



Autumn 2019

Berkshire 2019 Data Package Update

Regional Workforce Skills Planning Initiative

Objectives

- Update contextual regional labor market information
- **Narrow scope of data/discussion to focus on regional priority/critical industries**
- Confirm regional high priority industries and occupations through updated demand star rankings and skill gap analysis
- Evaluate any new demographic, labor pool, and talent pipeline considerations impacting workforce skill gaps
- **Introduce new dynamic data tools**

Table of Contents

Part I. **Regional Industry Overview and Profiles**

A: Sector Makeup by Employment and Wages

B: Priority Industry Profiles

- i. Groups and Employers
- ii. Employment by Educational Attainment
- iii. Occupations

Part II: **Supply Gap Analysis**

- i. Regional Sub-BA Occupations
- ii. State BA+ Occupations

Part III: **Workforce Supply Analysis**

A: Apprenticeships

B: Professional Licensing

Part IV: **New Data Tools**

Appendix

- A: Regional Context
- B: Worker Characteristics
- C: Priority Industry Profiles
- D: Critical Industry Profiles
- E: Professional Licensing

Glossary

Part I: Regional Industry Overview and Profiles

Who are the employers in our region?

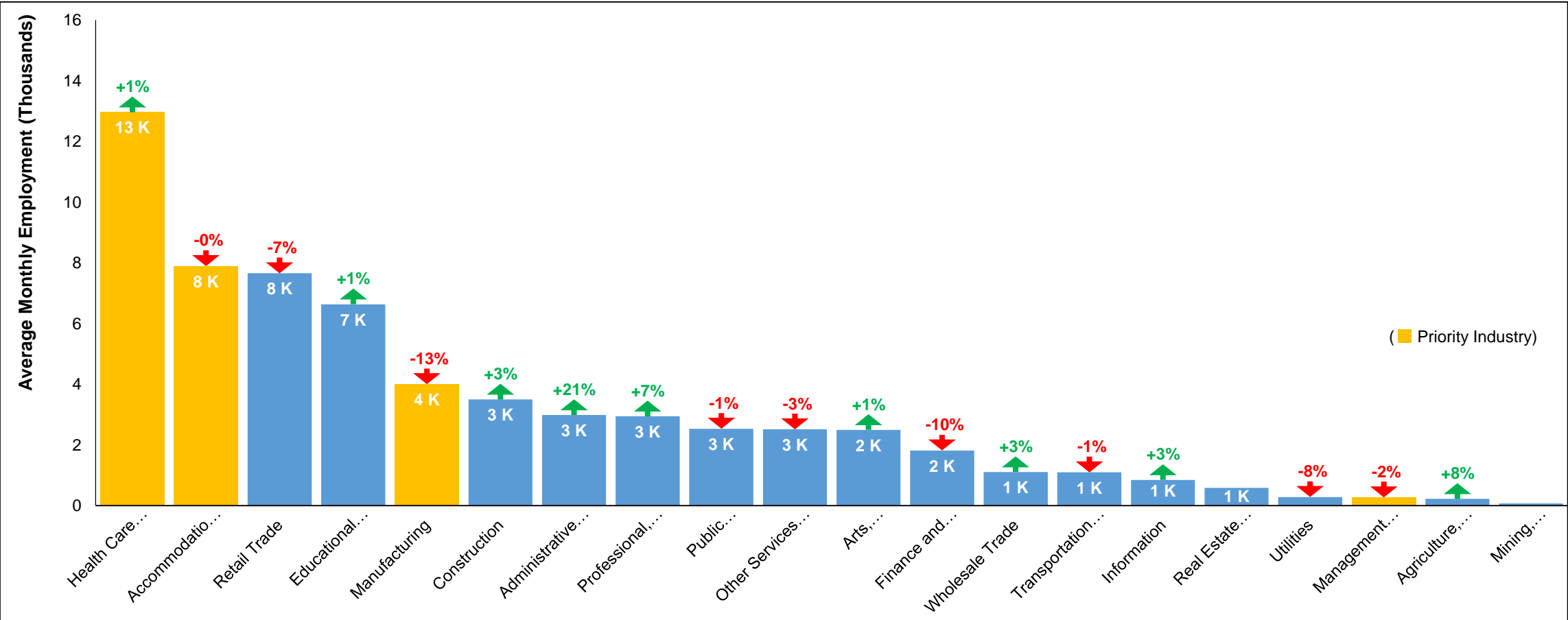
Terminology

Industry Sector	Sectors that represent general categories of economic activities, 2 digit NAICS
Industry Group	More detailed production-oriented combinations of establishments with similar customers and services, 4 digit NAICS

I.A: Regional Industry Overview

Sector Makeup by Total Employment

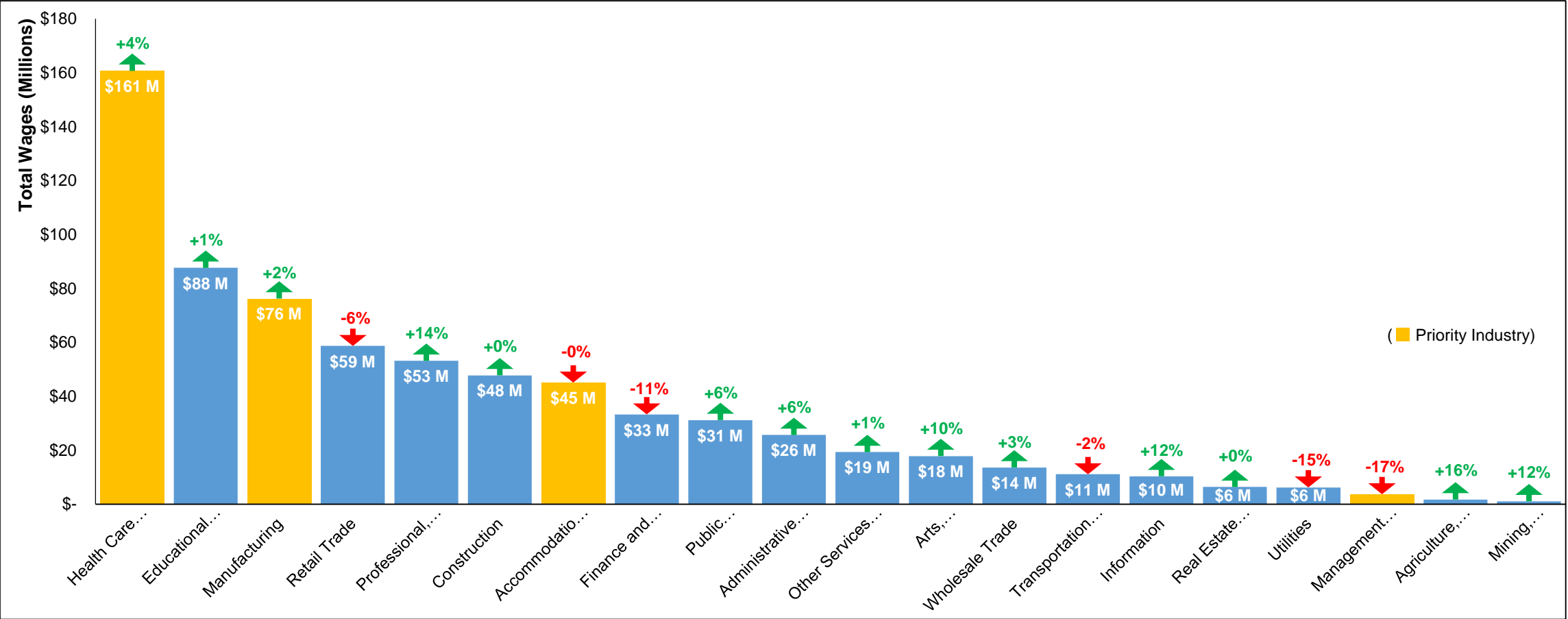
Healthcare and Social Assistance is the largest industry in the Berkshires, followed by Accommodation and Food Service and Retail, which each employ about two-thirds as many jobs as there are in Healthcare.



Note: The arrows above the bars indicate the percent change in employment from 2016 to 2018.

Sector Makeup by Total Wages

Healthcare and Social Assistance pays the most in wages of any industry in the Berkshires, followed by Educational Services and Manufacturing.



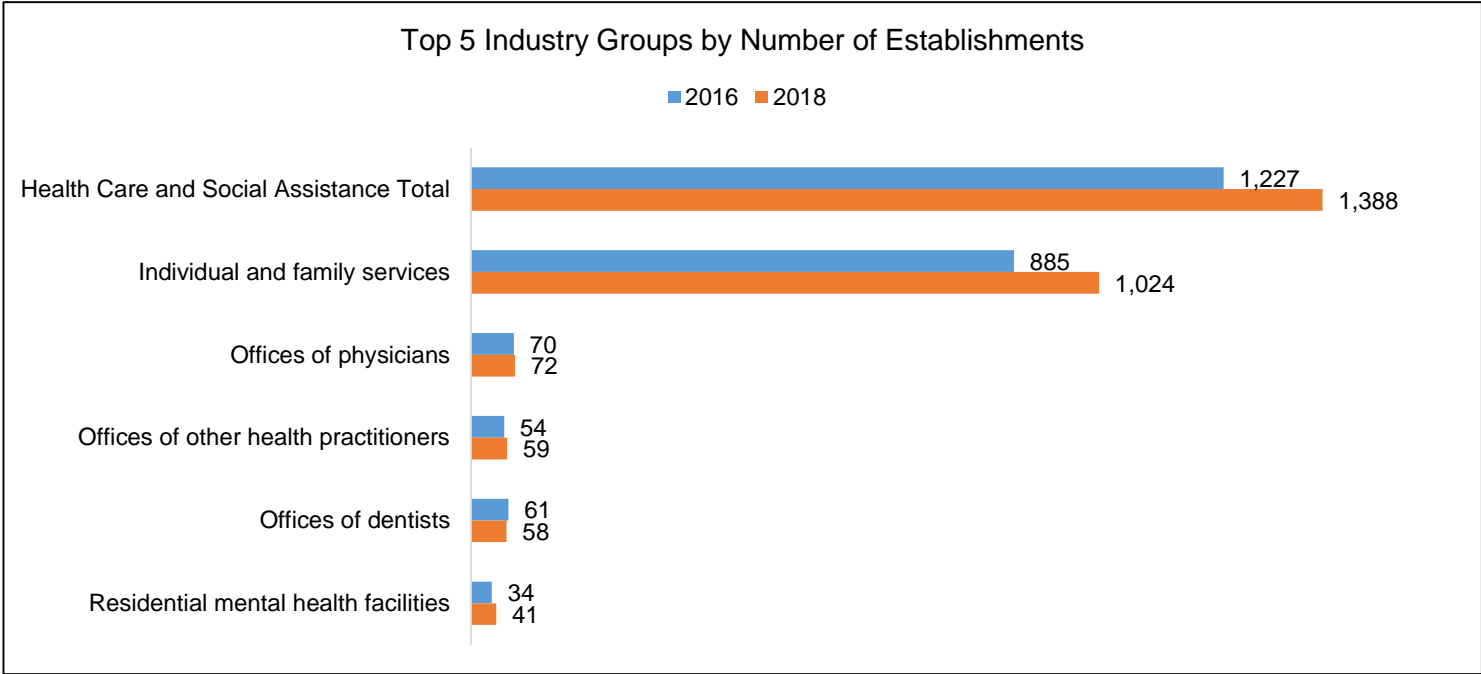
Note: The arrows above the bars indicate the percent change in total wages from 2016 to 2018.

I.B: Priority Industry Profiles

Healthcare and Social Assistance

Healthcare and Social Assistance Groups and Employers

More than 150 Healthcare and Social Assistance establishments were added in the Berkshires between 2016 and 2018, driven primarily by the increase in Individual and Family Services. Over the last 12 months, Berkshire Health Systems had the largest number of job postings in the region, with 434 postings.



Source: DUA/BLS Quarterly Census of Employment and Wages, Q3 2016 – 2018

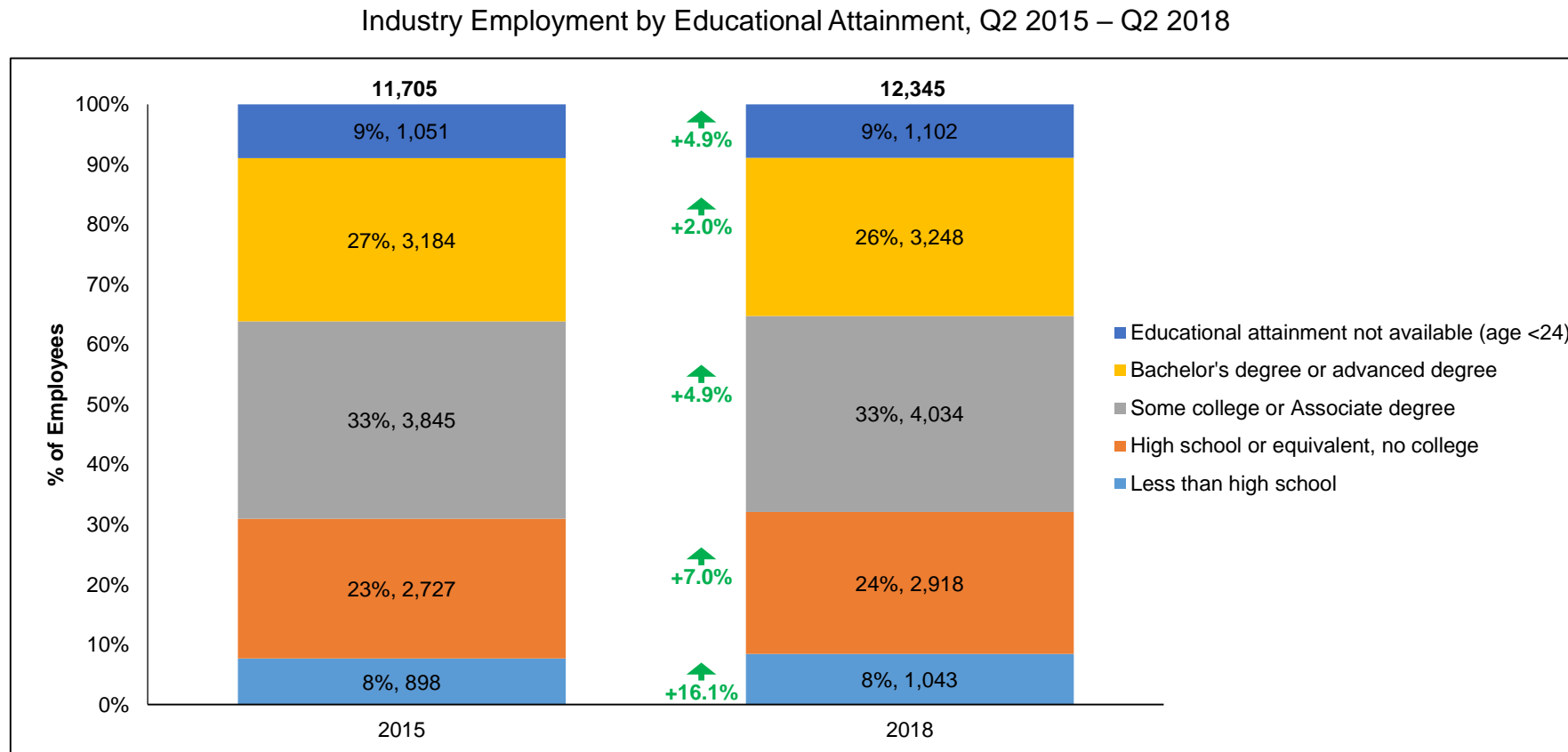
Largest Employers by 12-Month Regional Job Postings

Employer	Job Postings
Berkshire Health Systems	434
Genesis Healthcare Corporation	32
Vohra Wound Physicians	24
Amedisys	22
Aspen Dental	22
Nursefly Travel Nursing	21

Source: Burning Glass, 2019

Healthcare and Social Assistance by Education

Workers in Healthcare and Social Assistance are almost evenly distributed between those who have a Bachelor's degree or higher, Some College or Associate degree, or High School equivalent or less.

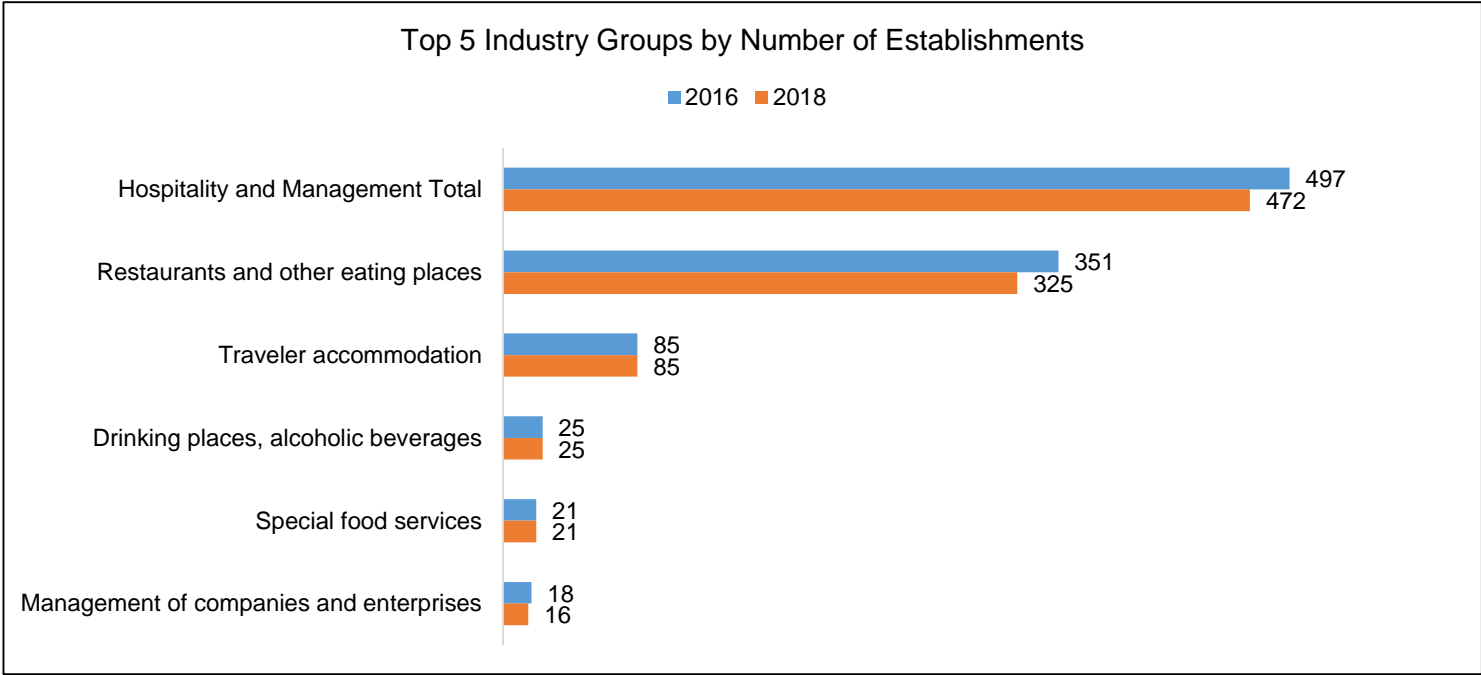


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – 2018

Hospitality and Management

Hospitality and Management Groups and Employers

The number of Hospitality and Management establishments in the Berkshires declined slightly from 2016 to 2018. Over the last 12 months, Canyon Ranch had the most job postings in the region, with 45. Compass Group (37) and The Williams Inn (36) followed.



