

September 2019



**GROWING**  
GREATER PHILADELPHIA  
comprehensive economic  
development strategy



## The Delaware Valley Regional Planning Commission

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



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

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

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## CHAPTER 1: What is the CEDS?

The Comprehensive Economic Development Strategy (CEDS) is the region's strategy-driven framework to increase economic productivity, diversify local wealth, improve the culture for underrepresented businesses, and increase individual prosperity for the region's residents. This CEDS covers a nine-county region—Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania, and Burlington, Camden, Gloucester, and Mercer in New Jersey. The CEDS was developed through guidance and support by an Economic Development Committee made up of public and private-sector representatives. Appendix A provides a full list of committee members.

### Why Do We Need a CEDS?

As the federally designated Metropolitan Planning Organization, the Delaware Valley Regional Planning Commission (DVRPC) provides a long-range vision for the future growth of Greater Philadelphia. Built on five development principles—transportation, livability, economic sustainability, the environment, and equity—*Connections 2045* serves as the guiding policy document for infrastructure investments and land use policy. To leverage the long-range vision, DVRPC convenes partners to develop an economic development strategy that serves as the required vehicle through which U.S. Economic Development Administration (EDA) evaluates grant requests. Without an EDA-approved CEDS, applicants in the region are ineligible to receive EDA funding.



*Growing Greater Philadelphia strives to create a sustainable regional economy while expanding global competitiveness.*

### Preparing the CEDS

This CEDS document, *Growing Greater Philadelphia*, is the result of an 18-month process of conducting research and gathering information from planning partners, stakeholders, and elected officials. A public meeting was held on October 2018 for interested participants to take part in the

strengths, weaknesses, opportunities, and threats (SWOT) analysis. A follow-up meeting was held in April 2019 to present the results of the SWOT, discuss the state of the regional economy, and refine the draft goals and objectives. Also in April 2019, a meeting of the DVRPC Regional Community and Economic Development Forum was held in partnership with the DVRPC Goods Movement Task Force to address supply chain resiliency. A draft action plan was then developed and sent for review to the CEDS review committee in May 2019.

Public meetings were advertised through DVRPC's website and social media platforms. The Growing Greater Philadelphia website ([www.dvrpc.org/economic](http://www.dvrpc.org/economic)) served as an ongoing public forum. Once adopted, *Growing Greater Philadelphia* will provide a framework for our regional economic development partners to prioritize strategies for implementation. It will guide economic development investments over the next five years. It includes a regional snapshot of the most current population, employment, and business data; an analysis of the region's strengths, weaknesses, opportunities, and threats; an action plan developed through stakeholder consensus; and an analysis of the region's economic vulnerability.

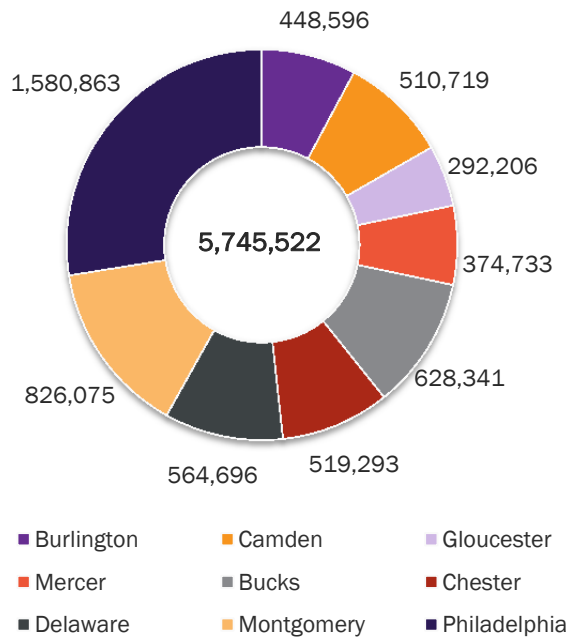


## CHAPTER 2: Regional Overview

### Population

According to the 2017 American Community Survey, the estimated total population for Greater Philadelphia is 5,745,522. This represents a 2.9 percent population increase since 2009, when the region’s population was 5,581,546. The most populated county is Philadelphia with 1,580,863 residents, followed by Montgomery County with 826,075 residents. Gloucester County is the least populated county with 292,206 residents. Figure 1 highlights the estimated population by county.

**Figure 1:** Total Population(Estimates) by County, 2017



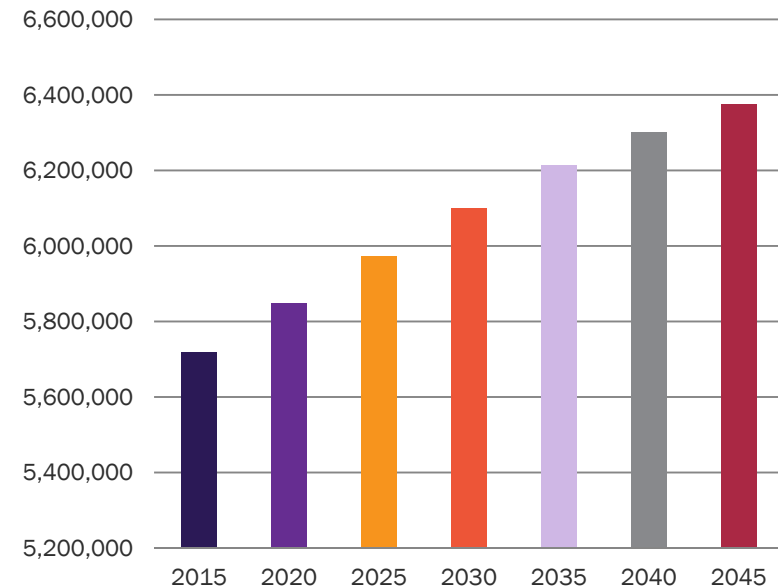
Source: U.S. Census Bureau, 2018.

Montgomery County experienced the highest increase in the region, with just over 49,769 additional residents since 2009, followed by Philadelphia County with 49,751 additional residents. On the other hand, the smallest counties in terms of population (Burlington, Gloucester, and Mercer) experienced a net combined population growth of 20,904 residents since 2009. Camden County lost over 6,000 residents.

### Population Projections

Figure 2 highlights regional population projections for DVRPC’s long-range plan, *Connections 2045*. The region’s population is expected to increase by 11.5 percent between 2015 and 2045.

**Figure 2:** Regional Population Projections, 2045



Source: DVRPC, 2019.

### Population by Age

As shown in Figure 3, the median age in Greater Philadelphia is 38.6. Persons over 55 years of age represent 27 percent of the region, while persons between 20 and 34 years of age represent 21 percent.

**Figure 3:** Population by Age, 2016

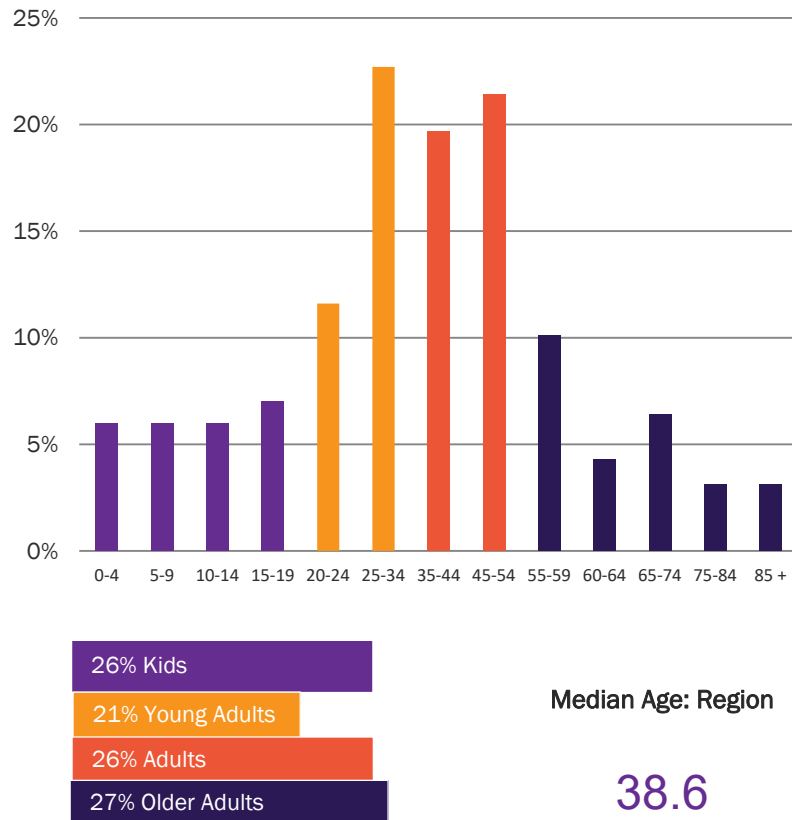
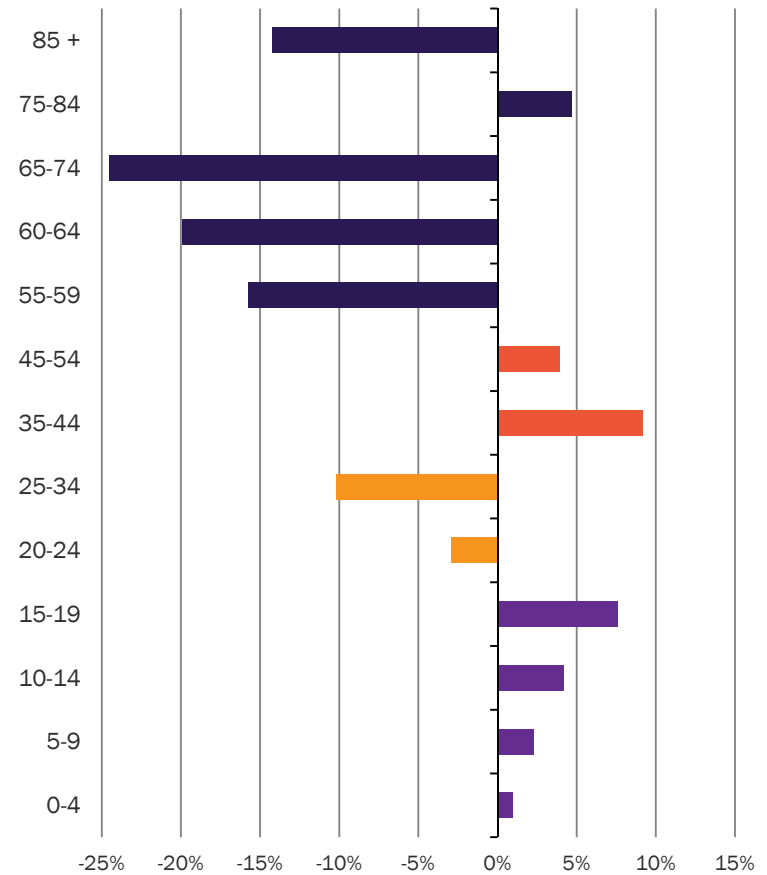


Figure 4 highlights population change by age between 2009 and 2016. Population in the 55-74 age bracket declined by approximately 200,000 (20 percent) while population in the 25-34 age bracket declined by 73,000 (10 percent). The region experienced growth among its adult population aged 35-54 (6.5 percent).

**Figure 4:** Population Change (Percentage) by Age, 2009-2016



Source: (Figures 3 and 4): U.S. Census Bureau, 2019.



## Education Attainment



*The region's ability to advance education attainment is critical for the future workforce.*

Education attainment is a key indicator for a region's workforce talent and institutional assets that can lead to technology innovation. As technology and knowledge-based industries become central to the global economy, this high skill level is driving job growth. Greater Philadelphia has over 100 education institutions, including community colleges and private, state, parochial and trade schools.

Table 1 illustrates the education attainment level for all residents 25 years of age or older. Less than one-third (29.6 percent) of the region's residents over 25 years of age hold only high school diplomas, which is just slightly higher than the national average of 27.5 percent. The percentage of the region's residents aged 25 or older with some college is 16.9 percent, compared to 21 percent nationally. The data illustrated shows that the region has a slightly higher percentage of residents 25 years and older with bachelor's degrees—21.5 percent for the region, compared to 18.8 percent for the nation—and graduate degrees—14.7 percent for the region, compared to 11.5 percent for the nation.

**Table 1:** Education Attainment Level (25 Years of Age and Older)

	Region	US
Less than 9th grade	3.7%	5.6%
9th to 12th grade, no diploma	6.8%	7.4%
High school graduate (includes equivalency)	29.6%	27.5%
Some college, no degree	16.9%	21.0%
Associate's degree	6.8%	8.2%
Bachelor's degree	21.5%	18.8%
Graduate or professional degree	14.7%	11.5%

*Source: U.S. Census Bureau, 2019.*

## Economy

### Per Capita Income

Creating jobs that match the workforce supply should result in gains in per capita income. As shown in Table 2, the region's per capita personal income has historically been higher than that of the United States. Within the region, the City of Philadelphia had the highest percentage increase of almost 50 percent between 2010 and 2017. Montgomery County had the lowest percentage increase between 2010 and 2017. Chester County had the highest per capita income in 2017, while Camden County had the lowest.

**Table 2:** Per Capita Income (in Dollars), 2010-2017

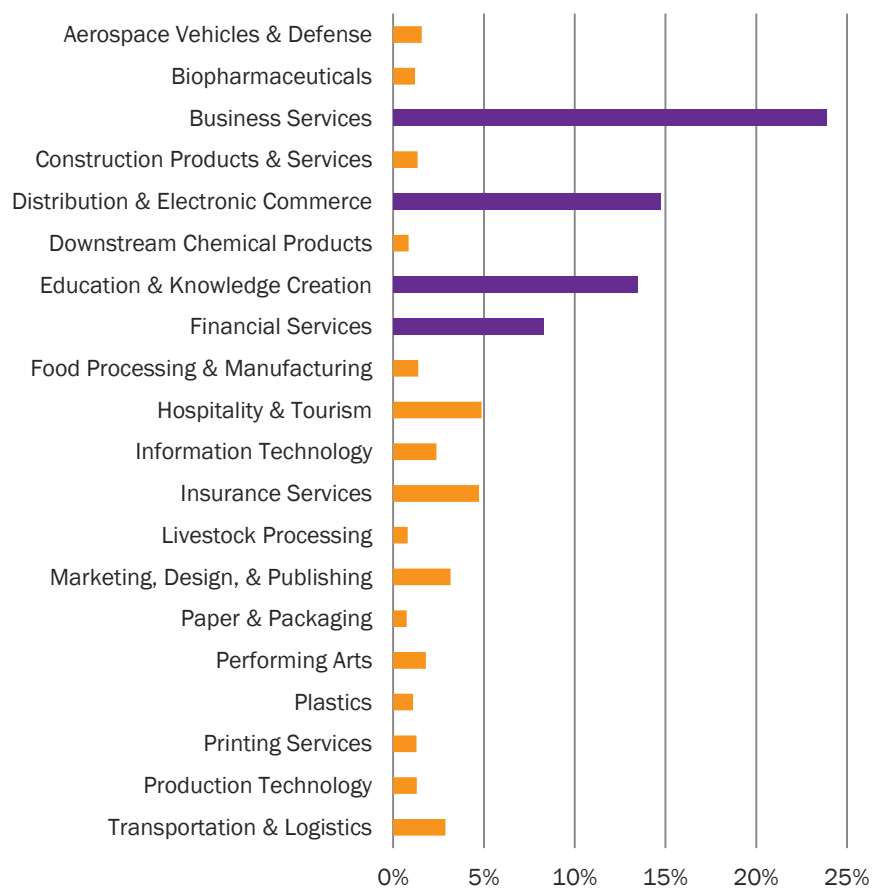
	2010	2017	Percentage Change
United States	40,277	51,640	28.21%
Greater Philadelphia	49,326	61,879	25.45%
Bucks	54,112	69,370	28.19%
Burlington	48,047	59,659	24.17%
Camden	41,993	51,878	23.35%
Chester	61,282	77,465	26.41%
Delaware	48,706	62,440	28.20%
Gloucester	41,512	52,506	26.48%
Mercer	54,600	66,343	21.51%
Montgomery	67,182	77,207	7.06%
Philadelphia	37,374	55,718	49.08%

Source: U.S. Bureau of Economic Analysis (BEA), 2018.

