and progress toward target achievement every four years in each LRP update.

The Program Development Group, along with the Safety and Operations Group and the Data and Models Group will all continue to play important roles in the performance-based planning and programming (PBPP) process for SPC and the region at-large.

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The implementation of the LRP is a multifaceted endeavor for translating the plan's Goals, Strategies, and Regional Vision into measurable, achievable actions that are implemented through close collaboration and coordination among SPC's federal, state and local planning partners as well as the public.

The next LRP is slated to be adopted in 2023. When needed, amendments and updates to *SmartMoves* will be considered and updated as necessary between regular plan update cycles.

1. Long Range Plan

Objective:

SmartMoves for a Changing Region (June 2019) initiated multiple new or modified processes - transportation system needs assessment, federal performance management requirements, financial planning, resource allocation, public engagement, and improved project evaluation/project prioritization practices - and incorporated required performance target setting and reporting advances cooperatively with PennDOT within SPC's growing Transportation Performance Management (TPM) planning framework. The plan includes a needs-based overview of the region's transportation system based on improved asset management processes.

SPC will begin to develop the region's next LRP, which is slated for adoption in June 2023. This plan will build on the strong foundation for performance based planning and programming and broad regional collaboration that was developed by *SmartMoves*. Plan implementation efforts will continue to advance the development of planning tools, data systems, and analytical and public processes that focus on transportation system performance, accessibility and mobility, equity, broadband connectivity, economic growth, community investment and sustainability for Southwestern Pennsylvania.

Planning Activities:

- **Policy and Strategy Analysis** – SPC will utilize its regional Policy Advisory Committee to review the current Vision, Goals and Strategies and recommend additions and/or revisions as necessary.
- **Outreach and Engagement** – SPC will utilize a multifaceted outreach and engagement approach that generates interest, informs, and educates stakeholders and the public using a mix of traditional and modern communication tools that reach diverse audiences and help the public understand and connect with the elements of the LRP. This includes taking advantage of engagement opportunities at existing public events across diverse geographies and demographic groups and providing greater issue and topic education throughout the planning process.
- **Performance Measurement, Target Setting and Reporting** – The LRP will build on the foundation of performance-based planning and programming established in

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SmartMoves and will focus on continuing the implementation of PM1, PM2, PM3, and transit federal performance metrics as well as exploring how these methodologies may be useful beyond the original Interstate and NHS applications. Over time and with the consistent application of planning resources these improved processes might be expected to facilitate better management practices and system performance results covering all segments of the region's intermodal transportation system.

- **Investment Analysis and Financial Strategies** - A primary goal for the *SmartMoves* Investment Plan – matching available transportation revenues to transportation system needs – has been met in the near-term in the fiscally constrained project list. The project list reflects an investment mix that is carefully balanced; it reasonably supported performance targets across the complete range of plan investment categories. In the longer-term, and in future LRP updates however, the goal of matching revenues with needs has potentially far-reaching effects because the Investment Plan also identified an enormous revenue gap where available revenues cover only about 30%-40% of total transportation needs.

Through Strategies identified in *SmartMoves*, and work undertaken during this Work Program, staff will continue to research and explore best practices that examine sustainable funding strategies - including an assessment of transportation needs, ongoing performance results, and a financial planning framework that provides a multifaceted and increasingly detailed view of the overall needs of the transportation system.

Work Products:

- A state of the practice, federally-compliant long range transportation and development plan for the Southwestern Pennsylvania region. (Ongoing)
- 2023 update to the current LRP (*SmartMoves for a Changing Region*) (Second quarter, 2023)

2. Transportation Performance Management

SPC is implementing a comprehensive evaluation system to inform the regional transportation planning process as a response to federal and state guidance and requirements for performance-based planning systems. This integrated Transportation Performance Management (TPM) planning process will be used to better identify and address critical needs in the system and strategically recommend the most appropriate investments to maximize our federal, state and local transportation funds. Primary tasks include an ongoing evaluation of transportation system needs; implementation of a comprehensive regional asset management process (NHS, federal aid, other state networks); collaboration with PennDOT on federal performance management requirements (PM1, PM2, PM3 and transit); and, an evaluation of significant performance risks to the regional transportation system (physical deterioration, transit services, safety, travel demand) at the current level of investment. The following sections identify the planning activities associated with these primary tasks. Additional support activities are included in other UPWP jobs – Safety and Operations, Multimodal Planning, Freight Planning, Data Systems and Modeling. Identified planning

tasks and activities will in many cases build upon practices already in place that were used during the development of *SmartMoves*.

2.A. Transportation System Needs Assessment

Objective:

This task will advance a multifaceted planning process: evaluate overall transportation system needs; establish a planning framework for comparing cross-asset transportation system performance for each investment category; evaluate current performance levels (for each investment category); evaluate performance for additional networks (other federal aid/other state networks); identify useful investment strategies (each category, including associated measures of effectiveness); identify total investment need at selected thresholds (minimum acceptable, maintain current performance, good performance); and, incorporate measures supporting life-cycle cost (LCC) and preservation-priority maintenance practices into SPC planning processes. The improved evaluation tools and processes will better predict the types of future investments that will be needed while providing improved support materials to guide future transportation decision-making. Some of these tools and processes might be useful to SPC's planning partners or participating local governments.

Planning activities necessarily include technical support to review and adjust roadway functional class designation as well as roadway segments defining the NHS network.

Planning Activities:

- Coordinate LRP input from SPC Planning Groups - Data and Models, Safety and Operations, Multimodal Planning and Transportation Program Development. Enhance planning processes and activities to better evaluate and document transportation system needs and anticipated performance levels for the region's transportation system.
- Evaluate the total system needs for each LRP investment category.
- Identify "good" performance levels for asset condition / state of good repair / network performance for each investment category. Identify minimum acceptable performance levels as well. Normalizing performance thresholds across disparate investment types is necessary as a first step in directly comparing performance results.
- Identify total investment need (at selected policy thresholds): to maintain current performance levels; to remain above minimum acceptable performance; and, to reach the good-level performance threshold.
- Monitor current condition (current performance level) for each LRP Investment Plan investment category – multiple performance measures may be appropriate depending on the case: highway safety, transit safety, infrastructure condition, transit state of good repair, mobility and accessibility, reliability, modal choice, freight movement, congestion and air quality.
- Identify priority implementation strategies and/or activities associated with each investment category; include relative "measures of effectiveness" for each strategy or

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activity to evaluate potential improvements or negative changes associated with various investment levels.

- Monitor the performance of the federal aid highway network and other state highway networks in addition to the current federal requirements for the Interstate system and NHS (non-Interstate).
- Continue development of Asset Management (AM) processes and tools: Baseline, Current and Forecast Physical Conditions for Pavements and Bridges; Network based Needs Summaries (all networks).
- Ensure that SPC evaluation processes are based on life-cycle costs and are consistent with PennDOT LCC practices. Incorporate pavement age/life expectancy factors identified in PennDOT's performance report.
- Determine the most-effective investment level for a preservation-priority strategy recognizing the still-considerable backlog in the SPC region of "fix-it-first" pavement and bridge projects.
- Develop SPC's tools and processes for forecasting bridge and pavement conditions in cooperation with PennDOT. Consider adapting statewide forecasts through 2030 identified in the PA TAMP for application to networks in the SPC region.
- Document estimated needs in an Asset Management Needs Estimate technical memorandum.
- Identify opportunities to work with PennDOT and local government partners, develop and provide planning guidance, technical assistance, and tools as appropriate to facilitate the use by planning partners of needs-based and performance-based planning techniques. Tailor support materials for contextual use: county, municipal or corridor.
- Identify and integrate into the LRP as appropriate quality of life performance measures and non-transportation measures.
- Work with FHWA, PennDOT and planning partners to update the NHS (non-Interstate) highway network in the region.
- Work with PennDOT and SPC planning partners to update the Functional Classification system as requested or when necessary due to a new roadway being constructed or when a major development alters regional traffic patterns.

Work Products:

- SWPA Region Needs Assessment Framework, including discussion of baseline condition, current condition, performance thresholds for minimum and good condition, and investment level required to reach a desired performance level. (Targeted completion - second quarter, 2023).
- AM Needs Estimates (technical memo). Identify state-of-good-repair cost estimates for multiple network-based Pavement and Bridge investment categories ((First quarter, 2023)

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- An enhanced process with supportive data systems and analysis tools for assessing, reporting and tracking the condition and performance of the transportation system and forecasting / testing selected improvement strategies in response to LRP policy goals, anticipated TIP investments, and required federal performance measures. (Ongoing)
- Briefing materials for the Commission, planning partners and the public. (As needed)
- Work with PennDOT and SPC planning partners to update the Functional Classification system and as requested or when necessary in conjunction with updated 2020 census urban area designations. (As required)

2.B. Federal Performance Management

Objective: MAP-21 and the FAST Act introduced federal performance requirements and established Transportation Performance Management (TPM) rules for both highway programs and public transportation. The TPM process uses system data to support investment and policy decisions to meet national transportation performance goals. A more complete description of SPC's performance-based planning (PBPP) framework is provided in the SPC TIP (Appendix 3) and *SmartMoves* (Appendix 2). PennDOT, SPC, regional transit agencies and other planning partners work together in implementing mutually-determined performance targets in identified areas (PM1, PM2, PM3 and Transit, as identified below). The PBPP process includes Data Collection and Analysis, Coordinated Target Setting, and Reporting on Progress. Adopted targets must be consistent with other federal, state and regional planning efforts.

Planning Activities:

General

- Develop an SPC System Performance Report documenting regional transportation system performance in accordance with federal performance measure requirements. The report must include baseline conditions, targets, and progress toward achieving the performance targets (compare current conditions to baseline) within identified timeframes.
- Include similar information in MPO-adopted LRPs and TIPs. SPC adopted *SmartMoves* in June 2019; its next LRP is scheduled for July 2023 (beyond this UPWP period). The 2023-2026 TIP is scheduled for adoption in June 2022.

PM1 (Highway Safety Performance Measures)

- Ensure adequate SPC representation on the PennDOT Safety Planning Work Group, Planning Partners meetings and conference calls to provide input into PM1 target setting.
- Review statewide and planning region safety data provided by PennDOT and review their performance findings; determine whether to adopt state targets or use SPC-developed regional targets.
- Provide assistance to PennDOT and respond as appropriate to re-assess and modify safety improvement strategies and revenue/investment strategies if an FHWA determination of significant progress is not established during their review of PA safety performance targets.

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PM2 (Pavement/Bridge Performance Measures)

- Ensure the conduct of SPC's AM planning activities is consistent with the PennDOT Transportation Asset Management Plan and is coordinated as appropriate with the PennDOT District Planners.
- Review the updated PA Twelve Year Program and regular AM performance reports to determine their impact on the region's AM performance targets and TIP development project selection priorities.
- Participate in PennDOT's AM Work Group activities, planning partner meetings and conference calls to provide input as appropriate into PM2 target setting.
- Determine whether to adopt PennDOT AM performance targets as the region's PM2 pavement and bridge condition targets. Develop regional targets as appropriate.
- Develop an MPO PM2 report by October 2022. The report must include baseline conditions, targets, and progress (current conditions) toward achieving the performance targets.
- Respond to, re-assess and modify AM investment priorities and/or revenue strategies if an FHWA determination of significant progress cannot be made during their federal review of state PM2 performance.

PM3 (Transportation System Performance Measures)

- Coordinate with PennDOT to review and track the PM3 measures over the next two years. States and MPOs are permitted to adjust their 4-year targets at the midterm of each 4-year performance period. The end of the first 4-year performance period and start of the next will occur in September 2022. A performance report for the 2018-2022 period will be due to FHWA by October 1, 2022. Also, at that time, new benchmarks and targets will be set for the next 4-year performance period (2022-2026).
- Work with PennDOT and the Statewide Planning Partners as needed to coordinate any updates to the process for estimating and reporting the performance measures.
- SPC will also track the annual PHED, Non-SOV travel, and CMAQ emissions reduction measures and revisit the region's established targets every two years, as required by the federal TPM regulations.
- Evaluate and explore accuracy and utilization of alternate data sources for the Non-SOV Travel measure.

Transit Performance Measures

- Monitor and share public transportation performance management information (baseline conditions, targets, progress) within SPC's broader role of tracking performance of the region's overall transportation system. Port Authority shared TPM information is generated through internal Port Authority management systems. Fifteen small Tier II agencies shared TPM information is provided through small public transportation agency participation in the PennDOT-managed TAM Group Plan and PennDOT's Bureau of Public Transportation (BPT) Capital Planning Tool (CPT).

Work Products:

- SPC System Performance Report, including required PM1, PM2, PM3 and Transit measures, baseline condition, targets and an assessment of progress. SPC's website performance measure dashboard will be maintained and updated where necessary. (Ongoing)

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- Inclusion of required TPM information in the 2023-2026 TIP. (Second quarter, 2024)
- Inclusion of required TPM information in the Draft 2025-2028 TIP. (Second quarter, 2024)
 - Adopted PM1, PM2, and PM3 performance targets developed through cooperative processes with identified statewide planning partners/agencies. (Reporting schedule: PM1 annually in January, PM2 Biennial in October, PM3 Biennial in October)
- Briefing materials for the Commission, planning partners and the public. (As needed)

3. LRP Investment Plan

The LRP Investment Plan is supported by two multifaceted processes - a financial planning process and a program development process. The financial planning framework includes multiple steps: identify available revenues, compare revenues with total needs, identify an approach to balance resource allocation, and identify optimal investment ranges for 14 investment categories to help inform initial project selection. *SmartMoves* (Appendix IV) includes a description of the program development process and a fiscally constrained project list as developed by SPC Work Group meetings at each PennDOT District. The financial planning and program development processes are integrated through the District Work Groups, where prioritization decisions sometimes lead to project-based adjustments that affect the proposed investment balance across categories. With a solid demonstration that the entire transportation funding gap cannot be addressed through existing means, the planning processes identified in section one (TPM) and this Investment Plan section are integral to development and support for a Commission theme to become more proactive on revenue.

3.A. LRP Financial Planning Framework

Objective: As noted earlier the primary emphasis of the financial planning framework within this section of the LRP Investment Plan includes multiple steps supporting the development of the fiscally constrained LRP project list: identify available revenues, compare revenues with total needs, identify an approach to balance resource allocation, and identify optimal investment ranges for 14 investment categories to guide initial project selection.

Planning Activities:

- Identify Available Revenues for the TIP, LRP Stage 2 and LRP Stage 3 periods. Update revenue estimates as appropriate. Identify and monitor potential risks to these revenue sources. Further develop (and document) the processes and tools for assigning revenues to investment categories.
- Update Investment Gap Tables periodically as ongoing PennDOT-SPC collaboration on asset management (AM) costs improves SPC AM needs estimates.
- Improve the investment strategy/approach to balance resource allocation across 14 investment categories. Test scenario planning techniques and tradeoff analysis, and integrate them into the LRP Financial Planning Framework to optimize the Investment Plan's investment mix.
- Develop communications materials to share appropriate information with the Commission, planning partners, and the public as part of a public awareness priority.

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- Review Major Project Financial Plans as requested.

Work Products:

- Revenue estimates for TIP and LRP, identified by funding source and for the region and for each PennDOT District. As needed with amended TIP/LRP. (Second quarter, 2024)
- Improved resource allocation process; tools for scenario planning and tradeoff analysis. (Fourth quarter, 2022)
- Updated Investment Gap tables for region, each PennDOT District, periodic update, based on anticipated improvements to needs estimates. (Third quarter, 2022)
- Updated Investment Plan Summary, w/ LRP amendment. (Fourth quarter, 2022)
- LRP Financial Planning Framework, updated working document. (As needed)
- Review of Major Project Financial Plans. (As requested)
- Briefing materials for the Commission, planning partners and the public. (As needed)

3.B. Long Range Plan Project Lists

Objective:

Planning support for the LRP Investment Plan during the 2022-2024 planning period focuses on maintaining the LRP project lists in the current LRP while developing and implementing the development process for the 2023 LRP update. Project list maintenance will be impacted by identified funding risks including the scheduled expiration of the FAST Act. Any changes in revenues would then be reflected in a future TIP development process that also requires an amended LRP Investment Plan. Maintain SPC LRP consistency with the 2023 TIP financial guidance. The development of the 2023 LRP project list development will involve six to nine meetings of the District Work Groups utilized for TIP and LRP project list development. Work products from Task 2 Transportation Performance Management and Task 3 LRP Investment Plan will be shared with the district work groups in support of the development of fiscally constrained LRP project list.

Planning Activities:

- Maintain the fiscally constrained project lists.
- Determine if adjustments in the 2019 LRP project list and line item amounts are necessary to maintain fiscal constraint as updated financial guidance is incorporated.
- Coordinate and facilitate District Work Groups involved in LRP project list development.
- Develop 2023 LRP fiscally constrained project list.

Work Products:

- Updated fiscally constrained LRP project list. Second quarter, 2023)

4. Infrastructure Resiliency

Objective:

Consistent with resiliency related strategies detailed in *SmartMoves for a Changing Region*, improve the resiliency and reliability of the region's transportation infrastructure with respect to vulnerabilities posed by extreme weather related events that are projected to show long term increases in magnitude and frequency. Planning activities in this area will focus on adopting or developing tools, strategies and processes that can assess the vulnerabilities and impacts associated with extreme weather events on the transportation system and integrate those tools/strategies into the transportation planning process. In the SPC region, the extreme weather vulnerabilities concerned are predominately those associated with increased frequency and magnitude of precipitation events and their resulting impacts.

Planning Activities:

- Actively participate in the next phase of PennDOT's extreme weather resilience efforts including consultation and coordination with members of the PennDOT Central Office extreme weather resilience initiative, focusing on assisting in the implementation of the planning related recommendations of the study.
 - Continue use of tools developed by PennDOT that identify historic vulnerabilities and integrate their use in the SPC transportation planning process for the LRP and TIP - PennDOT Road Closure Reporting System (RCRS), PennDOT One-Map, PennShare layers, SPC layers, etc.).
 - Assist, where requested, in the development of planning tools that evaluate the historic vulnerability of existing infrastructure using the RCRS data and other sources.
 - Investigate methods to integrate resiliency considerations into asset management. Encourage the use/adaptation of these methods for asset management within the SPC PennDOT Districts and work to extend methods to local asset management in the region.
- Utilize SPC's landslide susceptibility model to conduct vulnerability analysis on the transportation network and transportation assets within the region.
- Continue to track federal and state agency as well as local climate change scenario projections and disseminate the information to planning partners in the region.
- Assist activities through SPC's Water Resource Center in addressing localized stormwater management activities and best practices by providing municipal training and technical assistance through the LTAP Program.
- Continue to identify, monitor, and document the TIP costs associated with extreme weather-related events (flooding and slides).
- Support resiliency planning in the SPC region including involvement in county hazard mitigation plans and county comprehensive plans.

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- Examine and implement methods to adapt planning and programming to help address the impacts of extreme weather through resiliency and sustainability.
- Continue to research resiliency planning activities and vulnerability assessment methodologies as well as adaptation and mitigation approaches pertaining to impacts on the transportation system by flooding, landslides, and mine subsidence.

Work Products:

- Mapping to depict the areas and the major transportation infrastructure in the region that have historically been most vulnerable to extreme weather (flooding and landslides). (Ongoing)
- Resiliency and vulnerability mapping for inclusion in the LRP environmental linkage content and LRP story maps. (Second quarter, 2023)
- Data/statistics conveying the impact and cost of extreme weather on the SPC TIP. (Ongoing)
- Summarizing the potential impact of highly susceptible landslide areas on the transportation network and transportation assets in the SPC region. (Second quarter, 2023)
- Methods to incorporate resiliency concepts into asset management and pre-TIP planning, including consideration of local assets. (Ongoing)
- Communication materials summarizing and sharing current climate assessments, adaptation strategies, stormwater management approaches, landslide susceptibility, impact on the SPC TIP, and vulnerability assessment methods. (Ongoing)

5. Planning and Environmental Linkage

Objective:

Develop processes and tools that can be applied to programs and projects in order to develop transportation infrastructure in a way that maintains and enhances the cultural and ecological value of the region. Patterned after federal Planning and Environmental Linkage (PEL) initiatives, these efforts will be consistent with an ecological approach to transportation infrastructure development. These efforts will be focused both at system level regional planning, such as the development of the Regional Ecosystem Framework (REF), and at the project level, such as using SPC's wetland mitigation suitability tool. Encouraging the adoption of a regional approach to mitigation planning is an emerging goal of this project. It is the intent of the project to maintain and develop tools that can be used by SPC and also by its partners to plan mitigation for transportation projects/programs in a more efficient and beneficial way.

Planning Activities:

- Conduct PEL activities associated with the 2023 SPC long range plan:
 - Produce PEL support material for 2023 LRP: including resource agency consultation, environmental resource inventory, project screening, mitigation

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evaluation, and ACM presentation. Maintain the SPC wetland mitigation planning tool. Utilize the Watershed Resources Registry-Pennsylvania in possibly supplementing wetland mitigation planning discussion.

- Participate in the identification of opportunities to improve, maintain, and restore the function of natural environmental systems in the region in conjunction with planned transportation projects.
- Conduct PEL/LPN corridor or subarea studies in conjunction with other SPC planning studies.
- Maintain and update of the Regional Ecological Framework (REF).
- Apply the REF mapping to other planning processes such as county comprehensive plan updates or corridor project planning.
- Utilize the recently updated Regional Natural Heritage Inventory (NHI) data. This dataset is a key component of the REF model and individual project screenings.
- Continue to participate as a member of the Statewide Transportation Innovation Council (Environmental Technical Advisory Group).
- Explore development of a Regional Programmatic Mitigation Approaches.
- Monitor emerging mitigation efforts at resource agencies such as between PHMC and PennDOT Cultural Resources advanced mitigation. Assess possible applicability in the SPC region.

Work Products:

- 2023 Long Range Plan environmental linkage required documentation and online component. (Second quarter, 2023)
- Regional Ecosystem Framework GIS model. (Fourth quarter, 2022)
- Regional Natural Heritage Inventory database. (Ongoing)
- Mitigation planning tools. (Ongoing)
- PEL content for applicable corridors or subarea studies. (As needed)
- Briefing materials for the Commission, planning partners and the public. (As needed)

6. Funding Capacity Building

Objective: Build the region's transportation funding capacity through the policy goals of maximizing the effectiveness of existing resources, leveraging other sources of funding, and finding innovative ways to advance the Regional Vision, Goals and Strategies as set forth in the LRP. Given the significant needs associated with the regional transportation system and the demands on the federal and state base TIP funds, it is important to help project sponsors look for additional sources of funding. SPC works to identify, promote, and utilize funding programs beyond typical TIP base funds, and to build and enhance relationships with federal, state and local officials as well as other private sector and philanthropic partners.

Planning Activities:

- Assist member planning partners and PennDOT Districts with the application, project development, and submission process associated with pursuing funding beyond typical TIP base funds.
- Continue to build relationships with the private sector and federal, state and local elected officials as well as philanthropic organizations to foster productive working relationships in order to advance the Regional Vision, Goals and Strategies of *SmartMoves*.
- Continue to produce a legislative priorities booklet that highlights the region's critical transportation needs and priority projects. SPC staff will work closely with PennDOT executive staff and county representatives to update the priorities. This priority list is useful in coordinating efforts direct additional transportation funding to the region such as the earmark requests made in spring 2021.
- Provide coordination to member planning partners and PennDOT Districts on congressional transportation funding earmarks submittals, when appropriate. Track previous earmark submittals.
- Continue to produce the Community and Transportation Funding Programs Brochure that lists federal, state, local and private non-traditional funding opportunities for use by potential project sponsors, planning partners and stakeholders to identify funding for a wide variety of public improvement, infrastructure, and community-based initiatives.
- Research and market innovative financing mechanisms for major capital projects, such as Transportation Districts, the Pennsylvania Infrastructure Bank (PIB) and public private partnerships (P3s).

Work Products:

- As requested, technical assistance to planning partners and stakeholders in pursuing and applying for additional funding opportunities beyond typical TIP base funds. (As requested)
- A legislative priorities booklet identifying projects identifying projects most in need of additional funding. (As needed)
- A guidance brochure, updated 3-4 times a year, on available community and transportation funding programs. (Ongoing)
- Briefing materials for the Commission, planning partners and the public. (As needed)

7. Transportation Planning Guidance and Assistance

Objective: As the demand to maintain transportation infrastructure at a sufficient level increases, the need for local entities to identify, plan, and prioritize transportation projects is crucial in their ability to maintain and update their local transportation network as well as increase livability, accessibility, and mobility in their communities. Local entities may lack the capacity and resources to conduct planning activities, which can hinder their ability to develop the necessary transportation projects in their respective locality. Local entities' access to transportation resources and data is vital in their abilities in developing competitive TIP and LRP projects. SPC can provide the expertise and support to local entities to assist in data connection, mobility planning and development, and other necessary tasks to enhance local entities transportation plans and projects. Planning activities in this area will

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focus on providing guidance and support to local entities, to enhance local entities' ability to develop a well maintained, integrated transportation system and create vibrant accessible communities.

Planning Activities:

- Provide guidance and support to SPC member counties and their municipalities in preparing transportation elements of their comprehensive plans and other local planning efforts, on an as-needed basis.
- Lead a regional coalition to examine an integrated mobility, community revitalization and economic development strategic plan for the Mon Valley region of Southwestern Pennsylvania
- Assist in GIS mapping for Westmoreland County planning district mobility plans as identified in *Reimagining Our Westmoreland*.
- Develop a prototype of a county-wide planning toolkit to assist member counties' understanding transportation needs and to develop transportation projects.
- Provide GIS and other data software applications to publish maps and data for inclusion in local entities transportation plans, as requested.
- Connect member entities with information and analysis of local transportation network conditions, to assist local entities with the opportunity to enhance and develop competitive transportation projects.
- Identify appropriate network and corridor-related treatments in the region's significant freight activity centers and on significant transit corridors.

Work Products:

- Prototype of a local government planning toolkit to assist in addressing transportation, community and economic development needs. (Second quarter, 2024)
- An integrated mobility, community revitalization and economic development strategic plan for the Mon Valley region of Southwestern Pennsylvania. (Fourth quarter, 2024)
- Assist member counties with development of mobility plans including Westmoreland County's planning district mobility studies as part of the implementation of their comprehensive plan, *Reimagining Our Westmoreland*. (Ongoing)
- Provide planning resources and activities to SPC member entities on an as-needed/requested basis. (As needed)
- Briefing materials for the Commission, planning partners and the public. (As needed)

8. Corridors of Regional Significance (CORS) Master Planning Program

Objective

The Corridors of Regional Significance (CORS) Master Planning Framework outlines a consistent, scalable approach and relevant data and mapping resources for Corridors of Regional Significance. The goal of the CORS Master Planning Framework is to better inform transportation planning and coordination among agencies and municipalities, which will lead into the programming of funding and the project development process. The CORS Master Planning Framework will identify considerations that should be considered when planning for new projects within the corridors.

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Historically, improvements made to these corridors are aimed at solving specific issues at specific locations such as safety or operational deficiencies, reoccurring congestion or capital maintenance asset management needs. In order for the region to maximize the use of these facilities and to strengthen communities and the economy, they must be examined holistically, rather than location by location. *SmartMoves for a Changing Region* sets the Regional Vision, Goals and Strategies for this type of holistic corridor planning.

Corridors of Regional Significance typically traverse multiple place types, ranging from sparsely populated rural areas, to small towns and suburbs, to the densely populated urban areas. Each zone is accompanied by its own unique context as well as its own mobility, connectivity and accessibility needs. The corridors should employ context-based street design and the multimodal movement of people and goods, critical to the economic vitality and quality of life in Southwestern Pennsylvania.

Working with a broad range partners and stakeholders, the CORS Master Planning Framework includes the following activities.

Activities:

- Perform assessments in identified corridors over a multi-year period that examine demographic and economic trends; environmental justice; land use context; transportation systems; freight network and activity; corridor travel patterns; active transportation; future projects; environmental features; regional, county, and local plans and user perspectives; asset conditions; transit; congestion and reliability; and, safety.
- Develop CORS Master Planning Framework for multimodal goals and investment in each corridor to guide and inform future LRP and TIP programming decisions.

Work Products:

- A set of Master Planning Frameworks of designated Corridors of Regional Significance. (Ongoing)

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TRANSPORTATION IMPROVEMENT PROGRAM (TIP) DEVELOPMENT AND MANAGEMENT

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$441,400	\$448,400
PennDOT	\$26,513	\$27,825
SPC/Other	<u>\$83,838</u>	<u>\$84,275</u>
Total	\$551,750	\$560,500

TASK DESCRIPTIONS

The planning, development, documentation, administration and technical assistance associated with the region’s TIP is a substantial portion of the responsibilities contained within the Program Development Group. The following section describes the activities that will be undertaken by SPC, in collaboration with its partners, to develop and maintain a federally-compliant and dynamic TIP for the region.

1. Pre-TIP Planning

Objectives:

Develop tools, incorporate new processes, and foster coordination/collaboration efforts that will assist SPC, PennDOT and the region’s transit providers in considering network/project needs, various planning level studies, project screening information, and other project proposal information early in transportation planning (pre-TIP) within the SPC region.