Source: DUA/BLS Quarterly Census of Employment and Wages, Q3 2016 – 2018

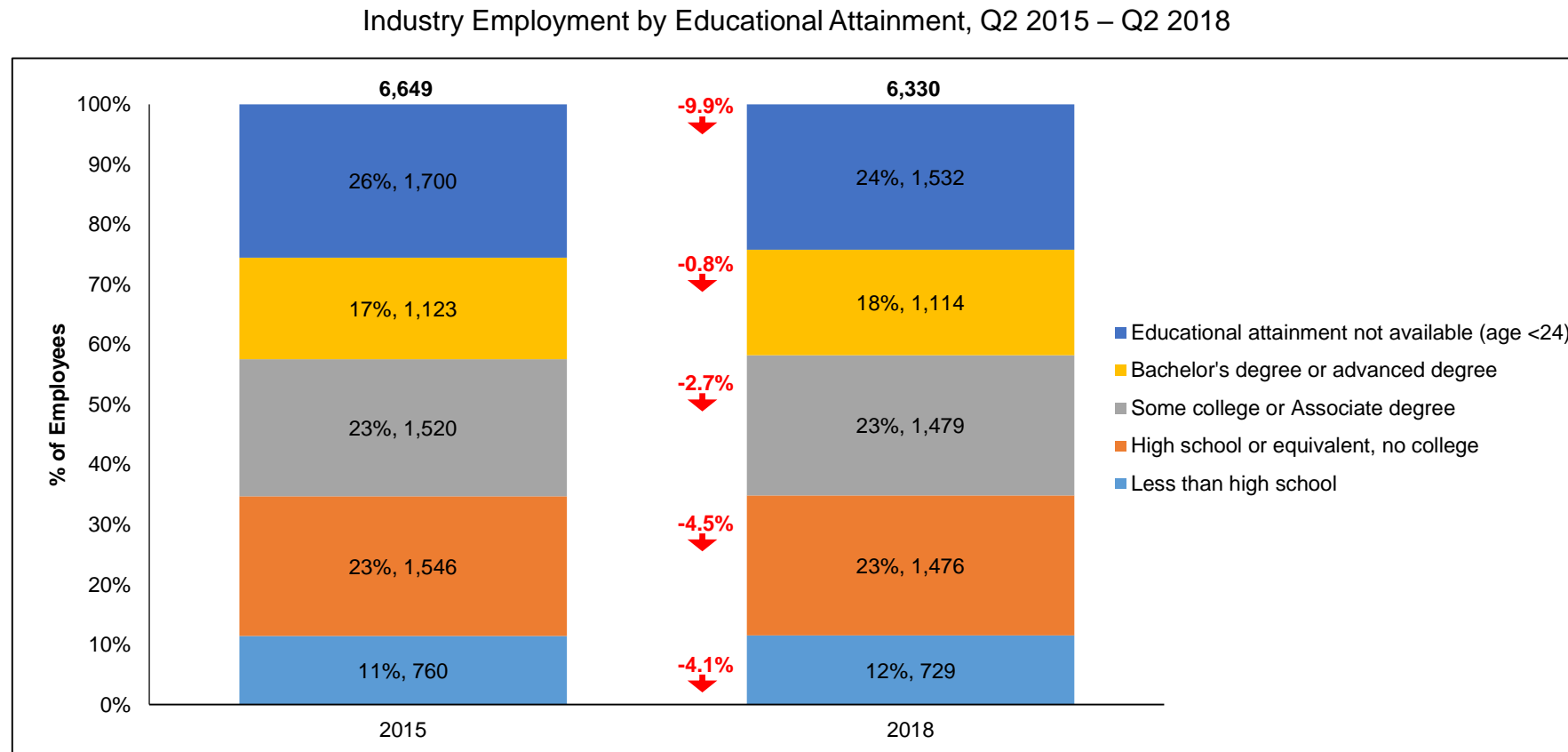
Largest Employers by 12-Month Regional Job Postings

Employer	Job Postings
Canyon Ranch	45
Compass Group	37
The Williams Inn	36
Hyatt	33
Wyndham Destinations	29
Aramark	25

Source: Burning Glass, 2019

Hospitality and Management by Education

More than 40% of workers in the Hospitality and Management sector have some college or higher level of education. 34% of this industry's workers in the Berkshires have a High school equivalent or less.

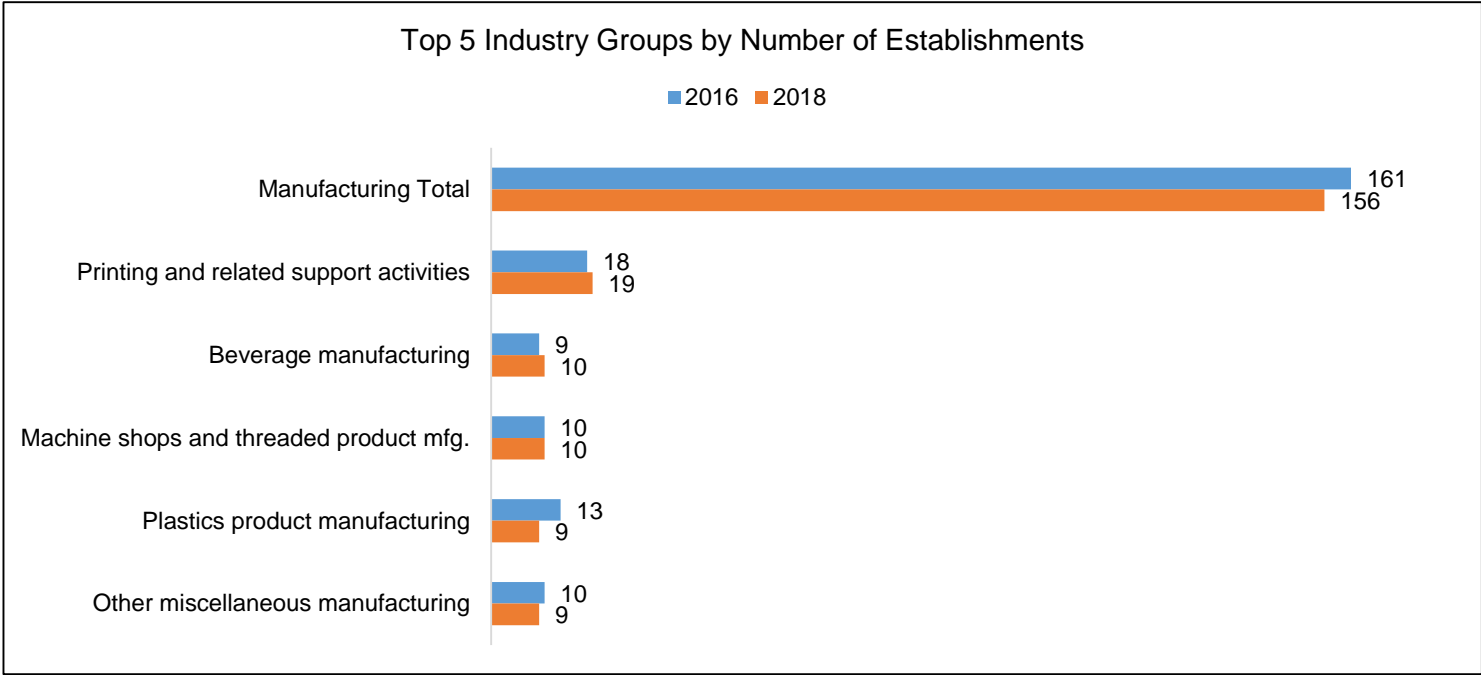


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – 2018

Manufacturing

Manufacturing Groups and Employers

The number of Manufacturing establishments in the Berkshires has stayed relatively stable since 2016. Over the last year, General Dynamics had the most job postings (490) in the region.



Source: DUA/BLS Quarterly Census of Employment and Wages, Q3 2016 – 2018

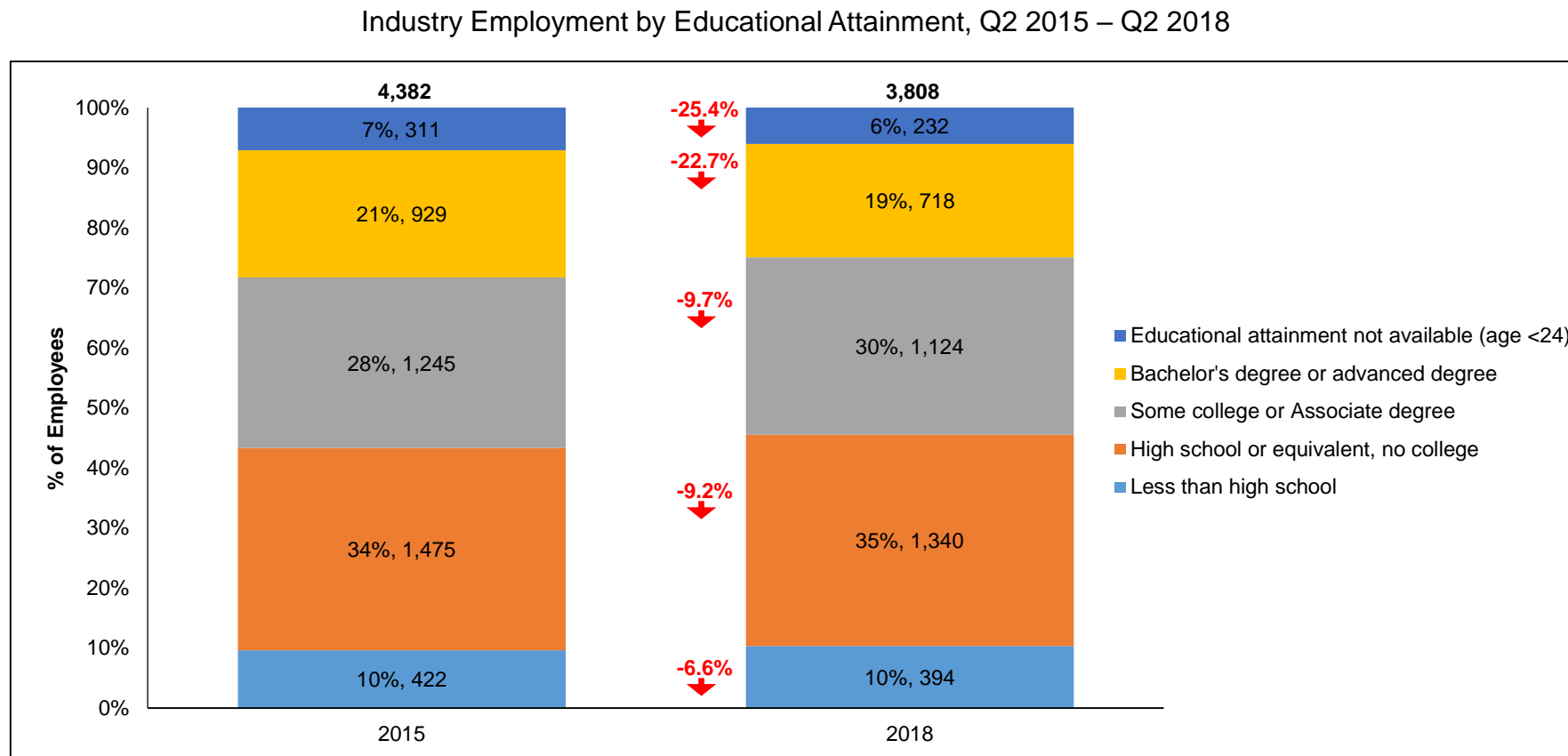
Largest Employers by 12-Month Regional Job Postings

Employer	Job Postings
General Dynamics	490
Crane Company	48
Advanced Drainage Systems	37
Neenah Paper	16
Raytheon	12
Stanley Black & Decker	12

Source: Burning Glass, 2019

Manufacturing by Education

45% of workers in Manufacturing in the Berkshires have a high school diploma or less. 30% have some college or an Associate degree and nearly 20% have a Bachelor's degree or higher. This mix has been relatively stable since 2015.



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – 2018

Occupations

Terminology

Occupation

A job or profession, not specific to an industry, defined by Standard Occupational Classification (SOC) code

Demand Star Ranking

Ranking of highest-demand, highest-wage jobs in Massachusetts, based on short-term employment projections (2020), long-term employment projections (2026), 12-month job postings from Burning Glass, and median regional occupation wages.

Ranking developed by State of Louisiana's workforce system and implemented with support of Boston Federal Reserve.

Selected Sub-BA Occupations Associated with Priority Industries

				Industry-Specific, Statewide	All Industries, Regional	
Industry	SOC Code	Occupation Title	Educational Requirement	2018 Industry Employment	STAR	Median Annual Wage
Health Care and Social Assistance	29-2021	Dental Hygienists	Associate's degree	5,360	4	\$78,899
	29-2061	Licensed Practical and Licensed Vocational Nurses	Postsecondary non-degree award	14,000	4	\$50,278
	31-9092	Medical Assistants	Postsecondary non-degree award	13,300	4	\$37,606
	49-9021	HVAC Mechanics and Installers	Postsecondary non-degree award	210	4	\$55,504
	15-1151	Computer User Support Specialists	Some college, no degree	820	4	\$45,451
Hospitality and Management	53-3032	Heavy and Tractor-Trailer Truck Drivers	Postsecondary non-degree award	150	4	\$44,780
	29-2061	Licensed Practical and Licensed Vocational Nurses	Postsecondary non-degree award	130	4	\$50,278
	15-1151	Computer User Support Specialists	Some college, no degree	1,130	4	\$45,451
Manufacturing	53-3032	Heavy and Tractor-Trailer Truck Drivers	Postsecondary non-degree award	1,560	4	\$44,780
	49-9021	HVAC Mechanics and Installers	Postsecondary non-degree award	50	4	\$55,504
	15-1151	Computer User Support Specialists	Some college, no degree	1,220	4	\$45,451

All occupations listed are 4- and 5-star occupations requiring a postsecondary non-degree award, some college, or an Associate's degree.
 Bolded occupations occur across multiple industries.

Part II: Supply Gap Analysis

Which occupations are likely to not have enough talent to meet employer demand?

How do we calculate a supply gap ratio?

Supply Gap Ratio = Projected Qualified Individuals Per Opening

- Supply Gap Ratio is a ***proxy measure*** for understanding what occupations are likely to not have enough talent to meet employer demand.
- Supply / Demand = Supply Gap Ratio
 - 100 qualified individuals / 50 potential openings = supply gap ratio of 2
 - 2 qualified individuals per opening (More supply than demand)
 - 6 qualified individuals / 12 potential openings = supply gap ratio of 0.5
 - 0.5 qualified individuals per opening (Less supply than demand)

How do we calculate demand and supply?

Demand

How many potential job openings do we expect for a given occupation?

New Demand Measure, or the average of total number of jobs for each occupation across three data sets...

- 2020 projections from openings and replacement (OES)
- 2026 projections from openings and replacement (OES)
- ***New data source: Burning Glass 12-month job postings (2019)***

NOTE TO DATA USERS: Beginning with this data package, Burning Glass is used to measure advertised online postings, replacing Help Wanted Online as the third component of indexed demand.

Note that this substitution may be responsible for some of the variance between indexed demand as calculated in the original and updated data packages. Direct value comparisons of the occupational demand measures, STAR rankings, and supply gap ratios should be limited.

Supply

How many qualified individuals do we potentially have available to fill a relevant job opening?

Sum of available workers or graduates related to an occupation from multiple data sets...

