



Southwestern Pennsylvania Commission

2019 Annual Report



Table of Contents

Officers and Members.....	1	Information Systems.....	20
Transportation.....	2	Information Systems.....	21
Introduction.....	3	HPMS.....	22
<i>SmartMoves for a Changing Region</i>	3	Aerial Photography.....	23
Transportation Project Progress.....	4	Finance.....	24
Multimodal Transportation.....	5	Financial Narrative.....	25
Operations & Congestion Management.....	8		
Transportation & Community Funding Programs.....	9		
Environmental Linkages.....	10		
Transportation Data.....	11		
Planning and Development.....	14		
Introduction.....	15		
Small Business Finance Assistance.....	16		
Government Procurement.....	16		
Local Technical Assistance Program.....	16		
Export Development.....	17		
Keystone Opportunity Zones.....	17		
Water Resource Center.....	18		



The Southwestern Pennsylvania Commission (SPC) hereby gives public notice that it is the policy of the Commission to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice, and related statutes and regulations in all programs and activities. Title VI and other related statutes require that no person in the United States of America shall, on the grounds of race, color, sex, national origin, age, or disability, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which SPC receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice by SPC under Title VI has a right to file a formal complaint with the Commission. Any such complaint must be in writing and filed with SPC's Title VI Coordinator within one hundred eighty (180) days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Discrimination Complaint Form, please see our website at: www.spcregion.org or call 412-391-5590.

Officers and Members

2019 Officers and Members of the Southwestern Pennsylvania Commission

Chairman

Larry Maggi

Vice Chairman

Rich Fitzgerald

Secretary-Treasurer

Tony Amadio

Executive Director

James R. Hassinger

Allegheny County

Rich Fitzgerald*
Lynn Heckman**
Clifford Levine
Robert J. Macey
David Miller

Armstrong County

Darin Alviano
Pat Fabian*
Richard Palilla
Jason L. Renshaw
George J. Skamai

Beaver County

Tony Amadio*
Daniel Camp
Sandie Egley
Kelly Gray
Charles Jones

Butler County

Kevin Boozel
Kim Geyer
Mark Gordon
Richard Hadley
Leslie A. Osche*

Fayette County

Joe Grata
Fred Junko
Dave Lohr
Vincent A. Vicites*
Angela Zimmerlink

Greene County

Dave Coder*
Jeff Marshall
Robbie Matesic
Archie Trader
Blair Zimmerman

Indiana County

Michael Baker
Sherene Hess
Mark Hilliard
Rodney D. Ruddock*
Byron G. Stauffer, Jr.

Lawrence County

Steve Craig*
Robert Del Signore
James Gagliano
Amy McKinney
Daniel J. Vogler

Pittsburgh

Scott Bricker
Ricky Burgess**
William Peduto*
Mavis Rainey
Aurora Sharrard

Washington County

Larry Maggi*
Scott Putnam
Harlan Shober
Diana Irely-Vaughan
Christopher Wheat

Westmoreland County

Charles W. Anderson**
Robert J. Brooks
Tom Ceraso
Gina Cerilli*
Ted Kopas

Pennsylvania Department of Transportation

Joseph Dubovi
Kevin McCullough
Cheryl Moon-Sirianni
James Ritzman*
Joe Szczur

Governor's Appointee

Jessica Walls-Lavelle*

Pennsylvania Department of Community and Economic Development

Johnna Pro*

Port Authority of Allegheny County

Katherine Kelleman
Ed Typanski

Transit Operators

Sheila Gombita

Federal Highway Administration***

Alicia Nolan

Federal Transit Administration***

Theresa Garcia-Crews

Federal Aviation Administration***

U.S. Environmental Protection Agency***

Laura Mohollen

U.S. Economic Development Administration***

2019 Officers and Directors of the Southwestern Pennsylvania Corporation

Chairman

Larry Maggi

Vice Chairman

Rich Fitzgerald

President/CEO***

James R. Hassinger

Vice President***

Lew Villotti

Secretary-Treasurer***

Vincent M. Massaro

Directors:

Tony Amadio*
Gina Cerilli*
Dave Coder*
Steve Craig*
Pat Fabian*
Rich Fitzgerald*
Larry Maggi*
Leslie A. Osche*
William Peduto*
Rodney D. Ruddock*
Vincent A. Vicites*

Southwestern Pennsylvania Commission Staff Leadership

Kirk Brethauer,

Director, Information Systems Department

Deborah Curry,

Director, Office of Human Resources

Jennifer Lasser,

Director, Planning & Development Department

Vincent M. Massaro,

Director Finance Department

Shannon O'Connell,

Director, Office of Communications & Public Engagement

Andy Waple,

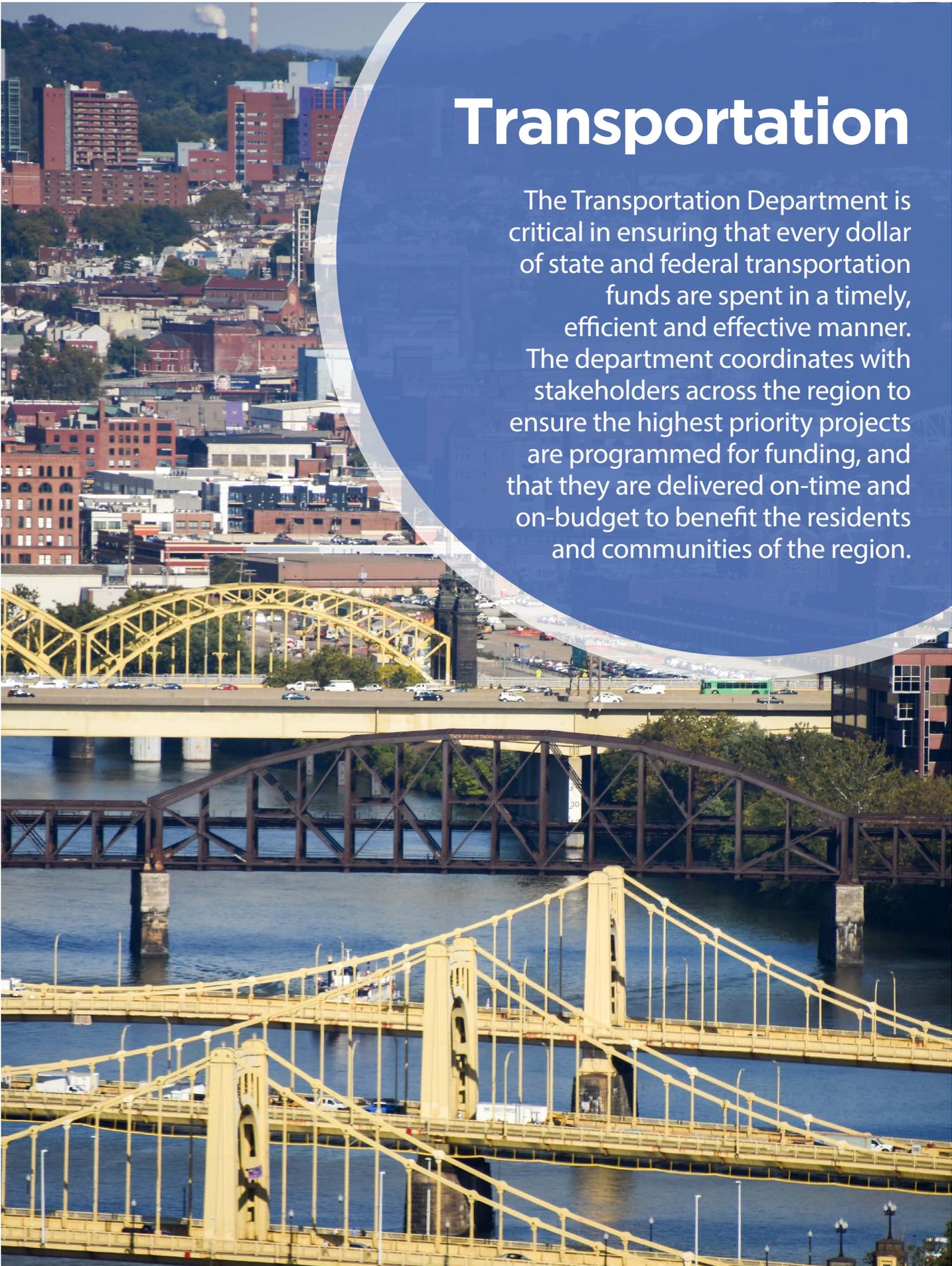
Director, Transportation Planning Department

All voting members of the Southwestern Pennsylvania Commission are members of the Southwestern Pennsylvania Corporation.

*Member of SPC Executive Committee

**At-Large Member of SPC Executive Committee

***Non-Voting Member



Transportation

The Transportation Department is critical in ensuring that every dollar of state and federal transportation funds are spent in a timely, efficient and effective manner. The department coordinates with stakeholders across the region to ensure the highest priority projects are programmed for funding, and that they are delivered on-time and on-budget to benefit the residents and communities of the region.

Introduction

As the Metropolitan Planning Organization (MPO) for Southwestern Pennsylvania, SPC, in collaboration with its member planning partners, will direct the use of billions in state and federal transportation funding through 2045. Adopted in June 2019, the long range plan – *SmartMoves for a Changing Region* – provides a robust policy framework that envisions a world-class, safe and well maintained, integrated transportation system that provides mobility for all, enables resilient communities and supports a globally competitive economy.

SmartMoves for a Changing Region



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

Working to find positive solutions and reveal exciting regional opportunities, in 2019 SPC created a new regional strategic vision and plan – *SmartMoves for a Changing Region* – to focus on adaptability to demographic, infrastructure funding, technological, economic, and environmental forces of change affecting community and regional livability and sustainability over time.

Reflecting a robust planning process, *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 economy to prosper. The discussion of the Vision development process centered on creating opportunity from investments and led to three major Goals of Connected Mobility, Resilient Communities and a Globally Competitive Economy.