This project will incorporate elements of federal initiatives such as Every Day Counts and Performance-Based Planning and Programming (PBPP), state initiatives, such as lowest lifecycle cost (LLC) asset management systems and PennDOT Connects into the current TIP administration and future TIP updates. These tools, processes, and coordination will provide project needs and fiscal constraint information as input to pre-TIP planning and programming decisions, leading into the subsequent, post-TIP, transportation project development process. Work products will lead to better decision-making, which, when informed by pre-TIP planning products and systematic planning processes, will add more value to transportation programs and can ultimately lead to more livable, accessible and sustainable communities.

Planning Activities:

TIP Development Work Groups – These Work Groups typically consist of District, SPC, county and city planning departments, transit operators, and Transportation Management Association representatives. The Work Groups meet periodically to review the status of candidate projects and generate consensus on advancing/deferring/dismissing project proposals at various decision points in the pre-TIP planning and TIP development process.

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- Maintain three TIP Development Work Groups as a key collaboration element in pre-TIP and performance-based planning and programming.
- Maintain and enhance the Work Groups' SharePoint sites in conjunction with TIP updates.
- Provide staff support, administrative and technical assistance, planning process facilitation, organizational support, and decision support information to each TIP Development Work Group.
- Establish agendas for ongoing Work Group meetings including candidate status management, asset management monitoring/reporting, public comment assessment, and PennDOT connects process support.
- Use Work Groups as a key collaboration element of the Pre-TIP planning process for the 2025-2028 TIP development.
- Continue maintenance and enhancement of the data and analytical systems used for pre-TIP planning.
- Continue development of an enhanced Off-System Bridge (BOF) program to analyze and prioritize BOF eligible projects. Coordinate with District Bridge Unit to discuss program details and deliverables. Utilize a BOF Work Group to review and recommend BOF eligible bridges, where applicable.
- Continue to adapt the TIP development process for increased focus on performance-based planning and programming including integration of PennDOT BAMS and PAMS systems as a component of asset management and candidate project prioritization.

Other TIP Development Activities – These include statewide work group participation, LPN/PennDOT Connects activities, and performance measure analysis/coordination. Working in conjunction, these activities improve the TIP development process, project selection, and increase program predictability and efficiency.

- Participate in statewide TIP Financial Guidance Work Group, the statewide TIP General and Procedural Guidance Work Group, and STIP MOU developments as appropriate.
- Conduct candidate project screening in pre-TIP planning and project development, including those associated with: the current TIP and the 2025-2028 TIP update.
- Incorporate public input originating from the State Transportation Commission public involvement activities into the TIP update process.
- PennDOT Connects form activities – support PennDOT Districts' use of screening forms for new candidate projects being considered for the TIP.
- Conduct environmental screenings and the development of preliminary constraint mapping for selected 2025-2028 TIP projects and for PennDOT District Environmental Units, as requested. Maintain, update, and improve existing GIS-based planning tools for conducting project environmental screenings.
- Participate in relevant trainings and webinars, hosting/attending where applicable.
- Maintain PennDOT District Environmental Manager communication.
- Attend PennDOT Connects meetings with local municipalities on TIP candidates, as warranted and as new projects are added to the 2023 TIP.
- Participate as a member of the Statewide Transportation Innovation Council, Environmental Technical Advisory Group.

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- Continued maintenance and upgrade of the data systems used for pre-TIP planning and performance-based programming.
- Work with PennDOT to integrate other performance measure data and expand scorecard tools to evaluate the optimal investment levels with respect to performance measures/targets and apply them to the TIP update.
- Ensure the TIP update process develops in accordance with federal transportation performance measures and derives input from the LRP investment plan.
- Provide education, support, and technical assistance to the TIP Development Work Groups in the area of performance measures and their influence on the TIP development process.

Work Products:

- TIP Development Work Groups - meeting administrative support and materials including: agendas, project lists, summaries of performance and other transportation data, financial data and projections, public input summaries, screening/prioritization output, and other items as necessary. (Fourth quarter, 2023)
- Continuation of PennDOT Connects initiative and incorporating candidate screening into the project development process within the SPC region. (Ongoing)
- Procedural framework materials for the 2025 TIP update. (Second quarter, 2023)
- Consensus on the advancement of project candidate projects at several decision points through the pre-TIP planning process prequalifying projects to the LRP/TIP. . (Fourth quarter, 2023)
- Improved communication and input at municipal and county level on TIP projects via PennDOT Connects activities. (Ongoing)
- Improved planning tools and communication networks (with PennDOT Districts and resource agencies) in order to conduct planning and environmental linkage activities.
- Improved data systems for conducting pre-TIP planning activities including performance measure data. (Ongoing)
- Briefing materials for the Commission, planning partners and the public. (As needed)

2. Current TIP Administration

Objectives: Delivering projects through the TIP is a primary mechanism for advancing the Regional Vision, Goals and Strategies of *SmartMoves for a Changing Region*. Maintenance of the TIP is also necessary, as modifications to the TIP occur on a month-to-month basis as a part of the SPC Transportation Technical Committee (TTC) meetings. The following planning activities are designed to continue the maintenance, documentation, and delivery of the 2021-2024 Transportation Improvement Program, as well as the development of the next TIP.

Planning Activities:

- Provide staff and logistical support to SPC's Transportation Technical Committee (TTC) in the maintenance and administration of the TIP.

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- Ensure the current TIP maintains consistency with and works to advance the LRP.
- Work jointly with PennDOT and regional planning partners to modify the TIP as required.
- Monitor the status of the TIP surface transportation program during the fiscal year and share appropriate program information with TIP stakeholders.
- Recommend TIP amendments based on coordination with project sponsors to ensure SPC's limited federal and state funding is used to its greatest potential.
- Provide technical assistance to current and potential project sponsors in accordance with federal, state and regional planning and programming requirements and to ensure technical consistency and completeness of project information.
- Maintain and further develop a data management system that enhances SPC data processing and analysis capabilities.
- Maintain and enhance the TIP webpage within SPC's website, as well as the current TIP GIS webmap on the SPC GIS website.
- Publish annual listings of projects for which federal funds have been obligated in the preceding year.
- Assist in conducting public outreach and participate in Public Participation Panels and other public meetings.

Work Products:

- 2021 – 2024 TIP and 2023-2026 TIP
 - TTC meeting materials (anticipate 24 meetings) and other reports/technical documentation. (Monthly)
 - Monthly documentation and processing of amendments and administrative changes to the TIP, as well as submission of online eSTIPS to the FHWA. (Monthly)
 - Monthly updating of current TIP webmap and breakdown of investment categories. (Monthly)
 - Fiscal year end Federal Obligations Report. (Annual)
- Briefing materials for the Commission, planning partners and the public. (As needed)

3. Draft TIP/Final TIP Documentation and Environmental Justice Documentation

Objectives: Delivering projects through the TIP is a primary mechanism for advancing the Regional Vision, Goals and Strategies of *SmartMoves for a Changing Region*. The following planning activities are designed to deliver Transportation Improvement Program documentation for the final 2023-2026 TIP and the Draft 2025-2028 TIP, adhering to federal regulations including Title VI, Environmental Justice and Air Quality Conformity requirements.

Planning Activities:

- Ensure the TIP is consistent with and works to advance the LRP.

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- Prepare all final documentation of the 2023 final TIP and submit to PennDOT Central Office.
- Prepare all draft 2023 TIP documentation for formal public comment period.
- Maintain and further develop a data management system that enhances SPC data processing and analysis capabilities.
- Review and refine, as necessary, performance measures for the TIP.
- Detail the anticipated effect of the TIP toward achieving the performance targets established in the LRP.
- Review and update, where warranted, the TIP modification procedures MOU with PennDOT Program Center as part of the 2023 TIP update.
- Assist in conducting public outreach and participate in Public Participation Panels and other public meetings during TIP development.
- Make certain that Environmental Justice (EJ) areas are correctly identified and mapped, and that all core guidance criteria are met within the benefits and burdens analysis.
- Research areas in which EJ analysis can be augmented via the use of primary and/or secondary guidance criteria as provided by PennDOT and FHWA.
- Participate in EJ data processing and guidance development provided by FHWA and/or PennDOT to improve SPC's Environmental Justice process and collaborate at the state level.
- Encourage and assist regional planning partners in incorporating EJ mapping and analysis in local government planning processes.
- Incorporate EJ principles and analyses into other TIP-related SPC planning processes, including TIP project selection and SPC discretionary funding program project selection.
- Provide EJ materials to Communications Team to assist in public outreach and public participation activities.

Work Products:

- Final 2023-2026 TIP document and supporting materials submitted to PennDOT Central Office, including: (Third quarter, 2022)
 - 2023-2026 TIP project list and final TIP materials.
 - TIP narrative and development documentation.
 - TIP Financial Plan Table and Financial Summary.
 - Final Benefits and Burdens (EJ) Analysis and report for the 2023-2026 TIP, including online mapping of EJ population and identified Communities of Concern.
 - Self Certification Resolution and Checklist.
 - Transportation Performance Management chapter.
 - TIP Modification Procedures MOU Update.
 - Other TIP Checklist items.

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- On-line materials, including interactive mapping.
- Draft 2025-2028 TIP document, supporting materials and presentations to the public and other planning partners and stakeholders. (Second quarter, 2024)
 - 2025-2028 TIP project list and Draft TIP materials.
 - TIP narrative and development documentation.
 - TIP Financial Plan Table and Financial Summary.
 - Benefits and Burdens (EJ) Analysis and report for the 2025-2028 TIP, including online interactive mapping of EJ population and identified Communities of Concern.
 - Self-Certification Resolution and checklist.
 - Transportation Performance Management chapter.
 - TIP Modification Procedures MOU Update.
 - Other TIP Checklist items.
 - On-line materials, including interactive mapping.
- Briefing materials for the Commission, planning partners and the public. (As needed)

4. SPC Funding Program Administration

Objectives: The Congestion Mitigation and Air Quality (CMAQ), Transportation Alternatives Set-Aside (TA Set-Aside) and Livability through Smart Transportation (SMART) programs are important mechanisms for improving the mobility and accessibility of the regional transportation system and enhancing the livability and sustainability of our communities. The programs and projects selected for funding from these programs help advance the Regional Vision, Goals and Strategies of the LRP and are important in achieving progress on regional performance measures.

Planning Activities:

- Administer the CMAQ, TA Set-Aside, and SMART funding programs including: coordination with planning partners and project sponsors, meeting materials and agendas, program schedules, policy/program guidance documents, candidate project applications, project evaluation and selection facilitation, and project monitoring. Update, expand, and document technical project evaluation procedures and methodologies for use in prioritizing multimodal projects in the LRP and the TIP, focusing on incorporating performance measures into the evaluation methodology.
- Continue to use Decision Lens® software to aid in the decision-making process.
- Continue to actively coordinate with project sponsors to ensure timely delivery of projects and execute any necessary programming adjustments on the current TIP.
- Review and refine, as necessary, the program policies, procedures, and structure for each funding program in anticipation of the 2025-2028 TIP development cycle.

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- Document case-study examples of the project delivery process for the SPC Congestion Mitigation and Air Quality (CMAQ), Transportation Alternatives Set-Aside (TA Set-Aside) and Livability through Smart Transportation (SMART) programs to demonstrate successful application of funds, especially by highlighting project best practices. Develop public facing materials to exhibit ways funding can be utilized for prospective applicants.

Work Products:

- Priority projects to be programmed and delivered for the 2023-2026 CMAQ Program and the 2023-2024 TA Set-Aside and SMART programs. (Ongoing)
- Summary and administrative reports for each program (CMAQ, TA Set-Aside and SMART) to document procedures, meeting minutes, processes undertaken, projects selected, funds allocated, how each of the programs advance the LRP, and further implement sustainability, resiliency, and performance-based planning and programming. (Second quarter, 2024)
- TIP modifications and amendments, as necessary, to ensure projects are funded in the correct year according to current schedules and budgets. (Monthly)
- Case studies detailing delivered projects with SPC-directed funding to be published on website for review by prospective applicants. (As needed)
- Presentations, upon request, to municipal governments seeking input on developing projects that will be eligible for state and/or federal funding. (As requested)
- Briefing materials for the Commission, planning partners and the public. (As needed)

5. Local Project Delivery Assistance

Objectives: A more effective and efficient use of public investment supports long term sustainability of the regional transportation system. To maximize projects delivered on time and within budget, SPC assists local project sponsors in the planning, programming and delivery of state and federally funded projects on the region's TIP.

SPC will continue to proactively engage and coordinate with local project sponsors and, on an as needed basis, serve as adjunct project managers to ensure that funds awarded through SPC's competitive funding programs are being used in a timely manner. This assistance will generally involve facilitation and coordination among project sponsors, local governments, PennDOT Districts, PennDOT central office, and the FHWA in order to develop a project to the point of construction. Through proactive delivery assistance, projects can move more efficiently and create capacity for new candidates to be programmed, thus maximizing regional benefit.

Planning Activities:

- Actively participate in PennDOT Connects meetings that occur in the region between PennDOT Districts, local and county governments, and other stakeholders to ensure

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connections are made among stakeholders while projects are in the planning and design phases.

- Assist in completing PennDOT Connects documentation for CMAQ, TA Set-Aside, and SMART funded projects.
- Coordination with project sponsors to provide guidance in administering state and federal aid projects in order to:
 - Identify appropriate funding mechanisms and their programmatic requirements.
 - Assist in developing viable, deliverable project scopes, schedules and budgets.
- Assist project sponsors in identifying and mitigating potential hurdles that may arise during the project development process.
- Assist in completing reimbursement agreements and other required administrative actions between local project sponsors and PennDOT, where applicable.
- Contract and oversee project management consultant support for local projects funded by SPC discretionary programs.
- Maintain and track the status of all CMAQ, HSIP, TA Set-Aside and SMART funded projects and make recommendations on needed funding changes as necessary.

Work Products:

- Conduct transportation planning and project delivery workshops throughout the region, giving increased attention and outreach to the various government associations and organizations that promote local government programs, services, and training sessions. (Third quarter, 2023)
- Meetings with potential project sponsors, as needed, to assist them in applying for state or federal funds. Individual meetings with project sponsors who are awarded funding to ensure they are aware of their roles and responsibilities in implementing local projects. (Fourth quarter, 2023)
- Individual meetings with project sponsors during the project development process in order to overcome impediments to project delivery. (As needed)
- Project agreements and other administrative documentation required in order to advance transportation infrastructure projects and programs. (As needed)
- Briefing materials for the Commission, planning partners and the public. (As needed)

TRANSPORTATION PROGRAM DEVELOPMENT – MULTI-YEAR IMPLICATIONS

SmartMoves for a Changing Region continues advancement of the consensus Vision for our region and the strategic investment direction for realizing that Vision. It continues to build on the broad consensus through the *SmartMoves* Strategies. The region’s long term investment strategy continues SPC’s priority on the preservation and operation of the existing roadway, bridge, and transit infrastructure.

The next LRP for Southwestern Pennsylvania is scheduled for adoption in June 2023. Specific activities to be completed in the 2022-2024 Work Program and beyond include:

- Plan Maintenance, Monitoring and Implementation – Maintain, monitor and implement the current plan through SPC standing and special committees, member planning and development staff, SPC’s Public Participation Panels, regional stakeholders, PennDOT’s Multimodal Project Management Systems, and other appropriate mechanisms.
- Development of the 2023 long range planning process and development of the 2023 LRP, as well as the statewide transportation planning and programming process that PennDOT and its MPO/RPO partners continue to improve through joint implementation of the statewide Linking Planning and NEPA/PennDOT Connects initiative by all planning partners.
- Continue to monitor and adjust, as necessary, the fiscal constraint of the LRP in accordance with revenue projections associated with all future federal and state transportation funding legislation.
- Continue to use the TIP as the main implementation vehicle to advance the Goals, Strategies and Regional Vision of the LRP and to track the performance of the LRP through TIP project evaluation and selection.
- Continue to seek additional, traditional and non-traditional, discretionary funding to assist in delivering high priority projects in the region.

The 2023-2026 TIP goes into effect on October 1, 2022. The 2023-2026 TIP and 2025-2028 TIP will be the next program updates, with SPC adoption scheduled for June 2022 and June 2024 respectively. As the mechanism for implementing the LRP, there is an ever-increasing emphasis on measuring TIP impact and performance on various transportation planning and programming areas and the Goals and Strategies set forth in the LRP. Several needs related to TIP management will take multiple years to accomplish and will require planning work across several UPWP periods:

- Continue to evolve the TIP Work Group process to build and integrate planning capacity in order to increase value in TIP development and other areas of transportation planning.
- Capitalize on available technology in TIP development through the use of GIS, visualization, social media, multimedia and other techniques.
- Fully integrate performance-based planning and programming requirements into the TIP development and maintenance processes.
- Continue to track progress of the LRP performance-based planning and programming targets through the TIP.
- Continue Linking Planning and NEPA and PennDOT Connects initiatives with the TIP development process.

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- Integrate local road and bridge needs into the TIP and LRP transportation planning and asset management framework.
- As SPC adds asset management and TIP program management tools, extend this planning capability to the member counties and City of Pittsburgh to assist them in the management of local government programs.
- Continue to advance emerging emphasis areas such as transportation resiliency and greenhouse gas monitoring and reduction in the planning process.
- Continue to monitor and adjust, as necessary, the fiscal constraint of the TIP in accordance with revenue projections from the FAST Act and all future federal and state transportation funding legislation.

MULTIMODAL TRANSPORTATION PLANNING

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MULTIMODAL TRANSPORTATION PLANNING – OVERVIEW

The Multimodal Transportation Planning Group of SPC’s Transportation Department works to advance the Regional Vision of the long range plan, *SmartMoves for a Changing Region*, by focusing on planning projects and products that serve to help sustain a world-class, safe and well maintained, integrated transportation system that provides mobility for all, enables resilient communities and supports a globally competitive economy. By fostering the robust planning necessary to deliver safe, secure and integrated motorized and non-motorized transportation networks that enhance access and mobility and increase economic opportunity for people throughout the region, SPC staff works with our regional partners to develop integrated multimodal solutions that account for the needs of all transportation system users.

STATEWIDE PLANNING PRIORITY AREAS

The tasks in this section of the UPWP address the following priority areas:

- **I-Plans and Programs:** Long Range Plan (LRP) and Transportation Improvement Program (TIP) administration and development (Title III), Annual Obligation Reports for Transit Projects, PennDOT Connects, and Performance-Based Planning and Programming.
- **II-Supporting Planning/Programming Activities:** Regional freight planning, technical assistance and process review, sustainability planning, administration of federally-approved Planning Agreements with transit operators and FTA Triennial Review Support, and supporting road safety audits and corridor operations and planning studies.
- **III-Project Delivery:** Transit TIP/LRP fiscal constraint, PennDOT Connects/scoping field views, and PennDOT Multimodal Fund project review and application assistance.
- **IV-Land Use/Transportation Linkages/Economic Development/Modernization:** Integrating freight considerations into LRP and TIP development, identifying livability and sustainability strategies via TDM and transit, equity and mobility planning for transportation disadvantaged populations, integrated/strategic corridor planning, PennDOT Connects participation, training and support.

ROLES

- **Federal Highway Administration (FHWA)/Federal Transit Administration (FTA):** Provide technical assistance as well as general oversight, review and approval of the Metropolitan Planning Process for Southwestern Pennsylvania.
- **SPC:** For program and planning product development, SPC staff will establish and facilitate cooperative processes with federal oversight agencies, PennDOT and local planning partners. SPC adopts the regional long range transportation plan, the TIP, the Public Transit-Human Service Coordinated Transportation Plan (CTP) and other planning products required by federal planning law. These programs and products are monitored and administered through the standing Transportation Technical and Transit Operators Committees.
- **Pennsylvania Department of Transportation (PennDOT):** For LRP and TIP development, the PennDOT Center for Planning and Program Development along with the PennDOT Multimodal

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Deputate ensure that statewide procedural and fiscal guidance for program development is adhered to and provides technical assistance for the preparation of locally initiated and federally required planning products.

- **PennDOT Districts:** In LRP and TIP development, the Districts' role is to share information regarding asset conditions, safety conditions, and traffic operations and presenting an advanced list of priority needs for the operation, preservation, and reconstruction of the state highway and bridge system within the District. The District Programming Units conduct and present carryover analysis and best fit optimization of new highway and bridge project candidates that have been prequalified for the TIP. Districts take the lead in coordinating and conducting PennDOT Connects activities.
- **Member Planning Departments:** In the program and project development processes, the county/city planning departments' role is to communicate the priority needs regarding maintenance and upgrade of the transportation networks in the county/city, including state, county, and municipal infrastructure assets. Member planning departments are to provide input on changes and status of county/city and municipal comprehensive plans, zoning ordinances, and planned development to determine their effects on early transportation planning decision-making and subsequent programming.
- **Transit Agencies:** Staff works closely with the region's transit operators, providing technical assistance, data, maps, and other analysis as needed. Transit service, operations, and management information is available from the transit operators. Staff and transit operators coordinate TIP and LRP Amendments, as well as overall short and long-range planning for public transit in the SPC region.

MULTIMODAL TRANSPORTATION PLANNING – RESULTS FROM CURRENT PROGRAM

The Multimodal Transportation Planning Group of SPC's Transportation Department focuses on planning processes and products designed to facilitate implementation of the region's long range plan, *SmartMoves for a Changing Region*. *SmartMoves* continues to place an emphasis on investing in multimodal projects to foster economic growth, enhance livability and connectivity in communities throughout the region, and provide residents with sustainable and resilient transportation choices.

The following is a sample of planning activities that were advanced in the 2020-2022 Work Program:

- Completed *SmartMoves Connections: A Regional Vision for Public Transit*
 - Study of the region's transit supportive land uses and potential for Multimodal Hubs and Multimodal Corridors adopted by SPC in June 2021.
 - Created online mapping tool to visualize Multimodal opportunities throughout the 10-county region.
- FFY 2020 Transit Obligations Report published. Some Obligated projects include:
 - Beaver County Transit Authority: Midlife Vehicle Overhaul (\$480,000)
 - Butler Transit Authority: Commuter CNG Buses (\$750,000)
 - Port Authority of Allegheny County: Electric Bus Purchase—seven buses (\$3,588,569)

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- Provided technical assistance to the City of Pittsburgh, Allegheny County, the City of Pittsburgh Urban Redevelopment Authority and the Port Authority of Allegheny County for the planning of the Downtown-Oakland-East End Bus Rapid Transit project.
- Provided additional technical assistance to the Port Authority of Allegheny County planning projects, including:
 - NEXTransit long range plan.
 - Station improvement plans for Station Square, South Hills Junction and Dormont Junction light rail stations.
- Participated in the project management group for the Pittsburgh Downtown Partnership's Downtown Mobility Plan.
- Participated in the City of Pittsburgh's Transit Oriented Development study of the Manchester/Chateau neighborhood.
- Provided technical assistance to the region's operators of public transit for the following activities:
 - Management of Title III (Transit) TIP and the 2023-2026 TIP update.
 - FFY 2020 and FFY 2021 Annual Sub-allocation Process for the Distribution of Federal Transit Urban Area Formula Allocations.
 - Regional Sub-allocations for emergency programs related to the COVID-19 pandemic
 - Coronavirus Aid Relief and Economic Security Act - \$162,133,867
 - Coronavirus Response and Relief Supplemental Appropriations Act - \$61,085,869
 - American Rescue Plan Act - \$248,240,183
 - Implementation of the federally-required process for Transit Asset Management Performance Targets.
- Provided technical assistance, invoice review, and work program development input to the region's three Transportation Management Associations (TMAs).
- Completed strategic planning for the regional rideshare program resulting in plan for activities designed to advance implementation of the Regional Transportation Demand Management (TDM) Strategic Action Plan and further integration of TDM strategies and projects into the regional transportation planning process.
- Completed three-year \$1.2 million regional marketing campaign promoting regional rideshare opportunities and the regional carpool and vanpool programs.
- Initiated the formation of the regional TDM Partners' group and held 8 meetings of the group. The group focused on implementation of strategic actions from the region's Regional Transportation Demand Management (TDM) Strategic Action Plan.
- Provided technical support in statewide and multi-state planning initiatives, including an Appalachian Regional Commission assessment of the Impact of Appalachian Coal Decline on railroad and barge activity in northern Appalachia, including Southwestern PA; and represented regional commercial navigation issues to USACE/ORSANCO during their stakeholder outreach on the "Planning Assistance to States" Study.

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- Actively participated in the PennDOT Freight Work Group, which produced a comprehensive Freight Plan Guidebook that outlines the process by which a Regional Freight Plan document may be developed. This document was released in 2021 as PennDOT Publication 790.
- Provided support to local planning partners and development interests in their efforts to leverage freight considerations in larger planning and funding scenarios, including support of the Butler County application for BUILD funding; the collaborative assessment of a potential new “innovation corridor opportunity” with SPC’s Planning and Development staff; identification of funding opportunities for river terminal development from non-traditional, intermodal sources, such as national rail funding programs; and identification and dissemination of new funding strategies designed to make applications for discretionary funding more competitive through inclusion of references to other key funding priorities such as Opportunity Zones.
- Completed the *Analysis of Human Service Transportation in Southwestern Pennsylvania* documenting how on-demand transportation services could be integrated into regional fixed-route transit services across the service areas of the regional transit systems.
- Completed brief and proposed scope of work for the creation and implementation of a Regional Mobility Index describing action steps to arrive at baseline criteria to measure sustainability, livability and equity benefits for use in investment prioritization for proposed multimodal transportation project development.
- Assisted multiple communities across the region to achieve the League of American Bicyclists Bicycle Friendly Community designation. During the last program period, three regional communities were so designated.
- Completed two full seasons of the Regional Bicycle Counts program. During the program period, bicycle count data was gathered and analyzed from over 50 count locations on regional multi-use trails, bike lanes and designated bicycle route segments throughout the region.
- Completed Bicycle Level of Comfort mapping for almost 15% of the road and trail network within the region. Bicycle Level of Comfort mapping was made available to any municipality or project sponsor upon request in the region through the work of the Active Transportation Forum.
- Maintained the interactive Active Transportation Resource Center – an online portal available to SPC member Counties and organizations as well as the general public. The resource center contains information and links to assist in the development of active transportation plans, project and policies for municipalities and potential project sponsors.

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MULTIMODAL TRANSPORTATION PLANNING

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$245,958	\$187,890
Federal Transit Administration	\$610,042	\$689,710
PennDOT	\$26,750	\$21,940
SPC/Other	<u>\$187,250</u>	<u>\$197,460</u>
Total	\$1,070,000	\$1,097,000

TASK DESCRIPTIONS

Implementation of *SmartMoves* is a multifaceted endeavor for translating the Regional Vision, Goals and Strategies into measurable, achievable actions that are implemented through close collaboration and coordination with SPC’s federal, state and local planning partners. Integrating the needs of a wide range of transportation system users and the operations of a variety of transportation modes is the focus of SPC’s multimodal planning efforts.

The following activities will be undertaken by SPC staff, in collaboration with its partners, to advance multimodal transportation planning in the region.

Active Transportation Planning

Staff contributes to planning products designed to support a regional active transportation network placing an emphasis on sustainable transportation projects that support human-powered transportation, engaging people in healthy physical activity while they travel from place to place and helping to reduce emissions and fuel consumption associated with motorized vehicle travel.

Planning Activities:

- Update active transportation profiles for each county and the City of Pittsburgh.
Solicit input from county planners from each member county and the City of Pittsburgh to learn more about existing conditions and local trends in biking and walking, and what policies and programs are in place to support growth in bicycle and pedestrian travel.
- Facilitate implementation of the *Regional Active Transportation Plan for Southwestern Pennsylvania* by fostering and supporting local planning efforts to identify opportunities to establish a regional active transportation network.
- Provide technical assistance to county and local governments and community stakeholders interested in developing active transportation plans, projects and programs, including bicycle/pedestrian plans, Complete Streets policies, Safe Routes to School programs, healthy community programs, bicycle education programs and obtaining bicycle and walk-friendly community designations.

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- Continue to maintain and update the region’s Active Transportation Resource Center to provide plan and project implementation tools, including information on how to ensure compliance with the Americans with Disabilities Act (ADA), for county and municipal governments and community stakeholders.
- Advance development of the regional bicycle and pedestrian data collection program by expanding the program to include pedestrian counts and working with state and local agencies to develop minimum data collection requirement for inventories, participating in local and state-sponsored work groups to ensure consistency of data collection and obtain crowd-sourced datasets to enhance monitoring and planning activities. (
- Support and facilitate the regional Active Transportation Forum on a quarterly basis to continue to provide a venue for local governments and community stakeholders to identify local and regional bicycle and pedestrian issues and share information.
- Provide support for PennDOT’s continuing multimodal initiatives including advancing PennDOT Connect initiatives.
- Develop regional measures for the emissions and health benefits of active transportation activities.