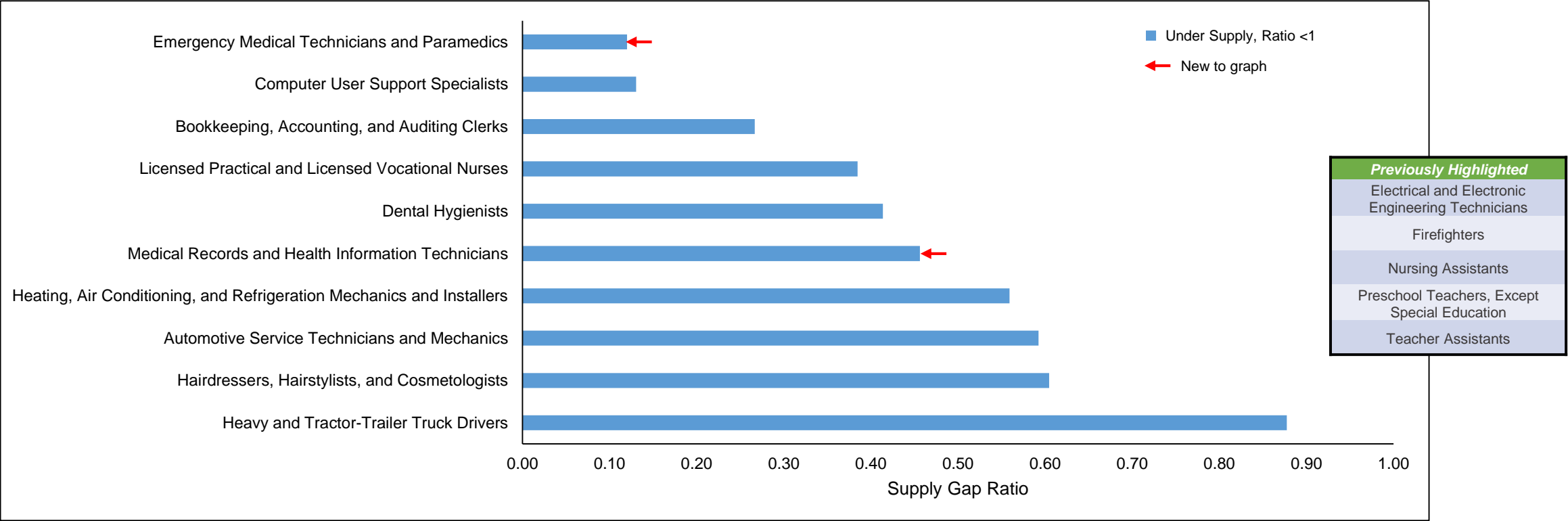
- Unique UI claims, 2018 (DUA)
- Relevant completer data
 - Voc-Tech completers, 2015-2017 average (DESE), 50% available*
 - Community College completers, 2015-2017 average (DHE), 90% available
 - State University completers, 2015-2017 average (DHE), 71% available
 - Private University completers, 2015-2017 average (iPEDS), 55% available

*All retention figures are statewide, studies cited in Data Tool

**Occupations requiring post-secondary education only

More Openings than Qualified: Regional Sub-BA Occupations, 3+ Stars

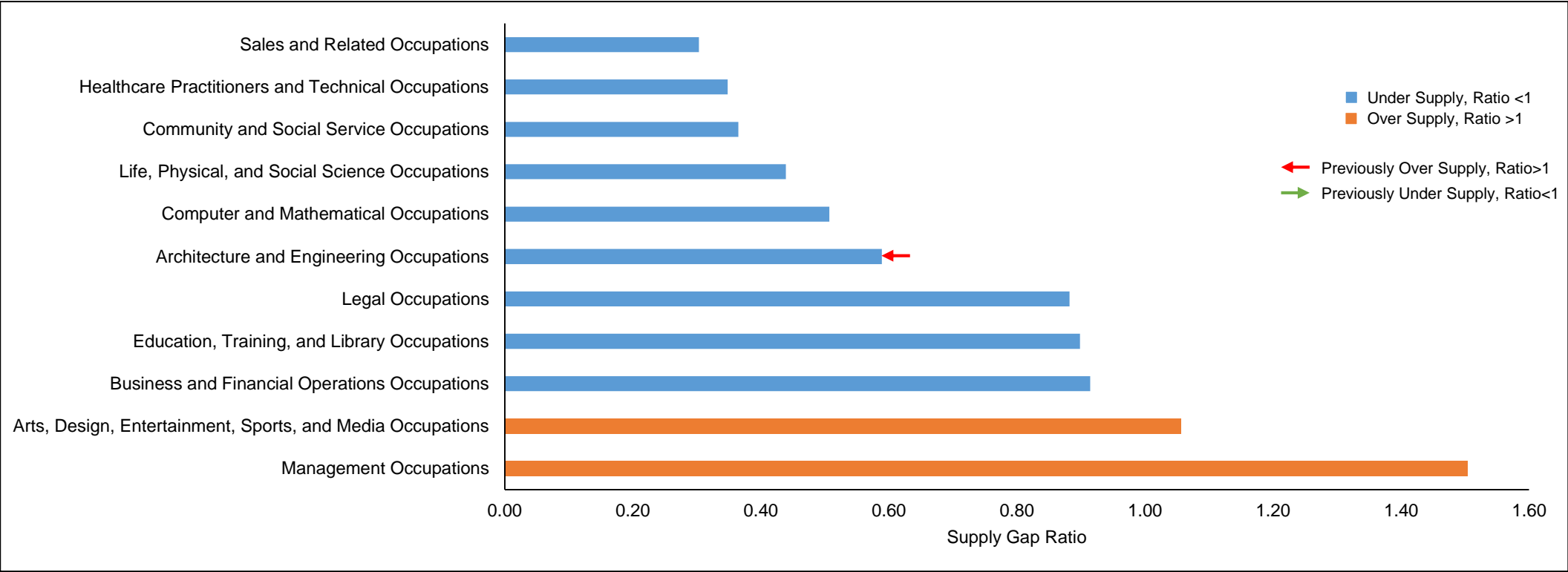
At the sub-BA level, a number of occupations rated 3+ stars do not have enough regional supply to meet employer demand.



3+ star occupations requiring a postsecondary non-degree award, some college, or an Associate’s degree. Demand Index 10+ only.

State Supply Gap Overview: BA+ Clusters

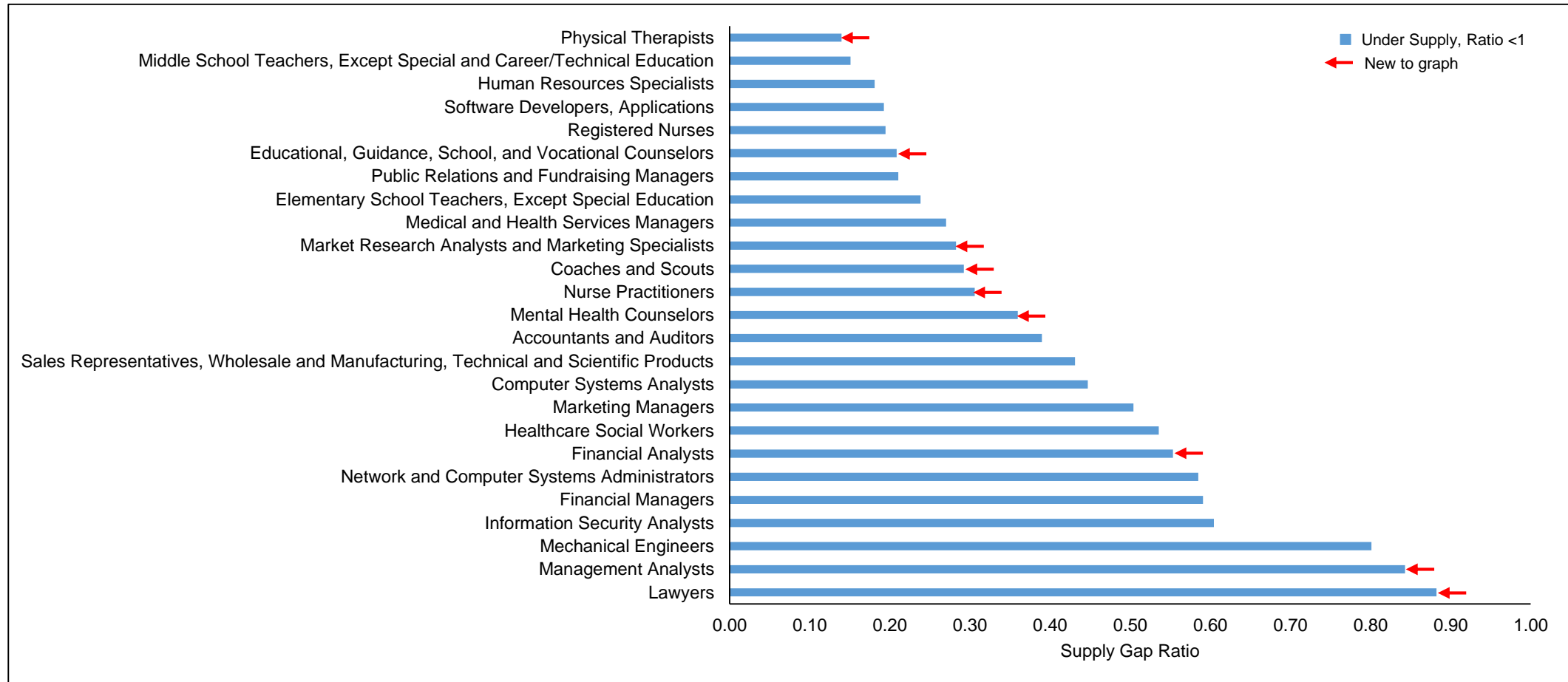
The Computer and Mathematical, Architecture and Engineering, and Legal occupation clusters average the lowest ratios of qualified individuals per opening at the BA+ level.



Occupations requiring a Bachelor's degree or higher, grouped by 2-digit SOC code. Occupation demand Index 100+.
(Star rankings not available at the 2-digit SOC level.)

More Openings than Qualified: State BA+ Occupations

At the BA+ level, there are a number of 4- and 5-star occupations for which demand exceeds the supply of qualified individuals statewide.



4- and 5-star occupations requiring a Bachelor's degree or higher. Demand Index 100+ only.

Occupations new to the graph may have previously had a supply gap ratio >1, a star ranking <4, or demand index <100.

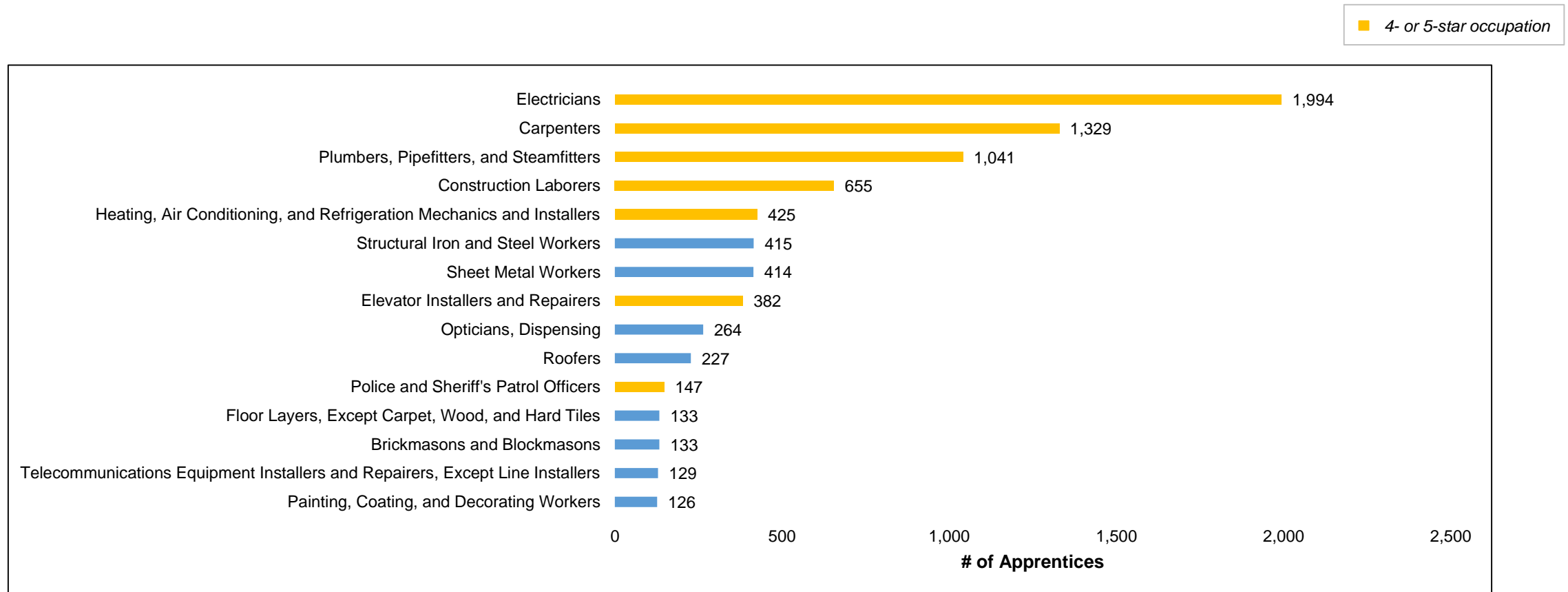
Part III: Workforce Supply Analysis

How many qualified individuals do we potentially have available to fill a relevant job opening?

III. A: Apprenticeships

Top 15 State Occupations by Apprenticeships

Electricians, Carpenters, and Plumbers, Pipefitters, and Steamfitters make up more than half of all apprenticeships statewide. All three of these occupations are ranked 4- or 5-stars, as are several other occupations with a large number of apprentices.



Source: Division of Apprentice Standards, 2019

How do we calculate demand and supply?

Demand

How many potential jobs exist for apprentices in a given occupation in our region?

New Demand Measure, or the average of total number of jobs for each occupation across three data sets...

- 2020 projections from openings and replacement (OES)
- 2026 projections from openings and replacement (OES)
- **New data source:** Burning Glass 12-month job postings (2019)

NOTE TO DATA USERS: Beginning with this data package, Burning Glass is used to measure advertised online postings, replacing Help Wanted Online as the third component of indexed demand.

Note that this substitution may be responsible for some of the variance between indexed demand as calculated in the original and updated data packages. Direct value comparisons of the occupational demand measures, STAR rankings, and supply gap ratios should be limited.

Supply

How many apprentices are qualified to work in these occupations?

Total currently enrolled apprentices...

- Division of Apprentice Standards, 2019

...minus the fraction of total occupation employment assumed to be made up of apprentices

- Bureau of Labor Statistics short-term projections (OES) – 2018 employment base

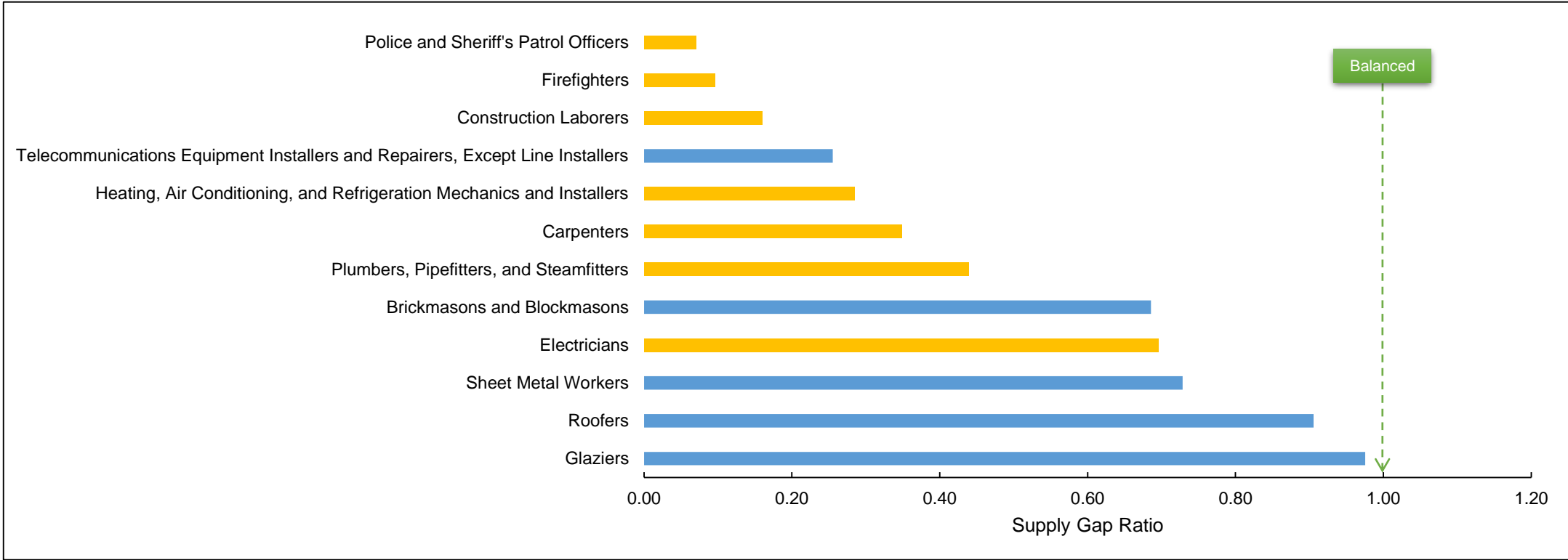
$$\frac{\text{Total Number of Apprentices}}{\text{Total 2018 Employment in Apprentice Trades}} \times \text{2018 Occupation Employment}$$

*All apprentice employment assumptions are statewide—methodology detailed in apprenticeships data tool.

State Supply Gap Overview: Apprenticeships

Employer demand exceeds the supply of apprentices for a number of 4- and 5-star occupations statewide. Of these, Police and Sheriff's Patrol Officers, Firefighters, and Construction Laborers have the fewest apprentices per opening.

■ 4- or 5-star occupation



Source: Division of Apprentice Standards, 2019

Regional Occupation Demand and Supply of Apprentices

In the Berkshires, the most popular occupations for apprentices (Electricians, Carpenters, Plumbers, Pipefitters, and Steamfitters, and Construction Laborers) are ranked 4 stars, indicating high wages and strong projected employer demand.

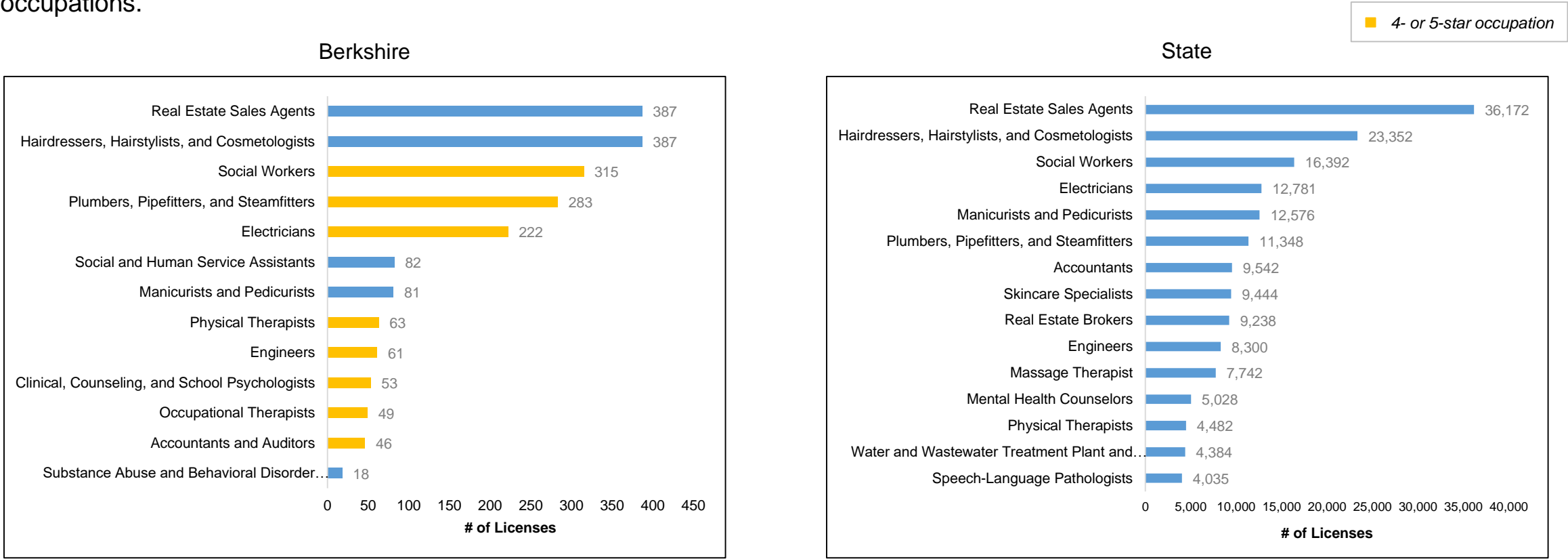
Occupation Title	STAR Ranking	Apprentices	Demand
Electricians	4	32	61
Carpenters	4	13	91
Plumbers, Pipefitters, and Steamfitters	4	11	32
Construction Laborers	4	7	129
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	4	2	31
Police and Sheriff's Patrol Officers	3	1	28

Source: Division of Apprentice Standards, 2019

III. B: Professional Licensing

Top Occupations by DPL Professional Licensing

In the Berkshires, a majority of the top occupations by number of Division of Professional Licensure licenses are 4- or 5-star occupations.



