# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What Are Forces of Change?</td>
<td>4</td>
</tr>
<tr>
<td>What are the Demographic Forces of Change?</td>
<td>7</td>
</tr>
<tr>
<td>Creating Strategies</td>
<td>13</td>
</tr>
<tr>
<td>Building the Vision</td>
<td>24</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>26</td>
</tr>
</tbody>
</table>
What Are Forces of Change?
What Are Forces of Change?
The Southwestern Pennsylvania Commission (SPC) is creating a new regional plan in which it will consider major Forces of Change and how we can best take advantage of opportunities they may create and mitigate the disruptions they may cause. Forces of Change are high level external forces (global, national, regional) that could have significant regional impacts (both positive and/or negative) now and in the future.

A Force of Change Scenario Report for each category has been developed by SPC. The reports will be used, along with input from the public, to establish a range of potential strategies related to each Force of Change. These strategies were reviewed and discussed at a Regional Plan Workshop held in September 2018. The resulting list of strategies will be used to gather further public input and ultimately to update the long range plan for the Southwestern Pennsylvania region.

SPC has identified forces that have effects on transportation and development in five broad categories: Demographics, Technology, Economy, Environment, and Funding.

Why and How Were Forces of Change Identified?
Every four years, SPC is required by federal law to update the region’s long range transportation plan. This plan lays out the vision and strategies for transportation investments in the Southwestern Pennsylvania region over the next 25 years. The current plan was adopted in June 2015.

In 2017, SPC staff began working with the region’s planning directors to develop a Task Force to help develop a process for the new long range plan.

SPC began by reviewing publications from the National Cooperative Highway Research Program on “Dynamic Forces of Change.” Next, peer Metropolitan Planning Organizations (MPOs) along with national and regional thought leaders were interviewed to get different perspectives. Common themes emerged, which drove the formation of Expert Resource Panels for each of the five categories to identify the Forces of Change that will impact them.
Expert Resource Panels and Exploratory Scenarios

Expert Resource Panels were formed to provide expertise on the potential effects of Forces of Change on the region. The Expert Resource Panels identified the Forces of Change within each category that are likely to impact the region. Panelists discussed potential opportunities and challenges, the relative probability of occurrence, and whether the impacts will be positive or negative.

The panel activities were designed to help answer the following questions:

What significant trends or disruptions are occurring now, or are foreseen to occur, with potential impact for the region?

Will the impacts be positive or negative for the region?

What specific challenges and opportunities for the region are generated by these occurrences?

What is the anticipated magnitude of the identified challenges and opportunities?

Participants were asked to focus on events, trends, and factors within each category and to identify possible impacts, potential challenges, and opportunities for each Force of Change.

Based on that discussion, exploratory scenarios were developed. Each exploratory scenario describes uncertain, but comprehensible, potential futures that may occur. These were developed to aid in discussions related to impacts and strategies for moving forward successfully.

Below are some of the topics that were explored by the Expert Resource Panels. Panelists considered the regional impacts of the topics and identified additional avenues for investigation.

Demographics
Aging Population and Labor Force; Immigration (regional); Urban and Suburban Development Patterns; National/Regional Shifts; Household Size; Diversity; Education; and, Opioid Addiction.

Technology
Connected & Autonomous Vehicles; Mobility as a Service; Automation; Additive Manufacturing; Modal Impacts; Broadband; and, Artificial Intelligence.

Economy
Emerging Industries; Housing Affordability; Economic Growth; Household Income; Employment Types; Shared Economy; Online Economy vs. Brick and Mortar Retail; and, Decaying Infrastructure.

Environment
Energy Supply and Demand; Fossil Fuel/Renewable Balance; Security; Environmental Attitudes; Climate Change and Resilience; and, Water Quality.

Funding
Role of Public & Private Sectors; Investment Levels; National/State/Local Government Roles; and, Finance (how to pay).
What Are The Demographic Forces of Change?
Demographic Forces of Change

Population Trends

As a major metro area, the SPC region is home to more than 2.6 million people. While the region’s population is generally older, there are areas of youth centered around colleges, universities and urban centers such as Downtown Pittsburgh, Oakland and Cranberry Township.