### Structure of Regional Employment

Figure 5 highlights the percentage of employment by sector for the region. Approximately 60 percent of the employment in Greater Philadelphia is concentrated in four sectors: Business Services (23.88 percent), Distribution & Electronic Commerce (14.76 percent), Education & Knowledge Creation (13.48 percent), and Financial Services (8.27 percent).

**Figure 5:** Percentage of Employment by Sector

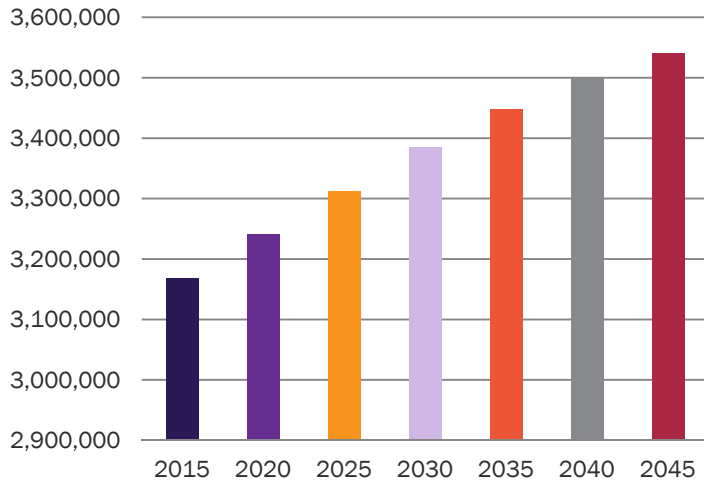


Source: U.S. Cluster Mapping Project, 2016.

### Employment Projections

Figure 6 illustrates regional employment projections conducted for DVRPC's long-range plan, *Connections 2045*. Regional employment is expected to increase by 11.7 percent between 2015 and 2045.

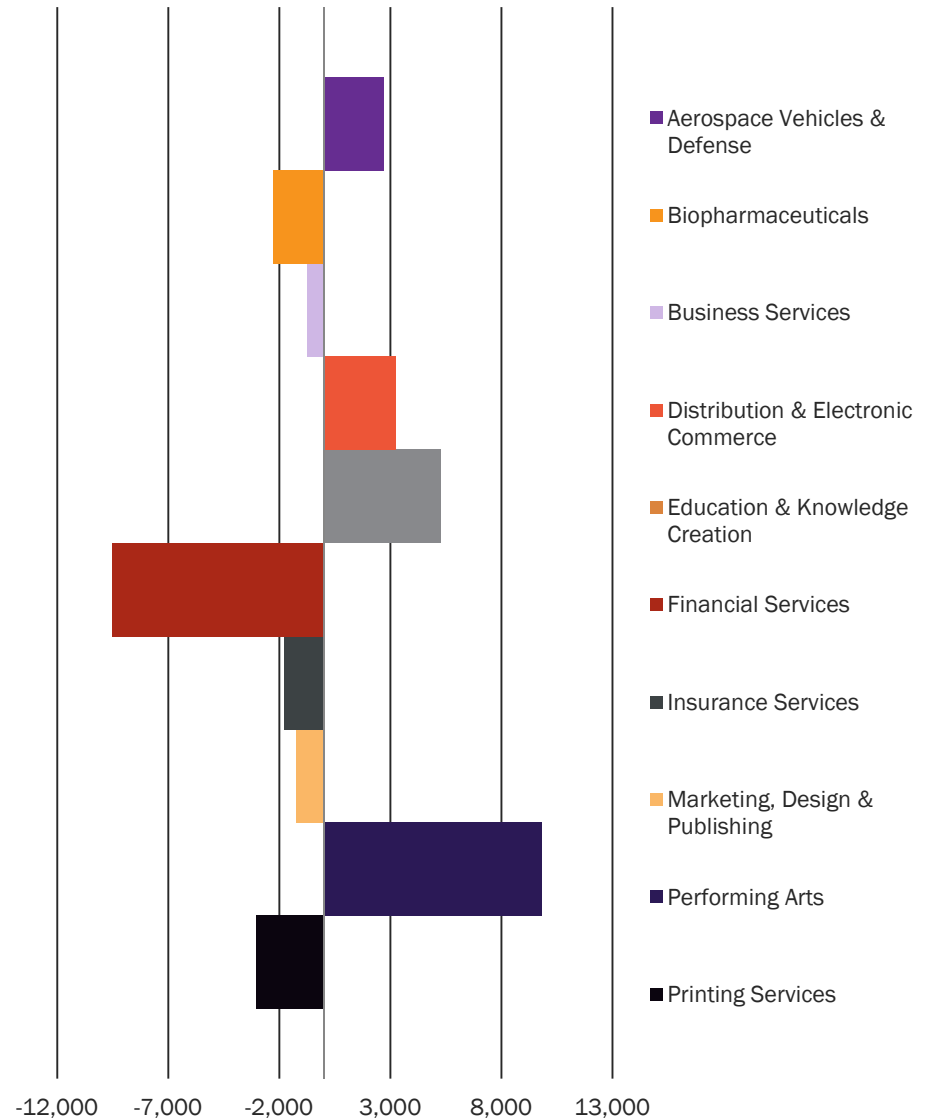
**Figure 6:** Regional Employment Projections, 2045



Source: DVRPC, 2019.

Figure 7 illustrates the change in jobs for the top 10 employment clusters. Regionwide, Greater Philadelphia experienced a 1.8 percent reduction in total employment from 2010 to 2016. However, there were four clusters that had gains. The Distribution & Electronic Commerce cluster gained over 3,000 new jobs, which was a 2.5 percent increase. The Education & Knowledge creation sector gained 5,291 jobs, which was a 4.4 percent increase. The Aerospace Vehicles & Defense cluster gained 2,628 jobs which was a 19.4 percent increase. The Performing Arts cluster experienced the greatest increase with 9,800 new jobs. The financial services cluster experienced the greatest loss in employment, with over 9,500 jobs lost over the six-year period.

**Figure 7:** Change in Jobs by Cluster, 2010-2016



Source: U.S. Cluster Mapping Project, 2019.

## Housing

Since 2009, the region has added just over 26,186 housing units, an average of 4,362 units per year. The vacancy rate has increased slightly from 8.4 percent in 2009 to 8.8 percent in 2016. The increase in vacancy may be attributed to the housing downturn that occurred in 2008. Table 3 outlines occupancy status since 2009.

**Table 3:** Occupancy Status, 2009-2016

	2009	%	2016	%
Total Housing Units	2,276,982		2,303,168	
Occupied Units	2,086,178	91.6%	2,101,562	91.2%
Vacant Units	190,804	8.4%	201,606	8.8%

Source: U.S. Census Bureau, 2019.

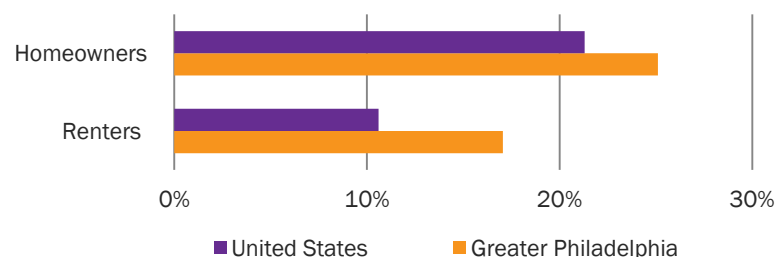
Maintaining a diverse supply of housing at all price points is critical to attracting and maintaining an adequate labor force and economic competitiveness. Housing affordability is measured in terms of the percentage of income that households pay toward their housing costs.<sup>1</sup>

Figure 8 illustrates the percentage of regional and national households that pay 35 percent or more of their income toward housing costs. Approximately 25 percent of the region's homeowners and 17 percent of renters spend 35 percent or more on housing or housing-related costs. This is higher than homeowners (21.3 percent) and renters (10.6 percent) nationwide.

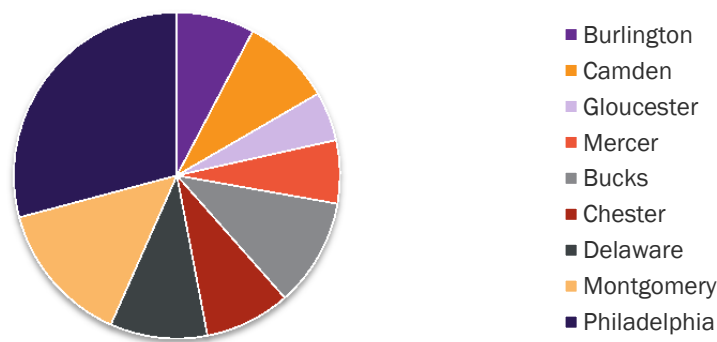
<sup>1</sup> Housing costs include costs associated with the mortgage, insurance premiums, property taxes, and homeowner's association fees.

Figure 9 outlines the distribution of housing units in the region. Of the 2.3 million housing units within the region, approximately half were built before 1960. Since 2000, over 212,000 units have been built (9 percent). Over 29 percent of the region's housing stock is located within the City of Philadelphia, followed by Montgomery County (14.2 percent). The four New Jersey counties are home to less than 30 percent of the region's housing units.

**Figure 8:** Housing Affordability (Households that Pay More than 35% Toward Housing Costs)



**Figure 9:** Housing Unit Distribution



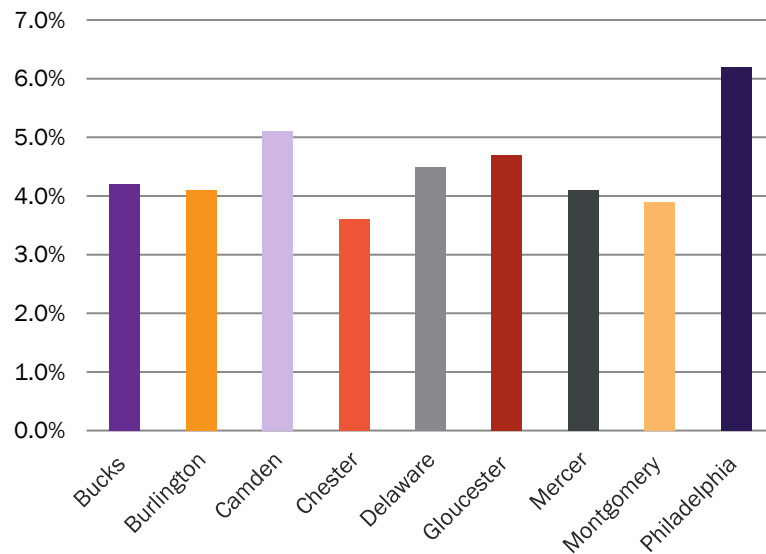
Source: (Figures 8 and 9): U.S. Census Bureau, 2019.

## Employment

Greater Philadelphia has a labor force slightly over 4.6 million persons over 16 years of age. As of March 2018, Greater Philadelphia had a 3.7 percent unemployment rate, which is lower than the national rate of 4.4 percent. Figure 10 highlights the unemployment rate by county.

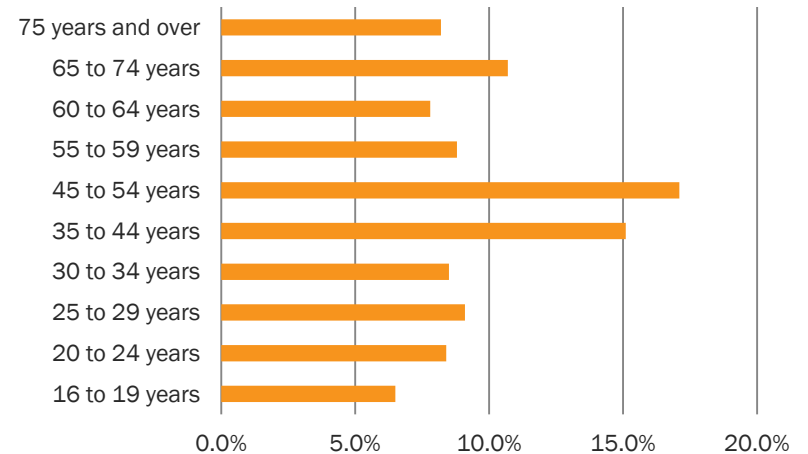
Figure 11 illustrates the labor force participation rate based by age and Figure 12 illustrates labor force participation by race. Approximately 60 percent of the labor force is made up of persons between the ages of 25 and 59 and approximately 68 percent of the labor force identifies as white.

**Figure 10:** Unemployment Rate by County, 2018

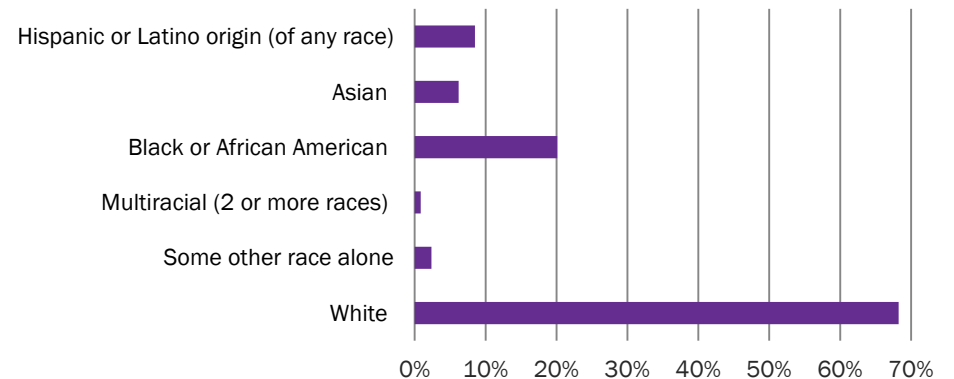


Source: U.S. Bureau of Labor Statistics (BLS), 2018.