Regional Occupation Demand and DPL Licensing

Comparing the number of license holders with total occupational employment offers another indicator of skill shortages or surpluses in occupational labor markets. While the number of professional licenses exceeds total employment for some occupations, such as Cosmetologists, for others, such as Educational Psychologists, the number of jobs (167) outstrips the supply of licenses (53).

DPL Board / License Type	STARS	Licenses	2018 Employment
Allied Health			
Occupational Therapist	4	49	103
Physical Therapist	4	63	157
Educational Psychologist	4	53	167
Cosmetology			
Cosmetologist (Hairdresser)	3	387	330
Electricians			
Electrician	4	222	400
Engineers And Land Surveyors			
Engineer	4	61	393
Gas Fitters			
Gas Fitter	4	283	211
Public Accountancy			
Certified Public Accountant	5	46	584
Real Estate			
Real Estate Salesperson	3	387	241
Social Workers			
Social Worker, Licensed	4	315	470
Social Worker Assistant	3	82	375

Source: Division of Professional Licensure, 2000-2019;
Bureau of Labor Statistics, Occupational Employment Statistics, 2020 Projections

Selected occupations ranked 3+ stars only. Not inclusive of occupations licensed by agencies other than the Division of Professional Licensure. Licenses must have been issued between 2000 and 2019, and not be expired as of 2019. See Appendix for additional detail.

Part IV: New Data Tools

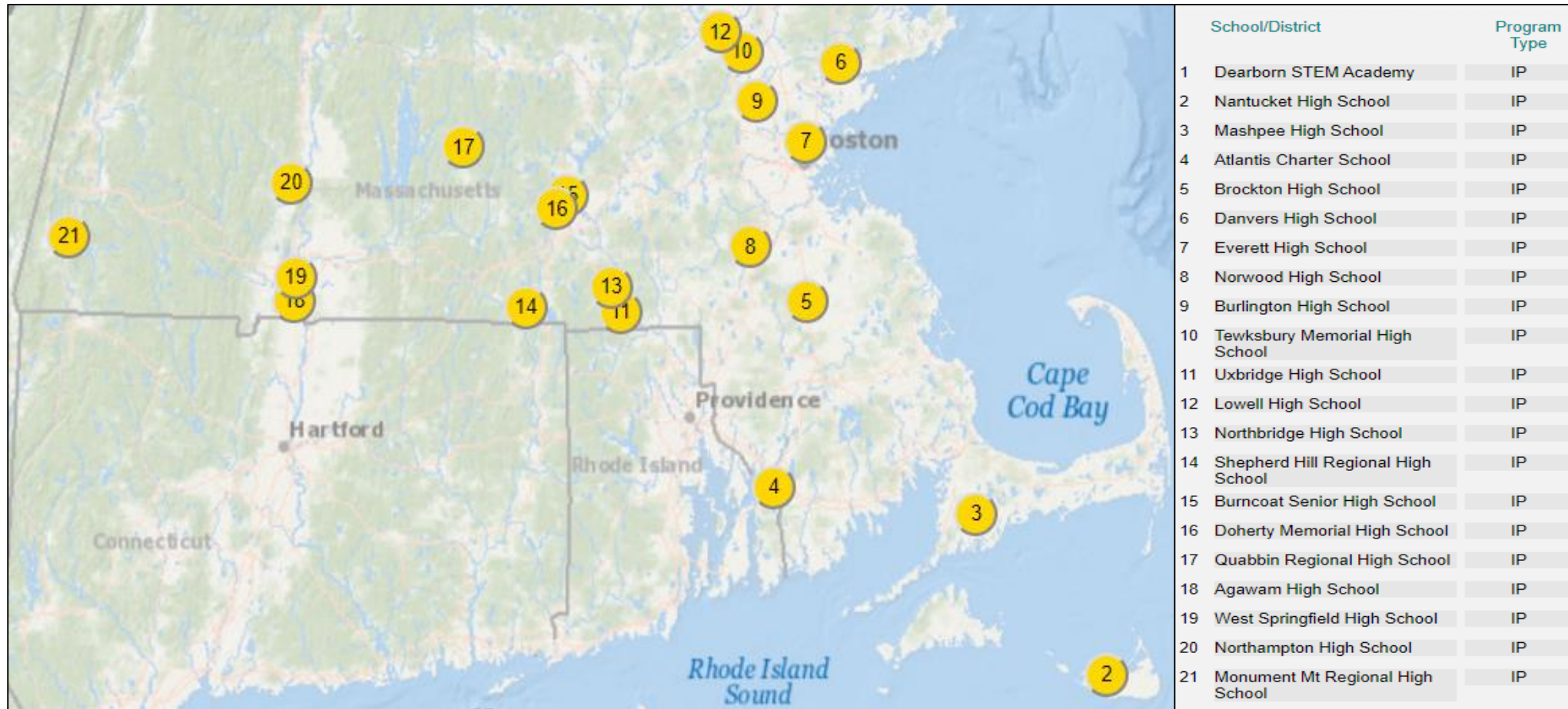
Dynamic Data Tools

As an extension of the data package update, a set of new [dynamic data tools](#) have been developed to support regional planning work.

These tools are intended to act as a resource for your teams to compare data across regions and generate insights beyond the analysis in this data package, with respect to five different areas:

1. Licensure
2. Apprenticeships
3. Regional Sector Makeup
4. Educational Attainment and Employment
5. Worker Characteristics

Education Program Supply



Online Tool: <http://massconnecting.org/pathwaymapping/default.asp#mapping>

Source: Department of Higher Education, 2019

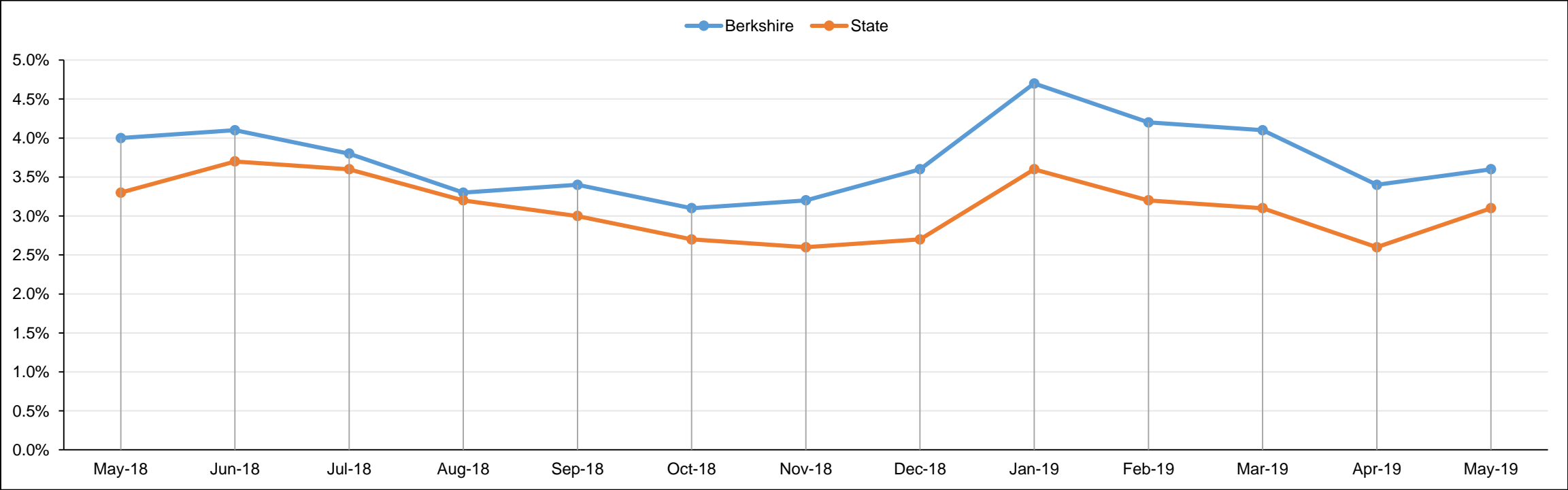
Discussion Questions

- How does this data inform your ongoing work to support regional priority industry and occupations?
- How can you act on this data to accelerate your blueprint priorities?
- This year, we're asking regional teams to develop an "update" to their blueprints. With this data in mind, what might be important to include in your update?

Appendix: Regional Context

Unemployment Rate

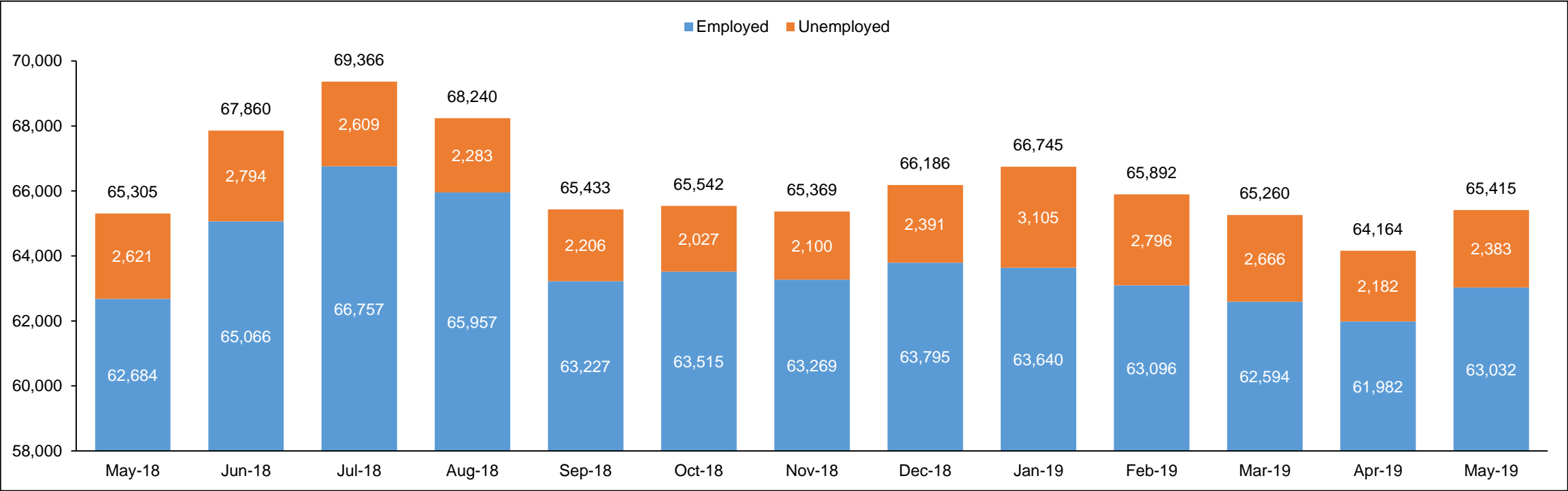
Berkshire’s unemployment rate has been between .5 and 1 percentage points higher than the state average for much of the past year.



Source: Bureau of Labor Statistics, 2016-2019 Seasonally Unadjusted Data

Unemployed v. Employed in Labor Force

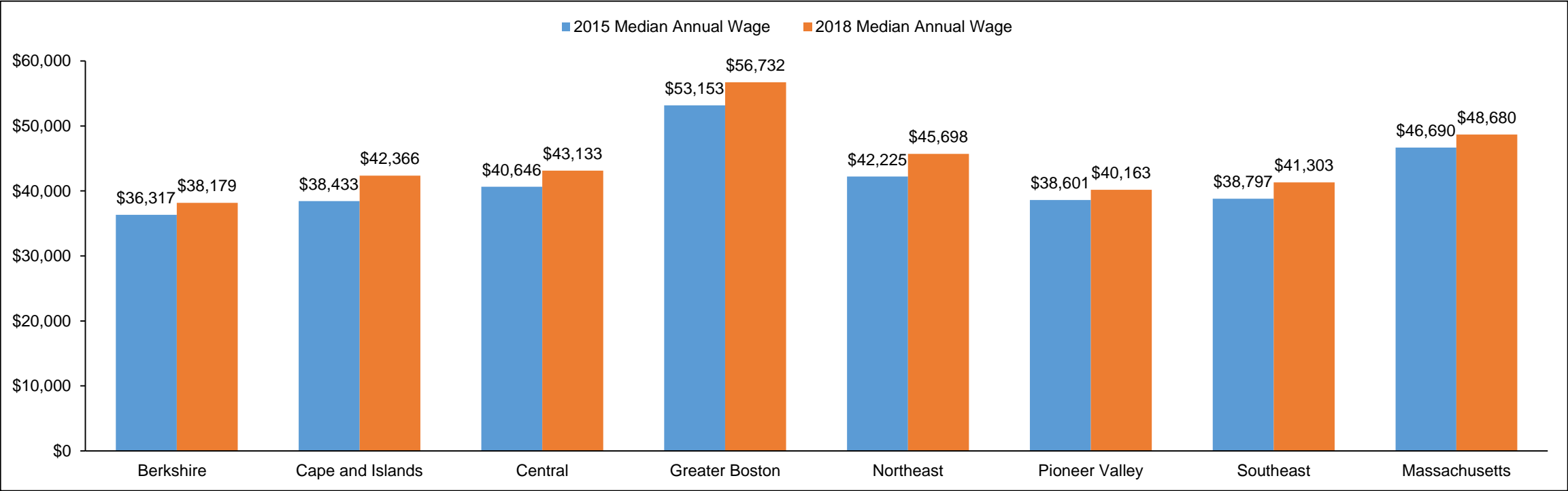
Berkshire’s labor force grows during the summer months, when tourism is strongest.



Source: Bureau of Labor Statistics, 2016-2019 Seasonally Unadjusted Data

Median Annual Wage

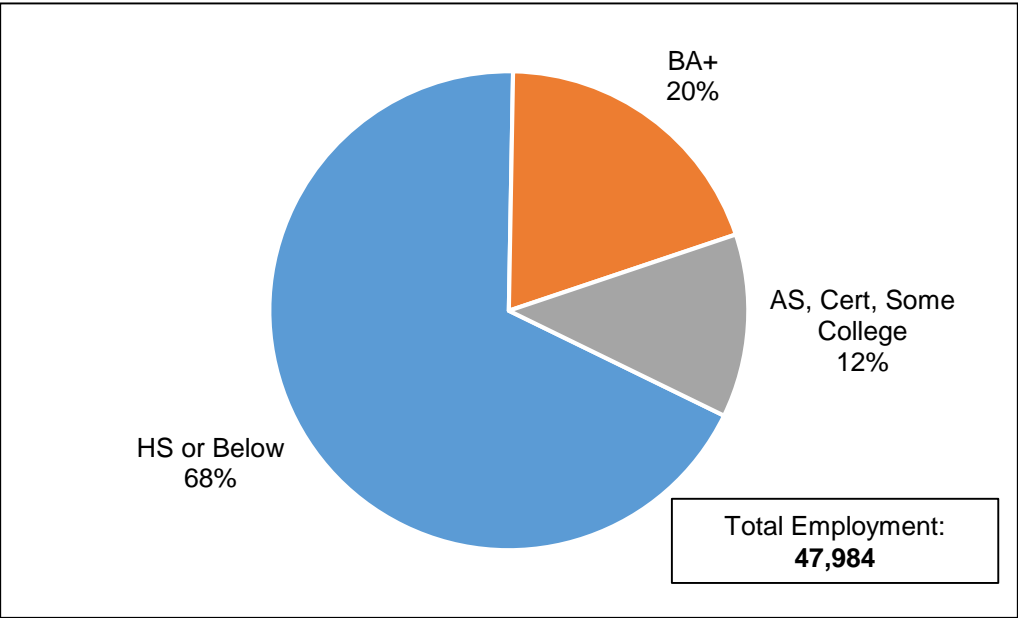
Berkshire’s median annual wage is the lowest across all regions, though it has increased since 2015.



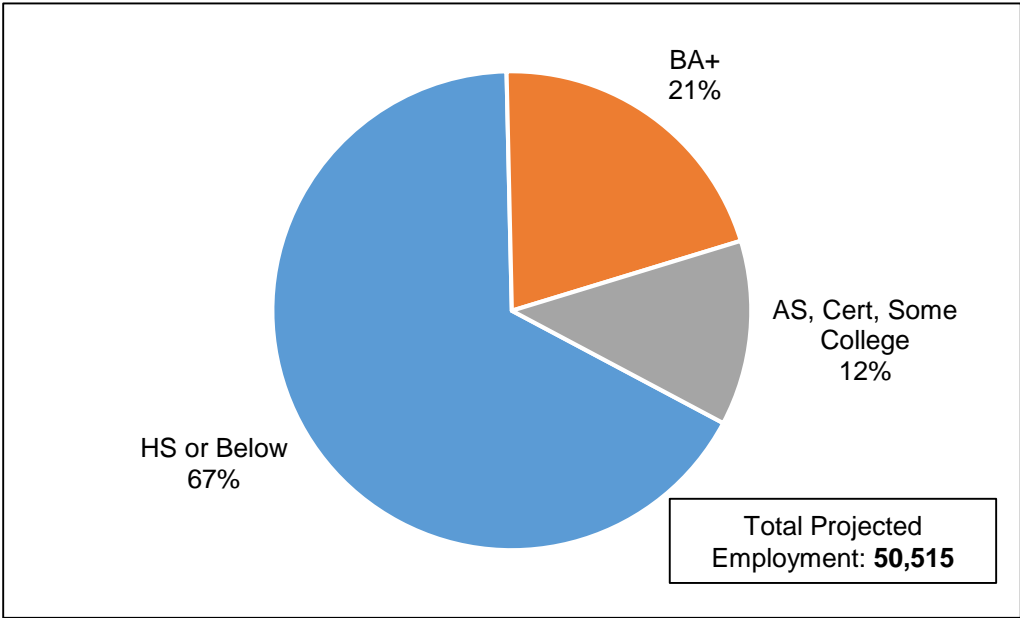
Educational Requirements for Employment

One in five of all jobs in the Berkshires in 2026 are projected to need a Bachelor’s degree or higher and two-thirds will require a high school diploma/equivalency or less.