The plan is the result of the region coming together to address concerns through collaboration with county and local planners, regional organizations, planning consultants and the business community; workshops with subject matter experts about trends, new disruptive technologies and innovations; best practice reviews from other innovative regions; online public surveys; discussions of problems and opportunities with the public and elected leadership in hands-on workshops; a Regional Plan Workshop with over 300 participants that was live-streamed on YouTube; and dozens of public meetings throughout the region.

Transportation Improvement Program

In the short term, the Transportation Improvement Program (TIP), the primary implementation vehicle for *SmartMoves*, addresses the most pressing needs identified in the long range plan, with a prioritized list of roadway, bridge, bicycle, pedestrian, transit and other multimodal projects programmed for advancement over the next four years.

In 2019, SPC and its planning partners advanced \$544 million for transportation improvement projects, guided by the region's 2019-2022 TIP. Thanks to efficient processing of transportation projects through SPC's Transportation Technical Committee, the region was able to capture an additional \$30.8 million in federal transportation funds during the year over what was originally programmed.

The 2019-2022 TIP outlines nearly \$1.7 billion in roadway and bridge related improvements and over \$2.1 billion in public transportation investments over four years. It will preserve, rehabilitate or replace over 260 bridges in Southwestern Pennsylvania and maintain hundreds of miles of roads. The program will also fund projects that improve safety, system reliability, and air quality; provide accommodations for pedestrians and bicyclists; and, maintain and enhance the region's public transportation systems.

Transportation Project Progress

A sample of TIP projects advanced in 2019:

Allegheny County & City of Pittsburgh:

- I-579 Cap Project
- Port Authority of Allegheny County: Bus Procurement/Fleet Replacement/Electric Bus Purchase
- SR 837 from 33rd Street to Smithfield Street Safety Improvements
- Kenmawr Bridge over Norfolk Southern RR Replacement
- US 22 from SR 48 to Westmoreland County Line Highway Restoration
- I-376 Above 2nd Avenue Wall Replacement
- Boulevard of the Allies from Bates Street to I-376 Ramp Highway Restoration
- West Ohio Street and Ridge Avenue Bridge Restoration
- PA 837/East Carson Street Reconstruction
- US 19/Washington Road from Washington County Line to McMurray Road Reconstruction
- SR 88 & SR 3004 Widening
- Brandt School Road Betterment
- PA 65/Spruce Run Road Bridge Preservation

Armstrong County:

- US 422 EB/WB Bridge Replacements over Pony Farm Road
- Stitts Run Bridge #1 Replacement
- T-763 West Hills Bridge Preservation
- Town and Country Transit: Wheelchair Accessible Buses/Facility Improvements

Beaver County:

- SR 18 7th Avenue & 7th Street Bridge Restoration
- SR 68 Midland Road Slide Correction
- SR 351/Crescent Drive/Fairlane Boulevard Resurfacing
- Beaver County Transit Authority: Expressway Travel Center Improvements/Bus & Shared Ride Van Delivery

Butler County:

- Butler Bypass Resurfacing
- SR 38 from SR 68 to SR 1002 Resurfacing
- SR 68 over Buffalo Creek Bridge Replacement
- PA 268 over Lowrey Run Bridge Replacement
- Butler Transit Authority: Renovated, ADA-Compliant Transit Terminal/New CNG Fueling Station/CNG Bus Delivery

Fayette County:

- Menallen Township Industrial Park Highway Restoration
- 2019 Emergency Slide Corrections
- PA 21 Fayette County Corridor Safety Improvements
- US 119 over Branch of Georges Creek Bridge Replacement
- Fayette Area Coordinated Transit: Bus Purchase

Greene County:

- SR 3016 over Mudlick Fork Bridge Improvements
- SR 3005 over Branch of Long Run Bridge Replacement
- Greene County: Transit Facility Improvements

Indiana County:

- SR 286/Oakland Avenue Widening and Improvements
- US 422 over Curry Run Bridge Replacement
- SR 1004 over US 119 NB/SB Bridge Replacement
- Armagh Bypass Preventative Maintenance and Resurfacing
- Philadelphia Street Bridges Group Bridge Replacement
- Indiana County Transit Authority: Facility Improvements

Lawrence County:

- Falls Street Bridge Preservation and Painting
- Mitchell Road Restoration
- Clover Land Bridge Replacement
- New Castle Area Transit Authority: CNG Buses/Mobile Lifts for Maintenance Facility

Washington County:

- SR 519 at SR 980 and I-79 Intersection Safety Improvements
- I-70: Tunnel Ridge Panel 15 Repairs
- 2019 Slide Repairs
- SR 2065 over Barneys Run Bridge Replacement
- Mid Mon Valley Transit Authority: CNG Buses/Bike Rack Installation
- Washington County (Freedom Transit): Bus Replacement

Westmoreland County:

- SR 906 Reconstruction
- SR 993/Third Street Slide Repairs
- SR 981 Traffic Signals – Latrobe
- US 30 Bypass Upgrades
- Westmoreland County Transit Authority: Bus Storage Facility

**In 2019, SPC
advanced more
than \$544 million
of TIP projects.**

Multimodal Transportation

In 2019, SPC's Multimodal Transportation Planning Group worked to advance the Regional Vision of *SmartMoves for a Changing Region* by focusing on planning projects and products that 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 robust planning 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 worked with our regional partners to develop integrated multimodal solutions that account for the needs of all transportation system users.

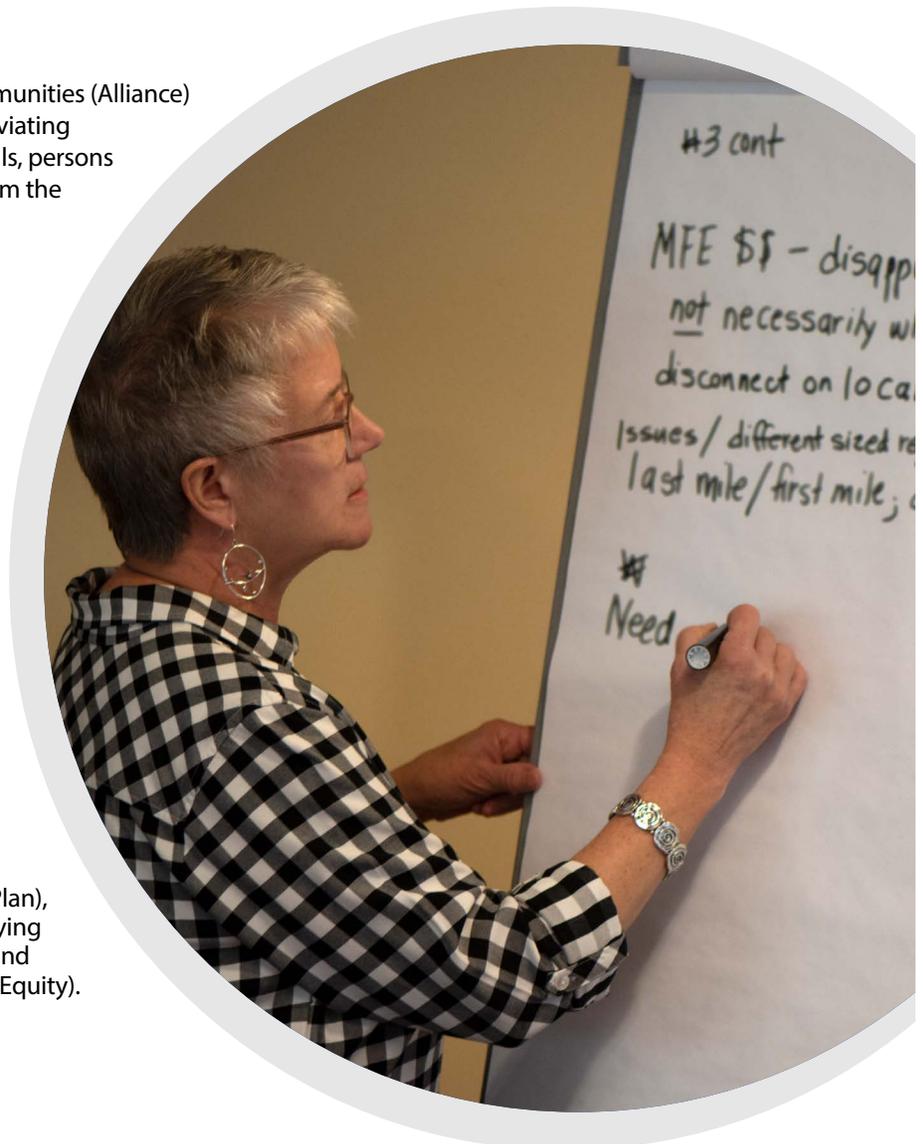


Access and Mobility

The Alliance for Transportation Working in Communities (Alliance) is an SPC program that focuses its efforts on alleviating transportation barriers for low-income individuals, persons with disabilities, older adults and others for whom the lack of transportation options is a key issue.

2019 Highlights

- Engaged Alliance participants in the development of the 2019-2022 Southwestern Pennsylvania Public Transit - Human Services Coordinated Transportation Plan (CTP), which is a supplemental document for the region's recently adopted long range plan, *SmartMoves for a Changing Region*.
- Coordinated the formation of special working groups – Multimodal Transportation Network, Seamless Travel Chains, Urban, Suburban, and Rural Environments, and Anyone, Regardless of Ability or Income – and assigned group leaders to direct several work sessions to discuss topics important to the individual groups and compile valuable transportation improvement ideas for inclusion in the CTP.
- Provided technical assistance to Mid Mon Valley Transit Authority (Strategic Business Plan), PHA Transportation Subcommittee (Simplifying Transportation to Medical Appointments), and Pittsburghers for Public Transit (Transit Fare Equity).



Public Transit Planning

SPC works with all the sponsors of transit projects in the ten-county region to provide technical and planning assistance in order to maximize service efficiencies; implement innovative projects; and, help provide viable transportation options for all the people in the Southwestern Pennsylvania region.