Access and Mobility Planning

Through the Alliance for Transportation Working in Communities (Alliance), staff cultivates regional collaboration among human service agencies, transportation providers, non-profit organizations, governmental entities, and others for the purpose of identifying strategies and promoting projects aimed at enhancing Southwestern Pennsylvania’s transportation network. This envisioned system includes a broad range of travel options that are fully integrated and provide connected mobility for all, including disadvantaged populations and people residing in underserved and rural areas. The planning efforts of the Alliance are intended to help advance public, private, and non-profit mobility services in all ten counties to support the health, activity, and participation of the region’s residents across their lifespan.

Planning Activities:

- Form partnerships with educational institutions and research facilities to study the travel behaviors of people from across the region, understanding why they travel, where they travel, and by what modes (i.e. Trip Typology), as well as how often they take different types of trips (i.e. Mobility Motivation Value).
- Conceive an equitable regional standard for sustainability, livability, and equity as seen through a mobility lens (i.e. Mobility Index) that can be applied toward decision-making for proposed land use and transportation projects in Southwestern Pennsylvania.
- Support efforts, if warranted, to conduct regional transit development planning aimed at assessing the impacts of the 2020-2021 COVID-19 pandemic on travel demand and defining what comes next for public transit operations in the region.
- Seek cooperation from Southwestern Pennsylvania’s public, for-profit, non-profit, and human service transportation providers to collaborate on activities that will lead to a

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comprehensive multimodal network where each providers' services and schedules are integrated into a single-tiered mobility system accessible by everyone.

- Advance the planning for and development of multimodal hubs in locations where there are clusters of activity and an expressed community desire for this type of facility.
- Play a strategic role in the planning and deployment of micromobility services to address mobility needs in underserved communities and provide first- and last-mile access to main-line transit services in suburban areas.

Take the first step toward future deployments of complete trips by studying the various complete trip segments and their relative significance in ensuring individuals can move from origin to destination without gaps in the travel chain – trip planning; outdoor navigation; intersection crossing; boarding/using vehicles; transferring between vehicles; modes; common fare payment; using stops/stations; indoor/outdoor transitions; indoor navigation; and connecting/completing trip segments.

- Conduct quarterly meetings of the Alliance to engage participants in discussions about transportation accessibility concerns in our urban, suburban, and rural communities and identify proven best practices that can be implemented to resolve transportation barriers. Document the actions this volunteer group and the outcomes of their work.
- Update the existing *Southwestern Pennsylvania Public Transit – Human Services Coordinated Transportation Plan*, focusing on strategies that align with the goals and objectives established for the region's LRP.
- Participate, as needed, in additional planning, programming, and project implementation activities at the request of the SPC Transit Operators Committee, FTA, PennDOT, counties, municipalities, community-based organizations, and/or other stakeholders.

Regional Public Transit Planning

Staff contributes to planning efforts that maintain and enhance a safe, efficient and sustainable system of public transportation that connects people with jobs and essential resources by advancing programs and projects providing public transportation options, regional transit coordination, alternatives to fixed route transit service, and economic opportunities linked to land use and transit oriented development. Over the 2022-2024 Work Program, SPC staff will focus on implementing *SmartMoves Connections: A Regional Vision for Public Transit*.

Planning Activities:

- Provide technical assistance to public transportation providers, PennDOT, FTA and other stakeholders as they develop the regional transit programs of projects in adherence to federal and state regulations and guidance relating to the region's LRP, TIP, and UPWP.
- In collaboration with FTA, PennDOT and regional transit providers, monitor and evaluate the LRP, TIP and UPWP for compliance with federal and state laws and regulations and for progress toward the regional goals and policies adopted by SPC. Track the delivery of all federally-funded transit projects in the region through the annual list of transit obligations and other reporting opportunities.

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- In collaboration with FTA, PennDOT and regional transit providers, establish and monitor performance targets for the transit operators in the SPC region.
- Coordinate the annual sub-allocation process for distribution of FTA Federal Urbanized Area Formula Program (Section 5307) funds to eligible sponsors of urban transit projects. Coordinate the effective use of federal funding to reach the region's goals and policies as adopted by SPC in the LRP.
- Provide technical assistance to SPC's members and the region's transit providers, as requested and as provided for in the TIP update procedures and other documents, through forums such as the Transit Operators Committee (TOC) and the Transportation Technical Committee (TTC).
- Assist with continuing efforts to integrate the Title I (highway) and Title III (transit) TIP management databases and to operationalize use of the PennDOT Bureau of Public Transportation Capital Planning Tool.
- Collaborate with transit providers, PennDOT, FTA, municipalities, community-based organizations and other stakeholders to plan and implement transit-oriented development (TOD), Transit Revitalization Investment Districts (TRID) and other strategies to revitalize, redevelop and create transit-supportive communities.
- Coordinate with the region's transit providers, PennDOT, FTA and local governments to identify potential corridors for future regional transit expansion, through Transit Signal Priority, Bus Rapid Transit and other innovative approaches.
- Assist municipalities in planning for enhancements to first and last mile connections to public transit facilities.
- Collaborate regionally on the location of park-n-ride facilities across all counties to support their varying needs and provide bus access in areas with a greater need but less demand.
- Work toward greater efficiency in public transit systems through regional cooperation while also promoting equitable public transit access.
- Provide technical assistance to public transportation providers, the PennDOT Multimodal Deputate, FTA and other stakeholders to ensure that intercity passenger rail and bus services are considered in the transportation planning process at both the state and local levels, and to improve and promote interconnectivity between public transit services, intercity passenger rail, and intercity bus services.
- Conduct additional studies, research and planning as requested by transit providers, SPC members, municipalities, PennDOT and other stakeholders that advance the goals of the region's LRP.

Regional Travel Demand Management and Commuter Options

Staff activities focus on Travel Demand Management planning and programming that supports the vision that travelers in the region have access to and are motivated to choose healthy, sustainable and effective travel options that reduce stress on the transportation network. Through the CommuteInfo Regional Rideshare Program staff supports a customer-focused trip-making options resource center that administers regional vanpool, carpool and bikepool matching programs and facilitates a regional forum for Transportation Demand Management efforts designed to increase the

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number of people who choose to make trips by transit, vanpool, carpool, bicycle, personal mobility device or walking.

Planning Activities:

- Provide administrative, technical and planning support for management and operation of CommuteInfo - the regional ridesharing program.
- Promote and expand commuter ridesharing through the production and distribution of marketing/information/training materials and events.
- Coordinate regional Travel Demand Management efforts and outreach in cooperation with partner agencies by providing a forum for collaboration.
- Collaborate with the region's TMAs in work program development, funding (through the CMAQ program), invoicing and adherence to eligibility of activities under the federal CMAQ program.
- Maintain and enhance the regional ridesharing database to be used in responding to requests for ridesharing assistance, creating program marketing materials, and measuring program effectiveness.
- Monitor changes in regional commuting and overall trip-making patterns as well as changes in regional employment and business trends in order to inform decision-making on program design.
- Engage in corridor and sub-area based forums for local partners and stakeholders to discuss and plan local ridesharing activities.
- Collaborate with SPC's Operations & Safety Group as well as PennDOT, counties, TMAs, transit providers, and other partners on implementation the promotion of ridesharing, commuting and general trip-making options as important travel demand management strategies employed as part of the SPC's Congestion Management Program.
- Documentation of the management of the FTA direct-funded regional vanpool program annual Program of Projects for maintenance of the region's TIP.
- Documentation of the status of all active federal and state grants that provide funding assistance for the provision of ridesharing services.

Integrated Holistic Planning Support

Through close contacts with and connections to the planning activities and priorities of its members, SPC staff actively engages in geographically-focused multimodal transportation and land use special studies in order to provide technical assistance for the advancement of community-based project planning.

Activities:

- Provide multimodal technical and planning support for the region's Congestion Management Process.

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- Provide multimodal technical and planning support for the Regional Operations Plan including technical support to SPC staff and staff from the PennDOT Program Center for implementation activities of the Regional Transportation Demand Management Action Plan.
- Provide multimodal technical and planning support for the Regional Transportation Safety Action Plan.
- Provide support and technical assistance to SPC staff and PennDOT Program Center staff and staffs of the three regional PennDOT Districts for the implementation of PennDOT Connects.
- Provide technical and planning support for the development of multi-municipal, corridor and sub-area focused land use/transportation assessments for targeted geographic areas.
- Identify livability, sustainability, and resiliency planning strategies for the location of transportation facilities and services for broader access to employment opportunities, affordable housing, schools and safe streets.
- Provide input to PennDOT in efforts to identify planning activities targeted to county and local governments, conservation districts and community stakeholders; examples include smart growth, complete streets, access management, transit oriented development, healthy communities, Americans with Disabilities Act (ADA) compliance, connectivity, transportation impact fees, and energy savings.
- Provide technical and planning assistance to member counties and the City of Pittsburgh for development of multimodal planning products associated with transit/land use/economic development studies designed to provide various types of innovative value capture mechanisms.

Work Products:

- Technical assistance for the development of regional trail and bicycle networks. (Ongoing)
- Assistance and documentation of the development and promulgation of enhanced active transportation performance measures and tracking systems. (Fourth quarter, 2023)
- Facilitation of the regional process for implementation of the 2019 Southwestern Pennsylvania Public Transit–Human Services Coordinated Transportation Plan. (Fourth quarter, 2023)
- Documentation of planning tasks undertaken by the region’s transit providers, including the Port Authority of Allegheny County, in accordance with adopted cooperative Metropolitan Planning Agreements. (Ongoing)
- Documentation to PennDOT, FTA and regional stakeholders of the Annual List of Obligations of federal transit funding. (Annual)
- Documentation to PennDOT, FTA and regional stakeholders for the annual sub-allocation process for the region’s federal Urbanized Area Formula Program funds. (Annual)
- Technical assistance and documentation for the region’s public transit project sponsors in the creation of Transit Development Plans. (Ongoing)

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- Technical support for and required documentation of any and all studies, reports and other planning documents resulting from requests for technical assistance from regional transit agencies. (Ongoing)
- Documentation to PennDOT, FTA and regional stakeholders of federally-required transit asset maintenance and safety-related performance measures and tracking systems.
- Management and administrative support for the regional vanpool program and the vanpool service contract. (Annual)
- Maintenance and administration of the regional ridesharing database. (Ongoing)
- Preparation and dissemination of marketing, promotional, and educational materials to enhance public informational campaigns promoting travel demand management and commuter options. (Ongoing)
- Preparation of briefing materials for the Commission, planning partners and the public as required. (As needed)
- Facilitate quarterly meetings of the SPC Transit Operators Committee: the region's Active Transportation Forum; the Alliance for Transportation Working in Communities; and, the region's Travel Demand Management Advisory group. (Ongoing)
- Maintenance of the regional Active Transportation Resource Center, the ATWIC webpage, the CommuteInfo website and the TOC webpage. (Ongoing)

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REGIONAL FREIGHT PLANNING

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$195,200	\$197,600
PennDOT	\$24,400	\$24,700
SPC/Other	<u>\$24,400</u>	<u>\$24,700</u>
Total	\$244,000	\$247,000

TASK DESCRIPTION

The economic vitality of Southwestern Pennsylvania relies on the ability to move goods and materials safely, reliably and efficiently into, through and out of the region. The comprehensive, multimodal freight network that serves the region was identified in the Regional Freight Plan completed under previous Work Programs. The goal for activities conducted under the 2022-2024 UPWP is to make regional freight planning processes and outputs more responsive to changes in economic activity that occur at the local, regional or national level. Such activities are consistent with the Regional Vision established in *SmartMoves for a Changing Region*, the region’s long range transportation and economic development plan, the *Regional Freight Plan for Southwestern Pennsylvania*; and the *Pennsylvania Comprehensive Goods Movement Plan*.

Freight Planning activities generally fall into two general areas: implementation of the Regional Freight Plan for Southwestern Pennsylvania, and the conduct of a regional freight planning program. It is anticipated that these efforts will include an update of portions of the Regional Freight Plan under current (2022-2024) UPWP, for which supplemental funding will be required.

Regional Freight Planning

The primary goal of the Regional Freight Planning program is to enable the region to adapt to a freight industry that is dynamic and ever-changing in response to local, regional and global supply chain and consumer demand cycles. The regional Freight Forum will continue to be used as a primary means of engaging both the public and private sectors, and enhanced engagement with economic and industrial development professionals will permit a deeper understanding of the needs of freight centers while still in the site development and planning stages. A program of regular outreach with our larger modal partners, federal and state oversight entities, and multi-state partnerships will be maintained.

These outreach efforts will be supported through the continued use of innovative new data sources, including the identification of truck movement patterns through StreetLight, and the use of AIS and Lock Performance Management System (LPMS) data from the US Army Corps of Engineers to identify “near real-time” data on freight movement in the region. HPMS class count data is already being used to identify the type and function of trucks using key roadways in the region.

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Emerging freight activities and information on the economic forces behind them (such as the decline of Appalachian coal mining) will be monitored through existing and anticipated new collaboration efforts. A program to coordinate more closely with economic development and land use planning activities (as related to major new development) in key local municipalities in the region is currently under development.

Likewise, the potential for new technology to advise the freight planning process and/or goods movement practices will be explored for regional application, including EV/CAV applications and innovative local delivery techniques.

An over-arching goal of the Regional Freight Planning program is to identify and advance project investments that enhance freight mobility and promote multimodal freight transportation operations and safety.

Freight Plan Implementation:

The Regional Freight Plan for Southwestern Pennsylvania was adopted in 2016. It continues to provide a good inventory of the region's transportation assets, but global changes that affect the region now require a re-examination of that inventory and development of a more contextual plan for the movement of freight.

To do so, it is proposed that the baseline freight infrastructure and commodity flow information presented in the 2016 Regional Freight Plan for Southwestern Pennsylvania be used to establish a Strategic Goods Movement Network (map) that identifies the transportation assets that currently serve as State, Regional and Connector level freight corridors. With the goal of preserving and protecting the transportation assets currently available, this regional hierarchy of truck routes and multimodal connections will identify improvements (and funding) needed to ensure long term intra- and inter-region connectivity for goods and materials.

In support of this highway freight classification process, HPMS class count data is already being used to identify the type and function of trucks using key roadways in the region. The preparation of an interactive Strategic Goods Movement Network is anticipated to be completed under this UPWP.

Building on the basic information already collected in the Regional Freight Plan for Southwestern Pennsylvania, this updated Network will incorporate additional data on truck (and intermodal where appropriate) operating conditions to reflect freight movement patterns more fully. This supplemental information may include freight impediment data such as vertical clearance limits or geometric design limitations affecting truck movement; first mile/last mile access limitations; curb management practices affecting local deliveries; truck parking and staging strategies; and continued viability of the full Ohio River System of commercial navigation in western PA. A program of enhanced coordination with modal partners in the air cargo and railroad sectors will also be established.

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Expanding beyond the physical transportation network, SPC will establish a communications protocol within SPC planning groups, as well as our sister program in Planning and Development (economic development), to identify emerging freight transportation needs, focusing on freight suitability, sustainability and safety.

Work Products:

- Implementation activities associated with the Regional Freight Plan. (Ongoing)
- Regional Freight Opportunities Assessment. (Ongoing)
- Southwestern Pennsylvania Freight Transportation Database. (Ongoing)
- Strategic Goods Movement Network Map. (Second quarter, 2023)
- Freight-related transportation projects. (Ongoing)
- Annual Regional Freight-Related Performance Measure report. (Annual)
- Briefing materials for the Commission, planning partners and the public. (As needed)

Regional Freight Program

The regional freight planning program responds to federal and state freight planning priorities, as identified in the National Freight Strategic Plan, the FAST Act, the *Pennsylvania Long Range Transportation Plan* and the *Pennsylvania Comprehensive Freight Movement Plan*, and provides opportunities for regional freight interests to have input into the transportation planning process.

Activities:

- Use the regional Freight Forum and other outreach efforts to facilitate the exchange of information among various freight mode stakeholders; provide avenues of input from the regional freight community on transportation planning issues; and, provide for the consideration and enhancement of inter-regional freight movement.
- Provide technical assistance to the PennDOT Multimodal Deputate, including participation in the Pennsylvania Freight Working Group, Pennsylvania Freight Summit, state Rail Freight Advisory Committee, Rail Freight Assistance Program, *Statewide Comprehensive Goods Movement Study*, and various other state studies and initiatives. Coordinate the region's response to continuing and emerging federal and state freight initiatives.
- Provide technical assistance to PennDOT District partners on freight planning and programming initiatives through the PennDOT Connects initiative, as well as through regular updates to Transportation Technical Committee members.
- Participate in multi-state planning efforts through participation in regional freight events such as the West Virginia Planning Conference and the Ohio Conference on Freight. Continue to collaborate with multi-jurisdictional partners, including adjoining MPOs in Pennsylvania, West Virginia, Ohio and Maryland, and the Departments of Transportation in those four states to cooperatively identify and address freight transportation issues and opportunities in inter-regional and multi-jurisdictional freight movement.
- Support intermodal initiatives of the Appalachian Regional Commission, the I-95 Corridor Coalition, the I-81 Corridor Coalition and other similar programs.

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- Advance priority freight initiatives identified by SPC members, partners and the regional Freight Forum, as appropriate.
- Collaborate with partners in adjoining states, PennDOT, Pennsylvania Turnpike Commission, local planning partners and other stakeholders in the exploration of the feasibility and benefits of Hyperloop technologies.
- Work with representatives of Pittsburgh International Airport and other airports in the region in the identification and assessment of air cargo opportunities.
- Continue to monitor freight utilization of the inland river system through established relationships with the Port of Pittsburgh Commission and the US Army Corps of Engineers (USACE).
- Assess the potential surface transportation impacts of scheduled lock closures on the Ohio River system as well as unscheduled lock closures (episodic) to determine probable impacts on the local surface transportation network. Identify opportunities to address vulnerability concerns and resiliency needs of the regional Inland Navigation System.
- Develop technical reports identifying safety issues associated with at-grade railroad crossings, GPS truck routing, commercial vehicle safety and specific locations as required.
- Collaborate with SPC's Transportation Operations and Safety Group as well as PennDOT, counties, and other partners on integration of freight considerations into the regional Congestion Management Process, *Regional Operations Plan*, *Regional Transportation Safety Action Plan*, PennDOT Connects initiatives and other planning efforts.
- Cooperate with local partners in the identification and advancement of transportation investments that enhance the economic competitiveness of a location or community in a corridor-based modal integration strategy or in direct support of efforts to enhance air, rail or water access.

Work Products:

- Regular meetings of the regional Freight Forum and associated meeting materials. (Ongoing)
- Regional multimodal, multi-state freight summit to educate local leaders on freight issues and opportunities in the SPC region, foster cross-regional cooperation and develop partnerships in the design and implementation of solutions to intermodal freight needs (As appropriate).
- Identification and implementation of mode specific responses to demonstrated needs, such as Truck Parking Strategy implementation and identification of a Regional Freight Network. (Third quarter, 2023)
- Intermodal Management System and NHS Intermodal Connector mapping. (Ongoing)
- Freight-related education and communications materials, other technical reports and special studies. (As requested)
- Briefing materials for the Commission, planning partners and the public. (As needed)

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PORT AUTHORITY PLANNING PROGRAM

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Transit Administration	\$184,000	\$184,000
Other	\$46,000	\$46,000
Total	\$230,000	\$230,000

TASK DESCRIPTIONS

Port Authority of Allegheny County provides public transportation throughout Pittsburgh and Allegheny County. The Authority's 2,600 employees operate, maintain and support bus, light rail, incline and paratransit services for approximately 216,000 daily riders. Port Authority owns and maintains an extensive network of transit properties and facilities including 3 busways, 51 park and ride lots and garages, a 26.2-mile light rail system, an HOV Tunnel, and an incline. Port Authority is currently focused on planning and implementing a number of improvements to make service more efficient and easier to use, including implementation of mobile payment and real-time screens, real-time vehicle tracking and on-street bus rapid transit.

1. Port Authority Transit Service, System Planning and Planning for Persons with Higher Mobility Needs

Objectives: Monitor system performance and evaluate performance of routes and adjust, as necessary, to ensure productivity and effective services. Respond, when possible, to customer requests for service changes. Perform transportation system planning to develop park-and-ride facilities and transit centers. Coordinate transit service and operations with business and joint development initiatives, transportation related air quality planning, congestion management, and smart growth activities at the municipal, county and regional levels. Coordinate with the region's three Transportation Management Associations (TMAs), Allegheny County Transit Council (ACTC) and the Committee for Accessible Transportation (CAT). Advance NEXTransit Plan service improvement recommendations. Conduct other planning activities that seek to improve transit operations and facilitate integration within the overall transportation system. Conduct planning specifically focused on groups with higher and more acute transportation needs, including, but not limited to: persons with disabilities, low-income persons, persons of a minority race or ethnicity, persons who do not or cannot drive, persons under age 18 or over age 65, persons with limited English proficiency and/or single mothers.

Planning Activities:

- Conduct transit service planning including, but not limited to:
 - Adjusting bus route alignments and garage assignments.
 - Revising bus and rail schedules, hours of service, vehicle blocks and operator runs.
 - Adjusting Downtown bus route patterns.
 - Per the service standards guidance, reviewing stop locations for each bus route and recommend and implement stop balancing.

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- Per the service standards guidelines, monitoring performances of existing transit services and evaluating proposals for new service utilizing productivity and other measures.
- Monitoring performance of changed services and making adjustments where needed.
- Revising the National Transit Database sampling plan.
- Producing service memos.
- Developing and implementing the quarterly system picks.
- Developing new public information materials including schedules and maps and updating Port Authority's website schedule information to reflect service changes and provide other information to increase public awareness of new travel opportunities.
- Engaging in joint planning activities with the staffs from the other transit providers as well as Southwestern Pennsylvania Commission (SPC) staff to identify efficient service configurations designed to provide riders with improved connections between services in order to enhance regional transit travel.
- Conduct the Bus Network Redesign study as recommended in NEXTransit.
- Refine and maintain the system-related database as input to planning services.
- Perform additional short-range route planning and evaluation in response to customer, business or other stakeholder requests for changes.
- Continue service planning activities for new developments in Port Authority's service area.
- Develop service plan as necessary to reflect updated funding scenarios and other agencies' key initiatives.
- Work with ACCESS, and other agencies on options to reduce service gaps resulting from service reductions and/or changes.
- Pursue short-range operational improvements to facilitate future implementation of Bus Rapid Transit and refine long-term operating plan.
- Examine the public information network and implement improvements, including Geographic Information Systems (GIS) and providing support for electronic media.
- Continue Implementation of upgrades such as the Automated Fare Collection system (including Smart Card) and Automated Travel Information System.
- Develop Affordable Fares Policy as recommended in NEXTransit.
- Provide data for continuous updates to Port Authority's Real-Time Information.
- Coordinate service, fare systems and customer information with Southwestern Pennsylvania's other transit providers.
- Manage Port Authority's existing network of park-and-ride facilities and pursue continued expansion of Port Authority's park-and-ride network.
- Participate in SPC's transportation related air quality planning including the Congestion Mitigation & Air Quality (CMAQ) program.
- Participate in SPC's Congestion Management Process (CMP), Coordinated Transportation Plan (CTP), and Regional Operations Plan (ROP).
- Continue to encourage a multi-faceted approach to provision of transportation services involving the private sector as appropriate, including development of community circulator plans as recommended in NEXTransit and involvement in TMAs.

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- Increase opportunities for business and joint development initiatives in conjunction with Port Authority transit operations, facilities and park-and-ride program.
- Provide staff support to ACTC.
- Coordinate with the CAT and ACCESS and provide PAAC support for other initiatives facilitating access for persons with disabilities and senior citizens, including development of an ADA Access Program as recommended in NEXTransit.
- Develop service plans responding to continued evolution of COVID-19 and its variants and associated restrictions and changes in travel plans.

Work Products:

- Continued review of bus and rail transit services and adjustments to improve productivity as warranted per the service guidelines. (Ongoing)
- Transit service plans responding to COVID-19 and variants. (Ongoing)
- Quarterly service revision summaries. (Ongoing)
- Bus stop balancing. (Ongoing)
- A regional transit database. (Ongoing)
- An improved public information network, including easier access to schedules and information. (Ongoing)
- Revised, easier to read, and informative system map, timetables and other public information. (Ongoing)
- Managing the existing park-and-ride program and expanding the network of park-and-ride facilities. (Ongoing)
- Coordination with the three TMAs. (Ongoing)
- Community circulator plans in five areas of Allegheny County. (Ongoing)
- Efforts to ensure consideration of transit by municipalities and private developers in future development projects. (Ongoing, as appropriate)
- Improved transit services coordinated with other municipal, Allegheny County, PennDOT Connects and other PennDOT plans and projects. (Ongoing)
- Provide input into local roadway construction and other development projects. (Ongoing)
- Record meetings with external advisory committees. (Ongoing)
- Provide informational materials in formats usable by persons with disabilities. (Ongoing)
- Advance short-range operational improvements to facilitate future implementation of Bus Rapid Transit and refine long-term operating plan. Fourth Quarter 2023 (for first phase of the project)
- Plan for service increases/reductions as warranted within available financial resources. (As needed)
- Bus Network Redesign.-(Third Quarter, 2025)
- Affordable Fares Policy. (Ongoing)
- ADA Access Program. (Ongoing)

2. Port Authority TIP, State Twelve Year Program, County Capital Program and UPWP Administration and Operating, Strategic and Financial Planning

Objectives: Develop a program of transit projects for inclusion in the region's Transportation Improvement Program (TIP), State Twelve-Year Program and Allegheny County's Capital Program. To administer 2022 - 2024 UPWP and the administration of the 2021-2024 TIP, and initiate planning for the 2023-2026 TIP. Monitor potential new transportation funding initiatives proposed by the PA legislature. Develop modeling based upon any new federal funding reauthorization bill that is presented to congress for ratification. Monitor and update Port Authority's strategic operating plans and capital needs assessment to reflect funding associated with Pennsylvania's next transportation funding measure as proposed by the legislature and approved by the governor, and to assess other important federal, state and local programs and policies pertaining to Port Authority financial and business planning.

Planning Activities:

- Develop transit projects for inclusion in the region's TIP, the State Twelve-Year Program, and the County Capital Program.
- Administer the Authority's portion of the UPWP.
- Continue development of Port Authority's portion of the 2023-2026 TIP.
- Ongoing quarterly capital budget progress meetings with Authority staff.
- Implement and monitor the progress of the strategic operating plan.
- Refine and maintain key performance indicators as a system evaluation tool and record.
- Monitor and update capital project status reports on a quarterly basis.
- Update 20-year capital and operating projections as necessary.
- Update fare modeling projections used in the preparation of the Authority's operating and capital budgets.
- Examine operating and capital impacts of FY 2022 and FY 2023 budgets.
- Assess other important issues which pertain to the Authority's financial and business planning.
- Coordinate with the PennDOT Connects Program to support TIP projects' multimodal consideration.

Work Products:

- Programming of transit projects for the Capital Improvement Program. (Ongoing)
- Administer the transit component of the FY 2021-2024 TIP. (Ongoing)
- Updated long-range operating and capital plans. (Ongoing)
- Regular reports on capital performance. (Ongoing)
- Regular reports on operating performance. (Ongoing)
- Updated capital needs assessment. (Ongoing)
- Updated long-term financial projections based upon new state and federal transportation funding legislation enacted in 2021 – 2023. (Ongoing)
- Annual operating and capital budget based on planning forecasts. (Ongoing)
- Financial indicators and operating statistics. (Ongoing)

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- Assessment of other important issues pertaining to financial and business plans. (Ongoing)
- Continued refinement of process to monitor the capital improvement program. (Ongoing)

3. Port Authority Long-Range Transit Planning

Objectives: To advance corridor and area-wide mid-range and long-term planning for small- and large-scale transit improvements as recommended in the NEXTransit plan. Participate in long-range transit corridor and community planning studies being led by the City of Pittsburgh, Allegheny County, SPC and other entities. Advance Port Authority's Transit Oriented Communities program. Conduct preliminary planning for extensions in fixed-guideway corridors.

Planning Activities:

- Conduct alternatives analysis and National Environmental Policy Act (NEPA) review for the NEXTransit prioritized corridors
- Advance the NEXTransit Plan recommendations to conduct the Best Use Studies for the Library and Allentown/Downtown LRT lines.
- Provide environmental support to engineering staff for projects in design.
- Conduct Transit-Oriented Communities (TOC) program by leading planning, design and development activities that support station access and design as well as joint development. Coordinate TOC efforts with municipal, community, and other stakeholders to ensure feasibility and support. Coordinate with the Federal Transit Administration, Pennsylvania Department of Transportation, SPC and Allegheny County as necessary. Opportunities to develop affordable housing will be incorporated into the TOC program.
- Continue the Station Improvement Program to modernize existing busway and light rail stations to better meet current rider needs, support TOC initiatives and enhance transit operations.
- Coordinate with municipal, county, regional and state planning and development initiatives to maximize opportunities for implementation of TOC.
- Work with municipalities and private developers to ensure there are provisions for transit in new construction and development projects in order to support TOD initiatives proposed in local, county and regional plans.
- Implement Port Authority's First and Last Mile Program Plan. Conduct outreach to advance partnerships necessary for project development and implementation, and share the plan and methodology, and generate broad interest in improving access to transit.
- Develop a Systemwide Signage and Wayfinding as recommended in NEXTransit.
- Advance the Sidewalk Quality and Access Program as recommended in NEXTransit. Seek funding to implement the program.
- Identify opportunities for business and joint development on Port Authority's facilities, including park-and-ride lots as recommended in NEXTransit.