2016 Employment

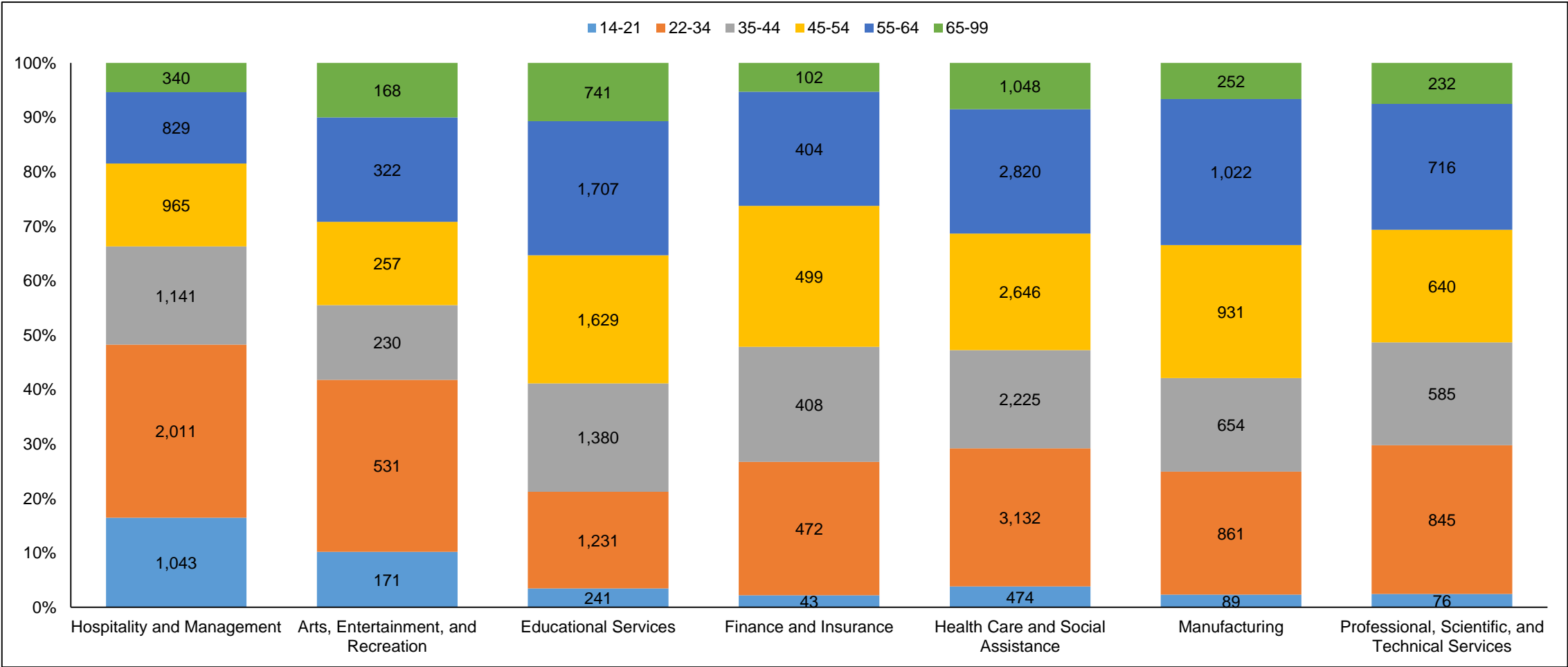


2026 Projected Employment



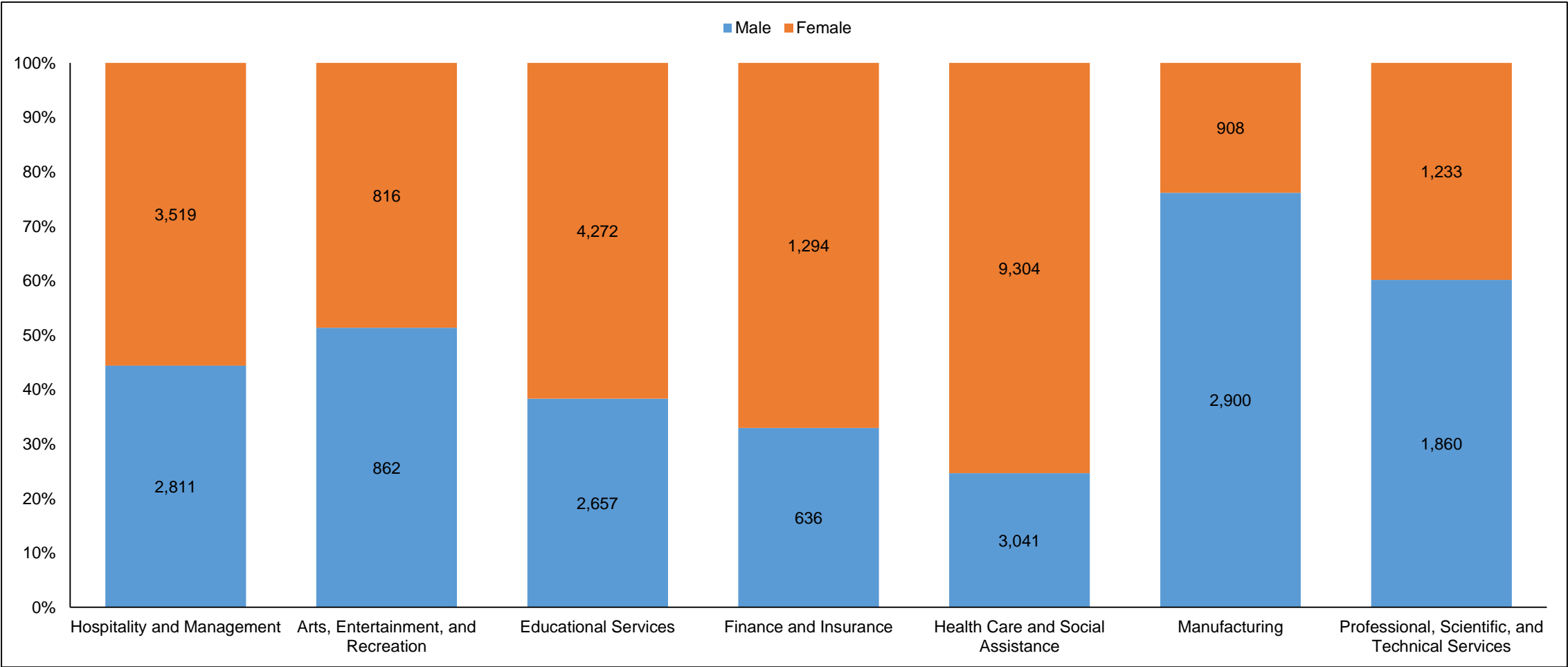
Appendix: Worker Characteristics

Priority and Critical Industries by Age



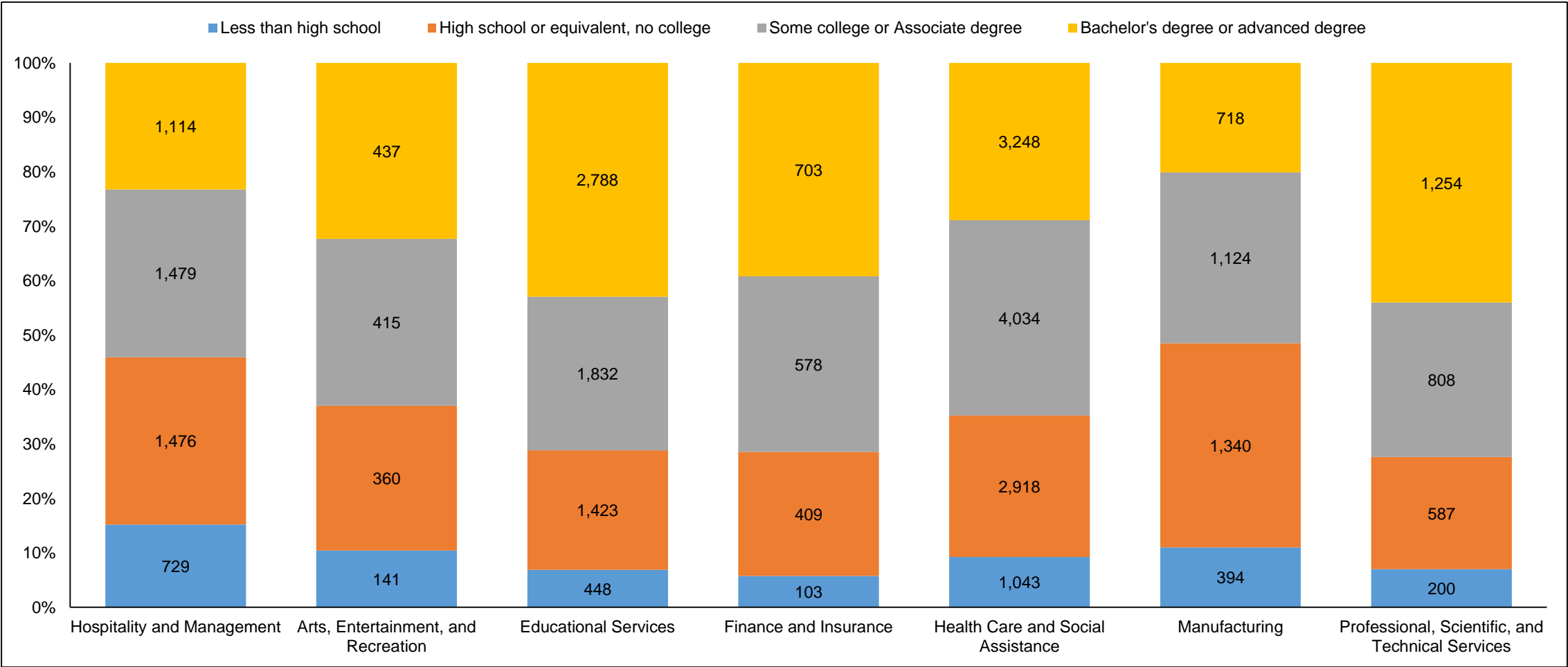
Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Priority and Critical Industries by Gender



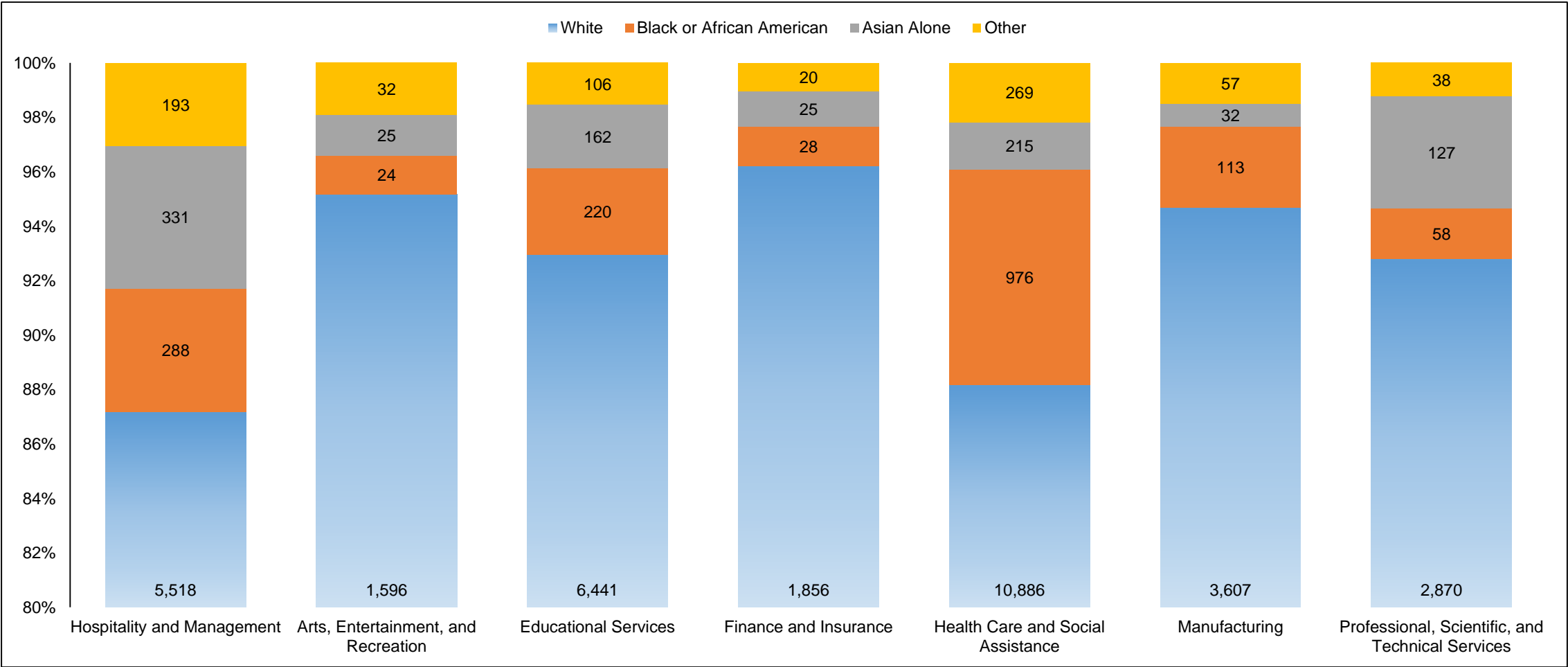
Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Priority and Critical Industries by Educational Attainment



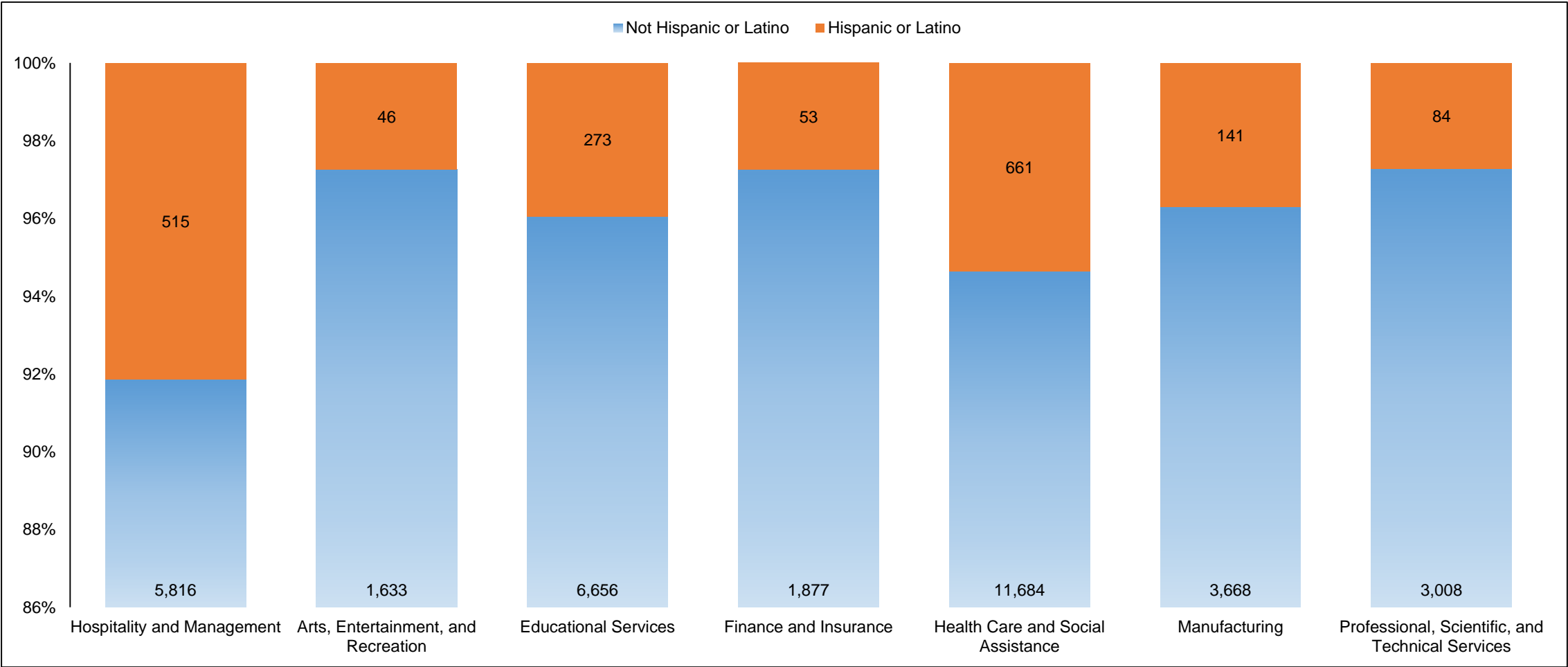
Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Priority and Critical Industries by Race



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Priority and Critical Industries by Ethnicity



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

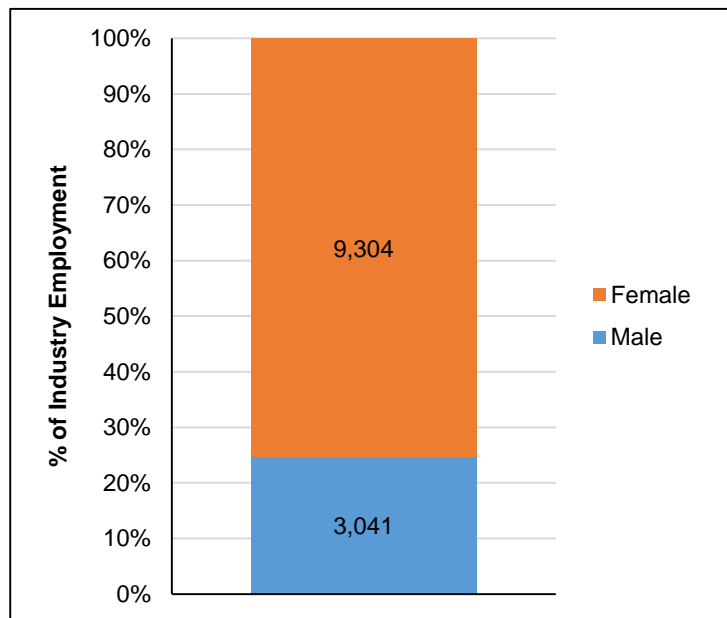
Appendix: Priority Industry Profiles

Healthcare and Social Assistance

Healthcare and Social Assistance by Gender

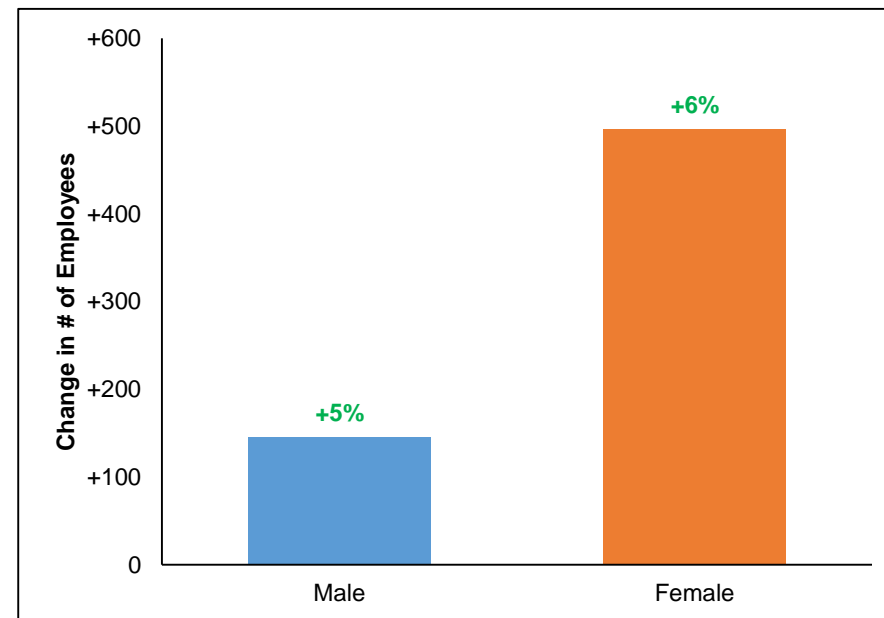
There are far more women than men working in Healthcare and Social Assistance, overall. This reflects the mix of occupations in the sector.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018