Welcoming a more diverse population serves as an opportunity for growth and entrepreneurship. For example, CNN reports that immigrants are twice as likely to start a business as U.S.-born citizens and Fortune magazine reports that black females are the fastest growing group of entrepreneurs.

NOTEWORTHY:
According to LendingTree, Pittsburgh was named as one of the top three cities in the country for millennial homebuyers.
Jobs

As job opportunities increase in the tech fields, the Southwestern Pennsylvania region may need another 80,000 workers by 2025. Across the region’s 61 institutions of higher education, 50% of the 40,000 annual graduates leave the region, with the number one reason for departure being that they cannot find a job here.

The Southwestern Pennsylvania region, when compared to 15 other benchmark regions, has the lowest percentage of residents under 18, the second lowest percentage of residents 18-64 and the highest percentage of residents 65 and over.

Pittsburgh is home to the Carnegie Mellon University, which holds the No. 1 graduate program for artificial intelligence in the U.S., according to U.S. News & World Report. Also, Pittsburgh was named one of four tech hubs in the U.S. to watch in 2018 via VentureBeat.

### Projected Workforce Shortage by 2025

| Workforce Openings during 2015-2025 | 340,000 |
| Baby Boomer Retirements (29,000 per year) | 290,000 |
| Job Growth (5,000 per year) | 50,000 |
| Total Projected Workforce Openings | 340,000 |
| Expected Number of Workers (26,000 per year) | 260,000 |
| **潜在短缺 by 2025** | 80,000 |

**SOURCE:** Inflection Point 2016, Allegheny Conference on Community Development

**NOTEWORTHY:**

Pittsburgh is home to the Carnegie Mellon University, which holds the No. 1 graduate program for artificial intelligence in the U.S.
Transportation

The region’s aging infrastructure and equitable access to transportation services have the potential to affect the population, development patterns and workforce. Keeping the region’s aging transportation system in a state of good repair is critical to support growth in the region.

The region not only needs to smartly invest in maintaining the system, but it also needs to find ways to invest in additional projects that strengthen our communities; make the transportation system safer, more efficient, and more reliable; and, grow our economy.

NOTEWORTHY:
Transportation and land use that supports and enhances the regional economy and the communities within it is vital to the future of our region.
Land Use

Changing demographics have the ability to affect development patterns and the provision of services in existing communities throughout the region. The population is relatively steady in the region, the average household size is also decreasing. Decreasing household size can create continued demand for housing units even in the face of overall population decline as the composition of households change. An increase in the number of households in lower density areas may strain the ability to provide services and infrastructure to support growth in those areas. Development should be focused in existing urbanized areas with infrastructure improvements targeted at the corridors that connect them.

Nearly 78% of the region’s population lives in the 15% of the land area that is classified as urban.
How can we adapt to the Forces of Change underway and take full advantage of the opportunities they create?

Population Trends
Southwestern PA has one of the oldest populations in the country and many areas have slightly declining/stable population.

Jobs
Southwestern Pennsylvania may face a potential shortage of 80,000 workers by 2025 and 50% of the region’s 40,000 annual college graduates leave the region.

Transportation
The region’s aging infrastructure & equitable access to transportation services have the potential to affect the population, development patterns and workforce.

Land Use
Changing demographics have the ability to affect development patterns and the provision of services in existing communities throughout the region.
Creating Strategies
To Address Demographic Forces of Change

The Demographic Expert Resource Panel identified strategies for each Force of Change to address potential impacts and mitigate risks. Panelists discussed the need to better align people with available jobs and explored various ways to make that happen:

- Develop better transportation connections to underserved employment areas.
- Guide land use policies to encourage new housing and employment development in areas with existing transportation and access.
- Increase training and awareness to match local people with the jobs that are available.

Regional cooperation was also a common theme: collaborating, communicating, and sharing of public resources and facilities to better direct resources and priorities around the region.