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- Represent Port Authority on community and area-wide planning studies to ensure that on-street and fixed-guideway transit is considered in future development proposals to optimize ridership and maintain or enhance service effectiveness and efficiency.
- Provide planning and environmental review support for near-term transit projects such as the new transit centers and park-and-ride facilities. Advance the Downtown Transit Center recommended in NEXTransit into planning and begin planning for other transit centers as proposed in NEXTransit.
- As needed, provide information to SPC information to be incorporated into the next regional long-range plan.
- Conduct Bus Garage Location and Capacity Study as recommended in NEXTransit. In addition to accommodating expansion of the bus fleet, the garage would be designed to accommodate alternative fueled vehicles and support systems such as electric buses and chargers. This effort will also evaluate maintenance and storage needs of the rail vehicle fleet and of the non-revenue vehicle fleet.
- Identify locations for planning bypass lanes around bottlenecks per a NEXTransit recommendation.
- Provide planning support, including resolution of any community or stakeholder issues and development of grant applications to advance the Downtown – Uptown – Oakland – East End Bus Rapid Transit project through implementation.
- Develop grant applications for planning studies, to implement programs and policies and to advance capital projects into construction.
- Provide planning support for further expansion of Port Authority’s fleet of electric buses and supporting infrastructure such as chargers and garage modifications. This task could also consider other alternative fuels. Funding opportunities to expand electric/other fuel buses would be pursued.
- Conduct a study (Moving the Mon Valley: Building on BRT) to evaluate opportunities to create more transit-oriented communities by expanding BRT in the Upper Mon Valley. This study is funded through an FTA Discretionary Pilot Program for Transit Oriented Development (TOD) Planning.

Work Products:

- Alternatives Analyses and NEPA reviews in the priority corridors identified in NEXTransit. (Ongoing for the next 15 – 20 years)
- Planning study for new Downtown Transit Center. (First Quarter 2024)
- Bus Use Study for the Library and Allentown/Downtown LRT lines. (Library Line Best Use Study: Fourth Quarter 2025. Allentown/Downtown LRT Best Use Study: Fourth Quarter 2026)
- Documentation of efforts conducted to advance projects and strategies included in the adopted regional long-range plan. (Ongoing)
- Representation of Port Authority in planning efforts undertaken by other organizations. (Ongoing)
- Per Port Authority’s guidelines, further advancement of the TOC program at busway and light rail transit stations. (Ongoing)
- Per Port Authority’s guidelines, advancement of a First and Last Mile Program to enhance access to busway and light rail transit stations. (Ongoing)

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- Continuation of the Station Improvement Program implementation. (Ongoing)
- Continuation of a Sustainability Plan. (Ongoing)
- Bus Garage Location and Capacity Study. (Fourth Quarter 2023)
- Grant applications for planning studies, implementation of programs and policies and to advance capital projects into construction. (Ongoing)
- Support for expanded electric bus/alternative fuel bus fleet and supporting infrastructure. (Ongoing)
- Develop a Systemwide Signage and Wayfinding as recommended in NEXTransit. (Ongoing)
- Moving the Mon Valley: Building on BRT Study

MULTIMODAL TRANSPORTATION PLANNING – MULTI-YEAR IMPLICATIONS

Active transportation has emerged as a high priority area at the national, state, regional and local levels. SPC will continue to work with regional partners to implement strategies from the *Regional Active Transportation Plan* as well as the *SmartMoves for a Changing Region* to guide future program and project development activities in this area.

SPC staff will continue to lead regional efforts to improve access, mobility and equity for the elderly, disabled and other traditionally underserved populations through its Alliance program and implementation of the *Southwestern Pennsylvania Public Transit-Human Services Coordinated Transportation Plan*.

SPC staff will continue to provide technical assistance to regional transit providers for enhanced service coordination through implementation and project development activities associated with *SmartMoves Connections: A Regional Vision for Public Transit* as well as the development of strategic planning documents for rural and small urban providers. Over the 2022-2024 work program, SPC staff will focus on implementing *SmartMoves Connections* by analyzing the data generated to prioritize the next phase of regional investments in transit connections.

SPC looks to expand the reach of its CommuteInfo vanpool and carpool program in order to increase its impact. Staff will be identifying ways to better integrate the CommuteInfo program with transportation demand management (TDM) planning and strategy development as part of the Congestion Management Process (CMP) and the Regional Operations Plan (ROP) – using the CMP as a tool to target TDM outreach in areas and corridors with identified congestion problems. SPC will also be looking at ways to increase collaboration between the PennDOT Program Center, the three Transportation Management Associations (TMAs) in the region and a broad range of stakeholders in order to implement the *Regional TDM Action Plan*.

In recent years, there has been a growing awareness at the federal level that there are national interests in addressing bottlenecks in the national freight network and in enhancing the intermodal movements of goods. This is evidenced in the FAST Act through the creation of a new National Highway Freight Program (NHFP) and a new discretionary Nationally Significant Freight and Highway Projects program. SPC has maintained a long-standing dialogue with members of the freight community to identify freight needs and to incorporate freight concerns into the transportation planning process.

TRANSPORTATION OPERATIONS & SAFETY

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TRANSPORTATION OPERATIONS & SAFETY – OVERVIEW

The long range plan, *SmartMoves for a Changing Region*, was developed with the following Regional Vision: A world-class, safe and well maintained, integrated transportation system that provides connected mobility for all, enables resilient communities, and supports a globally competitive economy. To achieve the vision, the following investments, that are relative to the Transportation Operations and Safety, were identified:

- Investment for Maintaining Infrastructure Condition
- Investment for System Safety, Efficiency and Reliability
- Multimodal Investment for Community and Economic Development

The *SmartMoves* vision includes well maintained roadways and bridges that are safe for all users. *SmartMoves* makes significant investments in improving mobility conditions, safety, and operations. The use of new and emerging technologies in operations, design, construction methodologies, and materials will be critical moving into the future, allowing us to maximize use of our limited state and federal funds.

Transportation Operations & Safety programs directly address the Regional Vision.

Transportation safety can be heavily influenced by recurring operational conditions such as traffic congestion, weather, work zones, traffic signal timings, and other factors. Conversely, crashes and other random incidents can have a large impact on operations and congestion. For this reason, transportation operations and safety planning are often done in tandem to ensure a coordinated approach.

Transportation systems management and operations (TSM&O) programs attempt to optimize the performance of the existing infrastructure through implementation of multimodal, cross-jurisdictional systems, services, and projects. These systems, services, and projects are designed to preserve capacity and improve the security, safety, and reliability of transportation systems.

Planning for operations involves developing objectives to direct the consideration of operational performance during the planning process, and incorporating operations solutions into investment decisions that support those objectives. This approach helps to ensure that operations needs are addressed in regional planning and investment decisions. By linking planning and operations, planners have a greater understanding of the role of operations projects and programs in the context of meeting regional goals and objectives, and a greater understanding of how they can help advance these activities. This linkage also allows operators to have a greater understanding of how the long range planning process can support management and operations activities, and how their activities fit into the context of regional goals.

STATEWIDE PLANNING PRIORITY AREAS

The tasks in this section of the UPWP address the following priority areas:

- **I-Plans and Programs:** Long Range Plan (LRP) and Transportation Improvement Program (TIP) development support; and Performance-Based Planning and Programming.

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- **II-Supporting Planning/Programming Activities:** Maintain and update the region's Congestion Management Process (CMP); technical assistance to planning partners; ITS and TSMO strategy and project development; implementation of the Regional Operations Plan (ROP); ITS Architecture maintenance and update; and conduct Road Safety Audits (RSA) and Corridor Operations Planning Studies (COPS).
- **III-Project Delivery:** Participate in PennDOT Connects and design/scoping field views; development and implementation of the Regional Traffic Signal Program.
- **IV-Land Use/Transportation Linkages/Economic Development/Modernization:** Identifying multimodal livability and sustainability strategies via integrated/strategic corridor planning; PennDOT Connects participation; training and support.

ROLES

- **Federal Highway Administration (FHWA)/Federal Transit Administration (FTA):** Provide technical assistance as well as general oversight, review and approval of the metropolitan planning process for Southwestern Pennsylvania.
- **SPC:** In Transportation Operations and Safety, the role of SPC is to establish and facilitate a cooperative process for operations and safety planning. SPC staff leads the planning process and implementation strategies for the Regional Operations Plan (ROP), the Regional Safety Action Plan (SAP), the Regional ITS Architecture and Plan, the Congestion Management Process, and the Regional Traffic Signal Program. SPC staff also provides technical assistance to all regional stakeholders and leads special studies with consensus from or at the request of regional planning partners. SPC staff also leads the Regional Operations and Safety Forum, which meets quarterly to discuss the above plans as well as upcoming operations and safety projects, studies, and initiatives. The Forum includes staff from FHWA, PennDOT Central Office (BOMO), PennDOT Districts, county planners, the City of Pittsburgh, Transportation Management Associations, other municipalities, bicycle and pedestrian advocates, and consultants.
- **PennDOT Central Office (BOMO):** In Transportation Operations and Safety, the role of the PennDOT Bureau of Maintenance and Operations (BOMO), Highway Safety and Traffic Operations Division is to participate and engage in the development of SPC's ROP and SAP and ensure that statewide guidance is being adhered to. BOMO staff and SPC staff also cooperate and coordinate on the exchange of operations and safety data. PennDOT Central Office legal staff is also involved in the review and approval of the reimbursement agreements for the Regional Traffic Signal Program.
- **PennDOT Districts:** In Transportation Operations and Safety, the Districts' role is to participate and engage in the development of all aspects of SPC's Operations and Safety program. The Districts participate on Steering Committees and consultant selection advisory committees for plan development and special studies. In the development of the ROP and SAP, the Districts' role is to communicate the priority needs regarding operations and safety of the state-owned transportation network. SPC staff and District staff also regularly cooperate and coordinate on the exchange of operations and safety data. The Districts, as roadway owners, are engaged in our

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Road Safety Audit program and are also involved in the review and approval of activities associated with the Regional Traffic Signal Program.

- **Member Planning Departments:** In Transportation Operations and Safety, the county/city planning departments' role is to participate and engage in the development of all aspects of SPC's Operations and Safety program. The planning departments participate on Steering Committees and consultant selection advisory committees for plan development and special studies. In the development of the ROP and SAP, the county/city planning departments' role is to communicate the priority needs regarding operations and safety of the transportation network in the county/city. SPC staff and planning departments' staff also cooperate and coordinate regularly on the exchange of operations and safety data. The counties and city, as roadway owners, are also engaged in our Road Safety Audit program.

TRANSPORTATION OPERATIONS & SAFETY – RESULTS FROM CURRENT PROGRAM

SmartMoves for a Changing Region continued to place an emphasis on investing in the maintenance and preservation of the existing transportation system; a theme that is also the top priority in the 2021-2024 TIP. This will undoubtedly continue with the 2023-2026 TIP currently under development. SPC's operations and safety programs address goals such as ensuring that we include major projects that maintain our existing system while also enhancing safety, accessibility, mobility, and connectivity across the region.

The following is a sample of transportation operations and safety planning activities that were advanced in the 2020-2022 Work Program:

- Held regular meetings of the regional Transportation Operations & Safety Forum.
- Utilized the Regional Integrated Transportation Information System (RITIS) platform suite of tools from the University of Maryland Center for Advanced Transportation Technology (CATT) laboratory to establish and confirm federal performance targets for system performance (PM3). Since 2018, SPC Operations and Safety staff have confirmed and adopted the statewide targets for metrics such as:
 - Percent of Person-miles Traveled on the Interstate System that are Reliable
 - Percent of Person-miles Traveled on the Non-Interstate NHS that are Reliable
 - Interstate System Truck Travel Time Reliability Index
 - Annual Hours of Peak-Hour Excessive Delay (PHED) per Capita
- Continued to participate in statewide and national discussions concerning advancements in Intelligent Transportation Systems (ITS), including a statewide connected and autonomous vehicle work group (led by PennDOT) on planning and policy related to these emerging technologies. Also participated in the past four State of Pennsylvania's annual Connected/Autonomous Vehicle summit.
- Participated in stakeholder workshops to develop the concept of operations for the [Pennsylvania Safety Transportation and Research Track \(PennSTART\)](#).
- Advanced the implementation of the [2019 Regional Operations Plan \(ROP\)](#) update by successfully coordinating and submitting applications for statewide Transportation Systems

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Management and Operations (TSM&O) funding on behalf of PennDOT Districts. These applications were awarded funding for implementation of additional CCTVs, dynamic message signs, and other ITS related infrastructure on the region's Interstates and state routes. These awards included one for a transit related park-n-ride availability system.

- Commenced the next phase of development for the [Regional Traffic Signal Program](#) including preliminary engineering and final design of the fourth cycle of projects. With the completion of the three cycles of this program, over \$12 million has been invested to improve 577 signalized intersections across 70 municipalities in our region since 2008. The results of the first three cycles of this program include **\$51 of public benefit for every \$1 spent** in terms of reduced travel delay, reduced vehicular stops, reduced fuel consumption and emissions, and improved safety.
- Completed a comprehensive review of the Congestion Management Process corridors to determine any necessary modifications. SPC engaged with staff from each county, the City of Pittsburgh, the Transportation Operations and Safety forum and other regional stakeholders to gather feedback on CMP modifications. The corridor set has been updated. Staff has also commenced updating corridor strategy prioritization by distributing surveys that ask key stakeholders about strategies to mitigate congestion on CMP corridors in their county. SPC will utilize the results of these surveys as well as the available congestion data to update the prioritization of congestion mitigation strategies.
- Analyzed historical crash data in order to facilitate establishment of the federally mandated, regional safety performance targets for the first four reporting periods. The latest regional safety targets were adopted by SPC in January 2021. These metrics include:
 - Number of fatalities
 - Rate of fatalities (per 100M vehicle miles traveled)
 - Number of serious injuries
 - Rate of serious injuries (per 100M vehicle miles traveled)
 - Number of non-motorized fatalities and serious injuries
- Completed an update of the Regional Safety Action Plan. The [2020 Regional Safety Action Plan](#) represents an update to the original 2015 plan. The updated plan is data driven and contains 13 Regional Safety Focus areas and well as 157 identified potential safety project locations.
- Conducted six additional Road Safety Audits. By end of FY 2022, SPC will have completed 44 Road Safety Audits since 2009. Many of the suggestions made in these audits have been incorporated in safety projects across the region.
- Completed a fourth Corridor Operations Planning Study along State Route 8 in Hampton and Richland Townships in Allegheny County. This was completed at the request of the PennDOT District 11-0.
- Completed the Brodhead Road Corridor Planning Study at the request of Beaver County and PennDOT District 11-0. This study analyzed an arterial corridor with limited capacity that is projected to experience very high development growth in the next 20 years. Recommendations included alternative intersection designs, new multimodal transit, bike, and pedestrian facilities/links and intersection improvements.

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- Continued to lead [Traffic Incident Management \(TIM\) initiatives](#) within and outside of the region. Staff continues to coordinate local TIM teams, training sessions, webinars, and after action reviews. Staff continues to lead and report on FHWA TIM self-assessments and provide a quarterly TIM Program newsletter. The newsletter identifies funding opportunities for first responders. SPC is also assisting with coordinating and providing National SHARP II TIM Responder Training to over 200 City of Pittsburgh Emergency Management Services personnel. Outside the region, SPC continues to make staff available to explain to other MPOs how a TIM team and program can be initiated and sustained.
- Completed a Regional Roundabout Screening Study that was a comprehensive look at potential roundabout locations at intersections that are underperforming safety-wise.

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TRANSPORTATION OPERATIONS, CONGESTION MANAGEMENT, AND CONNECTED MOBILITY/ITS

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$311,200	\$315,200
PennDOT	\$28,350	\$29,100
SPC/Other	<u>\$49,450</u>	<u>\$49,700</u>
Total	\$389,000	\$394,000

TASK DESCRIPTIONS

Monitoring and evaluating transportation system performance in order to identify sources and causes of recurring and non-recurring congestion is critical for developing and implementing strategies that enhance the mobility of people and goods in Southwestern Pennsylvania. Given that transportation system users typically don't recognize jurisdictional boundaries as they travel, and desire a seamless trip between origin and destination, it is essential to do this work in a collaborative environment with a wide variety of stakeholders.

Similarly, seamless technology and transportation are both about connecting people with the resources they need to live their lives, as well as connecting people in cities, towns and regions around the world. Technology in transportation has evolved but has changed rapidly in recent years. Activities in ITS planning are designed to maximize the power of technology to improve safety, mobility, and accessibility for transportation system users.

The following activities will be undertaken by SPC to facilitate the regional collaboration and cooperation that is needed to achieve an efficient and connected operating transportation system.

1. Regional Transportation Systems Management & Operations Program

Objective: Transportation Systems Management and Operations (TSM&O) is a set of strategies to anticipate and manage traffic congestion, and minimize causes of service disruption, delay and crashes. TSM&O is an integrated program to optimize the performance of the existing infrastructure through implementation of multimodal, cross-jurisdictional systems, services and projects. These elements are designed to preserve capacity and improve the security, safety and reliability of transportation systems. SPC encourages and participates in the incorporation of TSM&O within the ongoing cooperative regional planning and programming process and helps to identify regional and statewide process changes needed to incorporate TSM&O.

Planning Activities:

- Provide leadership and administrative support to the regional Transportation Operations and Safety Forum as it assists with the development of regional programs such as the ROP, CMP, ITS and safety planning.

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- Participate in PennDOT and local transportation operations planning activities including identification and prioritization of operations projects and transportation management plans to mitigate work zone impacts. Coordinate TSM&O funding applications with partners.
- Review and provide feedback, as requested, on development access plans and traffic impact studies.
- Coordinate and conduct workshops and studies on congestion reduction strategies.
- Participate in integrated corridor and planning studies associated with implementation of the LRP.
- Support PennDOT and other planning partners in efforts to research and implement innovative solutions such as roundabouts and diverging diamond interchanges to address locations with congestion and safety problems. SPC will be completing a Regional Roundabout Screening Study and will also be performing a before/after benefit-cost analysis at a completed diverging diamond interchange.
- Work with other SPC departments, as well as planning partner agencies, to implement policies, strategies and technologies to reduce energy and fossil fuel consumption.
- Continue outreach materials to disseminate information about regional congestion management and transportation operations initiatives.
- Develop and maintain collaboration tools such as SPC's website, social media outlets and SharePoint site in order to share operations planning and programming information.
- Conduct outreach activities including surveys, educational materials, training and other initiatives designed to increase the awareness of transportation operations and the benefits of traffic signal improvements and other implementation initiatives.

Work Products:

- Regular meetings of the Transportation Operations and Safety Forum including meeting materials. (Ongoing)
- Technical assistance, workshops and outreach materials. (As needed)
- Studies and other technical reports. (As needed)
- Briefing materials for the Commission, planning partners and the public. (As needed)

2. Regional Operations Plan Implementation

Objective: The long range plan was developed with the following Regional Vision: A world-class, safe and well maintained, integrated transportation system that provides mobility for all, enables resilient communities, and supports a globally competitive economy. To achieve the vision, the following investments, that are relative to the Regional Operations Plan (ROP), were identified:

- Investment for Maintaining Infrastructure Condition
- Investment for System Safety, Efficiency and Reliability
- Multimodal Investment for Community and Economic Development

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SPC's Regional Operations Plan (ROP) has established operations objectives to mitigate recurring congestion, maintain mobility during planned events, minimize the impact of unplanned events, and provide an efficient multimodal transportation system. These objectives have been developed in collaboration with a broad range of regional partners and require continuing collaboration and cooperation among these partners to undertake implementation activities to achieve them.

Planning Activities:

- Continue to identify regional focus areas for transportation operations to prepare for the next Regional Operations Plan Update. The 2019 Regional Operations Plan identified over 60 proposed projects, studies, and initiatives. Many of these proposed projects include intelligent systems to advance connected mobility. Continue to encourage the incorporation of ROP projects in the TIP Work Group discussions. Continue to coordinate with planning partners on acquiring any available discretionary funding for ROP projects when it becomes available. Commence ROP update in 2024.
- Conduct multimodal and other Corridor Planning Studies in corridors and regional subareas identified in the ROP in order to target congestion reduction strategies and implementation initiatives.
- Provide technical assistance for transportation operations project implementation.
- Monitor the effectiveness of transportation operations projects and strategies by conducting before and after analyses.

Work Products:

- Data assembly for next Regional Operations Plan update. (First quarter, 2023)
- Corridor Operations Planning Studies. (Ongoing)
- Before and after operations studies. (Ongoing)
- Briefing materials for the Commission, planning partners and the public. (As needed)

3. Congestion Management Process (CMP)

Objective: The CMP is a regional planning tool designed to help manage congestion by identifying congested corridors and recommending multimodal strategies for congestion mitigation. The CMP provides information that helps transportation planners, operations professionals and others to understand the causes and sources of congestion in individual corridors and the region. Data on these congestion elements helps SPC, in partnership with other agencies, to formulate congestion management strategies. Data and information from the CMP facilitate the transportation planning process by helping the region focus limited federal transportation dollars where they can have the greatest impact. The CMP process will also engage planning partners on FHWA operations performance metrics and target setting. As required, regional operations performance targets will be established within 180 days of established statewide operations targets.

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Planning Activities:

- Collect, compile and analyze traffic data as part of the CMP in order to identify sources and causes of congestion.
- Review and report on the state of recurring and non-recurring congestion in the region via tracking of various performance measures. Address federal performance metric requirements by collecting and analyzing data that will allow target setting and performance measure tracking of the following:
 - Percent of person-miles traveled on the Interstate system that are reliable
 - Percent of person-miles traveled on the non-Interstate national highway system that are reliable
 - Truck travel time reliability
- Complete a comprehensive review of the current network of 104 CMP corridors to determine necessary modifications. In the previous Work Program, staff engaged with regional stakeholders and planning partners and obtained the necessary feedback to update the CMP corridor set. In this Work Program, staff will complete the update of strategy prioritization by analyzing available data and re-engage stakeholders to obtain feedback on congestion mitigation strategies for each corridor.
- Use the CMP process to determine the positive travel time and reliability impacts that newly completed projects have made on Tier 1 (freeway) corridors.
- Continue to incorporate new sources of data (such as private-source probe data) and new analysis platforms such as Streetlight and RITIS in order to enhance the amount and quality of traffic data available for transportation planning purposes.
- Continue to enhance multimodal data integration into the CMP including transit ridership data, park-n-ride data, and freight data.
- Provide information and analyses required to incorporate traffic operations data into the technical project evaluation processes for the TIP and LRP, and to assess project selection criteria for other funding programs.

Work Products:

- Comprehensive CMP website updates. (Ongoing)
- Special studies and data sets, as needed. (Ongoing)
- Data and analyses for incorporation into project selection and project development activities for the TIP and LRP. (Ongoing)
- Briefing materials for the Commission, planning partners and the public. (As needed)

4. Regional ITS Architecture

Objective: ITS projects funded by USDOT must conform to a Regional ITS Architecture (Federal Regulation 23 CFR 940.11). SPC maintains this Architecture and updates it as needed in order to keep up with planned and potential future capabilities and needs throughout the region. SPC collaborates with agencies and stakeholders throughout the region to accomplish this.

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Planning Activities:

- Maintain the Regional ITS Architecture.
 - Since the last comprehensive update to the ITS Architecture in 2015, USDOT has released a new software update (RAD-IT). Staff has obtained some web training on this new software and in this work program staff will incorporate this latest software update into our ITS Architecture.
 - Add current ITS services within the region through coordination with and outreach to current architecture stakeholders. Use USDOT's Regional Architecture Guidance as appropriate.
 - Extend the current architecture to additional agencies and service areas through stakeholder education, outreach and technical assistance. Priority service areas include information services, transit management, incident management, emergency management, traffic control, freight, and research.
 - Customize architecture flows and identify standards as appropriate to facilitate the interchange of ITS information between agencies.
 - Work with funders and project sponsors to ensure that they incorporate and enforce a systems engineering analysis as a defined process for their ITS projects and as required by PennDOT.
 - Identify project architectures as appropriate within the Regional Architecture.
 - Maintain a user-friendly Regional ITS Architecture webpage so planning partners and stakeholders have access to the information within the architecture. Create links between this website and PennDOT's Operations webpages and pages hosted by other planning partners and stakeholders.

Work Products:

- Updated and accessible Regional ITS Architecture. (Second quarter, 2024)
- Briefing materials for the Commission, planning partners and the public. (As needed)

5. Regional ITS Program/Connected Mobility

Objective: The information contained in the Regional ITS Architecture and the relationships established to build and maintain the architecture are important elements for engaging stakeholders in planning for the future of ITS in the region. SPC will continue to use these tools to establish a strategic regional vision for ITS and to assist in the implementation of ITS projects.

Planning Activities:

- Provide leadership and administrative support to the ITS stakeholder group as it guides and implements the region's ITS planning program. Per the updated ROP, update the ITS device inventory and develop a Regional ITS Strategic Plan.
 - Foster discussion on a regional vision for ITS including the potential for agencies to collaborate on projects and funding. Discussion would also include how the region can be positioned to prepare for more connected vehicle deployment.

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- Support subcommittees as needed to advance priority initiatives of the region's ITS community.
- Sponsor quarterly meetings, special meetings, and special events as appropriate.
- Per the ROP, conduct outreach and encourage implementation of Transit Signal Priority, which is to date, an underutilized tool in the SPC region.
- Provide technical assistance as requested for project implementation.
 - Assist planning partners with project planning activities and identification of funding strategies as appropriate.
 - Assist planning partners with competitive ITS/Connected Mobility grant applications as needed.
 - Track the status of ITS projects in the region and facilitate the exchange of project information. Encourage before/after evaluation of those projects and contribution of the results to the USDOT's Research and Innovative Technology Administration (RITA) databases. SPC staff was involved in the development of the Concept of Operations Plan for the City of Pittsburgh Smart Spines project. Staff will continue to track the status of this ATCMTD funded project.
 - Conduct ITS-related feasibility studies that assess the feasibility and cost effectiveness of an ITS deployment strategy at specific locations (for example, the Regional Cashless Tolling Study was completed as part a prior program).
- Identify educational, training, and professional capacity building opportunities and facilitate access as appropriate.
- Disseminate ITS-related information to regional ITS stakeholders, decision-makers and the general public.
 - Determine effective uses for SPC's webpage for ITS communications.
 - Publish ITS articles or project features in newsletters, via social media or other communications methods as appropriate.
 - Support ITS presentations as needed at professional associations and special events.
 - Sponsor ITS workshops as appropriate.

Work Products:

- Regular meetings with regional ITS stakeholders. (Ongoing)
- Updated ITS Architecture. (Second quarter, 2024)
- Regional ITS Strategic Plan. (Fourth quarter, 2023)
- Study documents that assess the feasibility and cost effectiveness of ITS deployment strategies at specific locations. (As needed)
- Educational materials, newsletters, training courses, seminars and/or conferences as needed. (As needed)
- Presentation teams and promotional/support materials for conducting public outreach as needed. (As needed)
- Briefing materials for the Commission, planning partners and the public. (As needed)

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TRANSPORTATION SAFETY PLANNING

ESTIMATED COST:

	<u>2022-2023</u>	<u>2022-2023</u>
Federal Highway Administration	\$266,400	\$273,600
PennDOT	\$34,950	\$32,550
SPC/Other	<u>\$31,650</u>	<u>\$35,850</u>
Total	\$333,000	\$342,000

TASK DESCRIPTIONS

Having a safe and secure transportation network is important to transportation operations, public health, the regional economy, and overall quality of life in the region. Transportation safety planning activities undertaken by SPC strive to reduce the number and rate of crashes, fatalities, and injuries on the region’s transportation network. These efforts “Toward Zero Deaths” focus on the “4 E’s” of safety: Education, Engineering, Enforcement and Emergency Response. The safety planning process will also engage planning partners on FHWA safety performance metrics and target setting.

1. Regional Transportation Safety Action Plan Implementation

Objective: State DOTs and MPOs are responsible for establishing targets and achieving significant reductions in each of the five Federal safety performance measures:

- Number of fatalities (all public roads)
 - Rate of fatalities (all public roads-per 100M vehicle miles traveled)
 - Number of serious injuries (all public roads)
 - Rate of serious injuries (all public roads-per 100M vehicle miles traveled)
 - Number of non-motorized fatalities and non-motorized serious injuries (all public roads)
- SPC's 2015 Regional Transportation Safety Action Plan was the first step in establishing safety targets and tracking safety performance for the SPC region. This plan was updated in 2020. Thirteen regional safety focus areas were identified based on a review of regional crash data and feedback from SPC safety stakeholders. The updated plan is data driven and also contains 157 identified potential safety project locations.
 - In the previous program, as required by FHWA, SPC adopted regional safety performance targets for the first four reporting periods.

Planning Activities:

- Continue to compile and analyze traffic crash data on a regular basis in order to monitor trends and identify problem locations and priority issues.
- Begin to compile data for a 2025 update of the Regional Transportation Safety Action Plan, which is integrated into the LRP, in order to identify regional focus areas for safety.

