Fiscal Years 2024-2028

DELAWARE VALLEY
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REGIONAL
PLANNING COMMISSION

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.

DELAWARE VALLEY dvrpc REGIONAL PLANNING COMMISSION

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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DVRPC is funded through a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. The authors, however, are solely responsible for the findings and conclusions herein, which may not represent the official views or policies of the funding agencies.

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.

Why Do We Need a CEDS?

As the Economic Development District for the nine-county region, DVRPC manages the regional Comprehensive Economic Development Strategy (CEDS) for Greater Philadelphia, satisfying provisions of the U.S. Economic Development Administration (EDA). The first Greater Philadelphia Economic Development Framework was formally approved by EDA as the regional CEDS in 2009 and recently updated in 2019.

To remain eligible for EDA funding, the CEDS must be updated every 5 years. 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.

Preparing the CEDS

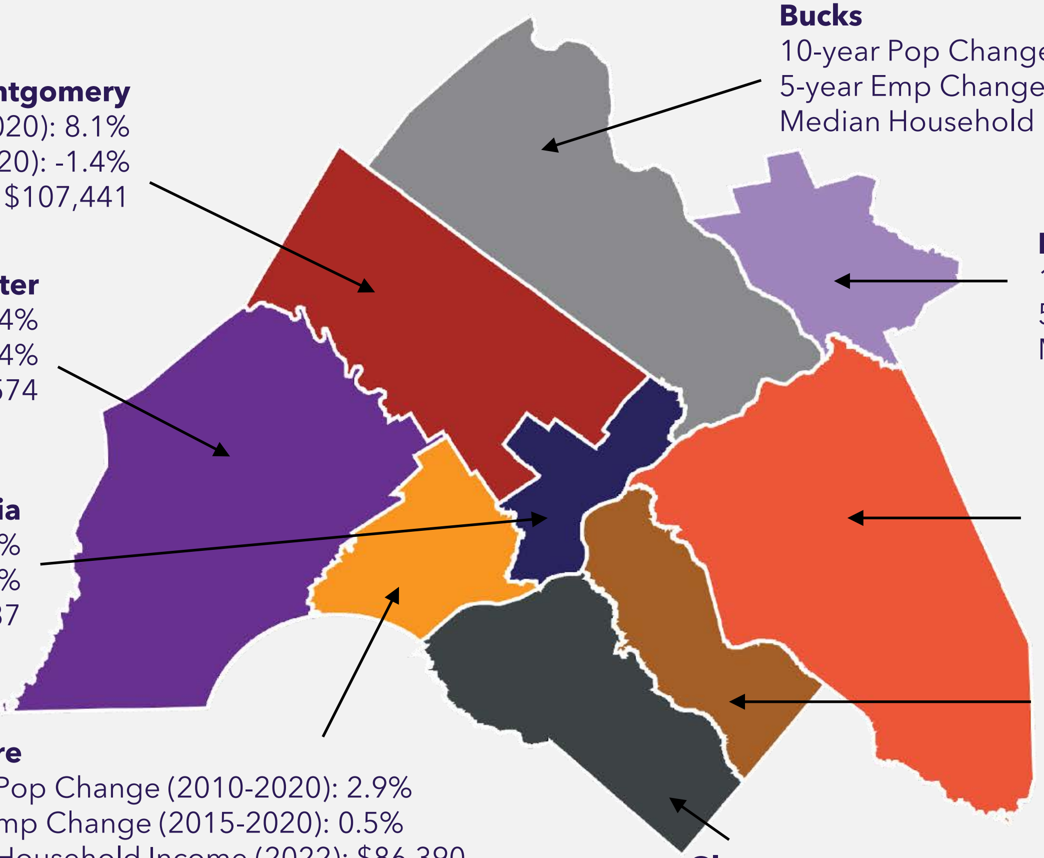
This CEDS document, *Growing Greater Philadelphia*, is the result of a 24-month process of conducting research and gathering information from planning partners, stakeholders, and elected officials.

Workshops were held in spring 2023 for interested participants to take part in the regional assessment of strengths, weaknesses, opportunities, and threats (SWOT). Based on feedback from the workshops and the regional assessment, draft goals and strategies were developed in the summer 2023. A follow-up meeting was held in August 2023 to present the results of the SWOT, discuss the state of the regional economy, and refine the draft goals and objectives. Further refinement of the goals and strategies took place over the winter and spring of 2024. A final public comment period took place in spring 2024.

Growing Greater Philadelphia acts as a regional framework for economic development partners to prioritize U.S. EDA economic development investments over the next five years. The report adheres to U.S. Economic Development Administration guidelines and includes a regional snapshot of the most current population, employment, and business data; a regional assessment of the region's strengths, weaknesses, opportunities, and threats; an analysis of economic trends and sectors; updated goals and strategies as part of a regional action plan; and an analysis of the region's economic vulnerability.

Regional Assessment & Background Data

Population and Employment Change by County (2010-2020)



Montgomery
10-year Pop Change (2010-2020): 8.1%
5-year Emp Change (2015-2020): -1.4%
Median Household Income (2022): $107,441

Chester
10-year Pop Change (2010-2020): 9.4%
5-year Emp Change (2015-2020): -1.4%
Median Household Income (2022): $118,574

Philadelphia
10-year Pop Change (2010-2020): 2.7%
5-year Emp Change (2015-2020): 4.9%
Median Household Income (2022): $57,537

Delaware
10-year Pop Change (2010-2020): 2.9%
5-year Emp Change (2015-2020): 0.5%
Median Household Income (2022): $86,390

Bucks
10-year Pop Change (2010-2020): 3.1%
5-year Emp Change (2015-2020): -2.2%
Median Household Income (2022): $107,826

Mercer
10-year Pop Change (2010-2020):3.8%
5-year Emp Change (2015-2020): 0.4%
Median Household Income (2022): $92,697

Burlington
10-year Pop Change (2010-2020): 3.8%
5-year Emp Change (2015-2020): -1.1%
Median Household Income (2022): $102,615

Camden
10-year Pop Change (2010-2020): 2.1%
5-year Emp Change (2015-2020): -1.5%
Median Household Income (2022): $82,005

Gloucester
10-year Pop Change (2010-202) 6.3%
5-year Emp Change (2015-2020): 5.2%
Median Household Income (2022): $99,668

Source: ACS 5-Year Estimates (2016-2020)

People: Residents and Workers

Regional Assessment

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Strong presence of higher educational institutions	Government fragmentation does not allow for cohesive planning	Influx of new immigrant populations contributes to quality of life for residents and businesses	Aging workforce presents challenges to sector pipelines
Diverse mix of ethnic nationalities	Entrenched poverty in urban areas requires attention	New multimodal infrastructure investments	Lack of sustainable funding for schools puts a larger burden on communities and individuals
Access to health care systems and options	Political leadership is divisive	Entrenched poverty in urban areas requires attention	Increase in Class A office vacancy
	Childcare affordability	Infrastructure investments can expand career paths	Increase in crime/violence

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Source: DVRPC, 2024

People: Residents and Workers

Data Trends and Highlights

Population (Table 1)

Greater Philadelphia residents are growing older but also becoming increasingly diverse. The largest net growth was in the *two or more-race* population group (+62%) followed by the *Other Race* population group (+16.9%). The largest decrease was in the *Hawaiian/Pacific Islander* population group (-11%), followed by the *Hispanic/Latino* population group (-3.1%). The White population group also had a large decrease of 112,673 persons (-3%)

Age (Table 2)

The age 70 to 74 group grew by 22%, followed by the 65 to 69 age group, which grew by 19.4%. The largest decreases are found between the ages 40 and 54. The 45-49 age group decreased by 9.4%, followed by the 50-54 age group, which decreased by 9.2%.

Household Income (HHI) (Table 4)

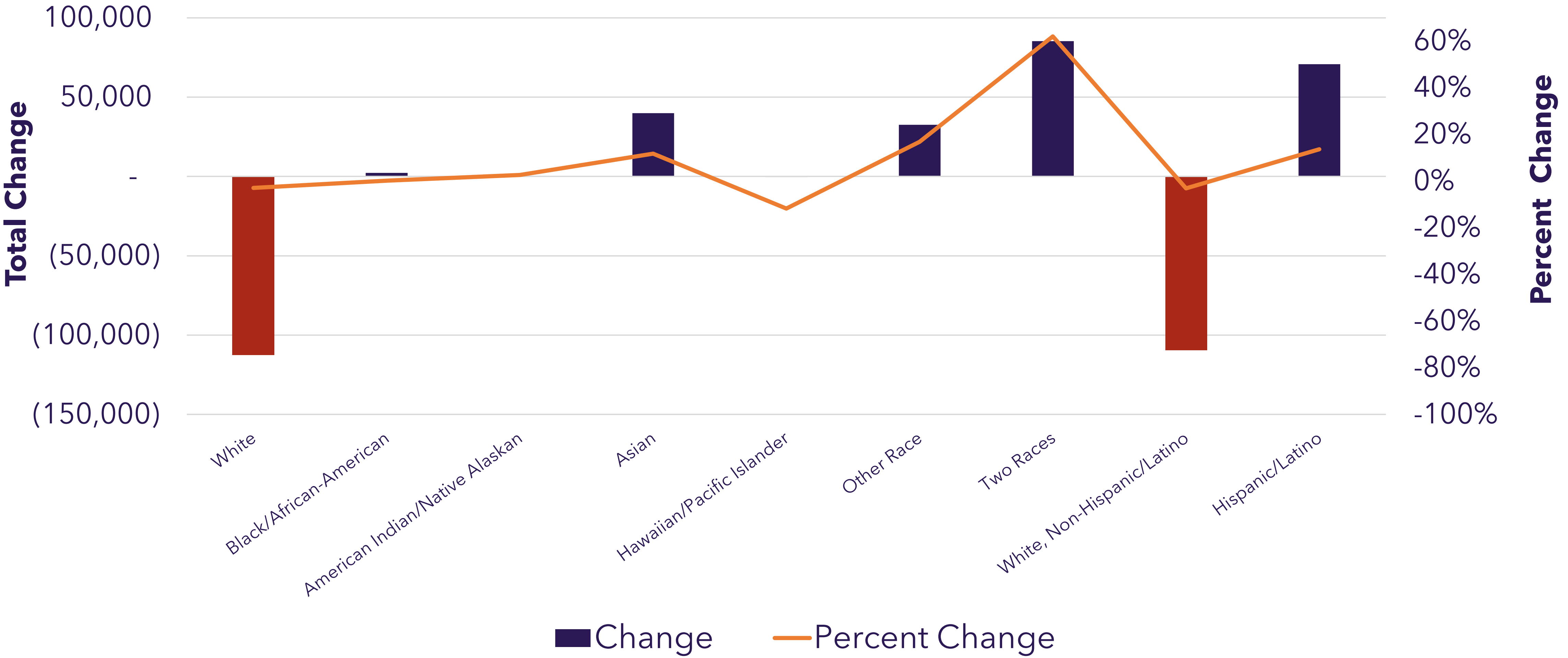
Household income growth increased in all ethnic and racial groups except within the *Other* cohort, which fell by 2.4%. The largest HHI growth is among the Black and Latino population groups, with 19.6% and 14.1%, respectively.

Labor Force (Table 7)

The highest participation rates include workers between the ages 25 and 59. While the region is growing older, the labor force participation rate for the age group between 65 and 74 population remains above 20%.

Tables

Table 1:Change in Regional Population by Race & Ethnicity (2015-2020)



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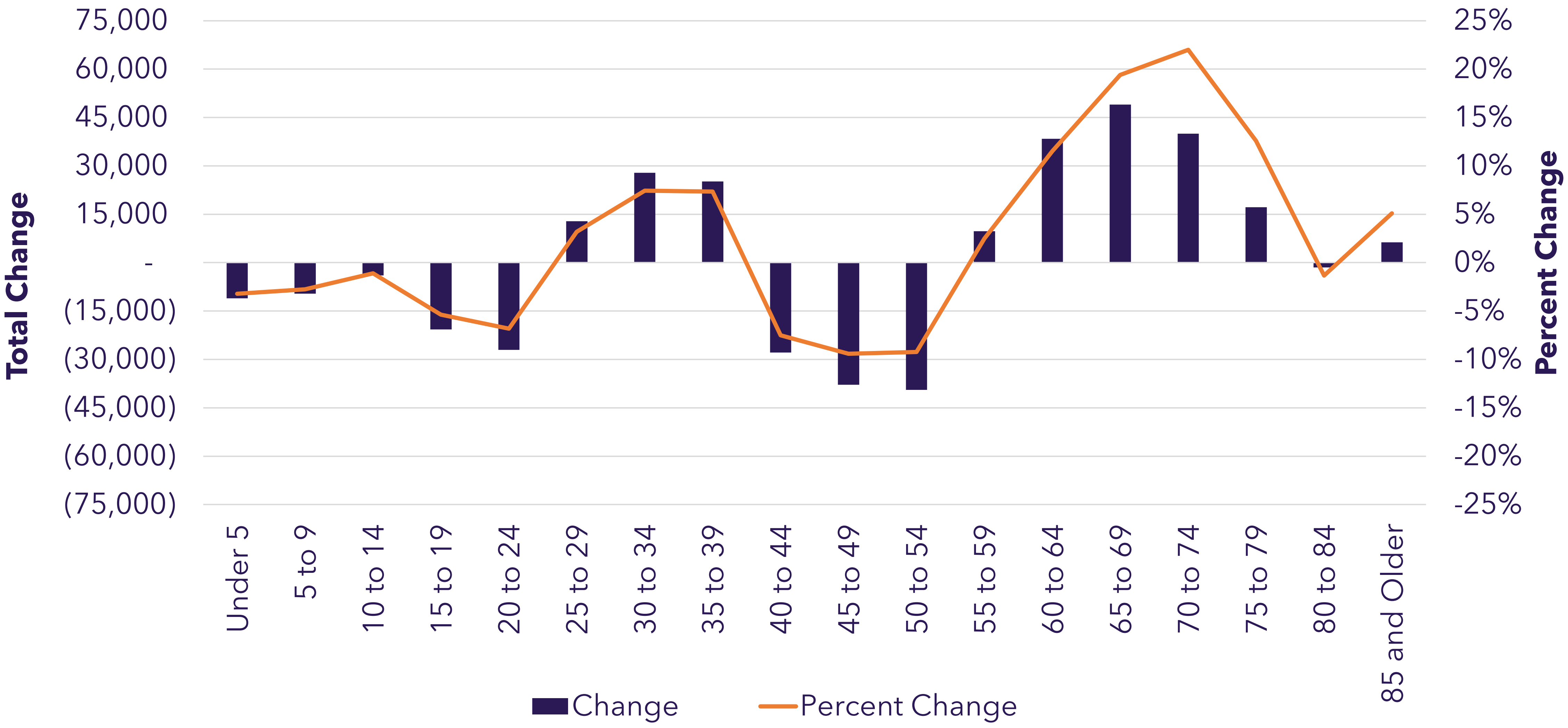
Source: ACS 5-Year Estimates (2011-2015, 2016-2020)

Table 2: Change in Regional Population by Age (2015-2020)



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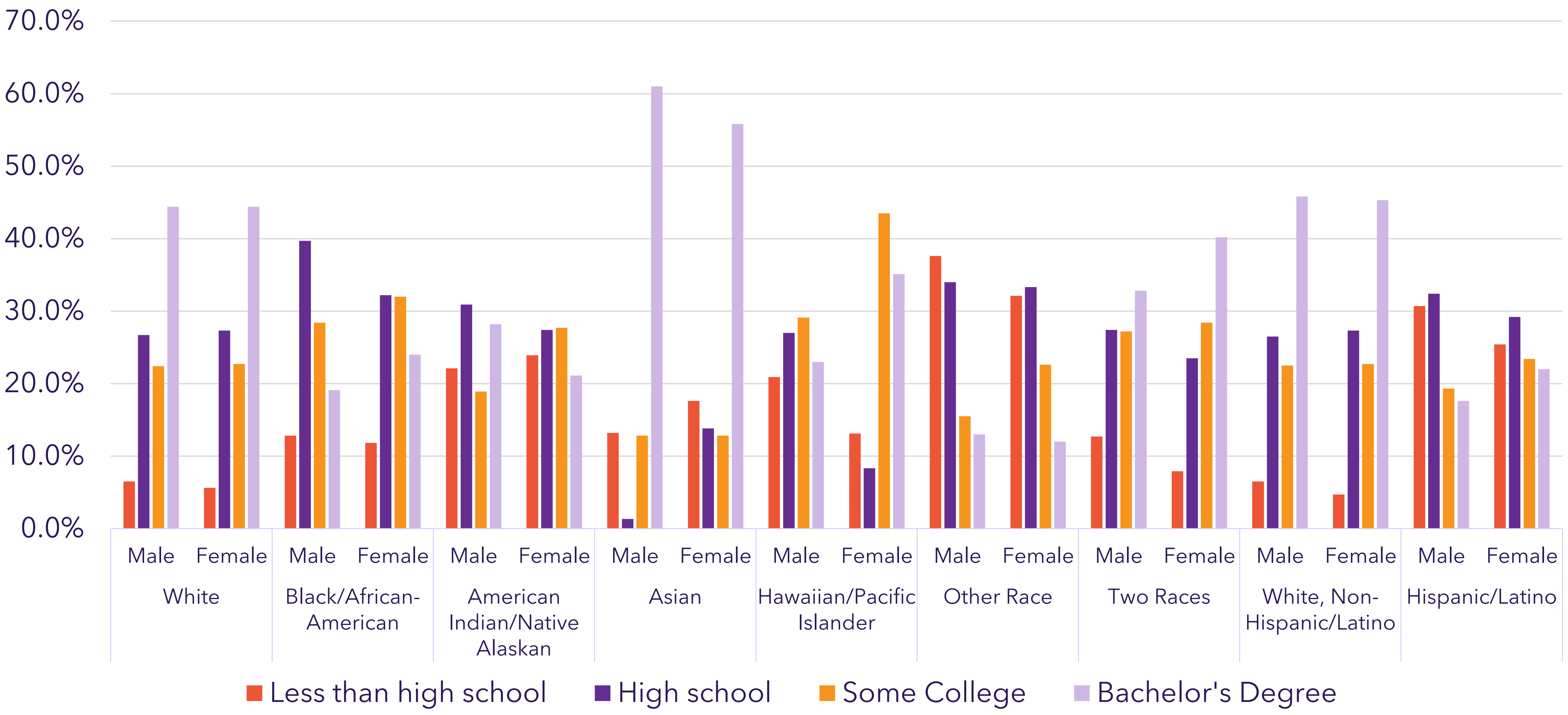
Source: ACS 5-Year Estimates (2016-2020)

Table 3: Regional Educational Attainment by Race, Ethnicity, & Sex (2020)



