



# SmartMoves

for a Changing Region









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यो फाराम अनुरोध गरिएमा वैकल्पिक ढाँचाहरूमा उपलब्ध छन्।  
अनुरोध गरेमा बिना शुल्क SPC ले अनुवादन र दोभाषे सेवा उपलब्ध गराउँछ।  
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#### Gujarati

આ દસ્તાવેજ વિનંતી પર વૈકલ્પિક ફોર્મેટમાં ઉપલબ્ધ હોય છે.  
SPC કોઈપણ શુલ્ક લીધા વિના વિનંતી પર અનુવાદ અને  
અર્થઘટન સેવાઓ પૂરી પાડશે. વધુ માહિતી માટે કૃપા કરી (412)  
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#### Oriya

ଏହି ଡକ୍ୟୁମେଣ୍ଟର ଅନୁରୋଧରେ ବୈକଳ୍ପିକ ଫର୍ମାଟରେ ଉପଲବ୍ଧ। କୌଣସି ଚାର୍ଜ  
ଛଡ଼ା ଏସପିସି ଅନୁବାଦ ଏବଂ ବ୍ୟାଖ୍ୟା ସେବା ପ୍ରଦାନ କରିବ।  
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#### Punjabi:

ਇਹ ਦਸਤਾਵੇਜ਼ ਬੇਨਤੀ ਕਰਨ 'ਤੇ ਵਿਕਲਪਕ ਰੂਪਾਂ ਵਿੱਚ ਉਪਲਬਧ ਹੈ।  
SPC ਬਿਨਾਂ ਕਿਸੇ ਖਰਚ 'ਤੇ ਬੇਨਤੀ 'ਤੇ ਅਨੁਵਾਦ ਅਤੇ ਦੁਬਾਰੀਆ ਸੇਵਾਵਾਂ  
ਪ੍ਰਦਾਨ ਕਰੇਗਾ।  
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ਕਰੋ।

#### Sinhalese

ඉල්ලීම මත මෙම ලේඛනය විකල්ප ආකෘතිවලින් ලබාගත හැකිය.  
SPC විසින් කිසිදු ගාස්තුවක් අය කිරීමකින් තොරව භාෂා පරිවර්තන හා  
භාෂණ පරිවර්තන සේවාවන් සපයනු ඇත.  
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අමතන්න.

#### Marathi

हा दस्तऐवज विनंतीनुसार पर्यायी स्वरूपांमध्ये उपलब्ध आहे.  
विनंतीनुसार SPC भाषांतर आणि अर्थविवरण सेवा विनामूल्य प्रदान  
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कॉल करा.

#### Bengali

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#### Hindi

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एस पी सी (SPC) अनुवाद और व्याख्या सेवाएं अनुरोध पर बिना  
शुल्क उपलब्ध कराएगी।  
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#### Sindhi

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درخواست جي صورت ۾ SPC ترجمي ۽ ترجماني جون مفت خدمتون فراهم  
ڪندي.  
مهرباني ڪري وڌيڪ معلومات لاءِ (412) 391-5590 تي SPC کي ڪال  
ڪريو.

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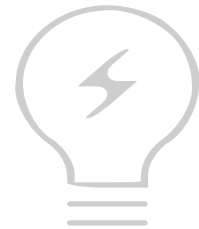
یہ دستاويز درخواست کیے جانے پر متبادل اشکال میں دستیاب ہے۔  
SPC درخواست کیے جانے پر ترجمہ اور ترجمانی کی خدمات مفت فراہم کرے  
گا۔  
مزید معلومات کیلئے SPC کو (412) 391-5590 پر کال کریں۔

# TABLE OF CONTENTS

---

## THE REGIONAL VISION

5



## VISION TO ACTION

17



**CONNECTED  
MOBILITY**

18



**SUSTAINABLE  
AND RESILIENT  
COMMUNITIES**

36



**GLOBALLY  
COMPETITIVE  
ECONOMY**

54

## A FOUNDATION FOR MOVING FORWARD

67







## SECTION I: VISION

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Our region is changing. Our population is changing; our economy is changing; our environment is changing; our technology is changing. And the way we need to make things happen is changing. This regional plan focuses on the *SmartMoves* we can make to take charge of change and make our region a better place for all.

# THE REGIONAL VISION

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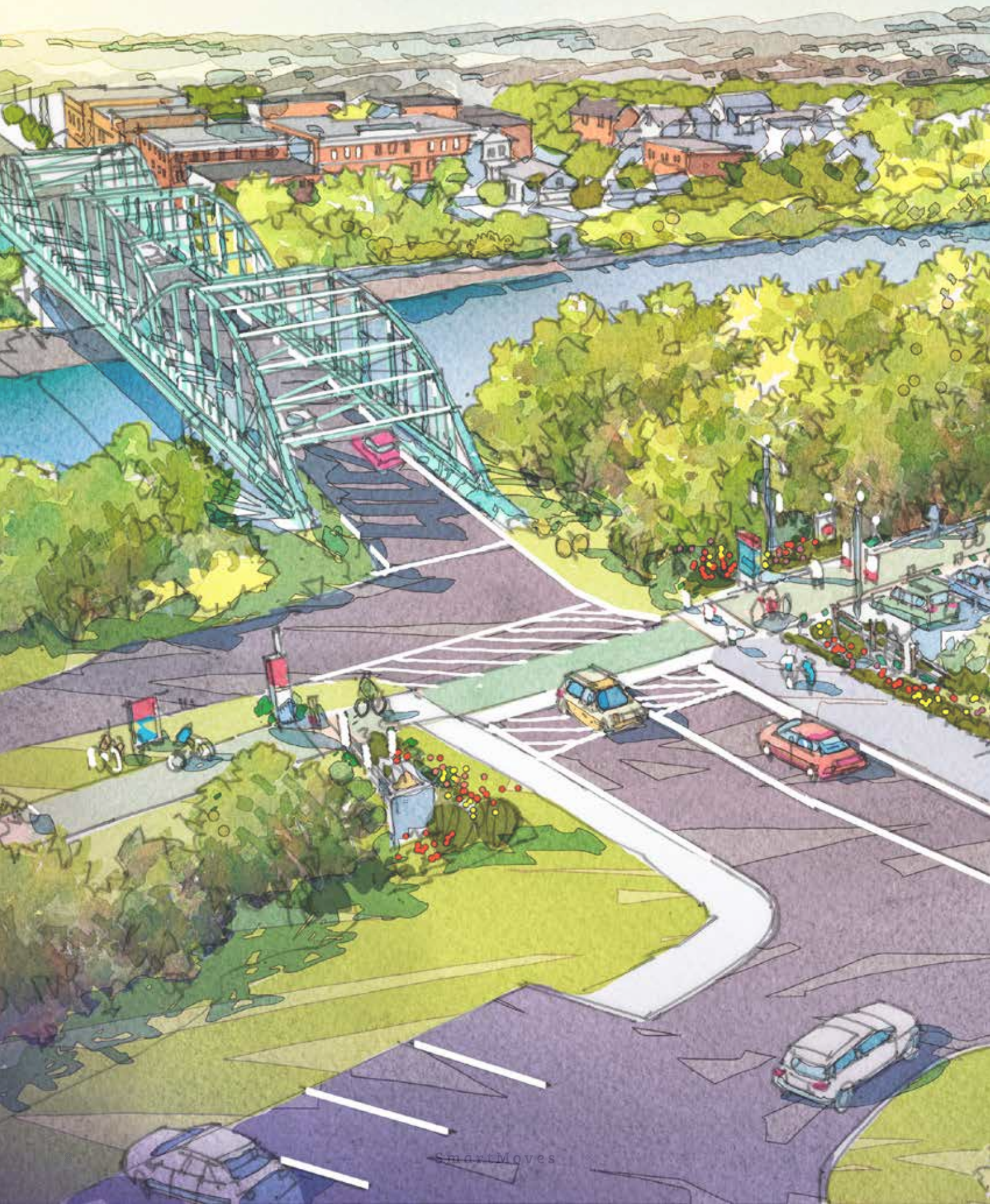
**A world-class, safe, well maintained and connected multimodal transportation system that provides mobility for all, empowers resilient and sustainable communities, and supports a globally competitive economy.**

The Regional Vision rose from workshops with subject matter experts about trends, new disruptive technologies and innovations, best practice reviews from other innovative regions, surveys, and discussions of problems and opportunities with the public and elected leadership in workshops and public meetings throughout the region.

This section represents a discussion of the vision development process that is centered on creating opportunity from investments and led to our three Major Goals of Connected Mobility, Sustainable and Resilient Communities, and a Globally Competitive Economy.

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# OUR REGION'S GOALS



## CONNECTED MOBILITY

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



## SUSTAINABLE AND 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.**



## GLOBALLY COMPETITIVE ECONOMY

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

## CREATING OPPORTUNITY

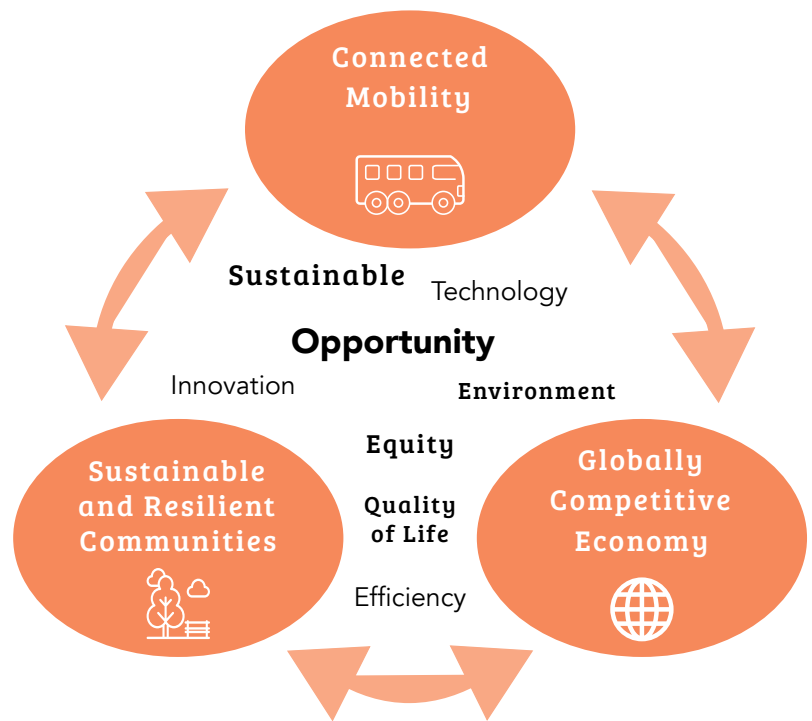
The Regional Vision means taking advantage of our considerable existing assets and developing, supporting, and implementing projects and programs that advance our progress. It means investing in regionally-connected, seamless transit, and new transit investments in key corridors and networks. It means 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.

This 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**.



## SmartMoves Envisions:



**Major projects** that maintain our existing system while also **enhancing safety, accessibility, mobility, and connectivity** across the region.



**Major expansions of communications technology** to our rural communities.



Coming together as a region to **address climate change**.



Working collaboratively to find **sustainable revenues for transportation infrastructure**.



Investment in and revitalization of the region's communities to reinforce the **sustainability of our towns and neighborhoods**.



Technology and innovation can be much more than self-driving cars and artificial intelligence, and it can work in rural as well as urban parts of the region. We envision innovative new farming techniques and technology deployment that will connect our entire region with high speed access to the internet, allowing our residents to work from anywhere and connecting them to global economic opportunities.

### CATALYST FOR COLLABORATION

The region will continue to experience acute shocks and chronic stresses related to extreme weather, shifting demographics and workforce, and funding for critical infrastructure. We must adapt, and this plan should be used as a guide to proactively develop responses through collaboration, information exchange, and shared goals that are applicable in both urban and rural areas. This plan is to be used as a catalyst for collaboration that creates opportunity in the region.

### ADVANCING THE VISION

*SmartMoves* 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 (Appendix IV).

This plan also includes a set of multimodal projects and initiatives to modernize and expand our transportation system (Appendix IV) that are in various stages of the planning process, and at this time, do not have funding identified for implementation. All of these projects and

initiatives contribute to the Regional Vision. The Strategies and Actions contained in the subsequent sections of this plan, coupled with the ongoing planning efforts already underway in the region, will help not only guide the development of these projects, but also identify partnerships and opportunities for collaboration to assist in implementing the Vision and the plan.

*SmartMoves* recognizes that as things change, our transportation and

mobility needs will also change and will likely continue to change significantly within the horizon of the plan – 2050. This plan also recognizes that we already don't have enough funding to maintain and optimize our current system at a comprehensive level, or to implement all of the transformative projects the region needs to achieve the Regional Vision.

*SmartMoves*  
recognizes that as things  
change, our transportation  
and mobility needs  
change too and will  
likely continue to change  
significantly within the  
horizon of the plan –  
2050.

*SmartMoves* is the region's official plan authorized by the federal government that directly attaches real funding to real projects that will be advanced in southwestern Pennsylvania.

The Vision for the region's transportation system includes major expansion to the region's public transportation network including expansion of high quality service from Downtown Pittsburgh to the Airport, the north, the eastern suburbs, the Mon-Valley, and points beyond. The plan sets the stage to better coordinate service among our region's 10 public transit agencies in order to facilitate seamless linkages with other first and last-mile modes of transportation. This Vision also includes new transit centers and improved transit stops, as well as resources for local governments to implement complete streets improvements that connect where we live to where we work and play.

#### **Transit:**

- Equitable, seamless linkages between the region's public transit services.
- Expansion of frequent, high quality service from Downtown Pittsburgh to the East, West, North, and South, Pittsburgh International Airport, Oakland

#### **Active Transportation:**

- Completion of the regional trail network.
- Connect the arterial trail network to communities and local active transportation networks.

#### **Roadways:**

- A network of safe, well maintained, and modern highways and bridges across all tiers of the highway system.
- Implementation of context-based street design.

## **Strategies at Work**

- Mobility for All
- Modernize Supporting Infrastructure
- Public Transit Equity
- Coordinated Investment
- Reinvest in Communities
- Take Care of Water
- Emerging Technology
- Connected and Autonomous Vehicles



Illustration: Regional Transit Center





# Advancing the Vision: Projects

## Our 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.

### Example Projects for: Transit

- Downtown to Oakland Bus Rapid Transit (BRT)\*
- West Busway BRT Extension to Pittsburgh International Airport
- East Busway Extension to the East Suburbs and Mon-Valley
- Establish Regional Transit Centers at Key Locations throughout the Region
- Expanded Regional Park-n-Ride Capacity\*

#### Strategies Advanced:

- Equitable Access
- Emerging Technology
- Public Transit

### Example Projects for: Active Transportation

- I-579 CAP (complete)
- Three Rivers Heritage Trail to Freeport\*
- Sheepskin Trail from Mon-River Trail to Great Allegheny Passage (GAP)\*
- Westmoreland Heritage Trail to GAP\*
- Hoodlebug Trail to Blairsville\*
- Ohio River Trail from McKees Rocks through Beaver County to Ohio

#### Strategies Advanced:

- Reinvest in Communities
- Sustainability
- Clean Air

### Example Projects for: Roadways

- U.S. Route 30 Modernization\*
- PA Turnpike Cashless Tolling Interchanges (Routes 130, 981, 910)
- State Route 228 Modernization and Capacity Upgrades\*
- State Route 885/Second Ave Corridor Improvements
- Monaca Gateway Corridor Improvements\*
- East Carson Street Mobility and Safety Improvements

#### Strategies Advanced:

- Infrastructure
- Prioritize and Streamline
- Smart Technology

\*Project or portion of project is under development and is funded in TIP and/or LRP

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## Strategies at Work

- Mobility for All
- Coordinated Investment
- Reinvest in Communities
- Pursue Innovative Ideas and Solutions
- Value our Natural Resources



Illustration: Four Corners Trail Junction



The Active Transportation Plan for southwestern Pennsylvania provides additional guidance, tools, and resources for use by local governments and other implementers of active transportation facilities on how to plan, develop, design, fund, implement, maintain, and evaluate active transportation options for their communities.



## IMPROVED MOBILITY

The 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.

The modernization of our Interstate highways through interchange reconfigurations and upgrades will ensure the safe and reliable movement of people and goods throughout the region and beyond.

Corridors of regional significance will be maintained and improved to facilitate the safe and efficient movement of people and goods. These improvements range from maintenance of current infrastructure to the complete reconstruction and upgrading of high priority corridors. Once these projects are ready to program on the Transportation Improvement Program, (TIP) – the implementation vehicle of the Long Range Plan, SPC will work with the PennDOT Connects process to ensure that local governments, transit providers and other stakeholders have the opportunity to shape the improvements in their communities.



Illustration: SR 228

expanded transportation modes across the region, whenever and wherever needed, to facilitate major regional and local travel. This plan sets aside significant funds to implement projects that advance active transportation, land use and transportation planning, expand transit options, revitalize communities, and improve air quality.



## GOALS

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### CONNECTED MOBILITY

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



### SUSTAINABLE AND 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.



### GLOBALLY COMPETITIVE ECONOMY

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

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## SECTION II: VISION TO ACTION

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**Focused investment will be key for moving  
our Regional Vision to action.**

Each of our 3 Major Goals rising from our Vision have Strategies associated with them that set the context for more specific projects, initiatives, and actions that are critical for the success of the changing Southwestern Pennsylvania region. These Goals and Strategies are interrelated and strive to connect the dots between the region, its residents, and opportunity.