2019 Highlights

- Completed the SPC Travel Demand Management (TDM) Strategic Action Plan.
- Began development of a regional transit planning project as directed by the long range plan. *SmartMoves Connections: A Regional Vision for Public Transit* will be completed by mid-2020.
- 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 data and other technical assistance for the EPA/Port Authority of Allegheny County TEAM pilot study of fixed guideway analysis and planning tools.
- Provided technical assistance to the region's operators of public transit for the following activities:
 - Assisted agencies in adoption of General Transit Feed Specification mapping standard
 - PennDOT Connects training and implementation
 - Management of the \$2.5 billion Title III (transit) TIP
 - Implementation of the local process for the Urbanized Area's FTA Formula assistance program

Active Transportation Planning

2019 Highlights

- In 2019, SPC adopted the region's first Active Transportation Plan and launched the companion web-based toolkit known as the Active Transportation Resource Center (atrc-spc.org).

Facilitated four Active Transportation Forums and programmed capacity-building presentations to help county and local governments and community stakeholders stay abreast of current issues and topics related to active transportation and healthy communities.

Complete Streets

2019 Highlights

- Through the Safe Streets, Smart Cities Academy, Smart Growth America worked with three cities around the country to implement temporary safety demonstration projects. The City of Pittsburgh was one of the selected cities and staff participated in the Academy as a member of the city's team.
 - Provided technical assistance and mapping; created a web map that included bicycle and pedestrian crash data and demographic factors to help identify who was most impacted by traffic safety in the city.

Served on the City of Pittsburgh's Complete Streets Advisory Committee; reviewed and provided input on the city's draft pedestrian safety action plan and a draft bike network map for the city's new bike plan.

Technical Assistance

2019 Highlights

- Provided technical assistance to member counties, municipal governments and community stakeholders within the region.
- Developed an educational guide: Understanding Bike Signs, Symbols and Pavement Markings.

Pedestrian and Bicycle Data Collection

2019 Highlights

- Collected bicycle counts at four locations:
 - Armstrong Trail/Ford City
 - Butler-Freeport Community Trail/Cabot
 - Panhandle Trail/Primrose Trailhead
 - Panhandle Trail/Burgettstown





The CommuteInfo® Program

The CommuteInfo program is the regional customer-focused full service commuting options resource center, running the region's vanpool, carpool and bikepool programs, and facilitating the forum for coordinating regional ridesharing efforts.

CommuteInfo helps contribute to enhancing the overall environmental and economic sustainability of our region by helping regional commuters choose a more sustainable commute while connecting with jobs, school and life.

Over 1,100 commuters a day from all 10 of SPC's member counties ride in a CommuteInfo van or registered carpool. With CommuteInfo, employees have wider access to jobs and employers have access to a larger labor market.

To support the regional carpool and vanpool program, CommuteInfo offers ridematching and emergency ride home services; provides information for commuters and employers about the benefits of ridesharing, transit, biking, and walking options; and publishes the regional park-n-ride inventory on its website: www.CommuteInfo.org.

2019 Highlights

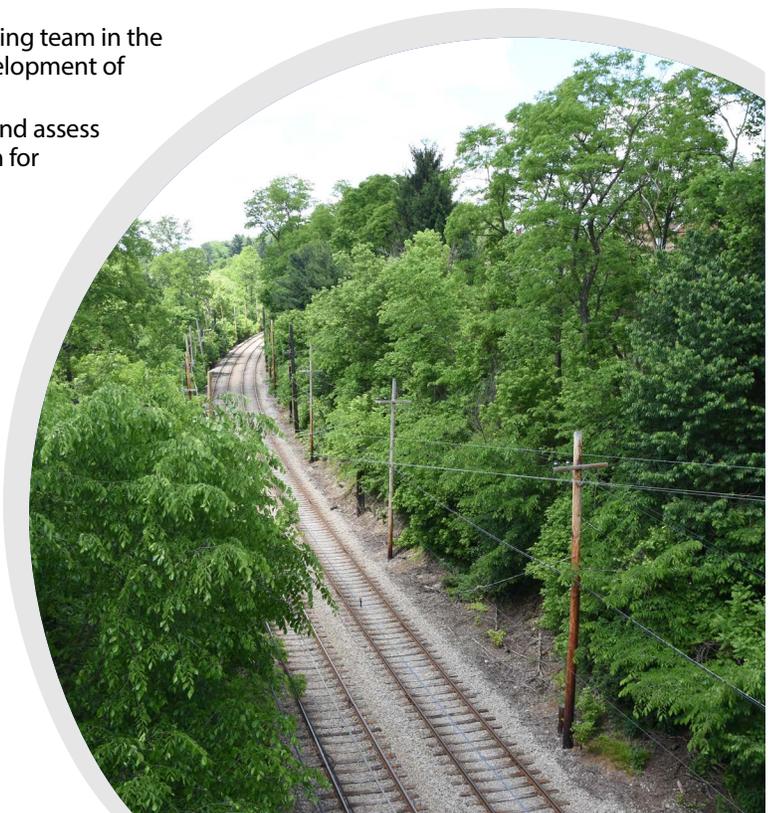
- The region's first Regional Transportation Demand Management (TDM) Strategic Action Plan was adopted by SPC in December 2019. The planning process brought together stakeholders from across the region to implement FHWA guidance on how to integrate TDM into the region's transportation planning processes.
- Conducted Transportation 101 sessions in Washington and Westmoreland Counties. The purpose of these sessions was to educate and engage local stakeholders on public transit and ridesharing options in their communities.
- Provided commuter options support for over 400 worksites in the SPC region.
- Continued an extensive multimedia advertising campaign of commuter options offered through SPC's CommuteInfo program.

Regional Freight Planning

SPC's Regional Freight program identifies project needs and strategic planning efforts that are completed collaboratively with local, regional, state and multi-state partners. SPC also works with industry groups and transportation service provider in the rail, barge and air cargo arena, as well as the commercial vehicles that use our highway network to move goods into and through our region.

2019 Highlights

- Collaborated with the PennDOT multimodal freight planning team in the creation of the (first in the nation) Guidebook for the Development of Regional Freight Plans.
- Hosted the FHWA's Truck Parking Roundtable to identify and assess regional truck parking needs, and develop a strategic plan for truck parking.
- Shared the results of the Southwestern PA Truck Parking Roundtable with a multi-state audience at the Ohio Conference on Freight.
- Worked collaboratively with the river port and terminal operators on the operations challenges facing the northern reaches of the Ohio River System, including the International River and Ports Association, the University of Tennessee-Knoxville University Transportation Center, the Ports of Cincinnati and Columbiana County, and the regional planning commission in Morgantown, WV.
- Provided guidance to Pennsylvania Bureau of Rail Freight staff on the allocation of State Rail Freight Assistance Program and Rail Freight Technical Assistance Program funds within the SPC region.
- Worked with mega-data provider StreetLight to use their traffic volume/flow assessment capabilities in the assessment of movements into and out of regional truck parking facilities to incorporate freight routing preferences into regional project need assessments.



Operations & Congestion Management

In 2019, SPC completed an update of the Regional Operations Plan. Through data analysis and stakeholder input, a list of the region's transportation needs and operation issues was developed. The 2019 Regional Operations Plan includes over 60 proposed projects, studies and initiatives that were developed with our steering and stakeholder groups.

Staff collects and analyzes data for over 100 congested corridors in our region as part of our Congestion Management Process (CMP). In 2019, SPC updated its CMP web pages with 2018 data that included information on travel times planning times, and federal congestion metrics for congested corridors in our region.

In 2019, SPC also completed the State Route 885/Second Avenue Multimodal Corridor Study at the request of the City of Pittsburgh and PennDOT. The Second Avenue corridor within the City of Pittsburgh is projected to experience higher economic growth activities in the future due to its proximity to sites such as Hazelwood Green, Southside Works, the Homestead Waterfront, Century III Mall and Carrie Furnace. This study provides short, medium and long term multimodal improvement recommendations for the Second Avenue corridor.

Regional Traffic Signal Program/Intelligent Transportation Systems Initiatives

- With the pending completion of the third funding cycle of the Regional Traffic Signal Program in 2019, over \$12 million has been invested to improve 577 signalized intersections across 70 municipalities in our region since 2008. The benefits of this program help to create more sustainable infrastructure and a more livable region.
- SPC has now commenced the fourth cycle of this program with proposed projects across 15 corridors in Allegheny, Beaver, Lawrence, Westmoreland, Butler and Armstrong Counties.
- SPC continued to coordinate and maintain the regional ITS Architecture.
- Staff continues to monitor and bring awareness to funding opportunities for ITS through FHWA's Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) program. Staff is participating in the concept of operations development for the SmartPGH project with the City of Pittsburgh and PennDOT. SmartPGH is a project funded by the ATCMTD program.



Rendering from the State Route 885/Second Avenue Multimodal Corridor Study

Transportation Safety

In cooperation with and per the request of local municipalities, counties and PennDOT, SPC organized and conducted three Road Safety Audits (RSAs) in 2019:

- Baum Boulevard (PA 380) and Centre Avenue from South Negley Avenue to Highland Avenue, City of Pittsburgh, Allegheny County
- Irwin-Herminie Road from Center Highway to 4th Street, North Huntingdon and Sewickley Townships, Westmoreland County
- Wayne Avenue/South 7th Street, Indiana Borough and White Township, Indiana County

**In 2019,
SPC led TIM
training for
over 600 City
of Pittsburgh
firefighters**

SPC staff continues to monitor progress toward achieving the previously adopted safety performance targets. SPC has adopted the statewide performance target established by PennDOT of 2% reduction per year across all five safety performance measures for the first federal reporting period.

SPC continued its Traffic Incident Management (TIM) Initiatives in 2019 by:

- Leading and coordinating TIM training for over 600 City of Pittsburgh firefighters
- Coordination of 7 local TIM team meetings and development of 4 TIM funding newsletters

Transportation & Community Funding Programs

Transportation & Community Funding Programs

These programs apply funding for projects that provide travel options and enhance the safety and operations of our existing transportation system. These investments, in turn, better our communities and help to attract and retain businesses in the region. Creating accessible, unique communities with equitable transportation options is the cornerstone of *SmartMoves for a Changing Region*.