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- Conduct an in-depth analysis or study of 1-2 safety focus areas per year in order to develop detailed action plans and implementation strategies for the region.
- Continue to provide information and analyses required to incorporate safety data into the technical project evaluation processes for the TIP, LRP, and other funding programs such as CMAQ, SMART and TA Set-Aside.
- Continue to coordinate with planning partners on Highway Safety Improvement Program (HSIP) applications and HSIP funding allocations. Continue to coordinate with and encourage PennDOT Central Office and the Districts on an MPO-led process for distribution of the regional HSIP funding allocation. This proposed process would place a significant emphasis on a systemic safety approach that is data driven, but flexible. FHWA's Systematic Safety Project Evaluation Tool, as well as the focus areas identified in the Regional Transportation Safety Action Plan, would be used as guidance within this process. Utilize the previously completed Regional Roundabout Screening Study and work with partners to fund high potential roundabout locations that have higher safety benefits.
- Participate in PennDOT, transit agency and local safety planning activities including identification and prioritization of HSIP projects. Assist local governments with identifying local safety projects that have high potential for HSIP and other funding sources. Also provide assistance with funding applications and project management.
- Monitor and report the regional safety performance measures as federally required.
- Monitor the effectiveness of safety projects and strategies by conducting before and after analyses.
- Provide technical assistance for safety project implementation.
- Create outreach materials, such as the regional Journal of Transportation Operations & Safety (JOTS), to disseminate information about regional safety initiatives.
- Develop and maintain collaboration tools such as SPC's website, social media outlets and SharePoint site in order to share safety planning and programming information.

Work Products:

- Update of the Regional Transportation Safety Action Plan. (Data compilation – second quarter, 2024; Completion – second quarter, 2025)
- Transportation Safety Focus Area studies. (Ongoing)
- Before and After Studies. (Ongoing and as needed)
- Project evaluation processes that integrate safety factors. (Ongoing)
- Outreach materials and newsletters. (As needed)
- Briefing materials for the Commission, planning partners and the public. (As needed)

2. Road Safety Audits

Objective: A Road Safety Audit (RSA) is a formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively

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estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users. This program assists planning partners with integrating RSAs into the project development process, identifying potential road safety issues, and establishing programming mechanisms to fund the suggested improvements.

Planning Activities:

- Provide technical assistance to planning partners interested in conducting RSAs.
- Conduct before and after studies of previously completed RSAs in order to gauge effectiveness and to identify suggestions that have not yet been implemented. These findings could then be used to help develop additional candidate projects for funding consideration.
- Provide technical assistance for cost estimating and project funding applications to address safety issues.
- Share RSA Summary Reports and RSA procedures with other MPOs and RPOs.

Work Products:

- Road Safety Audit reports with suggested safety improvements. (Ongoing)
- Cost estimates and project funding proposals. (As needed)
- Before and After studies that document actual benefit-cost of safety improvements. (As needed)

3. Corridor Operations Planning Studies

Objective: In order to improve mobility, accessibility, and safety in a comprehensive manner, SPC has developed a corridor study approach, which focuses on operations and safety collectively. Corridor Operations Planning Studies are a hybrid between traditional studies and the charrette-style RSA process and take a more holistic look at both operations and safety together and how they impact one another along a corridor. SPC has completed at least one of these studies per fiscal year for the last few years.

Planning Activities:

- Provide technical assistance to partners interested in conducting Corridor Operations Planning Studies.
- Provide technical assistance for cost estimating and project funding applications to address operations and safety issues.

Work Products:

- Corridor Operations Planning Study reports with suggested operations and safety improvements. (Ongoing and as requested)
- Cost estimates and project funding proposals. (As needed)

4. Traffic Incident Management (TIM) Program

Objective: TIM programs address the National Unified Goal for Traffic Incident Management (NUG) by enhancing the delivery of incident management services and products through increased cooperation and collaboration. By bringing first responders together on a regular basis, improvements in interagency traffic incident management will help to ensure the safety of first responders and reduce incident clearance time on the regional transportation network.

Planning Activities:

- Maintain the regional TIM program including leadership and administrative support for the Regional TIM Steering Committee.
- Provide support and training for the region’s Local TIM Teams. Work with partners to encourage formation of additional TIM teams as needed.
- Provide leadership and support for the statewide TIM program (PENNTIME).
- Establish and maintain TIM guidelines that can be adopted as standard practice by regional agencies.

Work Products:

- TIM educational materials. (Ongoing)
- TIM funding newsletter and outreach materials. (Ongoing)
- Leadership of the PENNTIME TIM Task Force Development Committee and support PENNTIME meetings and initiatives. (Ongoing)
- Support and host Regional TIM Steering Committee meetings. (Ongoing)
- First responder SHRP II TIM training sessions, specialized trainings, workshops, and local TIM team meetings. (Ongoing)
- FHWA TIM Self-Assessment. (Annual)
- Briefing materials for the Commission, planning partners and the public. (As needed)
- TIM Performance Measures tool (Incident Clearance Time and Secondary Crashes). (Ongoing)

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REGIONAL TRAFFIC SIGNAL PROGRAM

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$108,000	\$128,400
PennDOT	\$18,750	\$24,075
SPC/Other	<u>\$8,250</u>	<u>\$8,025</u>
Total	\$135,000	\$160,500

TASK DESCRIPTIONS

Maintenance and operation of traffic signals is a key component of an efficient regional transportation system. In Southwestern Pennsylvania there are currently over 2,800 traffic signals that are owned, operated and maintained by approximately 255 municipalities. Many of the municipalities do not have the resources, staff, or technical expertise to be able to ensure that these signals are operating as efficiently as possible and in coordination with signals in surrounding communities. SPC's innovative work in this area assists municipal governments and PennDOT in the delivery of traffic signal improvements to existing signal infrastructure in order to increase operational efficiency, reduce congestion, and improve safety and air quality along the region's arterial roadway network. This mature program's successful track record has led to increased statewide funding and implementation of traffic signal improvements and has been modeled as a national best practice.

1. Regional Signal Program

Objective: SPC has identified traffic signal management and infrastructure as a major need in the region. SPC has developed and established a regional traffic signal program that includes asset management, technical and project assistance to municipalities, as well as potential funding to assist in upgrading signal systems in the region. This effort is a high priority project type in both *SmartMoves for a Changing Region* and in the Regional Operations Plan (ROP). The planning and implementation activities that are part of this program are undertaken to increase the operational efficiency and safety of signalized corridors and to highlight the benefits of doing so.

Planning Activities:

- Manage efforts to update and maintain the current GIS-based regional traffic signal asset management database that can be used to assess and prioritize traffic signal needs. This information was previously provided to PennDOT Central Office to facilitate establishment of their TSAMS database.
- Work with our planning partners to establish criteria for prioritizing local and regional signal needs.
- Continue coordination efforts with PennDOT Central Office on their funding programs and initiatives with regard to traffic signals and arterial corridors (e.g., Green Light Go and ARLE programs).

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- Support a traffic signal technical committee to advance priority initiatives and support special events as requested.
- The following 4th cycle work commenced in the previous program and will be completed in within this work program. Manage the project selection, reimbursement agreements, preliminary engineering, final design, and construction phases for the 4th cycle of the Regional Traffic Signal Program, including:
 - Perform traffic engineering analyses and review analyses conducted by outside engineering consultants. Produce a preliminary engineering technical report with recommendations that are finalized by SPC, PennDOT, and municipalities.
 - Manage and review final design of the approved recommendations. Coordinate final design and final bid packaging with involved municipalities and PennDOT Districts.
 - Coordinate and manage construction/field implementation of technical recommendations, including any updated timings and coordination plans, equipment upgrades, signal decommissioning, etc., with PennDOT and the involved municipalities.
- Manage before and after studies to document the benefits of traffic signal investments, including operational improvements, estimated fuel savings, reduced emissions and financial savings. Include an analysis of accident records to document safety impacts of these investments.
- Research emerging technologies with regard to signal timing and coordination, including adaptive traffic signals and connected and autonomous vehicle technologies.
- Identify opportunities for Integrated Corridor Management pilot projects that would include controlling traffic signals in key corridors from the Regional Traffic Management Center (RTMC) during incidents and other necessary times. Assist local municipalities and others with identifying possible opportunities for other Smart Transportation projects along arterial corridors, such as adaptive traffic signals, access management, modern roundabouts, and traffic calming and multimodal accommodations.
- Encourage and provide technical assistance and available funding to municipalities interested in converting to LED traffic signals.
- Commence solicitation activities for the 5th cycle of the Regional Traffic Signal Program including Call for Projects, application reviews, project selection process and consultant selection process.

Work Products:

- Traffic signal asset management database. (Ongoing)
- Technical reports with analyses and recommendations for signal improvements. (Ongoing)
- Final design and bid packaging of traffic signal improvement/retiming projects. (Second quarter, 2023)
- Before and after studies. (Fourth quarter, 2024)
- Meetings with traffic signal stakeholders including meeting materials. (As needed)

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- Outreach and education materials. (As needed)
- Briefing materials for the Commission, planning partners and the public. (As needed)

TRANSPORTATION OPERATIONS & SAFETY – MULTI-YEAR IMPLICATIONS

The region’s operations and safety planning programs will continue to advance SPC’s priorities on the maintenance and operation of the existing system, coordinated investment at the corridor level, and provision of safe and secure multimodal and intermodal options for moving both people and goods. Within the operations and safety program, measurable performance targets have been established in support of national performance measures for safety, congestion reduction, and system reliability. Future performance measurement reporting will be integral to this program and will enable, encourage, and highlight the continued need for operations and safety planning and programming.

Congestion reduction and system reliability were two of seven national goals that have continued focus in the federal FAST Act legislation. Establishment of performance standards and an outcome-based program is continued with the provisions of this latest authorization bill. This likely will continue with the next authorization bill. In working toward the federal goals “to achieve a significant reduction in congestion on the National Highway System” and “to improve the efficiency of the surface transportation system”, SPC will continue to be a leader in planning for operations and on mainstreaming transportation operations into the planning process. SPC staff members have been recognized as statewide leaders in Planning for Operations initiatives and could be called upon to assist in expanding operations programs to other parts of the Commonwealth, particularly to rural areas where RPO planning staffs may not be able to support such activities.

Safety was another of the seven national goals that were reiterated in the FAST ACT. In working toward the federal goal “to achieve a significant reduction in traffic fatalities and serious injuries on public roads”, SPC will continue, through its transportation safety planning initiatives, to focus on increasing its role in transportation safety planning and on continuing to integrate safety into the overall transportation planning process. SPC staff members are being recognized as statewide leaders in Traffic Incident Management initiatives and have been called upon to assist in expanding TIM programs to other parts of the Commonwealth. A systematic regional HSIP funded program will ensure that effective improvement projects are provided on state, county, and local roadways.

The continued updating of the regional ITS Architecture to meet the latest standards enables SPC and its planning partners to fully use resources and emerging technologies that are available at the national level. Development of an ITS Strategic Planning document and future updates will result in the development of regional strategies and priority setting. It will also assist in preparing the region and its stakeholders for new technologies and systems, such as connected and autonomous vehicles, as they are developed, tested, and deployed. These on-going activities within SPC's ITS planning and implementation initiatives promote collaborative and effective ITS planning.

SPC's Regional Traffic Signal Program will continue to focus on efforts to address the traffic signal priority areas defined in the Southwestern Pennsylvania Regional Operations Plan. These ongoing efforts include providing technical, project management, and funding assistance to municipalities in order to implement

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signal improvement projects; gathering updated information on regional traffic signal needs; and, conducting before and after studies to determine and promote the measures of effectiveness related to the program. SPC's first three cycles of the program involved work on 649 traffic signals. The 4th cycle of the program is projected to affect an additional 98 traffic signals.

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DATA SYSTEMS & MODELING

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DATA SYSTEMS & MODELING – OVERVIEW

SPC compiles large amounts of data, maps and other information for use as resource material by staff on a daily basis and to support both in-house and outside agency planning activities. Key data items are available for download from SPC's website through SPC's Regional Data Center and SPC's Geographic Information System (GIS) Open Data Hub. SPC also functions as a Pennsylvania State Data Center (PaSDC) Regional Affiliate and Census processing center and repository. This data underpins all support of the planning activities at SPC.

One of the fundamental uses for this data is in SPC's regional models including the REMI (Regional Economic Models, Inc.) forecasting model, Mature Economic Region Land Use Allocation Model (MERLAM), the regional travel demand model, and SPC's air quality models. These models are essential to providing planning support to PennDOT, SPC's members, and other regional partners, as well as for developing the LRP and TIP and in processing air quality conformity determinations.

Significant ongoing data collection, data management and coordination is needed with federal, state and local agencies to maintain these data systems and models. The software and hardware used for SPC's data management and dissemination is maintained, updated, and enhanced periodically in order to keep up with technological advancements and opportunities. Staff training is also provided regularly.

STATEWIDE PLANNING PRIORITY AREAS

The tasks in this section of the UPWP address the following priority areas:

- **II-Supporting Planning/Programming Activities:** update and maintain the regional forecasting models, regional travel demand and air quality models, assist in implementing the state Climate Change Action Plan through air quality conformity analysis, Urbanized Area boundary updates, FTA Triennial Review Support, and participation in Federal MPO Planning Process Certification Reviews.
- **IV-Land Use/Transportation Linkages/Economic Development/Modernization:** support development of regional freight plan update and data support for livability, sustainability, and resiliency planning efforts.
- **V-Highway Performance Monitoring System and Traffic Data Collection:** Verify and update roadway inventory and performance measures on Highway Performance Monitoring System (HPMS) sample sections including any additional segments that may be required based upon revised urban boundary revisions in accordance with HPMS manual specifications.

Submit HPMS data to PennDOT by the first Friday in December of each calendar year.

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ROLES

Federal Highway Administration (FHWA)/Federal Transit Administration (FTA): Provide technical assistance as well as general oversight, review and approval of the Metropolitan Planning Process for Southwestern Pennsylvania.

SPC: In Data and Modeling, SPC's role is to acquire, maintain, summarize, and disseminate data and associated analysis in support of SPC's mission, implementation of *SmartMoves for a Changing Region*, and to support the development of the next LRP update (adoption scheduled for summer 2023). This includes coordination with a number of organizations and agencies (DEP, PaSDC, Census Bureau, SPC members, the region's transit operators, local universities, etc.). In coordination with the PennDOT Program Center and FHWA, staff manages and tracks progress toward the local Transportation Performance Management targets. SPC staff manages the HPMS data collection activity in the region and performs traffic data collection for PennDOT. Staff routinely updates and maintains the regional population, household, and employment forecasting models and the regional travel demand model. As needed, staff will work with other partners (PennDOT, DEP, EPA, etc.) to monitor and evaluate greenhouse gas emissions and assist in implementing Pennsylvania's Climate Action Plan.

PennDOT Central Office: Provide resources, and oversight to traffic data collection efforts.

PennDOT Center for Program Development: The Program Center convenes and chairs the statewide Air Quality Transportation Conformity Work Group, and serves as liaison to FHWA, EPA, and PaDEP for review and approval of air quality conformity assessments. The Program Center has a lead role in coordinating with SPC and other planning partners on managing the Transportation Performance Management process, and as needed, in monitoring and evaluating greenhouse gas emissions and implementation of the state's Climate Action Plan.

PennDOT Districts: The Districts are both a source of data for SPC's Data Systems and Modeling function, but also a customer for SPC's data and modeling services. Custom analysis, modeling, and other technical assistance are routinely provided for the Districts on request. Advise SPC on locations to collect traffic data.

Member Planning Departments: Similar to the Districts, SPC's members are also both a source of data as well as a customer for SPC's data services. Staff works closely with the members and their local municipalities on development and sharing of data and GIS resources. Local municipal plans are available from the members. Staff assists with the development of municipal plans with data and analysis on request. Communicate local traffic data collection needs.

Transit Agencies: Staff works closely with the region's transit operators, providing technical assistance, data, maps, and other analysis on a regular basis. SPC staff collects and shares information on the region's park-n-ride facilities. Transit service, operations, and management information is available from the transit operators.

DATA SYSTEMS & MODELING - RESULTS FROM CURRENT PROGRAM

SmartMoves for a Changing Region was adopted on June 24, 2019 as the regional long range transportation and development plan. This plan represents significant progress in implementing performance-based planning and programming. SPC's data systems and modeling programs provide data and analysis that support planning activities throughout the Work Program to advance the Regional Vision, Goals and Strategies of *SmartMoves*.

SPC's GIS-based information helps make the region's transportation system—including roadways, railways, bridges, waterways, tunnels, airports, etc.—more efficient and effective by analyzing multiple scenarios in the planning process. Private and public economic development groups have used GIS to aid site selection activities for key projects within counties and along key investment corridors. SPC's forecasting and travel models provide data and analysis to help the region prepare effective transportation plans, manage congestion, and meet air quality standards. SPC routinely provides technical assistance to its members and partner agencies to develop traffic forecasts for key transportation improvements throughout the region. These activities help to advance the Regional Vision, Goals and Strategies of *SmartMoves*. The following is a sample of data systems and modeling activities that were advanced in the 2020-2022 Work Program:

- Maintained data sharing agreements with Carnegie Mellon University and the University of Pittsburgh.
- Assisted the US Census Bureau with preparatory activities related to the 2020 Census, including the Local Update of Census Addresses (LUCA) Program, Participant Statistical Areas Program (PSAP), Complete Count Committee (CCC) Program, and other 2020 Census initiatives. Began obtaining, processing, and disseminating 2020 Census data as it was released.
- Acquired and began utilizing CUBE Access to measure accessibility in the SPC region.
- Executed agreement for accessing Strava Metro data for the SPC region.
- Enhanced GIS data for the 10-county region representing new and updated multimodal transportation, land use, land cover, environmental, social and demographic features.
- Refined metadata, attribute descriptions, spatial data dictionaries and additional documentation of the regional GIS for use in-house and for outside data recipients.
- Revised data representing the region's demographics at all geographic levels for historic and current counts, estimates, and projections. Incorporated data from the US Census Bureau at all levels of geography for a 41-county region. Additional enhancements were made using data from the American Community Survey and other recent Census estimates.
- Updated land use data and statistics regionwide from detailed aerial photography, distilled at the municipal level and by traffic analysis zone for the region's demographic forecast and regional travel demand model.
- Updated, edited and rectified GIS data representing infrastructure, land use/land cover, topography, hydrology, environmental features, and trip generators to correct ground locations through use of recent aerial imagery to aid transportation and economic development projects and plans.
- Distributed recent aerial imagery to PennDOT, member counties, municipalities, and planning partners for their use and to promote the sharing of end products between agencies with similar jurisdictions.
- Updated data representing past landslides and historic flood events to aid in determining possible

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negative impacts, and to improve the resiliency and reliability of the region's transportation systems.

- Robust regional GIS applications and tools provided information on environmental features, demographics, and traffic patterns and conditions to assist the evaluation of projects for the TIP, the LRP, and Congestion Mitigation and Air Quality (CMAQ) projects.
- Updated GIS databases and mapping for all of SPC's Congestion Management Process travel corridors, park-n-ride facilities, LRP projects, and TIP projects for use by staff, publication and for posting on the SPC website.
- A Traffic Signal Asset Management System database and online application that joins data from GIS with signal permits and attributes for over 3,400 traffic signal, beacon and flasher locations across the 10-county region.
- Maintained the inventory of locally-owned bridges across the region and a geospatial database of locations, a complete slate of attributes and a collection of photographs to support PennDOT's Local Transportation Asset Management strategy.
- Developed GIS data and products to assist compliance with Environmental Justice mandates, for Title VI activities at partner agencies, and the Americans with Disabilities Act.
- Hosted meetings on geospatial data and standards between member governments and planning partners to initiate practices to aid the exchange of GIS products and data. Represented MPO GIS interests for the PA Mapping and Geographic Information Consortium (PAMAGIC), and as part of PennDOT's Planning Partners. SPC staff serve on the PAMAGIC board.
- Produced various data layers, databases, maps, and graphics to assist planning partners, associated agencies and local governments.
- Upgraded GIS software and added hardware components to improve data processing capabilities, ensure data quality and accuracy, and improve the use of GIS data, applications and subsequent products.
- Staff provided technical support and detailed traffic forecasts to individual consultant teams that were under contract to PennDOT or member agencies, in preparation of needs analysis reports and traffic studies. A sample of recent projects includes:
 - Data and analysis for Port Authority of Allegheny County's LRP.
 - Data and analysis for Allegheny County's Westmoreland Heritage Trail to Great Allegheny Passage Trail Feasibility Study.
 - Data and analysis for PennDOT's traffic study for reconstruction of the I-79/Bridgeville Interchange in Scott Township, Allegheny County.
 - Origin - Destination analysis of travel patterns in the City of Pittsburgh's Oakland Neighborhood.
 - Data and analysis for updates to the statewide travel demand model.
 - Route 40 Needs Study (Uniontown and South Union Township, Fayette County).
 - Data and analysis to estimate active transportation demand for Cranberry Township, Butler County.
 - Data and analysis in support of PennDOT's traffic study for reconstruction of I-70 in Eastern Washington County.
 - East Busway Extension Feasibility Study – Swissvale to Monroeville (Allegheny County).

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- Downtown-Oakland-East End Bus Rapid Transit Project (City of Pittsburgh).
- Maintain online Regional Data Center on the SPC website where numerous data summaries are available to the public. Several “Spotlight” projects have been developed to showcase available data. SPC continues using Tableau software to develop interactive dashboards that enhance the display of data on SPC’s Regional Data Center.
- Inventory of the region’s park-n-ride facilities that contains detailed information for each of the more than 100 park-n-ride facilities located in the SPC region.
- Conformity assessments were conducted for adoption of the regional TIP in the summer of 2020, and for regionally significant TIP and LRP amendments in the fall of 2020 and summer of 2021.
- SPC continued to maintain an up-to-date, calibrated version of the REMI TranSight model. The REMI TranSight model provides the capability to integrate output from SPC’s regional travel demand model into the broader economic model to better evaluate the total economic effects of changes to the transportation network. The configuration of the REMI model regions allows for detailed and flexible scenario building for each of SPC’s individual member counties and the City of Pittsburgh. The REMI TranSight model assists with assessing the performance of the region’s LRP.
- SPC’s Cycle 11 forecast of population, employment and households, the updated 2045 Long Range Forecast, was adopted with *SmartMoves for a Changing Region* in June 2019.
- Developed metrics, targets, and tracking process for ongoing monitoring and reporting of progress on transportation performance measures to address US DOT’s Transportation Performance Management planning process. Developed and regularly maintains a Transportation Performance Management ArcGIS Hub on SPC’s website.
- Systematically updated the region’s travel demand models and modeling process, and to acquire data and tools to enhance modeling capability. In 2020, staff conducted StreetLight analysis of travel patterns of trips crossing the regional boundary and compared the results to output from the travel model. Staff is also seeking consultant assistance to develop updated components of the travel model including trip generation, distribution, and network coding processes.
- Maintained an annual subscription to StreetLight Data that provides access to an analytics platform to evaluate transportation projects and development of data for the model update process.
- Enhanced GIS data for the 10-county region representing new and updated transportation, transit, land use / land cover, environmental, social and demographic features.
- Refined metadata, attribute descriptions, spatial data dictionaries and additional documentation of the regional GIS for use in-house and for outside data recipients.

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GEOGRAPHIC INFORMATION SYSTEMS

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$274,159	\$275,036
Federal Transit Administration	\$67,041	\$73,764
PennDOT	\$34,270	\$34,379
SPC/Other	<u>\$51,030</u>	<u>\$52,821</u>
Total	\$426,500	\$436,500

OBJECTIVES:

The primary tasks of within GIS Operations is to provide accurate geospatial data representing land use, transportation infrastructure, environmental conditions, demographics, housing and employment categories that enhance existing GIS tools; introduce additional applications; and, provide support to SPC departments, member governments, associated agencies, and planning partners, resulting in improved quality and quantity of projects and plans at SPC.

PLANNING ACTIVITIES:

- Maintain and enhance a wide collection of GIS data and imagery representing built infrastructure, land cover / land use, topography, hydrology, environmental features, and trip generators to aid in sound and sustainable planning for transportation and economic development projects.
- Provide GIS data, applications, and products required by the various departments of SPC to assist with UPWP activities, to advance projects and support planning partners.
- Enhance and maintain multiple levels of geography to accurately depict the demographics of the region in terms of population, households, housing units, and workplace employment for further analysis and for incorporation with SPC’s modeling and forecasting programs.
- Maintain an accurate base map to highlight the relationship of transportation features such as railroad crossings, traffic signals, active transportation facilities, transit facilities, intermodal facilities, and ITS infrastructure to identify and minimize potential conflicts of safety.
- Develop and maintain accurate databases of environmental features and conditions as required for environmental impact studies for transportation and economic development projects across the region and to aid in linking transportation planning and the National Environmental Policy Act.

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- Maintain accurate data for the region's transportation networks and incorporate HPMS traffic counts and traffic signal data to aid in the analysis of system performance within SPC's Congestion Management Process, the Regional Operations Plan, and Traffic Signal Asset Management System.
- Maintain data and information related to transit routes, stops, and transit stations for fixed route transit service by all transit providers in the region and provide technical assistance for service planning and transit oriented development strategies.
- Incorporate completed economic development projects and maintain databases of places of employment, zip codes and traffic analysis zones to aid in determining the region's employment for SPC's modeling efforts, and to identify trip generators and attractions that affect traffic patterns.
- Maintain data and information representing river terminals, trucking, freight facilities, and railroad corridors to support SPC's Freight Forum, keep SPC's Regional Freight Network current, and assist in the development of regional and localized freight plans.
- Expand existing spatial data for transit service, pedestrian and pedestrian / bicycle trails and facilities, and parking facilities to provide analysis in support of SPC's Active Transportation Forum, and intermodal and multimodal opportunities across the region.
- Aid planning partners and the region's local governments with comprehensive and multi-jurisdictional plans through the use of accurate GIS data and imagery. Incorporate data and land use classifications from local plans into SPC's GIS to reflect changes across the region.
- Assist SPC and PennDOT district staff by maintaining databases of functionally classified highways, adjusted urbanized areas, fixed transit routes and stops, traffic signals, and park-n-ride lot locations.
- Maintain and update demographic data on race, age, income, education, mobility and Limited English Proficiency for benefits and burdens analysis as part of Environmental Justice activities at SPC, and to expand public outreach and public participation with minority and disadvantaged populations.
- Compile GIS data representing land cover / land use to identify areas that meet criteria for specific development activities at the local and regional level. Carry out revisions to land cover data as recent aerial imagery becomes available to keep data current for project evaluation, transit development plans, modeling and forecasting activities.
- Incorporate roadway, bridge, multimodal and crash data from PennDOT in the regional GIS to evaluate current conditions, traffic volumes, and sufficiency and deficiency of the region's highways and bridges to assist the Commission in prioritizing TIP and LRP projects, to assist staff in conducting Road Safety Audits, and to support regional Traffic Incident Management.

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- Provide aerial imagery and digital elevation data from recent aerial photography programs to member governments, associated agencies and planning partners.
- Implement flexible training options related to GIS data and application development to increase the ability of staff, expand tools to support partners, and maximize the use of quality geospatial data in decision-making.
- Apply and adopt spatial and data standards to promote and enhance the sharing of GIS data between SPC's member governments, associated agencies, and planning partners.
- Create maps, graphics and visualization tools to assist SPC departments with public engagement and outreach related to UPWP programs, to satisfy outside requests, and for distribution through the SPC website.
- Maintain computer hardware and software for GIS and other SPC programs to provide necessary services for member governments, associated agencies, and planning partners.

WORK PRODUCTS:

- A current collection of GIS data for the SPC region depicting transportation, environmental, social, and demographic features added or revised from outside data and high-resolution aerial imagery. (Ongoing)
- Maps, graphics, data, reports, visualization tools and online applications for use by SPC departments, member governments, associated agencies, planning partners and the general public. (Ongoing)
- Improved GIS applications to aid in the evaluation of transportation projects, and to increase the efficiency of SPC transportation plans and programs.

Updated metadata and documentation to reflect the addition of new GIS data, enhanced GIS data attributes, new applications, and to improve the transmittal of GIS products. (Ongoing)

Presentations, seminars and participation at local and state GIS functions. (As needed)

Enhanced GIS content and applications on SPC's website. (Ongoing)

- Promotional and support materials for SPC's public participation processes. (As needed)

RESULTS FROM CURRENT WORK PROGRAM:

- Enhanced GIS data for the 10-county region representing new and updated transportation, transit, land use / land cover, environmental, social and demographic features.
- Refined metadata, attribute descriptions, spatial data dictionaries and additional documentation of the regional GIS for use in house and for outside data recipients.