This plan transparently depicts how investments advance the Strategies, and, in some cases, how the Strategies can enhance the investments - ultimately working together to achieve the Major Goals and the Regional Vision.

# CONNECTED MOBILITY



Emerging technological advancements in the way we utilize transportation services, integrate multiple modes of transportation, increase mobility, and optimize our existing network have the potential to transform southwestern Pennsylvania's transportation system into a world-class, well maintained, integrated transportation system that will provide mobility for all, enable resilient communities, and support a globally competitive economy. Without the backbone of a safe, integrated, accessible system that fits the needs of all residents, the region will have difficulty achieving its full potential. Integrating new forms of mobility and employing a complete streets approach

to enhance our existing system will assist in reducing emissions and improving air quality. According to the United States Environmental

Protection Agency, the transportation sector generates the largest share of greenhouse gas emissions, accounting for nearly 27% of all Greenhouse Gases (GHGs) in 2020. Improving air quality and reducing emissions must be an integral component to the transportation planning and programming process for the region. As outlined in SPC's Regional Transportation Safety Action Plan, the region must also continue its focus, working toward a Vision Zero goal, on safety

for all transportation system users.

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

The Strategies and Actions included in *SmartMoves* have been identified through the plan development process via the Commission, Expert Resource Panels, SPC committees, and broad public input. Methods for fulfilling the Regional Vision of "a world-class, well maintained, integrated transportation system that will provide mobility for all, enable resilient communities, and support a globally competitive economy" are not limited to the Strategies and Actions presented to date. Subsequently proposed strategies and actions that help advance the Major Goals of Connected Mobility, Sustainable and Resilient Communities and a Globally Competitive Economy are consistent with the spirit and intent of the plan.



## **Goal:** **Connected Mobility**

### **Themes:**

- **Multimodal Mobility for All: Equity Keeps Us Whole**
- **High Tech Mobility: Connected and Autonomous Vehicles**
- **Funding and Financing: Sustainable Funding**
- **Prioritize and Streamline: Faster Project Development and Delivery**

Sustainable revenues to adequately fund public infrastructure and programs are critical in advancing the Vision and Goals of *SmartMoves*. A stable, predictable revenue stream will allow us to accurately predict future funding levels and advance priority projects in a timely manner. However, in order to deliver the type of transformative projects the region desires, additional and sustainable sources of revenue will be necessary. To address the need for additional revenues, an ongoing, collaborative effort across both the public and private sectors is essential for delivering a strong message that conveys the benefits of infrastructure investments to the regional economy and community livability.

When planning for transportation investments, the region must consider not just the transportation benefits, but also how well the improvements fit the context of the surrounding community it serves, and what societal benefits will come with the improvements.. The transportation system must be considered as a whole, rather than a series of separate networks. Involving the community in the early stages of the project development process will not only help to identify community needs and goals, but also assist in the delivery of projects by considering all factors before project design begins. This collaboration, along with strong partnerships between all parties involved, will assist in efficiently delivering projects, thereby enabling the region to capture as much state and federal funding as possible.



# Multimodal Mobility for All

## EQUITY KEEPS US WHOLE

The future holds great opportunities to achieve seamless mobility across the southwestern Pennsylvania region. The widespread use of smart phones and high speed internet connections enable us to become a more connected society and use multiple mobility options, even for a single-purpose trip.

Cities around the world are working to implement integrated transportation systems, often called “Mobility as a Service” (MaaS) or “Mobility on Demand” (MoD). The US Department of Transportation has supported a number of MoD “sandbox” projects to bring the research into the real world. In the future, a system like this might enable residents to plan a trip using multiple modes.

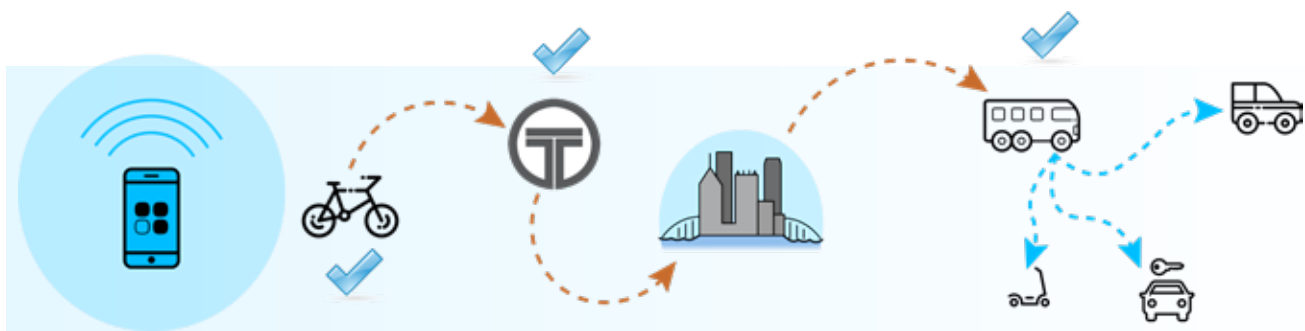
The current expansion of transportation options, from transit to bikeshare to on-demand services, offers opportunities for increased accessibility among disadvantaged populations (i.e. seniors, persons with disabilities, and those with limited incomes), but continued success will require coordinated planning and outreach from policymakers. Transportation accessibility is personal and distinctive for everyone.

Equity is especially essential in transportation because it ensures the more vulnerable

population segments are provided the same access to opportunity as other population segments. With any type of transportation service and/or mode, there are certain expectations that are universal to every user: it must be available, accessible, safe, affordable, convenient, comfortable, easy-to-use, timely, and respectful.

In order to achieve equity in transportation, strategies aimed at helping communities get the investments necessary to spur mobility need to be well-planned, smartly developed, and effectively implemented. The region-wide transportation network envisioned in this plan includes multiple travel options that not only meet universally-accepted expectations, but also support the health, mobility, activity, and participation of people across their lifespan.

The Regional Transportation Demand Management (TDM) Strategic Action Plan (adopted in 2019) helps to inform, support, and implement expansion of transportation options while helping to reduce the number of single occupancy trips in the Southwestern Pennsylvania region. The TDM plan defines an outcome-driven, performance-based regional approach for TDM strategies and will integrate those strategies into SPC’s existing short and long-range planning efforts and programs.



The same app might allow someone to check out a HealthyRide bicycle, ride it to a T station for a light rail ride to Downtown Pittsburgh, then board a bus to a destination in Butler County, paying just one fare. Or, a MaaS system might offer residents an option for a monthly subscription that would include unlimited transit and bike-share trips across multiple agencies and a limited number of taxi rides, rental cars or scooter rentals.





### EQUITABLE ACCESS STRATEGY

Integrate and coordinate the mobility services offered through traditional public transit agencies and private and non-profit enterprises to provide enhanced and equitable access for all users, including those who are transportation-disadvantaged due to age, physical/intellectual disability, limited income, and/or where they reside.

## 1 LOCAL AND AGENCY COLLABORATION

### Actions

- Encourage public transit agencies and private and non-profit transportation providers to collaborate on ways to connect underserved communities and disadvantaged populations to the larger public transit systems.
- Municipalities should be proactive in setting regulatory standards and ensuring that safety and best practices are being followed as public transit, connected and autonomous vehicles (CAVs), ridesharing, and other technologies change our developed landscape.

**Potential Implementation Partners:** County and Municipal Governments, Public Transit Providers, Private Transportation Providers

## 2 ENSURE EQUITY IN TRANSPORTATION

### Actions

- Consider every mode and user group when planning for new or improved transportation infrastructure, services, and facilities.
- Form partnerships with the private sector and health services/nonprofits to increase options in underserved areas.
- Work to increase flexibility in transportation funding, incorporating Mobility as a Service (MaaS) and technology.

**Potential Implementation Partners:** County and Municipal Governments, Public Transit Providers, Ridesharing Agencies and Companies, Health Care Industry, PennDOT



# High Tech Mobility

## EMERGING TECHNOLOGY

Technology is reshaping the transportation system as we know it. Emerging technologies in mobility are being developed at a rapid pace and will likely continue to do so for many years to come. The region must be nimble and forward-thinking to anticipate and embrace these technologies, as they will play a role in where we live, how we move, and where we work. Partnerships between the public and private sectors, along with our academic institutions, are critical in recognizing and proactively addressing the potential impacts that technology will have in terms of safety, equity, land use, and public sector revenue.

The collection and use of real-time data creates an environment that will enable us to maximize the effectiveness of the region's existing transportation system by monitoring and adapting to conditions in real-time. Implementing connected infrastructure is the first step in preparing for the widespread use of connected and autonomous vehicles (CAVs).

The region has already begun deploying connected infrastructure, primarily through the use of adaptive traffic signal systems on the region's most heavily traveled corridors. Adaptive signal systems adjust the signal timing in real time to accommodate changing traffic patterns and ease traffic congestion, thereby also increasing safety. There are several corridors in the

region where adaptive signal systems are already in operation (15) and more corridors are in the planning and project development stages (6). Transit signal priority systems should be considered when new adaptive systems are implemented in public transit corridors.

The Congestion Management Process (CMP) is a broad, regional level planning tool designed to help manage congestion by identifying congested corridors and recommending multimodal strategies for congestion mitigation that are tailored to each corridor. Many of the recommendations for CMP

corridors include technology-based operational improvements, along with demand management and multimodal strategies, to mitigate congestion.

The CMP is coordinated with the Regional Operations Plan (ROP). The ROP is a performance-based approach to planning for operations that involves the development of operations objectives tied to the major goals and strategies set forth in the

regional plan. These objectives should inform the transportation investment decision-making process, which identifies projects and programs for implementation. This approach is used to address a full range of operational issues, such as traffic congestion, transit operations, emergency response, and integration of transportation services.

The collection and use of real-time data creates an environment that will enable us to maximize the effectiveness of the region's existing transportation system by monitoring and adapting to conditions in real time.





### EMERGING TECHNOLOGY STRATEGY

Evolve and deploy appropriate infrastructure to facilitate safe and efficient use of Connected Infrastructure as well as Connected and Autonomous Vehicles (CAVs).

## 1 MODERNIZE SUPPORTING INFRASTRUCTURE

### Actions

- Projects and corridors should be prioritized based on safety, connectivity, and efficiency. Encourage collaboration between regional partners and local municipalities to develop associated land use design requirements/standards, such as curb space, drop-off points, etc.
- Coordinate public policy with funding, incentives, and/or regulations to advance deployment.
- Work with regional partners to develop a phasing process, which will be needed due to CAVs and non-CAVs sharing the roads.

**Potential Implementation Partners:** PennDOT, Infrastructure Owners, Colleges and Universities, Research Organizations, Vehicle Manufacturers, Public Transit Providers





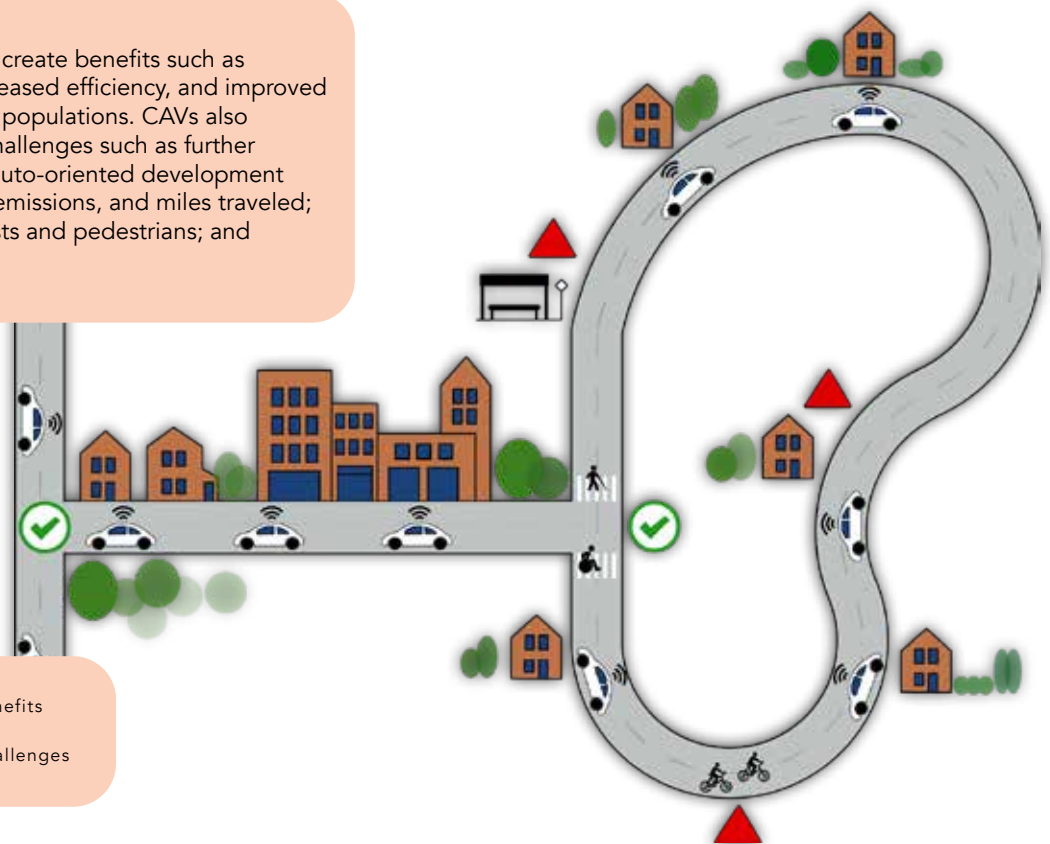
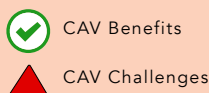
## CONNECTED AND AUTONOMOUS VEHICLES

Southwestern Pennsylvania has become an epicenter for the research and development of connected and autonomous vehicle technologies. Given the region's rich history for innovation and the presence of world class universities and research facilities, numerous companies such as Uber, Aurora Innovation, Latitude AI, and Motional have invested significant resources in establishing local offices, testing CAVs on local streets, and hiring graduates from local universities. The region remains on the cutting edge of this research. In fact, PennDOT, the Pennsylvania Turnpike Commission, and the Regional Industrial Development Corporation (RIDC) are partnering on site planning and design for the Pennsylvania Safety, Transportation and Research Track (PennSTART), a 350-acre state-of-the-art test track and testing and research facility located in Westmoreland County. This facility will benefit emergency responders, transportation technology companies, and research institutions while helping to drive the local economy.

CAVs, along with other shared mobility services, have the potential to not only be transformative from the predominance of privately owned vehicles to shared vehicles but also transformative to the built environment. Particularly in urban and suburban areas, CAVs have the potential to offer unprecedented opportunity to recalibrate roads to the human scale. Using complete streets and context-based design as a basis, CAVs, in the long-term, offer the potential for urban and suburban areas to pursue road diets that shift space previously used for automobiles back to active travel modes and shared space.

The technology of CAVs is moving at both a rapid pace and, currently, a high level of uncertainty. Measures will have to be taken locally to ensure any impacts will be considered and addressed appropriately to ensure the safety of the public, especially pedestrians and bicyclists who will be the most vulnerable in interacting with CAVs.

CAVs have the potential to create benefits such as improved traffic safety, increased efficiency, and improved mobility for disadvantaged populations. CAVs also have the ability to create challenges such as further exacerbating low density; auto-oriented development patterns; increased traffic, emissions, and miles traveled; decreased safety to bicyclists and pedestrians; and impacts to transit ridership.





### AUTONOMOUS TECHNOLOGY STRATEGY

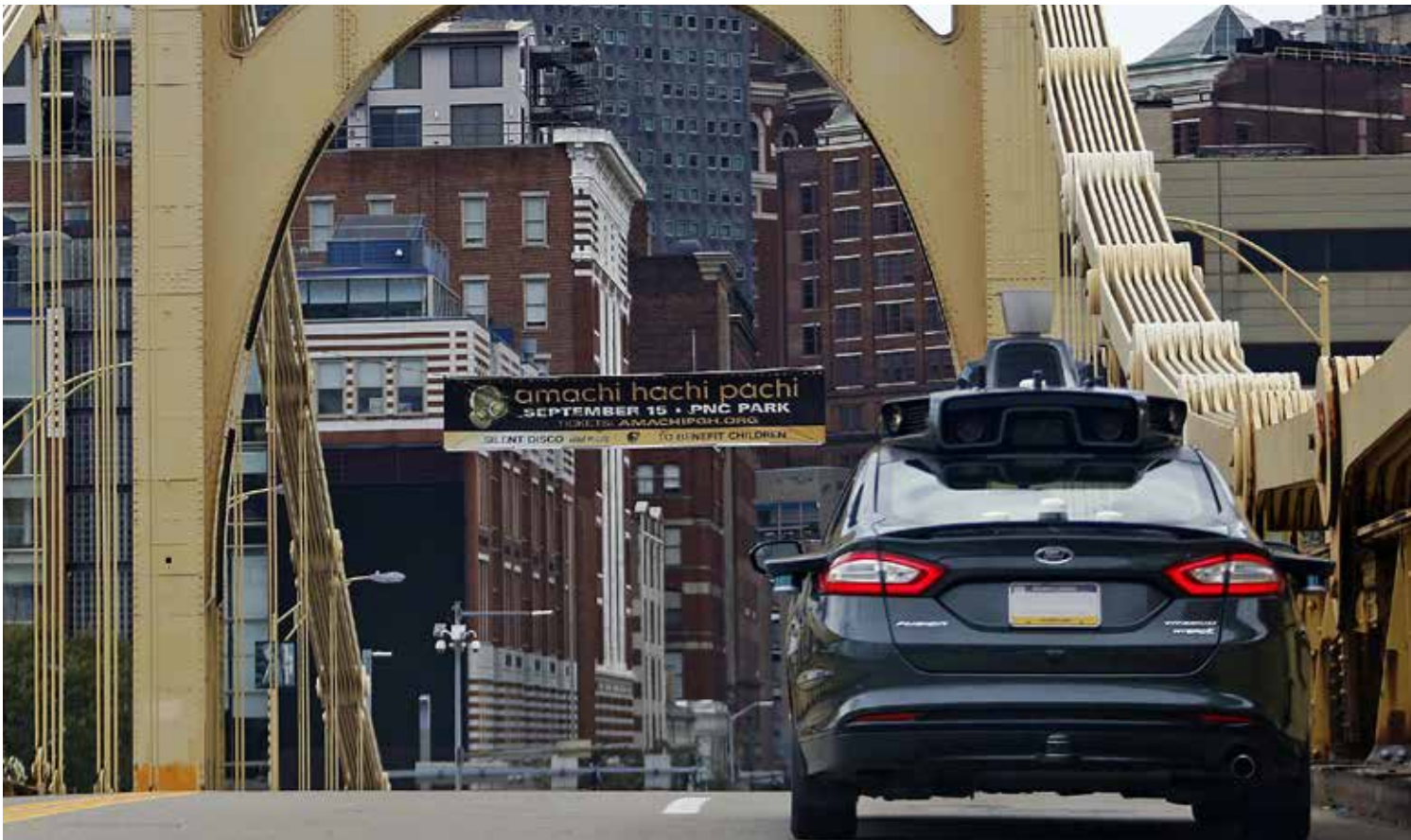
Minimize negative impacts associated with Connected and Autonomous Vehicles on safety, public sector revenue, congestion, the environment and local quality of life.