Clearing the Air: CMAQ

The federal Congestion Mitigation and Air Quality Program (CMAQ) provides funds for 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). A sample of projects with funding through the CMAQ Program in the 2021-2024 TIP includes:

- I-376 Banksville Interchange and Active Traffic Management
- Downtown Pittsburgh to Oakland BRT (signals, lane delineation and intersection improvements)
- Traffic Signal System Upgrades in several major corridors within the region
- Corridor Improvements on Routes 68 and 356 in Butler County
- Allegheny River Green Boulevard
- I-79/SR 910 Interchange Improvements
- Transportation Demand Management Program in the City of Pittsburgh
- 250 electric assist bicycles for Healthy Ride
- Bus Replacements for Mid Mon Valley Transit Authority
- Liberty Bridge 5 lane conversion



Community Reinvestment: SMART Program

SPC's Livability through Smart Transportation Program (SMART) provides funds to encourage collaborative projects that link multimodal transportation investments with land use planning to create transportation facilities that are safe and sustainable, responsive to the needs of all users and supportive of community planning goals. The program is designed to provide multimodal connections and community livability. A sample of projects with funding through the SMART Program in the 2021-2024 TIP includes:

- Westmoreland Heritage Trail to Great Allegheny Passage Trail Connector Study
- Monaca Gateway Project
- Sylvan Avenue Multimodal Path
- PA 68 Corridor Improvements
- Beaver Falls Road Diet - SR 18, 7th Avenue
- US 119 Youngwood Reconstruction
- Greensburg Health Care District and Neighborhood Trail Connection

Improving Mobility and Accessibility: Transportation Alternatives Set-Aside Program

The regional Transportation Alternatives Set-Aside Program (TA Set-Aside) provides funds for non-highway and bridge transportation projects that enhance the transportation system, increase mode choice and mitigate transportation-related environmental impacts. The region's priority for TA Set-Aside is to enhance mobility, accessibility, and safety for pedestrians and bicyclists, and secondarily, to mitigate transportation-related stormwater impacts. TA Set-Aside projects in the 2021-2024 TIP include:

- South 21st Street Complete Green Street
- South Hills Junction T Station Pedestrian Improvements
- Three Rivers Heritage Trail - Brackenridge Section
- Route 18 Betterment
- Hoodlebug Trail - Mile Hill Section
- Allegheny T Station Bicycle Lockers

Environmental Linkages

Transportation Planning and Environmental Linkage Program

2019 Highlights

- SPC developed a Regional Ecosystem Framework GIS model that quantitatively identifies concentrations of sensitive natural resources throughout the region. This analysis tool will be used by SPC and member planning entities, to assess the environmental resources involvement of future infrastructure projects.
- SPC consulted with numerous federal and state natural and cultural resource agencies in the development of Planning and Environmental Linkage aspects of *SmartMoves for a Changing Region* resulting in the completion of a Planning and Environmental Linkage (PEL) Addendum to the plan.
- The PEL work associated with the plan used several regional planning tools:
 - Regional ecosystem framework model
 - Wetland mitigation suitability planning tool
 - Mapping of relevant resiliency elements

2021-2024 Transportation Improvement Program (TIP)

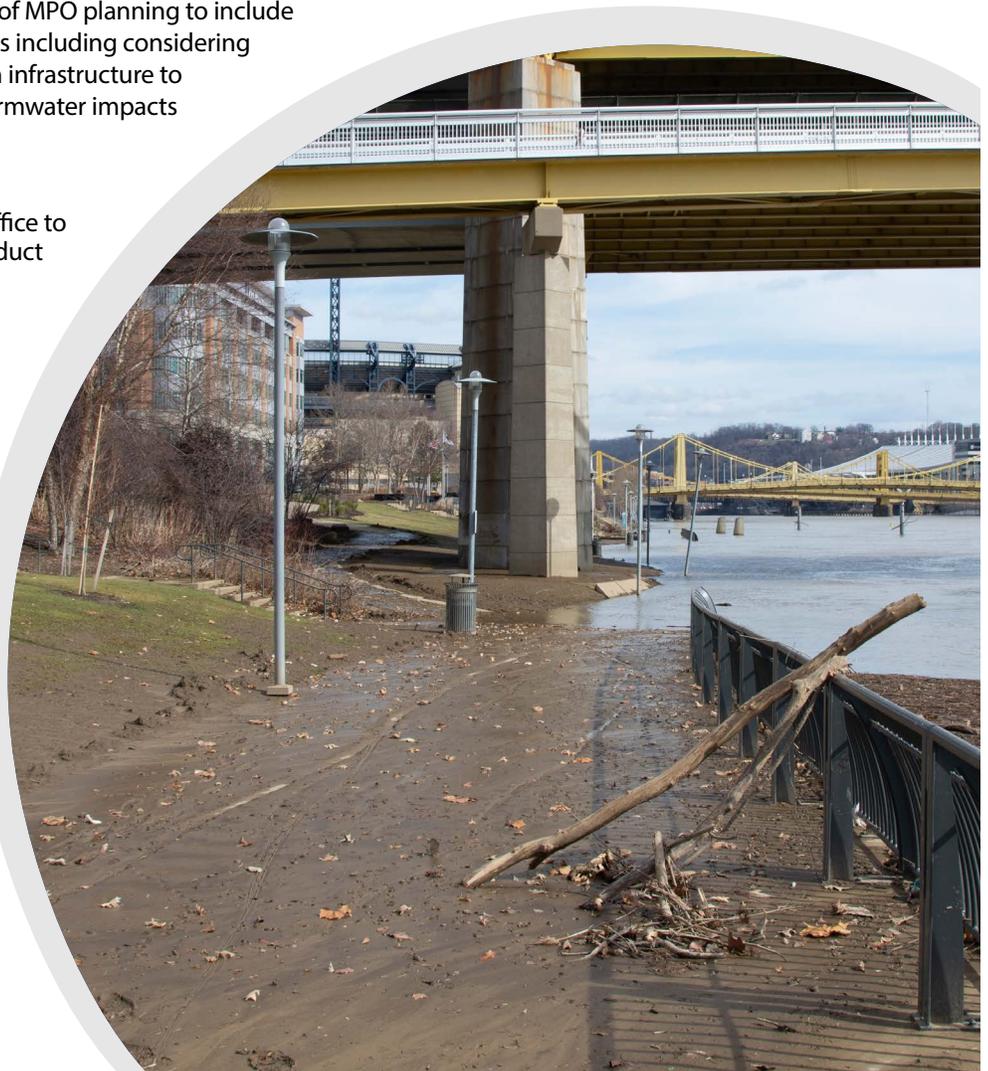
- New technological planning tools were developed including an interactive map of all TIP candidate projects with contextual layers tied to key *SmartMoves* strategies.
- Processed the screening and documentation of over 200 candidate projects for the 2021-2024 TIP.

Transportation Resiliency Planning Program

The federal FAST Act expanded the scope of MPO planning to include system resiliency of transportation systems including considering the vulnerability of existing transportation infrastructure to natural disasters and the mitigation of stormwater impacts on transportation.

2019 Highlights

- SPC worked with PennDOT Central Office to advance the grant from FHWA to conduct expanded hydrologic and hydraulic assessments on several bridges in Pennsylvania, including one in Allegheny County.
- Development of *SmartMoves* strategies in the area of resiliency.
- Mapping of relevant resiliency elements as part of the PEL activities of the plan development.
- SPC advanced development of a regional landslide model. SPC presented at the University of Pittsburgh, Swanson School of Engineering, Center for Sustainable Transportation Infrastructure Annual Forum in March and the University of Pittsburgh IRISE Landslide Workshop in August.



Transportation Data

The wide range of data resources readily available through SPC helps to advance many projects, programs and plans. In 2019, SPC responded to over 100 data requests. SPC provided technical assistance to local transit operators for developing Title VI reports; data to partner agencies for the completion of grant applications; population and employment projections for municipal master plans; and data and technical assistance for local traffic studies. By providing data and technical assistance, SPC helps its member governments and planning partners to save money on local projects.

SPC's online Data Library provides numerous data summaries to the public, member governments, planning partners, transportation consultants and academic researchers. New and updated data summaries, custom maps and charts, and other infographics are continually added to the Data Library. "Spotlight" projects showcase available data, including ESRI Story Maps and interactive Tableau dashboards to enhance the display of data. The latest Tableau dashboards provide a comparison of two sets of 5-year American Community Survey (ACS) estimates using 2009-2013 ACS and 2014-2018 ACS data.

In 2019, SPC developed a new cycle (Cycle 11) of population, household and employment forecasts for the SPC region to support the development of *SmartMoves for a Changing Region* that was adopted in June 2019.

SPC has continued to expand capacity for analysis of "big data" (INRIX, NPMRDS, StreetLight InSight) for use in the federal transportation performance management process as well as for project-level analysis. The StreetLight InSight data continues to be used regularly as a resource for several transportation projects. SPC developed an interactive ArcGIS Online "Communities of Concern" map for SPC's Safe Streets, Smart Cities Academy demonstration project in partnership with the City of Pittsburgh's Department of Mobility and Infrastructure. The Safe Streets, Smart Cities Academy is an initiative of the National Complete Streets Coalition and Smart Growth America.

Regional Park-n-Ride Facilities

SPC maintains an inventory of the region's park-n-ride facilities on the CommuteInfo website that contains detailed information for each of the more than 110 park-n-ride facilities located in the SPC region. The inventory includes facility location, parking spaces, ownership information, any applicable parking fees, links to area public transit service provider(s), the individual transit routes serving the facility and listings of amenities.

SPC's park-n-ride facilities web inventory is a well-used resource for the region's commuters.

Data about each park-n-ride facility is updated through regular field visits and coordination with the region's transit operators and PennDOT. In 2019, field visits were conducted at 64 park-n-ride facilities. The inventory was also updated to add three new park-n-ride facilities, relocate one park-n-ride facility, remove one park-n-ride facility due to permanent closure, and to mark seven park-n-ride facilities as temporarily closed due to nearby construction activity and other events.





Census Day is APRIL 1, 2020

Less than one year out until the 2020 Census Day. Make your community count!