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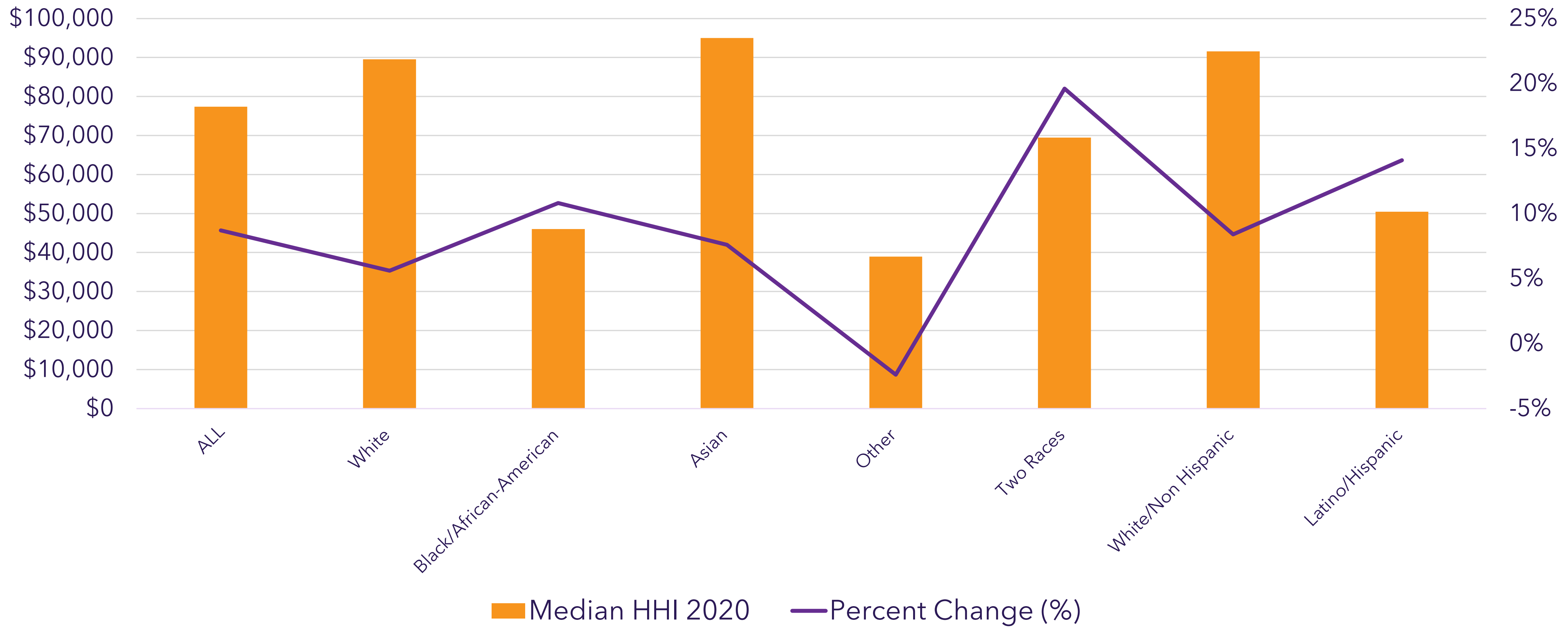
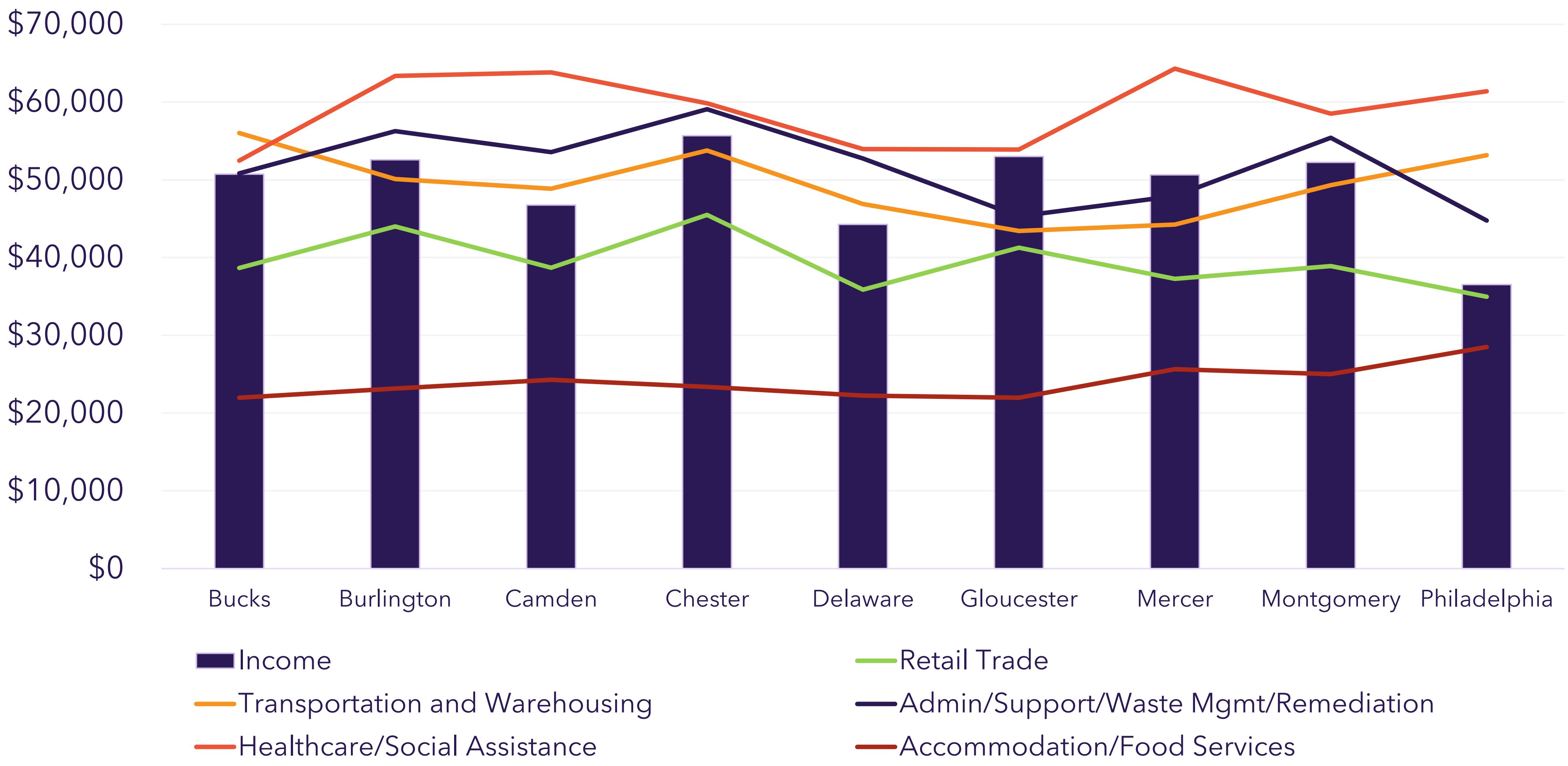
Source: ACS 5-Year Estimates (2016-2020)

Table 4: Change in Regional Median Household Income (HHI) by Race & Ethnicity (2015-2020)



Source: ACS 5-Year Estimates (2011-2015, 2016-2020)

Table 5: Income Required to Afford Median Housing Costs by County: Compared to Average Wages by Sector (2020)



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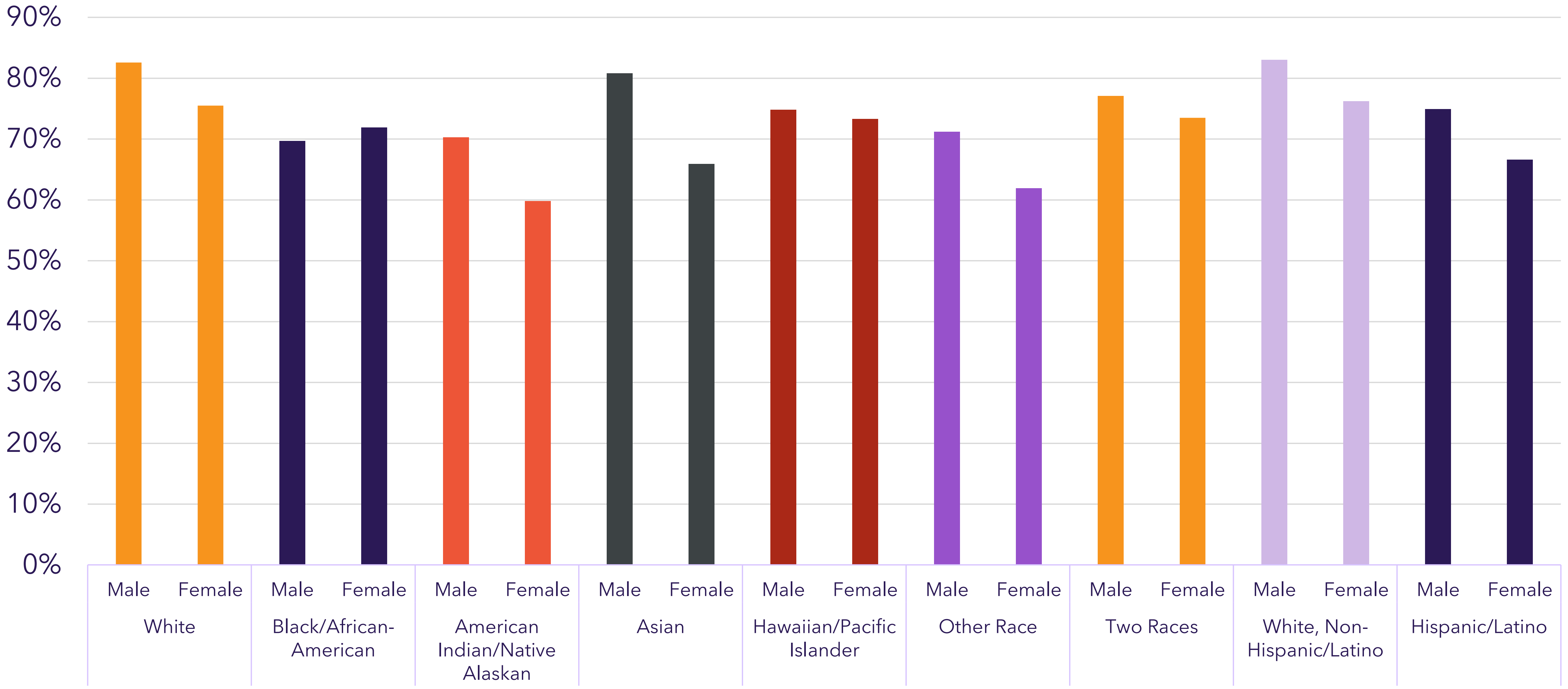
Source: Bureau of Economic Analysis (2016, 2021)

Table 6: Regional Labor Force Participation Rate by Sex, Race & Ethnicity (2020)



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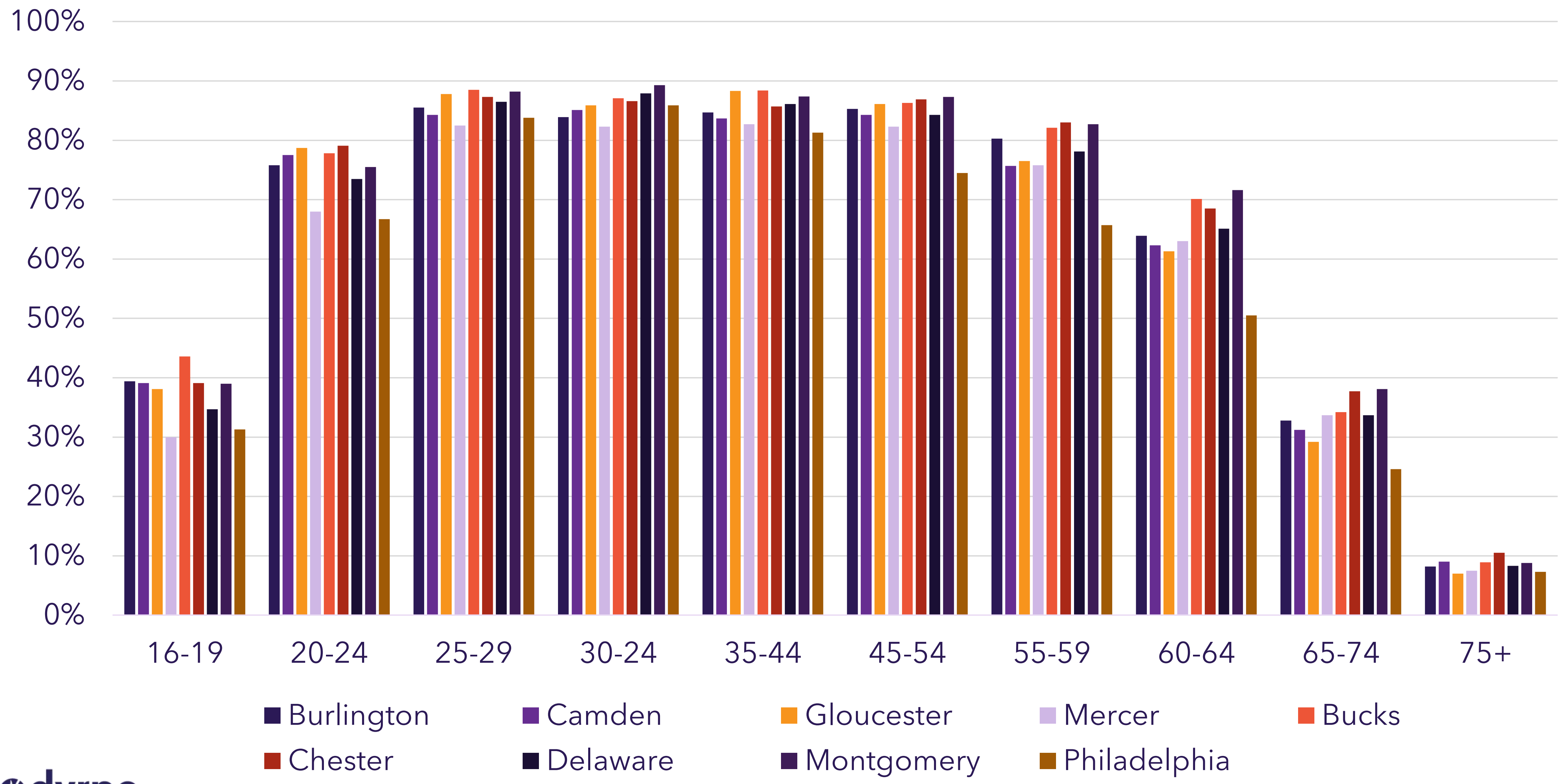
Source: ACS 5-Year Estimates (2016-2020)

Table 7: Labor Force by Age & County (2020)



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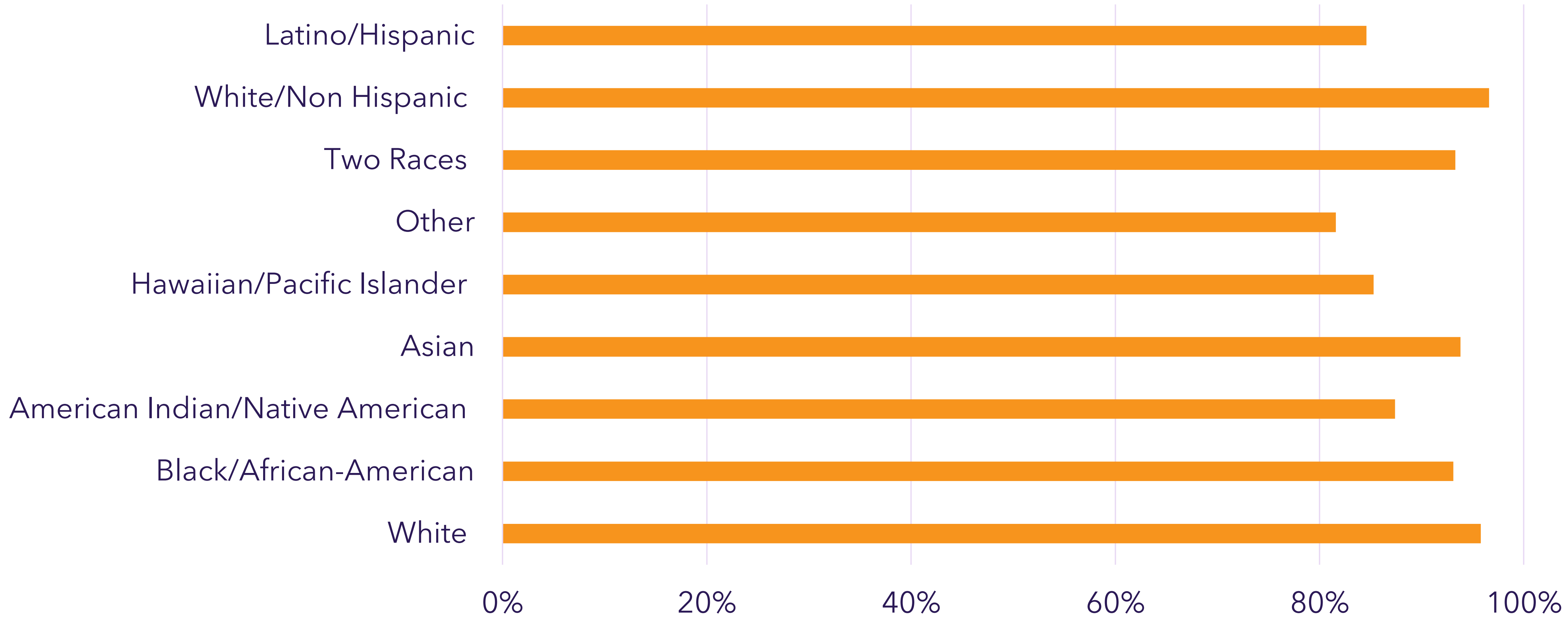
Source: ACS 5-Year Estimates (2016-2020)

Table 8: Health Insurance Coverage by Race & Ethnicity (2020)



Source: ACS 5-Year Estimates (2016-2020)

Place: Quality of Life and Place-Based Dynamics

Regional Assessment

STRENGTHS	WEAKNESSES	OPORTUNITIES	THREATS
Transit accessibility	Government fragmentation does not allow for cohesive planning	New energy-efficient industrial sectors are providing new job types that respond to changing economy and workforce	Lack of affordable housing is a major challenge for recruiting, retaining, and attracting workers
Access to cultural amenities and open spaces	Aging housing stock	Expansion of broadband service and speeds	Increase in weather events
Historic sense of place	Cost of clean energy transition for homeowners	Ability to expand tourism	Airport location near low elevation and wetlands
Central location along East Coast	Aging infrastructure (water, sewer, and roads) in need of expensive repairs		

Source: DVRPC, 2024

Place: Quality of Life and Place-Based Dynamics

Data Trends and Highlights

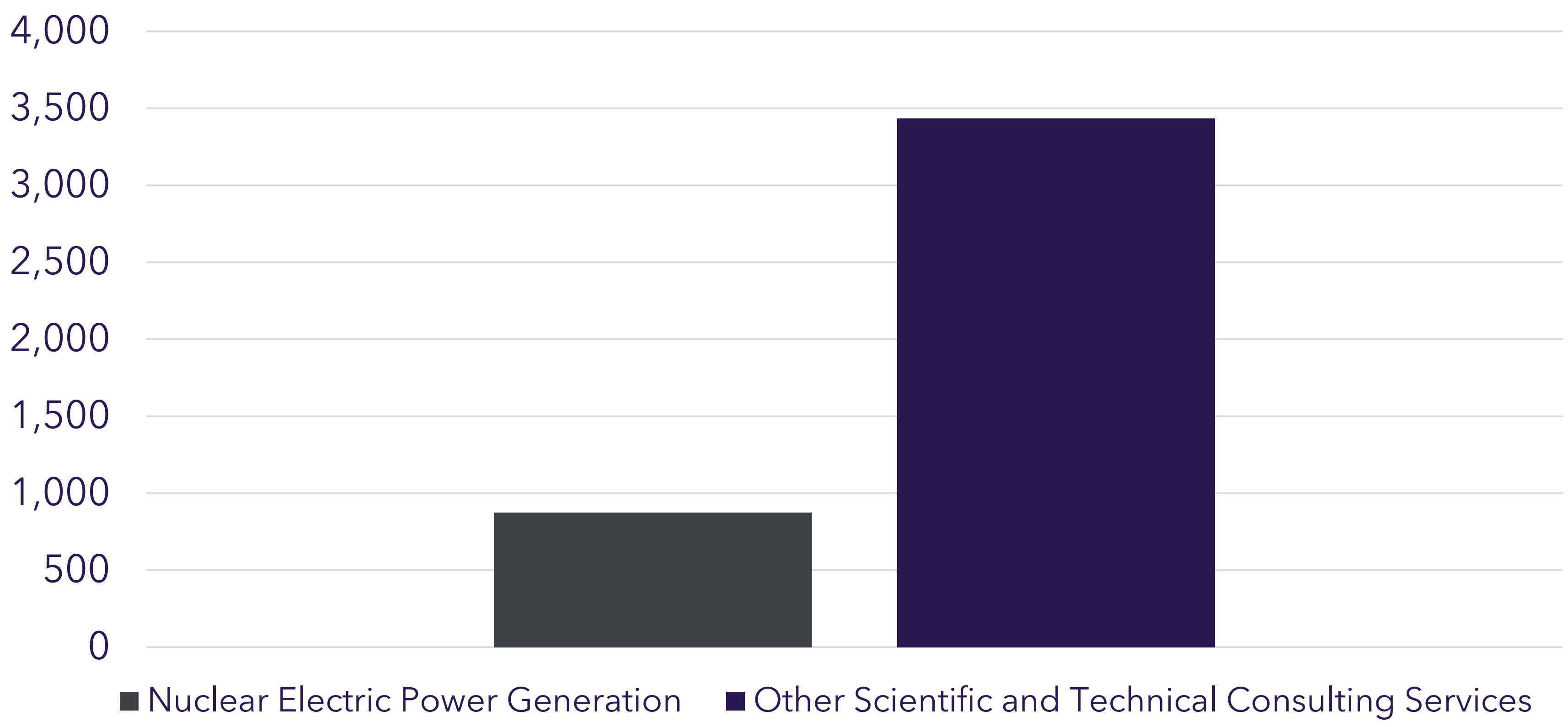
Clean Economy Sector (Table 9)
The Clean Economy Sector includes the *Electric Power Generation, Transmission and Distribution, and Other Scientific* and *Technical Consulting Services* industry groups. The *Other Scientific and Technical Consulting* industry group is the largest of the regional clean economy industries with nearly 3,500 employees. Less than 1% (.016%) of the region's total employment is within the Clean Economy sector.