## 1 MINIMIZE NEGATIVECAV IMPACTS

### Actions

- Examine options to minimize negative impacts. Examples may include: non-motorized system user safety, context-based design; complete streets; vehicle miles traveled (VMT) fees; congestion pricing; conversion of parking garages to other uses; conversion of curb space to other revenue generators; use of permitting/fees to discourage inappropriate automated routing of CAVs, e.g., diverting off arterials into residential streets; implementation of cooperative system, protocols at multiple levels of government.

**Potential Implementation Partners:** Developers, County and Municipal Governments, Infrastructure Owners, PennDOT, SPC, State and Federal Legislatures, Public Transit Providers







# Funding and Financing

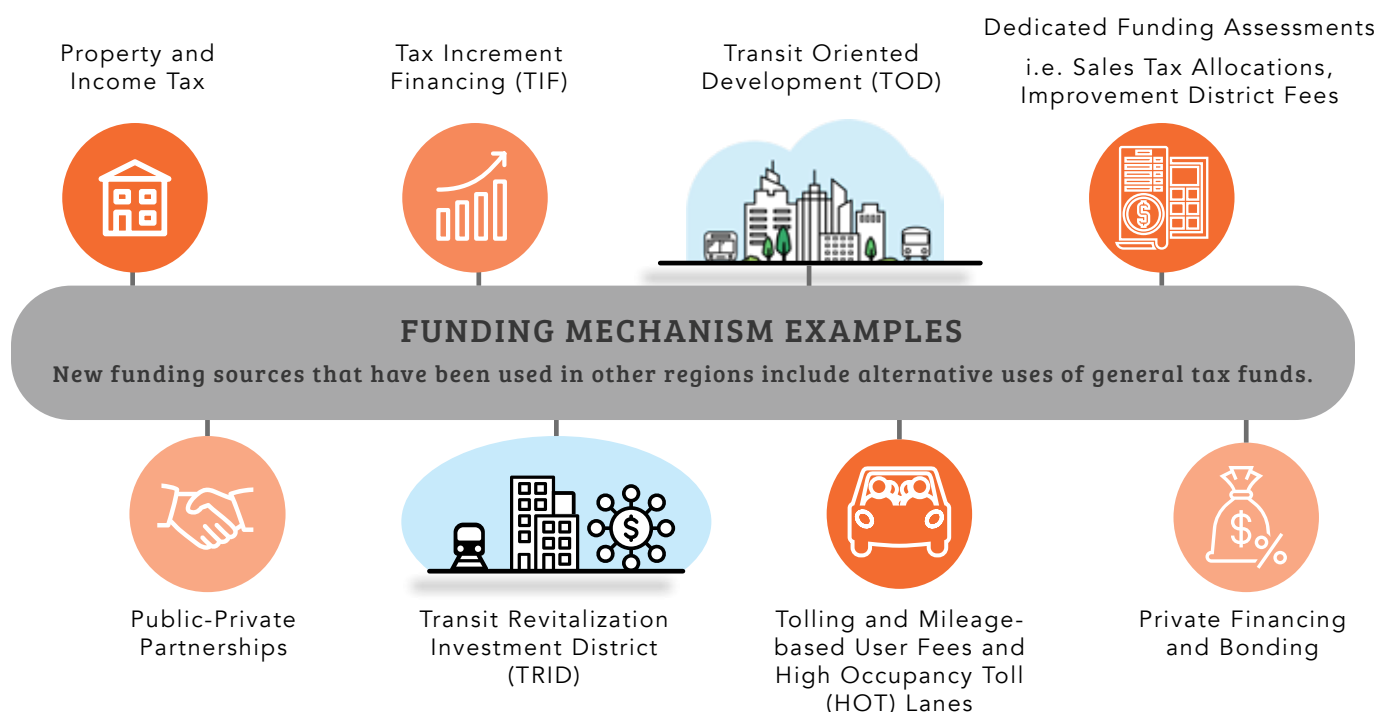
## SUSTAINABLE FUNDING

### Federal

Stable, reliable funding for infrastructure is critical to the quality of life and economic vitality of Southwestern Pennsylvania. Without predictable funding commitments at all levels, it will become more difficult to maintain our existing system at acceptable levels, invest in new projects and transit services, and to further develop our regional trail networks. Revenues from the federal Highway Trust Fund continue to decline due to reduced fuel consumption, popularity of electric vehicles, and the continuing reduction in buying power from the state and federal gas tax, which means that new revenue tools may be necessary to fund infrastructure improvements. Although the Bipartisan Infrastructure Law provided a short-term (5 year) boost in federal transportation funding, including several new formula and discretionary funding programs. The BIL did not, however, address the sustainability of the Highway Trust Fund. It continued borrowing from other sources to fund transportation infrastructure.

### State and Local

Due to Highway Trust Fund shortfalls, state and local governments are playing an increased role in funding transportation infrastructure. The Pennsylvania state government helped fill some of the gap with Act 89 in 2013. However, the \$450 million/year transfer to funding from the PA Turnpike to PennDOT to assist in the operations of public transportation providers was reduced to \$50 million/year in 2022. That \$400 million gap is currently being filled from the Pennsylvania General Fund. This sun-setting, along with decreasing revenues from fuel taxes, potential policy and legal decisions, and loss of buying power through inflation, have the potential to leave a \$12.5 billion shortfall in state funding over the next 12 years. Increased private sector financing of infrastructure could also play a greater role in future investments, particularly given anticipated decreases in available public financing. In total, over the next twelve years, a total of \$18.5 billion in federal and state funds are at risk.





### SUSTAINABLE FUNDING STRATEGY

Fund additional transportation infrastructure through private sector partnerships, user fees, value capture, and other appropriate mechanisms; broaden revenue tools available to local governments to fund infrastructure projects.

## 1 MATCH REVENUE TO NEEDS

### Actions

- Collaborate with the state legislature to reinforce that the need for revenue increases are a continuing process, not a “one and done” endeavor. Continue outreach with the state legislature to work toward matching revenues to transportation needs.

**Potential Implementation Partners:** SPC, Nonprofits, Chambers of Commerce, Rotaries, Local Champions, Transportation-Related Industries, Construction Legislative Council, American Society of Engineers, County Commissioners Association of Pennsylvania, State Legislature, Public Transit Providers

## 2 IDENTIFY NEW REVENUE SOURCES

### Actions

- Fund transportation with a user-fee based transportation revenue system or other new revenues. Some examples of revenue options that have been used in other areas include but are not limited to: Tolling, VMT Tax, State and/or Local Taxes, Bicycle Registration Fees, Transportation Network Company (TNC) Fees, Ridesharing/Pooled Vehicle Fees, Electric Vehicle (EV) Charging Fees, Carbon Taxes, State Income Tax (dedicated to infrastructure), and Regional Asset Districts.

**Potential Implementation Partners:** State Legislature, Business Community, SPC, Advocacy Groups, Local Officials, Local Champions, Public Transit Providers

## 3 PROMOTE PUBLIC-PRIVATE PARTNERSHIP

### Actions

- Learn from other public and private sector entities that have public-private partnership experience. Incentivize private sector participation with tax credits and other mechanisms.

**Potential Implementation Partners:** PennDOT P3 Office, County Governments, Trade Organizations, Financial Organizations, Chambers of Commerce, Economic Development Organizations, Public Transit Providers



## PUBLIC AWARENESS

Although funding for Pennsylvania's transportation infrastructure is in a better place than it was prior to the passing of Act 89 in 2013, there is still a wide, and growing, funding disparity between existing system maintenance needs and the amount of state and federal funds that are currently available and are expected to be available over the life of this plan. Other factors straining existing funding resources include addressing MS4 stormwater compliance, emergency repairs due to extreme weather (flooding and landslides), and reduced buying power due to inflation.

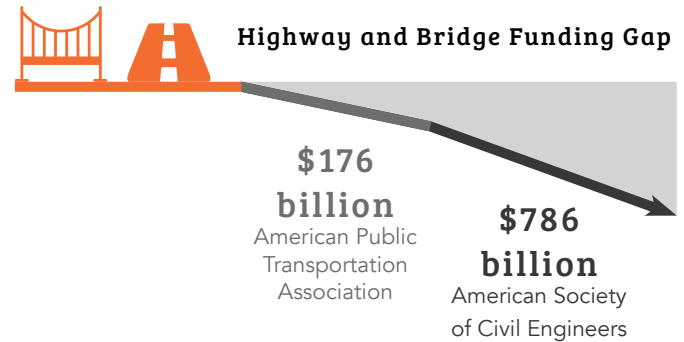
This problem is not unique to Southwestern Pennsylvania. In fact, the American Society of Civil Engineers (ASCE) 2021 Infrastructure Report Card estimates a national backlog of highway and bridge capital needs in excess \$786 billion. Similarly, the American Public Transportation Association estimates that there is backlog of approximately \$176 billion in known public transit projects.

Statewide, there are annual needs of an additional \$8.1 billion for bridges and roadways and \$1.2 billion in public transit needs. Looking into the future, and past simply maintaining our current system, there are \$2.2 billion in unfunded needs on the region's Interstate Highway System and \$5.2 billion in anticipated transit capacity expansion needs over the life of the plan.

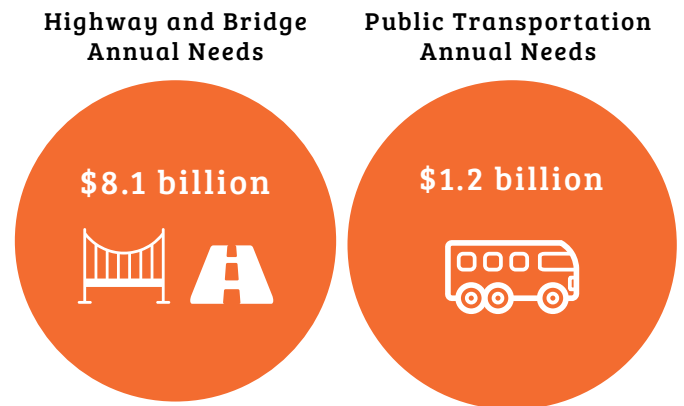
In order to address this funding disparity, additional revenue sources will be needed and, in many cases, support from a variety of stakeholders, including the private sector and the public, will be critical in establishing and sustaining these sources. To assemble this support, a robust educational outreach campaign centered on public infrastructure and its benefits to the economy and communities will be needed.

This campaign will require broad public input and support. It must build the trust of the public

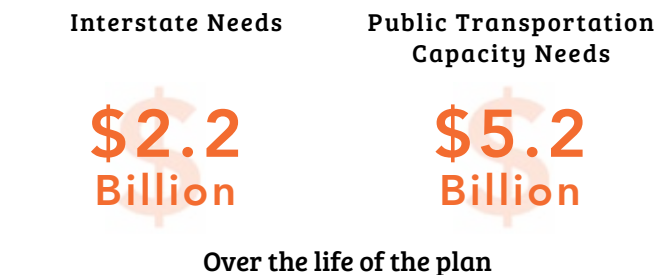
### National:



### Statewide:



### Local:



through transparency and accountability by making performance-based investment decisions and communicating the benefits to the public, business community, and stakeholders in an effective, easy-to-understand manner.





### PUBLIC AWARENESS STRATEGY

Create solutions for increasing infrastructure revenue increases, including processes for regular increases, (i.e. not a “one and done” endeavor); generate a broader understanding of, support for, and revenue for public infrastructure, building up from regional benefits and needs.

## 1 INCREASE AWARENESS

### Actions

- Continue to raise awareness in the business community, nonprofit sector, and other areas to broaden support for increases in infrastructure revenues.
- Enhance understanding by the private sector, nonprofits, and the general public of public infrastructure needs; garner their support for increased infrastructure revenues by highlighting past successes and accomplishments.
- Undertake a robust public education campaign to make the general public aware of the benefits of increased transportation funding and how it has been used in local communities.

**Potential Implementation Partners:** SPC, Nonprofits, Chambers of Commerce, Rotaries, Local Champions, Transportation-Related Industries, Construction Legislative Council, American Society of Engineers, County Commissioners Association of Pennsylvania





## PUBLIC TRANSIT EQUITY

Fixed route public transit service provides over 65 million rides per year in Southwestern Pennsylvania. The Port Authority of Allegheny County provides over 62 million of those trips. The remainder of those trips are provided by the region's nine other public transit providers within their respective service areas. SPC actively partners with the region's small urban and rural public transit providers in developing Transit Development Plans (TDPs). TDPs are five-year blueprints to improve public transit locally and throughout the region. The planning process engages all levels of the organization including county officials, the Boards of Directors, management, and staff. In addition, robust public involvement processes provide the public and stakeholders opportunities to express their vision for public transit. TDPs typically include:

- **Five-Year Strategic Business Plan** – A Board-driven document that identifies the major tasks to be accomplished by staff and board members over the next five years to advance the organization by accomplishing the mission and advancing toward a shared vision.
- **Service Guidelines** – A robust set of parameters for current and future public transit service, designed to establish a framework for service to be regularly evaluated and continually improved as well as to assure there is a well-reasoned approach to adding or reallocating service.

Many of these transit agencies also provide commuter service on a daily basis into the City of Pittsburgh. In developing the plan, through public and stakeholder input, it was evident that these services, along with demand-response transportation services and emerging mobility options, need to be better integrated. Integration should consider equitable access across providers and the region, the built environment, and corridors, and the use of technologies to facilitate seamless linkages of trip planning, trip making, fares, and safety.

Demand-response transportation, including Human Services Transportation (HST), encompasses a range of accessibility alternatives designed to meet the needs of individuals who have difficulties providing their own transportation due to age, disability, or income. The services are funded from federal programs, state and local funds, and private sources of revenue, the distribution of which is complex. With just a few exceptions, countywide demand-response transportation is managed and operated by each individual county's transit agency.

SPC is responsible for developing and maintaining the federally-mandated Southwestern Pennsylvania Public Transit - Human Services Coordinated Transportation Plan (CTP). The Coordinated Plan seeks to improve transportation options in the region through successful collaboration and resource sharing among human service agencies, transportation providers, workforce development groups, healthcare facilities, and government entities. This plan will be update in FY 2024.

Public transit will continue to be the backbone of local and regional transportation networks. Even in this overarching role, traditional transit agencies could benefit from partnering with other transportation-related entities, especially in places where transit doesn't work all that well – in hard-to-reach urban neighborhoods, lower density suburbs, sparsely populated rural areas, and developments where making smart connections between land use and transportation misaligned.



### PUBLIC TRANSIT STRATEGY

Continue to implement SmartMoves Connections – A Regional Vision for Public Transit by focusing on enhancing and expanding transit connections, programs and facilities that equitably benefit users while minimizing negative environmental impacts; identify and utilize dedicated and discretionary funding to enable seamless linkages and cooperation across the region.

## 1 SUSTAINABLE PUBLIC TRANSIT FUNDING

### Actions

- Identify a sustainable source for dedicated public transit funding. Encourage the public and local organizations to advocate for increased federal funding.

**Potential Implementation Partners:** PennDOT, County and Municipal Governments, Public Transit Agencies, Nonprofits, SPC, General Public

## 2 FACILITATE SEAMLESS LINKAGES

### Actions

- Work toward greater efficiency in public transit systems through regional cooperation and/or privatization. As the private sector plays an increasing role in public transit, municipalities must be able to adapt to future changes and ensure equitable access is maintained.

**Potential Implementation Partners:** Public Transit Agencies, County Governments, PennDOT, SPC, Educational Institutions, Transportation Network Companies (TNCs)

## 3 REGIONAL COLLABORATION

### Actions

- Continue to Implement SmartMoves Connections at a regional scale by pursuing a common fare vehicle and structure for all of the region's transit providers, facilitate discussions surrounding coordination of transit schedules and services, and continue to collaborate in the development in transit hubs across the region.
- Collaborate regionally on the location of Park-and-Ride facilities across all counties to support their varying multimodal needs and provide bus access in areas with a greater need but less demand.