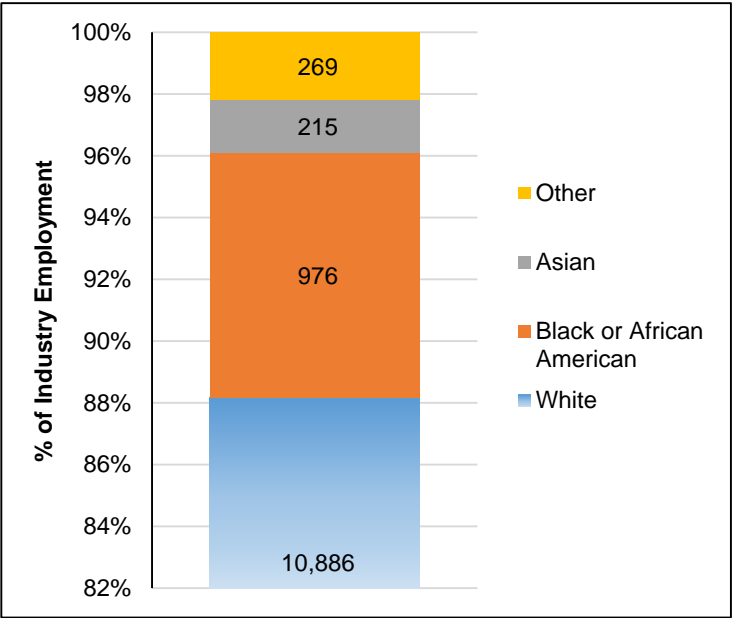


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Healthcare and Social Assistance by Race/Ethnicity

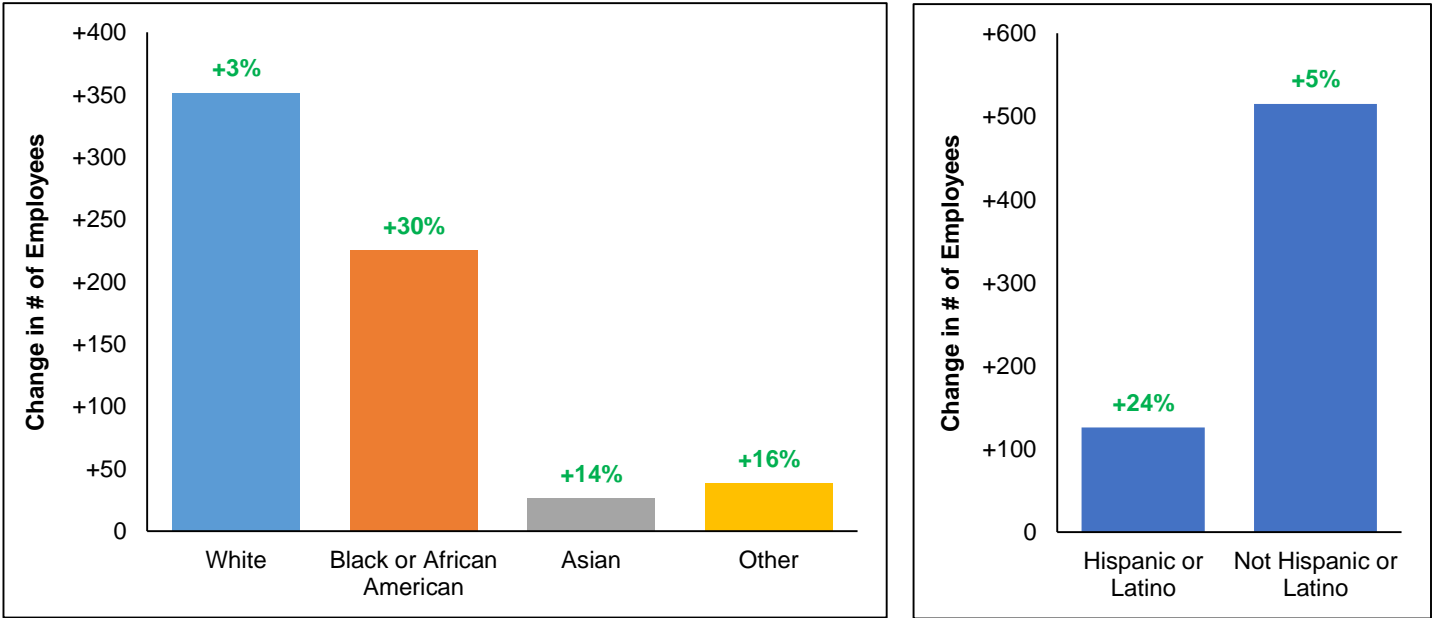
[Note: Check axis scale on chart on left.] While most workers in the Healthcare and Social Assistance sector are white, since 2015, growth in employment has been greater for Black or African American, Asian, and Hispanic or Latino populations.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018



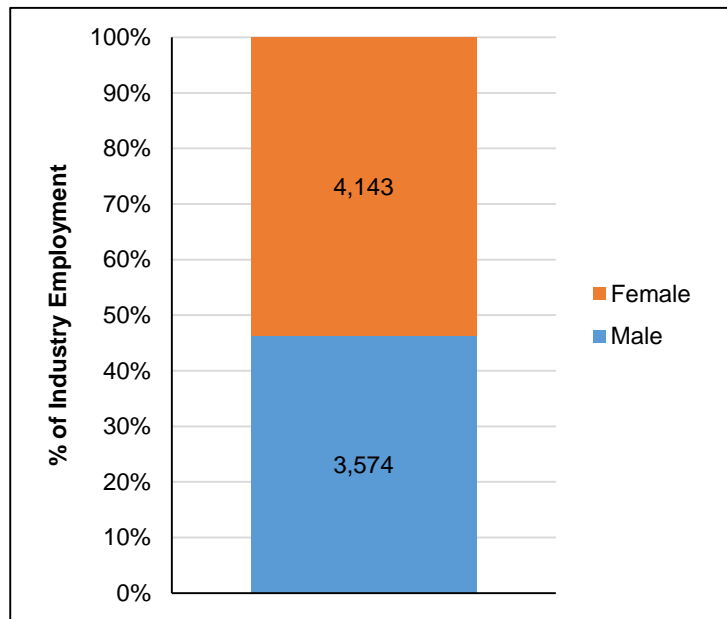
Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Hospitality and Management

Hospitality and Management by Gender

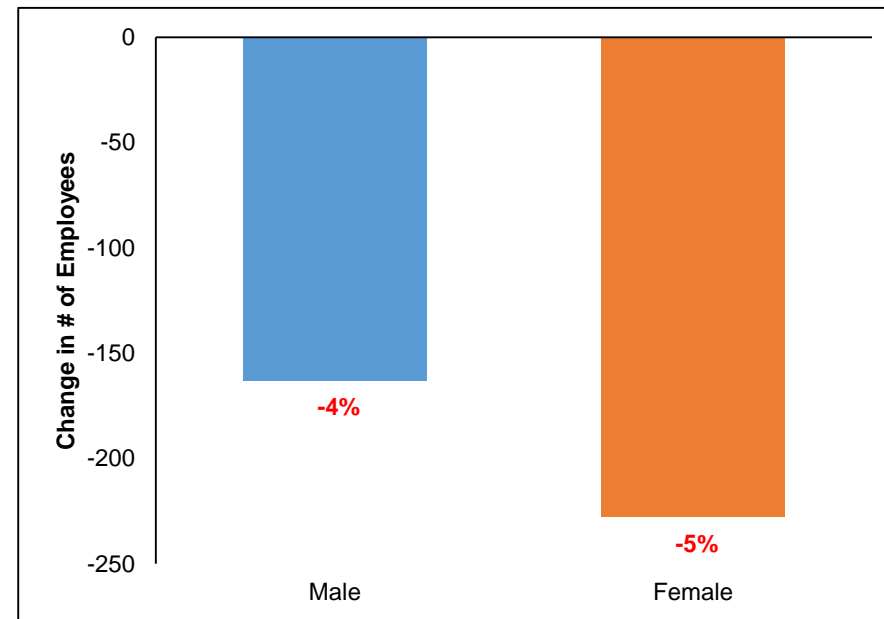
The Hospitality and Management industry has almost equal shares of male and female workers in the Berkshires.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018

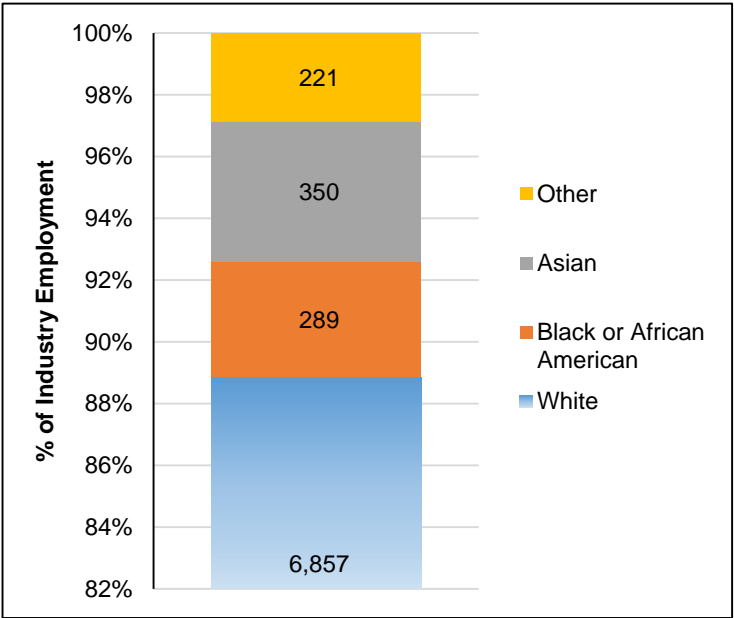


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Hospitality and Management by Race/Ethnicity

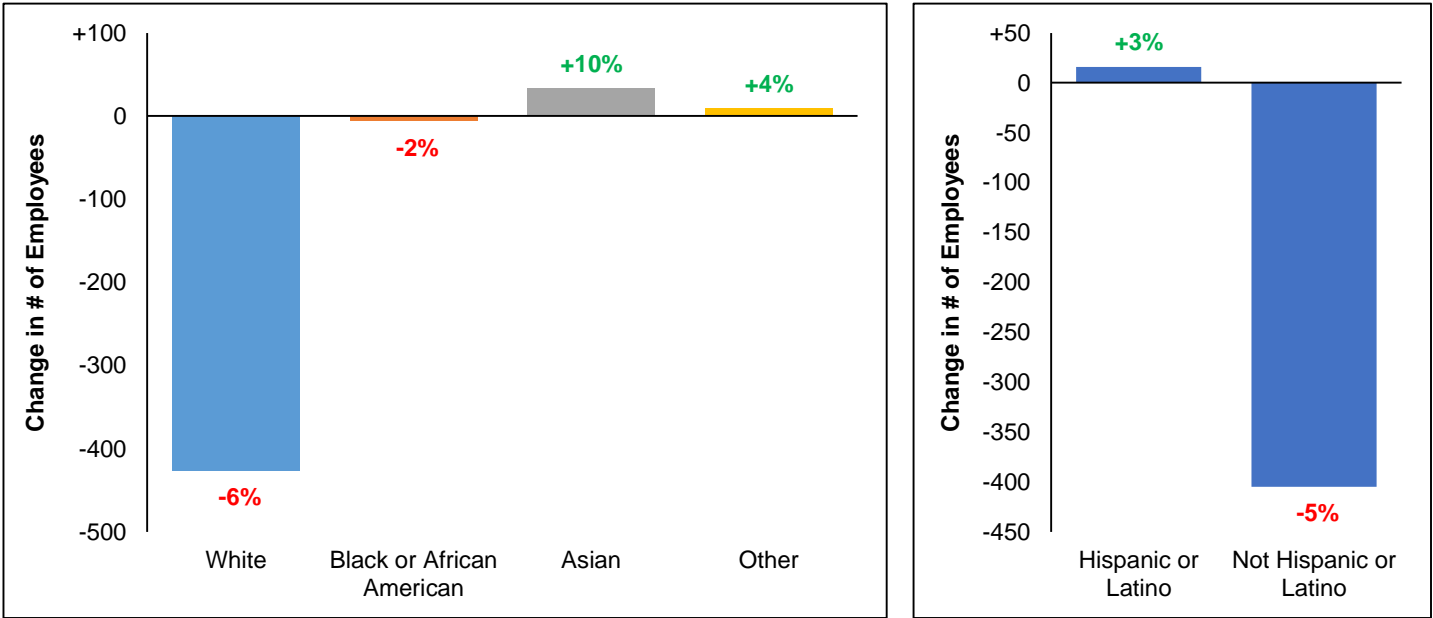
Workers in Hospitality and Management in the Berkshires are predominantly white, with only 8% of workers identifying as Black or African American or Asian.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018



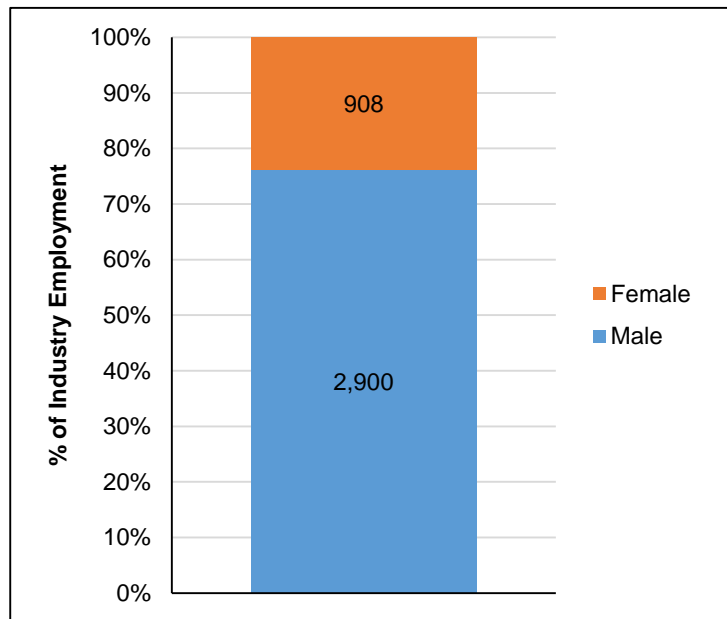
Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Manufacturing

Manufacturing by Gender

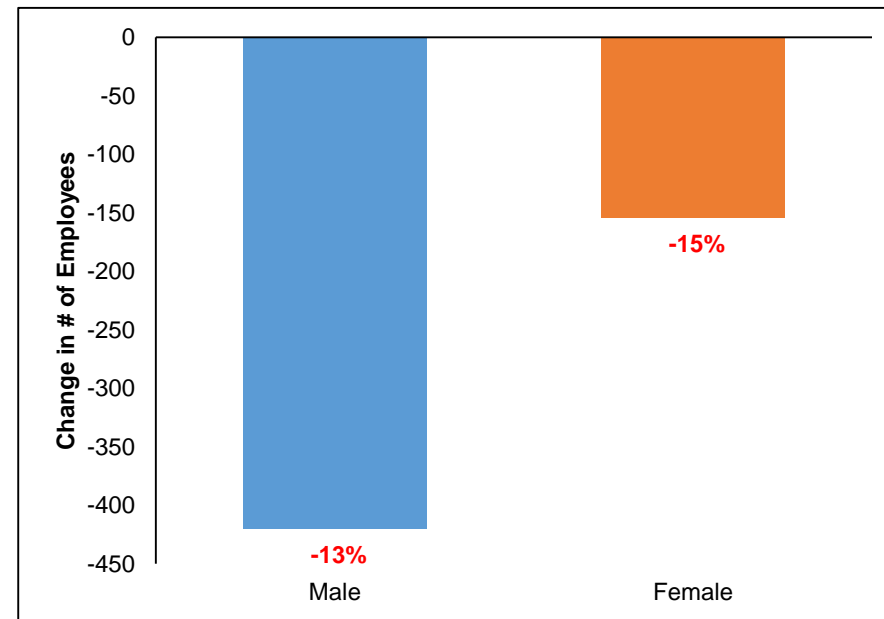
Manufacturing workers are predominantly male.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018

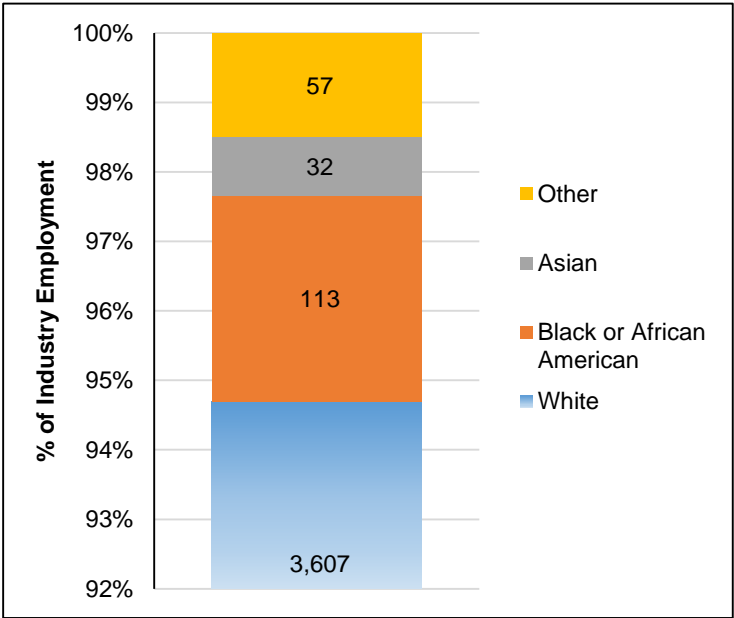


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Manufacturing by Race/Ethnicity