Data Partnerships

SPC is a longtime 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. SPC is responsible for the local dissemination of Census data. Data analysis, technical assistance and consultation services are also provided.

In 2019, SPC continued to assist the U.S. Census Bureau with activities related to the Local Update of Census Addresses (LUCA) Program in preparation for the 2020 Census. Feedback was received from the U.S. Census Bureau regarding the extensive LUCA reviews that SPC completed in 2018 on behalf of the following counties: Armstrong, Butler, Fayette, Greene and Westmoreland. The U.S. Census Bureau approved 22,400 address updates proposed by SPC.

SPC is the designated reporting entity for the SPC region for the 2020 Census Participant Statistical Areas Program (PSAP). In 2019, staff performed extensive PSAP reviews of the census tracts and block groups in the SPC region. Member counties and the City of Pittsburgh were invited to participate in the PSAP reviews. Staff coordinated with participating entities as needed throughout the review period. SPC was responsible for submitting all of the PSAP updates for counties in the SPC region to the U.S. Census Bureau.

SPC is also assisting the U.S. Census Bureau with activities related to the Complete Count Committee (CCC) Program for the 2020 Census. The CCC Program is intended to develop local partnerships to educate and motivate residents to participate in the 2020 Census. Staff coordinates with member counties and the City of Pittsburgh to provide support and share resource materials regarding this program, as well as assisting with enhancing regional awareness of the 2020 Census.

Census 101: What you need to know

Everyone counts.

The census counts every person living in the U.S. once, only once, and in the right place.



It's about redistricting.

After each census, state officials use the results to redraw the boundaries of their congressional and state legislative districts, adapting to population shifts.



Your data is confidential.

Federal law protects your responses. You are used to protect your community. By law we can't share information without your permission. Enforcement is strict to ensure your information is used only for the purposes for which it was collected.

It means \$675 billion.



It's in the Constitution.

The U.S. Constitution requires a census every 10 years. The census covers the entire country and everyone living here. The first census was in 1790.



2020 is easier.

In 2020, you'll be able to respond to the census online.



SPC continues to foster its data partnerships with local universities. SPC has ongoing data sharing agreements with the University of Pittsburgh's Center for Urban and Social Research (UCSUR) and their Western Pennsylvania Regional Data Center (WPRDC), Carnegie Mellon University (CMU) and their Transportation Data Analytics Center, and the University of Pittsburgh and their Center for Sustainable Transportation Infrastructure.

Transportation Modeling

SPC's travel models provide data and analysis to help the region prepare effective transportation plans, manage congestion and meet air quality standards. SPC provides technical assistance to its members and partner agencies to develop traffic forecasts and air quality assessments for key transportation and economic development improvements throughout the region.

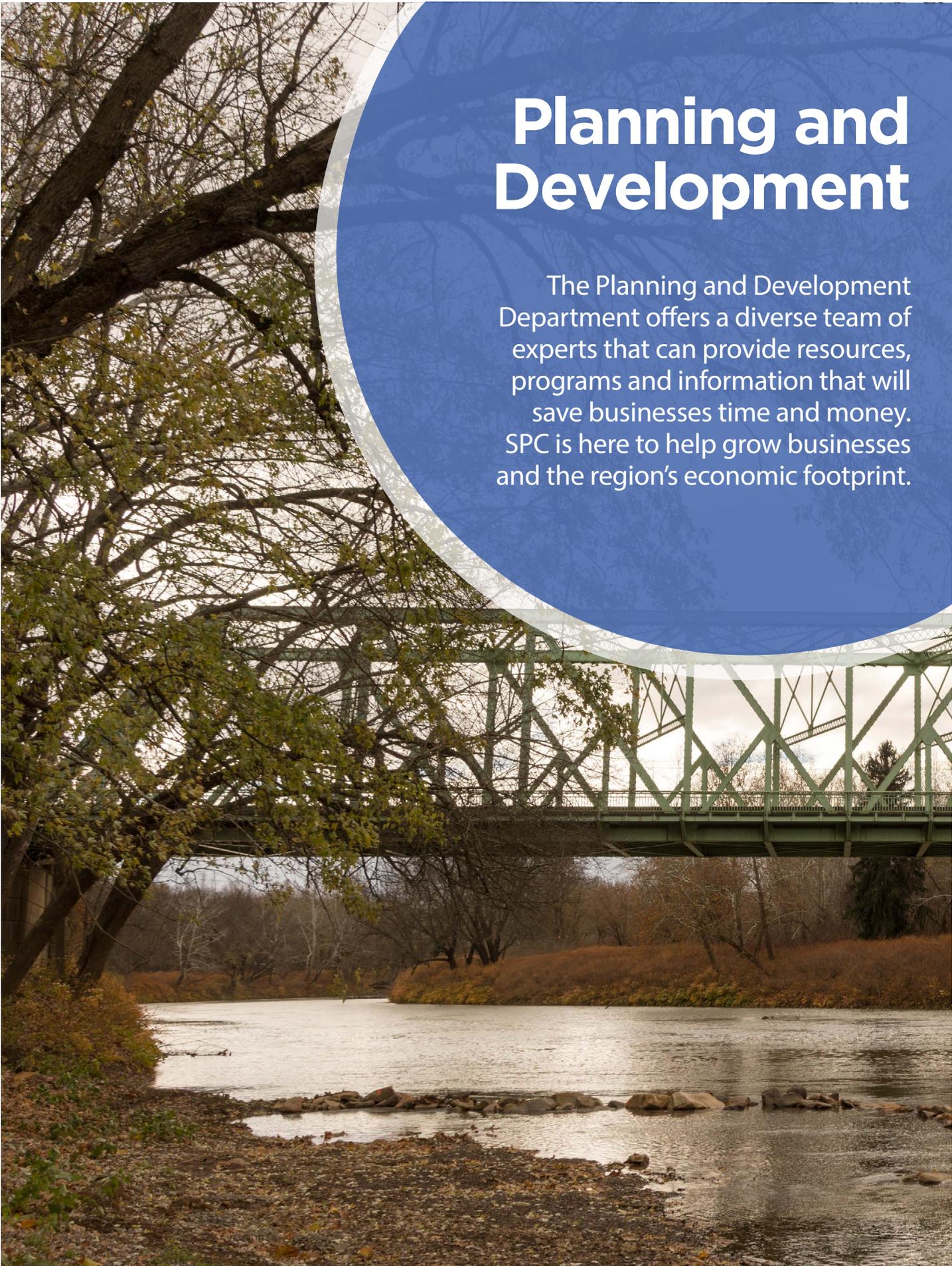
SPC's travel model was the basis for the federally-required air quality conformity assessments prepared in support of *SmartMoves for a Changing Region*. That assessment confirmed that SPC's adopted plans and programs will continue to contribute to improving air quality in the region.

Staff received and responded to over 130 requests from planning partners and their consultant teams for travel projections and traffic growth factors for ongoing highway, transit and development projects in 2019, including:

- Travel demand analysis for the proposed Downtown-Oakland-East End Bus Rapid Transit (BRT) project.
- Travel characteristics and greenhouse gas emissions from trips to and from Oakland in support of baseline emissions analysis by the Green Building Alliance of the Oakland 2030 District.
- Travel projections for the Banksville Road/Parkway West Interchange Reconstruction project.
- Data and analysis supporting a federal INFRA grant application prepared by Butler County for Freedom Road improvements through Cranberry and Adams Townships.
- Support to PaDEP and multiple local municipalities to develop and use estimates of vehicle miles traveled to calculate greenhouse gas emissions from the transportation sector in each of the municipalities.
- Provided regional data and analysis to the Columbus and Cleveland Ohio MPOs in support of studies of proposed Hyperloop systems between Chicago and Pittsburgh through Cleveland and Columbus.

EPA selected SPC, in partnership with the Port Authority of Allegheny County, to participate in a technical assistance project to demonstrate the capability of several sketch planning techniques to estimate the air quality impacts of enhancements to the transportation system. SPC and PAAC defined several scenarios to test a range of transportation and development strategies in the corridor between downtown Pittsburgh and the Pittsburgh International Airport.





Planning and Development

The Planning and Development Department offers a diverse team of experts that can provide resources, programs and information that will save businesses time and money. SPC is here to help grow businesses and the region's economic footprint.

Introduction

Planning & Development

SPC members promote regionally integrated, cooperative planning and development for communities throughout Southwestern Pennsylvania.

SPC combines management of community assistance, financial assistance, export assistance, government procurement assistance and special enterprise development activities with delivery of other state and federal programs to enhance our region's competitiveness in national and global markets.

State and Federal Partnerships

SPC is designated by the U.S. Appalachian Regional Commission (ARC) as the Local Development District (LDD) and by the U.S. Department of Commerce, Economic Development Administration (EDA) as the Economic Development District (EDD) for Southwestern Pennsylvania. SPC members play a lead role in identifying priority needs of local communities by working to foster economic development, to target and meet the most pressing needs, and to build community cohesion and leadership.

As the region's LDD, SPC members work together through the Area Development Program to advance a wide range of projects, including education and workforce training programs; Appalachian Development Highway System Program projects and industrial access improvements; water and sewer system construction; leadership development programs; and, development of healthcare resources to meet the Area Development goals.

SPC works with its members and organizations throughout the region to identify projects for ARC and EDA funding programs. In 2019, SPC submitted the following pre-application projects for funding consideration: the Dunkard Valley Water System Reconstruction (Greene), Windy Ridge Business & Technology Park (Indiana), Joseph A. Hardy Connellsville Airport Hangar Development Phase 2 (Fayette), and the Farm Youth Agricultural Entrepreneurship Program and Educational Center (Washington) to the Commission for submission to the Commonwealth and ARC.

Partners for Regional Economic Performance (PREP)

SPC is the designated PREP Coordinator for the Southwestern PA region. PREP is a Commonwealth initiative that encourages regional coordination in economic development efforts as a service to the business community. The PREP program is designed to integrate the delivery system historically served by the following core service providers: the county Economic Development Organizations (EDOs), Local Development Districts (LDDs) and Small Business Development Centers (SBDCs).