**Potential Implementation Partners:** SPC, PennDOT, Public Transit Providers, Federal Transit Administration, County and Municipal Governments, Housing Authorities, Finance Authorities





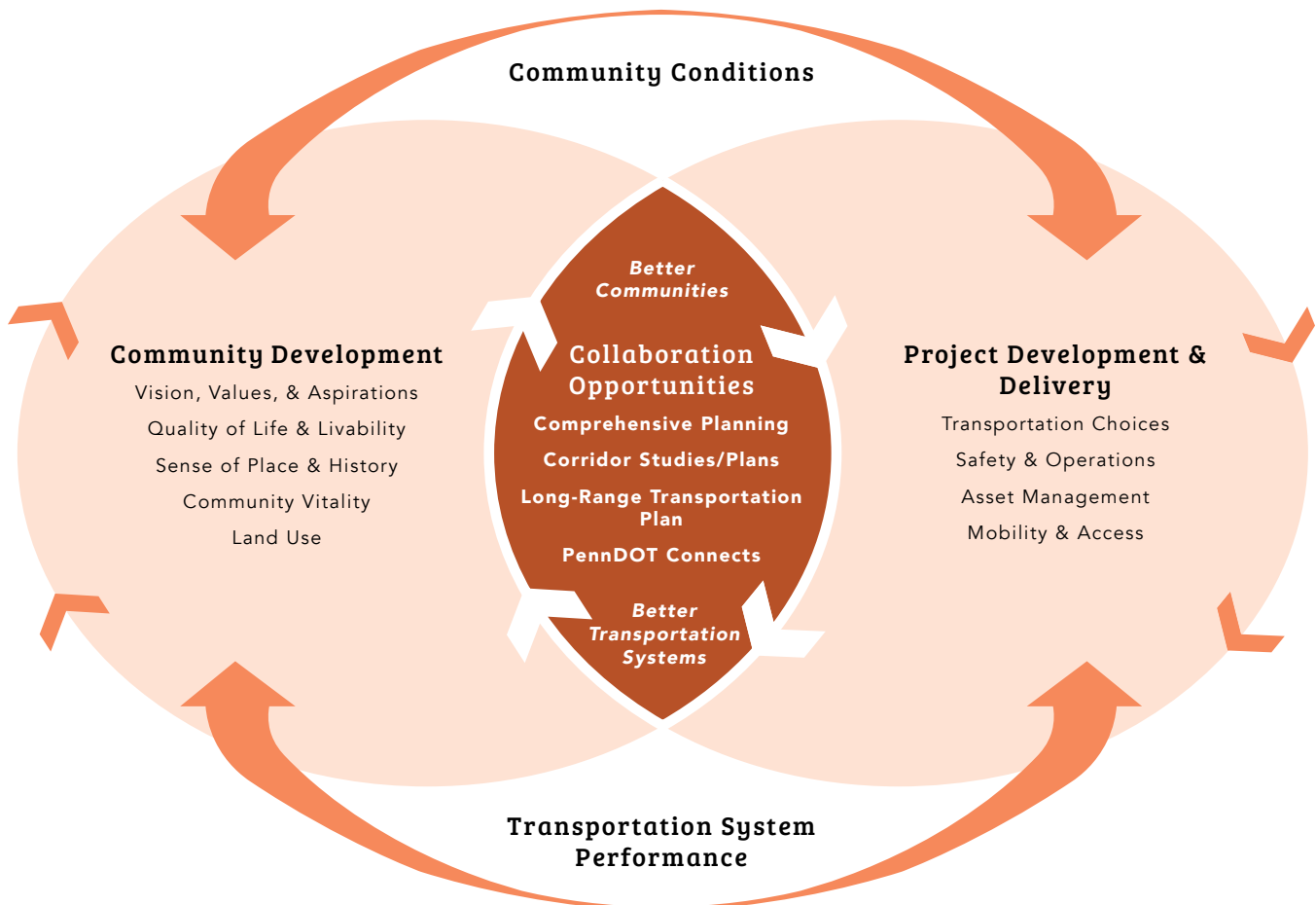
# Prioritize and Streamline

## COORDINATED INVESTMENT

The region's transportation network must function as an integrated system rather than a series of unrelated networks. It is imperative that the transportation agencies responsible for planning, implementing, and maintaining different components of the transportation system work in concert to give the region the opportunity to make mobility choices and investments.

If walking, cycling, and using public transportation are more attractive and convenient, it will help the region be more economically competitive by enhancing quality of life and the environment.

Not only do we need to continue to prioritize investment based on performance criteria at the corridor level, we also need to consider the context of each community in order to create genuine, livable places, emphasizing complete streets with a variety of mobility options. It is crucial to work toward the same shared goals of this plan, realizing that solutions to mobility are not one-size-fits-all and will look different across the urban, suburban, and rural areas of the region. Partnerships between transportation agencies, local governments, and the private sector are essential to this effort.





### **PRIORITIZE AND STREAMLINE STRATEGY**

Employ holistic planning for mobility and accessibility when developing and prioritizing projects. Make transportation improvements fit community context. Enhance local quality of life and encourage strong, enforceable, complete streets policies.

## **1 HOLISTIC PLANNING**

### **Actions**

- Prioritize investment based on performance criteria across the region while respecting and preserving local quality of life.
- Consider transportation funding and projects when making land use decisions. Land use regulations should support connectivity between the transportation network and new development. Regulations and codes should also set requirements for developers.
- Beyond land use regulations, options to make land “friendly” to developers should be considered. Guiding developers to high-impact properties that will support transportation projects will help to meet multiple goals.

**Potential Implementation Partners:** SPC, PennDOT, Public Transit Providers, County and Municipal Governments, Local Authorities

## **2 PROMOTE COLLABORATION**

### **Actions**

- Promote collaboration of planning efforts and bundling of projects and programs to reduce costs and develop cohesive communities/local governments. SPC will continue to serve as a conduit and clearinghouse for plans and information about projects – connecting potential partners and helping to ensure that connections are made while projects are in the planning and design phases.

**Potential Implementation Partners:** SPC, PennDOT, County and Municipal Governments



## PROJECT DEVELOPMENT & DELIVERY

The Commonwealth of Pennsylvania, as a part of the Federal Highway Administration's Every Day Counts (EDC) program, has advanced a number of initiatives over the past few years aimed at utilizing emerging infrastructure technologies and innovative project development to streamline the delivery of transportation improvements.

With our partners at PennDOT, SPC is committed to helping local project sponsors gain the knowledge that's essential for local administration of state and federal projects. SPC will continue to provide resources and technical assistance in project funding and planning, including project development and delivery.



Every Day Counts (EDC) is a state-based model that identifies and rapidly deploys proven, yet underutilized innovations to shorten the project delivery process, enhance roadway safety, reduce traffic congestion, and integrate automation. Proven innovations promoted through EDC facilitate greater efficiency at the state and local levels, saving time, money and resources that can be used to deliver more projects.

## Strategies at Work

- Apply New and Best Practices
- Reinvest in Communities
- Pursue Innovative Ideas and Solutions
- Mobility for All
- Modernize Supporting Infrastructure
- Public Transit Equity
- Coordinated Investment

Illustration: Second Avenue, Hazelwood





### PROJECT DEVELOPMENT & DELIVERY STRATEGY

Streamline federal, state and local project development and delivery across all phases.

## 1

### STREAMLINE PROCESSES

#### Actions

- Build public/private partnerships through collaboration and cooperation between infrastructure owners to develop cost savings.
- Embrace and adopt emerging technologies including materials and processes.

**Potential Implementation Partners:** SPC, PennDOT, Federal Highway Administration, Federal Transit Administration, County and Municipal Governments, Colleges and Universities, Public Transit Providers, Private Sector



# SUSTAINABLE AND RESILIENT COMMUNITIES

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The livability and sustainability of our communities is a priority. Intensive investments in connectivity, safe walkable neighborhoods, and green infrastructure will attract business and residents and provide opportunities for the communities of the region to flourish. Attractive, affordable housing, close to jobs and services in livable communities, accessible by public transportation, remain essential components to ensure residents are afforded equitable access to opportunity and current businesses are retained. These same attributes will help communities attract new residents and businesses.

All communities need to be well served by high-speed broadband to ensure all of southwestern Pennsylvania is able to participate in a changing, technology driven economy, and children throughout the region have access to all of the educational opportunities of the increasingly digital world. The provision of education affords opportunity for individuals to build successful lives and communities to achieve economic prosperity.

Communities across the region are incorporating green infrastructure to adapt to the increased

frequency of severe weather events and their impacts. As communities continue to implement green infrastructure, as a part of light imprint development, greater efficiencies in managing severe weather will be realized and in turn, make our communities and public spaces more appealing and more resilient.

## GOAL:

**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.**

Continued investment into programs that help to protect the region's open space and agricultural areas are essential in making certain that the rural character of much of the region remains intact and that our abundance of natural resources, the region's greatest asset, are preserved.

Working together to promote and implement best practices in land use policy, transportation planning, community development and leveraging private sector development will help communities and the region as a whole to create unique, livable areas with a sense of

place that are accessible for all residents. These places will be nimble and able to proactively plan for uncertain conditions, as well as able to adapt and overcome acute shocks and chronic stresses, creating 21<sup>st</sup> century communities that are prepared for the future.

## Goal: Sustainable and Resilient Communities

### Themes:

- **Resilient Communities: Elevate Community**
- **Tackle Climate Change, Air, and Water: The Earth Sustains Us**

The Strategies and Actions included in SmartMoves have been identified through the plan development process via the Commission, Expert Resource Panels, SPC committees, and broad public input. Methods of fulfilling the Regional Vision of “a world-class, well maintained, integrated transportation system that will provide mobility for all, enable resilient

communities, and support a globally competitive economy” are not limited to the Strategies and Actions presented to date. Subsequently proposed strategies and actions that help advance the Major Goals of Connected Mobility, Resilient Communities and a Globally Competitive Economy are consistent with the spirit and intent of the plan.







# Sustainable and Resilient Communities

## ELEVATE COMMUNITY

Investment and reinvestment into the region's existing communities is absolutely critical in creating and sustaining livable communities. southwestern Pennsylvania is home to communities of all sizes, from the densely populated urban core of the City of Pittsburgh and its suburbs to smaller cities, towns, and villages and sparsely populated rural areas. Each of these places is unique and has a story to tell. Through vision, collaboration, and sound community planning, the stories of these communities can be heard.

With sound community and transportation planning, vacant properties and gray/brownfield sites can be used to spur community development and revitalization. The adaptive reuse of vacant residential, commercial, and industrial properties

can help to reduce crime rates, increase the tax base, and combat population loss. While vacant properties have plagued many industrial cities and towns, they pose a unique opportunity for local government officials, community organizations, and residents to transform blighted and underutilized properties into vibrant assets that provide attractive, walkable, transit-friendly communities with complete streets and affordable housing options that will help retain current and attract new residents and businesses. By utilizing public policy incentives and lessons learned from other successful post-industrial communities, we can utilize these properties to benefit communities and the region at large.

## Strategies at Work

- Apply New and Best Practices
- Reinvest in Communities
- Pursue Innovative Ideas and Solutions
- Mobility for All
- Modernize Supporting Infrastructure
- Public Transit Equity
- Coordinated Investment
- Internet Connectivity



Illustration: McKean Avenue, Charleroi



### REINVEST IN COMMUNITIES STRATEGY

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.

#### 1 REPURPOSE UNDERUTILIZED LOTS

##### Actions

- Repurpose vacant properties for community benefit, such as community gardens, playgrounds, and open space; efforts should be expended to repurpose building(s). Maintaining a neighborhood's character and preventing too much demolition from occurring should be a priority when dealing with vacant dilapidated structures.

**Potential Implementation Partners:** County and Municipal Governments, Land Banks, Nonprofit Agencies, Economic Development Organizations

#### 2 PROMOTE INVESTMENT

##### Actions

- Promote investment in older, underserved communities to support public services and infrastructure improvements.

**Potential Implementation Partners:** Economic Development Organizations, Colleges and Universities, Health Care Industry

#### 3 UTILIZE INCENTIVES AND REGULATIONS

##### Actions

- Use public policy incentives and/or regulations to help ensure private property owners maintain their homes/buildings. Incentives may include zoning variances, tax abatements, and fee waivers among others, etc.

**Potential Implementation Partners:** Municipalities, Planning Commissions, Zoning Hearing Boards



## APPLY NEW AND BEST PRACTICES

Changing demographics and emerging technologies are changing community development and transportation planning. These Forces of Change are reshaping the way we move, where we want to live, how we purchase goods and services, and how/where we work. Techniques and concepts such as mixed-use development, form-based code, light imprint development, and context-based street design can help communities be nimble and prepared to take advantage of opportunities that spur economic growth and to transform themselves into accessible, sustainable communities.

The Commonwealth of Pennsylvania offers a number of tax incentives, loans and grant programs that can be used as mechanisms to leverage private sector development and to help communities realize their potential. The Municipal Authorities Act enables municipalities to create governmental bodies to finance and/or operate

Pennsylvania offers a number of tax incentives, loans and grant programs that can be used as mechanisms to leverage private sector development and to help communities realize their potential.

specific public works projects without utilizing the general taxing powers of the municipality. These mechanisms can be used by local governments to effectively take control of their own destinies. Through educational outreach, regional partners should focus on providing local governments with the tools and knowledge necessary to advance their priorities.



## BEST PRACTICES STRATEGY

Provide municipal education on land use best practices, Smart Growth principles, community development, transportation planning, and on existing mechanisms to leverage private sector development.

## 1 EDUCATE LEADERS ABOUT NEW AND BEST PRACTICES

### Actions

- Educate county and municipal governments about good land use practices and their benefits, including how to prepare land use regulations that support transportation networks and encourage development that is linked to or drives transportation access.
- Target chambers of commerce and state leadership for education efforts to raise awareness about best practices, ways to create great places that improve quality of life, and strategies to achieve consistent and user friendly regulations that support an affordable transportation system and provide housing closer to jobs and services.

**Potential Implementation Partners:** SPC, Chambers of Commerce, Housing and Finance Authorities, Nonprofit Organizations, PA DCED, PennDOT



### PURSUE INNOVATIVE IDEAS AND SOLUTIONS

Innovations in the way we plan, design, build, and maintain infrastructure projects are changing. State and federal transportation agencies are conducting research and developing new methods to streamline the project delivery process and save resources. For example, PennDOT's Road Maintenance and Preservation (Road MaP) initiative is using recycled asphalt to repave rural roads. This innovation and others like it are realizing savings in materials and are friendlier to the environment.

#### "Road MaP"

PennDOT's Road Maintenance and Preservation initiative is using recycled asphalt to repave rural roads.



### INNOVATIVE IDEAS STRATEGY

Embrace and expand emerging infrastructure innovations and technologies including planning, design, materials, and construction processes for a more adaptable and resilient built environment.

## 1 PUBLIC/PRIVATE COLLABORATION

### Actions

- Build public/private partnerships through collaboration and cooperation between infrastructure owners to develop cost savings.

**Potential Implementation Partners:** SPC, PennDOT, County and Municipal Governments, Construction Industry, Trade Organizations





## PREPARE FOR CHANGING WEATHER

Extreme weather events present significant and growing risks to the safety, reliability, effectiveness, and sustainability of communities and infrastructure in our region. In 2018, budgets to respond to infrastructure repairs due to extreme weather events such as flooding and landslides were exceeded by \$110 million statewide.

While transportation infrastructure is designed to handle a broad range of impacts based on historic climate, preparing for climate change and extreme weather events is critical to protect the integrity of the transportation system and financial investments.

Extreme weather can degrade water quality, increase stormwater runoff and stream bank erosion, and damage drinking water and wastewater treatment facilities. Communities in low-lying areas and along rivers are especially vulnerable to extreme weather events.

Southwestern Pennsylvania has the highest risk for landslides in Pennsylvania<sup>6</sup>. Landslides continue to negatively impact the region's transportation system, communities, and businesses.

The financial impact of landslides to transportation funding in the region is becoming increasingly significant. On the 2021 TIP, \$30 million was programmed for landslide remediation and the 2023 TIP already includes over \$66 million in slide remediation projects. One hundred percent of this funding is for reactionary remediation measures

and takes away from other planned priority capital improvements. This plan is reserving \$262 million of highway and bridge funding to remediate the effects of extreme weather on our transportation system.

Planning for and investing in green infrastructure in our communities is critical in reducing vulnerability to extreme weather.

Emerging Geographic Information System (GIS) based applications can help to predict

where landslides may occur. Employing this technology and educating our partners and local governments can help us take preemptive measures to prevent landslides.



This plan is reserving \$262 million of highway and bridge funding to remediate the effects of extreme weather on our transportation system.