Air Quality (Table 11)
The *Utilities* sector had the highest greenhouse gas emissions with 5.7 million metric tons, followed by the *Manufacturing* sector with 4 million metric tons. In 2022, there were no recorded unhealthy days in the Philadelphia MSA. (BLS: "The Utilities sector comprises establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply, and sewage removal.")

Housing (Table 12, 13, 14)
Over 45% of the region's housing stock was built before 1959 and most of the housing stock are single family, detached units. Approximately 17% of the region's residents are severely housing cost burdened.

Tables

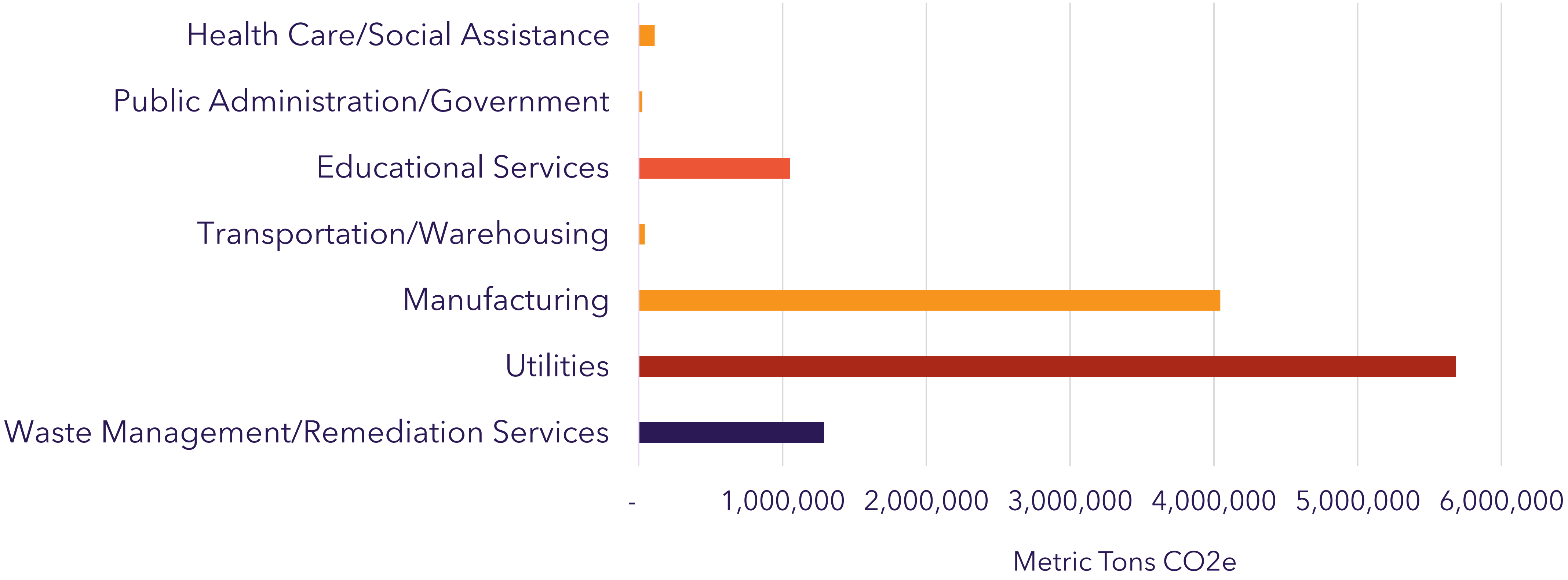
Table 9: Clean Economy Industry Employment (2020)



This chart shows regional employment in clean industries, which includes the *Electric Power Generation, Transmission and Distribution and Other Scientific and Technical Consulting Services* industry groups. The *Other Scientific and Technical Consulting* industry group is the largest of the clean economy industries

Source: County Business Patterns (2020)

Table 10: Large Facility GHG Emissions by Industry (2021)



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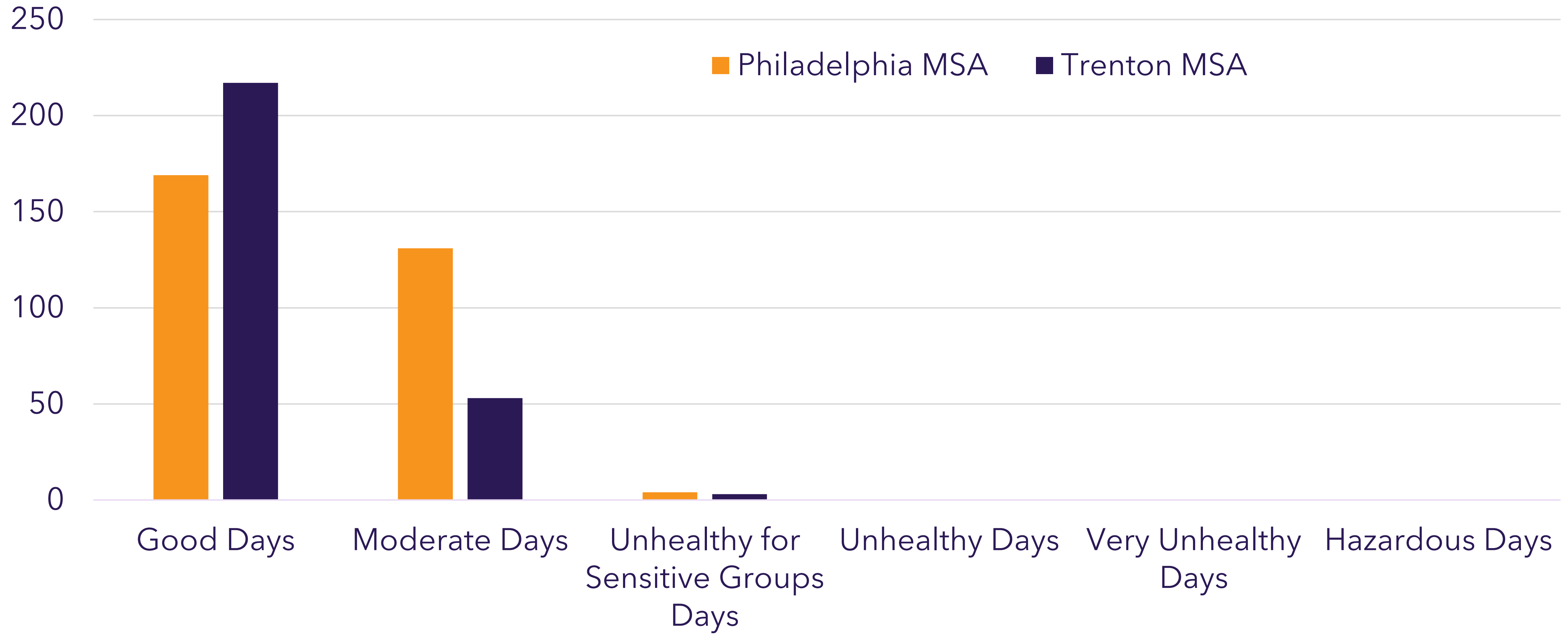
Source: EPA Greenhouse Gas Emissions from Large Facilities (2021)

Table 11: Number of Unhealthy Days (2022)



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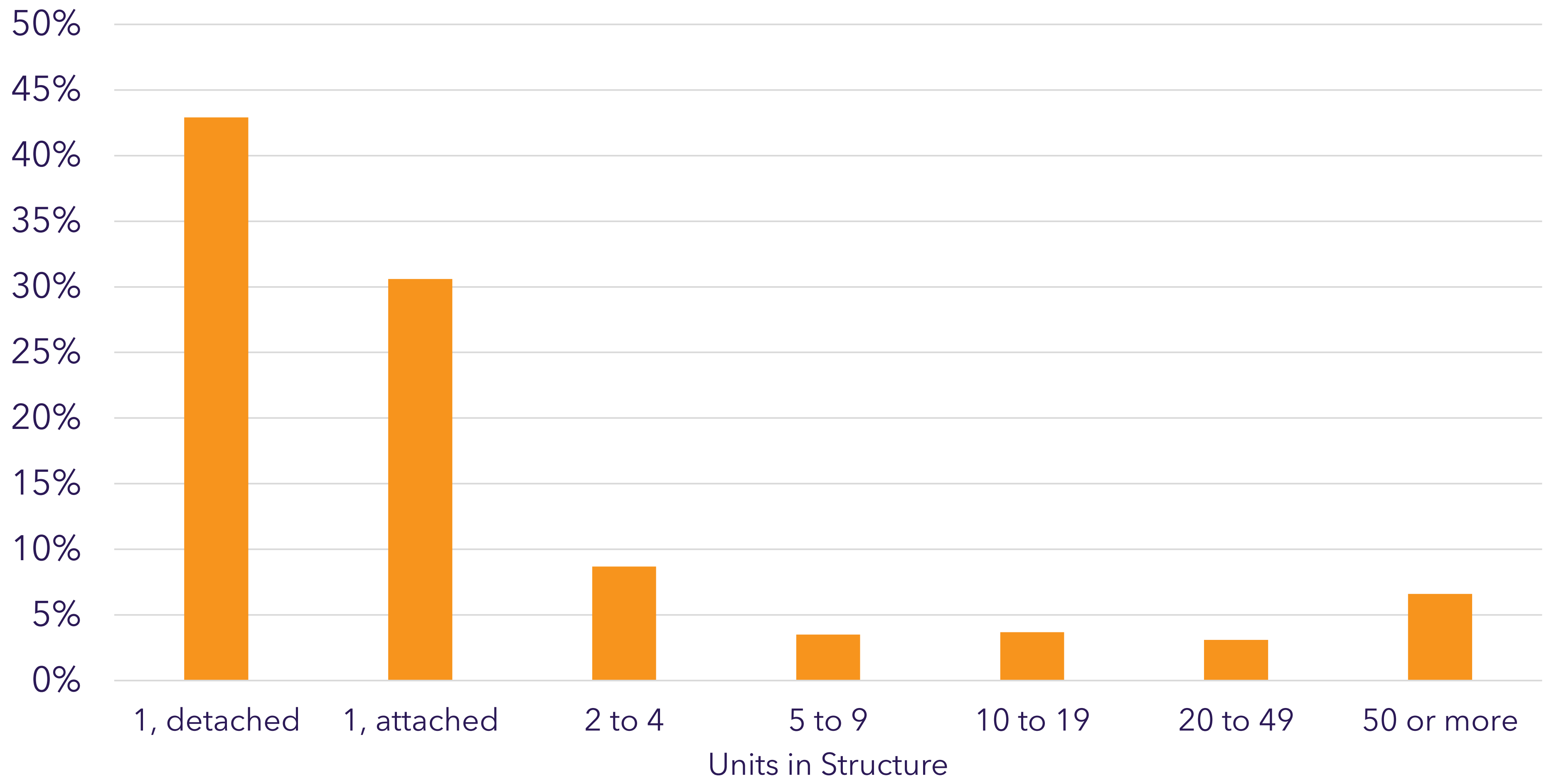
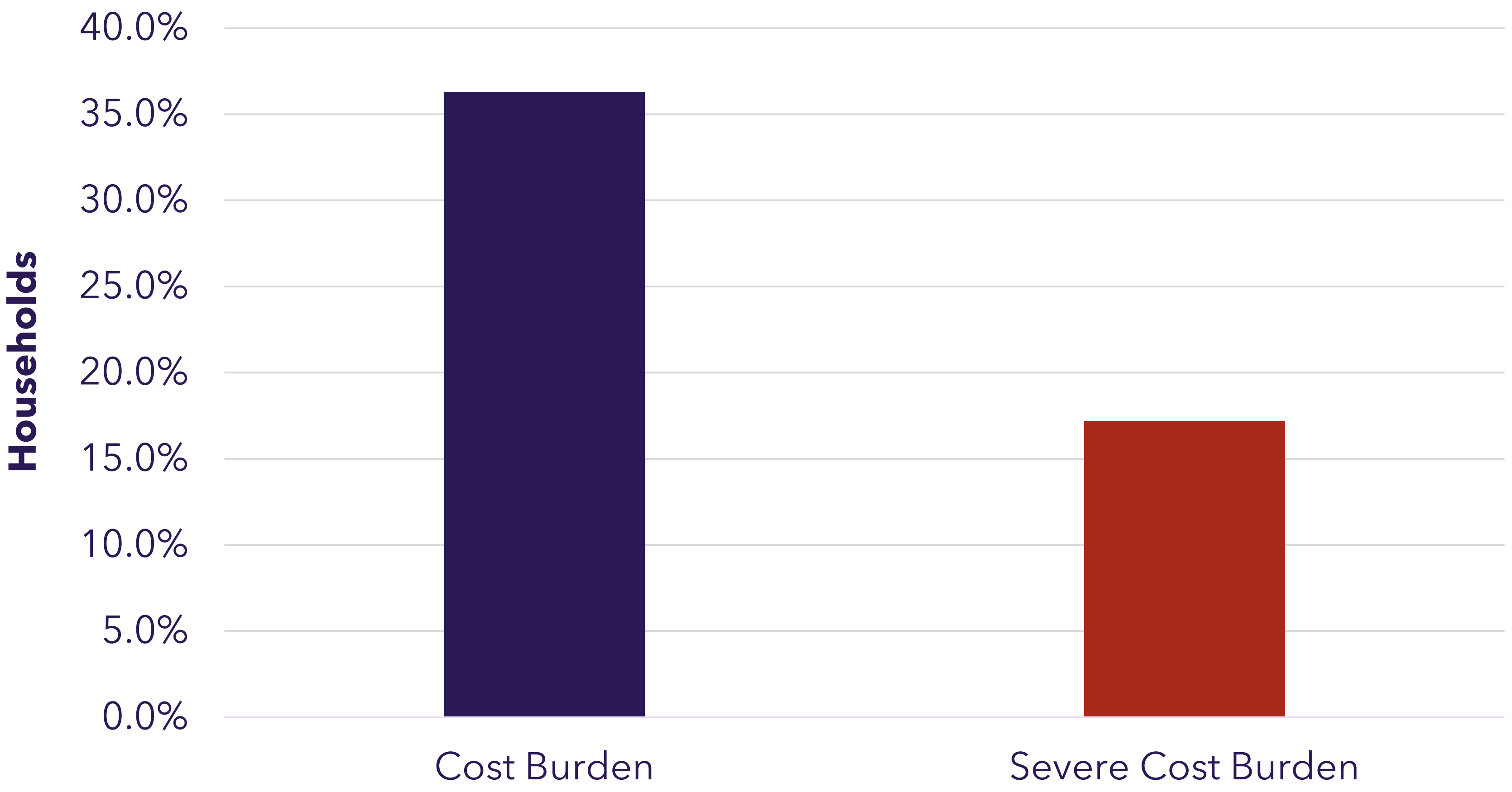
Source: EPA Air Quality Index by CBSA (2022)

Table 12: Housing Unit Distribution (2021)



Source: ACS 5-Year Estimates (2016-2021)

Table 13: Regional Housing Cost Burden (2020)



Cost Burden: household spends at least 30 percent of its income on housing costs and utilities
Severe Cost Burden: household spends at least 50 percent of its income on housing costs and utilities

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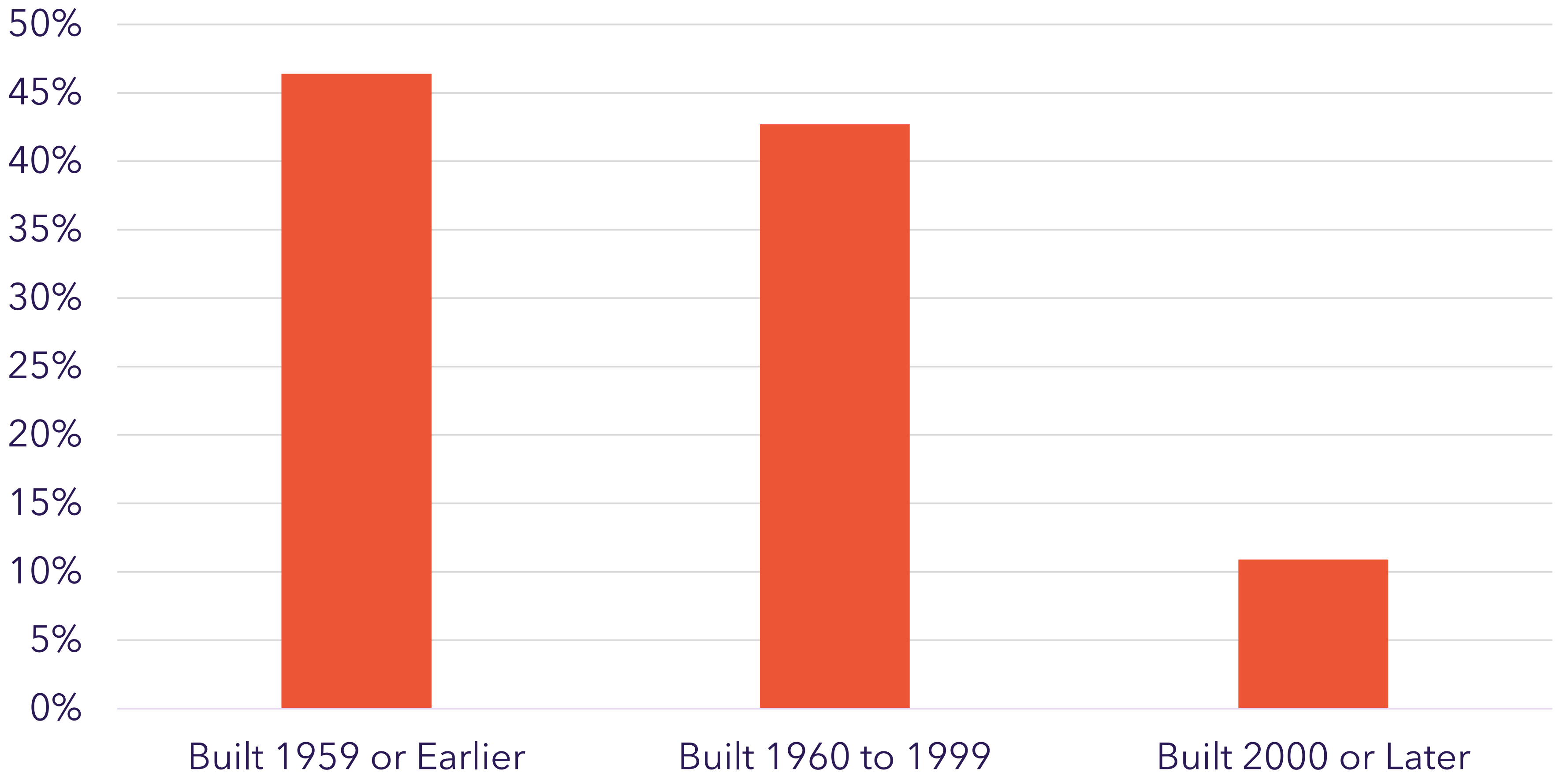
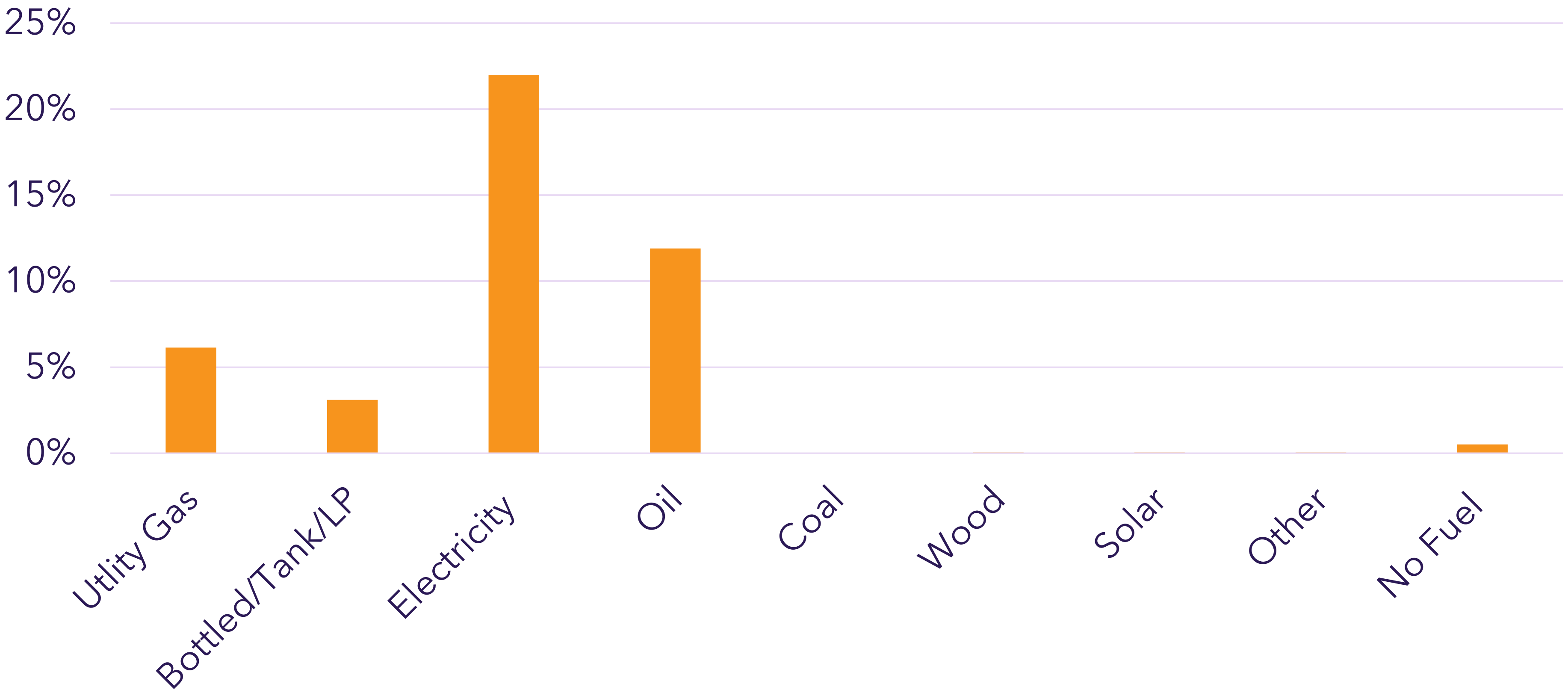
Source: ACS 5-Year Estimates (2011-2015, 2016-2020)