In 2019, this regional partnership served over 1,800 clients in over 7,800 separate counseling sessions. This resulted in over \$105 million in increased sales, over 920 jobs created and over 3,000 retained.



Engage!

SPC is continuing the Engage! Program, which is a statewide business retention and expansion (BRE) program designed to regularly and proactively interact with targeted companies. SPC serves as the regional coordinator for Southwestern Pennsylvania. Over the past 12 months, the region has Engaged with over 250 companies, completed 38 business walks and developed over 168 separate Action Plans that resulted in 37 Referrals to Partners.

Small Business Finance Assistance

In 2019, SPC approved nine loans totaling \$1,690,000. These loans have leveraged over \$3.2 million in private money financing. The small businesses that benefited from our loan programs retained over 100 full time jobs and have committed to creating another 18 new jobs.

SPC maintains strong relationships with local private financial institutions, Small Business Development Centers and community-based economic development entities to create comprehensive loan packages that enable small businesses to meet their financing needs with low-interest loans. During 2019, SPC's Business Finance Assistance staff met with over 100 lenders, potential and existing clients, and partner economic development organizations to educate them on our loan programs.

The Small Business Finance program enjoys continued success with its first Loan Servicing Client, Catalyst Connection. This servicing relationship has generated over \$10,000 in fee revenue. SPC's Business Finance Assistance portfolio currently stands at \$5.6 million and growing.



Government Procurement

SPC's Government Procurement Assistance program helps hundreds of companies in the region with their efforts to market to and contract with federal, state and local government agencies. SPC provides one-on-one counseling and training with an emphasis on small businesses with minority, female or service-disabled veteran owners to help facilitate their participation in the government marketplace. SPC shares a Department of Defense (DOD) Cooperative Agreement Grant with Indiana University of Pennsylvania that enables maximum effectiveness with limited resources.

Benefits to the region in 2019:

- Counselors participated in over 190 business counseling sessions with 150 companies.
- Client businesses won government contracts with a value of over \$25 million.
- Counselors attended 24 separate government contracting related events, and at 11 of those events, SPC's Government Procurement staff presented on the program's benefits to the small business community, or other government contracting related topics.

Local Technical Assistance Program

In 2019, SPC again partnered with PennDOT and Pennsylvania State Association of Township Supervisors (PSATS) to administer the region's Local Technical Assistance Program (LTAP), which assists our local municipalities by offering training programs and technical assistance.

In 2019, SPC renewed a focus on the City of Pittsburgh's maintenance and road/street safety needs with 6 different classes attended by over 100 employees. The region was also the first to host the new Active Transportation course, which is a target topic for both SPC and LTAP.

SPC coordinated LTAP courses with similar educational programs being offered by SPC's Water Resource Center. SPC held 14 LTAP courses in 2019 in 6 municipalities in 3 counties, and over 200 participants took advantage of the program this year, including several first-time attendees.



Export Development

The goal of SPC's Export Development program is to provide assistance and create opportunities for Southwestern Pennsylvania companies to expand their business internationally, thereby increasing export sales and employment prospects in the region.

SPC's Export Development staff offers consultative services to small- and mid-sized businesses located throughout Southwestern Pennsylvania. SPC's Export Development Program also sponsors and co-sponsors educational seminars and training programs designed for exporters and potential exporters in the region.

2019 Highlights

- Assisted with the exporting needs of 70 companies, which generated 111 projects.
- Connected with 22 new clients interested in exporting.
- 14 companies reported export sales totaling \$35 million as a result from the assistance received.

In September, SPC's Export Development team hosted the annual "Bringing the World to PA" event with the Pennsylvania Overseas Authorized Trade Representatives and scheduled 153 meetings with local companies to discuss new and existing projects.



Keystone Opportunity Zones

SPC serves as the regional coordinator of the Commonwealth's Keystone Opportunity Zone (KOZ) program. This innovative economic development program encourages development in underutilized land and buildings by providing tax benefits to business and property owners who locate within the designated areas. Businesses must apply annually to receive the tax abatement benefits under the KOZ program and must be in compliance with all state and local tax laws and building code provisions.

2019 Highlights

- 3 new businesses located in regional KOZ sites
- 2,397 jobs were created
- 1,939 jobs were retained
- 118 applications were received
- Over \$306 million in public and private capital was invested in KOZ sites

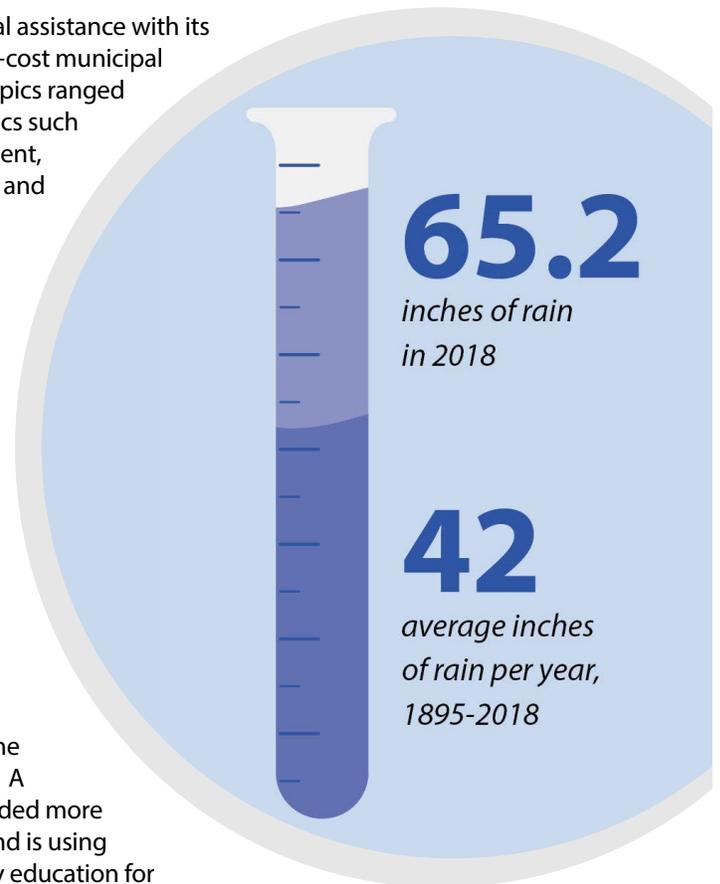
Water Resource Center

SPC's Water Resource Center (WRC) continued its regional municipal assistance with its award-winning educational workshop program in 2019. Twelve no-cost municipal workshops were offered with a total of 358 attendees. Workshop topics ranged from MS4 requirements, flooding and floodplain management topics such as the National Flood Insurance Program (NFIP) and code enforcement, public engagement for large municipal projects, grant applications and assisting DEP with drinking water loss management.

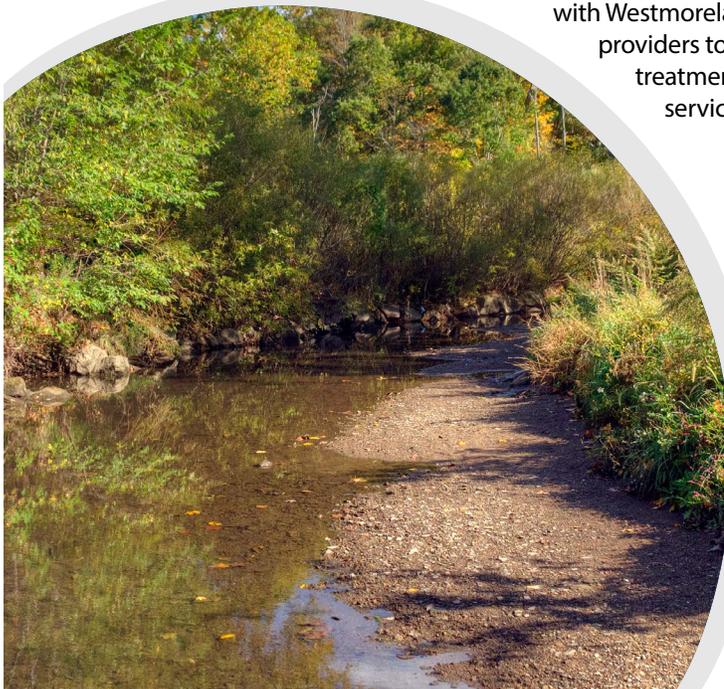
In addition to the educational workshops, the WRC developed infographics and technical fact sheets on Flooding in Southwestern PA to help the region's municipalities navigate the complexities of the National Flood Insurance Program (NFIP), Community Rating System (CRS), Resources for Municipal Staff and Funding Sources for Mitigation and Cleanup.