**Figure 11:** Labor Force Participation Rate by Age, 2016



**Figure 12:** Labor Force by Race, 2016



Source: (Figures 11 and 12): U.S. Census Bureau, 2019. Data Note: Hispanicity constitutes an ethnicity category, as opposed to a racial category. Ethnicity distinguishes between those who report ancestral origins in Spain or Hispanic America (Hispanic and Latino Americans), and those who do not (non-Hispanic Americans).

### Technology Jobs

Firms requiring technology professionals contribute to the innovation ability of a region. There are two categories of technology professionals: high-tech jobs and technology-based knowledge jobs.

High-tech jobs are defined as industries having high concentrations of workers in STEM (Science, Technology, Engineering, and Mathematics) occupations. STEM occupations account for 5.8 percent of all jobs<sup>2</sup> nationwide. High-tech jobs make up approximately 6 percent of all jobs in Greater Philadelphia and are highlighted by county in Figure 13. The highest numbers of technology jobs are located in Montgomery County with over 11 percent. This is followed by Chester and Mercer counties, with 10.4 percent and 7.4 percent, respectively.

Technology-based knowledge jobs are associated with innovation production: information technology; engineering; healthcare and medical science practitioners and scientists; mathematics, statistics, and data, and accounting; natural science and environment management; and postsecondary education and knowledge creation. Technology-based knowledge jobs account for over half of the technology jobs in Greater Philadelphia and are highlighted in Figure 14. The highest numbers of technology-based jobs are located in Montgomery and Philadelphia counties with 25 percent, followed by Chester County with 14 percent.

Figure 13: Percentage of High-Tech Jobs by County

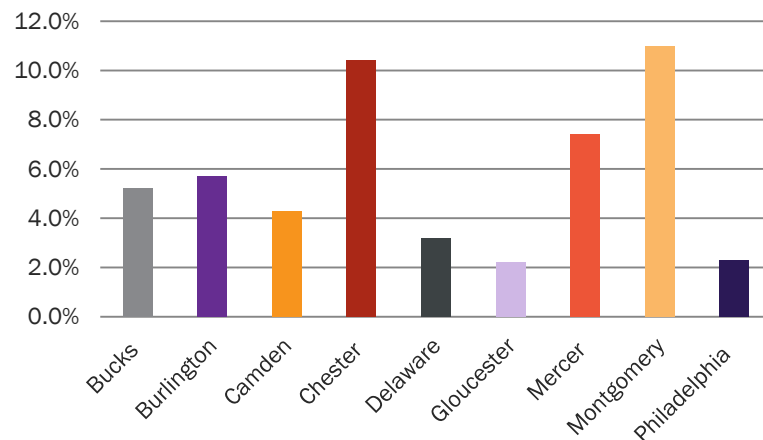
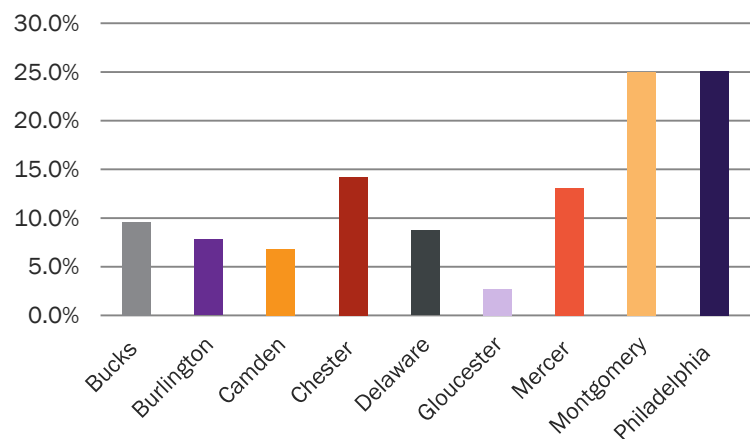


Figure 14: Percentage of Technology-Based Knowledge Jobs by County



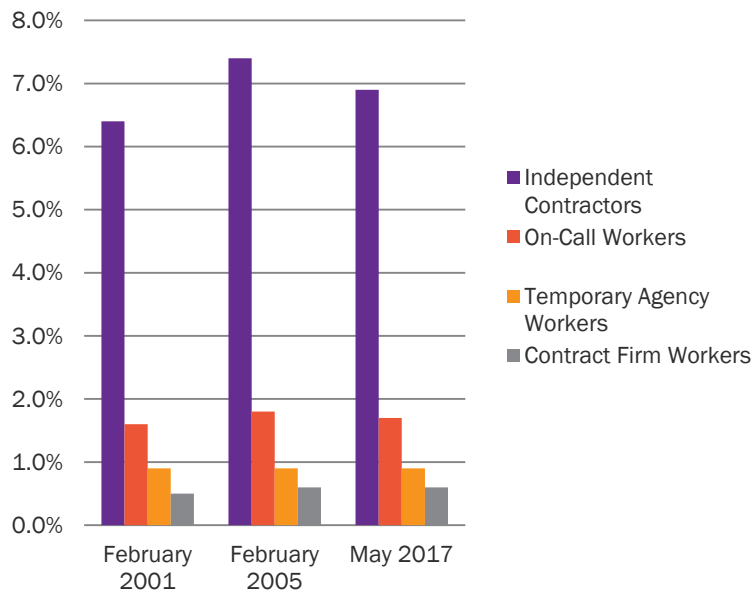
Source: (Figures 13 and 14): U.S. Census Bureau, 2018.

<sup>2</sup> Beyond the Numbers, U.S. Bureau of Labor Statistics (BLS) May 2016.

## Flexible Employment

Temporary, flexible jobs are commonplace, and companies tend toward hiring independent contractors and freelancers instead of full-time employees. Not officially defined, the “gig economy” describes workers with a single project or task for which they are hired, often through the digital marketplace. This gig workforce is spread throughout various occupations and is not easily identified in employment surveys. The Bureau of Labor Statistics (BLS) and U.S. Census Bureau provide numbers on the occupational areas most likely to employ gig workers. Figure 15 highlights flexible jobs in alternative employment arrangements for the United States. (BLS data is provided for the national level) Since February 2001, independent contractor jobs increased from 6.7 percent to 6.9 percent in May 2017.

**Figure 15:** Flexible Jobs (United States)



Source: Bureau of Labor Statistics (BLS) U.S. Department of Labor, (accessed February 08, 2019). BLS refers to gig workers as independent contractors.

The U.S. Census Bureau provides nonemployer statistical data from IRS tax information. Many gig workers fit the Census definition of a nonemployer: self-employed individual operating a small, unincorporated business with no paid employees. Gig employees are more likely in some occupations than others, particularly those that are one-time and on-demand based. Table 4 outlines the four occupation areas where gig jobs are most common and highlights the job growth in Greater Philadelphia.

**Table 4:** Gig Economy Job Growth

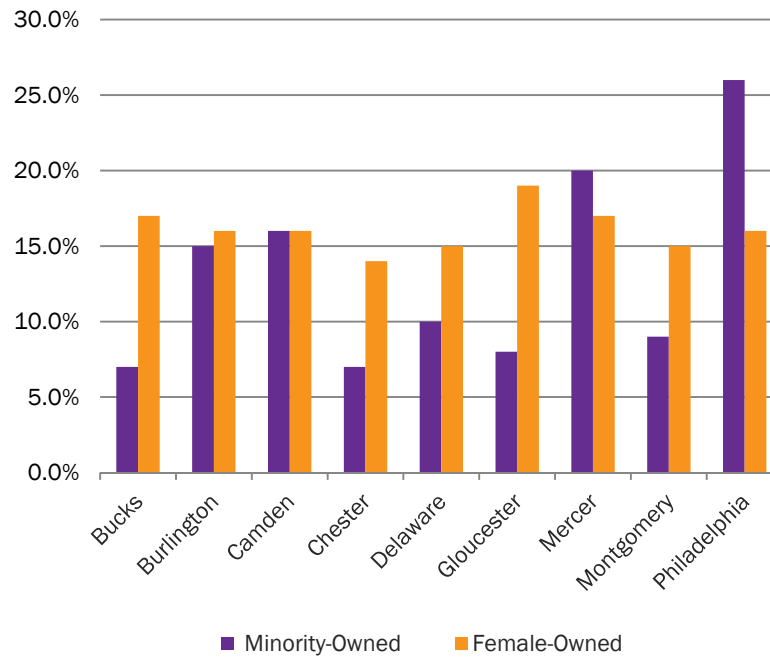
North American Industry Classification System (NAICS)	Occupations	Worker Type	2010-2016 Growth (percent)
Arts	Musicians, graphic designers, artists	Specific one-time services, customized products	19.25%
Construction	Carpenters, painters, construction workers	Short duration projects	.85%
Professional & Technical	Technical writers, photographers, computer programmers, IT professionals	Project-based electronic delivery	7.8%
Transportation & Warehousing	Delivery drivers, ridesharing	On-demand services	146.5%

Source: 2016 Nonemployer Statistics, U.S. Census Bureau, 2019.

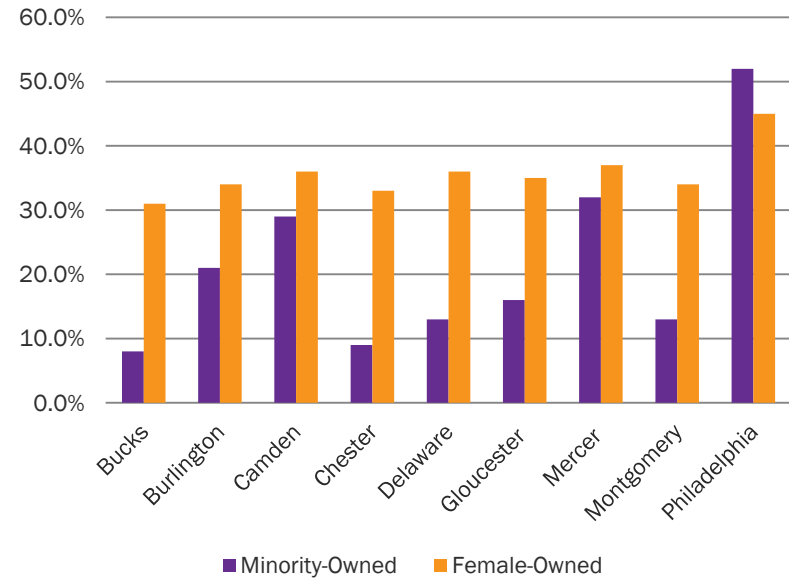
### Business Diversity

Figures 16 and 17 highlight minority-owned and female-owned businesses in traditional employer-owned companies and industries commonly found in the gig economy. The City of Philadelphia has the highest number of minority-owned employer businesses (26 percent) and minority-owned gig businesses (52 percent). Gloucester County has the highest number of female-owned employer businesses (19 percent) and Philadelphia has the highest number of female-owned gig businesses (45 percent).

**Figure 16: Employer Business Ownership**



**Figure 17: Minority-Owned Gig Business Ownership**



Source: (Figures 16 and 17): U.S. Census Bureau, 2018.

DVRPC recognizes that available data regarding minority and female-owned businesses is limited and, in most cases, based on certification status. Participants of the public SWOT process agreed that a more reliable data source should be explored to ensure businesses owned by underrepresented populations are counted correctly and evaluated as part of the regional economy.



## Infrastructure

One of the major themes identified at the public SWOT meeting process was the need to maintain and invest in sustainable infrastructure. Although Greater Philadelphia has an enviable transportation network, improvements to water/sewer systems and a high-quality telecommunications system were identified as essential to recruiting new employers and top talent to the region. Figure 18 highlights the Greater Philadelphia transportation network.

### Highway Network

Greater Philadelphia's transportation network includes major highways, such as I-95, the Schuylkill Expressway (I-76), Route 476 (Blue Route), the Vine Street Expressway, and the Pennsylvania Turnpike in Pennsylvania; and I-295, New Jersey Turnpike (I-95), I-676, Route 130, and Route 30 in New Jersey. The region is connected to the rest of the nation in every direction.

### Airports

Philadelphia International Airport (PHL) is the 14<sup>th</sup>-busiest airport in the nation in aircraft movements and 19<sup>th</sup> in passenger movements. In 2017, PHL served over 25 million domestic passengers and over 29 million international passengers. PHL serves 26 airlines, with approximately 500 daily departures to 131 destinations worldwide. PHL generates \$15.4 billion in the regional economy and has over 96,000 employees. Situated on 1,150 acres in the northeast part of the City of Philadelphia, Philadelphia Northeast is a reliever airport for general aviation and corporate flight operations. Trenton Mercer Airport is a growing commercial carrier, serving domestic destinations.

### Public Transit

The region is served by the Southeastern Pennsylvania Transportation Authority (SEPTA), New Jersey Transit (NJT), Amtrak, and the Port Authority Transit Corporation (PATCO). NJT and SEPTA are the nation's third- and fifth-largest transit provider, respectively. SEPTA serves the region with buses, trolleys, subways, regional rail lines, and paratransit. NJT provides rail service from 30<sup>th</sup> Street Station in Philadelphia to Atlantic City, New

Jersey as well as several bus routes within New Jersey with connections to Philadelphia. Amtrak provides national service from 30<sup>th</sup> Street Station in Philadelphia. PATCO is responsible for the High-Speed Line, which connects Camden County, New Jersey and the City of Philadelphia. NJT also operates the River Line which connects Camden to Trenton.

### Freight Network

Greater Philadelphia has an extensive freight network that consists of 319 miles of primary highway, 700 miles of freight rail lines, 31 port terminals along the Delaware and Schuylkill rivers, two commercial airports, and 11 reliever airports. The network serves local businesses and residents and within 500 miles of the region.

### Broadband Connection





Broadband provides significant benefits to the next generation of entrepreneurs and small businesses—the engines of job creation and economic growth for the country. The innovation capabilities of a region are linked to internet availability. To gauge use and availability, the Federal Communications Commission measures broadband density—residential fixed connections per 1,000 households. Figure 19 illustrates where at least 10 Mbps (megabits per second) service is available to residential households in the Greater Philadelphia region. A connection speed of 10 Mbps is the minimum recommended for offices with less than 10 employees.

### Water Systems

Water and sewer (public service) infrastructure poses a health and financial challenge to many parts of the region. Investments in system technology are needed to keep our communities safe and livable. Not only are these investments necessary, but they also act as an engine for new career paths and jobs for local residents, particularly in urban areas where infrastructure is nearing 100 years old (or older). Figures 20 and 21 illustrate the current water and sewer service areas by community types for the region.