Table 14: Age of Housing Stock (2020)



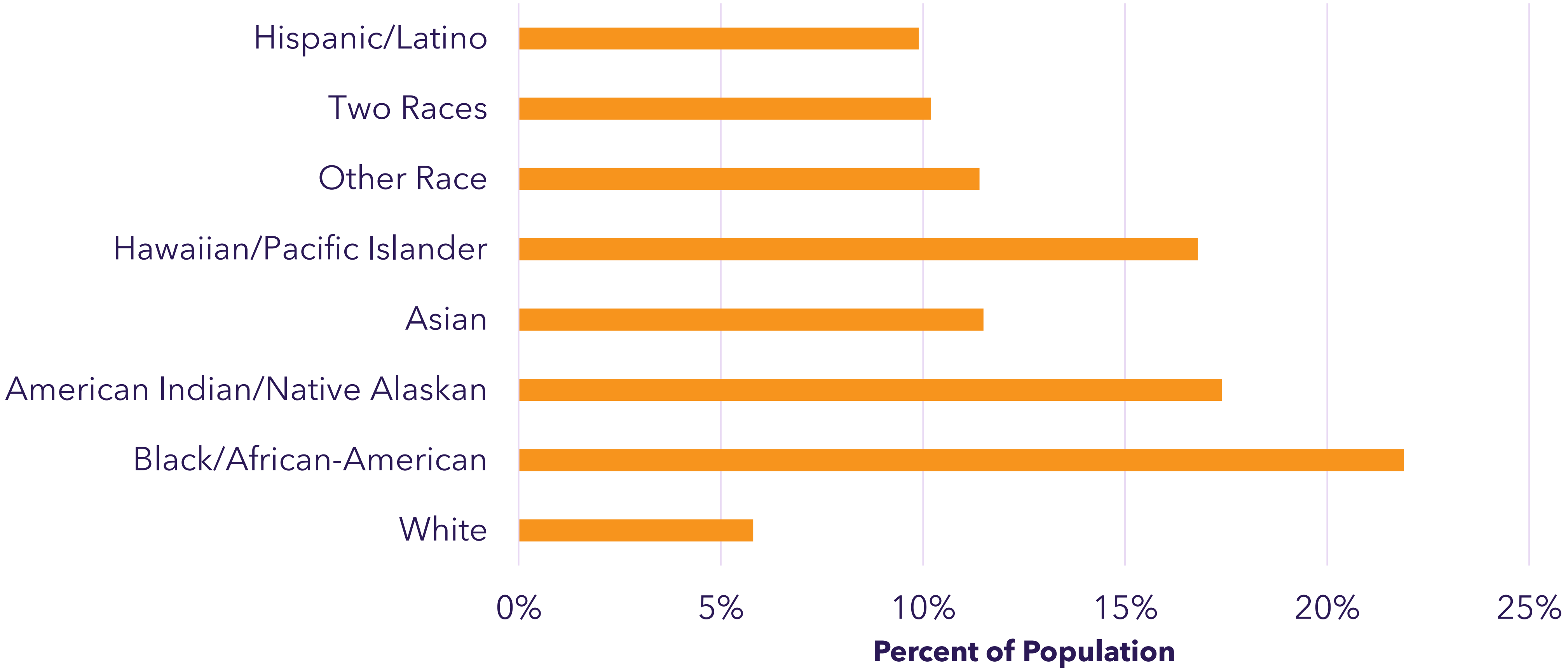
Source: ACS 5-Year Estimates (2016-2020)

Table 15: Home Fuel Heating Sources (2020)



Source: ACS 5-Year Estimates (2016-2020)

Table 16: Commuting by Public Transit (2020)



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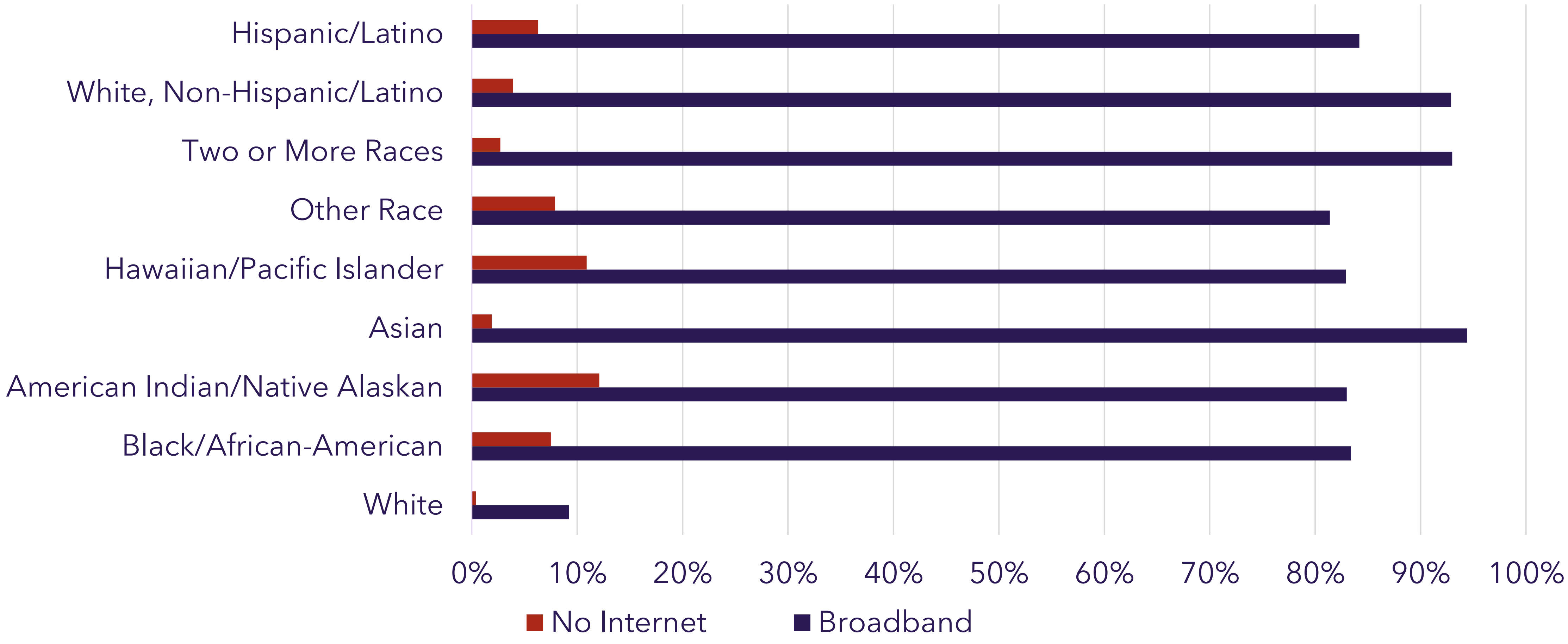
Source: ACS 5-Year Estimates (2016-2020)

Table 17: Internet Access by Race & Ethnicity (2020)



Source: ACS 5-Year Estimates (2016-2020)

Prosperity: Employment and Wealth-Creation

Regional Assessment

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Positioned to advance innovation and entrepreneurship	Unclear path for social and economic mobility	Expand opportunities for women and minority owned entrepreneurs and businesses	Supply chain challenges and risk of automation (ecommerce)
Designated as a regional tech hub (PROPEL) for precision medicine	Political leadership is divisive	Water ports enable an increase in foreign and domestic investments and expansion	Aging labor force will increase the number of retirements
University City Innovation Center	Limited venture capital Investments	Abandoned industrial sites are available for redevelopment	Regional talent drain from regional universities
	Skill mismatch with employment opportunities	International airport and ability to become global player	Increase in automation and digitization of regional sectors may disrupt employment

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Source: DVRPC, 2024

Prosperity: Employment and Wealth-Creation

Data Trends and Highlights

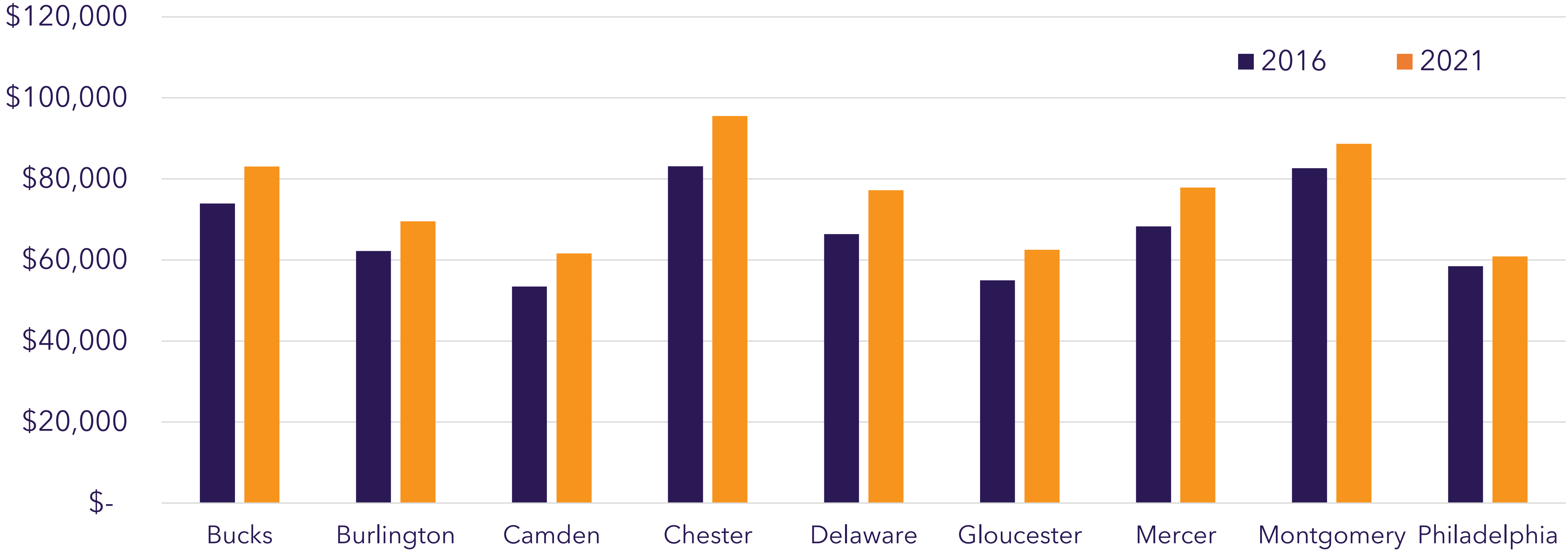
Per Capita Income (Table 18)
Seven of the region's nine counties experienced a double-digit percent increase in per capita income between 2016 and 2020. Delaware County had largest increase in per capita income (+16.3%). Chester County has the highest per capita income at $95,483 and Philadelphia has the lowest per capita income at $60,869.

Wages (Table 19)
The highest weighted annual wages are found in the *Management* of *Companies/Enterprises* sector (+$170K), followed by the *Utilities* sector (+$150K). Conversely, the *Accommodation/Food Services* and *Retail Trade* sectors have the lowest weighted annual wages ($25K, $39K), respectively.

Competitive Sectors (Table 22, 23)
The region's economic strength continues to be Eds and Meds. *Educational Services* is the region's most competitive sector followed by *Health Care/Social Assistance*. Together, these sectors account for 64.5% of the region's basic jobs. The *Management of Companies* and *Art/Entertainment* sectors are also strong in Greater Philadelphia with location quotients above 1.0. During the COVID-19 pandemic, the region was able to rely on the *Educational Services* and *Health Care/Social Assistance* sectors due to their presence as anchor institutions. The *Mining* sector increased by 31% by 2016, followed by *Management of Companies* (+9.4%) and *Transportation/Warehousing* (+6.4 %)

Tables

Table 18: Changes in Per Capita Income (2016-2021)



2016 values are inflation-adjusted using CPI's Inflation Calculator (January 2016 to January 2021)

Source: Bureau of Economic Analysis (2016, 2021)

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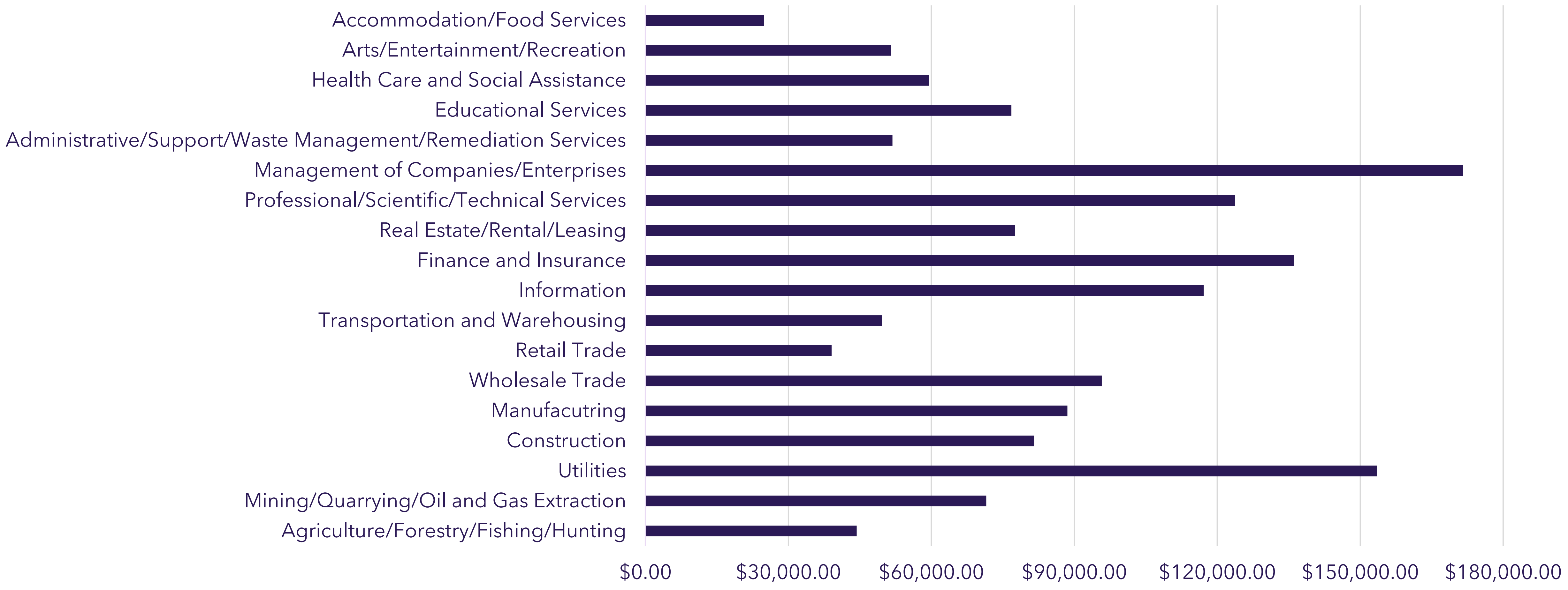
Table 19: Regional Weighted Average Annual Wage by Sector (2020)



Source: County Business Patterns (2016, 2020)

Table 20: Change in Regional Employment by Sector (2016-2020)

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Source: County Business Patterns (2016, 2020)

Table 21: Top Sectors by Location Quotient (LQ) (2020)

Sector	Location Quotient (LQ)
Educational Services	2.29
Management of Companies/Enterprises	1.36
Arts/Entertainment/Recreation	1.31
Financial Activities	1.27
Health Care/Social Assistance	1.27
Professional/Business Services	1.12
Wholesale Trade	1.10
Other Services (except Public Administration)	1.04
Retail Trade	0.96
Information	0.94

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Source: County Business Patterns (2016, 2020)

Table 22: Largest Location Quotient (LQ) Change (2016-2020)

Sector	2016	2020	% Change
Mining/Quarrying/Oil and Gas Extraction	0.05	0.06	31.10%
Management of Companies/Enterprises	1.24	1.36	9.40%
Transportation and Warehousing	0.85	0.9	6.40%
Health Care/Social Assistance	1.23	1.27	3.10%
Wholesale Trade	1.06	1.1	3.00%
Information	0.99	0.94	-5.70%
Agriculture/Forestry/Fishing/Hunting	0.27	0.25	-5.80%
Construction	0.82	0.77	-6.00%
Administrative/Support/Waste Management & Remediation Services	0.67	0.62	-6.70%
Real Estate and Rental and Leasing	0.92	0.86	-7.20%