Each exploratory scenario describes uncertain, but comprehensible, potential futures that may occur. These were developed to aid in developing strategies to address impacts and mitigate risks.
Population Trends Strategies
That Impact Demographics

Exploratory Scenario*

What If...population trends such as low birth rates and low immigration rates are impeding the region’s population growth. Population shifts are impacting public investments at the local level, such as schools, services and infrastructure. The region’s lack of diversity makes it more difficult to attract a diverse workforce.

*Each exploratory scenario describes uncertain, but comprehensible, potential futures that may occur. It is not suggested that these scenarios will occur, only that a region may consider them as a “What If...” scenario.
Strategy 1: Attract New Residents and Retain More University Graduates

Encourage migration to the region to mitigate population decline. Promote quality of life to attract new residents including great schools, health care facilities, and services. This effort will be most successful if it has a regional focus. Business communities and chambers of commerce often do a great job of attracting residents, but workforce investment boards and college / university alumni organizations can also help. Understanding the role of employment opportunities and overall employment rates will also help to guide action steps for attracting new residents.

Local college graduates are another potential population of permanent residents. Efforts to retain graduates should align with efforts to attract new residents. Understanding the impacts of employment rates and opportunities will also help to retain graduates. Further, working with colleges and universities to prepare students for local industries can create a path from graduation to a local job. Additional measures for retaining graduates could include programs for housing assistance or student loan assistance.

Partners for Implementation
SPC, regional organizations, business community/chambers of commerce, workforce investment boards, university alumni outreach groups, colleges and universities, Pittsburgh Regional Alliance, realtors associations, economic development board, tourism/visitors bureaus

Strategy 2: Help Employers Attract Workers

Work with regional employers to attract job candidates. This effort can align with overall efforts to attract new residents by promoting the region and the benefits of relocating here.

Encourage employers to align their requirements with national standards to ensure that they are competitive and able to attract workers. Employers can offer competitive benefits and perks such as moving expenses. Realistic job requirements that align with the job (i.e. discourage the trend of requiring experience but offering entry-level pay) can also help bring new employees to businesses and new residents to the area.

Partners for Implementation
Employers, with support from local chambers of commerce, Pittsburgh Regional Alliance, realtors associations, economic development board, tourism boards, workforce development boards
Job Strategies
That Impact Demographics

Exploratory Scenario*

What If...the region’s workforce continues to age, and a majority of the potential workforce does not have the skills for today’s jobs, let alone the skills for evolving jobs. This negatively impacts the region’s ability to compete.

*Each exploratory scenario describes uncertain, but comprehensible, potential futures that may occur. It is not suggested that these scenarios will occur, only that a region may consider them as a “What If...” scenario.
Strategy 1: Grow and Attract a Variety of Industries
Over the next decade our workforce will be characterized by large scale retirements, slow population growth, and increasing skill demand across all occupations. At the same time, many of our traditional industries will continue to be disrupted by technological advances, requiring that employers and talent keep pace with this change to remain competitive. According to Inflection Point 2017-18, prepared by the Allegheny Conference on Community Development, far reaching business investment decisions have been made in the past year that have strong, positive workforce implications, whether it be a multi-billion dollar investment in an ethane cracker, billion dollar investments in our unique technology assets such as autonomous vehicles, or those active investments of time and energy being made by our region’s educators and businesses to grow a more nimble and strong talent pipeline.

Continuing this trend and working to attract a variety of industries to diversity the region will help the economy grow stronger, attract new residents, and retain the residents that we have.

Partners for Implementation
Chambers of commerce, industry groups, Allegheny Conference on Community Development

Strategy 2: Focus on Workforce Reintegration
Expand the workforce by reintegrating individuals into the workforce with minor criminal records or previous drug use. Educate employers on the value and potential of these workers, help with job placement, and consider legislation to ease the way to clear records of past use (in reference to opioid use). Changes to legislation can help to keep those with minor criminal offenses in touch with the workforce and help to create a path for reintegration.