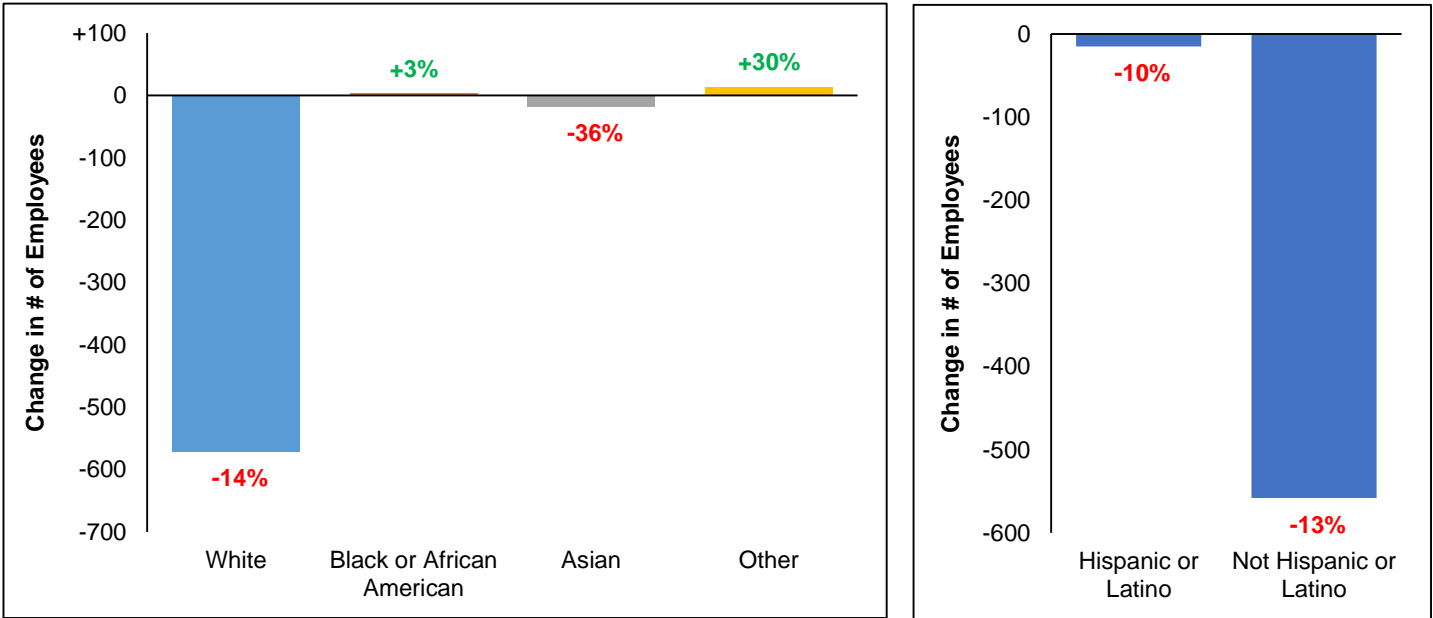
The Manufacturing workforce is predominantly white in the Berkshires, with only about 4 percent of workers identifying as Black or African American, or Asian.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018



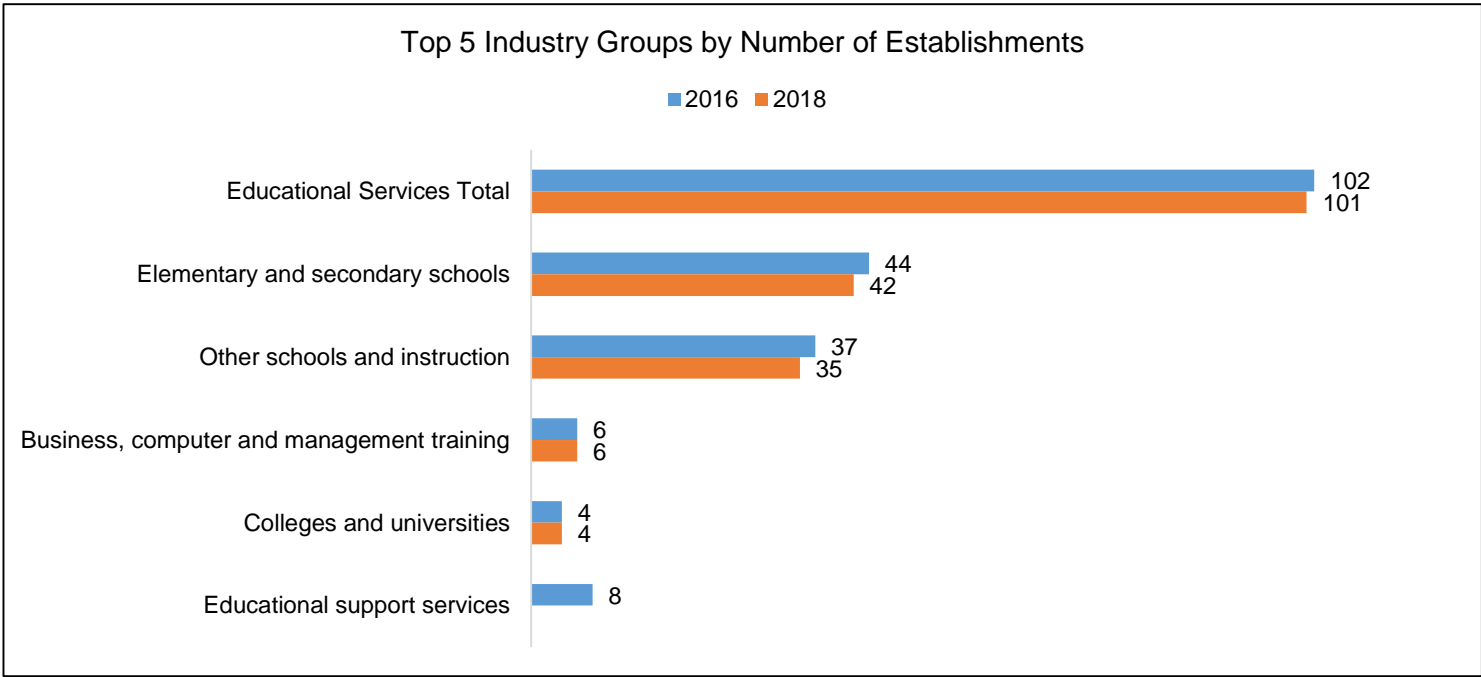
Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Appendix: Critical Industry Profiles

Educational Services

Educational Services Groups and Employers

The number of Educational Services establishments in the Berkshires remained stable between 2016 and 2018. Over the last 12 months, the employer with the most online job postings in the region was Williams College, with 115.



Source: DUA/BLS Quarterly Census of Employment and Wages, Q3 2016 – 2018

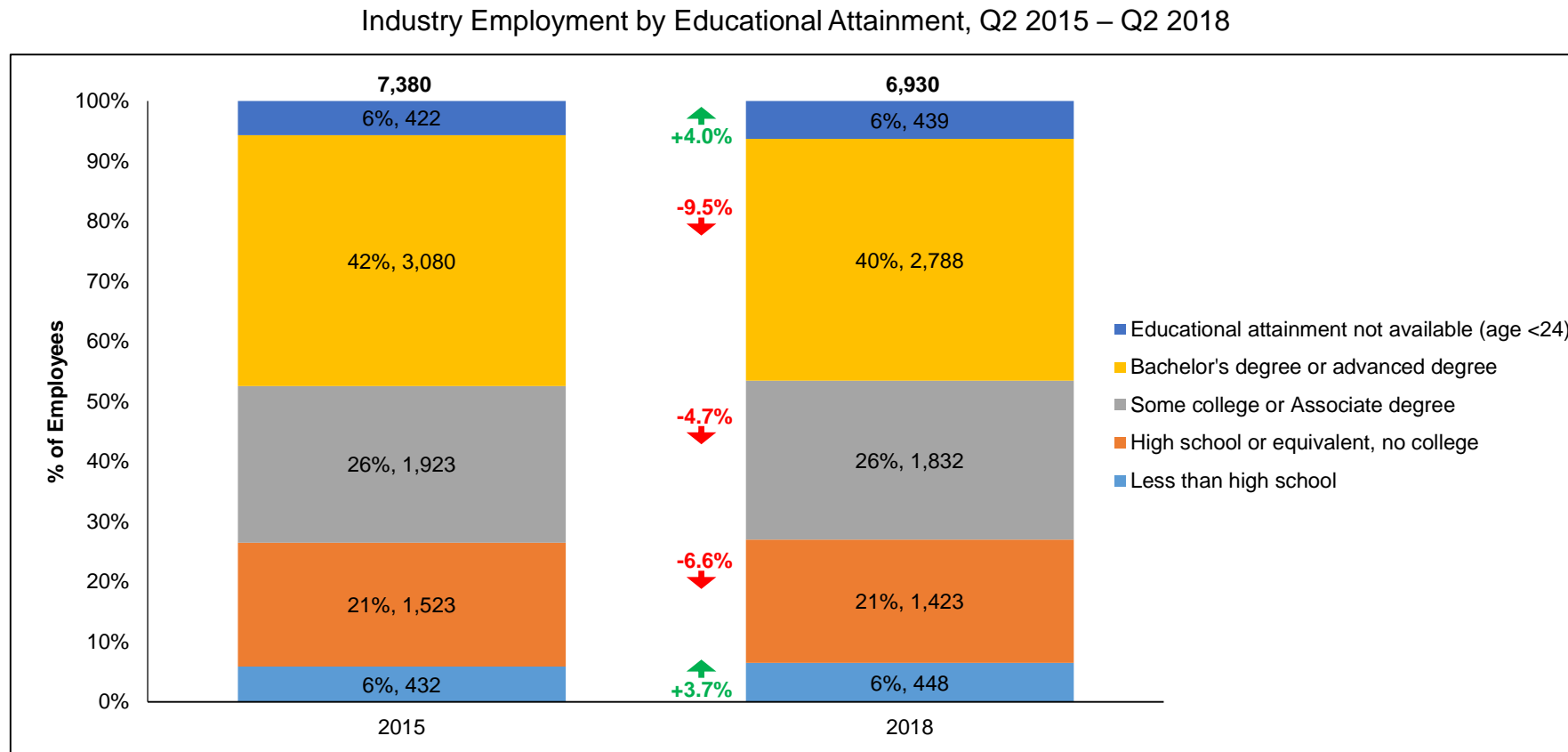
Largest Employers by 12-Month Regional Job Postings

Employer	Job Postings
Williams College	115
Massachusetts College Of Liberal Arts	66
Pittsfield Public Schools	63
Mount Greylock Regional School	43
Bard College At Simon's Rock	39
Special Education Department	27

Source: Burning Glass, 2019

Educational Services by Education

66% of workers in the Educational Services sector in the Berkshires have at least some college education.

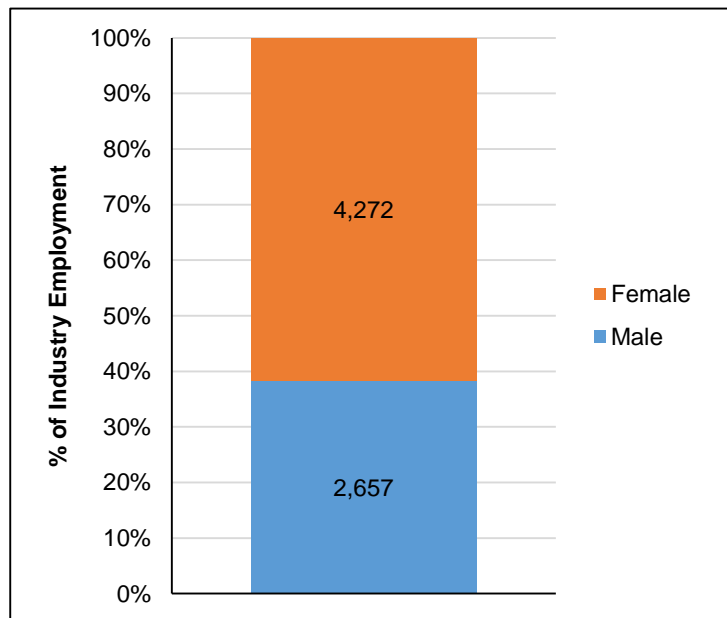


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – 2018

Educational Services by Gender

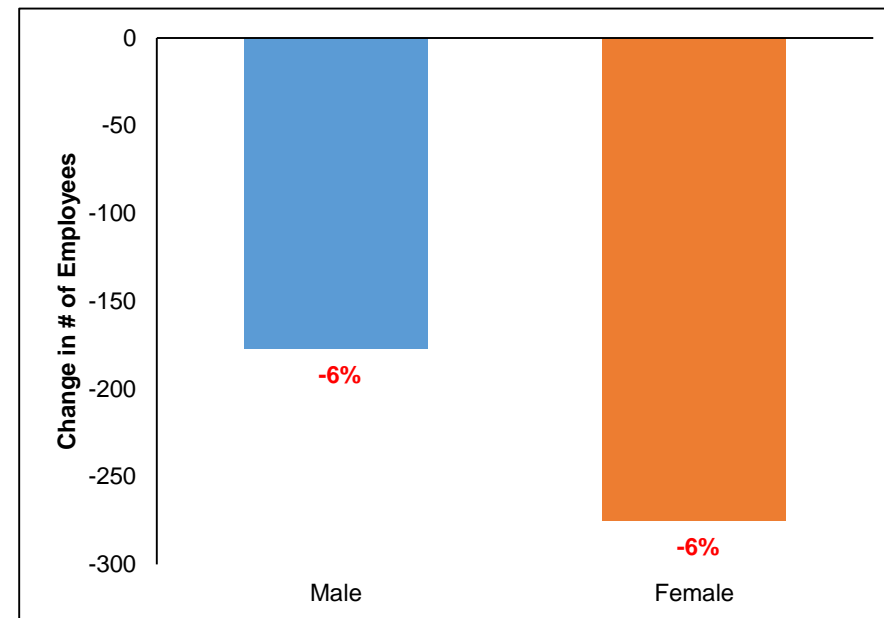
More than 60% of Educational Services workers are female.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018

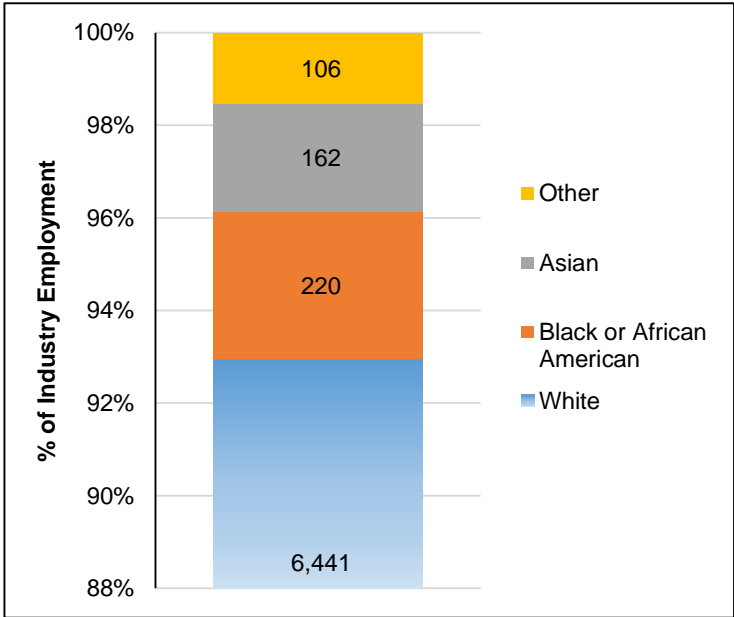


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Educational Services by Race/Ethnicity

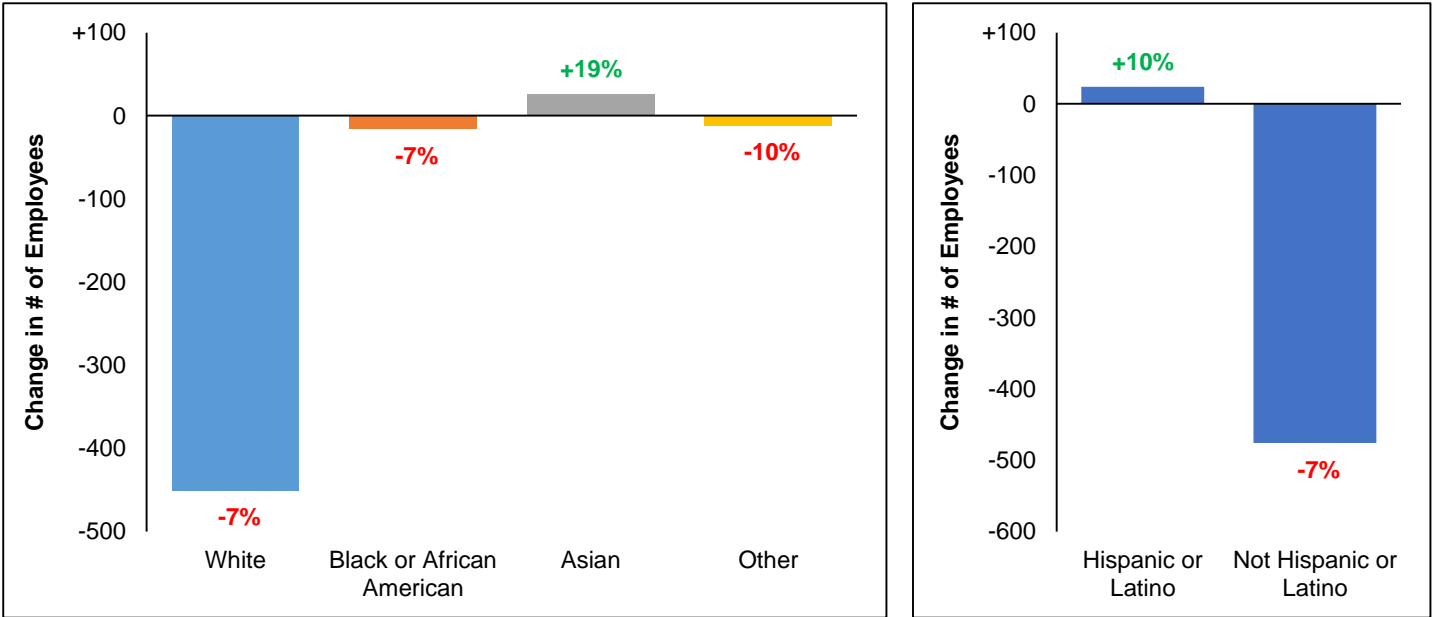
More than 90% of Educational Services workers are white, although the share of Black or African American, Asian, and Hispanic or Latino workers in the sector has increased since 2015.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018

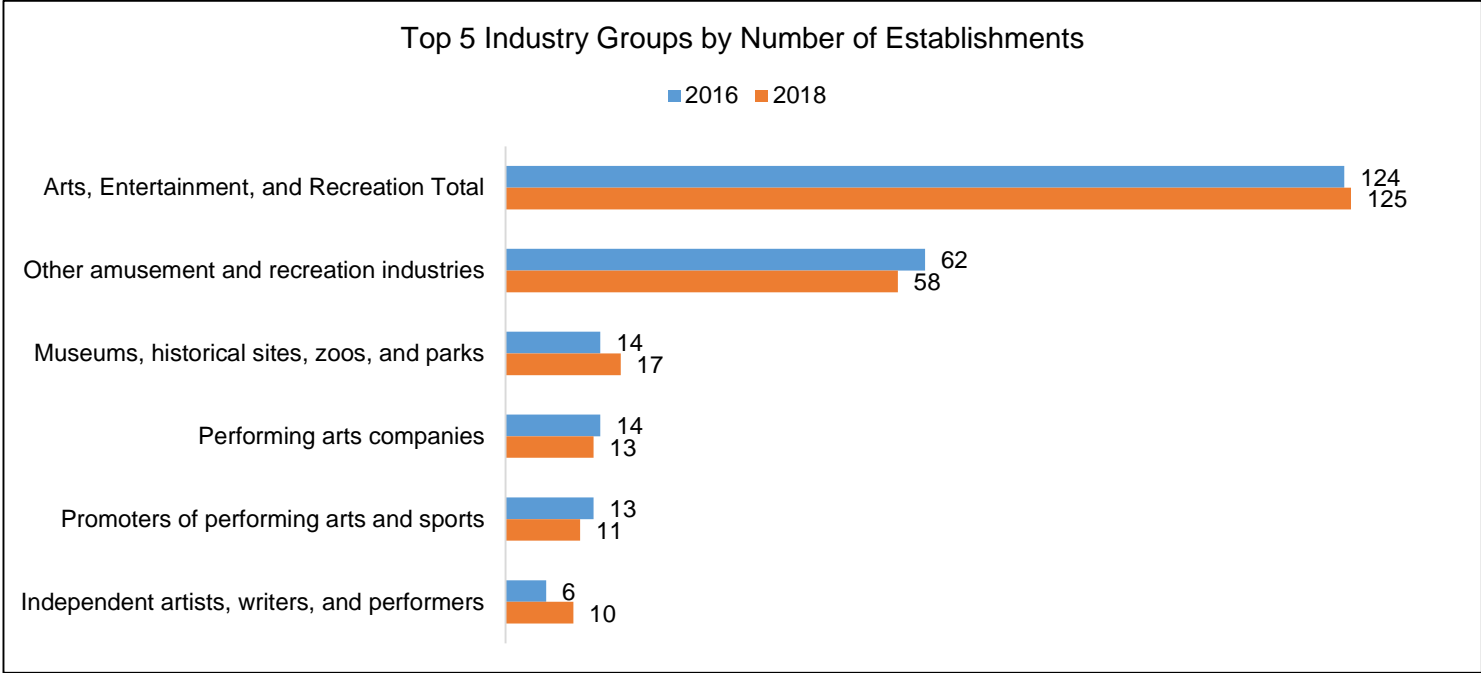


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Arts, Entertainment, and Recreation

Arts, Entertainment, and Recreation Groups and Employers

The number of Arts, Entertainment and Recreation establishments in the Berkshires remained stable between 2016 and 2018. Over the last 12 months, Sterling and Francine Clark Art Institute was the employer responsible for the most job postings in the Berkshires (18).