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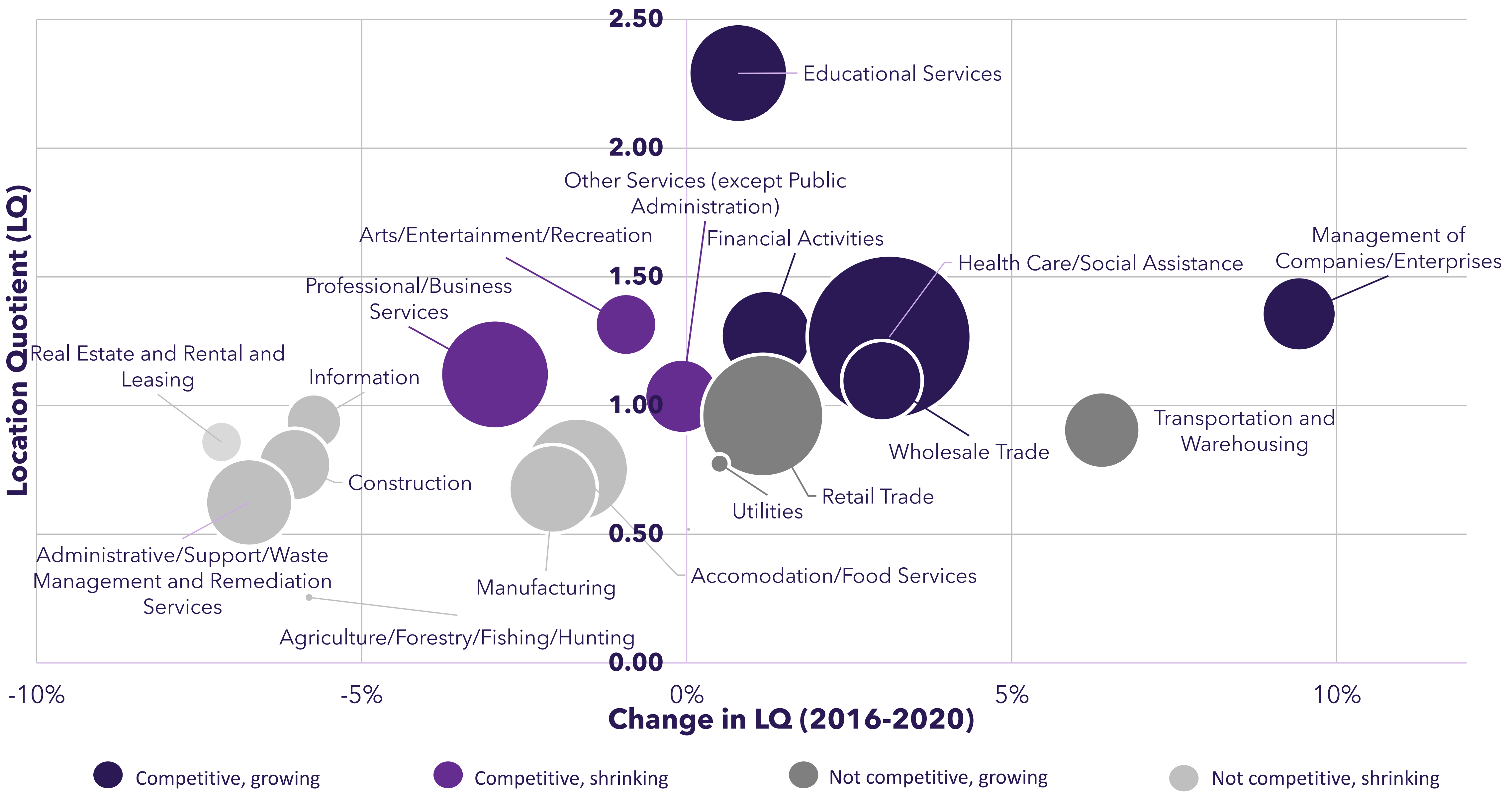
Source: County Business Patterns (2016, 2020)

Table 23: Economic Sector Competitiveness (2020)



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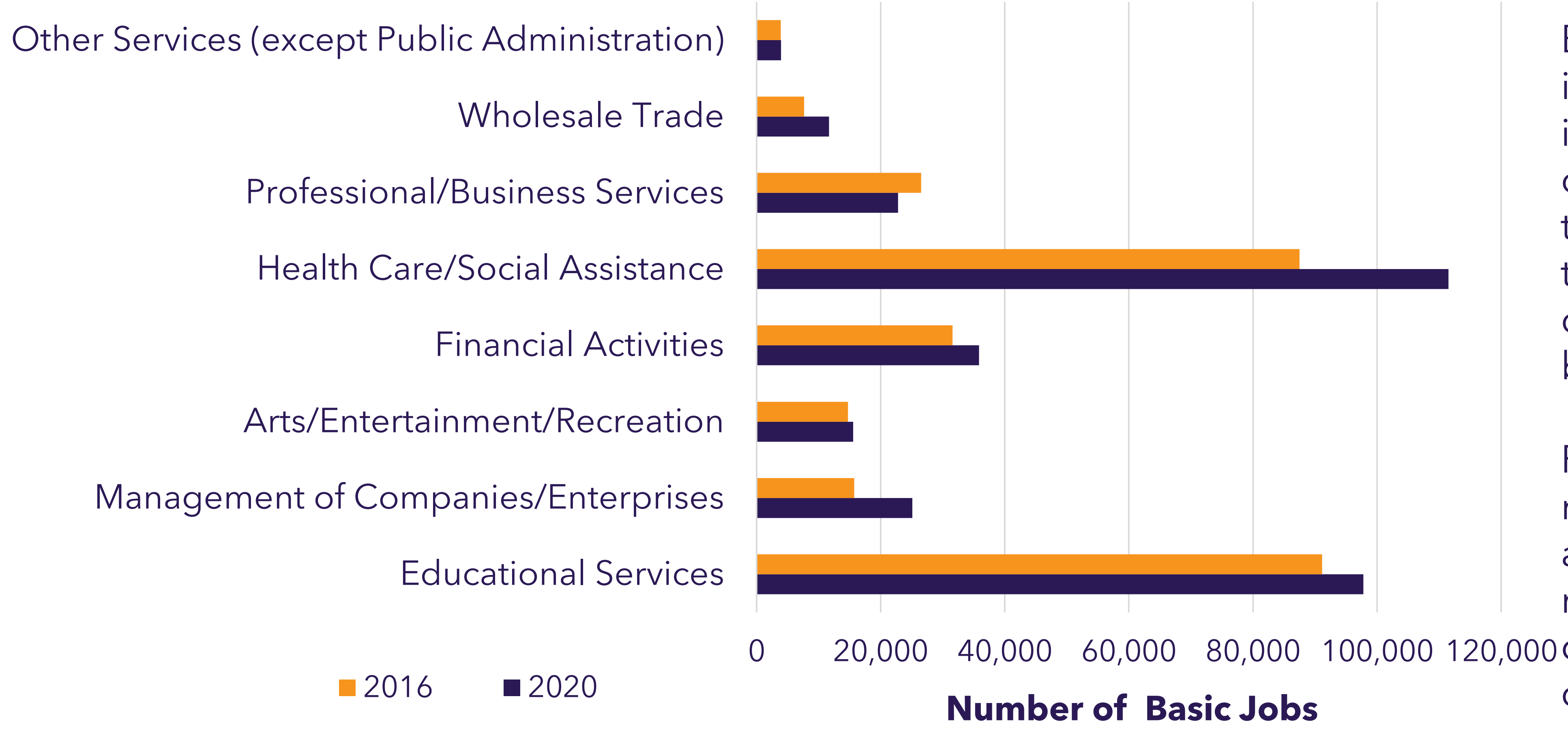
Source: County Business Patterns (2016, 2020)

Table 24: Competitive Sectors: Basic Employment (2020)

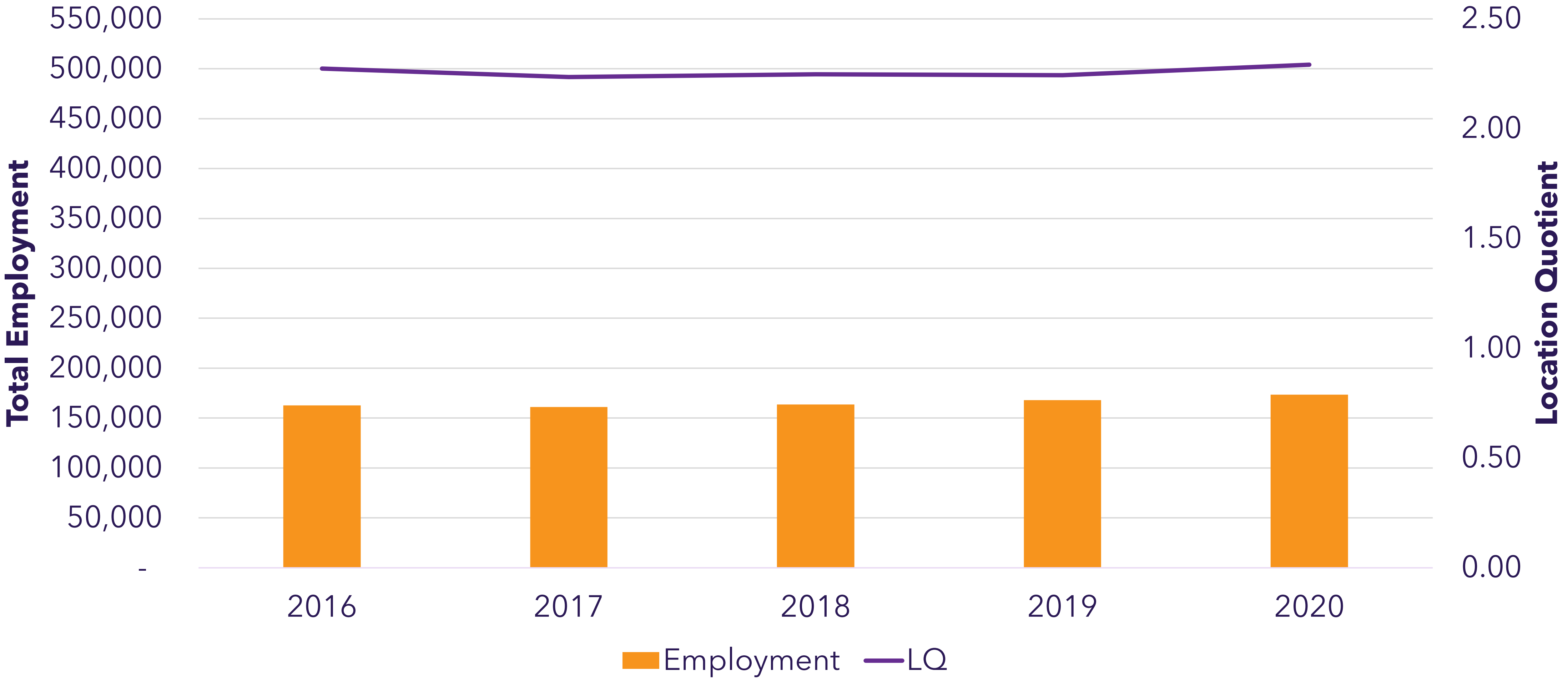


Basic employment is made up of industries that rely on external factors to fuel demand; thus, measuring demands from beyond our region.

For instance, mining, logging, and many large manufacturing companies are considered *basic* employers because their goods are shipped outside the location where they

Source: County Business Patterns (2016, 2020)

Table 25: Educational Services Employment (2016-2020)



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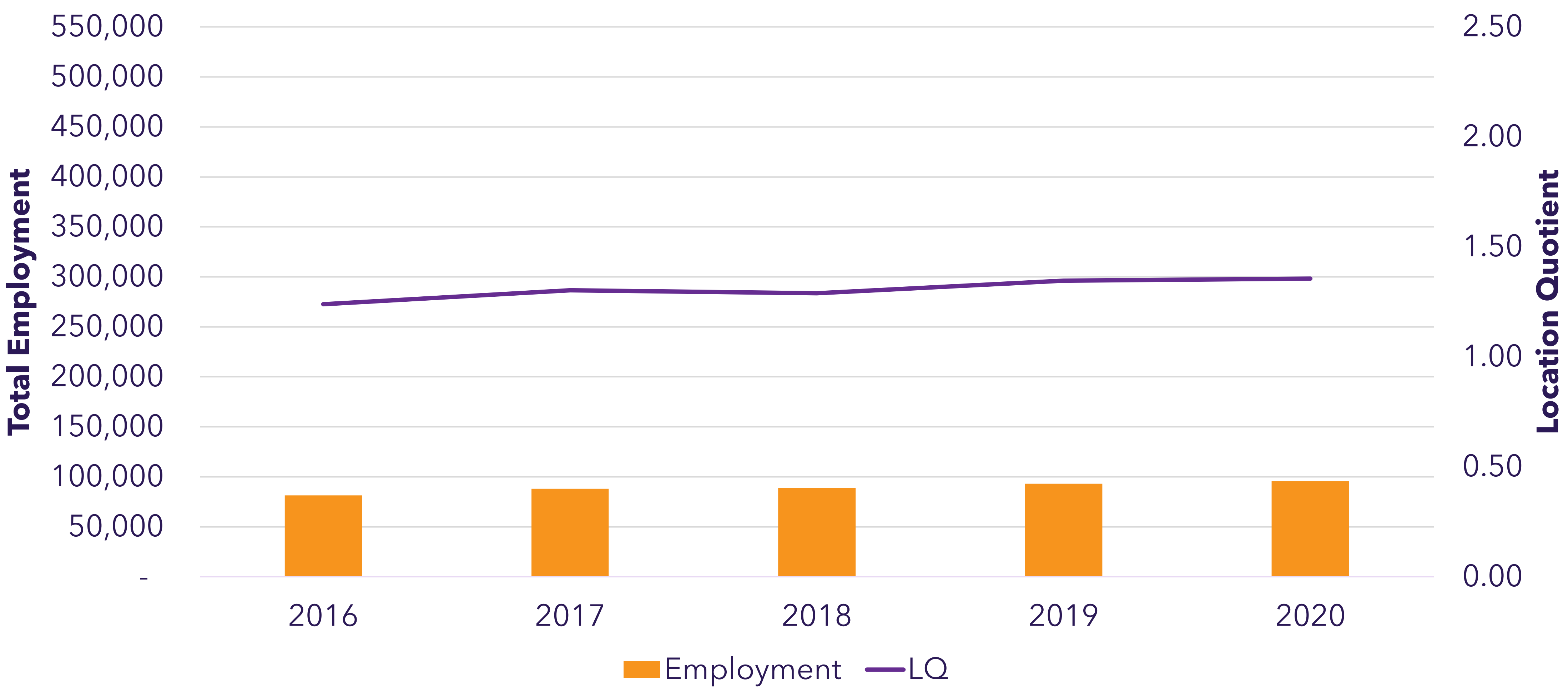
Source: County Business Patterns (2016, 2020)

Table 26: Management of Companies/Enterprises (2016-2020)



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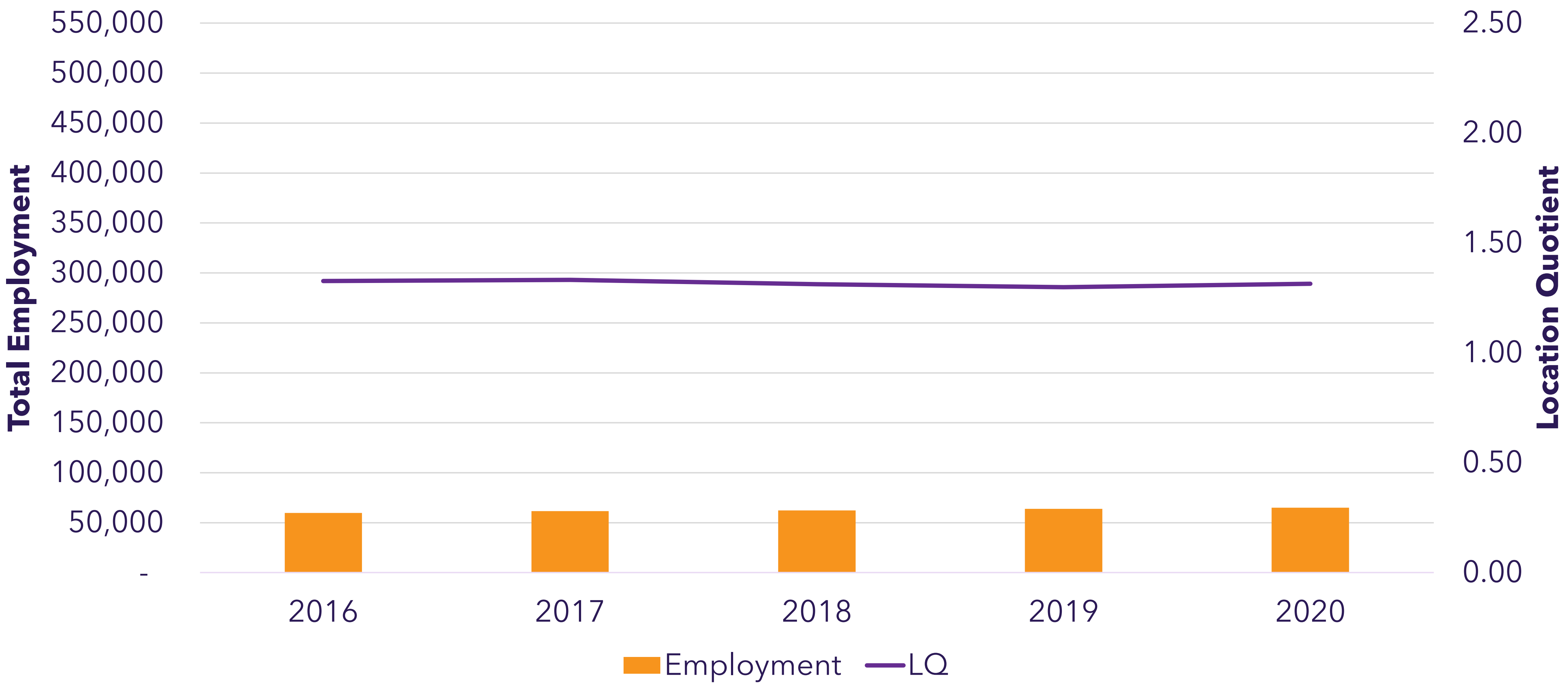
Source: County Business Patterns (2016, 2020)

Table 27: Arts, Entertainment, and Recreation (2016-2020)