Partners for Implementation
Nonprofit agencies for employment help, chamber of commerce, local and state government, employers, school superintendents/boards, alumni associations, workforce boards, and professional groups
Strategy 3: Match Graduates to Jobs
Match college graduates to available jobs. Bus college students to local job fairs. The Allegheny Conference on Community Development recently held a regional bus tour with students from high-demand occupations to showcase employment opportunities and quality of life assets in the region. Working with colleges and universities to make attendance at these job fairs mandatory, and/or require internships will help students connect to the local workforce and region – raising the odds that they will remain on as long term residents.

Partners for Implementation
Young professionals groups, universities, employers, school superintendents, workforce boards, career services at universities, Allegheny Conference on Community Development, trade associations

Strategy 4: Train Workers for Jobs
Train and match workers to existing regional jobs. Encourage training in schools from earlier ages in a two-pronged approach of increasing awareness and encouraging hands-on work experience such as apprenticeships.

Expose students to a greater range of jobs to increase their awareness of career opportunities. Conduct an awareness campaign in schools to guide students to the many available jobs (such as skilled trades). Partner with project management training programs to emphasize problem solving and leadership skills. This will help to demonstrate that these jobs have opportunities for advancement. Incorporate transition plans with employment goals into graduation requirements.

Network with universities to secure funding support and ongoing education for leadership. This can include upskill training to move employees up the ladder. Promote these opportunities to local residents. Invest in transportation that connects people to jobs so that the available jobs are also desirable long term and people can afford to stay.

Partners for Implementation
Philanthropy organizations, K-12 schools, universities, and employers, with support from industries, local chambers of commerce, and local and regional governments
Transportation Strategies
That Impact Demographics

Exploratory Scenario*
What If...increasing expenses are incurred to maintain and rebuild the region’s old infrastructure despite varying population shifts. A focus on transportation access and options becomes more important in both urban and rural areas. Available financial resources place a strain on how and when transportation investments are made, and changing demographics dictate the location and type of investment.

*Each exploratory scenario describes uncertain, but comprehensible, potential futures that may occur. It is not suggested that these scenarios will occur, only that a region may consider them as a “What If...” scenario.
**Strategy 1: Focus in the Right Places**

Although different projects suit different locations, some places were “left behind” when transit options expanded elsewhere. Prioritize investment based on performance criteria. This will help prioritize impacts across the region while respecting and preserving local quality of life. Subsidies offered by private development must be evaluated carefully because they don’t always subsidize development that is sustainable in the long term. For example, locations near transit access are less likely to experience long term transportation failures and are more likely to be successful well into the future.

**Partners for Implementation**

All regional transportation authorities, including PennDOT, public transit providers, Federal Transit Administration, county and municipal officials, and all local authorities.

---

**Strategy 2: Develop a Regional Comprehensive Public Transit Plan**

A regional public transit plan can drive cooperation and linkages across the region. Improving collaboration between providers, utilizing PennDOT Connects, sharing resources, and allowing service across jurisdictions could all be addressed at a regional scale. A method known as “finding dancing partners” works to pair neighboring Authorities or relevant resources to enhance resource sharing. Moving forward from PennDOT Connects, an online database would enable access to shared resources including past and existing studies.

Another related regional effort could be collaborating on the location of Park and Ride facilities across all counties to support their varying needs and providing bus access in areas with greater need but less demand.

**Partners for Implementation**

All regional transportation authorities, including PennDOT, transit providers, Federal Transit Administration, county and municipal officials, and all local authorities. Housing and finance authorities may be valuable partners as well.
Land Use Strategies
That Impact Demographics

Exploratory Scenario*

What If...there is a mismatch between affordable available housing in proximity to jobs and services. This degrades access, especially for the low income and the physically challenged.

*Each exploratory scenario describes uncertain, but comprehensible, potential futures that may occur. It is not suggested that these scenarios will occur, only that a region may consider them as a “What If...” scenario.
Strategy 1: Consider Transportation When Making Land Use Decisions and Simplify Regulations for Developers

The impact of transportation funding and projects must be considered 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. Local municipalities value independence, but consistent zoning and land use regulations at the municipal level can help to create a more level laying field across the region and guide development to high-impact locations.