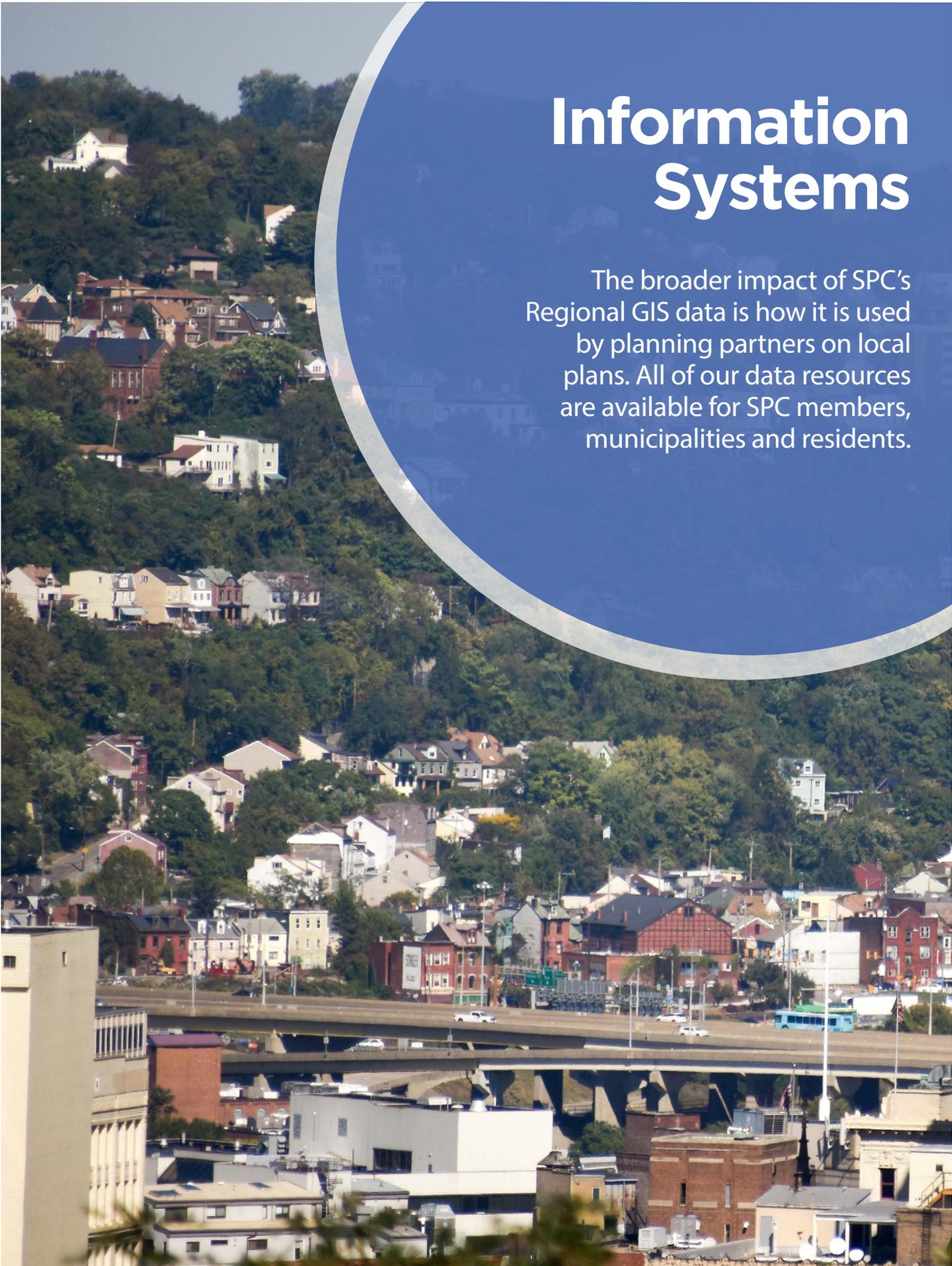
Keystone Communities Program Grant

In 2019, the WRC also worked on the Keystone Communities Program grant with the seven Local Development Districts across the state. The Pennsylvania Department of Community and Economic Development awarded \$350,000 and \$227,000 to SPC for the LDDAP Stormwater Mitigation and Resiliency Project for Phase I and Phase II, respectively. The goal of the projects is to assess the impact and develop local responses across the state to the implementation of the Biggert-Waters Flood Insurance Reform Act. A 1-year grant extension was approved in 2019 for the LDDs that needed more time to complete Phase I and II. SPC has completed Phase I and II and is using the information to create a replicable framework for flood resiliency education for communities in the Southwestern Pennsylvania region.



The WRC began a regional inventory of public sewer providers (municipal and authorities) in 2019. Existing regional data sources were compiled for each county, and starting with Westmoreland County, a survey was developed and sent to sewer providers to collect data about the provider, their financials, collection and treatment, plans and regulatory actions, future expansion and their service area.



An aerial photograph of a town built on a hillside. The houses are densely packed and vary in color, including red brick, white, and yellow. A multi-lane highway bridge with concrete pillars spans across the foreground. The sky is clear and blue. A large blue circular graphic is overlaid on the right side of the image, containing the title and text.

Information Systems

The broader impact of SPC's Regional GIS data is how it is used by planning partners on local plans. All of our data resources are available for SPC members, municipalities and residents.

Information Systems

Regional Data Supporting Projects at the Local Level

Projects at the federal, state, county and municipal levels across Southwestern Pennsylvania rely on SPC's data resources and technical assistance to move forward. From the comprehensive data layers within its regional GIS, to new applications that intersect and analyze different types of data representing the people, structures and environment of Southwestern Pennsylvania, SPC lent support and distributed data for numerous projects in 2019.

2019 Highlights

- SPC assisted county and local planning partners by developing corridor mapping for the SR 228 corridor in Butler County for an Infrastructure for Rebuilding America (INFRA) Grant Application.
- Corridor mapping along the SR 28 corridor from US 422 to I-80 in the counties of Armstrong and Clarion was developed to showcase vehicle and truck traffic, TIP and 12 Year Plan projects for this multi-county project that extends beyond the SPC region.
- SPC worked with Carnegie Mellon University staff from the Remaking Cities Institute in the Department of Architecture who are researching the SR 65 Corridor between Bellevue, Allegheny County and Rochester, Beaver County. The Institute is focused on the corridor's future as a multimodal highway and its design issues for autonomous vehicle use.
- SPC processed GIS data and imagery to support the development of a comprehensive plan for Penn Township, Westmoreland County. SPC's Regional GIS provided data covering the Township along with critical infrastructure in the surrounding areas in both Westmoreland and Allegheny Counties. In addition, a custom mosaic of aerial imagery from SPC was created to completely cover the project area.
- Officials from Franklin Township, Greene County asked SPC to work with consultant teams to provide accurate GIS data and imagery to aid in the development of the Township's comprehensive plan.
- SPC supplied data to the Audubon Society to assist with the 10-Year update of the Buffalo Creek Watershed Conservation Plan in Allegheny, Armstrong and Butler Counties. Data representing SPC's 2000, 2006 and 2016 Land Use/Land Cover Inventories were provided for each year by county along with additional GIS layers to calculate and depict changes in land cover within the watershed.

Regional Sidewalk Inventory

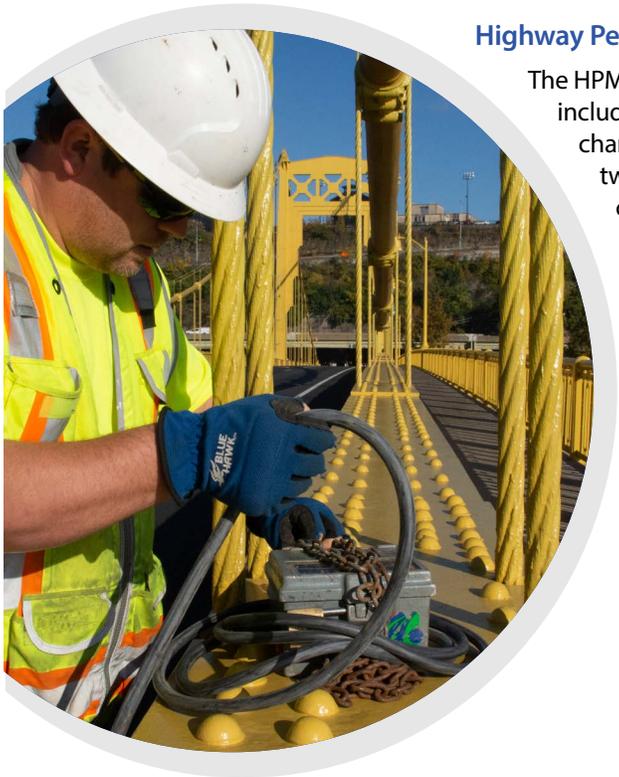
GIS staff created a regional sidewalk inventory consisting of sidewalks, steps, and crosswalks across communities in all 10 SPC counties. The data was collected and digitized using a variety of GIS tools, SPC's high-resolution aerial imagery, imagery from other state and federal programs and field views. SPC has digitized over 6,000 miles of sidewalk, 50 miles of steps and 560 miles of crosswalks.

This dataset has been shared with a number of municipalities, transit agencies, community groups and planning partners to assist local plans and projects and to better understand where the walking infrastructure is in their respective communities.

The data has also been used to support the development of the regional Active Transportation and *SmartMoves Connections* plans and to assist the Airport Corridor Transportation Association (ACTA), a non-profit transportation management association (TMA) and SPC planning partner, with a Multimodal Study in western Allegheny County.

SPC has digitized over 6,000 miles of sidewalk, 50 miles of steps and 560 miles of crosswalks.

HPMS

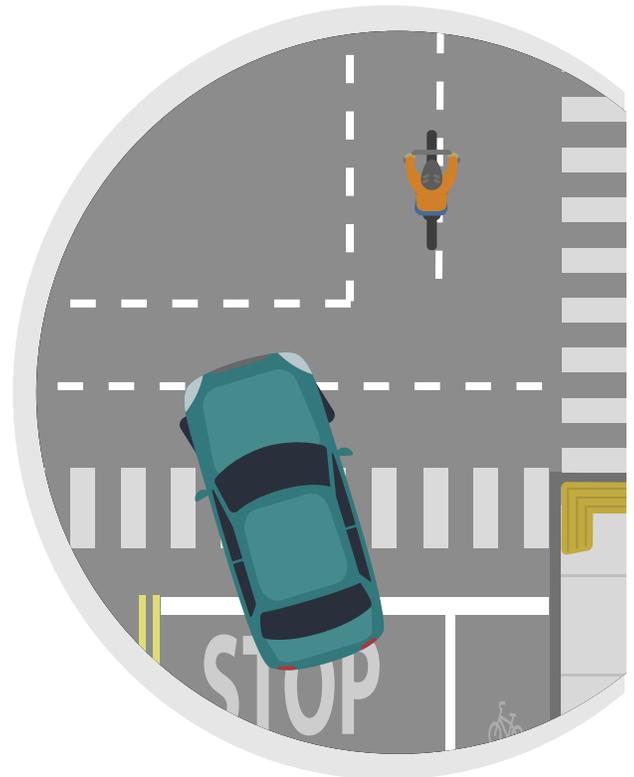


Highway Performance Monitoring System (HPMS)

The HPMS program is a national level highway information system that includes data on the extent, condition, performance, use and operating characteristics of the nation's highways. The HPMS program is defined by two parts, traffic counting and roadway inventory. As part of the traffic counting portion of HPMS, SPC completed 509 traffic counts across our ten-county region in 2019.