### PROMOTE INVESTMENT STRATEGY

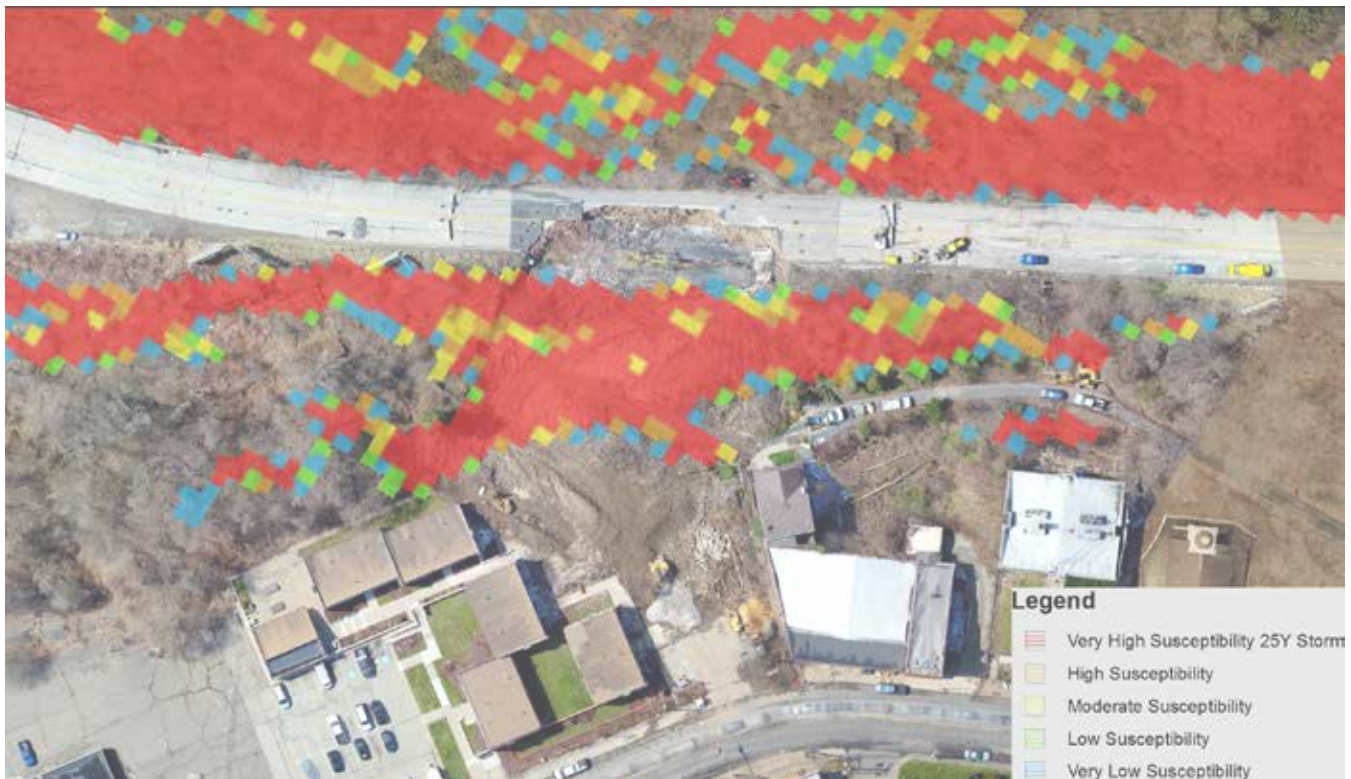
Promote strategic infrastructure investment in communities that reduces physical exposure and vulnerability from natural hazards, including flooding and landslides.

## 1 SUPPORT MITIGATION PLANNING

### Actions

- Support and develop mitigation planning efforts that identify the highest quality mitigation projects for natural and cultural resources in the region. Coordination and sharing best practices among local and regional municipalities should be encouraged to ensure efficient mitigation planning efforts.

**Potential Implementation Partners:** SPC, County and Municipal Governments



SPC's predictive landslide model overlaid on Route 30 landslide, April 2018





# Tackle Climate Change, Air, & Water

## THE EARTH SUSTAINS US

Climate change is defined as a significant change in the measures of climate, such as temperature, rainfall, or wind, lasting for an extended period – decades or longer.<sup>7</sup> Climate change can occur from natural processes and factors such as changes in the sun's intensity, volcanic eruptions, and changes in the ocean's currents. Human activities, such as the burning of fossil fuels, emissions from agriculture, and emissions generated by changes to land use such as deforestation, urbanization, and desertification, are also contributing to the observed rise in global average temperatures since the mid-20<sup>th</sup> century.

Combating these changes is a multifaceted, multi-agency endeavor. A broad coalition of stakeholders is needed to identify local/regional risks and tailor strategies in order to achieve the greatest benefit to air quality and the environment. The Commonwealth of Pennsylvania and the City of Pittsburgh both have developed Climate Action Plans (CAPs), which could serve as a foundation for a regional plan.

A broad coalition of stakeholders is needed to identify local/regional risks and tailor strategies in order to achieve the greatest benefit to air quality and the environment.





## SUSTAINABILITY STRATEGY

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.

### 1 INVEST IN RENEWABLE RESOURCES

#### Actions

- Encourage investment in renewable energy sources that produce fewer emissions, which can help to slow the rate of climate change.

**Potential Implementation Partners:** SPC, PennDOT, County and Municipal Governments, State Legislature, Private Industry, Chambers of Commerce, Nonprofits, Foundations, General Public, Public Utilities

### 2 RAISE AWARENESS FOR SUSTAINABLE PRACTICES

#### Actions

- Undertake strategies that raise awareness and educate the public, government officials, and businesses about climate change, its projected impacts, and the region's strategies in response.

**Potential Implementation Partners:** SPC, County and Municipal Governments, Nonprofits, Foundations, Educational Institutions

### 3 DEVELOP A REGIONAL ENERGY PLAN

#### Actions

- Develop a Regional Energy Plan to promote cleaner electricity generation. Focus research, development and transportation projects, and educational institutions on electrical energy and ways to produce cleaner electricity. Such sources may include wind turbines, solar panels, and hydroelectric systems.

**Potential Implementation Partners:** County and Municipal Governments, Coalition of Public and Private Entities, Public Utilities

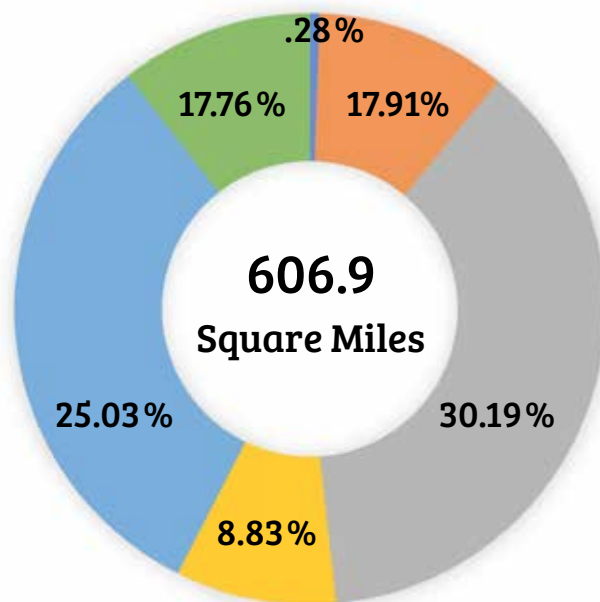


## VALUING OUR NATURAL RESOURCES

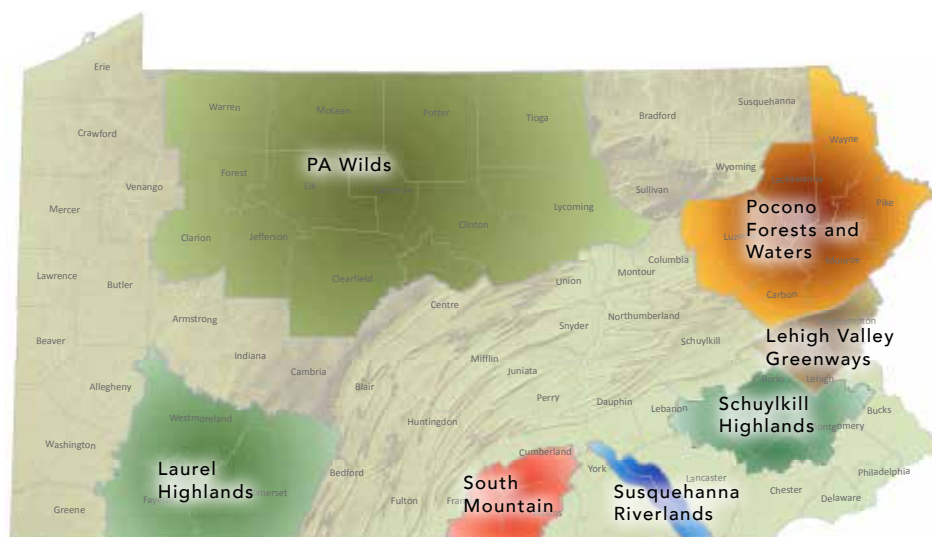
The region's natural resources are its greatest asset. These resources contribute to the environmental health as well as the economic health of our region. Conservation is critical to the long term sustainability of those contributions. Southwestern Pennsylvania is home to one of the Commonwealth's seven Conservation Landscapes, the Laurel Highlands. Conservation Landscapes are regions bound together by a shared sense of place and identity that come together collaboratively to drive strategic investment and actions around sustainability, conservation, community revitalization, and recreational projects. These collaborations are found in regions where there are strong natural assets, local readiness and buy-in, and state-level investment and support.

In addition to the Laurel Highlands Conservation Landscape, which includes Fayette and Westmoreland counties in the SPC region, the feasibility of creating another conservation landscape, tentatively called the Glacier's Edge is being investigated. The Glacier's Edge could include all or parts of Allegheny, Butler, and Lawrence counties in our region.

Conservation not only protects plants, birds, and animals, but it also help protects us. Good planning, conservation and management of our resources can provide protection from natural disasters, such as floods and drought, as well as protecting our regional food sources.



## PROTECTED AND CONSERVED LAND WITHIN THE REGION



## CONSERVATION LANDSCAPES





### NATURAL RESOURCES STRATEGY

Conservation of the region's natural resource assets and key tracts of land enhances environmental quality, natural land connectivity, habitat corridors, and agricultural lands preservation, and provides recreational opportunities for residents and tourists , as well as reclaim and remediate environmentally sensitive lands.

## 1 CONTINUE CONSERVATION WITHIN COUNTIES

### Actions

- Encourage counties to continue planning and management efforts to conserve and preserve existing natural resources and sensitive ecosystems.

**Potential Implementation Partners:** County Governments, PA DCNR

## 2 SUPPORT CONSERVATION EFFORTS

### Actions

- County and municipal governments should continue to support conservation efforts to enhance environmental quality, natural lands connectivity, habitat corridors, and agricultural lands preservation.

**Potential Implementation Partners:** County and Municipal Governments, PA DCNR

## 3 PROMOTE NATURAL RESOURCES FOR RECREATION

### Actions

- Support, promote, develop, and adapt recreational opportunities for residents and tourists that are based on the region's natural resource assets.

**Potential Implementation Partners:** Local Tourism Boards, County and Municipal Governments, Chambers of Commerce, PA DCNR



## Strategies at Work

- Reinvest in Communities
- Mobility for All
- Coordinated Investment
- Value our Natural Resources
- Apply New and Best Practices

Illustration: Three Rivers Heritage Trail, Etna

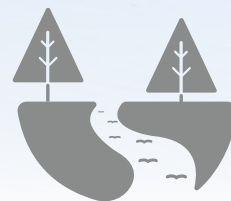




## TAKE CARE OF WATER

Water issues such as sewage, water quality, water quantity, stormwater drainage, flooding, and watershed protection are closely interrelated and should be examined holistically. The region should support the integration of stormwater management decisions into local planning, municipal operations, and budgeting, data and information sharing, and transportation planning and programming.

Again, with many of the other recommendations and strategies presented in this plan, planning holistically to address water issues is a multifaceted, multi-agency effort that will require close collaboration among stakeholders and government entities. County and municipal governments should be aware of how local decisions can affect access for other users and ensure the region's water remains a vital environmental, economic, and recreational asset.





### CLEAN WATER STRATEGY

Promote and support sustainable regional water resource management and planning for water topics such as stormwater, flooding, water quantity, water quality, and infrastructure systems.

## 1 PROMOTE BEST PRACTICES

### Actions

- Prepare Integrated Watershed Plan(s) to promote the use of best practices, lessons learned, and upstream responsibilities. Watershed Plans should be prepared within the context of the Regional Integrated Water Plan Framework, once developed.

**Potential Implementation Partners:** County and Municipal Governments, Watershed Associations, ALCOSAN

## 2 INTEGRATED WATER RESOURCE MANAGEMENT APPROACH

### Actions

- Develop a Regional Stakeholder Advisory Committee that will guide the development of a Regional Integrated Water Resource Planning framework. The committee will be composed of representatives from public utilities, transportation, private industry, county government/municipal offices, agriculture, and environmental advocacy groups. Representatives from each member county can ensure representation and a coordinated approach. The SPC region should take an Integrated Water Resources Management (IWRM) approach, which has been defined by the Water Research Foundation's blueprint for One Water. One Water is defined as "an integrated approach to managing finite water resources for long-term resilience and reliability, meeting both community and ecosystem needs." This is a flexible approach that will allow our region to develop a framework specific to the needs of the region that builds on the interconnectedness of existing plans and a multi-stakeholder planning process as well as lessons learned from a diverse group of water professionals.

**Potential Implementation Partners:** SPC, County Governments

## 3 CREATE INCENTIVES FOR STORMWATER MANAGEMENT

### Actions

- Incentivize individuals and business owners to minimize and manage stormwater. The development of a standalone stormwater utility/authority or a property tax increase could possibly be used, while implementing discounts for green infrastructure. SPC and its partners should consider conducting a feasibility study for the development of such an authority and/or developing a regional flood susceptibility index (FSI) to help prioritize areas susceptible to flooding for planning and mitigation investments.

**Potential Implementation Partners:** SPC, County and Municipal Governments



## REDUCE GHG EMISSIONS

With the transportation sector becoming the greatest contributor to GHG emissions (approximately 27% of total) in the United States, it is imperative that the region prioritizes programs and projects that work to reduce Vehicle Miles Traveled (VMT) and decrease greenhouse gas emissions. Reducing GHGs in the transportation sector will be a multifaceted, multi-agency endeavor.

Transportation agencies, local governments and the private sector should work together to provide mobility options for the region's residents to reduce VMT for single-occupancy vehicles through complete streets policies and other transportation demand management (TDM) activities and programs that improve air quality. As the use of electric vehicles expands in the region, in private and freight related vehicles as well as multimodal options, the benefits to the environment can be advanced by the strategic placement of electric vehicle charging infrastructure. Potential sites for additional plug in charging stations could include multi-unit residences, workplaces, retail

locations, institutional parking facilities, and strategic locations along highway corridors such as truck stops, convenience stores and hotels. This plan reserves nearly \$1 billion through its

competitive funding programs (CMAQ, CRP, TA Set-Aside and SMART) to implement these types of improvements and to support this Strategy.

Employers in both urban and suburban areas can play a critical role in improving air quality by incentivizing the use of ridesharing, public transportation, bicycling and walking for their employees. Local governments should take the lead by amending their local zoning codes to require developers to submit a TDM plan

with each major development project.

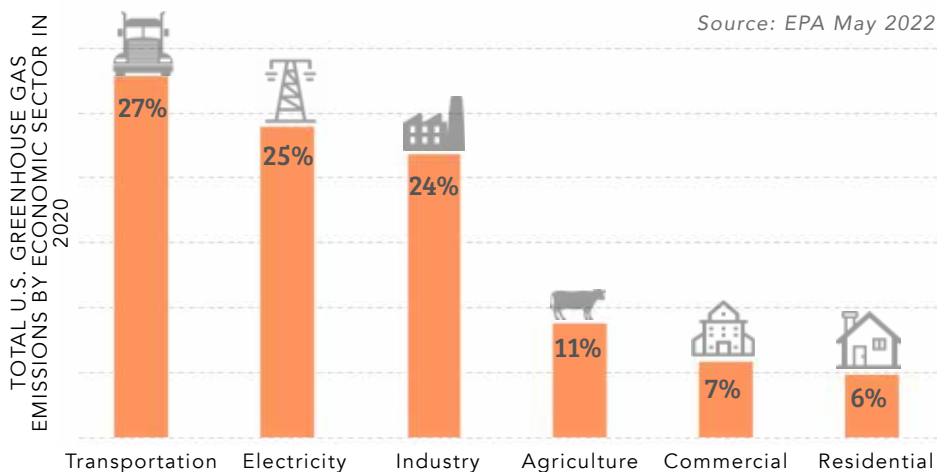
Sound land use planning techniques such as mixed-use development, form-based code, and infill development/redevelopment will also improve air quality for the region by increased opportunities to walk, bike, and use public transit.

As described in Appendix XX, Transportation Performance Management, the Commonwealth

of Pennsylvania and the southwestern Pennsylvania region have set targets to reduce mobile source emissions and improve air quality. The targets represent the amount of emissions to be reduced per day via projects funded with regional Congestion Mitigation and Air Quality (CMAQ) program funds. SPC and its planning partners will uphold our long-standing policy to select projects for CMAQ funding that realize the greatest benefit to air quality.

SPC and its planning partners will uphold our long-standing policy to select projects for CMAQ funding that realize the greatest benefit to air quality.

**Transportation and Electricity are the largest contributors to Green House Gas Emissions in the U.S.**







### CLEAN AIR STRATEGY

Support and encourage transportation projects and 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).