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. Regulatory and tax burdens for new businesses can also be reviewed to identify opportunities to guide development.

Partners for Implementation
Municipalities, municipal steering committees, counties, and councils of government

Strategy 2: Promote the Benefits of Best Practices in Land Use

Educate local government 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.

SPC and related organizations, including housing and finance authorities, should assist counties with education about successful land use practices and their benefits. State level support is also important because the state is well-positioned to follow through on strengthening land use plans and practices.

Partners for Implementation
SPC and related regional organizations, housing and finance authorities, state agencies, chambers of commerce
During the Regional Plan Workshop, participants were asked to discuss potential draft strategies for the Forces of Change and identify investment levels for each of the draft strategies. This exercise helped to create a framework that could be used to evaluate and drive future evaluation of projects and investments.

Below are the investment strategy results for the Demographic Forces of Change.

<table>
<thead>
<tr>
<th>Demographic Forces of Change</th>
<th>Percent Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transportation Strategies</strong></td>
<td>19.3%</td>
</tr>
<tr>
<td>Focus in the right places. (Not all projects suit all locations. Some places were “left behind” when transit options expanded elsewhere.)</td>
<td>5.7%</td>
</tr>
<tr>
<td>Develop a comprehensive regional plan for public transit to drive cooperation and linkage across the region.</td>
<td>13.6%</td>
</tr>
<tr>
<td><strong>Land Use Strategies</strong></td>
<td>25.0%</td>
</tr>
<tr>
<td>Consider the impact of transportation funding and projects when making land use decisions.</td>
<td>8.6%</td>
</tr>
<tr>
<td>Make affordable housing land development regulations user-friendly for developers.</td>
<td>7.1%</td>
</tr>
<tr>
<td>Educate local government and councils about best land use practices and their benefits.</td>
<td>9.3%</td>
</tr>
<tr>
<td><strong>Population Trends Strategies</strong></td>
<td>15.0%</td>
</tr>
<tr>
<td>Encourage domestic migration to stop the decline or slow population growth in the region.</td>
<td>5.7%</td>
</tr>
<tr>
<td>Retain university students after graduation.</td>
<td>5.7%</td>
</tr>
<tr>
<td>Encourage employers to better align their requirements with national standards to be more competitive and attract workers.</td>
<td>3.6%</td>
</tr>
<tr>
<td><strong>Jobs Strategies</strong></td>
<td>40.7%</td>
</tr>
<tr>
<td>Grow and attract a variety of industries to diversify jobs across the region.</td>
<td>15.7%</td>
</tr>
<tr>
<td>Reintegrate individuals into the workforce with minor criminal records or previous drug use.</td>
<td>8.6%</td>
</tr>
<tr>
<td>Encourage employers to offer better employment benefit packages.</td>
<td>4.3%</td>
</tr>
<tr>
<td>Match college graduates to available jobs.</td>
<td>3.2%</td>
</tr>
<tr>
<td>Train and match workers to the jobs we have in the region.</td>
<td>8.9%</td>
</tr>
</tbody>
</table>
Building the Vision

As discussed in this report, in developing Smart Moves for a Changing Region, SPC convened a series of Expert Resource Panel meetings to identify Forces of Change, weigh their potential impacts, and develop strategies to mitigate and/or optimize the forces. This information, coupled with public and partner input and feedback from SPC leadership, was organized into a set of three emerging themes that capture the most positive aspects of each strategy and focus them in a way that will result in a holistic long range plan for the region.

SPC is developing a plan that both provides a framework and makes significant investment to advance the most critical issues and projects facing the region. The emerging themes will be used in conjunction with performance metrics and other public input to evaluate the program of proposed projects and programs to be contained in the plan. 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.

The emerging regional vision is a world-class, well maintained, integrated transportation system that provides connected mobility for all, enables resilient communities and supports a globally competitive economy.