Figure 18:

# Greater Philadelphia Transportation Network

-  Major Airport
-  Major Highway
-  Passenger Rail
-  Freight Rail

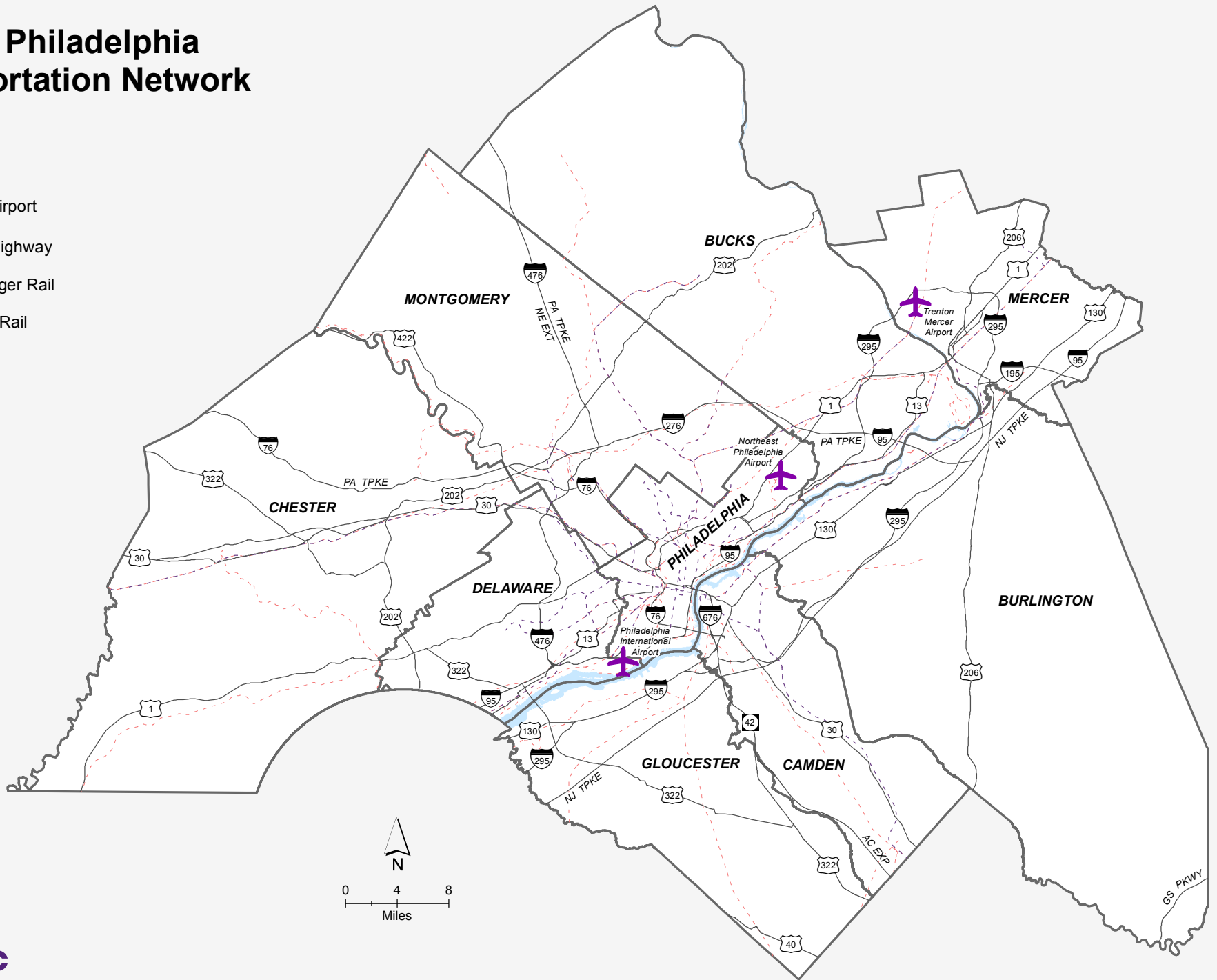


Figure 19:

## Broadband Residential Connections

At least 10 Mbps Downstream and  
at least 1 Mbps Upstream Connections  
per 1000 Households, by Census Tract

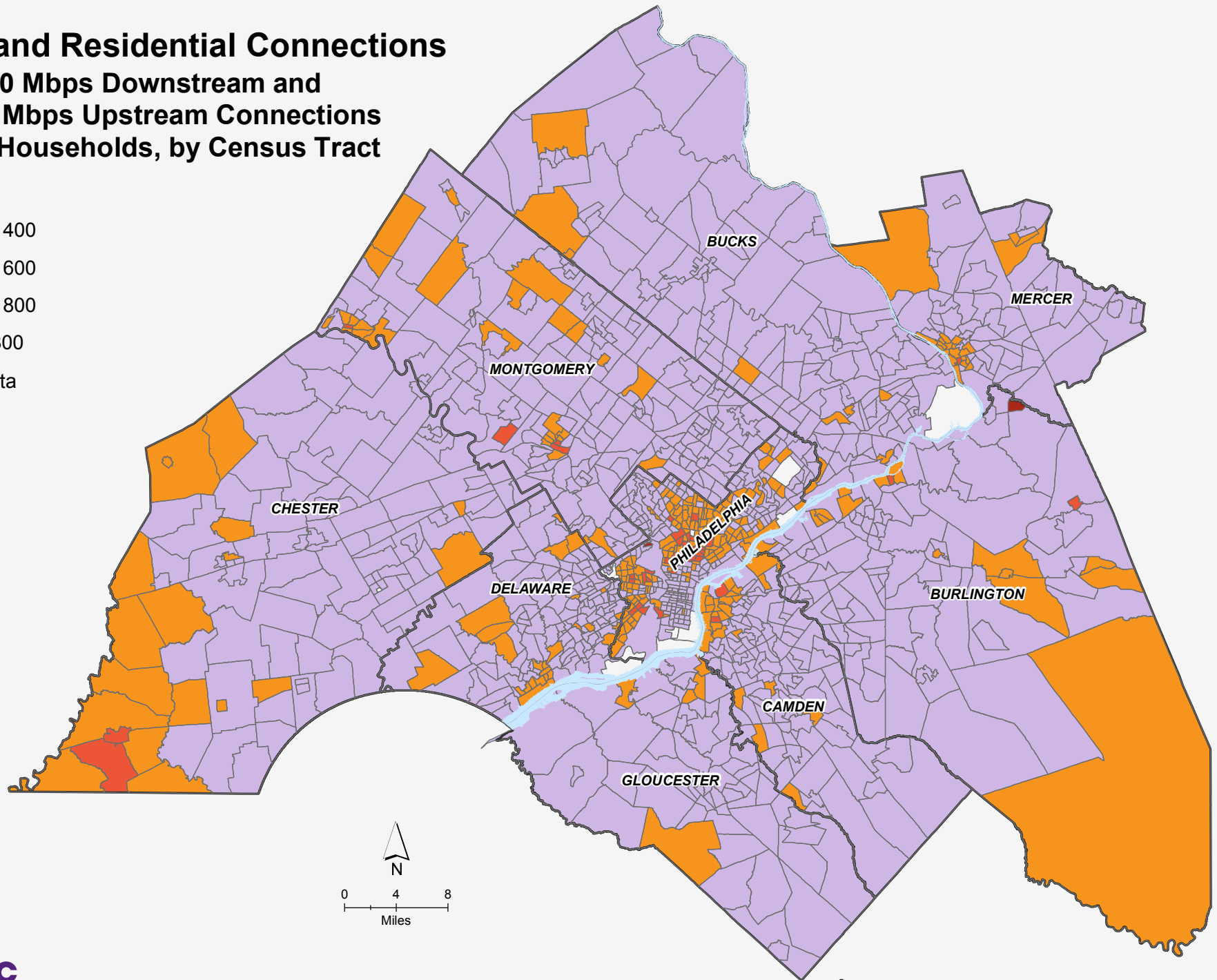
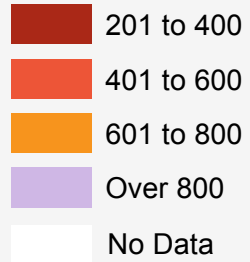


Figure 20:

# Water Service Areas By Community Type

- Core City
- Developed Community
- Growing Suburb
- Rural Area
- No Service

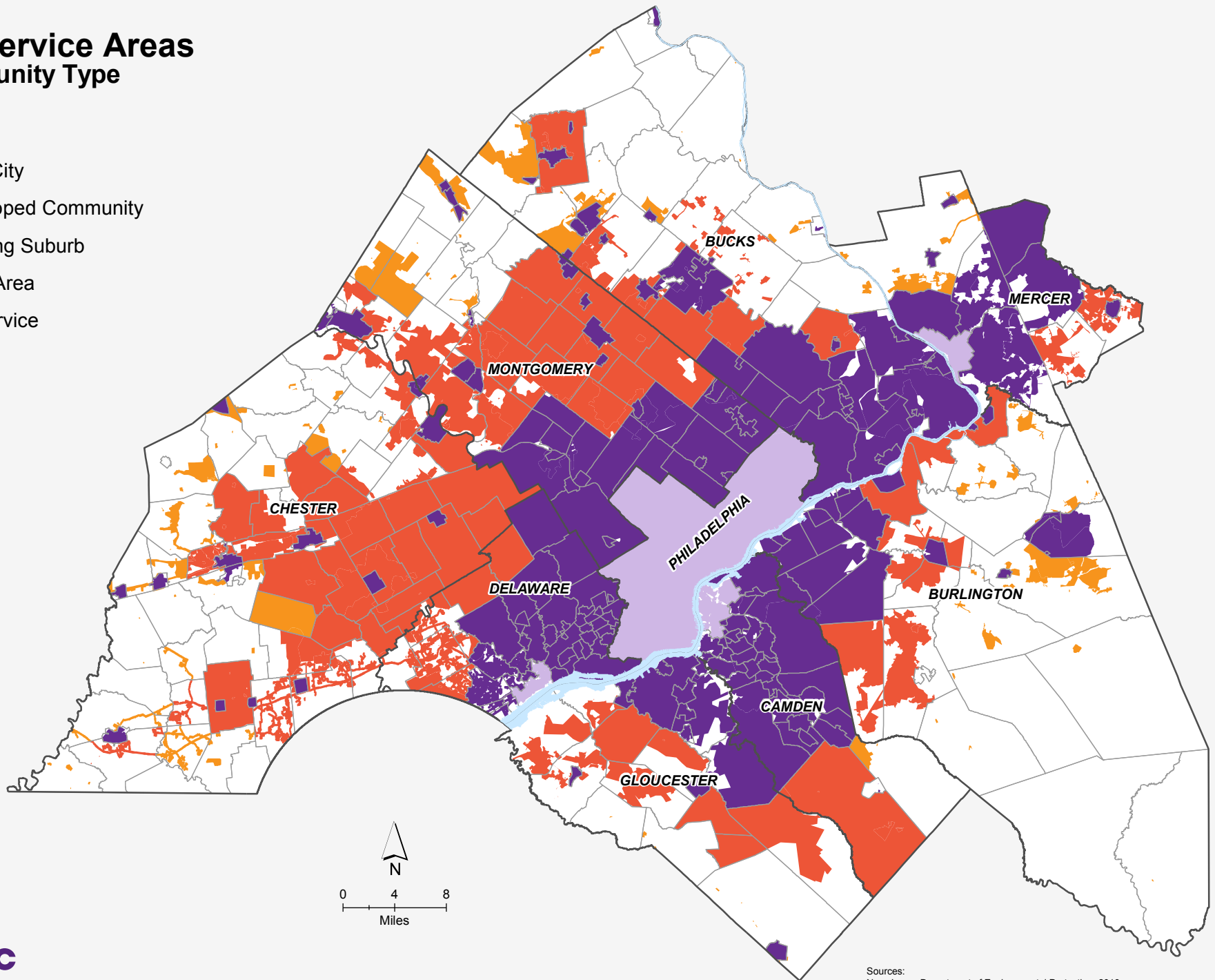
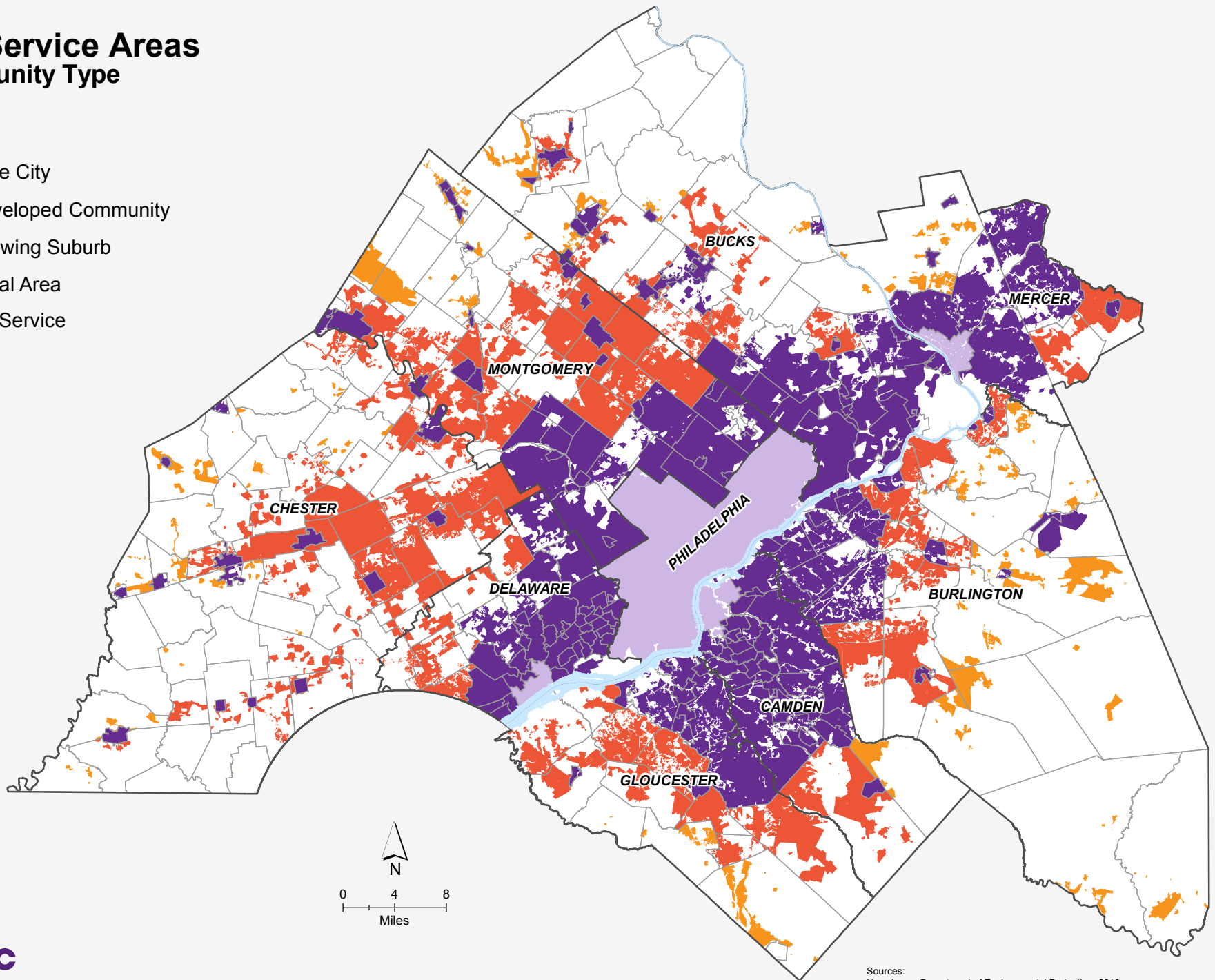