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- Revised data representing the region's demographics at all geographic levels for historic and current counts, estimates, and projections from the US Census American Community Survey for the region.
- Updated land use data and statistics region-wide from detailed aerial photography, distilled at the municipal level and by traffic analysis zone for the region's demographic forecast and traffic demand models at SPC. Updated, edited and rectified GIS data representing infrastructure, land use / land cover, topography, hydrology, environmental features, and trip generators to correct ground locations through use of recent aerial imagery and county provided parcels to aid transportation and economic development projects and plans.
- An open GIS Data portal on SPC's website to aid in distributing data to planning partners for use on local plans and projects.
- Online geospatial mapping applications to provide data on traffic counts and statistics, active transportation infrastructure, connected pedestrian infrastructure and bicycle level of comfort mapping for public and planning partner access.
- Distributed recent aerial imagery to PennDOT, member counties, municipalities, and planning partners for use on local projects and plans.
- Updated data representing environmental conditions to aid in determining potential impacts and to improve the resiliency and reliability of the region's transportation systems.
- A comprehensive and expanded collection of GIS data representing sidewalks, public stairs, trails and pedestrian / bicycle infrastructure to support the regional Active Transportation Plan.
- Robust regional GIS applications and tools that provide information on environmental features, demographics, and traffic patterns and conditions to assist the evaluation of projects for the TIP, the LRP, Congestion Mitigation / Air Quality projects and Transportation Alternatives Program.
- Updated GIS data and mapping for Congestion Management Process travel corridors, park-n-ride lots, LRP projects, and TIP projects for use by staff, publication and for posting on the SPC website.
- An updated and current Traffic Signal Asset Management System database and GIS application and attributes for traffic signal, beacon and flasher locations across the 10-county region.
- An expanded inventory of locally-owned bridges and roads across the region with a geospatial database of locations, to support asset management strategies and as a base map for future candidate projects.

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- Developed GIS data and products to assist compliance with Environmental Justice mandates, for Title VI activities at partner agencies, and the Americans with Disabilities Act.
- Hosted meetings on geospatial data standards for hydrology, bringing together member governments and planning partners to foster best practices in developing accurate data. Represented MPO GIS interests for the PA Mapping and Geographic Information Consortium, and regional GIS user groups.
- Produced various geospatial data layers, aerial mosaics, maps, and graphics to assist planning partners, associated agencies and local governments.
- Upgraded GIS software and computer hardware to improve data processing capabilities, ensure data quality and accuracy, and improve the use of GIS data, applications and subsequent products.

MULTI-YEAR PLANNING IMPLICATIONS:

- A complete, current and comprehensive collection of GIS data and aerial imagery for the 10-county region that complements data and GIS programs at state agencies, member governments and planning partners within and adjacent to the SPC region.
- A spatial collection of data showing land cover data change in the region as a revised base map to aid in transportation and economic development planning decisions for both short and long-term plans. Data will be updated from future collections of imagery to show change and identify development patterns.
- Updated land use totals and workplace employment data by municipality and traffic analysis zone that are tracked in SPC's modeling and forecasting programs to identify growth or loss in residential and employment sectors over time and for future population and employment forecasts.
- In-depth analysis of the region's demographic data to identify disadvantaged populations and trends relating to transportation and economic development opportunities.
- Historic and current statistics regarding the region's transportation infrastructure to aid in project evaluation and prioritization for state and locally maintained transportation assets.
- As transportation and economic development projects are completed, they are added to the regional GIS and incorporated into the monitoring of the flow of traffic, people, and goods and services.
- Track, inventory, and digitize land use categories from county and municipal comprehensive plans as they are completed. Incorporate results into modeling and forecasting activities.

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- Increasingly accurate GIS data at the regional level through the incorporation of periodic updates to digital parcels, street centerlines, and site addresses provided by local governments.
- Expand existing databases and geospatial layers for traffic counts, traffic signals, and transit facilities to reflect changing conditions and for benchmarking in project evaluation programs.
- Broader representation of environmental features and conditions to assist in linking transportation planning and the National Environmental Policy Act.

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REGIONAL DATA AND GRAPHICS CLEARINGHOUSE

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$308,800	\$312,800
PennDOT	\$38,600	\$39,100
SPC/Other	<u>\$38,600</u>	<u>\$39,100</u>
Total	\$386,000	\$391,000

TASK DESCRIPTIONS

The collection and analysis of a wide range of data supports SPC’s transportation and economic development planning programs. The maintenance and application of data resources such as the regional park-n-ride inventory, freight flows, traffic volume trends, and datasets like NPMRDS, INRIX, and StreetLight are vital across all of SPC’s planning functions. Key program elements include the processing and dissemination of Census and other data releases and developing and maintaining a current catalog of SPC data products available to staff, member agencies, transit operators and other planning partners, and others. SPC functions as a Regional Affiliate of the Pennsylvania State Data Center (PaSDC). In this role, SPC operates as an extension of the PaSDC by responding directly to the information needs of requestors in the SPC region. Data analysis, technical assistance, and consultation services are also provided.

1. Data and Graphics Maintenance & Analysis

Objective: SPC serves as a regional resource for data to support planning by SPC’s internal departments, member governments, associated agencies, transit operators and planning partners. SPC continuously enhances this data and looks for new ways to analyze and apply data visualization techniques to produce clear, concise information for planning activities.

Planning Activities:

- Maintain SPC’s data files to reflect changes that occur over time.
- Research, develop and/or acquire new data resources, as needed.
- Coordinate with the data collection, data management and data dissemination efforts undertaken by SPC through funding through SPC’s Planning and Development Department.
- Support implementation of *SmartMoves for a Changing Region* by providing data and analysis, as needed.
- Provide data and analysis to support the development of SPC’s next Long Range Plan update, which is expected to be adopted in the summer of 2023. Support implementation of SPC’s next LRP by providing data and analysis, as needed.
- Increase awareness among in-house staff, outside agencies and other stakeholders regarding data resources available through SPC.
- Continue to expand and enhance the presentation of data resources on SPC’s online Regional Data Center housed on the SPC website. Continue to implement, refine, and expand tools to

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- allow interactive choice by users for selecting the type and geography of tables/graphs/maps to display during their website visit.
- Respond to data requests from in-house staff and from outside agencies and individuals.
 - Continue to function as a PaSDC Regional Affiliate agency and Census processing center and repository.
 - Monitor and as needed, participate in federal activity to update Urbanized Area boundaries and MSA boundaries for the 2020 Census.
 - Work with the US Census Bureau to acquire, process and disseminate the various Census products as they are released, including additional 2020 Census data releases, annual American Community Survey (ACS) data, annual Census population estimates, and several other Census data files.
 - Continue to acquire, process and disseminate, as appropriate, other publicly available datasets.
 - Continue to obtain data resources through agreements with other entities (e.g. Strava Metro data).
 - Review hardware and software needs for SPC's data maintenance and dissemination activities. Obtain, install and operationalize needed equipment. Provide for staff training, as needed.
 - Maintain existing hardware and software such as Adobe Creative Cloud Suite, Tableau Desktop, CUBE Access, ArcGIS, etc.
 - Continue to work with partners to obtain demographic and origin-destination data for users of regional park-n-ride facilities and report on findings.
 - Continue research and testing of options for enhancing park-n-ride facility utilization statistics via alternative data collection methods. Select and deploy new methodologies for obtaining baseline utilization statistics for regional park-n-ride facilities.
 - Provide analysis of regional freight flow/goods movement data to support development of an updated Regional Freight Plan.
 - Continue to acquire, review, and expand capacity for analysis of "big data" for travel monitoring such as NPMRDS, INRIX, StreetLight, etc.
 - Provide demographic analysis for SPC's Linking Planning and NEPA and PennDOT Connects activities, as needed.
 - Identify specific data needs to advance regional livability, sustainability, and resiliency planning efforts.
 - Assist with data collection, data management and data analysis tasks required for SPC's asset management activities, as needed.

Work Products:

- Updated data files and related documentation from the US Census Bureau and other sources, as needed. (As needed)

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- New data files and related documentation, as needed. As needed.
- Standard and custom data products for use by staff and other organizations and individuals. (As needed)
- Enhanced SPC online Regional Data Center and updated catalog of data resources. (Ongoing)
- Various interactive dashboards and other infographics to highlight SPC's data resources. (Ongoing)
- Documentation of data collection, management and dissemination activities and procedures. (Ongoing)
- Updated data request file that records and documents incoming data requests. (Ongoing)
- Operational software and hardware for data collection, management and dissemination, and a staff trained in its use. (Ongoing)
- Documentation of data and analysis to support development of the next long range plan update. (First Quarter, 2023)
- Current data on characteristics and use of the region's park-n-ride facilities. Ongoing.
- Documentation of the analysis of regional freight flow/goods movement to/from the SPC region. (Ongoing)
- Documentation of the analysis of "big data" for the region, such as NPMRDS, INRIX, and StreetLight data. (Ongoing)
- Briefing materials for the Commission, planning partners and the public. (As needed)

2. Transportation Performance Management

Objective: SPC continues to be in close collaboration with PennDOT and other planning partners to implement performance targets and measures related to FHWA and FTA rulemakings intended to use system information to make investment and policy decisions to achieve national performance goals as required by MAP-21 and the FAST Act. Performance measures have been established to assess the following: the condition of pavements and bridges on the National Highway System (NHS); safety in terms of serious injuries and fatalities on public roads; performance of the Interstate and non-Interstate NHS; freight movement on the Interstate system; traffic congestion and on-road mobile source emissions as related to the CMAQ program; NHS asset management; and, transit asset management through state of good repair (SGR) measures. Data has been gathered and shared among planning partners to develop baseline measurements and continue the ongoing assessment of progress toward performance targets. Processes continue to be developed for publishing standardized reports to disseminate this information to planning partners and the public. Continued maintenance and enhancements to SPC's Transportation Performance Management ArcGIS Hub on SPC's website.

Planning Activities:

- Acquire, process, and analyze datasets for monitoring progress toward performance targets, such as the National Bridge Inventory (NBI), the Fatality Analysis Reporting System (FARS), the National Performance Management Research Data Set (NPMRDS), the

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Highway Performance Monitoring System (HPMS), etc. Develop and document tools to efficiently process and analyze these datasets.

- Continued coordination with planning partners and others for the development and implementation of Memorandums of Understanding (MOUs).
- Continued coordination with PennDOT, FHWA, and FTA on the development and implementation of transportation performance measures.
- Collaborate with PennDOT, SPC members, Public Participation Panels, transit operators, and other planning partners to implement local targets, develop appropriate metrics, and to track and disseminate progress toward targets.
- Prepare required reports for PennDOT, FHWA, and FTA. Develop regular reports and visualization tools that will communicate progress toward performance targets to staff, planning partners, the public, and others. Continue to maintain and enhance SPC's Transportation Performance Management ArcGIS Hub on the SPC website. Continue benchmarking efforts for key regional indicators.
- Manage SPC's overall efforts to address federal performance measure requirements. Additional work to respond to the performance measures requirements will also be initiated under other UPWP tasks and undertaken by other SPC Transportation Department Groups.

Work Products:

- Documentation of data collection, analysis, management and dissemination activities and procedures related to the ongoing monitoring of progress toward performance targets. (Ongoing)
- Performance monitoring reports and interactive dashboards to be disseminated to interested parties via SPC's website and through other means. (Ongoing)
- Briefing materials for the Commission, planning partners and the public. (As needed)

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AIR QUALITY MODELING

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$288,000	\$292,400
PennDOT	\$54,000	\$54,825
SPC/Other	<u>\$18,000</u>	<u>\$18,275</u>
Total	\$360,000	\$365,500

TASK DESCRIPTIONS

The Clean Air Act (CAA) requires that transportation planning must be consistent with air quality goals in areas experiencing air quality problems. This is determined through the transportation conformity process. Transportation conformity applies to transportation plans, programs, and projects receiving federal funding or requiring federal approvals in areas that do not meet, or previously have not met, air quality standards for ozone, carbon monoxide, particulate matter, or nitrogen dioxide. These areas, designated by the federal Environmental Protection Agency (EPA), are known as nonattainment areas or maintenance areas, respectively. The region’s overall sustainability, livability and resiliency are affected by our ability to forecast air quality. Federal highway funding is available through the Congestion Mitigation and Air Quality (CMAQ) program for eligible transportation projects in nonattainment or maintenance areas. SPC conducts a competitive solicitation for candidate CMAQ projects every two years as part of the TIP update process. There is also a growing interest at the federal and state levels for monitoring and projecting levels of greenhouse gas (principally carbon dioxide - CO₂) emissions. SPC will be investigating tools for estimating the current and future level of CO₂ emissions from transportation-related sources.

1. Air Quality Modeling

Objective: To conduct the required conformity assessment of the region’s LRP and TIP to ensure that they conform to the Clean Air Act. To conduct air quality modeling in support of various other tasks in the UPWP, such as project evaluation for the CMAQ program, addressing the federal Transportation Performance Management (TPM) traffic congestion measures related to the CMAQ program, and assisting its members and planning partners in developing current estimates and projections of greenhouse gas emissions from transportation-related sources.

Planning Activities:

- As part of the regional transportation air quality conformity process, review scope and design concepts of projects proposed for inclusion in the TIP and LRP and identify regionally significant, non-exempt, transportation projects.
- Conduct analyses necessary for SPC to make its required finding of conformity for any newly adopted or amended LRP or TIP as needed. Solicit public comment. Prepare appropriate documentation.
- Ensure that SPC satisfies federal requirements for interagency coordination and consultation on transportation air quality conformity assessments and related tasks.

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- Continually monitor SPC's emissions modeling process. Upgrade modeling techniques, procedures, and software as needed.
- Monitor state and federal actions that could affect SPC's conformity process. Adjust the process to respond to those actions.
- Monitor state and federal actions on proposed climate change legislation and related regulations and policy directives, greenhouse gas emissions analysis, implementation of Pennsylvania's Climate Action Plan, and other similar initiatives. Integrate into SPC's air quality planning process as appropriate.
- Provide technical support to SPC's members, the region's municipalities, and planning partners on development, maintenance, and enhancement of Climate Action Plans.
- Develop and maintain analysis and modeling processes, tied to EPA's MOVES model, to estimate current and future level of greenhouse gas emissions from mobile sources in the SPC region. Integrate those new processes into the travel demand and conformity modeling process.
- Develop estimates of current and future greenhouse gas emissions from transportation-related sources.
- Develop estimates of the potential air quality and congestion impacts of projects proposed for CMAQ funding in the TIP.
- Address the federal TPM traffic congestion and air quality measures in coordination with PennDOT and through the interagency process. Set regional targets, calculate metrics, monitor progress, and prepare required reports and documentation.
- Provide support to other UPWP tasks, as needed, and to SPC member agencies and planning partners, by developing emissions estimates and other air quality impacts attributable to programs and/or projects developed by them.
- Continue SPC's participation in the Pennsylvania Transportation Air Quality Work Group. The Work Group meets quarterly to discuss and share information about the air quality conformity process and related topics. It also serves as the statewide forum for interagency consultation on conformity process issues.
- Provide training opportunities for staff in transportation conformity, CMAQ, Greenhouse gas emissions, and other air quality planning and modeling topics.

Work Products:

- Conformity reports for new and/or amended TIPs and LRPs for the region's air quality nonattainment and maintenance areas for ozone, particulate matter, and carbon monoxide. (2023-2026 TIP – Final Report July 2022. New LRP – Draft Spring 2023; Final Summer 2023. 2025-2028 TIP – Draft Spring 2024. Others as needed when (if) regionally significant TIP/Plan amendments.)
- Documentation of technical procedures, public review, and interagency coordination in the conformity process. (Included in each conformity report)
- Documentation of emissions modeling procedures. (Included in each conformity report)

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- Documentation of changes to SPC's Air Quality Planning process to address new federal and state directives from climate change legislation and related regulatory and policy directives. (As needed)
- Documentation of activity and analysis conducted in support of other UPWP tasks, and/or in support of initiatives undertaken by SPC member agencies and planning partners. (As needed)
- CMAQ candidate project air quality and congestion impact analyses. (Fall 2023 for 2025-2028 TIP)
- Regional targets and metrics addressing the TPM congestion measures, and related process documentation and progress reporting. (Updates due every 2 years – Summer/Fall 2022; Summer/Fall 2024)
- Briefing materials for the Commission, planning partners and the public. (As needed)

2. CMAQ Project Before and After Assessments

Objective: With consultant assistance, develop a framework and procedures for conducting before and after studies of completed CMAQ funded projects. Using the framework, conduct a pilot study with a sampling of completed CMAQ funded projects to assess whether expected emissions benefits were realized.

Planning Activities:

- Conduct literature review and interviews with key practitioners to identify current practice for before and after studies. Review process used by SPC to assess before and after performance of completed regional traffic signal corridor projects. Compile national examples of before and after studies and document their data needs, analysis methods, and cost.
- Select a sample of recently completed CMAQ projects in the region to test and assess the before and after analysis methods. Determine which methods are best suited to each eligible CMAQ project type.
- Prepare a toolkit of available analysis methods, and prepare detailed instructions for their use. Prepare templates for data collection. Develop guidance for project sponsors to prepare quality data for use in the before and after studies.
- Update SPC's CMAQ Program Guidance to integrate recommended before and after study processes into the candidate CMAQ project application package.

Work Products:

- Documentation of literature search and practitioner interviews. (Fall 2022)
- Templates and guidance for collecting quality before and after data for CMAQ funded projects. (First Quarter 2023)
- Toolkits and procedures for conducting before and after studies. (Spring 2023)

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- Final study report, documenting the pilot study's methodology, findings, and recommendations. (Spring 2023)
- Draft modifications to SPC's CMAQ Program Guidance and Procedures to integrate the study recommendations into the candidate CMAQ project application package and project evaluation process for use during development of the update to the region's LRP (adoption scheduled for summer 2023). (By start of 2025-2028 TIP's CMAQ Cycle - Summer 2023)
- Briefing materials for the Commission, planning partners and the public. (As needed)

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LAND USE MODELS AND REGIONAL FORECASTS

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$191,558	\$190,191
Federal Transit Administration	\$46,842	\$51,009
PennDOT	\$35,917	\$35,661
SPC/Other	<u>\$23,683</u>	<u>\$24,639</u>
Total	\$298,000	\$301,500

TASK DESCRIPTIONS

Understanding population and employment trends and land use patterns is important for understanding current and future demands on the transportation network. It is also important to be able to assess potential changes that could occur as a result of policy changes at the federal, state, regional, and local level. SPC uses an integrated economic-demographic forecasting model known as REMI (Regional Economic Models, Inc.) for this purpose. SPC uses another model known as MERLAM (Mature Economic Region Land Use Allocation Model) to allocate regional forecasts of population, households and employment from REMI to the municipalities and traffic analysis zones in the SPC region.

1. Economic-Demographic Models & Forecasts

Objective: SPC provides policy-sensitive forecasts of population, employment and households for the ten-county SPC region. To do so, SPC maintains land use modeling procedures and the process for regional allocation of forecasted population, employment and households. These models permit SPC to monitor demographic trends and current and proposed economic development activity in the ten-county SPC region and to build scenarios demonstrating the likely outcomes of major transportation and economic development investments. SPC's population, employment, and household forecasts support the development of the LRP updates.

Planning Activities:

- Acquire, install, review, calibrate and, as appropriate, modify the annually updated version of the REMI model for the ten-county SPC region.
- Maintain REMI population and employment forecasts that serve as the control total for the municipal and traffic zone forecasts and as the baseline for testing policy alternatives.
- Use the REMI model in conjunction with SPC's regional travel demand model to perform corridor and subarea analyses to better understand the relationship between major regional-scale construction and industry employment trends, to monitor LRP performance, and to demonstrate the likely outcomes of major transportation infrastructure and/or economic development investments in the region.
- Develop a series of standardized REMI products in response to requests from other agencies and partners.

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- Maintain, improve upon, and expand SPC's development monitoring and major trip generators databases.
- Maintain, improve upon, and expand SPC's employment databases.
- Acquire, maintain and update the various datasets required for the MERLAM model.
- Update, maintain and support the MERLAM model, including calibration of the MERLAM model for each of the eleven REMI regions.
- Use the MERLAM model for analysis of regional and local demographic and economic trends for evaluation and development of plans and programs.
- Use the REMI and MERLAM models for land use planning and analysis, as needed.
- Provide for staff training on the REMI and MERLAM models, as needed.
- Develop and maintain documentation of the REMI and MERLAM models.
- Convene a Forecast Advisory Committee, as needed, with representation from each of SPC's member governments, economists, major developers and other key stakeholders.
- Prepare, finalize, and formally adopt a new cycle (Cycle 12) of population, household and employment forecasts to support development of SPC's next LRP update, which is expected to be adopted in the summer of 2023.

Work Products:

- Current, operational version of the REMI model for the ten-county SPC region and a staff trained in its use. (Ongoing)
- Documentation of scenarios built and demonstrated utilizing the REMI model. (As needed)
- Current, up-to-date development monitoring and major trip generators databases. (Ongoing)
- Current, up-to-date employment databases. (Ongoing)
- Current, operational version of the MERLAM model for the ten-county SPC region and a staff trained in its use. (Ongoing)
- Documentation of land use planning and analysis utilizing the REMI and MERLAM models. (As needed)
- Documentation of the REMI and MERLAM models. (Ongoing)
- Forecast Advisory Committee meeting materials and minutes, as needed. (First Quarter 2023)
- Official Cycle 12 population, household and employment forecasts. (First Quarter 2023)
- Briefing materials for the Commission, planning partners and the public. (As needed)

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TRANSPORTATION MODELS

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$272,873	\$270,935
Federal Transit Administration	\$66,727	\$72,665
PennDOT	\$51,164	\$50,800
SPC/Other	<u>\$33,736</u>	<u>\$35,100</u>
Total	\$424,500	\$429,500

TASK DESCRIPTIONS

SPC’s travel demand models are indispensable in the region’s transportation planning and programming processes. Model results are the basis of SPC’s transportation air quality conformity assessments and the models are routinely used to develop transit ridership and traffic projections for PennDOT, the Turnpike Commission, transit operators, SPC’s members, and others.

SPC continually improves its transportation modeling capabilities. SPC’s current transportation models were designed to use the Cube Voyager software package. The modeling process is structured as a standard four-step chain of transportation models including trip generation, trip distribution, modal split, and travel assignment models. Regional forecasts of population and employment developed by SPC with the REMI model are allocated to traffic analysis zones through the SPC-developed MERLAM process. These results are then used as inputs to the trip generation model. Staff also has access to other modeling tools and “big data” resources such as StreetLight Data, INRIX, and Cube Access to supplement and extend the travel modeling capabilities.

1. Travel Demand Model

Objective: To provide estimates of current and future travel demand in the region. To maintain, enhance, and use the tools needed to simulate travel patterns stratified by mode, purpose, and time of day for individual transportation facilities or corridors, as well as regionwide.

Planning Activities:

- Maintain and enhance regional travel demand modeling capability.
- Purchase annual subscription to the Cube Voyager, Cube Access, Streetlight Insight data, PTV Vissim/Visum, INRIX Trips data, and others as needed for access to comprehensive, detailed data on trip and traveler characteristics in the region. This will provide current, accurate data for transportation studies, travel model calibration, and transportation operations analysis.
- Maintain regional Economic Impact Assessment modeling tools and ensure their compatibility with the regional travel demand model and demographic forecasting tools.
- Train staff in SPC’s established modeling procedures, in the use of SPC modeling software, and in travel demand modeling theory and practice.

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- Provide ongoing modeling support to other UPWP tasks, and provide assistance to SPC's members and planning partners.
- Develop extensions and enhancements to current modeling process as required for ongoing modeling workload (travel projections, park-n-ride demand, transit ridership estimates, air quality analysis, etc.).
- Use microsimulation/visualization software (ex. Vissim/Visum, Cube Access) to enhance SPC's travel modeling capabilities.
- Modify and update modeling steps, as needed.
- Upgrade or replace hardware and software, as needed.
- Assess data needs for ongoing maintenance and enhancement of SPC's travel model.
- Continue to monitor national developments concerning longer-range advances in modeling theory and practices.
- Continue ongoing data collection efforts to support travel demand model validation and calibration efforts.
- Continue using NPMRDS data files and other data resources to compute travel time reliability metrics for SPC's response to the federal Transportation Performance Management process, and for improving model calibration and validation efforts.
- Participate, as needed, in efforts to develop and maintain a Pennsylvania statewide travel demand model. Work to ensure compatibility with regional models.

Work Products:

- Continued, and improved, in-house travel modeling capability and data resources to support other SPC work tasks. (Ongoing)
- Documentation of activity to maintain and extend current modeling capability. (Ongoing)
- Documentation of efforts to develop a statewide travel demand model. (As needed, in coordination with PennDOT's statewide modeling efforts)
- Documentation of efforts conducted to support assessment of economic impacts of major transportation and development projects. (As needed)
- Documentation of travel time reliability metrics and model calibration and validation efforts. (TTR – Included in PM3 Performance Reports. Calibration/validation documentation included in each conformity report)
- Operational hardware and software for travel demand modeling and a staff trained in its use. (Ongoing)
- Current, up to date technical documentation of travel demand model. (Ongoing)
- Individual reports on data collection efforts/surveys conducted to provide needed data for the model update process. (As needed)
- Briefing materials for the Commission, planning partners and the public. (As needed)

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TRAFFIC FORECASTS AND NEEDS REPORTS

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
PennDOT (PE)	<u>\$90,000</u>	<u>\$90,000</u>
Total	\$90,000	\$90,000

TASK DESCRIPTIONS

Through the use of its regional travel demand model, regional demographic forecasting tools, and extensive data resources, SPC provides support to PennDOT and other planning partners in the development of traffic forecasts for traffic impact studies, engineering reports, and the design phases of various transportation projects. These forecasts are used to project future year traffic volumes and travel flow patterns for build and no-build conditions in order to identify appropriate mitigation measures and design criteria.

1. Traffic Forecasts

Objective: Needs analyses and preliminary design are critical first steps in the development of any transportation project. As needed, SPC will provide accurate travel forecasts essential for developing appropriately scoped projects to improve accessibility, mobility, safety and long-term sustainability and resiliency of the transportation system as well as enhancing the communities where the projects are implemented.

Planning Activities:

- Assist in developing detailed travel forecasts for project design.
- Provide technical support on an individual project basis for major investment analyses. SPC support is expected to focus on transportation demand, economic impact assessment, and "build/no build" impact analysis, while responding to federal mandates regarding major investment analysis.
- Prepare/Participate in Project Needs Studies for transportation projects, as identified by PennDOT and SPC.
- Provide information and analysis about projected travel demand and trip characteristics, as requested by PennDOT, consultants, and planning partners.
- Adjust technical approaches, as appropriate, to ensure integration and consistency with federal planning regulations.

Work Products:

- Data and analysis provided to PennDOT Districts, SPC members, public transit service providers, other planning partners, and their consultant teams to support preparation of needs reports and design documents. (As requested)
- Detailed project-level travel forecasts. (As requested)
- Briefing materials for the Commission, planning partners and the public. (As needed)

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HIGHWAY PERFORMANCE MONITORING SYSTEM (HPMS)

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
<u>HPMS Traffic Monitoring</u>		
Federal Highway Administration	\$172,000	\$177,100
Pennsylvania Department of Transportation	\$78,000	\$77,400
<u>HPMS Inventory</u>		
Federal Highway Administration	\$108,312	\$112,539
Pennsylvania Department of Transportation	\$44,188	\$42,961
<u>HPMS Inventory Lawrence County</u>		
Federal Highway Administration	\$15,000	\$15,000
Other	<u>\$3,750</u>	<u>\$3,750</u>
TOTAL	\$421,250	\$428,750

TASK DESCRIPTION:

The major purpose of the HPMS is to support data-driven processes within FHWA, PennDOT, and the Congress. The HPMS data are used extensively in the analysis of highway system condition, performance, and investment needs that make up the biennial Condition and Performance Reports to Congress.

1. HPMS Inventory

Objective: To verify and update roadway inventory and performance measures on 548 sample sections throughout the region, in accordance with the HPMS Field Manual specifications. The inventory includes the measurement and/or classification of shoulders, lanes, and medians as well as noting the number of traffic signals, stop signs, and/or potential widening obstacles within each sample section.

Planning Activities:

- Maintain an in-house database of all Inventory sample sections to facilitate accountability and work schedule.
- Coordinate with PennDOT Central Office the delivery of sample sections to be inventoried for the given year.
- Compare new sample locations to in-house database to highlight any issues regarding the data or sample locations, report to PennDOT any conflicts.
- Group and map sample sites in order to efficiently be able to visit all the given locations within the allotted timeframe.
- Oversee HPMS Inventory effort in Lawrence County; integrate their data into SPC database.

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- Participate in PennDOT’s data collection quality review process.
- Maintain and replace, when needed, the HPMS data collection vehicle, safety equipment and measuring devices.
- Attend and participate in HPMS Inventory workshops and conferences sponsored by PennDOT.
- Submit sample section updates by first week of December of given year.
- Coordinate with PennDOT districts the verification of submitted data.

2. HPMS Traffic Monitoring

Objective: To attempt to collect at least 450 total traffic counts throughout the region. Both volume and classification counts will be collected via machine tube counters with around 375 assigned locations. Also, classification counts will be collected via manual field views conducted over the course of 6 total hours starting either from 6am-Noon or Noon-6pm. Approximately 75 manual counts would be collected.