This vision means taking advantage of our considerable existing assets and developing, supporting and implementing projects that advance our progress. It means investing in regionally connected seamless public transportation that includes new transit investments in key corridors and networks. It means developing modern support infrastructure that prepares the region not just for current technological advances; but also strives to put the region years and decades ahead, by developing the next technology here in this region because we have the expertise in the region to make this happen. It means tackling climate change and taking care of our air and our water. This will allow us to work with many partners and dovetail this plan with other related plans and regional efforts of both public and private sector to advance the region.

The vision means working with partners in identifying and using the types of proven funding and financing arrangements that we will need to make that happen.

The vision will focus on the workforce needs of the region. It means attracting and growing our population by making the region a place where people want to come and stay. It means training our population not just for the jobs that exist but for the jobs we create through innovation and entrepreneurship, and making this region a leader in technology and innovation.

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. It will include innovative new farming techniques and technology deployment that will connect our entire region with high speed access to the internet to afford all our residents the opportunity to work from anywhere and connecting them to the global economic opportunities. The vision will recognize our assets and putting them to the best use for this region, and our residents.

The vision also means taking stewardship and care of the communities that are the foundation of this region, and environment that sustains us. This plan will focus community investment that both sustains our past and protects our future, while elevating the status of our communities throughout the region as desirable places to live and work.
Acknowledgements

Expert Resource Panel Workshop Participants

Tony Amadio, Beaver County Board of Commissioners
Chad Amond, Westmoreland County Chamber of Commerce
Ashton Armstrong, Allegheny County Economic Development
   Virginia Bailey, McCormick Taylor
   Douglas Barch, PennDOT District 11-0
   Andy Baston, Michael Baker International
   Lucinda Beattie, Pittsburgh Downtown Partnership
   John Benhart, Jr., Indiana University of Pennsylvania
   Alan Blahovec, Westmoreland County Transit Authority
   Phillip Bobitz, Federal Highway Administration
   Kevin Booze, Butler County Board of Commissioners
   Sheri Boyle, California University of Pennsylvania
   Scott Bricker, Bike Pittsburgh
   Chris Briem, University of Pittsburgh
   Donald Buckwalter, Indiana University of Pennsylvania
   Eric Buncher, Allegheny County Airport Authority
   Greg Butler, Local Government Academy
   Lauren Byrne Connelly, Allegheny County Economic Development
   Stan Caldwell, Heinz College
   Arthur Cappella, Fayette County Planning and Community Development
   Daniel Carpenter, Westmoreland County Dept. of Planning and Development
   Thomas Ceraso, Municipal Authority of Westmoreland County
   Gina Cerilli, Westmoreland County Board of Commissioners
   Dan Cessna, Michael Baker International
   Lance Chimka, PA Department of Community & Economic Development
   Frank Cippel, PennDOT District 11-0
   Commissioner Coder, Greene County Board of Commissioners
   Cassandra Collinge, Allegheny County Economic Development
   Dave Cook, PennDOT District 10-0
   Mike Coonley, Armstrong County Department of Economic Development
   Steve Craig, Lawrence County Board of Commissioners
   Darla Cravotta, Office of County Executive Rich Fitzgerald
   Mark Critz, PA Department of Agriculture
   Brenda Dare, Transitional Paths to Independent Living
   Victor DeFazio, PennDOT District 11-0
   Sabina Deitrick, University of Pittsburgh
   Carly Dobbins-Bucklad, Allegheny Conference on Community Development
   Amie Downs, Allegheny County
   Rachel Duda, PennDOT District 12-0
   Douglas Dupnock, PennDOT District 10-0
   Pat Earley, Allegheny County Economic Development
Expert Resource Panel Workshop Participants (continued)