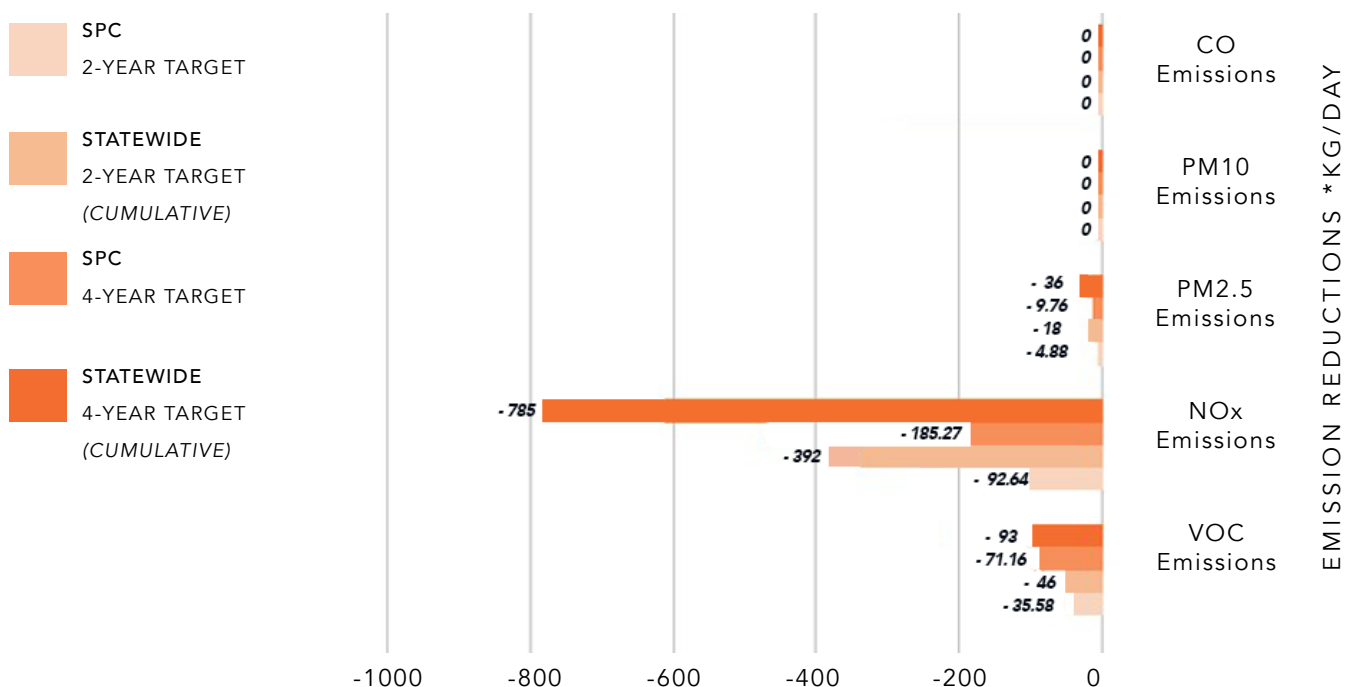
## 1 ENCOURAGE PROJECTS WITH GOOD AIR QUALITY STANDARDS

### Actions

- Support and encourage transportation projects and programs that will contribute to attainment and maintenance of the national ambient air quality standards (NAAQS) for ozone, carbon monoxide, and particulate matter.

**Potential Implementation Partners:** SPC, PennDOT, County and Municipal Governments, Energy Producers

## Targets for CMAQ Emission Reduction



# GLOBALLY COMPETITIVE ECONOMY

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As the region looks to the future and the economic opportunities it can provide to its residents, it will need to make *SmartMoves* to maximize opportunities. Actively addressing workforce, infrastructure, energy, and technology are critical to ensuring the entire region can reach its potential for everyone to have equal opportunities for success. How we approach workforce to match skills and meet demand; how we transform our

infrastructure into an asset rather than a risk; how quickly and widely we adopt and deploy existing and new technologies; and, how we capitalize on the energy sector will determine if this region is globally competitive. The answers rely on us making *SmartMoves* for strategic infrastructure investments and workforce training that will make the region recognized as a global leader in technology and innovation.

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

The Strategies and Actions included in *SmartMoves* have been identified through the plan development process via the Commission, Expert Resource Panels, SPC committees, and broad public input. Methods of fulfilling the Regional Vision of “a world-class, well maintained, integrated transportation system that will provide mobility for all, enable resilient communities, and support a globally competitive economy” are not limited to the Strategies and Actions presented to date. Subsequently proposed Strategies and Actions that help advance the Major Goals of Connected Mobility, Sustainable and Resilient Communities, and a Globally Competitive Economy are consistent with the spirit and intent of the plan.

# **Goal:** **Globally Competitive Economy**

## **Themes:**

- **Grow, Train, and Retrain: Workforce for Change**
- **Prioritize, Improve, and Support: Infrastructure Supports Us**
- **Partner and Deploy: Technology Advances Us**

### **GROW, TRAIN, AND RETRAIN: WORKFORCE FOR CHANGE**

Building and retaining a diverse local workforce to meet the demand for highly skilled talent across sectors is critical. Growing the size of the candidate market and ensuring it has the soft skills needed to meet the 21<sup>st</sup> century expectations of a modern workforce through training and retraining is also crucial.

### **PRIORITIZE, IMPROVE, SUPPORT: INFRASTRUCTURE SUPPORTS US**

Keeping our aging public infrastructure in a state of good repair is necessary to support growth in the region, but it is just as important that we build the infrastructure of the future. Prioritizing infrastructure that provides for economic success, including embracing innovation and technology to improve its efficiency.

### **PARTNER AND DEPLOY: TECHNOLOGY ADVANCES US**

Rapidly advancing technology affects all aspects of the economy from infrastructure and mobility to advanced manufacturing, to healthcare, retail, and the service industry. Fast paced technology identification, deployment, and adoption across all sectors will give the region a competitive advantage. Ensuring that the entire region is provided equal access to high speed internet connectivity is essential to prevent residents and communities from being left behind.





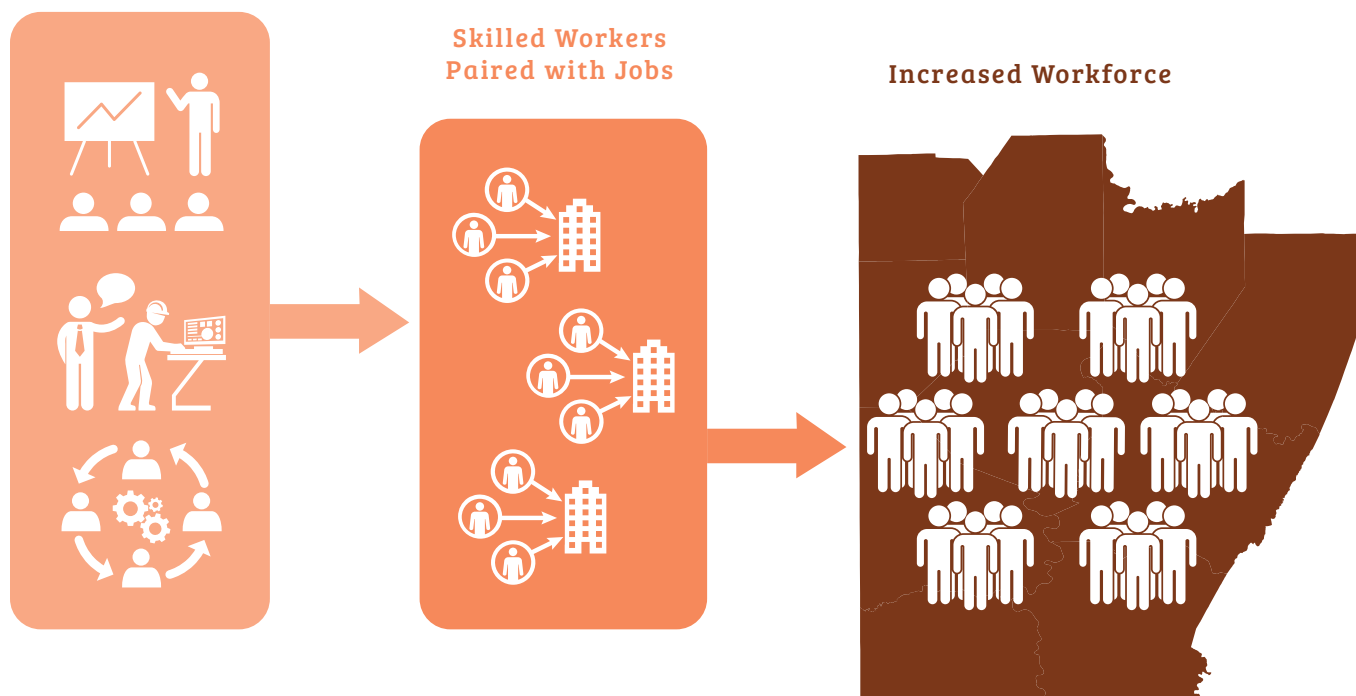
# Grow, Train, & Retrain

## WORKFORCE FOR CHANGE

The region may not have enough eligible workforce candidates to fill the jobs of the future. This Strategy focuses on increasing the candidate market or “end size” to meet future workforce demands. For the region to be successful it will require that we form what may be seen as non-traditional partnerships for action. This strategy seeks to increase the size of the region’s work force in general and for the sectors and occupations of high demand through traditional and new innovative actions.



## Traditional and Innovative Training





## WORKFORCE GROWTH STRATEGY

Grow job candidate market by promoting the benefits of recruitment, retention and immigration of skilled labor, and workforce reintegration of individuals with barriers to work.

### 1 BREAK THE BLUE COLLAR STIGMA

#### Actions

- Raise the profile of skilled labor blue collar careers. Break the stigma attached to available jobs in blue collar jobs (such as heavy machinery, etc.).

**Potential Implementation Partners:** Employers, Workforce Investment Boards, Trade Associations, Universities, K-12 Schools, Chambers of Commerce, Trade Schools

### 2 ATTRACT NEW WORKERS TO THE REGION

#### Actions

- Encourage migration to the region. Promote the region's quality of life to attract new residents, including lower cost of living, great schools, health care facilities, and services.
- Encourage employers to align their requirements with national standards to ensure that they are competitive and able to attract workers.

**Potential Implementation Partners:** Regional Organizations, Business Community/Chambers of Commerce, Workforce Investment Boards, University Alumni Outreach Groups, Colleges and Universities, Pittsburgh Regional Alliance, Realtors Associations, Economic Development Organizations, Tourism/Visitors Bureaus

### 3 ATTRACT A VARIETY OF INDUSTRIES

#### Actions

- Continue working to attract a variety of industries to diversify the region to help the economy grow stronger, attract new residents, and retain the residents that we have. o Work with new and growing industries such as aerospace, aviation, robotics, and autonomy to diversify regional opportunities.

**Potential Implementation Partners:** Chambers of Commerce, Industry Groups, Allegheny Conference on Community Development



## CONTINUED TRAINING

The region's workforce will need continuous training and retraining beginning in high school through college and continuing to incumbent workers. The region will need to prepare the workforce for emerging industry demands in growing future industries like Advanced Manufacturing, Robotics and Artificial Intelligence. Industry 4.0 will require different skills and we need to prepare the region's workforce to remain competitive. This Strategy recognizes and focuses on the need to provide training and retraining not only for existing jobs, but also for the job market of the future.



## TRAINING STRATEGY

Train and/or retrain employees and post-secondary graduates for regional jobs, and train for emerging technology opportunities, like Advanced Manufacturing, Robotics and Artificial Intelligence.

# 1 COLLABORATE WITH EDUCATIONAL INSTITUTIONS

### Actions

- Train and match workers to existing regional jobs. Encourage training in schools from earlier ages in a three pronged approach that includes increasing awareness, creating career pathways, and encouraging hands-on work experience like apprenticeships.
- Work with schools and other partners to provide flexible and easy to use funding for on-the-job training geared to emerging and new technologies. Teach/promote new computer skills to help older populations enhance productivity and relativity in the job market.
- Network with universities to secure funding support and ongoing education for leadership. This can include upskill training to move employees up the ladder. Invest in transportation that connects people to jobs so that the available jobs are also desirable long term and people can afford to stay.
- Encourage industry led partnerships with educational institutions to determine current and future skill set needs. Utilize these relationships to prepare career pathways to employment for trainees and students.

**Potential Implementation Partners:** Philanthropic Organizations, K-12 Schools, Colleges and Universities, Industry Partners, Employers Chambers of Commerce, County and Municipal Governments



### PROMOTING JOB READINESS

"Teach them how to show up to work everyday and on time. Teach basic communication and problem-solving skills and we will train them how to operate our machines." A number of participants in our plan development process expressed this sentiment. This Strategy focuses implementation steps that provide the workforce with the needed soft skills, like communication and problem solving, and working with industries to develop systems that allow them to provide the customized job training.



### JOB READINESS STRATEGY

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.

## 1 SHARPEN SOFT SKILLS IN EDUCATIONAL PROGRAMS

### Actions

- Encourage training programs at schools and universities to focus on soft skills. Schools and training programs can incorporate transition plans with employment goals into graduation requirements.
- Network with universities to secure funding to support education and leadership training to help move employees up the ladder. Provide or arrange for flexible and easy to use on-the-job training funds for companies to train employees and promote awareness of existing resources to aid with these goals.
- Obtain feedback from Industry partners on current needs and challenges. Ensure that education, workforce and job training support networks have the most up to date information to provide future trainees.

**Potential Implementation Partners:** Employers, Workforce Investment Boards, Trade Associations, Universities, K-12 Schools, Chambers of Commerce, County and Municipal Governments



# Prioritize, Improve, Support

## INFRASTRUCTURE SUPPORTS US

This Strategy focuses on coordinated infrastructure investments that are strategically selected for their potential impact on the regional and local economy. Coordinated investments often yield the greatest

impact and often lend themselves to alternative funding methods like public/private partnerships and other value capture financing tools.



## INFRASTRUCTURE STRATEGY

Prioritize infrastructure projects by considering their full regional economic, environmental and community benefits, emphasizing projects that are consistent with national and regional community, economic and environmental priorities and needs.

## 1 COST SAVINGS THROUGH PUBLIC/PRIVATE PARTNERSHIPS

### Actions

- Work to build public/private partnerships between infrastructure owners through collaboration and cooperation to develop cost savings. Work with county and municipal governments to establish requirements for developers to pay for public infrastructure improvements associated with private sector projects.

**Potential Implementation Partners:** SPC, PennDOT, County and Municipal Governments

## 2 CONSIDER ECONOMIC IMPACT

### Actions

- Consider the economic impact of infrastructure investment on land use patterns and tax revenues from potential commercial or industrial development, residential investment, and other types of land development.

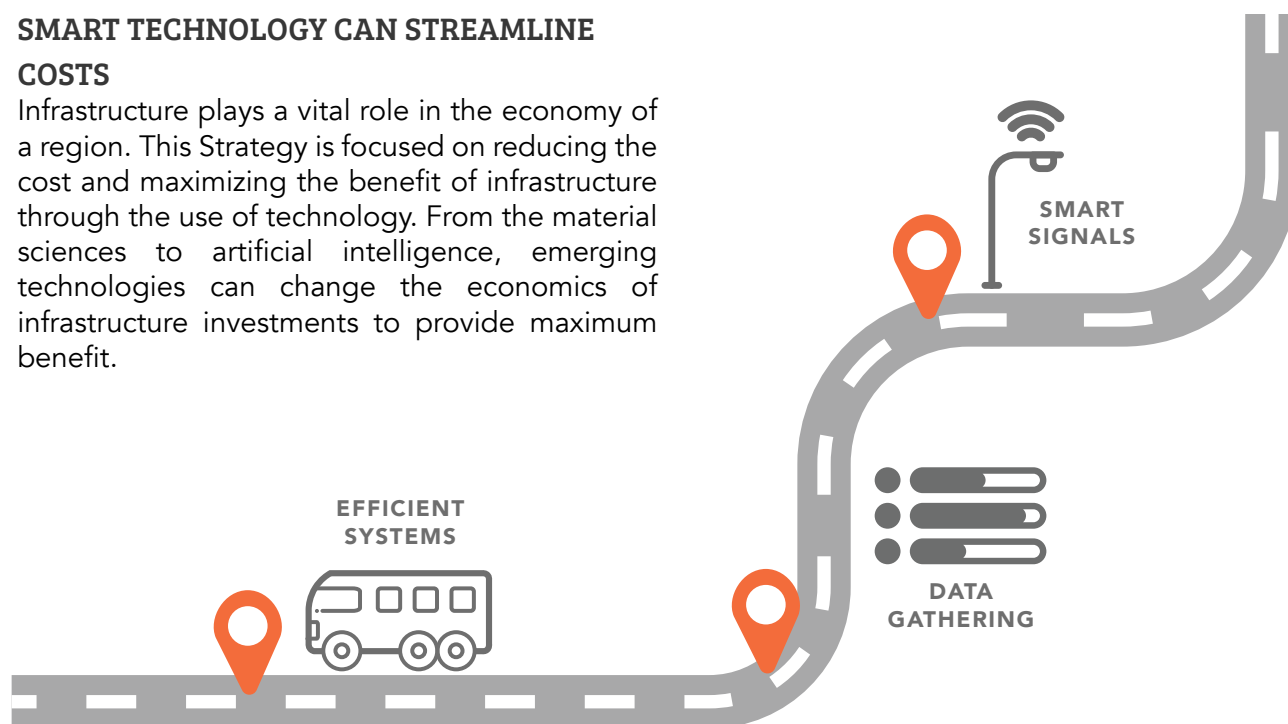
**Potential Implementation Partners:** SPC, Chambers of Commerce, County and Municipal Governments, PennDOT





## SMART TECHNOLOGY CAN STREAMLINE COSTS

Infrastructure plays a vital role in the economy of a region. This Strategy is focused on reducing the cost and maximizing the benefit of infrastructure through the use of technology. From the material sciences to artificial intelligence, emerging technologies can change the economics of infrastructure investments to provide maximum benefit.