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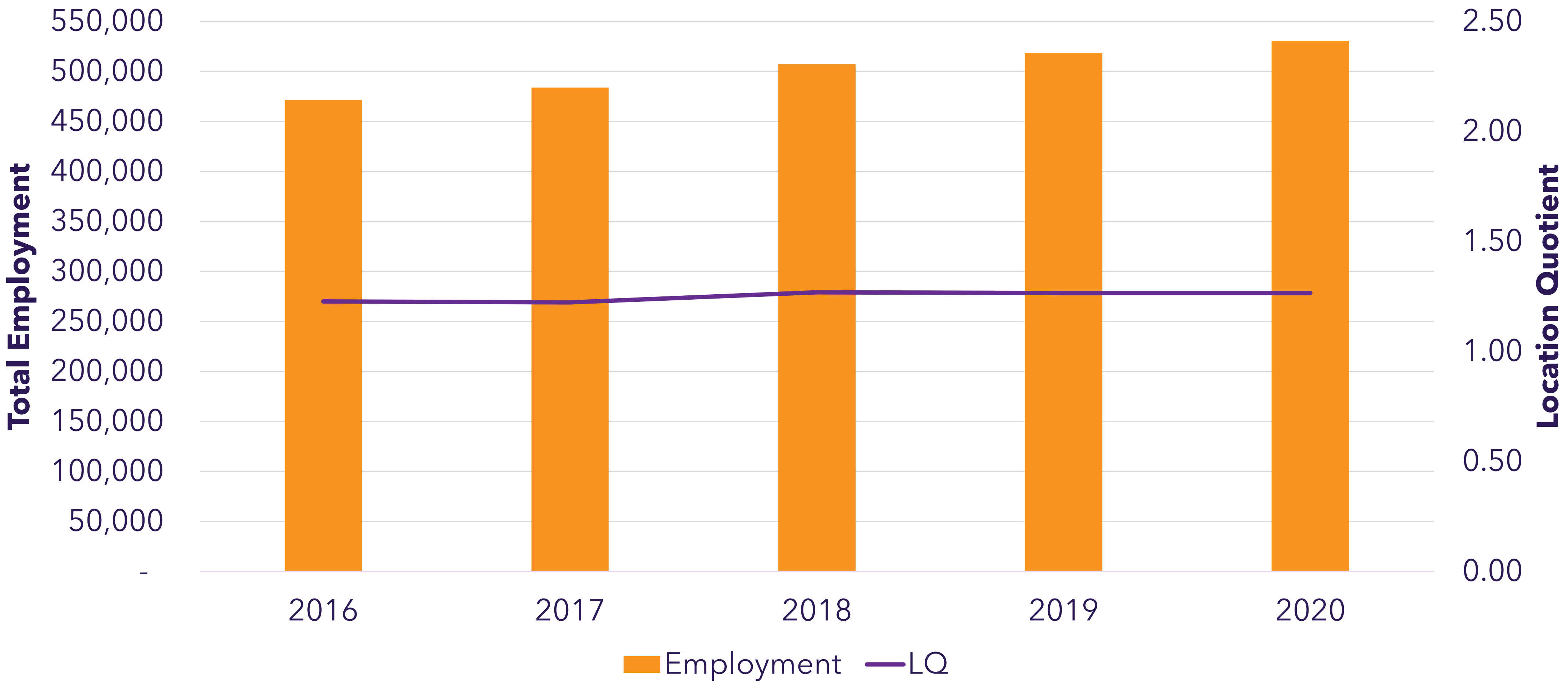
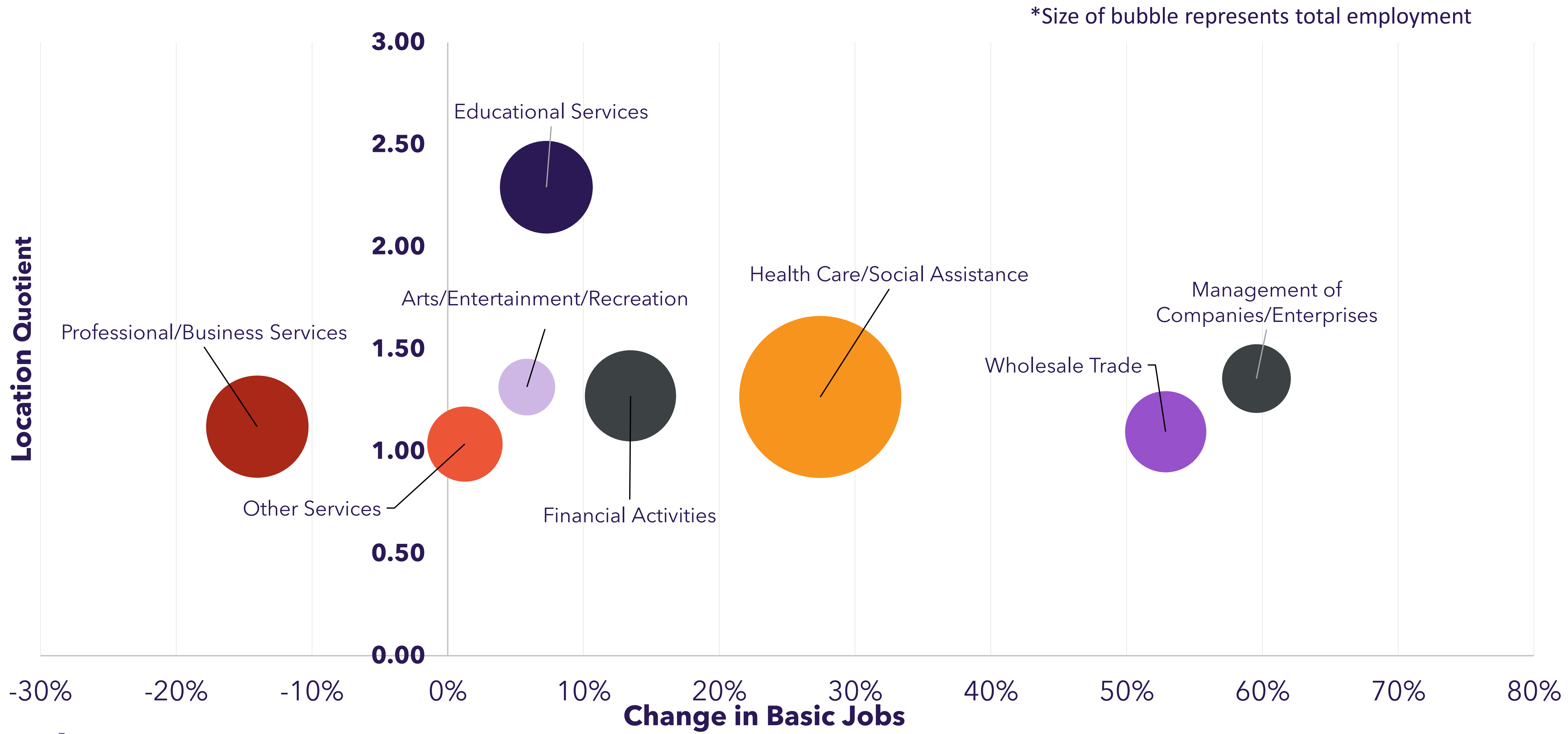
Source: County Business Patterns (2016, 2020)

Table 28: Healthcare and Social Assistance (2016-2020)



Source: County Business Patterns (2016, 2020)

Table 29: Employment, LQ, & Change in Basic Jobs (2020)



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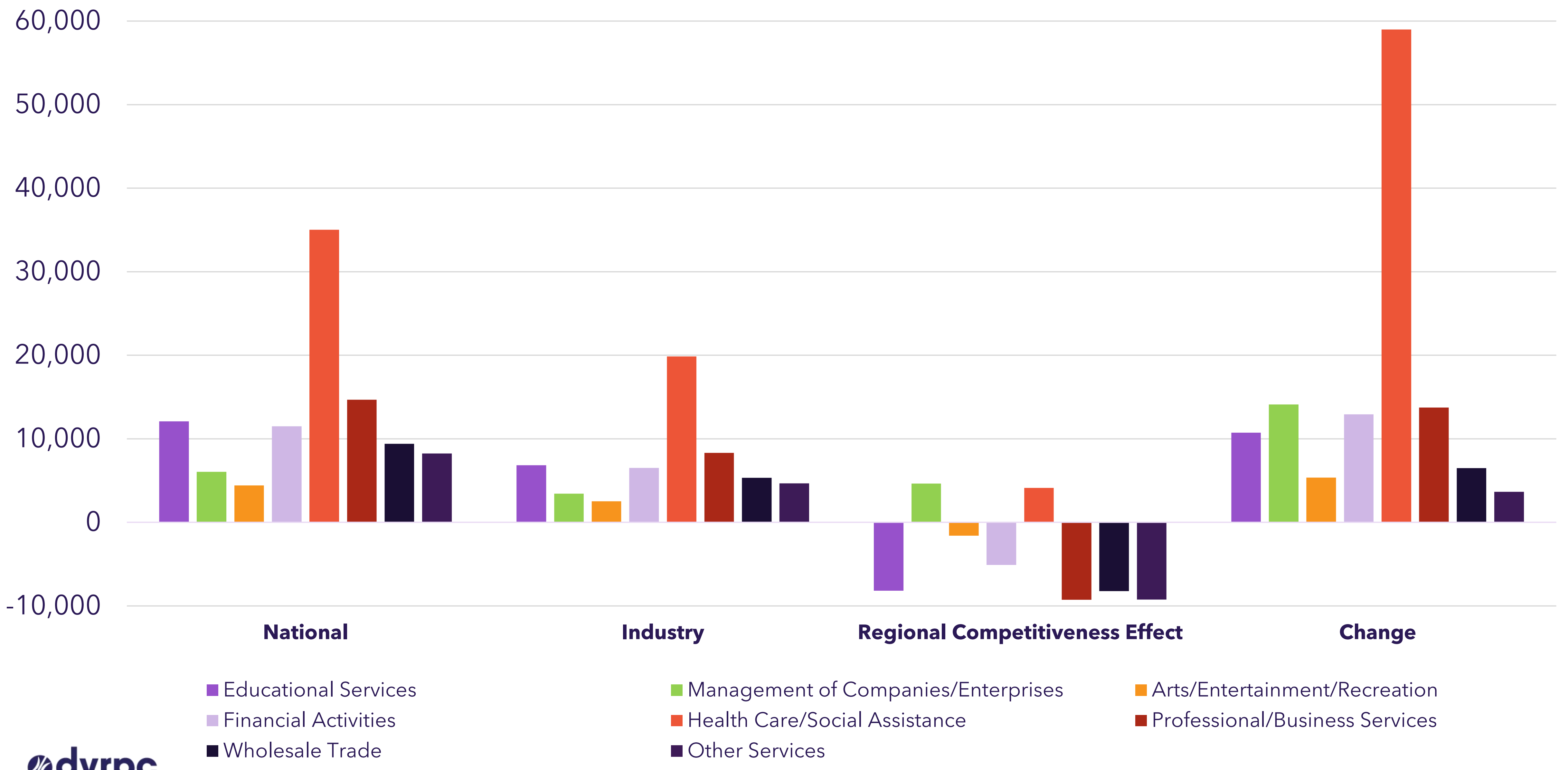
Source: County Business Patterns (2016, 2020)

Table 30: Shift-Share Analysis (2020)



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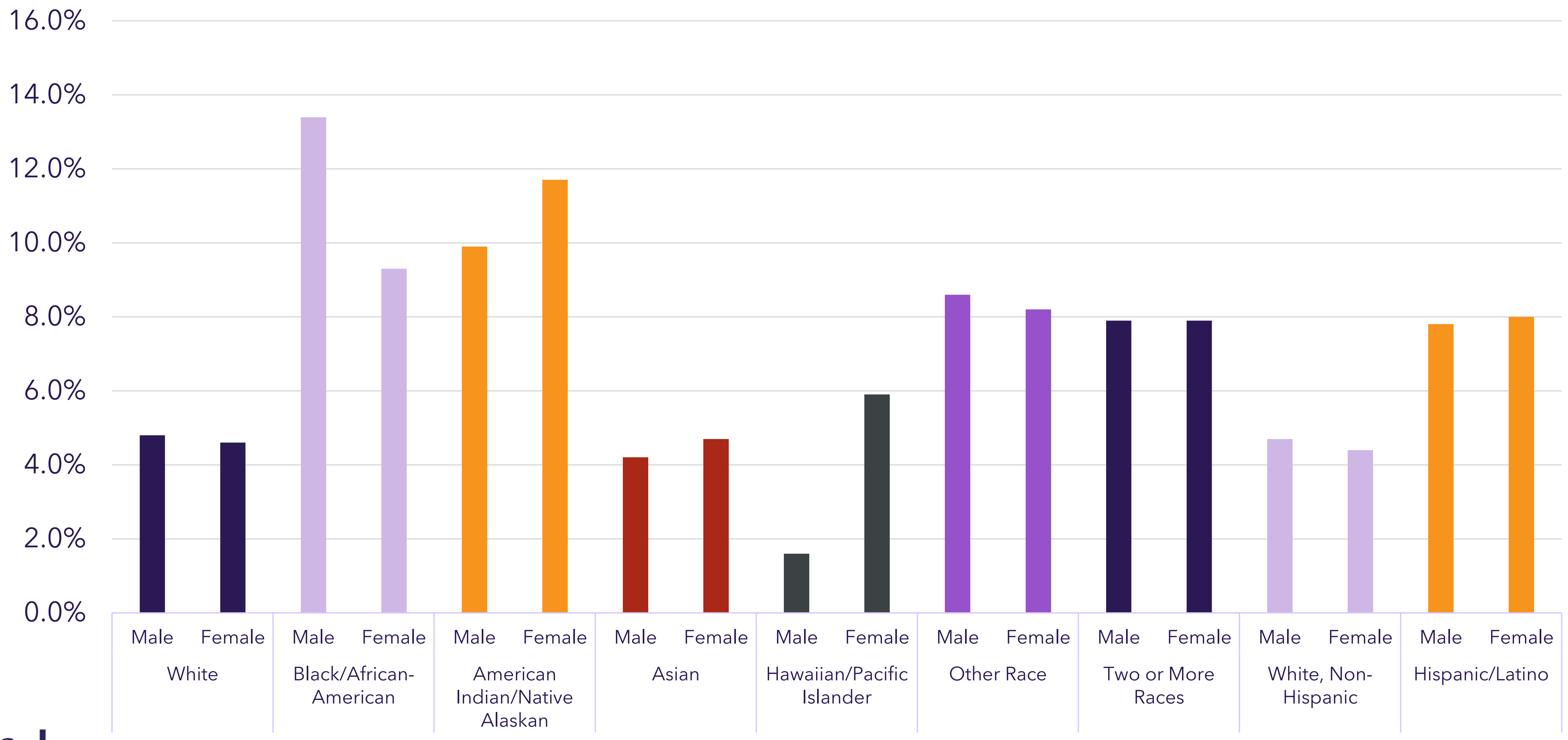
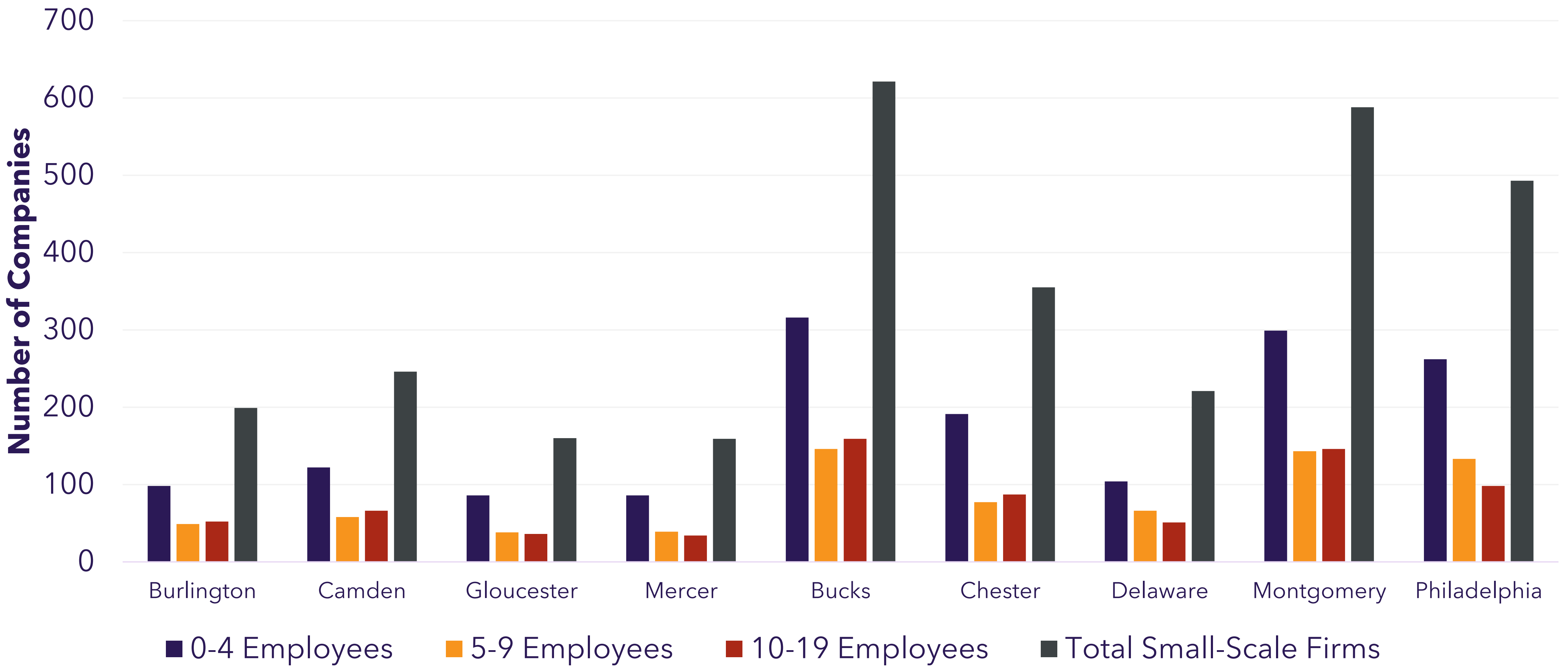
Source: County Business Patterns (2016, 2020)

Table 31: Unemployment Rate by Sex, Race, & Ethnicity (2020)



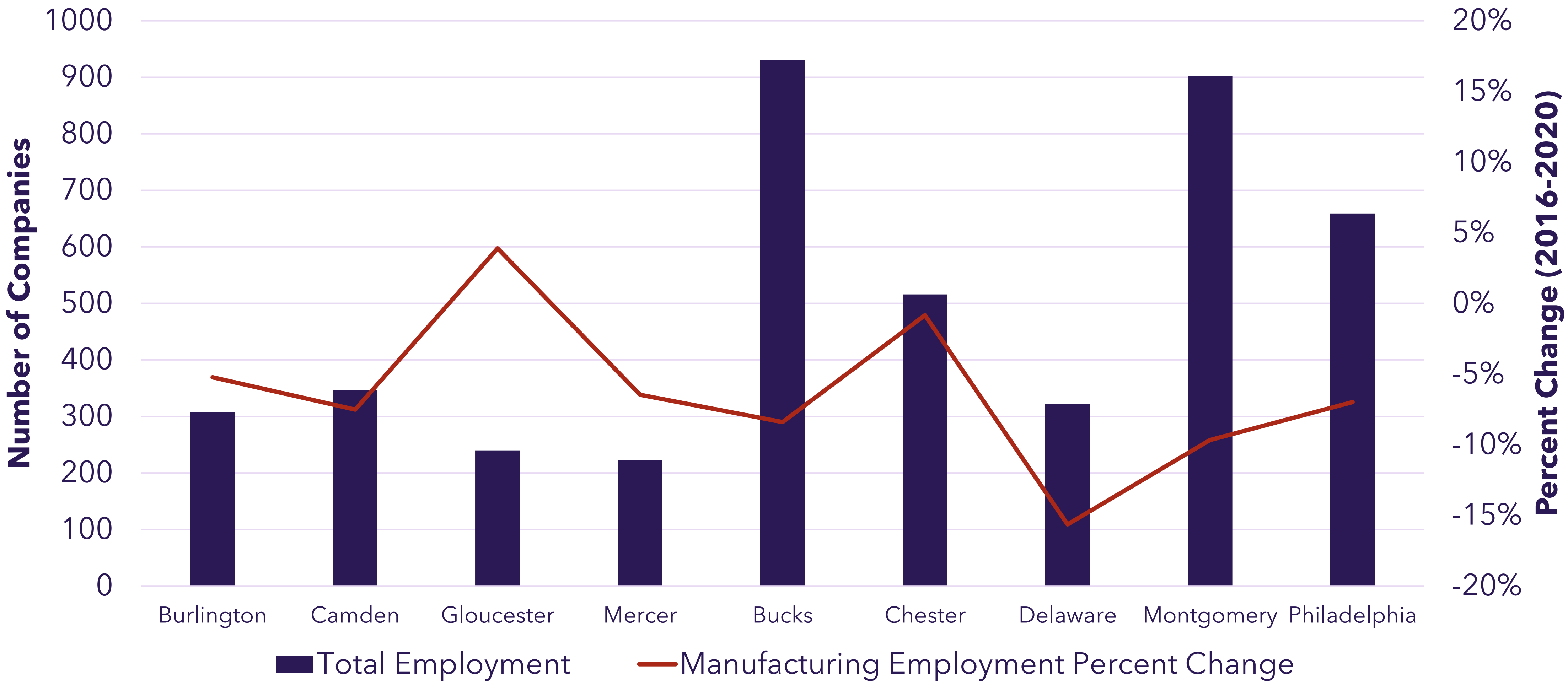
Source: ACS 5-Year Estimates (2016-2020)

Table 32: Small-Scale Manufacturing Employees (2020)



Source: County Business Patterns (2016, 2020)

Table 33: Change in Small-Scale Manufacturing Companies (2016-2020)