Figure 21:

# Sewer Service Areas By Community Type

- Core City
- Developed Community
- Growing Suburb
- Rural Area
- No Service



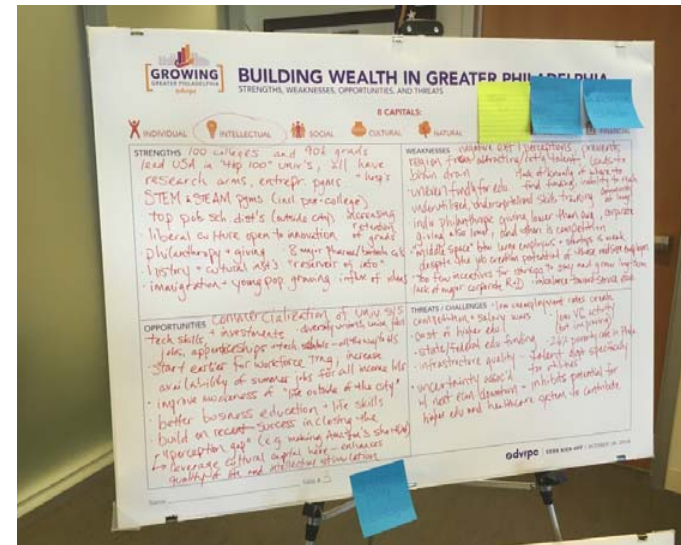


## CHAPTER 3: SWOT Analysis

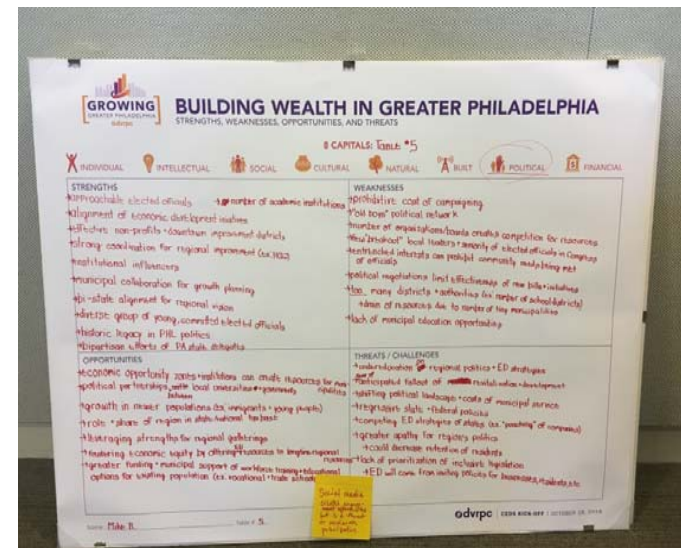
An integral component of the CEDS process is the regional SWOT analysis. This was completed in March 2019 with the assistance of the CEDS review committee, planning partners, and members of the public.

The idea behind the SWOT analysis was to enable participants to think about the resilience of the region and realize there are many elements to a strong regional economy. Participants were asked to consider what we, as regional policy makers, can control at the local level and what areas are out of our control. Borrowing this strategy from *WealthWorks*<sup>3</sup>, the SWOT exercise included eight capital areas: Intellectual, Individual, Social, Natural, Built, Political, Financial, and Cultural. By considering the various capitals of the region, participants were able to address economic resilience, sustainability, and diversity.

Participants were broken up into eight groups, and a facilitated discussion was led by a DVRPC staff member. Over 70 people attended the SWOT meeting with representatives from federal, regional, state, local, private, nonprofit, and institutions. The SWOT themes from each of the eight working groups are outlined in Figure 22. These were used to develop the goals, objectives, and strategies.



Participants shared ideas about the region's Intellectual Capital.



Participants shared ideas about the region's Political Capital.

<sup>3</sup> *WealthWorks*© brings together and connects a community's assets to meet market demand. A set of national and regional partners developed the *WealthWorks* framework. Initial funding for *WealthWorks* is provided by the Ford Foundation, through its Expanding Livelihood Opportunities for Poor Households Initiative; [www.wealthworks.org](http://www.wealthworks.org)

**Figure 22: SWOT Themes**





## CHAPTER 4: Goals, Strategies, and Objectives

### Goal: Maximize Human Capital Potential

Workforce talent is critical for Greater Philadelphia to sustain and grow businesses and communities. Leaders need to monitor labor force characteristics and the evolving needs of employers to create strategies and incentives for alignment between the two elements. Coordination of the region's labor force can improve the resiliency and adaptability of our region's communities to social, cultural, and technological changes.

**Objective: Develop training to capitalize on the region's current and future workforce.**

#### Strategies:

- Introduce career path programs and activities that maximize exposure of youth to the broadest range of job and career opportunities.
- Conduct annual assessments of high-demand jobs and specific skills needed.
- Align training, retraining, educational opportunities, and resources to prepare local residents to work for sustainable wages in high-demand occupations.
- Address underlying factors that prevent unemployed persons from accessing meaningful career and job opportunities with sustainable wages.
- Modify training programs to allow companies to respond quickly to economic shifts and stay competitive.

**Objective: Increase job and career opportunities for underrepresented populations, such as minorities and women.**

#### Strategies:

- Create an investment fund or public funding stream to support underrepresented business founders.
- Support existing and cultivate new entrepreneur programs for underserved populations.
- Organize bias training for investors to increase access to capital to underserved populations.
- Create global startup training centers that provide entrepreneurial support and consultative services for culturally diverse consumers.
- Invest in new data collection systems of underrepresented entrepreneurs and employers to scale up their share of the economy.

**Objective: Create job and career opportunities for nontraditional students, returning citizens, older workers, veterans, and immigrants.**

#### Strategies:

- Invest in organizations that assist veterans and service personnel to find jobs, especially those with in-demand technical skills.
- Address the skills-business mismatch by encouraging apprenticeships that integrate job skills training with employment opportunities.
- Provide training/support for employers and Human Resource professionals that focus on reducing bias.
- Provide guidance to reduce bias against immigrants, returning citizens, older workers, nontraditional students, and veterans during the hiring process.
- Increase awareness of business development resources available at the local, state, and federal levels to help immigrants establish or take advantage of business opportunities.

## Goal: Attain Regional Growth and Global Connectivity

Employment in Greater Philadelphia is primarily concentrated in four sectors and accounts for over 60 percent of all employment in the region. Heavy reliance on these four sectors poses a threat to the resilience of the regional economy. Employment diversification will enable the region to remain competitive in a global market.

**Objective: Foster a competitive and fair business climate.**

**Strategies:**

- Work with regional partners to explore the creation of a regional investment fund to support all of the region's businesses at all stages.
- Provide coordination and information exchange about incentives offered by government at all levels.
- Analyze the reduction or elimination of select taxes, particularly those that impact the attraction and retention of new businesses or employers.

**Objective: Support initiatives designed for small business creation and expansion.**

**Strategies:**

- Streamline the continuum of the startup ecosystem through one-stop shops for startups.
- Create mentorships between established and emerging business leaders.
- Increase the number of worker-owned cooperatives.
- Assess available real estate for business development and expansion (e.g., incubator/accelerator/coworking space).
- Identify linkages between companies and resources available through university systems, research centers, and industry associations.

**Objective: Continue toward a technologically diversified economy.**

**Strategies:**

- Advocate for inclusive, collaborative economic development projects led by higher education and nonprofits.
- Identify ways to help traditional manufacturers repurpose assets and adopt advanced technologies.
- Direct research and development (R&D) investments toward technological innovations that connect global markets and startup companies.
- Invest in existing and new concentrated innovation districts across the region.

**Objective: Nurture an environment that helps economic clusters thrive and expand globally.**

**Strategies:**

- Invest in supply chain infrastructure to expedite international shipping capabilities.
- Improve capacity of the region's transportation and communication infrastructure to ease trade flows between local and overseas markets.
- Establish more free trade zones in the region to reduce costs on imported goods.
- Safeguard regional economic conditions to enable growing economic clusters (performing arts, aerospace defense, education and knowledge, life sciences) to expand.

## Goal: Strengthen Infrastructure to Support the Regional Economy

Proper infrastructure is necessary to retain and attract businesses. The evolving economy places higher importance on expanded and improved broadband telecommunications, energy-efficient systems, and transportation infrastructure. Improved and expanded telecommunications are the cornerstones of economic diversification. Committing to an environmentally friendly economy will have positive environmental impacts and diversify employment clusters.

**Objective: Maintain cutting-edge telecommunications infrastructure.**

**Strategies:**

- Establish a regional telecommunications task force.
- Encourage diversification of telecommunications providers.
- Ensure local, regional, and state plans are in place to meet broadband access, speed goals, and needs.
- Promote opportunities/events to identify key regional industry (information sharing, communications, and technology) partners.

**Objective: Continue the transition to an environmentally friendly economy.**

**Strategies:**

- Modernize electrical grid systems to optimize and incorporate storage capabilities and maintain reliability.
- Adopt incentives for new economic development projects to use solar, wind, and geothermal technologies.
- Encourage environmental certifications for new and existing buildings.
- Reduce greenhouse gas emissions and locate facilities or provide design or infrastructure to avoid the impacts of climate change and severe weather events.

**Objective: Invest in public infrastructure systems technology and maintenance to increase the health and economic welfare of the region's residents.**

**Strategies:**

- Conduct an analysis of water/sewer gaps and areas of needed repairs.
- Invest in water, wastewater, and stormwater infrastructure by supporting economic development projects that produce jobs in these sectors.
- Help local jurisdictions identify and implement nature-based solutions for water system needs.

**Objective: Prioritize transportation investments to increase access to the region's economy.**

**Strategies:**

- Ensure transportation improvements connect households to quality jobs, healthcare, and education.
- Invest in existing and new transit service to employment opportunities.
- Encourage business development and expansion in areas of the region with existing transit services.
- Invest in the region's ports and freight infrastructure to provide more efficient access to customers and suppliers.

## Goal: Support Inclusive Growth to Empower All Communities

Creating an economy for all communities of the region will enable sustainability. Prioritizing local ownership, collaboration, and production will create equity and have better health outcomes for all persons.

**Objective: Strengthen local economies through commerce and community.**

Strategies:

- Increase local supply chain connections through “local first” commerce policies.
- Bolster community involvement and services through partnerships with existing community systems: libraries, schools, and recreational facilities.
- Increase and support local agriculture throughout the region including urban developed areas.
- Nurture an environment for local jurisdictions and large institutions to procure locally sourced products and services.

**Objective: Capitalize on the region’s quality of life and reputation as a premier tourist destination.**

Strategies:

- Create a single regional task force to combine efforts of tourist and business attraction organizations to increase tourism and investment.
- Support arts and culture through placemaking and events to keep the region’s downtown centers vibrant.
- Advocate for special district designations to expand economic development opportunities.
- Promote local history through the preservation and reuse of existing historical structures.
- Advertise the region’s global significance with branding.

**Objective: Build trust and open communication among political leaders, business owners, and community.**

Strategies:

- Support democratic models of economic control, such as worker ownership, land trusts, and public asset protection.
- Institute a leadership program that trains people to run for and serve in elected office.
- Incentivize shared services across local jurisdictions, school districts, and other authorities.
- Require training for local municipal boards/authorities members to ensure fair decision making and transparency.

**Objective: Achieve housing affordability across the region.**

Strategies:

- Coordinate planning to encourage strategic housing investments near employment centers and transit hubs to reduce household transportation costs.
- Direct mixed-use development to the region’s tax incentive zones.
- Review housing programs to ensure holistic approaches to stretch limited dollars further.
- Reduce the housing cost burden by encouraging local jurisdictions to allow for easier development processes that also include energy-reducing residential systems (e.g., solar).
- Support broader racial and socioeconomic integration in all communities through land use, housing, and economic policies.

## CHAPTER 5: Action Plan

The action plan identifies the goals, objectives, strategies, potential performance measures, and types of implementation partners necessary for guiding economic development investments over the next five years. The purpose of the action plan is to provide a "roadmap" for targeting future economic development investments throughout the region, thereby launching the CEDS into action. The action plan will be used to steer the selection of future economic development investments that address critical barriers to regional economic vitality.

The action plan lists each of the four goals and the associated objectives and strategies, as outlined in Chapter 4. New to the action plan chart are potential performance measure(s) and partner organization types. Performance measures will be further refined and evaluated in years two through five of the CEDS plan cycle. Understanding that each county and city approaches the economic development process differently, organization types have been identified.