## SMART TECHNOLOGY STRATEGY

Improve infrastructure efficiency through technology implementation in project development including, design, construction, operation, and maintenance phases.

### 1 DEVELOP SMART DATA SYSTEMS

#### Actions

- 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.

**Potential Implementation Partners:** SPC, PennDOT, Federal Highway Administration, Federal Transit Administration, County and Municipal Governments, Colleges and Universities, Public Transit Providers



### INVEST IN LOCAL ENERGY RESOURCES

The Appalachian region has the potential to become a major petrochemical and plastic resin-producing region. The Appalachian region is an ideal location for the emergence of a second major petrochemical manufacturing hub in the country with close proximity to abundant natural

gas liquid (NGL) resources and manufacturing markets. This strategy focuses on supporting the development of a storage hub in the region to take maximum advantage of locally-sourced natural gas liquids.



### ENERGY RESOURCES STRATEGY

Support and incentivize new and emerging industries and clean energy hub development such as those associated with Carbon Capture Utilization and Sequestration (CCUS) and hydrogen.

## 1 SUPPORT NEW ENERGY SOURCES

### Actions

- Grow and expand our economy and strong manufacturing and industrial base by supporting decarbonization initiatives, solutions, and workforce needs.
- Reduce the uncertainty of future energy infrastructure needs by encouraging its partners to apply existing public/private financing programs to Appalachian energy infrastructure projects and continuing to promote investment in the energy sector.

**Potential Implementation Partners:** US Department of Energy, Pennsylvania Department of Environmental Protection's Energy Programs Office (EPO), chambers of commerce, industry groups and associations, as well as the Allegheny Conference on Community Development.

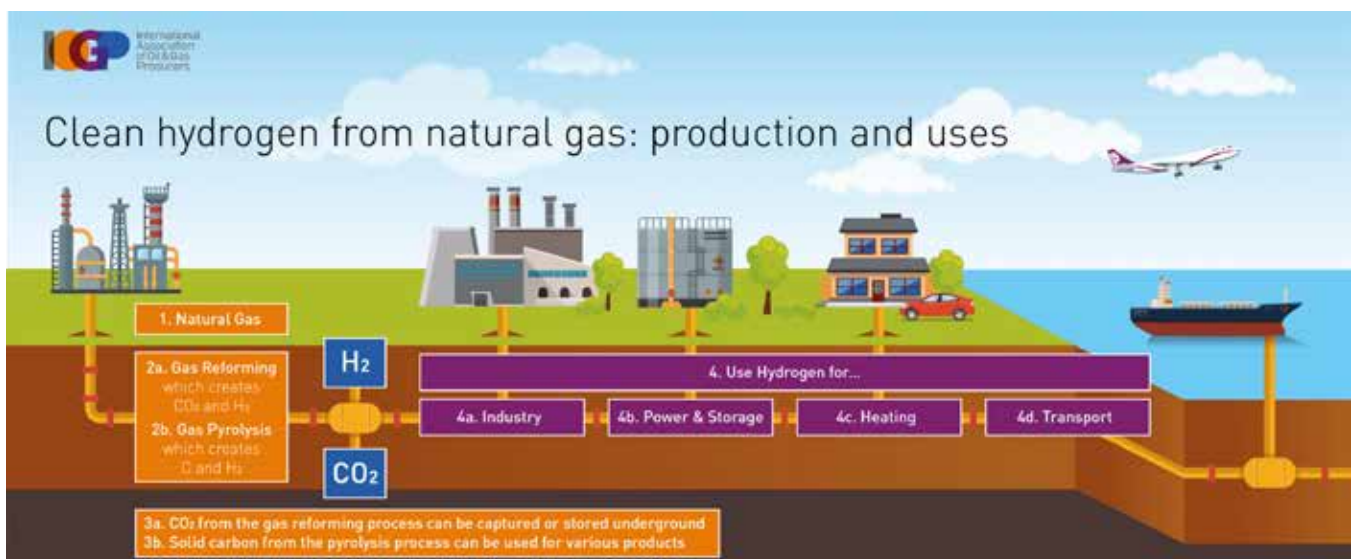


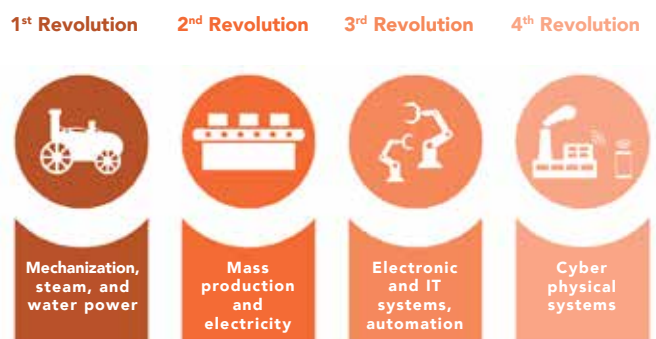
Image courtesy of the International Association of Oil & Gas Producers



# Partner and Deploy

## TECHNOLOGY ADVANCES US

Innovation and technology continue to change the way industries, companies, businesses, and individuals communicate and perform. This Strategy focuses on building active partnerships to identify new technologies and assess their relevance to keep this region at the cutting edge of technological innovation.



## NEW TECHNOLOGY STRATEGY

Identify, track, develop and deploy new technology advancements across the region through the use of public private partnerships; opportunities include mobility, communications, sustainable development and infrastructure resiliency.

### 1 IDENTIFY INFRASTRUCTURE NEEDS FOR CAVS

#### Actions

- The region must work with PennDOT, local infrastructure owners, and vehicle manufacturers to determine the infrastructure needs for CAVs and identify and eliminate any technical barriers to their safe use.

**Potential Implementation Partners:** PennDOT, Infrastructure Owners, Colleges and Universities, Research Organizations, Vehicle Manufacturers

### 2 IDENTIFY EMERGING TECHNOLOGIES

#### Actions

- Work with research institutions and private industry to identify emerging innovations and technologies and implement initiatives to adopt and deploy.

**Potential Implementation Partners:** County and Municipal Governments, Regional Organizations, Research Organizations, Existing Manufacturers

### HIGH SPEED CONNECTIVITY FOR ALL

Currently, many areas within the region lack adequate high-speed internet access and equipment that are essential for residents to better connect to jobs, education, health care, and to attract new business. The regional Connectivity Roadmap provides a guide for building a more comprehensive and equitable broadband network that will help people connect to opportunity.



### INTERNET CONNECTIVITY STRATEGY

Continue to implement the Connectivity Roadmap by developing, supporting and deploying high speed connectivity programs and projects to affordability, equitably and systematically address the unserved and underserved areas of the region.

## 1 BROADBAND EVERYWHERE

### Actions

- Continue to promote and assist the region in deploying affordable, equitable high speed internet service and supporting digital literacy and equity programs either through funding, incentives and/or policy changes.
- Work collaboratively with partners across the region and the Commonwealth, including the Pennsylvania Broadband Development Authority as well as state and federal elected officials to implement the 12 Goals found in the Connectivity Roadmap to ensure our region is connected and thriving socially and economically.

**Potential Implementation Partners:** SPC, PennDOT, the Pennsylvania Turnpike Commission, Telecommunication Companies, County and Municipal Governments, Commonwealth of Pennsylvania, Nonprofits, Schools and Higher Education Institutions, and the Private Sector.







## SECTION III:

# A FOUNDATION FOR MOVING FORWARD

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The Southwestern Pennsylvania Commission (SPC) is the designated Metropolitan Planning Organization (MPO), Local Development District (LDD), and Economic Development District (EDD) for Southwestern Pennsylvania. In these roles, SPC is the leader in regional planning for southwestern Pennsylvania and is charged with developing both the regional long range transportation plan and the comprehensive economic development strategy. While mandated by different federal regulations, *SmartMoves for a Changing Region* integrates these into a coordinated regional program of projects and actions that are guided by the principle that the relationships between our communities, economic development, and the region's transportation system are interconnected, interdependent, and fundamental to the success of southwestern Pennsylvania. SPC works with multiple planning partners at the federal, state, regional, and local levels on programs and projects that move the Regional Vision, Major Goals, and Strategies forward.

# FOUNDATION: SPC ROLE

SPC's planning area encompasses the ten counties of southwestern Pennsylvania and their connections to points beyond the region. The planning process addresses surface transportation needs for roadways, bridges, and public transit; travel by automobile, truck, buses, trains, bicycle, or walking; issues with safety, accessibility, and mobility; and, access to work, school, shopping, recreation, and our homes.

The long range plan is one of the core products of SPC's cooperative, coordinated and comprehensive (3c) metropolitan transportation planning process. In Summer 2017, the SPC Executive Committee charged the region's county planning directors to create a Long Range Plan Task Force with diverse expertise to develop a new planning process. Based on direction from the Task Force, SPC developed Expert Resource Panels to identify and examine trends and Forces of Change that are impacting the region today and will continue to impact the region in the future. SPC staff, working with the planning directors, took the direction and feedback given by its Task Force, and advanced the new planning process to create a holistic, state-of-the-practice plan that will enable the region to collaboratively work together and advance southwestern Pennsylvania forward.

SPC is the leader in regional planning for southwestern Pennsylvania and is charged with developing both the regional long range transportation plan and the comprehensive economic development strategy.



At the direction of the SPC Executive Committee, the Regional Policy Advisory Committee, and the Commission as a whole, we worked collaboratively with stakeholders and the public throughout the region to create a Regional Vision, Goals, and Strategies that move the region forward in a holistic positive direction. These Strategies, along with the foundation of the Ten Federal Planning Factors and the National Performance Goals, guide the investments and priorities for state and federal transportation investments over the next 25 years. This will ensure the projects and programs contained in the plan will work in concert to assist the southwestern Pennsylvania region achieve its desired vision for the future.



### FEDERAL PLANNING FACTORS

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 accessibility and mobility of people and freight;
5. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
6. Increase the safety of the transportation system for motorized and non-motorized users;
7. Increase the security of the transportation system for motorized and non-motorized users;
8. Increase accessibility and mobility of people and freight;
9. Increase the security of the transportation system for motorized and non-motorized users; and
10. Increase accessibility and mobility of people and freight.



## TRANSPORTATION PERFORMANCE MANAGEMENT

The Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act include performance management requirements. Performance-based planning will ensure that SPC and PennDOT collectively invest federal transportation funds efficiently towards achieving national, as well as state and regional goals.

Transportation Performance Management (TPM) is a strategic approach that uses system data and information to make investment and policy decisions to achieve performance goals. TPM is an ongoing, systematic approach that provides key information to help decision-makers understand how investments decisions made across transportation assets and/or modes affect system performance. The process improves communication between decision-makers, stakeholders, and the public. A key component of TPM is the establishment of performance measures and targets, which are developed via cooperative partnerships based on data and objective information.

TPM is a strategic approach that uses system data and information to make investment and policy decisions to achieve performance goals.



### Investment Decisions

Using goals, measures, and data to make better informed decisions about how to invest transportation funding.



### Aimed at a Better Performing Transportation System

Setting targets, developing plans, reporting results, and being accountable for performance.



### For Connected and Productive Communities

Focusing on the efficient delivery of goods and safe, reliable journeys to work, school, shopping, and community activities.

## PERFORMANCE GOALS

SPC has long utilized a comprehensive planning and programming process with a focus on collaboration between PennDOT, FHWA, and planning partners at the county and regional levels. This approach will be applied as part of this long range plan to implement TPM and Performance-Based Planning and Programming (PBPP). A detailed summary of the TPM and PBPP collaboration, roles and responsibilities, baseline conditions, performance targets, and a description of the process used in setting the targets is found in Appendix II.



### INFRASTRUCTURE CONDITION

To maintain the highway infrastructure asset system in a state of good repair.

### SAFETY

To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

### CONGESTION REDUCTION

To achieve a significant reduction in congestion on the National Highway System.

## NATIONAL PERFORMANCE GOALS

### FREIGHT MOVEMENT AND ECONOMIC VITALITY

To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

### ENVIRONMENTAL SUSTAINABILITY

To enhance the performance of the transportation system while protecting and enhancing the natural environment.

### SYSTEM RELIABILITY

To improve the efficiency of the surface transportation system.

## THE CLEAN AIR ACT

The Clean Air Act establishes National Ambient Air Quality Standards (NAAQS) and assigns certain responsibilities to state and local governments to meet these standards. The US Environmental Protection Agency has promulgated transportation conformity regulations to address Clean Air Act requirements. SPC is responsible under these regulations for testing its long range plan and TIP to ensure that these programs will not deteriorate regional air quality. A summary of SPC's requirements, conformity process, and findings are explained in detail in Appendix V - Air Quality Conformity Determination.

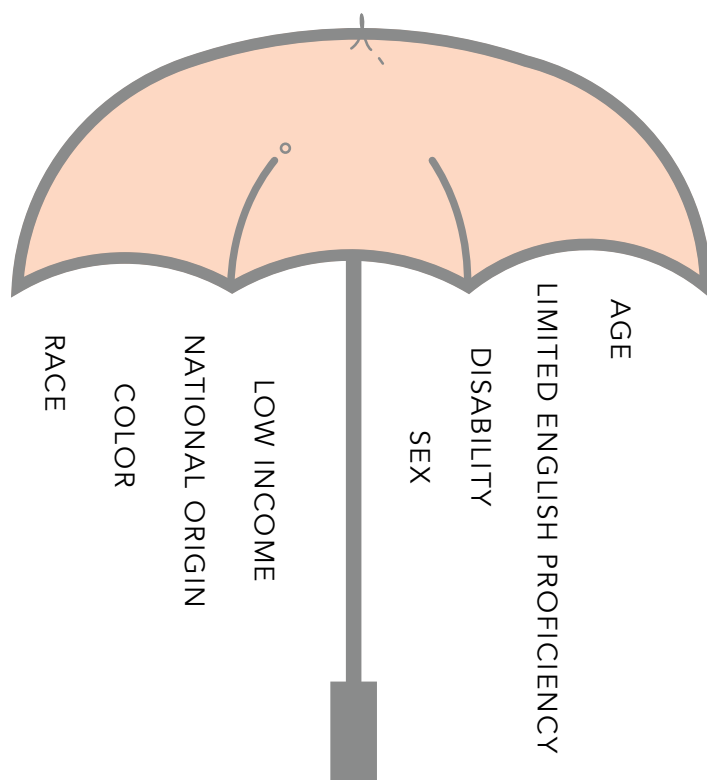
## CIVIL RIGHTS ACT AND ENVIRONMENTAL JUSTICE

Executive Order 12898 mandates federal agencies to incorporate Environmental Justice (EJ) analysis in their policies, programs, and activities. Building from the framework of Title VI of the Civil Rights Act of 1964, which ensures nondiscrimination in federal programs, EJ directives address how low-income and minority populations are affected by the actions of the federal government. The federal Title VI Program is broader than the Title VI statute and encompasses other nondiscrimination statutes and authorities under its umbrella, including Executive Order 12898 on EJ. The analysis and findings of the *SmartMoves* Environmental Justice Report are found in Appendix VI of this plan.

As of the adoption of SmartMoves, US DOT is in the process of implementing the Justice40 Initiative created by Executive Order 14008 and reaffirmed in Executive Order 14096. Justice40 is an all of government approach that sets a goal of 40% of the benefits of certain federal investments flowing to disadvantaged communities. SPC is in the process of holistically incorporating the Justice40 initiative into its program as additional guidance is released.

## FISCAL CONSTRAINT

Federal regulations require a fiscally-constrained transportation plan (23 CFR Part 450.324 and 49 USC Chapter 53). There must be a reasonable expectation that sufficient revenue (federal, state, and local matching funds) will be available to cover the total cost of projects identified in the fiscally constrained portion of the long range plan. Appendix IV includes project lists, revenues, and the methodology used to forecast revenues that are reasonably expected to be available through 2050.