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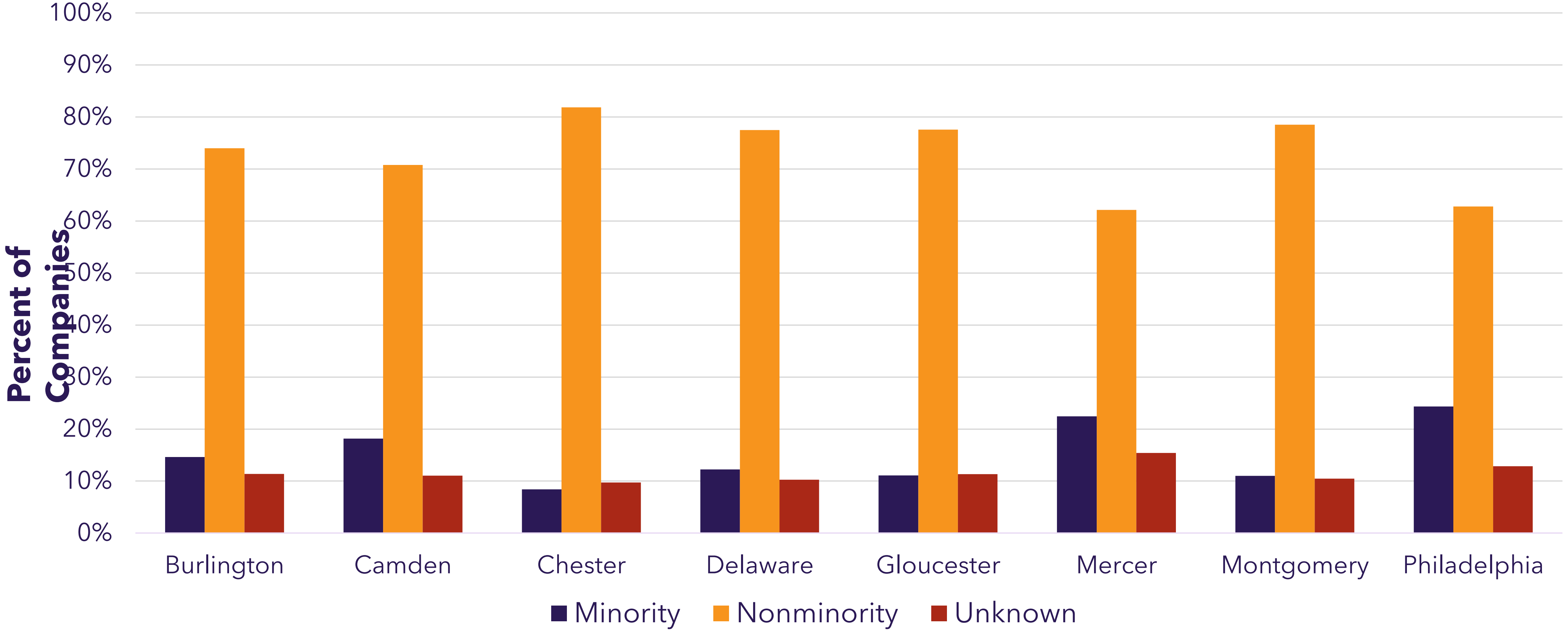
Source: County Business Patterns (2016, 2020)

Table 34: Minority Business Ownership by County (2017)



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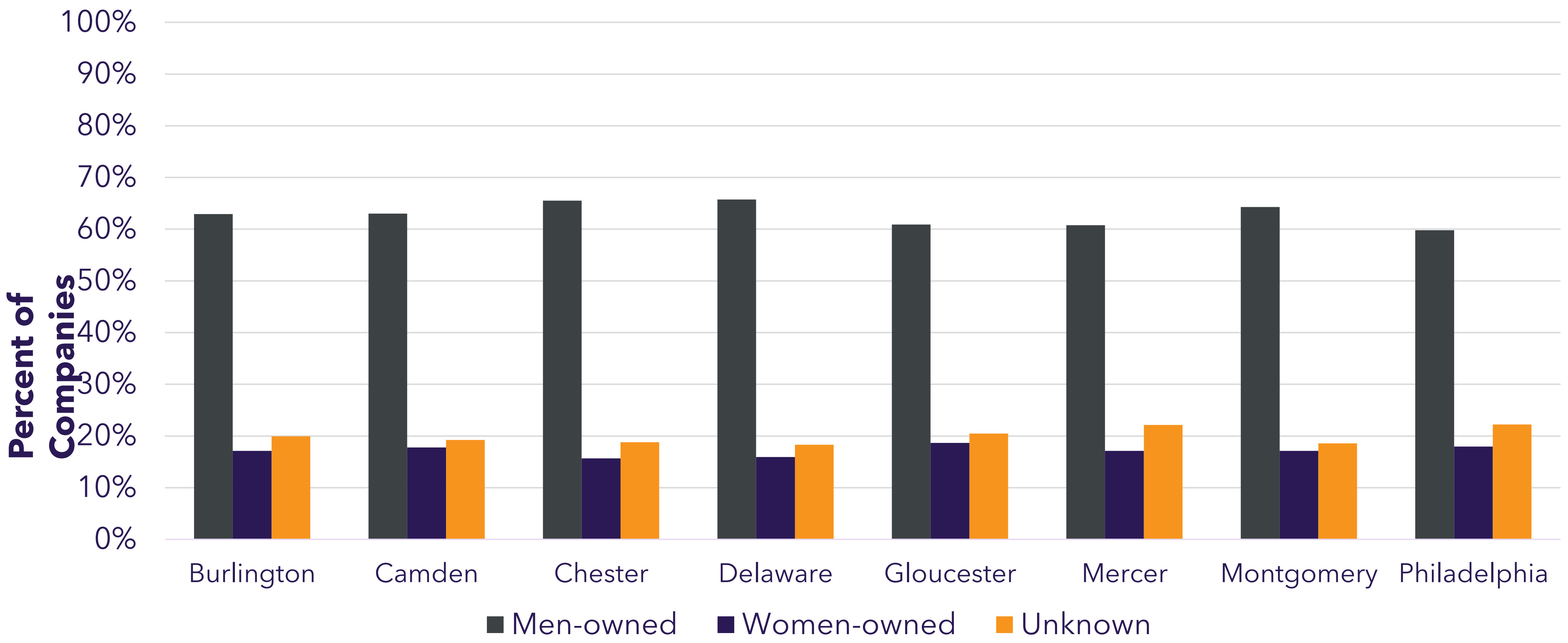
Source: County Business Patterns (2017, 2020)

Table 35: County Business Ownership by Gender (2017)



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Source: County Business Patterns (2017, 2020)

Economic Trends

Economic Trends

Recent world events have expedited the advancement of digital technologies, altering where and how we work (telework), as well as produce and distribute goods and services (automation). The integration of telework and automation differ between occupation and sectors. The following slides illustrate how digitization may impact the regional economy and various occupations within.

Telework

Increased telework opportunities forced central business districts that were overly reliant on office workers to reinvent themselves. Traditional retail districts and shopping malls must find new ways to compete with increasingly convenient e-commerce platforms.

Automation

Low wage workers risk losing their jobs to digitally-enabled automation and artificial intelligence technologies, whereas automation of middle-income occupations could lead to greater income inequality.

	Lower Automation Risk	Higher Automation Risk
Higher Telework Capacity	Finance and Insurance Information Management of Companies and Enterprises Professional, Scientific, and Technical Services	Administrative / Support Services / Waste Management and Remediation Services Real Estate, and Rental and Leasing
Lower Telework Capacity	Educational Services Health Care and Social Assistance Other Services Utilities	Arts, Entertainment, and Recreation Accommodation and Food Services Agriculture, Forestry, Fishing, and Hunting Construction Manufacturing Mining, Quarrying, and Oil and Gas Extraction Retail Trade Transportation and Warehousing Wholesale Trade

Source: Frey, Carl Benedikt & Osbourne, Michael, DVRPC, 2024

Methodology

Automation
The Oxford Martin School's publication, *The Future of Employment*, sought to quantify the degree to which specific occupations are susceptible to computerization. The analysis was done utilizing data from the U.S. Department of Labor's online platform, O*NET Resource Center. Sector-level risk was calculated by determining the occupational employment composition of each sector, and then multiplying each occupation's automation risk by its percentage of total employment within each subsector. The values were then summed to calculate its automation risk by sector.

Telework
Released in November 2022, the U.S. Bureau of Labor Statistics' (BLS) Occupational Requirements Survey (ORS) provides estimates on a range of requirements at the occupational level. Each requirement falls within one of seven categories: physical demands, environmental conditions, education, training, and experience, as well as cognitive and mental requirements.

Due to gaps in the ORS, the BLS' Business Response Survey (BRS) was used to determine telework capacity at the sector-level. However, since the BRS defines telework capacity as establishments with employees teleworking either all the time, some of the time, and or rarely or never, the following formula was developed to quantify telework capacity:

Telework Score = ((Percent of establishments with employees teleworking all the time * 10) + (Percent of establishments with employees teleworking some of the time * 5) + (Percent of establishments with employees teleworking rarely or never * 1))/1000

Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Telework Capacity

Scores by Sector

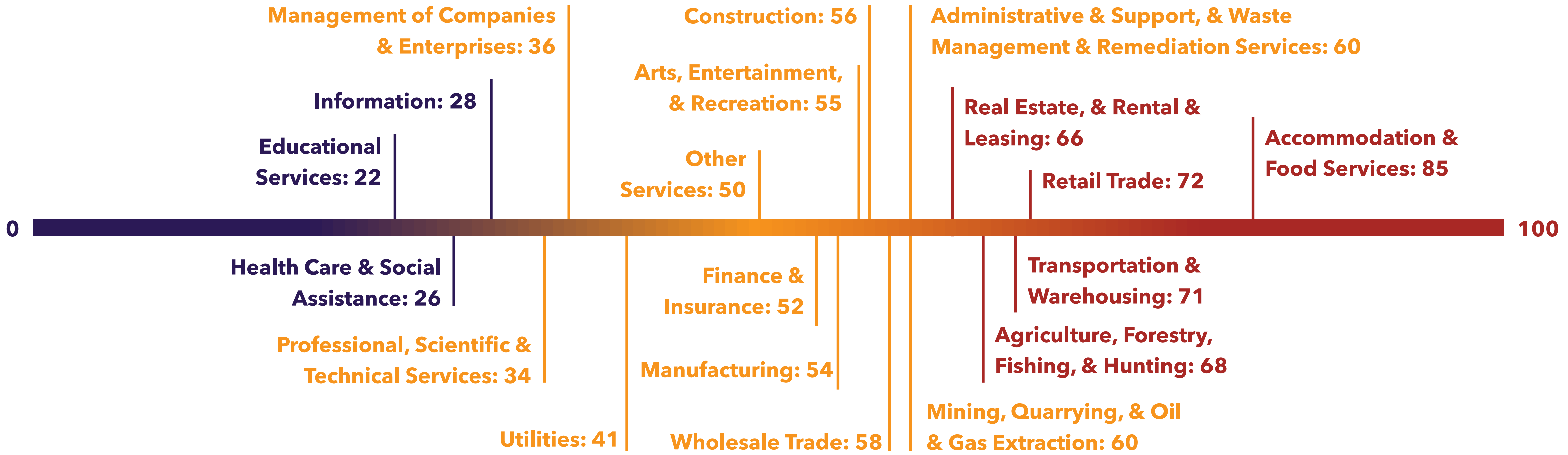
Increased telework capacity and opportunities mean that employers now have access to a national, or even global, talent pool. This also means that workers are no longer constrained by the job market in their city, or the housing market in the city in which their job is located. However, telework capacity is greater in some sectors of the economy than others, meaning some occupations are still tethered to the physical location of their job.

Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Automation Risk

Scores by Sector

Routine jobs are at the greatest risk of automation and can be broken down into two categories. The first is cognitive, which includes occupations such as secretaries and customer service representatives. The second is manual, which are more physical in nature such as a factory worker. Both types can be found throughout each sector at varying degrees. As a result, the workforces in some sectors are at greater risk of automation than others. Below is the automation risk for the top economic sectors in Greater Philadelphia.



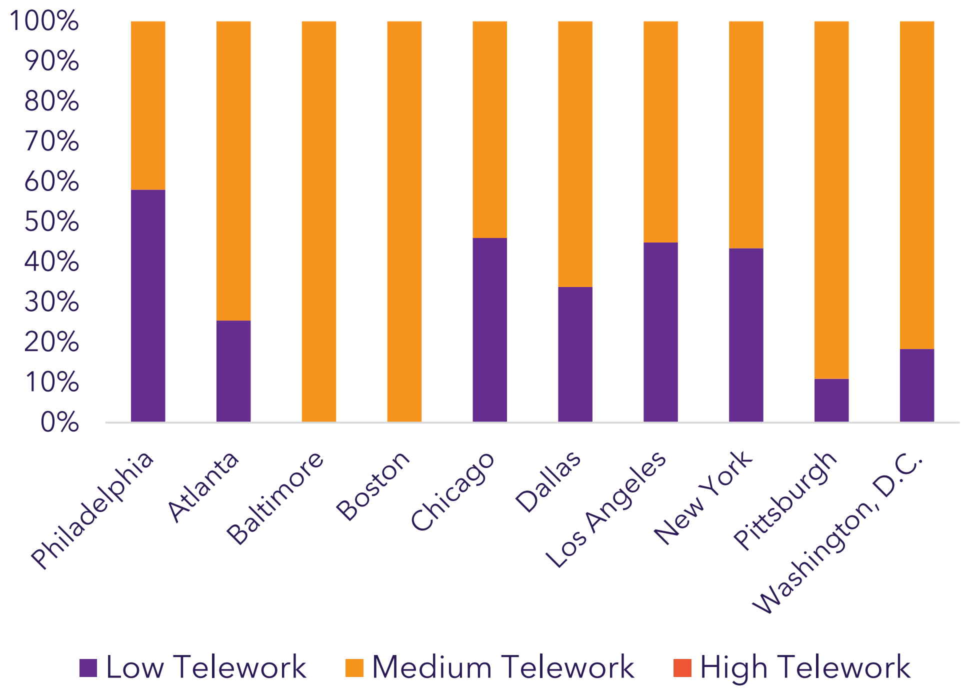
Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Regional Comparisons

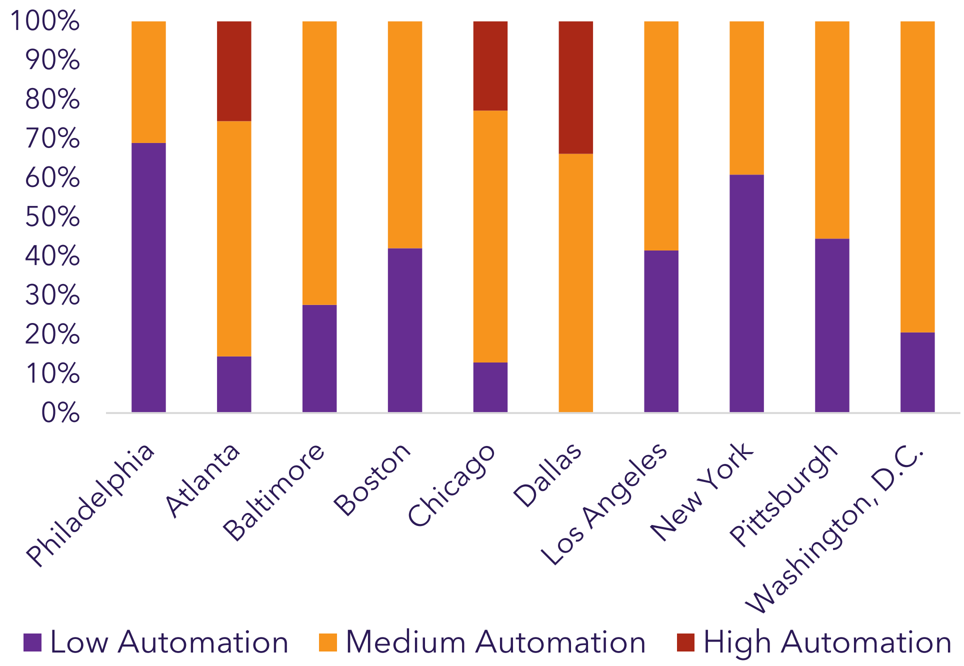
Competitive Sector Employment as Share of Total Employment

Regional economies built upon sectors with higher Telework Capacity will need to adopt policies aimed at talent retention and quality of life improvements. Conversely, regions where economies are more reliant on sectors with greater Automation Risk will more likely face challenges related to the reskilling and upskilling of a displaced workforce. DVRPC's Rating the Region dashboard provides a deeper analysis of these trends by sector and region.

TELEWORK CAPACITY



AUTOMATION RISK



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Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Competitive Economic Sectors

Greater Philadelphia's most competitive sectors (based on LQ) are outlined below. Those that are competitive and growing are highlighted in **purple**. Those that are regionally-competitive are highlighted in **green**. Those in which the region is not competitive, but the sector is growing are highlighted in **orange**. The Telework Capacity and Automation Risk scores for each sector, and for the top three occupations within each of these sectors, are detailed in the slides that follow to better anticipate the future implications of digitalization for Greater Philadelphia's economy.

COMPETITIVE	COMPETITIVE - REGIONALLY	NOT COMPETITIVE - GROWING
Educational Services	**Management of Companies & Enterprises**	**Retail**
Arts, Entertainment, & Recreation	**Health Care & Social Assistance**	**Transportation & Warehousing**
Finance & Insurance		**Utilities**

Source: DVRPC, 2024

Educational Services

NAICS Code 61

Total Employment: 152,823
Share of Regional Employment: 6.15%

Telework Capacity	Automation Risk
22	35

TOP OCCUPATIONS

1. Elementary School Teachers, Except Special Education

Total Regional Employment: 27,340
Annual Mean Wage: $71,390

Telework Capacity	Automation Risk
00	00

2. Secondary School Teachers, Except Special and Career / Technical Education

Total Regional Employment: 27,240
Annual Mean Wage: $74,380

Telework Capacity	Automation Risk
N/A	01

3. Teaching Assistants, Except Postsecondary

Total Regional Employment: 26,370
Annual Mean Wage: $28,650

Telework Capacity	Automation Risk
00	N/A

Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Management of Companies & Enterprises

NAICS Code 55

Telework Capacity	Automation Risk
36	35

Total Employment: 89,087
Share of Regional Employment: 3.58%

TOP OCCUPATIONS

1. General and Operations Managers

Total Regional Employment: 58,980
Annual Mean Wage: $143,140

Telework Capacity	Automation Risk
26	01

2. Customer Service Representative

Total Regional Employment: 57,530
Annual Mean Wage: $44,170

Telework Capacity	Automation Risk
21	55

3. Accountants and Auditors

Total Regional Employment: 32,580
Annual Mean Wage: $87,000

Telework Capacity	Automation Risk
45	94

Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Arts, Entertainment, & Recreation
NAICS Code 71

Total Employment: 47,419
Share of Regional Employment: 1.91%

Telework Capacity	Automation Risk
52	22

TOP OCCUPATIONS

1. Amusement and Recreation Attendants
Total Regional Employment: 6,720
Annual Mean Wage: $26,510

Telework Capacity	Automation Risk
00	72

2. Exercise Trainers and Group Fitness Instructors
Total Regional Employment: 5,750
Annual Mean Wage: $47,140

Telework Capacity	Automation Risk
N/A	09

3. Landscaping and Groundskeeping Workers
Total Regional Employment: 18,580
Annual Mean Wage: $38,910

Telework Capacity	Automation Risk
00	95

Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Health Care & Social Assistance

NAICS Code 62

Telework Capacity	Automation Risk
26	26

Total Employment: 515,666
Share of Regional Employment: 20.75%

TOP OCCUPATIONS

1. Home Health and Personal Care Aides

Total Regional Employment: 112,040
Annual Mean Wage: $26,220

Telework Capacity	Automation Risk
00	39

2. Registered Nurses

Total Regional Employment: 73,350
Annual Mean Wage: $87,830

Telework Capacity	Automation Risk
03	01

3. Nursing Assistants

Total Regional Employment: 34,110
Annual Mean Wage: $31,670

Telework Capacity	Automation Risk
00	N/A

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Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Finance & Insurance
NAICS Code 52

Total Employment: 164,624
Share of Regional Employment: 6.62%

Telework Capacity	Automation Risk
52	35

TOP OCCUPATIONS

1. Customer Service Representative
Total Regional Employment: 57,530
Annual Mean Wage: $44,170

Telework Capacity	Automation Risk
21	55

2. Insurance Sales Agents
Total Regional Employment: 8,260
Annual Mean Wage: $80,770

Telework Capacity	Automation Risk
35	92

3. Securities, Commodities, and Financial Services Sales Agents
Total Regional Employment: 13,840
Annual Mean Wage: $87,710

Telework Capacity	Automation Risk
N/A	02

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Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Retail Trade
NAICS Code 44

Total Employment: 287,058
Share of Regional Employment: 11.55%

Telework Capacity	Automation Risk
18	72

TOP OCCUPATIONS

1. Retail Salesperson
Total Regional Employment: 68,930
Annual Mean Wage: $30,810

Telework Capacity	Automation Risk
01	92

2. Cashiers
Total Regional Employment: 61,460
Annual Mean Wage: $27,840

Telework Capacity	Automation Risk
00	97

3. Stockers and Order Fillers
Total Regional Employment: 51,490
Annual Mean Wage: $34,780

Telework Capacity	Automation Risk
00	N/A

Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Transportation & Warehousing

NAICS Code 48

Total Employment: 101,293
Share of Regional Employment: 4.08%

Telework Capacity	Automation Risk
22	71

TOP OCCUPATIONS

1. Heavy and Tractor-Trailer Truck Drivers
Total Regional Employment: 33,270
Annual Mean Wage: $57,000

Telework Capacity	Automation Risk
00	79

2. Laborers, and Freight, Stock, and Material Movers, Hand
Total Regional Employment: 59,600
Annual Mean Wage: $39,560

Telework Capacity	Automation Risk
00	85

3. Light Truck Drivers
Total Regional Employment: 21,000
Annual Mean Wage: $46,570

Telework Capacity	Automation Risk
00	69

Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Utilities
NAICS Code 22

Total Employment: 9,686
Share of Regional Employment: 0.39%

Telework Capacity	Automation Risk
27	41

TOP OCCUPATIONS

1. Electrical Power-Line Installers and Repairers
Total Regional Employment: 1,400
Annual Mean Wage: $93,690

Telework Capacity	Automation Risk
00	01

2. Customer Service Representative
Total Regional Employment: 57,530
Annual Mean Wage: $44,170

Telework Capacity	Automation Risk
21	55

3. Power Plant Operators
Total Regional Employment: 360
Annual Mean Wage: $96,570

Telework Capacity	Automation Risk
N/A	85

Source: Frey, Carl Benedikt & Osborne, Michael, DVRPC, 2024

Economic Resilience

Preparing for Economic Shocks

A resilient economy is one that has the ability to withstand an initial economic shock, recover quickly from a shock, and avoid the shock altogether.