Planning Activities:

- Maintain an in-house database of HPMS traffic count sites and traffic count data to facilitate accountability and to provide data to assist other SPC departments.
- Develop and maintain an ArcGIS online mapping interface of all collected traffic counts.
- Coordinate with PennDOT central office the delivery of sites to be counted for the given year.
- Review sites to identify any that issues will affect the ability to complete the count safely, accurately, and to PennDOT’s specifications. Such issues can include construction, safety of staff, and/or the characteristics of the roadway (parking, medians).
- Review the number of assigned manual counts to be taken to determine the appropriate number of interns to be hired, if needed.
- Submit completed counts by the end of the month in which they were completed.
- Maintain and replace, when needed, the traffic counting vehicle, traffic counters, traffic counting supplies, and safety equipment.
 - SPC has an inventory of 72 counters.
 - Traffic counting supplies includes road tube, tape, nails, etc.
 - Safety equipment such as high visibility clothing, gloves, glasses, hard hats, etc.
- Attend and participate in HPMS Traffic Counting workshops.
- Participate in PennDOT’s annual traffic counter personnel safety review process.
- Complete all possible traffic counts by the week before Thanksgiving and have data submitted by the first week of December.

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REGIONAL TRANSPORTATION ASSET MANAGEMENT

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$36,000	\$36,800
SPC/Other	<u>\$9,000</u>	<u>\$9,200</u>
Total	\$45,000	\$46,000

TASK DESCRIPTION:

To enhance and continue to maintain asset management tools, processes, and datasets for use by SPC, PennDOT, counties, municipalities, and planning partners. This will assist with planning and funding decisions on locally-owned roads, bridges, traffic signals, and other transportation assets. These tasks advance several regional priorities reaffirmed in the Long Range Transportation Plan, including:

- Revitalization and redevelopment of the region’s existing communities
- Maintenance of the existing transportation system
- Transportation and development choices will reflect a priority on safe and secure multimodal and intermodal networks for both people and goods.
- The region’s infrastructure system will be designed to protect and enhance public health and the environment.

3. Roads Data Collection

Objective: To collect and maintain data on liquid fuel and non-liquid fuel local roads to assist in PennDOT’s program planning.

Planning Activities:

- Continue working with PennDOT and other MPOs/RPOs in order to establish data standards and collection methods. (Ongoing)
- Continue working with PennDOT to enhance the local roadway centerline file. (Ongoing)
- Work with local governments to update road centerlines files with recent residential and/or commercial developments. (Ongoing)
- Provide training to interns and SPC staff. (As needed)

4. Local Bridge Data Collection

Objective: To maintain and update data on locally owned bridges/culverts less than 20’ in length.

Planning Activities:

- Continue working with PennDOT and other MPOs/RPOs in order to establish data standards and collection methods. (Ongoing)

- Continue working with PennDOT Districts in identifying structures that need their lengths verified. (Ongoing)
- Continue working with PennDOT to enhance their Bridge Management System (BMS) files. (Ongoing)
- Continue working with municipalities in identifying their structures, as well as identifying any structures that have been replaced since original inventory. (Ongoing)
- Continue work on updating the regions hydrology centerline file in order to better identify where structures may exist. (Ongoing)
- Manage and maintain an in-house database of the collected structures for use by SPC, PennDOT, counties, municipalities, and planning partners. (Ongoing)
- Attend relevant meetings and workshops to enhance data collection procedures and keep current with current data collection technology. (Ongoing)

5. Regional Traffic Signal Asset Management

Objective: To maintain an inventory of all traffic devices in the region including traffic signals, flashing warning devices, school zone flashers, electronic signs, intersection control beacons, rectangular rapid flashers, as well as, ITS Devices.

Planning Activities:

- Continue implementation of the regional traffic signal asset management database and associated planning tools.
- Continue to work with PennDOT central office in identifying where traffic devices are and their current status.
- Collect additional traffic signal data to fully populate the established database and GIS layer.
- Maintain an in-house database of collected traffic devices with an online viewer to assist our municipalities and other SPC departments.

6. Local Pedestrian Infrastructure

Objective: To collect data on the regional pedestrian network including sidewalks, trails, public stairs, and bicycle infrastructure to aid active transportation plans and programs in the region.

Planning Activities:

- Continue to work with PennDOT and local communities in order to create a pedestrian network including sidewalks and crosswalks. (Ongoing)
- Coordinate with SPC's Active Transportation Forum to identify trail improvements and connections. (Ongoing)
- Work with planning partners to determine where a pedestrian network inventory is needed or would be useful in order to complete connections in the network. (Ongoing)

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- Identify methods for the continued development of these datasets and expanding them to other parts of the region. (Ongoing)
- Collection of bike racks, trailheads, parking lots, etc. (Ongoing)
- Create an ArcGIS Online web viewer of active transportation infrastructure. (Ongoing)
- Create an ArcGIS Online web app in order for local communities to update their infrastructure. (Ongoing)

DATA SYSTEMS & MODELING – MULTI-YEAR IMPLICATIONS

Accurate and up-to-date data resources and modeling tools underpin all of the planning activities at SPC. Moreover, SPC's members and partner agencies rely on these resources and the technical expertise of SPC's staff for their planning work. SPC's data and modeling programs will continue to support the planning functions of the agency and the activities of its planning partners by maintaining these important data resources and by staying abreast of the latest innovations and techniques in GIS, data collection, and modeling. Examples include:

- A complete, current and comprehensive collection of GIS data and aerial imagery for the 10-county region that complements data and GIS programs at state agencies, member governments and planning partners within and adjacent to the region.
- A spatial collection of data showing land cover data change in the region as a revised base map to aid in transportation and economic development planning decisions for both short and long term plans. Data will be updated from future collections of imagery to show change and identify development patterns.
- Updated land use totals and workplace employment data by municipality and traffic analysis zone that are tracked in SPC's modeling and forecasting programs to identify growth or loss in residential and employment sectors over time.
- In-depth analysis of the region's demographic data to identify the spatial distribution of disadvantaged populations and trends relating to transportation and economic development opportunities.
- Historic and current statistics regarding the region's highway and bridge inventory to aid in project evaluation and prioritization for both state and locally-maintained transportation infrastructure.
- As transportation and economic development projects are completed, add them to SPC's GIS and incorporate into the monitoring of the flow of traffic, people, and goods and services.
- Track, inventory, and digitize land use categories from county and municipal comprehensive plans as they are completed. Incorporate results into modeling and forecasting activities.
- Develop increasingly accurate GIS data at the regional level through the incorporation of periodic updates to digital parcels, street centerlines, and site addresses provided by local governments.
- Expand existing databases and geospatial layers for traffic counts, traffic signals, and transit facilities to reflect changing conditions and for benchmarking in project evaluation programs.
- Broader representation of environmental features and conditions to assist in linking

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- transportation planning and the National Environmental Policy Act.
- Implementation of a multi-year strategic plan to enhance SPC's land use, economic and travel demand models.
 - Enhancement of the regional park-n-ride facility inventory including implementation of new techniques for collecting utilization statistics and origin-destination data.
 - Continued expansion of SPC's Regional Data Center with enhanced data presentation capabilities on the SPC website.
 - Continue to inventory, catalog, and document SPC's data resources, geospatial layers, and analysis tools.
 - Integration of new datasets that have been emerging along with the increase and diffusion of mobile technologies.
 - Enhancement of freight data and analysis capabilities.
 - Improved use of data visualization tools and techniques to compile, analyze and present information to the public and to decision-makers, including transportation performance measure tracking.
 - Ongoing monitoring of transportation performance targets and measures to address USDOT Transportation Performance Management planning process.

OUTREACH & COORDINATION

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OUTREACH & COORDINATION – OVERVIEW

As the designated MPO for a 7,100+ mi² ten-county area, SPC is responsible for regional transportation planning activities that necessitate outreach to and coordination with a wide range of stakeholders. SPC works with its member governments, planning partners, the public, and interested parties to ensure effective and innovative transportation planning that is representative of and responsive to the needs of a very diverse region. Public engagement, communications and outreach throughout the transportation planning process provides important opportunities for the public, planning partners and interested parties to share information, ideas, needs and priorities as we work together to build our region's future.

Effective planning for a region of this size and diversity requires the cooperation and coordination of many planning partners working together to advance *SmartMoves for a Changing Region's* Regional Vision, Goals and Strategies. SPC serves as the forum for regional planning efforts in the areas of transportation and economic development, working closely with the public, local municipal officials, county planning and development offices, ten transit operators, three Transportation Management Agencies (TMAs), three PennDOT Districts and dozens of other entities.

SPC supports a regional planning process that is coordinated, comprehensive and continuing. The implementation of this planning process requires substantial outreach and coordination with our regional planning partners. Through the projects included in the Coordination and Outreach program, SPC solicits the participation and involvement of the regional planning partners in technical committees, project level studies and other transportation planning initiatives. Public outreach and involvement are conducted through the Public Participation and Communications Program, which also includes SPC website maintenance. The Local Technical Assistance Program (LTAP) permits SPC to serve as a regional point of contact and facilitator for technology transfer.

Program Administration activities support the design, management and evaluation of the Work Program, provide secretarial support for the planning and technical staff, and ensure proactive public involvement in the transportation planning process. Program administration functions include activities that benefit all jobs in the Work Program.

SPC's Public Participation Program offers a variety of opportunities for people to participate in the regional transportation planning process, with the goal of fostering significant and ongoing two-way communication with our member governments, planning partners, the public and interested parties. SPC provides resources and support in coordinating the planning process through a variety of mechanisms. One of the chief mechanisms is through the use of our Public Participation Panels (Panels). SPC brings planning directly to our member counties through these Panels. Panels are comprised of more than 300 individuals reflecting the demographic diversity, needs, and concerns of communities throughout our 10-county region. The Panels help to conduct outreach, identify needs and resources, suggest alternatives, and help to get the word out about the regional planning process.

SPC works diligently to make information accessible to the public and to provide timely public notice. We provide information to the public that is accurate, understandable and pertinent to regional transportation planning and engagement activities, and do so through the use of varied communication tools. In addition to informing the public, SPC makes every effort to educate the public about the planning process and provide supportive policy, program and technical information. Educating the public supports

informed public contribution and continued engagement. Education is enhanced through the use of visualization tools that help people understand and relate to SPC's various planning activities.

SPC continues to develop methods and opportunities for traditionally underserved portions of the population to participate in the transportation planning process, including minority, non-English speaking, and low-income groups. It is a continual priority to increase the diversity and number of participants in engagement activities through building new relationships with organizations and communities that serve these populations.

STATEWIDE PLANNING PRIORITY AREAS

The Tasks found in this section of the UPWP address the following priority areas:

- **II-Supporting Planning/Programming Activities:** Performance measures and targets, freight, project delivery, TA Set-Aside program administration, functional classification, Congestion Management Process (CMP), travel demand model, greenhouse gas emissions/Pennsylvania's Climate Change Action Plan, Marcellus shale impacts, technical assistance, process reviews, modernization/technology improvements, P3 promotion, Transportation System Management and Operations (TSMO), traffic operations, Intelligent Transportation Systems (ITS), safety planning, road safety audits, asset management inventories.
- **IV-Land Use/Transportation Linkages/Economic Development/Modernization:** integrate land use, freight facilities/connectors, and local comprehensive planning into LRP and Freight Plan; state freight network; livability, sustainability and resiliency strategies, via the SMART program and regional collaboration; training and best practices for local governments, travel demand management, Extreme Weather Vulnerability Assessment, and integrated/strategic corridor planning.
- **VI-Public Involvement and Outreach:** MPO Public Participation Plan and Title VI/Non-discrimination Plan, data collection practices/transportation program beneficiaries, expand Environmental Justice (EJ) beneficiaries, EJ analysis on LRP and TIP, Title VI review and improvements, expanded MPO use of website for program information, recognize Tribal consultation, collaborate with STC on TYP public participation, address DBE requirements in contracting process and participate in DBE training; accessible meeting materials, share statewide documents on website, local government assistance and outreach, integrate cultural resources.
- **VII-Local Technical Assistance Program:** Identify priority training needs, market program, advertise training opportunities, coordinate registrations, regional point of contact, administration and reporting.

ROLES

- **Federal Highway Administration (FHWA)/Federal Transit Administration (FTA):** Provide technical assistance as well as general oversight, review and approval of the Metropolitan Planning Process for Southwestern Pennsylvania.

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- **SPC:** Provide public engagement support to SPC, organization wide; promote PennDOT initiatives, including PennDOT Connects; work with SPC members and planning partners to promote SPC activities as well as other county and local initiatives regionwide. Work with PennDOT to administer, develop, prioritize, schedule, and market LTAP training. Provide administrative oversight of the SPC UPWP.
- **PennDOT Center for Program Development:** Provide resources, including messaging, data and outreach materials for SPC use into the Twelve Year Program update. Process invoices and provide review and feedback over SPC work program tasks.
- **PennDOT Bureau of Planning and Research:** Provide resources, and oversight of the LTAP program.
- **PennDOT Districts:** Provide SPC materials including construction updates and other promotional items for dissemination. Review program activities and reports as well as process invoices. Coordinate current and future UPWP Tasks with SPC.
- **Member Planning Departments:** The county/city planning department's role is to assist in communicating and promoting the transportation planning process and its outcomes to its municipalities and residents and also to relay county and community needs o SPC and planning partners. The county/city members are also responsible in appointing Public Participation Panel members. Assist in identifying and promoting LTAP training opportunities. Provide participation and input into the metropolitan planning process for Southwestern Pennsylvania.

OUTREACH & COORDINATION – RESULTS FROM CURRENT PROGRAM

The 2021-2024 Transportation Improvement Program (TIP) development occurred during the 2020-2022 UPWP. During the TIP update, SPC offered an online form for the public to give input on a variety of transportation topics, from roads and bridges, public transportation, bicycle and pedestrian facilities, etc. SPC worked with its standing committees, which include representatives from county and city planning agencies, PennDOT, transit operators, bicycle and pedestrian organizations, freight interests and others, to review this input for common linkages to current and future TIP projects to carry forward as input into the long range plan.

Due to the COVID-19 pandemic and Governor Wolf's Stay-At-Home orders, SPC was unable hold in-person public meetings with our Public Participation Panels for the public comment period. Three virtual public meetings were held instead, one for each of our PennDOT Districts, giving an overview of what was included in the draft TIP. Resources were put on the SPC website and comments were accepted through PublicInput.com, a new client relationship management program. Recording of the virtual public meetings were saved and were made available on the SPC YouTube channel. SPC's YouTube channel showcases both in-house video production, consultant simulations, and webinar broadcasts.

Social media was used to support each SPC department during the past year with the emphasis on promoting public input. SPC spread the message about the TIP public comment period and virtual

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meetings. Also supported were transportation surveys and CommuteInfo animation ads with targeted county and zip code social media buys.

A streamlined and modernized re-design of 'spcregion.org' was launched early in the year. A blog style 'What's Happening' at SPC section allows for consistently current spotlight and relevant news items to be both featured and easily accessible. From the important events like 2020 Census dates and news to spreading the word of important partner information like the Port Authority's Long Range Plan update, we were able to inform the public on what was going on in the region and state. Implementation of full Google Analytics provided new insight not only to web statistics, but how our users interact with and navigate through the site.

The following is a sample of the range of public outreach, administrative support, and coordination that was provided across all UPWP tasks in the 2020-2022 UPWP:

- Advance mail outs, agenda packets and follow-up to various committee meetings and Commission events.
- Monthly progress reports, invoices and accounting documentation.
- Maintenance of contact databases and other resources.
- Correspondence with various partners and the public.
- Submission of the draft 2022-2024 UPWP.
- Participation in PennDOT Central Office's TIP Financial and General and Procedural Guidance Work Groups, UPWP Planning Priorities Work Group, and Statewide Planning & Research Program Work Group.
- Active engagement and support for ten Public Participation Panels (PPPs), including virtual meetings and official public comment periods associated with the 2021-2024 TIP update.
- Cooperative outreach with legislators, local elected officials, and Councils of Government at a variety of local meetings.
- Development of educational materials for PPP members and the general public.
- Multimedia collaboration continued with multiple SPC departments and staff supporting and showcasing their great work.
- With a fully functional and completely in-house Multimedia Production team, development began on an animated explainer and promotional videos to expand SPC's audience reach.
- Enhanced use of online surveys to gather input for various planning projects and studies.
- Ongoing improvements and enhancements of the interactive web-based form for use by the public in providing public input to the transportation planning process.
- Annual Report, e-newsletters, website updates and enhancements, presentations and other materials and products.

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UPWP ADMINISTRATION

Responsible Agency:

Southwestern Pennsylvania Commission

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$72,776	\$74,000
PennDOT	\$13,646	\$13,875
SPC/Other	<u>\$4,549</u>	<u>\$4,625</u>
Total	\$90,971	\$92,501

Results from Current Program:

- Work Program outlined in FY 2020-2022 currently being implemented.
- The draft 2020-2022 UPWP was submitted for PennDOT approval in February 2020.
- Participation in Central Office’s UPWP Development, Financial Guidance, and the General and Procedural Guidance Work Groups.
- Maintenance and monitoring of overall 2020-2022 planning program, and individual projects, to ensure delivery on time and within budget.

Objectives:

Manage the 2020-2022 UPWP (two year) for the SPC region and design the 2022-2024 UPWP. Continue focus in FY 2022-2024 on implementing and administering performance management requirements set forth in guidance from MAP-21 and the FAST Act. Also, work cooperatively to advance specific recommendations from the 2021 Certification Review of the Pittsburgh Metropolitan Transportation Management Area and service to the SPC members, partners, customers and region.

TASK DESCRIPTIONS:

- During the Program Year, meet with Commission members, PennDOT and USDOT representatives of FHWA and FTA to review current UPWP progress and to discuss tasks to be undertaken in the upcoming UPWP.
- Perform maintenance activities, as needed, including processing UPWP amendments, budget revisions and staffing plan reassignments.
- Coordinate transportation planning activities that respond to federal and state requirements and local objectives. Specific activities are identified in the TIP, the long range plan and in other UPWP jobs that analyze the benefits and burdens of projects, programs and services to various socioeconomic groups to demonstrate that there are not disparate impacts on protected populations.
- Design the 2022-2024 UPWP consistent with PennDOT Central Office Annual Planning Priorities letter that also reflects FHWA Pennsylvania Division Guidance and Priorities and FTA Planning Emphasis Areas.

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- With input from PennDOT, USDOT and SPC's planning partners, advance recommendations from the 2021 Certification Review of the Pittsburgh Metropolitan Area.
- Approve the FY 2022-2024 UPWP (two-year) by end of February 2022. Submit all documents required for contract execution by mid-March 2022, including Exhibits 2 and 3 and authorizing signature resolutions. Also, identify and include transportation projects associated with land use initiatives, and be prepared to support carryover/ongoing supplemental planning tasks as candidates for supplemental planning funds.
- Submit progress reports and invoices to PennDOT no later than 15 days following the reporting period.
- Provide meeting notices and materials not less than five working days prior to meetings and distribute the meeting minutes within 15 working days after the meetings.
- Continue Environmental Justice and public participation activities. Implement Title VI Nondiscrimination/EJ Compliance Plan.
- Ensure SPC region is addressing DBE requirements as part of SPC contracting practices.
- Participate in equal opportunity non-discrimination and DBE trainings offered by PennDOT, FHWA and FTA.
- Include funding requests for any special supplemental Work Program tasks in the 2022-2024 UPWP.
- Continue participation in Central Office's UPWP Development Work Group in advance of 2024-2026 Annual UPWP Design Planning Letter from Central Office.
- Develop planning tools, data systems and reports necessary to support evolving long range plan analytical processes: land use planning, transportation model improvements, community and economic development, investment target cost-benefits (life-cycle), and investment tradeoffs.

Work Products:

- Final document, 2022-2024 UPWP. (First quarter 2022)
- Completion of the 2020-2022 UPWP. (By June 30, 2022)
- Continued advancement of Environmental Justice/Title VI processes and activities. (Ongoing)

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GENERAL SUPPORT SERVICES

RESPONSIBLE AGENCY:

Southwestern Pennsylvania Commission

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$264,800	\$270,000
PennDOT	\$33,100	\$33,750
SPC/Other	<u>\$33,100</u>	<u>\$33,750</u>
Total	\$331,000	\$337,500

Results from Current Program:

Administrative, secretarial and graphics support were provided across all UPWP tasks. Examples of the range of support include advance mail outs, agenda packets and follow-ups to various Committee meetings and events; support to the ten Public Participation Panels; monthly progress reports; various Work Program documents by UPWP job; maintenance of contact databases and various files; and, correspondence with various partners and the public.

Objectives: Provide administrative/secretarial support for tasks across all projects in the UPWP in advancement of federal, state, and regional (Commission) planning provisions.

TASK DESCRIPTIONS:

- Draft and final copy/files for all administrative materials, such as:
 - Correspondence
 - Meeting notices, agendas, attendance lists, minutes
 - Set up and administer virtual meetings
 - Presentation materials and handouts
 - Interim and final study reports
 - Program progress reports and budget material
- Associated support activities, such as:
 - Service to office visitors, directing them to appropriate staff, response to various requests
 - Telephone contacts, assistance to callers
 - Set up and administer virtual meetings
 - Various committee/meeting support activities (e.g., nametags, registration, etc.)
 - Copies and report production support
 - Sending faxes, routing incoming faxes
 - Mailing list database maintenance
 - Preparation of mass mailings and other mailings
 - Handling incoming and outgoing correspondence, logging and filing
 - Staff travel arrangements (air travel, hotel and conference registration)

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- Administrative/secretarial support for tasks across all projects in the UPWP; production/distribution of individual UPWP job products
- Graphic design/support for newsletters, promotional materials, and reports
- Support to county Public Participation Panels
- Submission of progress reports and invoices to PennDOT no later than 15 days following the reporting period
- Provision of meeting notices and materials not less than five working days prior to meetings and distribute the meeting minutes within 15 working days after the meeting

Work Products:

- Administrative, secretarial and graphics support for all tasks in the UPWP to meet a range of varied planning needs including support for numerous committees/meetings, events or conferences; visitor services; processing incoming/outgoing correspondence; document processing; preparation of progress reports; and maintenance of contact databases and various files. (Ongoing)
- Commission action on the FY 2022-2024 Unified Planning Work Program (UPWP) (two-year) by end of February 2022. Submit all documents required for contract execution by mid-March 2022, including Exhibits 2 and 3 and authorizing signature resolutions. Also, identify and include transportation projects associated with land use, and be prepared to support carryover/ongoing supplemental planning tasks as candidates for any supplemental planning funds. (By February 28, 2022)
- Submission of progress reports and invoices to PennDOT no later than 15 days following the reporting period. (Ongoing)
- As part of public involvement and outreach activities, provide meeting notices and materials not less than five working days prior to meetings and distribute the meeting minutes within 15 working days after the meetings. (Ongoing)

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MEMBER PLANNING AGENCY PARTICIPATION

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$213,378	\$213,378
SPC/Other	\$53,345	\$53,345
Total	\$266,723	\$266,723

TASK DESCRIPTIONS

SPC’s eleven member agencies are represented at all levels of Commission interaction, from general policy forums to technical work groups for single UPWP activities, including the Transportation Technical Committee, Transit Operators Committee, Regional Policy Advisory Committee, Active Transportation Forum, Freight Forum, CMAQ Evaluation Committee, Transportation Operations and Safety Forum, Local Traffic Incident Management Teams, the Livability Through Smart Transportation Work Group, and SPC Public Participation Panels. Member agency representatives assist in reviewing packages of meeting materials as well as working with staff in preparing and discussing key agenda issues.

Planning agencies also provide technical support to various UPWP tasks on an as-needed basis. Participation in various technical committees and project work groups, data collection and analysis, study committees, and other technical review efforts require a significant commitment of time and labor.

1. SPC Member Planning Participation

Objective: SPC supports and encourages coordinated transportation planning processes within the region by providing planning funds to SPC member planning departments to facilitate their participation in regional forums and various UPWP tasks.

Planning Activities:

- Support and participate in SPC standing committees and task-related work groups, including:
 - Public Participation – assist in outreach/education through each member’s Public Participation Panel.
 - Transportation Alternatives Set-Aside Program (TA Set-Aside) – assist in the evaluation of candidate projects.
 - Congestion Mitigation & Air Quality (CMAQ) Program - assist in program development and preparation in advance of the next funding cycle; assist in the evaluation of candidate projects for the next update.
 - Livability Through Smart Transportation (SMART) Program – assist in the development, evaluation and delivery of candidate projects.
 - Participate in SPC’s various committees and forums (Regional Policy Advisory Committee, Freight Forum, Transit Operators Committee, Active Transportation Forum, Transportation Operations and Safety Forum, Local Traffic Incident Management Teams, etc.).

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- Provide input and technical support for the maintenance and development of major products such as the LRP, TIP and UPWP:
 - TIP – assist in maintenance and monitoring of the current TIP, and in development of the fiscally-constrained TIP update.
 - *SmartMoves* – assist with LRP implementation on multiple fronts including review of any plan amendment requests, and ensure that the plan remains consistent with all federal and state planning provisions; assist with activities to advance the next plan update cycle.
 - UPWP – participate in advancement of individual 2022-2024 UPWP projects as needed, and assist in design of 2024-2026 UPWP, including generating candidate projects and studies for supplemental funding consideration.
 - Assist in application of project evaluation procedures to analyze, evaluate, and prioritize candidate LRP and TIP projects.
 - Assist with completion of various Linking Planning and NEPA (LPN) Screening Forms for new candidate LRP/TIP projects.
- Provide support to PennDOT as key partners in advancing the region’s response to the Department’s priority activities: Land Use/Transportation Linkages/Economic Development/Modernization, Plans and Programs, Planning Tools and Techniques, HPMS and Traffic Data Collection, Local Technical Assistance Program, and Public Involvement and Outreach.
- Work cooperatively to comply with requirements of the FAST Act, while also assisting in advancing specific recommendations from the Certification Review of the Pittsburgh Metropolitan Area as documented in the final report.
- Work with PennDOT to promote public/private partnerships (P3s) and innovative financing opportunities in support of economic development.
- Identify and implement innovative financing mechanisms for major capital projects. Promote the Pennsylvania Infrastructure Bank (PIB) as a tool for financing transportation projects, including community reinvestment projects. Work with PennDOT to identify and support sustainable sources of revenue.
- Assist in assessing and advancing Intelligent Transportation Systems (ITS) elements through the LRP and TIP.
- Enhance Environmental Justice activities to ensure that all stakeholders have the opportunity to become involved in the region’s planning and programming process.
- Identify livability, sustainability, and resiliency planning strategies for the location of transportation facilities and services for broader access to employment opportunities, affordable housing, schools and safe streets.
- Work with SPC and PennDOT to incorporate land use planning into the planning process. Help to initiate changes in the process that may be necessary to accomplish this effort.
- Coordinate all land use planning with the respective county comprehensive plans. Look for opportunities to integrate land use and transportation in blighted communities or brownfields/grayfields.
- Assist SPC and PennDOT in efforts to identify training and planning activities targeted to local governments dealing with access management, transit oriented design, healthy

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communities, street connectivity, broadband connectivity, interchange area development, transportation impact fees, energy savings, etc.

- Support and participate in Road Safety Audits conducted within the member jurisdiction.
- Assist SPC's continuing response to the inventory of local transportation assets.
- Participate in equal opportunity, non-discrimination and DBE Training offered by PennDOT and FHWA that SPC may host. PennDOT DBE training includes all aspects of 49 CFR Part 26 and is also fully consistent with DBE procedures for FTA grantees.

Work Products:

- Active participation and input to various SPC committees. (Ongoing)
- Support and input to special studies. (Ongoing)
- Assistance in public outreach/education through member Public Participation Panels. (Ongoing)
- County comprehensive plans with robust land use and transportation components. (Ongoing)
- Linking Planning and NEPA screening forms. (Ongoing)
- Assistance with LRP and TIP maintenance activities including review of amendment requests. (Ongoing)
- Assistance in advancing other UPWP projects. (Ongoing)

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PUBLIC PARTICIPATION / COMMUNICATIONS PROGRAM

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	\$199,932	\$202,583
PennDOT	\$4,992	\$5,323
SPC/Other	<u>\$44,992</u>	<u>\$45,323</u>
Total	\$249,915	\$253,228

TASK DESCRIPTIONS

Communication with the public contributes to more effective and innovative transportation planning that is representative of and responsive to the needs of the entire region. To maintain and enhance communication among SPC members and the public in accordance with the FAST Act; Title VI of the Civil Rights Act of 1964; Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 1994; the Americans with Disabilities Act of 1990; and the Limited English Proficiency Executive Order, SPC has an adopted Public Participation Plan. As part of this Public Participation Plan, SPC has implemented Public Participation Panels in each of the region's 10 counties. These panels have proven to be one effective way to provide education designed to enhance understanding of regional planning and transportation programs; opportunities for public participation and input during development of plans, programs and projects; and opportunities to review draft documents and comment on major decisions prior to Commission action.

1. Public Participation Plan

Objective: The Public Participation Plan provides a framework to ensure that SPC's transportation planning processes include a proactive participation process and comply with federal participation plan requirements. The Public Participation Plan identifies strategies and tools to help ensure effective participation in SPC's transportation planning activities. Activities in this Public Participation Plan are also coordinated with the statewide transportation planning public involvement and consultation processes.