**FHWA TITLE VI PROGRAM COVERAGE**



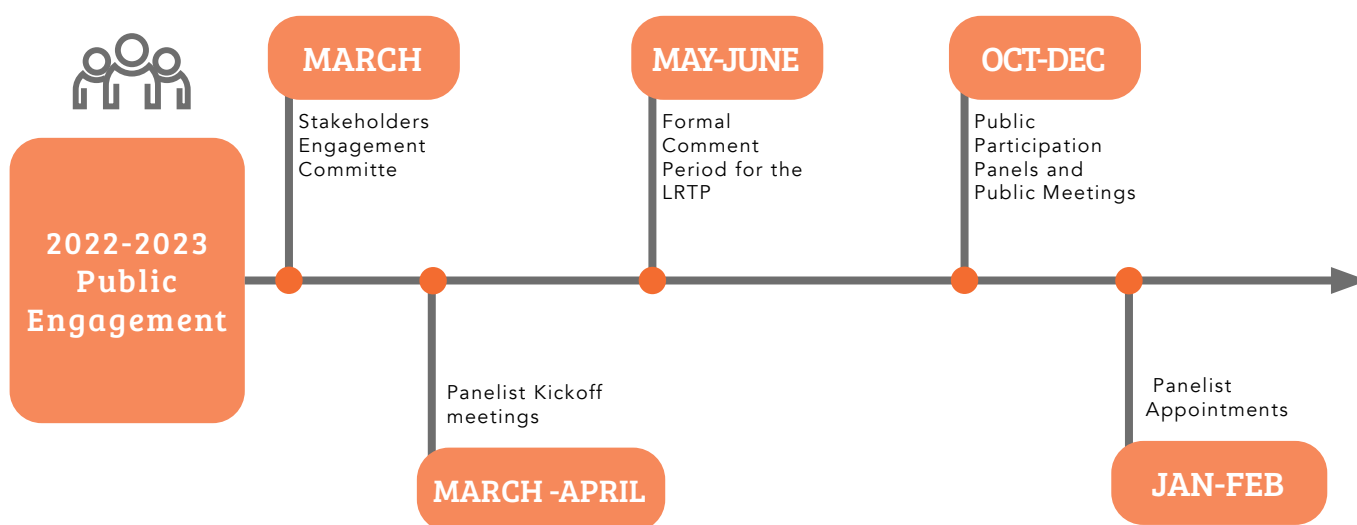


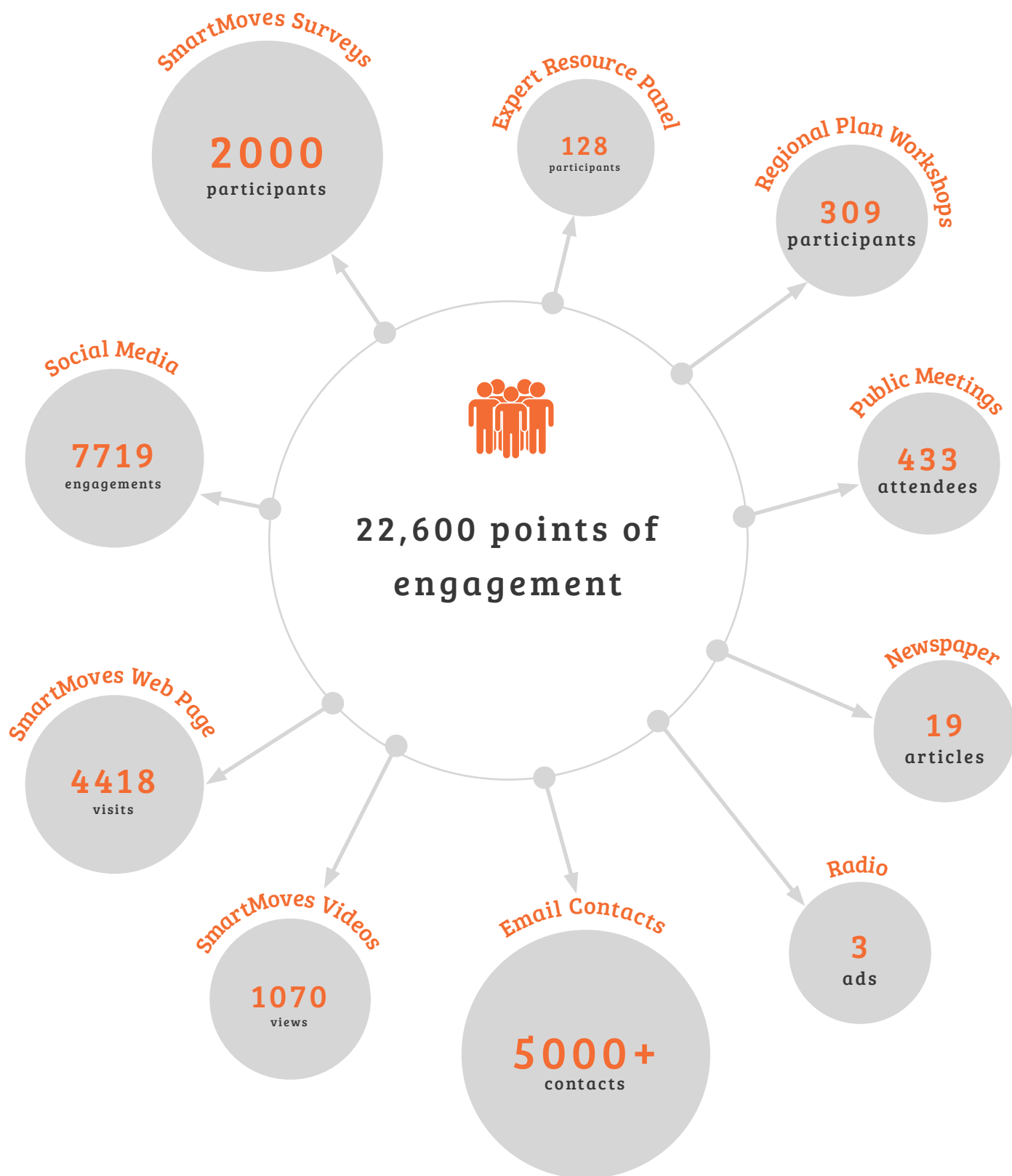
## PUBLIC ENGAGEMENT

Public engagement throughout the development and update of the long range plan 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. SPC's Public Participation Program offers a variety of opportunities for any interested party to engage in the regional transportation planning process. SPC brings planning directly to our member counties through Public Participation Panels, which 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 assist in the evaluation of implementation strategies in the planning process. The Panels hosted public meetings in each of our 10 counties throughout the process. The SPC public participation process is outlined and detailed in its adopted Public Participation Plan.

All of the following input from the development of SmartMoves in 2018/2019 has been retained and considered for the 2022/2023 update. There were an additional two rounds of public meetings held in the Fall of 2022 and in the Spring of 2023.

There were two rounds of ten public meetings held – one in Fall 2022 to gather input on the plan and one in Spring 2023 to present the draft plan.





Formal review and comment on the draft plan will be solicited through a 30-day public review process, in accordance with federal requirements. During this review process from May 11, 2023 through June 9, 2023, public comment will be accepted at ten Public Participation Panel meetings, public meetings, and via mail, email, or fax at any time during the public comment period.

Full documentation of public outreach activities associated with development of *SmartMoves for a Changing Region* is included in the Public Participation Report (Appendix VIII), which is produced upon conclusion of the formal 30-day public comment period.

Review and comment on the draft plan will be solicited through a 30-day public review process, in accordance with federal requirements. During this review process from May 11, 2023 through June 9, 2023, public comment will be accepted at ten Public Participation Panel meetings, public meetings, and via mail, email, or fax at any time during the public comment period.

The Public Participation Report summarizes all public engagement activities undertaken as a part of the development for this plan, not just the engagement conducted and input received through the required formal 30-day comment period. It includes all public meeting schedules and meeting locations, and copies of public advertisements identifying provisions for persons with disabilities and/or needs related to sight, hearing, or language.

There were two rounds of ten public meetings held – one in Fall 2022 to gather input on the plan and one in Spring 2023 (required by federal guidelines and the SPC Public Participation Plan) to present the draft plan. The report includes a summary of the public comments submitted during the formal 30-day public comment period,



SPC's response to these comments and the full text of written and electronic comments received through the public participation process.

The report also includes the results of the two public surveys used to gather input, and maps depicting the geographic distribution of the respondents. It also provides statistics on the number of points of engagement SPC received through its online outreach – conducted throughout the planning process.

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# Moving Forward: Implementation

*SmartMoves for a Changing Region* defines the Regional Vision and Major Goals and Strategies developed through a collaborative regional planning process that identifies transportation, community, and economic development needs and priorities. Transportation focused strategies, resulting in infrastructure improvement projects and related programs, are implemented in a number of ways, primarily through the Transportation Improvement Program (TIP), which provides the bulk of the region's transportation investment funds. These TIP programs are supplemented by other federal, state and local transportation investments, including those made by the US Department of Transportation, the Appalachian Regional Commission, the Pennsylvania Turnpike Commission and PennDOT's Central Office in Harrisburg. The regional TIP (and statewide STIP) is updated on a regular basis to reflect current funding levels and priorities.

SPC's Unified Planning Work Program (UPWP) identifies transportation planning priorities and activities that will be carried out each year, including the implementation of specific Strategies and Actions contained in this plan. Federal transportation legislation authorizes planning funds so that regional planning organizations are able to fulfill the federal planning requirements (23 U.S.C. 134 and 135, 49 U.S.C. 5303-5304, and 23 CFR part 450) and to conduct the regional

transportation planning that advances local priorities set forth in the long range planning process. The tasks to update federally required planning and programming documents such as the TIP, the Congestion Management Process, the Human Services Coordinated Transportation Plan, and the region's Safety Action Plan and the Regional Operations Plan are identified.

Also identified are the tasks to be undertaken and the partners needed to advance the implementation of specific Strategies and Actions depicted in previous sections of this plan. Example tasks to implement the Strategies could include initiatives such as creating holistic visions for corridors of regional significance; the development of a best practices resource center; development of a regional plan to tackle climate change; planning to revitalize communities throughout the region; conducting public outreach to raise awareness of the need for increased transportation funding and the public benefits therein; and the examination of how to increase coordination and linkages between regional transit providers.

SPC intends on continuing the broad collaboration and engagement conducted during this long range plan development process to develop the projects, programs, and initiatives that will be advanced through regional partnerships across Southwestern Pennsylvania.





# REFERENCES

## Endnotes

- 1 <https://www.epa.gov/sites/production/files/2019-02/documents/us-ghg-inventory-2019-main-text.pdf>
- 2 <https://mobilitylab.org/equity/>
- 3 <https://www.talkpatransportation.com/perch/resources/tac-2019-transportation-funding-risks-report.pdf>
- 4 Ibid.
- 5 <https://www.talkpatransportation.com/perch/resources/tac-2019-transportation-funding-risks-report.pdf>
- 6 <https://www.talkpatransportation.com/perch/resources/tac-2019-transportation-funding-risks-report.pdf>
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- 8 <http://www.talkpatransportation.com/perch/resources/tac-2019-transportation-funding-risks-report.pdf>
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- 11 <https://www.gwp.org/en/About/who/GWP-Technical-Committee/>
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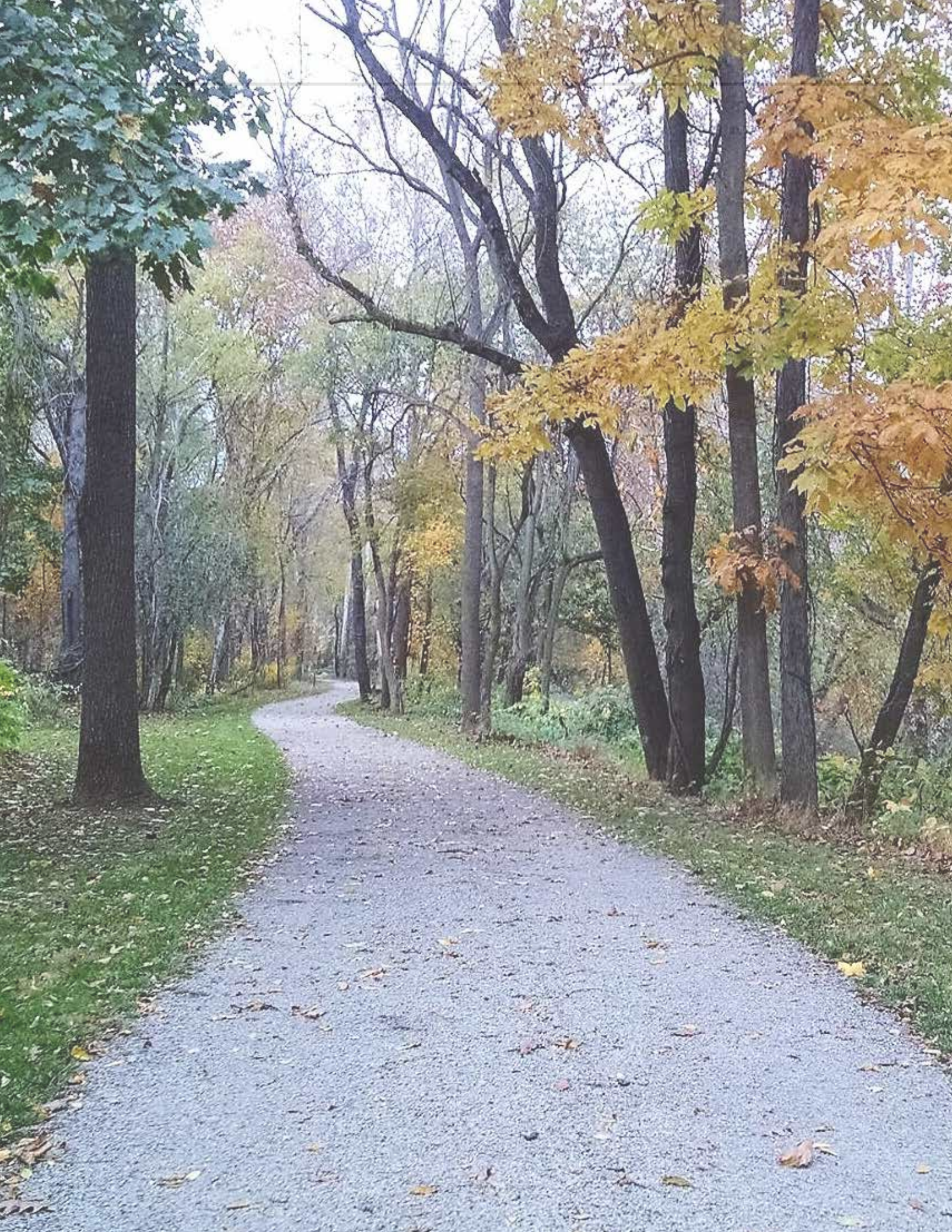
# APPENDICES

- I. Scenario Reports
- II. Transportation Performance Management
- III. Investment and Strategy Linkage
- IV. Regional Vision for Southwestern Pennsylvania
  - IV-1: Revenues and Projects Currently within Fiscal Capacity
  - IV-2: Projects Currently beyond Fiscal Capacity
  - IV-3: Interstate Maintenance Program (2019-2030)
  - IV-3: Interstate Maintenance Program Needs (2019-2045)
  - IV-4: Pennsylvania Turnpike Commission Projects
- V. Air Quality Conformity Analysis
- VI. Environmental Justice Analysis
- VII. Planning and Environmental Linkage
- VIII. Public Engagement Summary
- IX. Glossary

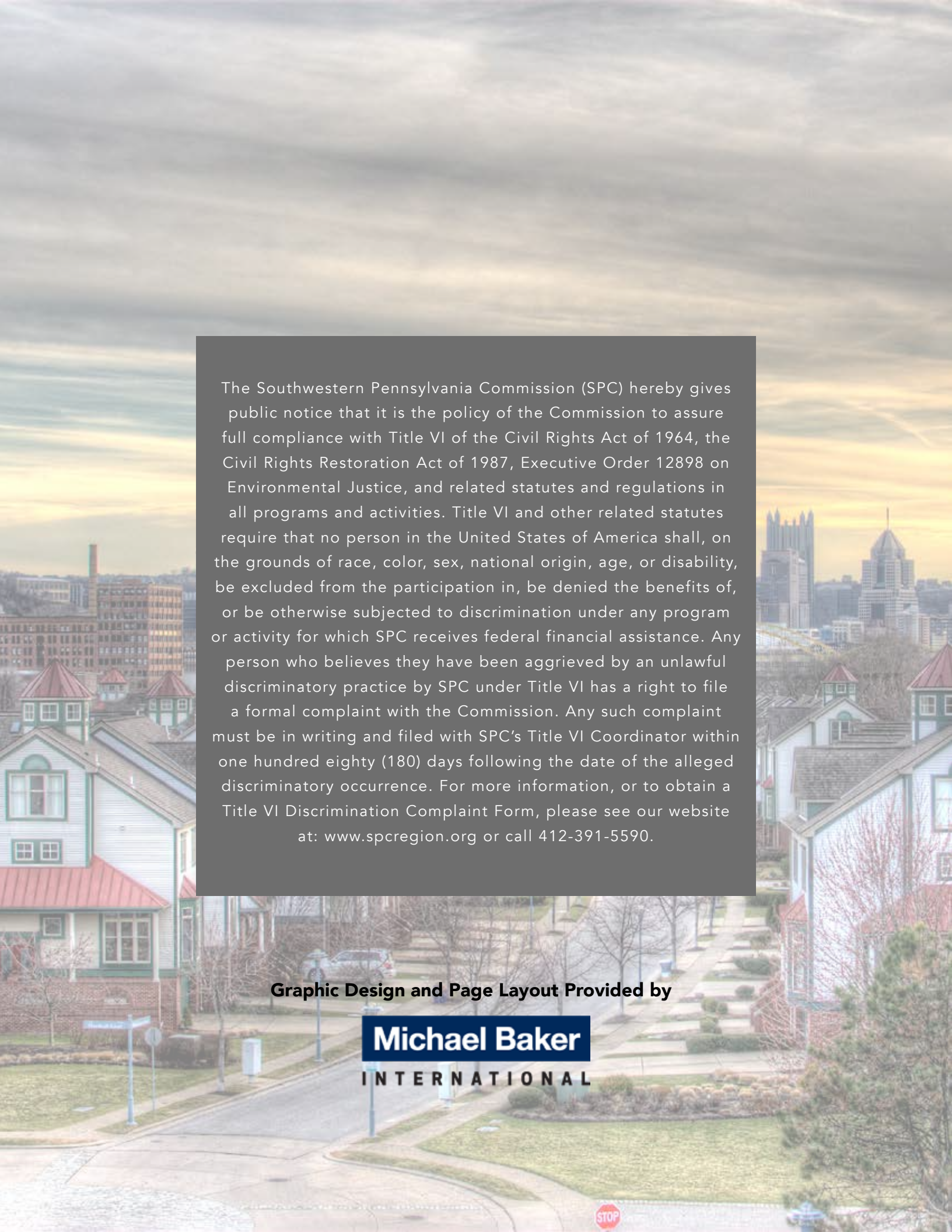


Illustration: Norvelt, Westmoreland County









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](http://www.spcregion.org) or call 412-391-5590.

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# SmartMoves

For a Changing Region