It involves the protection of and physical recovery of damaged infrastructure and the creation of 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/or

• an external event, natural or manmade disaster, the closure of one or more military bases, or the loss of a major employer.

Resilience Initiatives

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.

Resilience initiatives fall into two categories: steady-state (long-term) and responsive (short-term). In the event of disruption of the region's economy, it is important that specific roles and responsibilities are assigned to regional economic development practitioners and organizations such as acting as the focal point for coordination, distributing timely information, leading injury responses, and acting as the grant administrator for federally funded recovery projects.

Steady-State Initiatives

focus on long-term efforts to bolster the ability to withstand or avoid a shock. As climate change increases the frequency, severity, and extent of disasters, community planning and development is critical. Proactive investments at the local level such as creating flexible land use policies, ensuring public sector and private sector capabilities and partnerships, and engaging the entire community in making decisions about the future can help mitigate potential economic losses from an economic shock.

- Integrating larger planning efforts (e.g., hazard mitigation plans) and funding sources into local comprehensive plans and regulatory documents.
- Maintaining municipal business licenses, tax information, and other business establishment databases with GIS and other digital tools.
- Measuring redundancy in telecommunications and broadband networks to protect commerce and public safety in the event of natural or manmade disasters.
- Employing safe development practices such as locating structures outside of floodplains, preserving natural lands that act as buffers from storms, and protecting downtowns from the impacts of extreme weather.
- Conducting vulnerability assessments to understand at-risk populations should a weather event take place.

Responsive Initiatives

focus on short-term actions to increase capacity to respond and recover from a shock. Established communication networks and information collection protocols can speed up a region's response and increase effectiveness. Agencies listed below can assist with regional responses.

Business Emergency Operation Centers serve as a hub of business-to-business collaboration and communication.

Small Business Development Centers (SBDC) provide small business owners a variety of free business consulting and low-cost training services.

Workforce Investment Boards provide opportunities to retrain workers to meet the evolving needs of the region's emergency employers.

Transportation/Incident Management Groups provide a forum for regional partners to work together.

Defining key stakeholders, roles, responsibilities, and key actions.

Adopting a process for regular communication, monitoring, and updating of business community needs and issues to be used after an incident.

Identifying key local, regional, state, and federal officials to lead communication for business needs and coordinate assessment efforts.

Requiring business succession plans for short-, intermediate-, and long-term recovery needs.

Table 36: Hazard Risks by County

The Federal Emergency Management Agency (FEMA) and EDA are helping local and regional partners identify opportunities to align their process to better anticipate and mitigate natural and economic shocks. By understanding the potential risks within the region, organizations and agencies identified to assist in a recovery can invest in actions that provide support across agencies and leverage funding . The factors listed in the corresponding table were identified through each county's Hazard Mitigation Plan as those with a moderate-high risk of occurrence. The following slides illustrate potential disasters and show a mix of steady-state and responsive actions that may be undertaken.

	Flooding	Drought	Wildfire	Extreme Weather	Water Quality	Transportation Related	Health Pandemic	Environmental Hazards
Bucks	o	o		o		o	o	
Burlington	o	o	o	o			o	o
Camden	o	o	o	o			o	o
Chester	o				o		o	
Delaware	o			o		o	o	o
Gloucester							o	
Mercer	o	o		o			o	o
Montgomery	o	o		o		o	o	
Philadelphia	o			o			o	o

Source: County Hazard Mitigation Plans (See Sources Page)

Closure of Major Employer Scenario

This scenario assumes the temporary or permanent closure of an employer that comprises a large percentage of local jobs. Seven of the top 10 employers in the region are within the education and health sectors. The lack of sector diversification leaves the region at risk for high unemployment in the unlikely scenario of a closure or event that forces work to come to a halt.

IMPACT

Increase in unemployment rate and needed assistance

Decreased local spending

Greater need for social and emotional support services

Potential home foreclosure and rental payment delinquencies

PREPARATION

Create business retention and expansion plans to determine employer needs and concerns

Develop an effective talent supply and retraining pipelines

RECOVERY STEPS

Determine if employees' rights were violated by employer

Determine if the employer is eligible for reduced reporting requirements or other allowances to government agencies

Help laid-off employees to file initial application for unemployment benefits

Initiate Trade Adjustment Act (U.S. Department of Labor) support services, including training, job search, and relocation allowances (if applicable)

RESOURCES

PA Department of Labor and Industry Rapid Response

PA Worker Adjustment and Retraining Notification (WARN)

NJ Worker Adjustment and Retraining Notification (WARN)

NJ Department of Labor and Workforce Development

Public Health Event Scenario

Public health events can be short or long-term, but either is able to cause significant disruptions in everyday tasks and workforce capacity, ultimately threatening the viability of a business.

IMPACT	PREPERATION	RECOVERY STEPS	RESOURCES
Increased health care costs and associated burdens	adequate personnel levels and necessary programs	Follow state and federal protocols for immediate incident response	PA Health Alert Network
Severe pressure on healthcare system, utilization, and capacity	Confirm an Incident Response Framework is in place and plan for public health events	Share accurate information with the public	NJ Health Services Portal
Workforce shortages	Build up reserves of materials such as face masks, vaccines, ventilators, and other equipment for future health emergencies.	Take prescribed action to prevent spread of disease, if applicable	CDC-Emergency Preparedness and Response
Business slowdowns and closures		Follow guidelines for public quarantines and business shutdowns	Public Health Emergency Response Teams (PHERST)
Changes to built environment to accommodate protective measures		Work with officials to get necessary supplies to those in need	PA Department of Health
Increased regulatory and code enforcement burdens			NJ Department of Health

Catastrophic Flooding Scenario

Unprecedented rainfall floods hundreds or thousands of acres of homes, infrastructure, and businesses.

IMPACT

Long-term illness and loss of life

Damage/destruction of housing would exacerbate existing shortages

Damage /destruction of office, commercial, and industrial facilities would adversely impact economic growth

Damage/ destruction of natural and man-made tourism amenities could affect visitation rates

Road drainage systems may not be adequate to handle increased runoff, debris, and sediment during and after

PREPARATION

assessments to determine flood potential

Coordinate outreach to residents, landlords, and businesses to procure necessary flood insurance policies, as necessary and available

Develop and update coordinated response plans in case of flooding

RECOVERY STEPS

Identify temporary shelter, food, medicine, and other pressing resident issues

Assess damage to homes and businesses to determine safety

Identify special clean up benefits for residents/businesses

Identify technical assistance and funding to rebuild property and inventories

Work with government agencies to apply and secure funding

RESOURCES

Federal Emergency Management Agency (FEMA)

Heath and Human Services Office of the Assistant Secretary for Preparedness and Response (ASPR)

ASPR-Technical Resources Assistance Center and Information Exchange (TRACIE)

PA Emergency Management Agency (PEMA)

NJ Mitigation Assistance

American Institute of Architects Hazard Mitigation Resources

Wildfire Scenario

Uncontrolled fire destroys hundreds or thousands of acres of forest land, homes, infrastructure .

IMPACT

Damage or destruction of housing would exacerbate existing shortages

Damage or destruction of office, commercial, and industrial buildings and facilities would adversely impact economic growth

Damage or destruction of natural and man-made tourism amenities could affect visitation rates

Wildfire can result in soil erosion that limits regrowth potential

Road drainage systems may not be adequate to handle increased runoff, debris, and sediment after a fire

PREPARATION

Conduct home and business assessments to determine levels of fire safety

Work with US Forest Service to ensure all proactive measures are taken to prevent against the spread and impact of fire, including soil erosion control measures

Coordinate outreach to residents, landlords, and businesses to procure necessary fire insurance policies, as necessary and available

Develop and update coordinated response plans in case of fire emergency

RECOVERY STEPS

Identify temporary shelter, food, medicine, and other pressing resident issues

Assess damage to homes and businesses to determine if they are safe to reenter

Assess natural and manmade resources to determine the extent of damage and estimated recovery time and cost

Support residents and businesses to identify benefits

Assist landowners with reforestation, replanting and other resource conservation practices

Work with businesses to identify technical assistance and funding to rebuild property and inventories, and secure resources to restart operations

RESOURCES

PA Department of Conservation and Natural Resources

NJ Forest Fire Service

U.S. Fire Administration

National Fire Protection Association (NFPA)

Red Cross

SmokeyBear.com

Ready.gov

Wildland Fires (U.S.D.A.)

Data Sources

Slides 3-44

U.S. Bureau Economic Analysis (2016, 2021)

U.S. Census Bureau, American Community Survey (ACS), 5-Year Estimates (2011-2015) (2016-2020)

U.S. Census Bureau, County Business Patterns (2016, 2017, 2020)

U.S. Environmental Protection Agency (EPA) Air Quality Index by CBSA (2022)

U.S. Environmental Protection Agency (EPA) Greenhouse Gas Emissions from Large Facilities (2021)

Slides 46-59

Frey, Carl Benedikt & Osborne, Michael, "*The Future of Employment: How Susceptive Are Jobs to Computerisation?*" Oxford University (September 2013)

U.S. Census Bureau, North American Industry Classification System (NAICS) (2022)

U.S. Bureau of Labor Statistics (BLS), Occupational Employment and Wage Statistics (April 2023)

Zumbrun, Josh. "Is Your Job 'Routine'? If so, It's Probably Disappearing," Wall Street Journal (April 2015)

Documents Referenced (Slide 74)

Bucks County Hazard Mitigation Plan Update, 2021

Burlington County Hazard Mitigation Plan, 2019

Camden County Hazard Mitigation Plan, 2022

Chester County, Pennsylvania, Hazard Mitigation Plan, July 2021.

Delaware County Hazard Mitigation Plan, 2016

Gloucester County Hazard Mitigation Plan, 2021

Montgomery County Hazard Mitigation Plan, 2017

Philadelphia Hazard Mitigation Plan, 2022

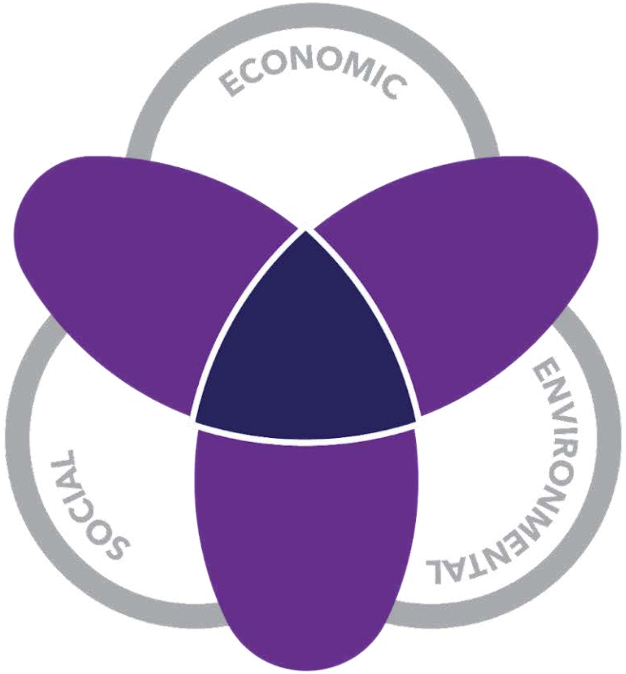
Strategic Directon

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-sector organizations 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 the opportunities and challenges that the region faces.

Although each county and municipality approaches the economic development process differently, they are united in advancing common goals: investing in their people, creating attractive places, and supporting businesses. Continued coordination across state lines, municipal and county lines, employment sectors, and the public and private sectors is essential to maintain a broad regional perspective and to create a thriving region.

Growing Greater Philadelphia focuses on the intersection of community and economic development in the following areas: Prosperity, Livability, Adaptability, and Connectivity.

For each focus area, the action plan includes the strategies, performance metrics, and potential partners. Separately, regional projects have been identified by partners that are most likely to address the greatest needs and/or will increase the region's overall economic competitiveness upon completion.



Focus Areas

PROSPERITY

LIVABILITY

ADAPTABILITY

CONNECTIVITY

Prosperity

In an era defined by systemic change, the region must provide pathways to remove barriers, align resources, and create equitable opportunities to ensure economic success and the well-being of the workforce.

GOAL: RESIDENTS AND BUSINESSES HAVE ACCESS TO THE EDUCATIONAL, TECHNOLOGICAL, AND CAPITAL RESOURCES NEEDED FOR FINANCIAL AND ECONOMIC MOBILITY.

<table>
<tr><th>Strategy</th><th>Potential Performance Metrics</th><th>Partners</th></tr>
<tr><td>Foster a regulatory ecosystem that supports the cultivation of a diverse and local entrepreneurial talent pool.</td><td rowspan="3">Annual Wage Growth
Educational Attainment
Technology-Based Occupations
Number of Job/Skills Training Programs
Number of Minority, Woman-Owned, Immigrant and Disadvantaged Businesses
Employment Growth
Research and Development Investments
Exports/Imports
Regional Startups</td><td rowspan="3">Employers
PA Career Link/NJ Career Connections
Private Sector
All Levels of Educational Institutions
U.S. Department of Labor
Workforce Investment Boards
All Levels of Government
Minority Business Development Groups
National Association of Women Business Owners (NAWBO)
Small Business Development Centers (SBDCs)
Job Placement Agencies</td></tr>
<tr><td>Support the region’s innovation districts and PROPEL Tech Hub, while seeking research and development investments to enable creativity and economic diversification.</td></tr>
<tr><td>Equip the regional workforce with the relevant skills needed to be able to adapt to advancements in production and distribution.</td></tr>
</table>

Livability

Photo: Spencer Gober, DVRPC

Changing workforce dynamics and heightened competition from peer regions requires that Greater Philadelphia be a place where people choose and can afford to live and thrive.

GOAL: QUALITY OF LIFE IMPROVEMENTS LEAD TO TALENT AND RESIDENT AND BUSINESS RETENTION AND GREATER RELIABILITY IN WORKFORCE PRODUCTIVITY.

Strategy	Potential Performance Metrics	Partners
Employ placemaking initiatives that leverage and enhance the region’s unique identity, natural environment, and cultural amenities. Support the development of a variety of housing types to preserve regional affordability and meet the needs of a wider range of households. Pursue opportunities to assess and clean up contaminated properties throughout the region. Promote primary prevention strategies and healthy built environments as ways to reduce healthcare needs.	Net Migration Number of Community Farms Number of Buy Local Programs Tourism Visitation Tourism-Related Jobs Historic Protected Properties Number of Arts/Culture Venues Housing Unit Distribution Tax Credits in Use Health Data Housing and Transportation Index Number of Brownfields/Greyfields	All Levels of Government Chambers of Commerce Food Industry Partners Local Downtown/Improvement Districts Arts Community Destination Marketing Organizations (DMOs) Tourist Attractions/Destinations Convention Boards Transit Providers Housing Organizations Private Housing Developers Employers

Adaptability

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Global events and climate change have underscored the need to anticipate and respond to changing economic, environmental, and social dynamics.

GOAL: THE REGION REMAINS ECONOMICALLY COMPETITIVE WHILE ANTICIPATING AND MITIGATING THE ADVERSE IMPACTS OF CLIMATE CHANGE AND GLOBAL FORCES.

Strategy	Potential Performance Metrics	Partners
Diversify economic sectors to reduce the impacts of future economic downturns, regardless of causality. Prevent future development patterns from encroaching into ecologically sensitive and agriculturally productive areas. Invest in adaptation and enhance resilience in the natural and built environment, including the relocation of at-risk structures.	Number of Regional Unhealthy Days Regional Acres of Open Space Number of Energy-Related Businesses LEED Building Certifications Flood Insurance Claims Clean Economy Industry Employment Large Facility GHG Emissions by Industry Home Fuel Heating Sources Water Quality Data Percent of Energy from Renewable Sources	All Levels of Government Philanthropic Organizations Building, Trade, and Code Organizations Economic Development Organizations Green Building United Insurance Companies Power Companies U.S. Green Building Council County Planning Partners Environmental Protection Agency (EPA) Green Stormwater Partners NJ Environmental Infrastructure Trust Public and Private Water/Sewer Companies Energy Coordinating Agency Philadelphia Energy Authority Philadelphia Green Capital Corp.

Connectivity

The evolving economy places higher importance on expanded and improved telecommunications, clean and reliable energy systems, and convenient and connected transportation infrastructure.

GOAL: RESIDENTS AND BUSINESSES HAVE ENHANCED AND RELIABLE ACCESS TO REGIONAL, NATIONAL, AND GLOBAL ECONOMIES.

Strategy	Potential Performance Metrics	Partners
	Broadband Density	All Levels of Government
Expand and adopt new telecommunications infrastructure and technologies.	Number of Broadband Providers	NJ Department of Transportation
	Investments in Public Infrastructure	PennDOT
	Number of Jobs in Transportation Industry	Goods Movement Community
	Port Investments	Transit/Transportation Stakeholders
Support multimodal transportation investments to improve access to jobs, quality housing, and education.	Electric Vehicle Investments	U.S. Department of Energy
	Home Weatherization Investments	U.S. Environmental Protection Agency
	Home Electrification Conversions	Energy Coordinating Agency
	Number of Solar Installments	Philadelphia Energy Authority
Modernize the region's freight infrastructure to increase supply chain efficiencies and connectivity.	Energy Star Buildings	Philadelphia Green Capital Corp.
	Foreign Investments	Utility Companies
	Enplaned passengers	
Support the transition to an energy efficient, electric and renewables-based economy.	Air Freight	
	Annual Port Tonnage	