**Goal: Maximize Human Capital Potential**

Objective	Strategy	Potential Performance Measure(s)	Potential Partner Types
<p>Develop training to capitalize on the region’s current and future workforce.</p>	<ol style="list-style-type: none"> <li>1. Introduce career path programs and activities that maximize exposure of youth to the broadest range of job and career opportunities.</li> <li>2. Conduct annual assessments of high-demand jobs and specific skills needed.</li> <li>3. Align training, retraining, educational opportunities, and resources to prepare local residents to work for sustainable wages in high-demand occupations.</li> <li>4. Address underlying factors that prevent unemployed persons from accessing meaningful career and job opportunities with sustainable wages.</li> <li>5. Modify training programs to allow companies to respond quickly to economic shifts and stay competitive.</li> </ol>	<p>Annual Wage Growth Educational Attainment Technology-Based Occupations Gig Economy Occupations Number of Job/Skills Training Programs Nationally Recognized Industry Credentials</p>	<p>Intermediate Units Major Employers PA CareerLink/NJ Career Connections Private Sector School Districts Technical Schools Universities/Colleges U.S. Department of Labor Workforce Development Boards</p>
<p>Increase job and career opportunities for underrepresented populations, such as minorities and women.</p>	<ol style="list-style-type: none"> <li>1. Create an investment fund or public funding stream to support underrepresented business founders.</li> <li>2. Support existing and cultivate new entrepreneur programs for underserved populations.</li> <li>3. Organize bias training for investors to increase access to capital to underserved populations.</li> <li>4. Create global startup training centers that provide entrepreneurial support and consultative services for culturally diverse consumers.</li> <li>5. Invest in new data collection systems of underrepresented entrepreneurs and employers to scale up their share of the economy.</li> </ol>	<p>Number of Minority, Woman-Owned, Immigrant, and Disadvantaged Businesses Labor Mobilization</p>	<p>All Levels of Government Economic Development Organizations Educators EntrepreneurWorks Minority Business Development Center (U.S. Department of Commerce) National Association of Women Business Owners (NAWBO) Small Business Administration/Small Business Development Centers (SBDCs) Workforce Development Boards</p>
<p>Create job and career opportunities for nontraditional students, returning citizens, older workers, veterans, and immigrants.</p>	<ol style="list-style-type: none"> <li>1. Invest in organizations that assist veterans and service personnel find jobs, especially those with in-demand technical skills.</li> <li>2. Address the skills-business mismatch by encouraging apprenticeships that integrate job skills training with employment opportunities.</li> <li>3. Provide training/support for employers and Human Resource professionals that focus on reducing bias.</li> <li>4. Provide guidance to reduce bias against immigrants, returning citizens, older workers, nontraditional students, and veterans during the hiring process.</li> <li>5. Increase awareness of business development resources available at the local, state, and federal levels to help immigrants establish or take advantage of business opportunities.</li> </ol>	<p>Labor Force Participation Rate High School Graduation Rates</p>	<p>All Levels of Government Center for Returning Citizens DVRPC Greater Philadelphia Veteran’s Network Human Resource Professionals Job Placement Agencies Nationalities Service Center NJ Veteran’s Chamber School Districts Technical Schools Universities/Colleges Veterans Administration Welcoming Center for New Pennsylvanians Workforce Development Boards</p>

**Goal: Attain Regional Growth and Global Connectivity**

Objective	Strategy	Potential Performance Measure(s)	Potential Partner Types
<p>Foster a competitive and fair business climate.</p>	<ol style="list-style-type: none"> <li>1. Work with regional partners to explore the creation of a regional investment fund to support all of the region's businesses at all stages.</li> <li>2. Provide coordination and information exchange about incentives offered by government at all levels.</li> <li>3. Analyze the reduction or elimination of select taxes, particularly those that impact the attraction and retention of new businesses or employers.</li> </ol>	<p>Employment Growth Number of Startups in the Region</p>	<p>Banks/CDFIs Ben Franklin Technology Partners Business Community Chambers of Commerce Counties Economic Development Organizations Major Employers Municipalities Select Greater Philadelphia Unions</p>
<p>Support initiatives designed for small business creation and expansion.</p>	<ol style="list-style-type: none"> <li>1. Streamline the continuum of the startup ecosystem through one-stop shops for startups.</li> <li>2. Create mentorships between established and emerging business leaders.</li> <li>3. Increase the number of worker-owned cooperatives.</li> <li>4. Assess available real estate for business development and expansion (e.g., incubator/accelerator/coworking space).</li> <li>5. Identify linkages between companies and resources available through university systems, research centers, and industry associations.</li> </ol>	<p>Average Firm Size Headquarters of Small/Large Firms Number of New Companies Number of Cooperatives</p>	<p>Angel Networks Banks/CDFIs Ben Franklin Technology Partners County Venture Capital Programs Departments of Transportation(DOTs) Nonprofit organizations Philanthropic Organizations Small Business Administration/Small Business Development Centers (SBDCs) Sustainable Business Network South Jersey Technology Park @ Rowan Universities/Colleges</p>
<p>Continue toward a technologically diversified economy.</p>	<ol style="list-style-type: none"> <li>1. Advocate for inclusive, collaborative economic development projects led by higher education and nonprofits.</li> <li>2. Identify ways to help traditional manufacturers repurpose assets and adopt advanced technologies.</li> <li>3. Direct research and development (R&amp;D) investments toward technological innovations that connect global markets and startup companies.</li> <li>4. Invest in existing and new concentrated innovation districts across the region.</li> </ol>	<p>Establishment Churn Business Dynamism Venture Capital Investments Small Business Innovation Research/Small Business Technology Transfer Grants Number of University-Led Economic Development Projects Number of Traditional Manufacturers</p>	<p>Angel Networks Ben Franklin Technology Partners Chambers of Commerce County Venture Capital Programs Economic Development Organizations Manufacturers Minority Business Council Nonprofit Organizations Universities/Colleges</p>
<p>Nurture an environment that helps economic clusters thrive and expand globally.</p>	<ol style="list-style-type: none"> <li>1. Invest in supply chain infrastructure to expedite international shipping capabilities.</li> <li>2. Improve capacity of the region's transportation and communication infrastructure to ease trade flows between local and overseas markets.</li> <li>3. Establish more foreign trade zones in the region to reduce costs on imported goods.</li> <li>4. Safeguard regional economic conditions to enable growing economic clusters (performing arts, aerospace defense, education and knowledge, life sciences) to expand.</li> </ol>	<p>Foreign Direct Investments Exports Growth Aviation Passenger Activity Maritime Trade Tonnage</p>	<p>All Levels of Government Chambers of Commerce County Economic Development Partners DVRPC Foreign Trade Zones Goods Movement Community Minority Business Council</p>

**Goal: Strengthen Infrastructure to Support the Regional Economy**

Objective	Strategy	Potential Performance Measure(s)	Potential Partner Types
<p>Maintain cutting-edge telecommunications infrastructure.</p>	<ol style="list-style-type: none"> <li>1. Establish a regional telecommunications task force.</li> <li>2. Encourage diversification of telecommunications providers.</li> <li>3. Ensure local, regional, and state plans are in place to meet broadband access, speed goals, and needs.</li> <li>4. Promote opportunities/events to identify key regional industry (information sharing, communications, and technology) partners.</li> </ol>	<p>Broadband Density Number of Broadband providers</p>	<p>All Levels of Government IT /Telecommunications companies Philanthropic Organizations Technical Learning Institutions</p>
<p>Continue the transition to an environmentally friendly economy.</p>	<ol style="list-style-type: none"> <li>1. Modernize electrical grid systems to optimize and incorporate storage capabilities and maintain reliability.</li> <li>2. Adopt incentives for new economic development projects to use solar, wind, and geothermal technologies.</li> <li>3. Encourage environmental certifications for new and existing buildings.</li> <li>4. Reduce greenhouse gas emissions and locate facilities or provide design or infrastructure to avoid the impacts of climate change and severe weather events.</li> </ol>	<p>LEED Building certifications ENERGY STAR Certifications Flood Insurance Claims Percentage of Energy from Renewable Energy Sources</p>	<p>All Levels of Government Building, Trade, and Code Organizations DVRPC Economic Development Organizations EDA Green Building United Insurance Companies Power Companies U.S. Green Building Council</p>
<p>Invest in public infrastructure system technology and maintenance to increase the health and economic welfare of the region's residents.</p>	<ol style="list-style-type: none"> <li>1. Conduct an analysis of water/sewer gaps and areas of needed repairs.</li> <li>2. Invest in water, wastewater, and stormwater infrastructure by supporting economic development projects that produce jobs in these sectors.</li> <li>3. Help local jurisdictions identify and implement nature-based solutions for water system needs.</li> </ol>	<p>Investments in Public Infrastructure Water Quality Data Regulatory Compliance Number of Jobs in Industry(s)</p>	<p>County Planning Departments EDA Environmental Protection Agency (EPA) Green Stormwater Partners Local Jurisdictions New Jersey Environmental Infrastructure Trust PENNVEST Public and Private Water/Sewer Companies Water/Sewer Authorities</p>
<p>Prioritize transportation investments to increase access to the region's economy.</p>	<ol style="list-style-type: none"> <li>1. Ensure transportation improvements connect households to quality jobs, healthcare, and education.</li> <li>2. Invest in existing and new transit service to employment opportunities.</li> <li>3. Encourage business development and expansion in areas of the region with existing transit services.</li> <li>4. Invest in the region's ports and freight infrastructure to provide more efficient access to customers and suppliers.</li> </ol>	<p>Port Investments Transit Investments Multimodal Investments</p>	<p>All Levels of Government DOTs DVRPC Goods Movement Community Rail Companies Regional Ports Transit Partners</p>



**Goal: Support Inclusive Growth to Empower All Communities**

Objective	Strategy	Potential Performance Measure(s)	Potential Partner Types
Strengthen local economies through commerce and community.	<ol style="list-style-type: none"> <li>1. Increase local supply chain connections through “local first” commerce policies.</li> <li>2. Bolster community involvement and services through partnerships with existing community systems: libraries, schools, and recreational facilities.</li> <li>3. Increase and support local agriculture throughout the region including urban developed areas.</li> <li>4. Nurture an environment for local jurisdictions and large institutions to procure locally sourced products and services.</li> </ol>	<p>Net Migration                      Number of Community Farms                      Increase in Agricultural Uses/Businesses                      Number of Buy Local Programs</p>	<p>All Levels of Government                      Chambers of Commerce                      Food Industry Partners                      Local Downtown/Improvement Districts</p>
Capitalize on the region’s quality of life and reputation as a premier tourist destination.	<ol style="list-style-type: none"> <li>1. Create a single regional task force to combine efforts of tourist and business attraction organizations to increase tourism and investment.</li> <li>2. Support arts and culture through placemaking and events to keep the region’s downtown centers vibrant.</li> <li>3. Advocate for special district designations to expand economic development opportunities.</li> <li>4. Promote local history through the preservation and reuse of existing historical structures.</li> <li>5. Advertise the region’s global significance with branding.</li> </ol>	<p>Tourism Visitation                      Tourism-Related Jobs                      Historic Protected Properties                      Number of Arts/Culture Venues</p>	<p>All Levels of Government                      Arts Community                      Chambers of Commerce                      Destination Marketing Organizations                      Global Philadelphia Association                      Preservation Alliance for Greater Philadelphia                      Tourism Attractions                      Tourism Convention Boards                      Transit Providers</p>
Build trust and open communication among political leaders, business owners, and community.	<ol style="list-style-type: none"> <li>1. Support democratic models of economic control, such as worker ownership, land trusts, and public asset protection.</li> <li>2. Institute a leadership program that trains people to run for and serve in elected office.</li> <li>3. Incentivize shared services across local jurisdictions, school districts, and other authorities.</li> <li>4. Require training for local municipal boards/authorities members to ensure fair decision making and transparency.</li> </ol>	<p>Number of Cooperatives                      Number of Shared Service Agreements</p>	<p>All Levels of Government                      Board-Elected Authorities                      Chambers of Commerce                      Mayors/Councils/Freeholders                      New Jersey Municipal League                      Pennsylvania Municipal League                      Philadelphia Area Cooperative Alliance</p>
Achieve housing affordability across the region.	<ol style="list-style-type: none"> <li>1. Coordinate planning to encourage strategic housing investments near employment centers and transit hubs.</li> <li>2. Direct mixed-use development to the region’s tax incentive zones.</li> <li>3. Review housing programs to ensure holistic approaches to stretch limited dollars further.</li> <li>4. Reduce the housing cost burden by encouraging local jurisdictions to allow for easier development processes that also include energy-reducing residential systems (e.g., solar).</li> <li>5. Support broader racial and socioeconomic integration in all communities through land use, housing, and economic policies.</li> </ol>	<p>Number of Decent Quality Affordable Housing Units                      Housing and Transportation Index                      Tax Credits in Use                      Integration Index</p>	<p>All Levels of Government                      Housing Developers                      Housing Organizations                      Major Employers                      Transit Providers</p>



## CHAPTER 6: Economic Resilience

Economic resilience includes the ability to withstand an initial economic shock, being able to recover quickly from a shock, and the ability to avoid the shock altogether. It involves the protection of and physical recovery of damaged infrastructure and support systems for businesses as they work to recover and return to full productivity.

Disruptions to the economic base of a region are generally caused by one or more of three occurrences:

- a downturn or significant event in the national economy that impacts demand for locally produced goods and consumer spending;
- a downturn in particular industries that are critical components of the region's economic activity; and
- an external event, natural or manmade disaster, the closure of one or more military bases, or the loss of a major employer.

To establish resilience, either locally or regionally, stakeholders need to anticipate potential risk, evaluate how that risk can impact key economic assets, and build a response. There are two types of initiatives that can be used. Steady-state initiatives focus on long-term efforts to bolster the region's ability to withstand or avoid a shock. Responsive initiatives increase the region's capacity to respond and recovery from a shock. In the event of disruption of the region's economy, regional economic development practitioners and organizations often become the focal point of coordination, information dissemination, external injury responses, and the lead grant administrator for federally funded recovery projects.

### Steady-State Initiatives

- ensuring that local comprehensive plans and regulatory documents implement a vision that includes integration of other planning efforts (e.g., hazard mitigation plans) and funding sources;
- maintaining geographic information systems (GIS) that link with municipal business licenses, tax information, and other business establishment databases to track local and regional "churn" and available development sites;
- measuring redundancy in telecommunications and broadband networks to protect commerce and public safety in the event of natural or manmade disasters;
- ensuring local businesses understand their vulnerabilities—including supply chains—in the face of disruptions and are prepared to take actions to resume operations after an event; and
- employing safe development practices in business districts such as locating structures outside of floodplains, preserving natural lands that act as buffers from storms, and protecting downtowns and other existing development from the impacts of extreme weather.

### Responsive Initiatives

- defining key stakeholders, roles, responsibilities, and key actions;
- establishing a process for regular communication, monitoring, and updating of business community needs and issues to be used after an incident;
- establishing key local, regional, state, and federal officials to communicate business needs and coordinate assessment efforts; and
- establishing succession plans for short-, intermediate-, and long-term recovery needs.

Source: EDA Guidelines, 2019.

**Table 5:** Resilience Stage and Response Time Periods

Stage	Safety	Utilities	Buildings	Environment	Economic
Immediate (<72 hours)	Deal with casualties	Use emergency backup systems	Remove loose debris	Limit further ecological impact	Maintain supply of critical goods; respond to price increases
Emergency (3-7 days)	Provide mass care	Begin to restore service	Provide shelter for homeless	Remove debris	Prioritize resources
Very Short Term (7-30 days)	Fight outbreaks	Continue to restore service		Protect sensitive ecosystems	Override markets
Short Term (31-180 days)		Service back to 100%	Provide temporary housing/business sites	Deal with issues	Help with small business impacts
Medium Term (181 -365 days)	Deal with post stress	Reassess		Begin remediation	Help with large business impacts
Long Term (366+ days)	Reassess	Mitigate	Rebuild and mitigate	Mitigate	Deal with business failures/closing

Sources: *Economic Resilience to Disasters, CARRI Research Report 8, Community and Regional Resilience Institute, 2012.*

Resilience planning involves determining your community or business’s potential risks, including locations likely to experience significant natural disasters or immediate or pending economic shifts, impacts, and consequences. Local officials should establish what their vulnerabilities are and develop goals, strategies, and time-sensitive actions that can mitigate the effects of an economic incident that supports long-term recovery efforts. Table 5 outlines a sample timeline to help with establishing resilience strategies for resident safety, utilities, buildings, the environment, and the local economy.

The region’s highest risk factor related to the economy is increased flooding from natural disasters and other impacts of climate change. As such, *Growing Greater Philadelphia* prioritizes identifying potential economic vulnerability related to flooding. The action plan (chapter 4) outlines objectives and strategies if the region should experience less demand for locally produced goods and consumer spending or if a particular industry is facing a hardship that may affect critical components of the region’s economic activity.