Planning Activities:

- Implement the Public Participation Plan and its companion Documents (Title VI Plan and Limited English Proficiency (LEP) Plan).
- Support and promote effective public involvement in SPC's transportation planning process by utilizing strategies and techniques to:
 - Provide opportunities for public involvement and input during development of planning programs, policies and projects.
 - Provide opportunities to review draft documents and comment on major decisions prior to Commission action.
 - Attend regional forums to engage and inform different populations of our region.

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- Continually develop innovative, effective public meeting materials utilizing visualization techniques to inform and engage the public about transportation planning and funding issues.
- Continually expand engagement reach using social media, videos, surveys, story maps and other online mechanisms.
- Administer all required public comment periods in accordance with federal regulations and the Public Participation Plan (provide timely notice, make draft documents widely available including via the Internet, hold public meetings, gather comments and feedback, respond to comments as appropriate, and document the process).
- Continue to develop innovative techniques for engaging the public, and reaching affected populations and the public at large as appropriate. Disseminate information and receive public feedback.
- In accordance with federal regulations on the accessibility of transportation planning and programming processes and outcomes, continue its Environmental Justice program of innovative outreach in the region.
 - Actively engage minority and low-income populations, non-English speakers and those with Limited English Proficiency (LEP), older persons and persons with disabilities, and other populations traditionally underserved by the existing transportation system, by developing communications materials to be translated and distributed as appropriate to enhance the participation of these groups.
 - Maintain existing public outreach tools and develop new and innovative techniques to reach extended audiences.
 - Monitor regional population and demographic trends and enhance specialized outreach as outlined in the Public Participation Plan, including Limited English Proficiency assessments.
 - Participate in outreach opportunities presented by regional task forces on disabilities, and other special needs groups.
 - Using demographic data, identify and map locations of demographic clusters, including protected populations, concentrations of low-income, minority, elderly, non-auto households, or other groups having special transportation needs.
 - Make web-based mapping of low-income and minority clusters available on the SPC website.
- Support communications efforts associated with projects and initiatives developed from the Work Program.
 - Use uniform protocols and coordinated communications vehicles including materials developed for print and electronic distribution, public meetings and online communications products. Ensure cost-effective production and dissemination of SPC information and materials to the public, members, regional planning partners, and other organizations using a variety of methods to reach target audiences.
 - Conduct educational presentations about SPC programs and projects through meetings, workshops, conferences and other means of communication. Use regional community and media organizations to disseminate information about transportation planning and public participation opportunities, emphasizing outreach to minority and low-income populations, non-English speakers and LEP persons, older

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persons and persons with disabilities, and other populations traditionally underserved by the existing transportation system.

- Maintain and enhance accessibility to information in a variety of formats.
- Use the agency website (www.spcregion.org) and social media platforms (Facebook, twitter, YouTube, etc.) to disseminate information on various projects, programs and initiatives.
- Create videos as a means of educating and informing the public in a new and innovative format to reach different audiences.
- Utilize an email marketing tool to get information to the public and our regional stakeholders. This email marketing tool can be a way to share information regarding public input, an upcoming meeting, new data, etc.

Work Products:

- A continually-implemented public participation and outreach program. (Ongoing)
- Advertisements promoting public comment periods and public meetings. (Ongoing)
- Public meetings (virtual and in-person when allowed) and associated materials. (Ongoing)
- Press releases, annual reports, e-newsletters, educational packets and other written products communicating SPC's programs, planning processes and activities. (Ongoing)
- Limited English Proficiency Plan and staff training activities. (Ongoing)
- Continued development of SPC's websites. (Ongoing)
- Briefing materials for the Commission, planning partners and the public. (Ongoing)
- Various social media platform posts and engagements, including educational videos for the SPC YouTube channel. (Ongoing)

2. Public Participation Panels

Objective: SPC maintains Public Participation Panels (Panels) for each county in its transportation planning region. Panel members are appointed to reflect the demographics of the population of their respective counties in regard to age, income, ethnicity, special needs, and special interests. Members serve as a conduit to the local communities where they live and work. They are asked to provide input, but are also expected to "get the word out" about what they learn at meetings. Panel meetings, both in-person and virtual, are open to the public and are scheduled on an as-needed basis.

Planning Activities:

- Provide administrative support for Public Participation Panels.
- Organize and promote public meetings hosted by Panels to enhance understanding of the transportation planning and programming process and to obtain feedback on plans, programs and projects.
- Maintain and continue to develop SPC's online resources so that the Panels and the public can be involved and have a place to go to get more information regarding our meetings and programs.

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- Create outreach “toolkits” that will help the Panel participants spread the word easier regarding SPC activities (public input, upcoming meetings, submission deadlines, etc).
- Use an email marketing tools (Constant Contact, etc.) to communicate with the Panels. The email marketing tool makes it easy and more efficient to share information with the Panels.

Work Products:

- Panel member orientation materials. (Ongoing)
- Panel membership and attendance records. (Ongoing)
- Panel meetings (in-person and virtual) and associated materials. (Ongoing)
- Briefing materials for the Commission, planning partners and the public. (Ongoing)
- Public Participation/Get Involved webpage. (Ongoing)
- Email marketing engagement. (Ongoing)
- Outreach “toolkits.” (Ongoing)

3. Transportation Improvement Program (TIP) / Long Range Plan (LRP) Outreach and Engagement

Objective: Develop a Public Outreach and Engagement Plan that generates interest, informs, and educates the public using a mix of traditional and modern communication tools that reach diverse audiences and help the public understand and connect with the elements of the TIP/LRP.

Planning Tasks:

- Participate in local events and provide convenient in-person and virtual meeting opportunities to share information with diverse groups of stakeholders and the general public.
- Provide educational information in advance to empower stakeholders to provide informed feedback.
- Utilize graphics, imagery and videos to make technical information relatable and easy to understand.
- Focus advertising and branding on public interests/hooks, and less on the technical information.
- Utilize social media and online advertising to gather feedback on plan topics, support other outreach methods, and expand the audience reach.
- Incorporate communication tools that are convenient and diverse to capture input from a variety of audiences.
- Use quantitative tools and techniques to measure outreach effectiveness.

Work Products:

- TIP/Long Range Plan public meetings. (Ongoing)
- Surveys. (Ongoing)
- Plan outreach and engagement materials and events. (Ongoing)
- Plan materials and documents. (Ongoing)
- Social media posts and advertisements. (Ongoing)
- Educational videos. (Ongoing)

4. Accessibility Assessment and New Agency Guidelines for Public Information

Objective: Conduct an assessment of current accessibility guidance and practices and evaluate their utilization agency-wide. Review current federal and state guidance on accessibility requirements. Develop new agency protocols for meeting accessibility requirements for print and electronic media, including step by step instructions for staff. Communicate new protocols to staff and contractors/consultants and assist with accessibility implementation of public information. Develop an accessibility request protocol for the public to use to request specific accessibility accommodations of public materials.

Planning Tasks

- Conduct assessment of current accessibility and agency utilization.
- Develop updated protocols for agency with step-by-step instructions.
- Develop communication materials for staff on importance of accessibility.
- Develop communication materials for contractors/consultants.
- Prepare accessibility request protocol for the public to use to request specific accessibility accommodations.

Work Products:

- Assessment of current accessibility and agency utilization. (Second quarter 2023)
- Updated protocols for agency with step-by-step instructions. (Third quarter 2023)
- Communication materials for staff on importance of accessibility. (Third quarter 2023)
- Communication materials for contractors/consultants. (Fourth quarter 2023)
- Accessibility request protocol for the public to use to request specific accessibility accommodations. (First quarter 2024)

Unified Planning Work Program

Fiscal Years 2022-2024

**LOCAL TECHNICAL ASSISTANCE PROGRAM (LTAP)
PROMOTION AND EVALUATION**

ESTIMATED COST:

	<u>2022-2023</u>	<u>2023-2024</u>
Federal Highway Administration	<u>\$45,000</u>	<u>\$45,000</u>
Total	\$45,000	\$45,000

OBJECTIVES:

The PennDOT Local Technical Assistance Program, or LTAP, is part of a national initiative to transfer transportation technology through training, technical assistance, and other customer services to municipal elected officials and their staff. LTAP provides technical information and proven technologies to meet the growing demands on municipal governments. In an effort to expand and promote LTAP services to the 548 municipalities within its ten-county region, SPC will assist PennDOT with facilitating LTAP training during the 2022-2024 fiscal years.

The program markets and promotes the training opportunities provided by LTAP through the establishment of a partnership wherein SPC serves as the Regional Technology Transfer Representative for LTAP in the ten-county SPC region. Through this program, the technical training needs of local municipalities are met by identifying their needs and coordinating with LTAP on scheduling relevant training programs in the region.

TASK DESCRIPTIONS:

1. Identify Regional Training Needs

- Develop a priority training list that identifies training needs within the region based on historical data, knowledge of region, district municipal services representatives' input; incorporate into an annual training calendar.
- Using the priority training list/annual calendar, work with PennDOT to schedule training dates.
- In coordination with PennDOT Project Manager, identify training course locations. Responsibilities include, but are not limited to logistics, class locations, registration, room set-up, food, etc.
- Identify regional municipal issues and provide to PennDOT Project Manager for consideration.
- Identify additional training available on safety and operations topics for possible additional training opportunities.

Unified Planning Work Program

Fiscal Years 2022-2024

2. Program Marketing and Outreach

- In conjunction with PennDOT Project Manager, develop a plan to expand LTAP training and technical assistance in the region. Examples of marketing activities may include but not be limited to integration of LTAP into MPO/RPO outreach programs, promotion of technical assistance through the distribution of brochures, targeting municipalities who have not taken advantage of LTAP services, etc.
- Work with PennDOT Project Manager to promote upcoming LTAP activities at least six (6) weeks prior to the scheduled LTAP class sessions. Promotional activities may include but are not limited to brochures, LTAP fax alerts, website updates, e-newsletters, postcards, social media posts, etc.
- In coordination with PennDOT Project Manager, develop a plan for LTAP outreach in the region, such as equipment shows, Advisory Committee, County Conventions, etc. for approval by PennDOT Project Manager. Outreach activities should be coordinated with PennDOT Project Manager and Municipal Services Representatives to avoid duplication in outreach efforts.

3. Administration and Reporting

- Participate in scheduled conference calls with PennDOT Project Manager. (Ongoing)
- Determine a regular communication method that will work best for all parties. (Ongoing)
- Submit quarterly reports detailing all LTAP project activities and expenditures to PennDOT Project Manager. (Ongoing)
- Develop and submit annual reports that detail the process used to market LTAP in the region no later than July 31. The annual report should include an evaluation of training, marketing, and outreach activities, and recommendations for future activities with LTAP in the region. (Second quarter 2023/Second quarter 2024)

OUTREACH & COORDINATION – MULTI-YEAR IMPLICATIONS

The UPWP is a core element of the MPO planning function. As such, the development and administration of the UPWP is an ongoing work task. UPWP development continues to evolve to take a longer-term, multi-year view of each of the region’s planning activities.

- Final report, 2020-2022 UPWP for submission to PennDOT for approval in February 2020.
- Completion of the FY 2020-2021 planning program, which ends on June 30, 2020.
- Completion of the FY 2021-2022 planning program, which ends on June 30, 2022.
- Continue to advance Environmental Justice/Title VI processes and activities.
- Continue to work cooperatively with regional/state/federal planning partners to advance specific recommendations from the 2021 Certification Review of the Pittsburgh Metropolitan Area by FHWA and FTA.

Staff support is required for virtually all elements of the UPWP. As such, it is envisioned that every Work Program will include this work element in advancing all the planning provisions of the FAST Act and subsequent federal legislation.

- Continue to provide secretarial, clerical and administrative support across individual UPWP jobs in advancing all the planning provisions of MAP-21, the FAST Act, and any emerging federal guidance.
- Continue graphics/design support for newsletters, printed materials and reports.
- Continue to take advantage of advancements in technology and graphic and support software to improve efficiency, quality control, and turn-around, enhancing SPC’s commitment to service to SPC members, partners and customers throughout Southwestern Pennsylvania and to the Commonwealth.

Engaging the public and facilitating collaboration amongst a wide range of stakeholders in an area as large and diverse as Southwestern Pennsylvania is always challenging. Advances in technology and communications, particularly smart phones and social media, have created more opportunities to engage the public in the planning process. SPC continues to expand its use of social media and video capabilities to enhance the communication of program and project information across different media. SPC is constantly looking for the best ways to provide clear, concise, and meaningful information to its planning partners, interested stakeholders, and members of the public.

SPC will continue to use its Public Participation Panels, Internet website, newsletters, social media and other tools to educate and engage citizens on regional transportation issues. It will also use workshops, on-line forums, virtual and in-person meetings and other mechanisms to facilitate communication and collaboration with its members and other transportation stakeholders. In the coming years, SPC will continue to investigate new technologies, including emerging visualization tools, to help people understand and relate to SPC’s various planning activities. SPC will also continue to develop methods and opportunities for traditionally underserved portions of the population to participate in the transportation planning process, including minority, non-English speaking, and low-income groups.

Technical support is an evolving need for municipalities as technology and conditions on the ground change. Thus, it is expected that LTAP will include in its course and on-site tech assist offerings, ever evolving materials and expertise in subject matter that is vital to local governance. LTAP will continue to provide on-site tech assists as specific needs arise in individual municipalities, provide a voice for local

Unified Planning Work Program

Fiscal Years 2022-2024

governments when deciding on new or updated course offerings, and finally serve as ongoing support for PennDOT and PSATS in the PennDOT Connects initiative.

SECTION III

UPWP FUNDING SUMMARIES

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Unified Planning Work Program

Fiscal Years 2022-2024

Exhibit Two

SOUTHWESTERN PENNSYLVANIA COMMISSION
2022-2023 UNIFIED PLANNING WORK PROGRAM

Year One
October 2021

CONTRACT SUMMARY

	Project Totals	Program Totals	Agency Totals
FEDERAL HIGHWAY ADMINISTRATION			
FHWA PL - MPO Base Program		4,437,000	
FHWA PL - Supplemental Planning Program		45,000	
Local Technical Assistance Program	45,000		
FHWA Total			\$4,482,000
FEDERAL TRANSIT ADMINISTRATION			
FTA PL - MPO Base Program		1,085,000	
FTA Total			\$1,085,000
PENNSYLVANIA DEPARTMENT OF TRANSPORTATION			
PENNDOT MLF - Match to MPO Base Planning Program		587,000	
PENNDOT PE Traffic Forecasts and Needs Reports		90,000	
PennDOT Total			\$677,000
SOUTHWESTERN PENNSYLVANIA COMMISSION and OTHER PARTNERS			
SPC - Base Program		742,513	SPC
Member Planning Agency Participation		53,345	SPC Members
HPMS - Lawrence County		3,750	Lawrence County
Port Authority Planning Program		46,000	Port Authority
Total Local Match - SPC and Other			\$845,608
SPC 2022-2023 UPWP TOTAL (Year One)			\$7,089,608

Unified Planning Work Program

Fiscal Years 2022-2024

Exhibit Two

SOUTHWESTERN PENNSYLVANIA COMMISSION
2023-2024 UNIFIED PLANNING WORK PROGRAM

Year Two
October 2021

CONTRACT SUMMARY

	Project Totals	Program Totals	Agency Totals
FEDERAL HIGHWAY ADMINISTRATION			
FHWA PL - MPO Base Program		4,437,000	
FHWA PL - Supplemental Planning Program		45,000	
Local Technical Assistance Program	45,000		
FHWA Total			\$4,482,000
FEDERAL TRANSIT ADMINISTRATION			
FTA PL - MPO Base Program		1,190,000	
FTA Total			\$1,190,000
PENNSYLVANIA DEPARTMENT OF TRANSPORTATION			
PENNDOT MLF - Match to MPO Base Planning Program		587,000	
PENNDOT PE Traffic Forecasts and Needs Reports		90,000	
PennDOT Total			\$677,000
SOUTHWESTERN PENNSYLVANIA COMMISSION and OTHER PARTNERS			
SPC - Base Program		764,605	SPC
Member Planning Agency Participation		53,345	SPC Members
HPMS - Lawrence County		3,750	Lawrence County
Port Authority Planning Program		46,000	Port Authority
Total Local Match - SPC and Other			\$867,700
SPC 2023-2024 UPWP TOTAL (Year Two)			\$7,216,700

Unified Planning Work Program

Fiscal Years 2022-2024

Exhibit Two

SOUTHWESTERN PENNSYLVANIA COMMISSION
2022-2024 UNIFIED PLANNING WORK PROGRAM

Two Year
October 2021

CONTRACT SUMMARY

	Project Totals	Program Totals	Agency Totals
FEDERAL HIGHWAY ADMINISTRATION			
FHWA PL - MPO Base Program		8,874,000	
FHWA PL - Supplemental Planning Program		90,000	
Local Technical Assistance Program	90,000		
FHWA Total			\$8,964,000
FEDERAL TRANSIT ADMINISTRATION			
FTA PL - MPO Base Program		2,275,000	
FTA Total			\$2,275,000
PENNSYLVANIA DEPARTMENT OF TRANSPORTATION			
PENNDOT MLF - Match to MPO Base Planning Program		1,174,000	
PENNDOT PE Traffic Forecasts and Needs Reports		180,000	
PennDOT Total			\$1,354,000
SOUTHWESTERN PENNSYLVANIA COMMISSION and OTHER PARTNERS			
SPC - Base Program		1,507,118	SPC
Member Planning Agency Participation		106,690	SPC Members
HPMS - Lawrence County		7,500	Lawrence County
Port Authority Planning Program		92,000	Port Authority
Total Local Match - SPC and Other			\$1,713,308
SPC 2022-2024 UPWP TOTAL (Two Year)			\$14,306,308

Unified Planning Work Program
Fiscal Years 2022-2024

Exhibit Three

SOUTHWESTERN PENNSYLVANIA COMMISSION
2022-2023 UNIFIED PLANNING WORK PROGRAM

Year One
January 2022

PROJECT FUNDING TABLE

	PROJECT BUDGETS		UPWP Project Funding	FHWA	AGENCY PARTICIPATION		
	SPC	Other			FTA	PennDOT	SPC / Other
I. TRANSPORTATION PROGRAM DEVELOPMENT	1,253,750		1,253,750	892,653	110,347	65,925	184,825
1a) Long Range Plan Implementation	702,000		702,000	451,253	110,347	39,412	100,988
1b) TIP Development & Management	551,750		551,750	441,400		26,513	83,838
II. MULTIMODAL TRANSPORTATION PLANNING	1,314,000	230,000	1,544,000	441,158	794,042	51,150	257,650
2a) Multimodal Transportation Planning	1,070,000		1,070,000	245,958	610,042	26,750	187,250
2b) Regional Freight Planning	244,000		244,000	195,200		24,400	24,400
2c) Port Authority Planning Program	Port Authority	(1)	230,000		184,000		46,000
2d) Moving the Mon Valley: Building on BRT	Port Authority	(6)	795,000		556,500		238,500
III. TRANSPORTATION OPERATIONS and SAFETY	857,000		857,000	685,600		82,050	89,350
3a) Transp. Ops & Congestion Mgmt.	389,000		389,000	311,200		28,350	49,450
3b) Transportation Safety Planning	333,000		333,000	266,400		34,950	31,650
3c) Regional Traffic Signal Program	135,000		135,000	108,000		18,750	8,250
IV. DATA SYSTEMS and MODELING	2,432,500	18,750	2,451,250	1,666,701	180,611	426,139	177,799
4a) Geographic Information Systems	426,500		426,500	274,159	67,041	34,270	51,030
4b) Regional Data & Graphics Clearinghouse	386,000		386,000	308,800		38,600	38,600
4c) Air Quality Modeling	360,000		360,000	288,000		54,000	18,000
4d) Land Use Models & Reg. Forecasts	298,000		298,000	191,558	46,842	35,917	23,683
4e) Transportation Models	424,500		424,500	272,873	66,727	51,164	33,736
4f) Traffic Forecasts and Needs Reports	90,000	(2)	90,000			90,000	
4g) HPMS - Traffic Count Program	250,000		250,000	172,000		78,000	
4h) HPMS - Inventory	152,500		152,500	108,312		44,188	
4i) HPMS - Lawrence County	Lawrence County	(3)	18,750	18,750		15,000	3,750
4j) Local Asset Management	45,000		45,000	36,000			9,000
V. OUTREACH AND COORDINATION	716,885	266,723	983,608	795,886		51,737	135,985
5a) UPWP Administration	90,970		90,971	72,776		13,646	4,549
5b) General Support Services	331,000		331,000	264,800		33,100	33,100
5c) Member Planning Agency Part.	Member Agencies	(4)	266,723	213,378			53,345
5d) Public Participation / Commun. Program	249,915		249,915	199,932		4,992	44,992
5e) Local Technical Assistance Program	45,000	(5)	45,000	45,000			
TOTAL FOR 2022-2023 UPWP YEAR ONE	6,574,135	515,473	7,089,608	4,482,000	1,085,000	677,000	845,608

FOOTNOTES:

- 1) The 20% local match is provided by the Port Authority of Allegheny County.
- 2) PENNDOT PE Funds (100%). \$90,000 total.
- 3) The 20% local match is provided by Lawrence County.
- 4) The 20% local match provided by the SPC Member Counties and the City of Pittsburgh.
- 5) FHWA PL (100%) federal supplement provided by PennDOT.
- 6) Additional funding through FTA's TOD Pilot Program as a direct grant to the Port Authority. PAAC provides the identified local match. The project appears in the SPC UPWP for information purposes only.

NOTE: Project detail may not sum to totals because of rounding.

Unified Planning Work Program
Fiscal Years 2022-2024

Exhibit Three

SOUTHWESTERN PENNSYLVANIA COMMISSION
2023-2024 UNIFIED PLANNING WORK PROGRAM

Year Two
October 2021

PROJECT FUNDING TABLE

	PROJECT BUDGETS		UPWP Project Funding	AGENCY PARTICIPATION			
	SPC	Other		FHWA	FTA	PennDOT	SPC-Other
I. TRANSPORTATION PROGRAM DEVELOPMENT	1,263,000		1,263,000	891,548	118,852	66,561	186,039
1a) Long Range Plan Implementation	702,500		702,500	443,148	118,852	38,736	101,764
1b) TIP Development & Management	560,500		560,500	448,400		27,825	84,275
II. MULTIMODAL TRANSPORTATION PLANNING	1,344,000	230,000	1,574,000	385,490	873,710	46,640	268,160
2a) Multimodal Transportation Planning	1,097,000		1,097,000	187,890	689,710	21,940	197,460
2b) Regional Freight Planning	247,000		247,000	197,600		24,700	24,700
2c) Port Authority Planning Program	Port Authority	(1)	230,000		184,000		46,000
III. TRANSPORTATION OPERATIONS and SAFETY	896,500		896,500	717,200		85,725	93,575
3a) Transp. Ops & Congestion Mgmt.	394,000		394,000	315,200		29,100	49,700
3b) Transportation Safety Planning	342,000		342,000	273,600		32,550	35,850
3c) Regional Traffic Signal Program	160,500		160,500	128,400		24,075	8,025
IV. DATA SYSTEMS and MODELING	2,469,500	18,750	2,488,250	1,682,801	197,438	425,127	182,884
4a) Geographic Information Systems	436,000		436,000	275,036	73,764	34,379	52,821
4b) Regional Data & Graphics Clearinghouse	391,000		391,000	312,800		39,100	39,100
4c) Air Quality Modeling	365,500		365,500	292,400		54,825	18,275
4d) Land Use Models & Reg. Forecasts	301,500		301,500	190,191	51,009	35,661	24,639
4e) Transportation Models	429,500		429,500	270,935	72,665	50,800	35,100
4f) Traffic Forecasts and Needs Reports	90,000	(2)	90,000			90,000	
4g) HPMS - Traffic Count Program	254,500		254,500	177,100		77,400	
4h) HPMS - Inventory	155,500		155,500	112,539		42,961	
4i) HPMS - Lawrence County	Lawrence County	(3)	18,750	15,000			3,750
4i) Local Asset Management	46,000		46,000	36,800			9,200
V. OUTREACH AND COORDINATION	728,228	266,723	994,952	804,961		52,948	137,043
5a) UPWP Administration	92,500		92,501	74,000		13,875	4,625
5b) General Support Services	337,500		337,500	270,000		33,750	33,750
5c) Member Planning Agency Part.	Member Agencies	(4)	266,723	213,378			53,345
5d) Public Participation / Commun. Program	253,228		253,228	202,583		5,323	45,323
5e) Local Technical Assistance Program	45,000	(5)	45,000	45,000			
TOTAL FOR 2023-2024 UPWP YEAR TWO	6,701,228	515,473	7,216,700	4,482,000	1,190,000	677,000	867,700

FOOTNOTES:

- 1) The 20% local match is provided by the Port Authority of Allegheny County.
- 2) PENNDOT PE Funds (100%). \$90,000 total.
- 3) The 20% local match is provided by Lawrence County.
- 4) The 20% local match provided by the SPC Member Counties and the City of Pittsburgh.
- 5) FHWA PL (100%) federal supplement provided by PennDOT.

NOTE: Project detail may not sum to totals because of rounding.

Unified Planning Work Program
Fiscal Years 2022-2024

Exhibit Three

SOUTHWESTERN PENNSYLVANIA COMMISSION
2022-2024 UNIFIED PLANNING WORK PROGRAM
PROJECT FUNDING TABLE

Two Year
January 2022

	PROJECT BUDGETS		UPWP Project Funding	AGENCY PARTICIPATION			
	SPC	Other		FHWA	FTA	PennDOT	SPC-Other
I. TRANSPORTATION PROGRAM DEVELOPMENT	2,516,750		2,516,750	1,784,201	229,199	132,486	370,864
1a) Long Range Plan Implementation	1,404,500		1,404,500	894,401	229,199	78,148	202,752
1b) TIP Development & Management	1,112,250		1,112,250	889,800		54,338	168,111
II. MULTIMODAL TRANSPORTATION PLANNING	2,658,000	460,000	3,118,000	826,648	1,667,752	97,790	525,810
2a) Multimodal Transportation Planning	2,167,000		2,167,000	433,848	1,299,752	48,690	384,710
2b) Regional Freight Planning	491,000		491,000	392,800		49,100	49,100
2c) Port Authority Planning Program	Port Authority	(1)	460,000			368,000	92,000
2d) Moving the Mon Valley: Building on BRT	Port Authority	(6)	795,000			556,500	238,500
III. TRANSPORTATION OPERATIONS and SAFETY	1,753,500		1,753,500	1,402,800		167,775	182,925
3a) Transp. Ops & Congestion Mgmt.	783,000		783,000	626,400		57,450	99,150
3b) Transportation Safety Planning	675,000		675,000	540,000		67,500	67,500
3c) Regional Traffic Signal Program	295,500		295,500	236,400		42,825	16,275
IV. DATA SYSTEMS and MODELING	4,902,000	37,500	4,939,500	3,349,502	378,049	851,265	360,684
4a) Geographic Information Systems	862,500		862,500	549,194	140,806	68,649	103,851
4b) Regional Data & Graphics Clearinghouse	777,000		777,000	621,600		77,700	77,700
4c) Air Quality Modeling	725,500		725,500	580,400		108,825	36,275
4d) Land Use Models & Reg. Forecasts	599,500		599,500	381,748	97,852	71,578	48,322
4e) Transportation Models	854,000		854,000	543,808	139,392	101,964	68,836
4f) Traffic Forecasts and Needs Reports	180,000	(2)	180,000			180,000	
4g) HPMS - Traffic Count Program	504,500		504,500	349,100		155,400	
4h) HPMS - Inventory	308,000		308,000	220,851		87,149	
4i) HPMS - Lawrence County	Lawrence County	(3)	37,500	37,500	30,000		7,500
4j) Local Asset Management	91,000		91,000	72,800			18,200
V. OUTREACH AND COORDINATION	1,445,113	533,446	1,978,560	1,600,847		104,685	273,028
5a) UPWP Administration	183,470		183,470	146,776		27,521	9,174
5b) General Support Services	668,500		668,500	534,800		66,850	66,850
5c) Member Planning Agency Part.	Member Agencies	(4)	533,447	426,757			106,690
5d) Public Participation / Commun. Program	503,143		503,143	402,515		10,314	90,314
5e) Local Technical Assistance Program	90,000	(5)	90,000	90,000			
TOTAL FOR 2022-2024 UPWP TWO YEAR	13,275,363	1,030,946	14,306,310	8,964,000	2,275,000	1,354,000	1,713,306

FOOTNOTES:

- 1) The 20% local match is provided by the Port Authority of Allegheny County.
- 2) PENNDOT PE Funds (100%). \$180,000 total.
- 3) The 20% local match is provided by Lawrence County.
- 4) The 20% local match provided by the SPC Member Counties and the City of Pittsburgh.
- 5) FHWA PL (100%) \$90,000 total. federal supplement provided by PennDOT.
- 6) Additional funding through FTA's TOD Pilot Program as a direct grant to the Port Authority. PAAC provides the identified local match. The project appears in the SPC UPWP for information purposes only.

NOTE: Project detail may not sum to totals because of rounding.