SPC also completed 147 counts for Allegheny County as part of a 3-year traffic counting program on their county-owned roadways.

Another part of HPMS is the roadway inventory portion. In 2019, SPC inventoried 552 sections of roadway throughout the region. This inventory includes the measurement and/or classification of shoulders, lanes and medians as well as noting the number of traffic signals, stop signs and widening obstacles.



Better Graphics for Better Outreach

SPC has redesigned outreach materials to aid in public outreach to provide timely and consistent information to members, local governments and the public.

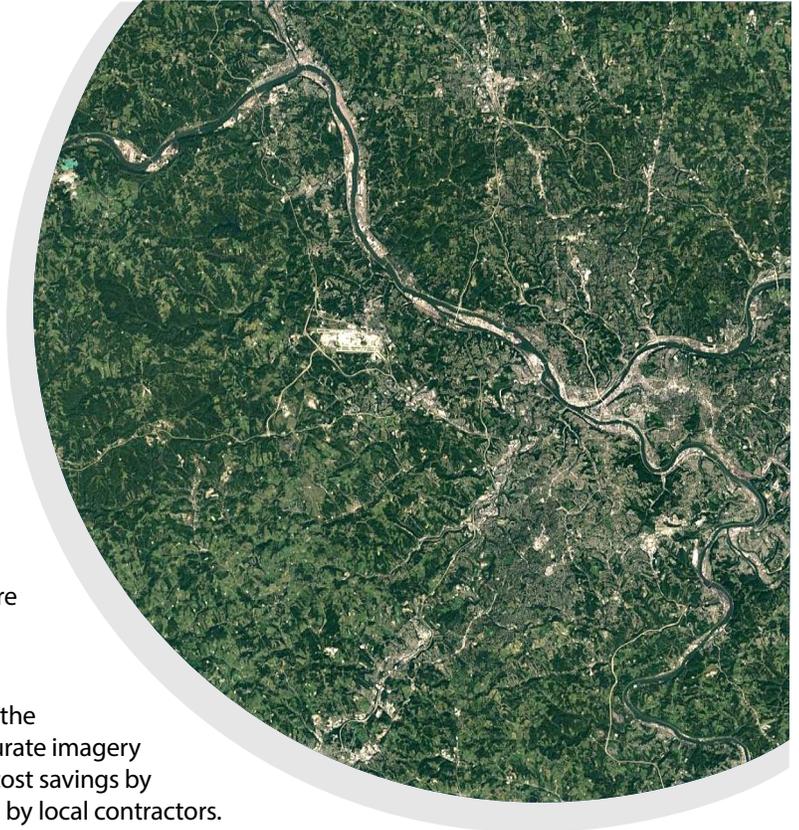
An example is SPC's Active Transportation informational book, *Understanding Bike Signs, Symbols and Pavement Markings*. This work includes a guide to understanding bike symbols, signs and pavement markings to help educate the public in recognizing these facilities in neighborhoods across the region and also to help commuters recognize where different modes of travel occupy the same streets and roads across our region.

Aerial Photography

Regional Imagery at the Local Level

SPC's Regional Aerial Photography program continues to aid local projects and programs across the region. The high-resolution color aerial photography and resultant digital orthophotographs for Southwestern Pennsylvania have been used to catalog the landscape and develop accurate mapping for a multitude of transportation and economic development projects at member counties and local municipalities. The high level of accuracy of the imagery combined with the near infrared band of light captured as part of the project has been used to catalog the natural environment and human infrastructure in GIS mapping programs housed at state, county and municipal partners.

An additional benefit is the availability of raw imagery from the project for traditional planimetric mapping. By sharing accurate imagery that has already been acquired, local projects benefit from cost savings by eliminating the need for aerial flights and detailed mapping by local contractors.



Local projects benefiting from the imagery were:

- The Pittsburgh Water & Sewer Authority (PWSA) used SPC's imagery to develop data representing impervious surfaces in their service area. Additional aero triangulation data from SPC's imagery was used as an aid to develop planimetric mapping representing built infrastructure.
- Raw aerial images for 1"=50' scale planimetric and 2' contour engineering design mapping for residential and commercial developments in Union Township, Washington County and in Jefferson Hills, Allegheny County.
- The imagery was utilized by the Borough of South Greensburg, Westmoreland County to map existing conditions and topography for designing a residential development, sanitary sewers, storm sewers and related appurtenances.
- Imagery was supplied to assist the Redevelopment Authority of the County of Washington, the Canonsburg Lake Save the Lake Committee, and the Washington County Conservation District for the development of a Lake Management Plan for Canonsburg Lake in Washington County.
- The Fawn Township, Allegheny County Board of Supervisors used imagery for the mapping of existing conditions and topography for a slide mitigation project and for public facilities planning.



Finance

The Finance Department's primary goal is to safeguard the agencies assets. It accomplishes this through overseeing all accounting, payroll, treasury, auditing, grant administration and HR activities.

Financial Narrative

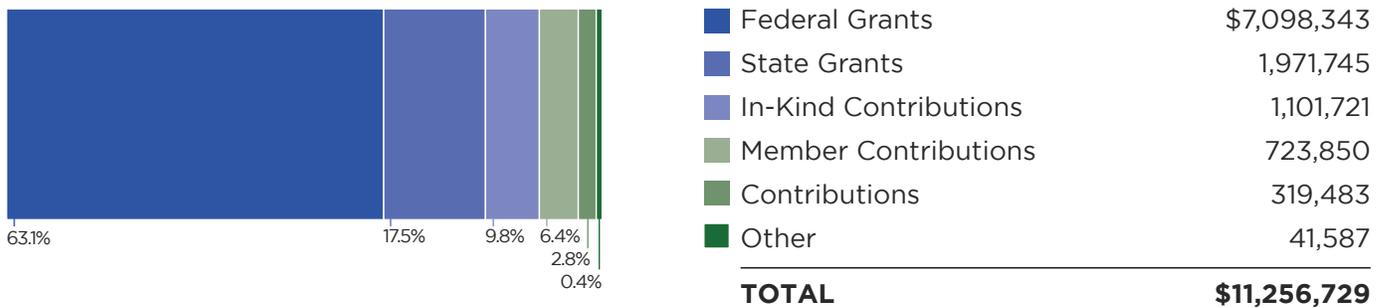
SPC's administrative arm is the Southwestern Pennsylvania Corporation, a non-profit 501(c)(3) corporation. Its operations are funded through a combination of federal and state planning grants, SPC member contributions, in-kind service contributions and grants from private foundations to support various transportation planning and economic development projects.

The Corporation's resources are applied to its core functions: SPC's daily administrative operations and planning functions. Federal and state government agencies are the largest sources of funding for SPC. SPC's program revenues totaled \$11.2 million during the 2018-2019 fiscal year.

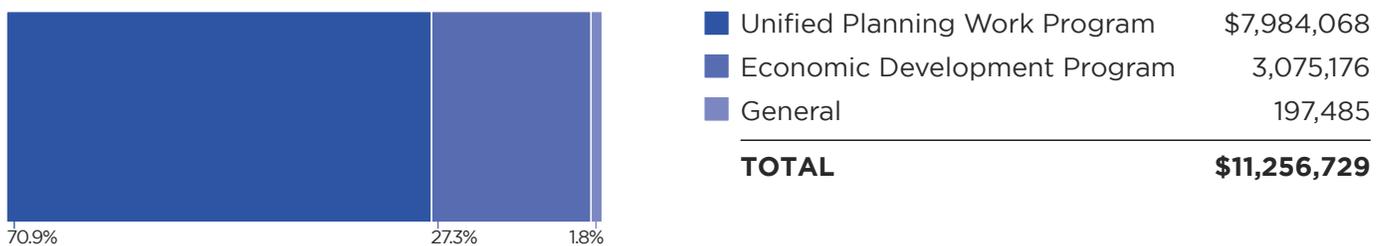
SPC's fiscal year runs from July 1 through June 30, and the accompanying financial information is for the fiscal year ending June 30, 2019. The financial records of the SPC are recorded on an accrual basis in accordance with generally accepted accounting principles. The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. That is, revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

The audit report for the reporting period expresses an unmodified opinion with no reportable findings related to the financial statements and federal awards.

Program Revenues



Program Activities



**A Special Thank you to all
of the SPC Staff, who are an
important part of the team
that makes the Southwestern
Pennsylvania Commission one
of the best regional planning
agencies in the country.**

Jim Anderson
Belachew Ayele
Kristin Baum
Michael Baum
Kim Beaver
Jared Bedekovich
Dan Bernazzoli
Mary Brangan
Kirk Brethauer
Leann Chaney
Andrew Clevenger
Ronda Craig
Debbie Curry
Domenic D'Andrea
Racheal Diehl
Linda Duffy
Erika Eagan
Ryan Falcone
Ken Flack

Sarah Francis
Colleen Friend
Zora Fye
Lillian Gabreski
Robert Gobert
Ryan Gordon
Anthony Hickton
Chuck Imbrogno
Chris Jaros
Claire Jordy
Stephanie Kambic
Erin Kepple Adams
Tom Klevan
Jennifer Lasser
Rena Liu-Belshe
Vince Massaro
Cort McCombs
Steven Meredith
Ed Nemeth

Shannon O'Connell
Jackie Pacheco
Dee Pamplin
Jeremy Papay
Rachel Roche-Nguyen
Evan Schoss
Bob Schwartz
Gregory Shermeto
Ailisa Sobien
Josh Spano
Kathy Stefani
Todd Stranko
Kay Tomko
David Totten
Cathy Tulley
Rich Votilla
Sara Walfoort
Andy Waple
John Weber







SPC is the federally certified metropolitan planning organization and the development district serving Southwestern Pennsylvania.

The preparation of this report was funded in part through grants from the Federal Highway Administration, Federal Transit Administration, the U.S. Department of Transportation, the U.S. Department of Commerce, the Appalachian Regional Commission, and the Commonwealth of Pennsylvania. The views and opinions of the authors or agency expressed herein do not necessarily state or reflect those of these agencies.