### Economic Vulnerability from Natural Disasters

The results of climate change and sea level rise will increase the potential for serious flooding, posing potential economic problems for communities, residents, and businesses. Therefore, to assess the region’s economic vulnerability, an analysis was conducted to understand the number of jobs, businesses, critical facilities, and pipeline infrastructure located within the flood-prone areas (100-year and 500-year floodplains<sup>4</sup>) of the region. If these facilities are damaged in a natural disaster or flood, the economic cost and human impact could be substantial. The locations of critical facilities are shown in Figure 25, followed by an analysis of the number of vulnerable jobs and businesses.

<sup>4</sup> The 100-year floodplain represents a 1 percent annual chance; the 500-year floodplain represents a .2 percent annual chance.

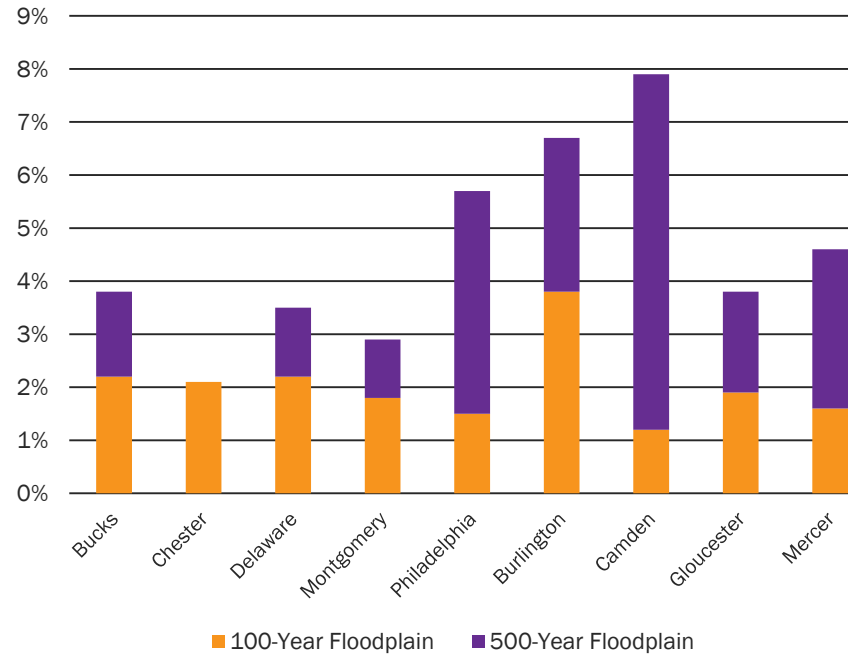
### Critical Facilities

The slightest chance of flooding can pose a threat to delivery of services provided by a community's facilities and systems. A critical facility provides services that are essential during and after a disaster occurs. Critical facilities include police stations, emergency services, medical facilities, schools, day care centers, power generating stations, utility facilities, water and sewer treatment plants and structures that use or produce volatile or explosive materials (pipeline infrastructure). The region has over 4,500 critical facilities with 66 percent located in the five Pennsylvania counties. Bucks County has the highest number of critical facilities with 725, followed by Philadelphia County with 721, then Montgomery County with 717.

Figure 23 illustrates the percentage of critical facilities located within flood-prone areas. Burlington County has the highest percentage (4) of critical facilities within the 100-year floodplain, followed by Delaware and Bucks counties with 2 percent of critical facilities within the 100-year floodplain.

There are more critical facilities located within the 500-year floodplain. Camden and Philadelphia counties have the highest percentage of critical facilities located within the 500-year floodplain, with 6.7 percent and 4.2 percent, respectively. Chester County does not have any critical facilities located within the 500-year floodplain.

Figure 23: Percentage of Critical Facilities within Flood-Prone Areas



Sources: Delaware County Planning Commission, 2019; Bucks County Planning Commission, 2019; Montgomery County, 2019; Chester County, 2017 & 2018; City of Philadelphia Police Department, 2018; City of Philadelphia Fire Department, 2017; FEMA, 2014, 2019; DVRPC, 2012, 2013, 2015, undated.

### Pipeline Infrastructure

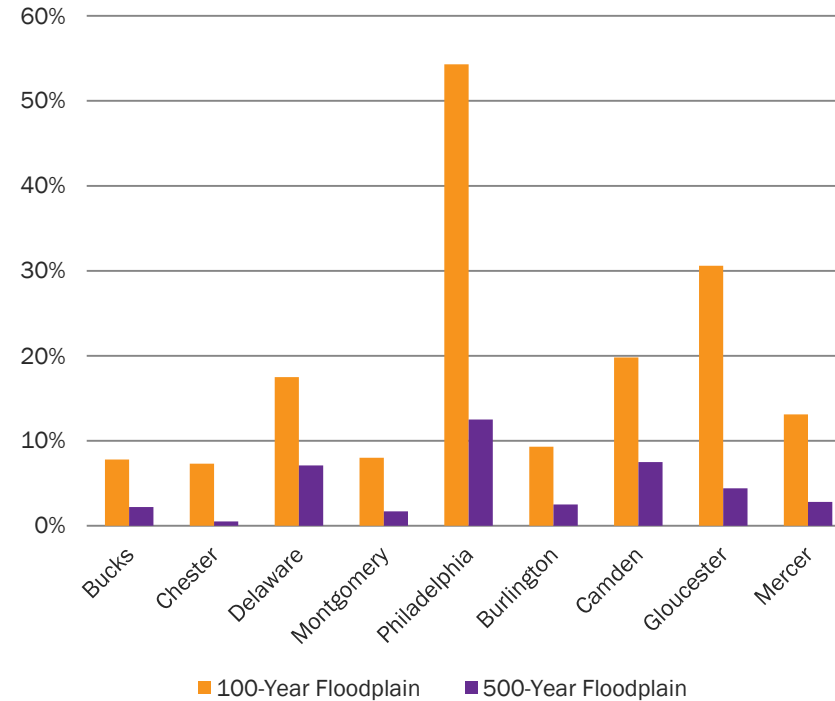
The region has roughly 2,100 miles of pipeline<sup>5</sup> infrastructure. Over 1,500 miles are located within the five Pennsylvania counties. Chester County has the highest number of pipeline miles (594), followed by Montgomery County and Delaware County with 303 miles and 301 miles, respectively. Gloucester County has the lowest pipeline mileage with 75.

Figure 24 illustrates the percentage of pipeline located within flood-prone areas. Approximately 17 percent (358 miles) of the region’s pipeline infrastructure is located in a flood-prone area.

Approximately 54 percent of Philadelphia County’s pipeline infrastructure is within the 100-year floodplain, followed by Gloucester County with 30 percent and Camden County with 20 percent. Bucks and Chester counties have the least number of pipeline miles within the 100-year floodplain with 7.8 percent and 7.3 percent, respectively.

The number of pipeline miles located within the 500-year floodplain drops significantly. Philadelphia County has the highest number of pipeline miles (13 percent) within the 500-year floodplain, followed by Camden County with 7.5 percent, and Delaware County with 7.1 percent. Less than 1 percent of the pipeline within Chester County is located in the 500-year floodplain.

**Figure 24:** Percentage of Pipeline Infrastructure within Flood-Prone Areas

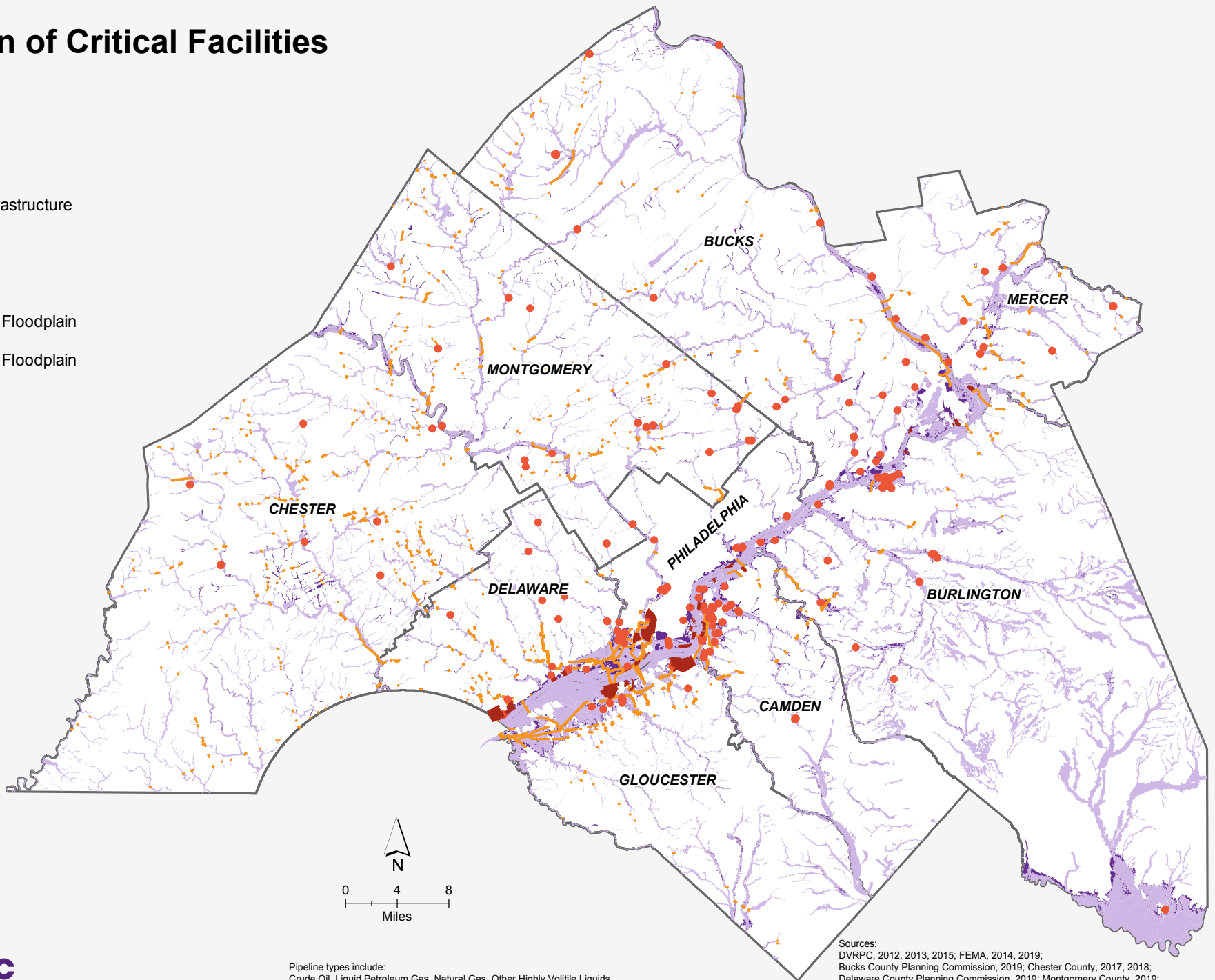


Sources: Delaware County Planning Commission, 2019; Bucks County Planning Commission, 2019; Montgomery County, 2019; Chester County, 2017 & 2018; City of Philadelphia Police Department, 2018; City of Philadelphia Fire Department, 2017; FEMA, 2014, 2019; DVRPC, 2012, 2013, 2015, undated.

<sup>5</sup> Pipeline types found in Greater Philadelphia include: Crude oil, liquid petroleum, gas, natural gas, propane, non-highly volatile liquid products, empty gas, empty liquid, and other highly volatile liquids.

Figure 25:  
**Location of Critical Facilities**

- Critical Infrastructure
- Pipeline
- Port
- 100-year Floodplain
- 500-year Floodplain



Pipeline types include:  
 Crude Oil, Liquid Petroleum Gas, Natural Gas, Other Highly Volatile Liquids,  
 Propane Gas, Non-Highly Volatile Liquid Products, Empty Gas, and Empty Liquid

Sources:  
 DVRPC, 2012, 2013, 2015; FEMA, 2014, 2019;  
 Bucks County Planning Commission, 2019; Chester County, 2017, 2018;  
 Delaware County Planning Commission, 2019; Montgomery County, 2019;  
 City of Philadelphia Fire Department, 2017; City of Philadelphia Police Department, 2018

### Jobs and Businesses in Flood-Prone Areas

This section quantifies the percentages of businesses and jobs located in flood-prone areas in the eight suburban counties and the Core Cities. Figure 26 shows the percent of county jobs located within flood-prone areas (100-year and 500-year floodplains). Approximately 4 percent of the region's jobs are located in the 100-year floodplain, and 3 percent are located within the 500-year floodplain. Mercer County has the highest percentage of jobs in the 100-year floodplain (5 percent), and Delaware County has the highest percentage of jobs in the 500-year floodplain (5.25 percent).

**Figure 26:** Percentage of Jobs by County in Flood-Prone Areas

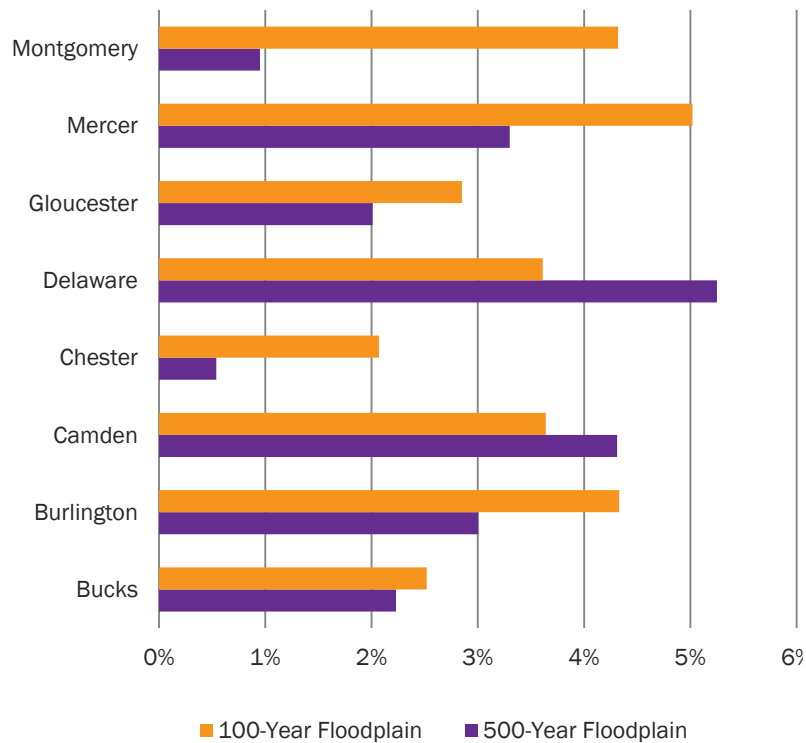
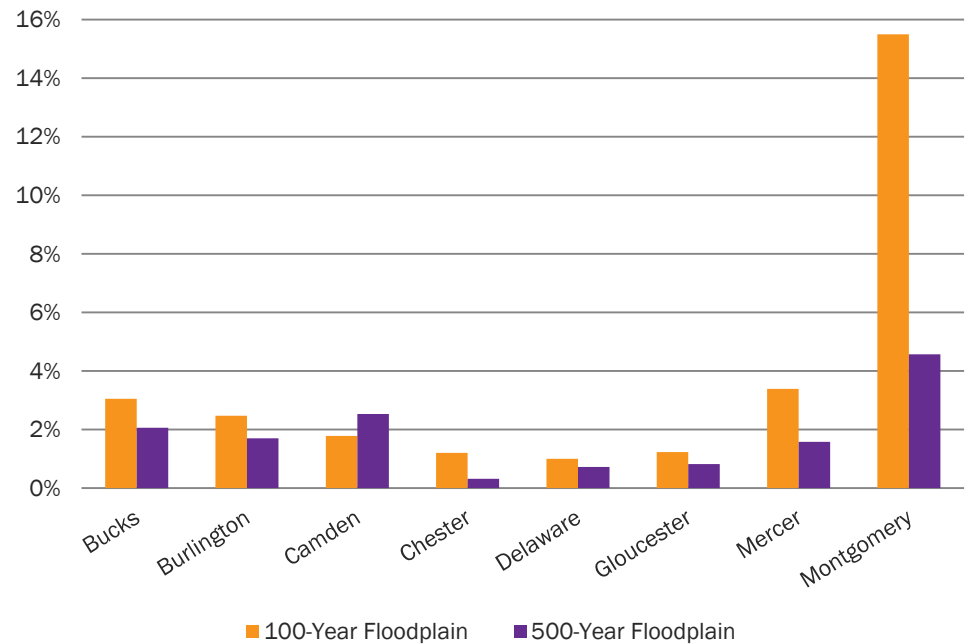