Pat Fabian, Armstrong County Board of Commissioners
Richard Feder, Trans Associates
Rich Fitzgerald, Allegheny County Chief Executive
Tammy Frank, Beaver County Department of Liquid Fuels
Jim Futrell, Pittsburgh Regional Alliance
Jim Gagliano, Lawrence County
Ami Gatts, Washington Greene County Job Training Agency
Kimberly Geyer, Butler County Board of Commissioners
Matt Gordon, Allegheny County Conservation District
Mark Gordon, Butler County Economic Development and Planning
Kelly Gray, Widmer Engineering
Alex Graziani, Penn Township
Jeff Grim, IUP Institute for Rural Health and Safety
Karen Hacker, Allegheny County Health Department
Ian Harrell, Butler County Conservation District
Ron Henshaw, Cranberry Township
Susan Hockenberry, Quaker Valley Council of Governments
Donna Holdorf, National Road Heritage Corridor
Christine Hughes, Duquesne University Small Business Center
Timothy Jablunovsky, PennDOT District 10-0
Charles Jones, City of Beaver Falls
Jim Katsafanas, Michael Baker International
Charles (Chuck) Kolling, BIPC
James Kunkel, Saint Vincent College
Ken Langford, Resident
Susan Lautenbacher, Lark Enterprises, Inc.
Jeffrey Leithauser, Washington County Planning Commission
Mark Magalotti, University of Pittsburgh
Larry Maggi, Washington County Board of Commissioners
Tom Maier, USACE Pittsburgh District
Lynn Manion, Airport Corridor Transportation Association
Jeff Marhsall, Greene County
Kevin McCullough, PennDOT Center for Program Development and Management
Tom McElree, EMS West
Kelly McLaughlin, Allegheny County Conservation District
Brandon Mendoza, NAIOP
Mark Metil, Gannett Fleming
Kristen Michaels, CONNECT
David Miller, University of Pittsburgh
Robert Miskanic, PennDOT District 11-0
Christine Mondor, Carnegie Mellon University
Tom Mueller, Earth Sciences - California University of PA
Nick Neupauer, Butler County Community College
Linda Nitch, Lawrence County Regional Chamber of Commerce
Ann Ogoreuc, Allegheny County Economic Development
Leslie Osche, Butler County Board of Commissioners
Camille Otto, Federal Highway Administration
James Palmer, Beaver County Corporation for Economic Development
Lorna Parkins, Michael Baker International
Alex Pazuchanics, City of Pittsburgh
Kay Pierce, ACED Planning Division
Jim Price, Sustainable Pittsburgh
Johnna Pro, PA Department of Community and Economic Development
Mavis Rainey, Oakland Transportation Management Association
Chad Reese, Whitman, Requardt & Associates
Jason Rigone, Westmoreland County Planning and Development
James Ritzman, PennDOT Central Office
Chuck Rompala, Port Authority of Allegheny County
Connie Ruffalo, Transitional Paths to Independent Living
Dave Rupert, Armstrong County Conservation District
Chris Sandvig, Pittsburgh Community Reinvestment Group
Angela Saunders, PennDOT District 12-0
Andrew Schwartz, Environmental Planning & Design, LLC
Lisa Kay Schweyer, Traffic21 Institute
Michael Shanshala, PennDOT District 10-0
Aurora Sharrard, University of Pittsburgh
Lisa Signore, Community Development Program of Beaver County
Matt Smith, Michael Baker International
Matt Smoker, Federal Highway Administration
Byron Stauffer, Jr., Indiana County Office of Planning & Development
Naomi Stein, Economic Development Research Group, Inc.
Mary Stollar, Washington County Chamber of Commerce
Michael Storms, Elliott Group
Jim Struzzi, Indiana County Chamber of Commerce
Thomas Swisher, Armstrong County Planning Department
John Tague, Allegheny County Transit Co.
Scott Thompson-Graves, Whitman Requardt & Associates - LLP
Douglas Tomlinson, PennDOT
John Turack, Penn State University
Michael Turley, North Huntingdon Township
Ray Vargo, University of Pittsburgh SBDC
Chris Watts, Pittsburgh Downtown Partnership
Joe West, Beaver County Planning Commission
David White, Healthy Ride Pittsburgh
David Wohlwill, Port Authority of Allegheny County
Blair Zimmerman, Greene County Board of Commissioners
Ephraim Zimmerman, Western Pennsylvania Conservancy

Expert Resource Panel Workshop Participants (continued)
Demographics

Exploratory Scenario Report