Figure 27 illustrates that 2.5 percent of the region's businesses within the counties are located in the 100-year floodplain, and approximately 2 percent are located in the 500-year floodplain. Montgomery County has the highest percentage of businesses in the 100-year floodplain (15.5 percent) and the highest percentage of businesses in the 500-year floodplain (4.9 percent). Over 90 percent of the businesses located in the 100-year floodplain may be considered small businesses.<sup>6</sup>

**Figure 27:** Percentage of Businesses by County in Flood-Prone Areas



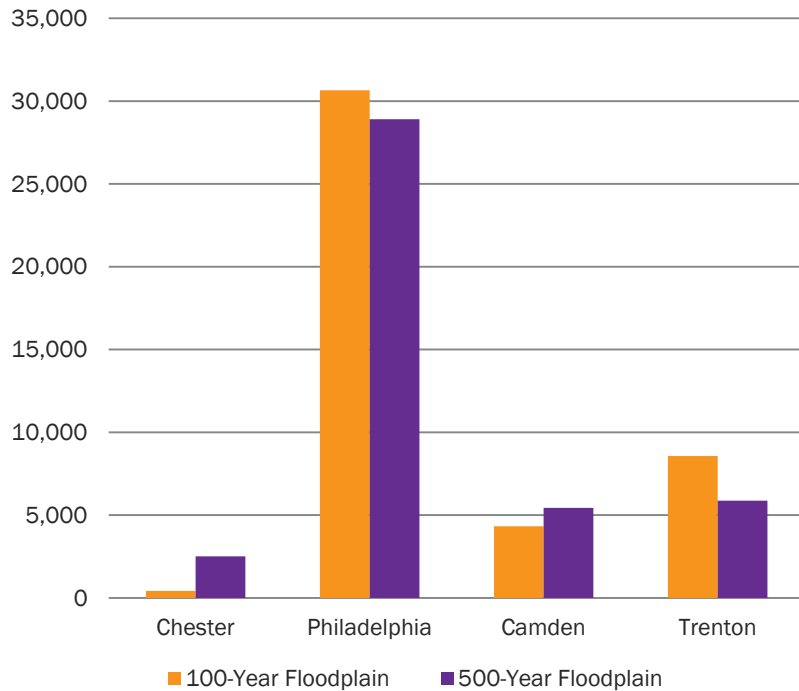
<sup>6</sup> The Small Business Administration's size standards for small businesses are based on average annual revenues and number of employees. A business must make between or below \$750,000 and \$35.5 million and have between or below 100 and 1,500 employees depending on the industry. For this analysis, the number of employees was used to determine the size of the business.

Source: National Establishment Time Series (NETS) 2013; (Figures 26 and 27): DVRPC, 2019.



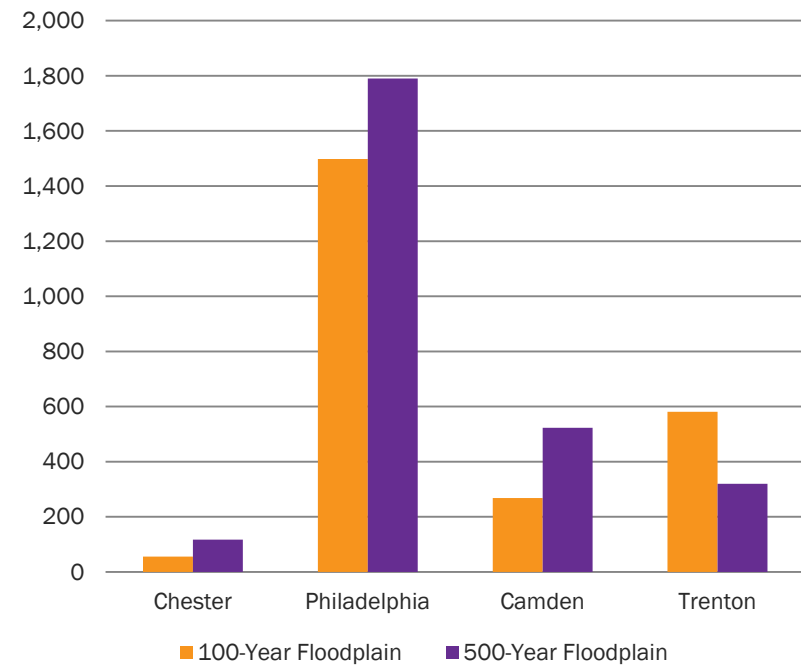
The region has just over 890,000 jobs located in the Core Cities: Camden, Chester, Trenton, and Philadelphia. Figure 28 illustrates the number of jobs in flood-prone areas within the region's Core Cities. Approximately 86,000 of those jobs are located within the 100-year and 500-year floodplains. The highest number of jobs located in flood-prone areas is in the City of Philadelphia with 59,000 jobs. The City of Trenton has over 14,000 jobs located within the 100-year floodplain, and the City of Chester has the least number of vulnerable jobs with only 2,900 located in flood-prone areas.

**Figure 28:** Number of Core City Jobs in Flood-Prone Areas



The region has over 105,000 businesses (small and large) located in the Core Cities: Camden, Chester, Trenton, and Philadelphia. Figure 29 illustrates the number of businesses in flood-prone areas within the region's Core Cities. Approximately 105,000 businesses are located in the region's Core Cities. Approximately 2,400 are located within the 100-year floodplain, and 2,750 are located within the 500-year floodplain. The City of Philadelphia has the highest number of businesses located in the 100-year and 500-year floodplains with 1,498 and 1,790, respectively.

**Figure 29:** Number of Core City Businesses in Flood-Prone Areas



Sources: NETS 2013 (Figures 28 and 29); DVRPC, 2019.

## Regional Communication Networks

The effectiveness of a region's response to a major economic disruption is often enhanced if the public, private, education, and nonprofit sectors are aware of each other's roles and responsibilities—particularly as they pertain to recovering from economic shocks. Established communication networks and information collection protocols coupled with broadly understood knowledge of key elements (such as supply-chain relationships) can help speed a region's response. Once the networks are established, participants can be called upon in times of crisis to provide services and support in the case of a disruption. There are agencies in the region that may serve as a vehicle to mobilize action and facilitate information sharing and training. Emergency networking agencies in our region include:

**Business Emergency Operation Centers** serve as a hub of business-to-business collaboration and communication to connect private-sector organizations with local and federal emergency operations centers to ensure assistance and resources are being directed to businesses in need.

**Small Business Development Centers (SBDC)** provide small business owners a variety of free business consulting and low-cost training services, such as business plan development, financial packaging and lending assistance, disaster recovery assistance, procurement aid, and healthcare guidance.

**Workforce Investment Boards** provide opportunities to retrain workers to meet the evolving needs of the region's emergency employers, often partnering with community colleges and technical schools.

**Transportation Operations Initiatives** provide a forum for regional partners to work together. DVRPC helps to foster various forums such as the transportation operations task forces and the regional incident management task forces,

The region's SBDCs are university-hosted centers providing classes, consulting, training, reports, data, research, and other resources to existing and pre-venture small businesses. The seven SBDCs are part of a national network of Small Business Administration sponsored centers charged with promoting economic growth, entrepreneurship, and small business growth. SBDC resources are available to all and free or low cost to participating businesses. Strategic initiatives include switching agriculture ventures to organic, integrating interns into small business, and boosting the region's exports.

### Regional SBDC Locations and Areas Served

#### Pennsylvania

##### Temple University

Lower Bucks, Lower Montgomery, and Philadelphia Counties

##### Widener University

Delaware County

##### Lehigh University

Upper Bucks and Upper Montgomery Counties

##### University of Pennsylvania

Philadelphia County

##### Kutztown University

(Lead of the Pennsylvania SBDC system)

Chester County

#### New Jersey

##### Rutgers University—Camden

Burlington, Camden, and Gloucester Counties

##### College of New Jersey

Mercer County

## CHAPTER 7: Report Summary

Greater Philadelphia is a large and complex region, covering portions of two states, with hundreds of municipalities responsible for individual development decisions. The region's economy is similarly diverse and multifaceted, with dozens of public and private economic development organizations, each seeking to promote or attract a wide variety of sectors or specific interests. Thus, there is no single process or simple strategy that will fully address all the opportunities and challenges that the region faces. Although each county and city approaches the economic development process differently, they are united in advancing common goals:

- Maximize Human Capital Potential;
- Attain Regional Growth and Global Connectivity;
- Strengthen Infrastructure to Support the Regional Economy; and
- Support Inclusive Growth to Empower All Communities.

Continued coordination across state lines, across city and county lines, across employment sectors, and across the public and private sectors is essential to maintaining a broad regional perspective and identifying and working toward a common vision, goals, and objectives.

Greater Philadelphia presents tremendous potential for continued economic growth. Over the next five years, DVRPC will manage the regional CEDS and coordinate ongoing economic development efforts and prepare and submit annual reviews as required by EDA. Working closely with the Economic Development Committee and economic development partners, the CEDS strategies for achieving the region's goals will continue to be promoted and performance measures will be refined and analyzed.

Under the direction of the Economic Development Committee, staff will maintain a list of key regional economic development projects at [www.dvrpc.org/economic](http://www.dvrpc.org/economic). These projects are identified by regional partners to support and implement the regional CEDS goals.

The economic vulnerability of the region and its individual communities will continue to be assessed to develop strategies to mitigate a natural or man-made disaster. DVRPC will continue to support and encourage our implementation partners to increase economic productivity, diversify local wealth, improve the culture for underrepresented businesses, and increase individual prosperity for the region's residents.





# Appendix A



## Appendix A: Economic Development Committee Members

African-American Chamber of Commerce  
Ben Franklin Technology Partners/Southeast Pennsylvania  
BioAdvance  
Bio NJ  
Bucks County Industrial Development Authority  
Bucks County Planning Commission  
Burlington County Chamber of Commerce  
Burlington County Department of Economic Development and Regional  
Planning  
Camden County Improvement Authority  
Camden County Planning Department  
Camden County Regional Chamber of Commerce  
Camden Division of Development and Planning (Camden City)  
Camden Redevelopment Authority (Camden City)  
Center City District  
Central Bucks Chamber of Commerce  
Chamber of Commerce of Southern New Jersey  
Chester City Division of Planning  
Chester County Chamber of Business and Industry  
Chester County Economic Development Council  
Chester County Planning Commission  
Chester Economic Development Authority (Chester City)  
ChooseNJ  
Cooper's Ferry Partnership  
Delaware County Commerce Center  
Delaware County Planning Department  
Delaware River Port Authority (DRPA)  
Economy League of Greater Philadelphia  
The Enterprise Center  
The Enterprise Center at Burlington County College  
Gloucester County Chamber of Commerce  
Gloucester County Economic Development Department  
Gloucester County Planning Department  
Greater Bucks-Montgomery Chamber of Commerce  
Greater Philadelphia Chamber of Commerce  
Greater Philadelphia Hispanic Chamber of Commerce  
Lower Bucks Chamber of Commerce

Main Line Chamber of Commerce  
Mercer County Office of Economic Development and Sustainability  
Mercer County Planning Division  
Mid-Jersey Chamber of Commerce  
Montgomery County Planning Commission  
Montgomery County Commerce Department  
Montgomery County Community College  
New Jersey Business Action Center  
New Jersey Department of Community Affairs  
New Jersey Department of Transportation  
New Jersey Economic Development Authority  
New Jersey Office for Planning Advocacy  
New Jersey Technology Council  
New Jersey Transit (NJT)  
PECO Economic Development Division  
Pennsylvania Convention and Visitors Bureau  
Pennsylvania Department of Community and Economic Development  
Pennsylvania Department of Transportation  
Pennsylvania Governor's Action Team  
Pennsylvania Governor's Policy Office  
Philadelphia City Planning Commission  
Philadelphia Department of Commerce  
Philadelphia Industrial Development Corporation  
Philadelphia Regional Port Authority  
Port Authority Transit Corporation (PATCO)  
Princeton Regional Chamber of Commerce  
Select Greater Philadelphia  
South Jersey Port Corporation  
Southeastern Pennsylvania Transportation Authority (SEPTA)  
Southern New Jersey Development Council  
Temple University  
Trenton City Department of Housing and Economic Development  
University City Science Center  
Upper Bucks Chamber of Commerce  
Visit Philadelphia (formerly the Greater Philadelphia Tourism Marketing  
Corporation)  
World Trade Center of Greater Philadelphia





# Growing Greater Philadelphia

## Comprehensive Economic Development Strategy

**Publication Number:** 19019

**Date Published:** September 2019

**Geographic Area Covered:**

Nine-county region

**Key Words:**

Comprehensive Economic Development Strategy (CEDs), U.S. Department of Commerce, U.S. Economic Development Administration (EDA), economy, employment centers, economic clusters, performance measures, economic resiliency

**Abstract:**

This report was created to provide the required update to Greater Philadelphia's regional Comprehensive Economic Development Strategy (CEDs). The report includes background demographic, economic, and land use data; identifies regional strengths, weaknesses, opportunities, and threats; discusses economic resiliency; identifies regional economic development goals, objectives, and strategies; and identifies potential performance measures that will be tracked in future years to measure progress made toward achieving the regional goals. The regional CEDs was developed under the guidance of a Review Committee that includes representatives of the county planning and economic development agencies, regional economic development organizations, educational institutions, and the private sector.

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