Source: DUA/BLS Quarterly Census of Employment and Wages, Q3 2016 – 2018

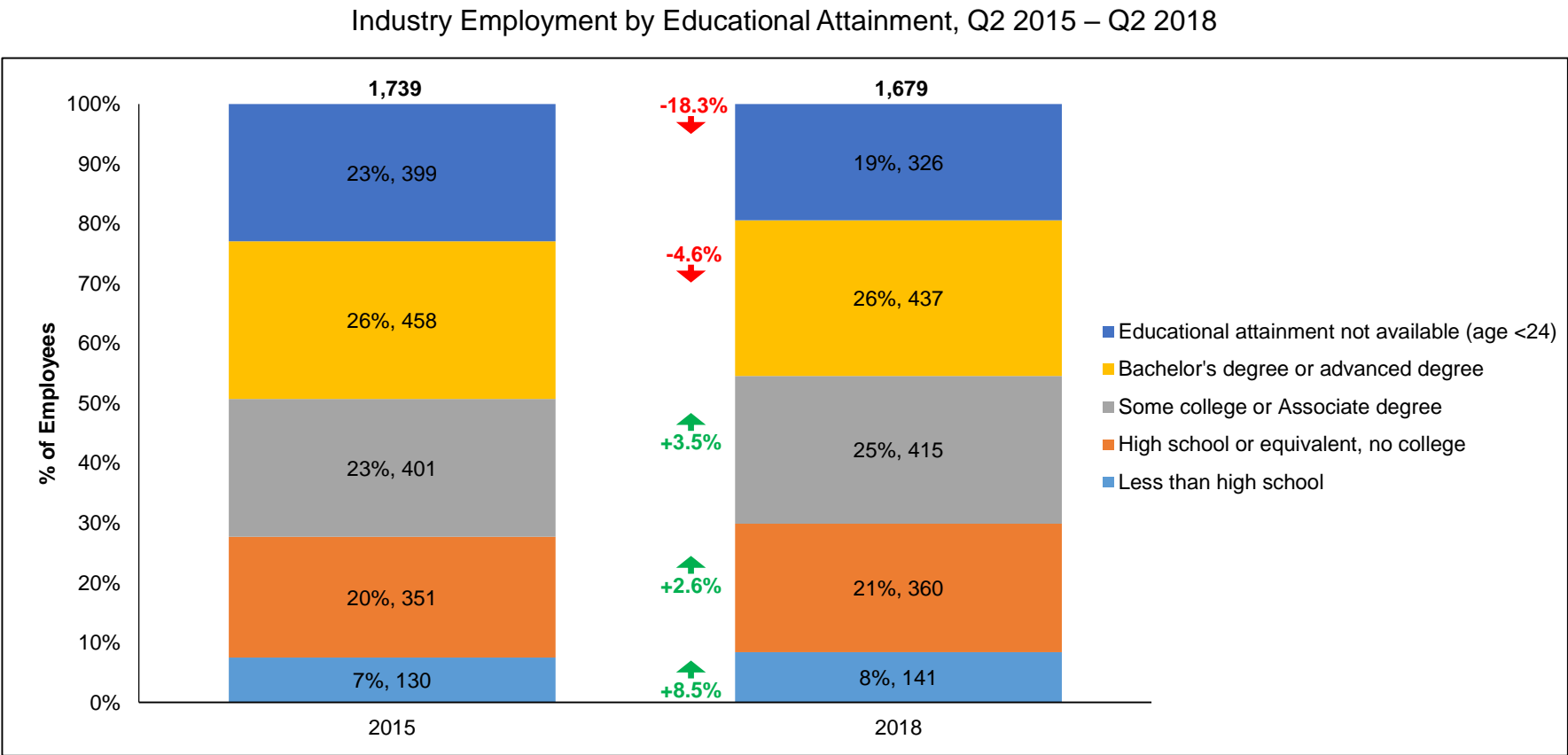
Largest Employers by 12-Month Regional Job Postings

Employer	Job Postings
Sterling And Francine Clark Art Institute	18
Williamstown Theatre Festival	12
Berkshire Museum	6
Waterford Group Llc	4
Talmi Entertainment/ Moscow Ballet	2
Mass Moca	2

Source: Burning Glass, 2019

Arts, Entertainment, and Recreation by Education

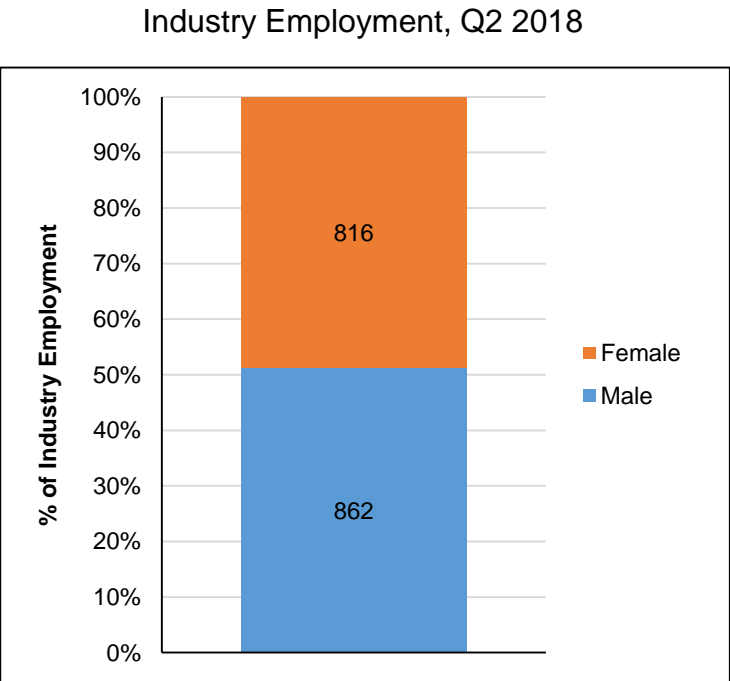
Arts, Entertainment and Recreation, like Hospitality, affords opportunities to people with a variety of educational backgrounds. 21% of workers in the Berkshires have a high school diploma, 25% have some college or an Associate degree, and 26% have a Bachelor’s degree or higher.



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – 2018

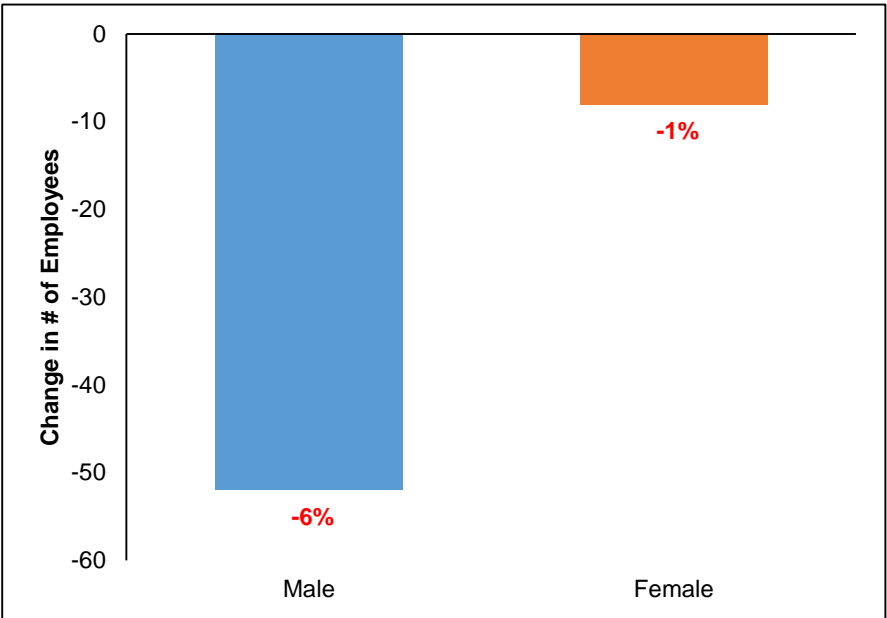
Arts, Entertainment, and Recreation by Gender

Employment in the Arts, Entertainment and Recreation sector in the Berkshires is fairly evenly split between male and female workers.



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018

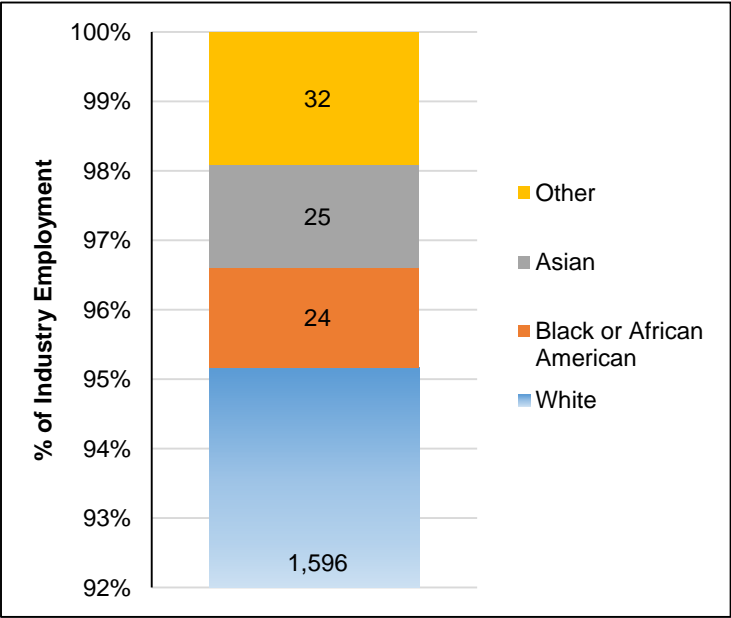


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Arts, Entertainment, and Recreation by Race/Ethnicity

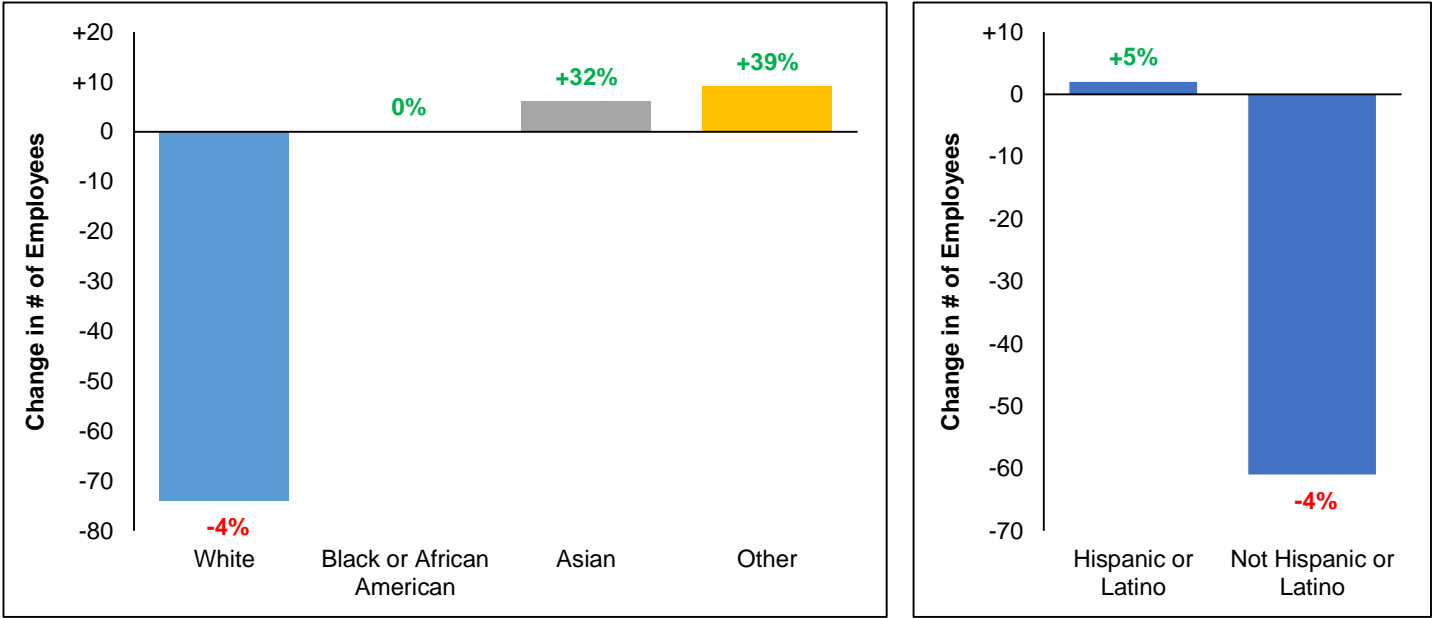
More than 95% of workers in the Arts, Entertainment and Recreation industry are white in the Berkshires. Numbers of people of color working in the sector have grown by a small amount since 2015.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018

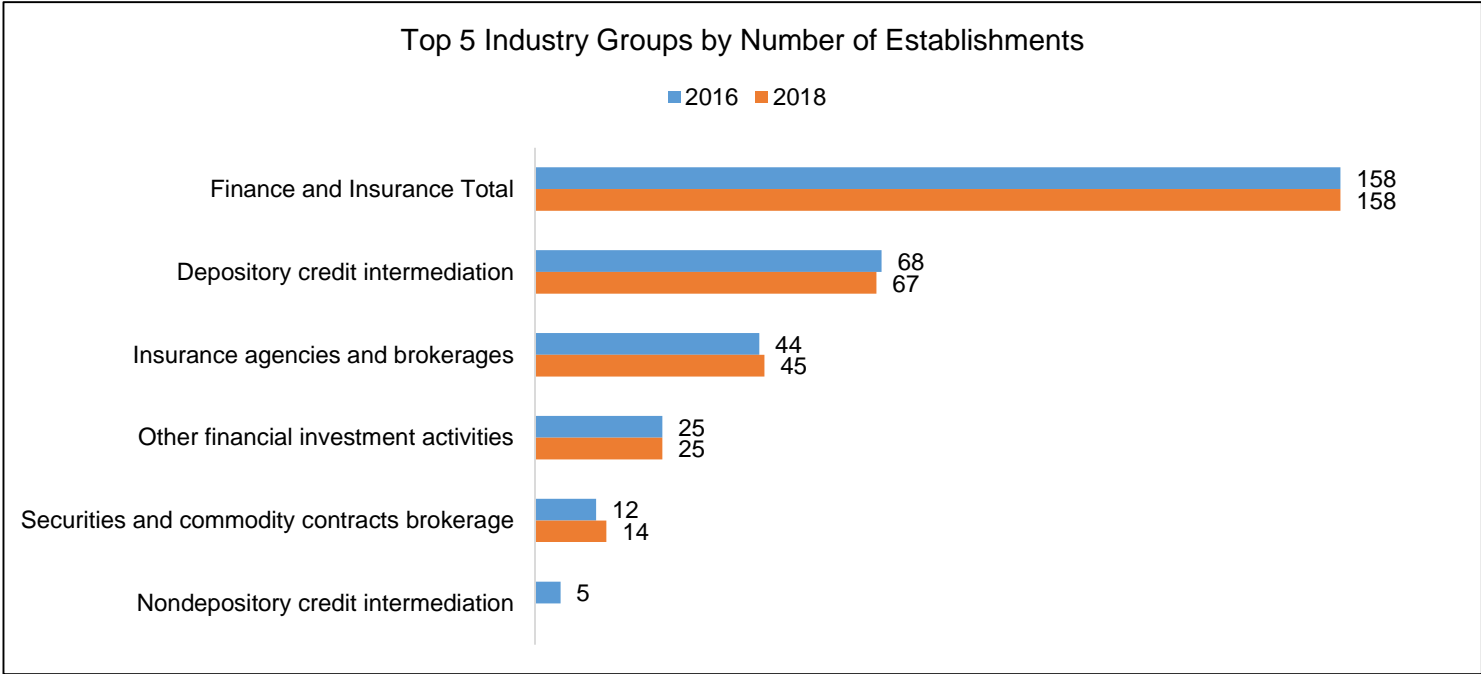


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Finance and Insurance

Finance and Insurance Groups and Employers

The number of Finance and Insurance establishments in the Berkshires has remained stable since 2016. In the last year, Berkshire Bank was responsible for the most job postings in the region (63), followed by Assurance (55) and AmeriPlan (28).



Source: DUA/BLS Quarterly Census of Employment and Wages, Q3 2016 – 2018

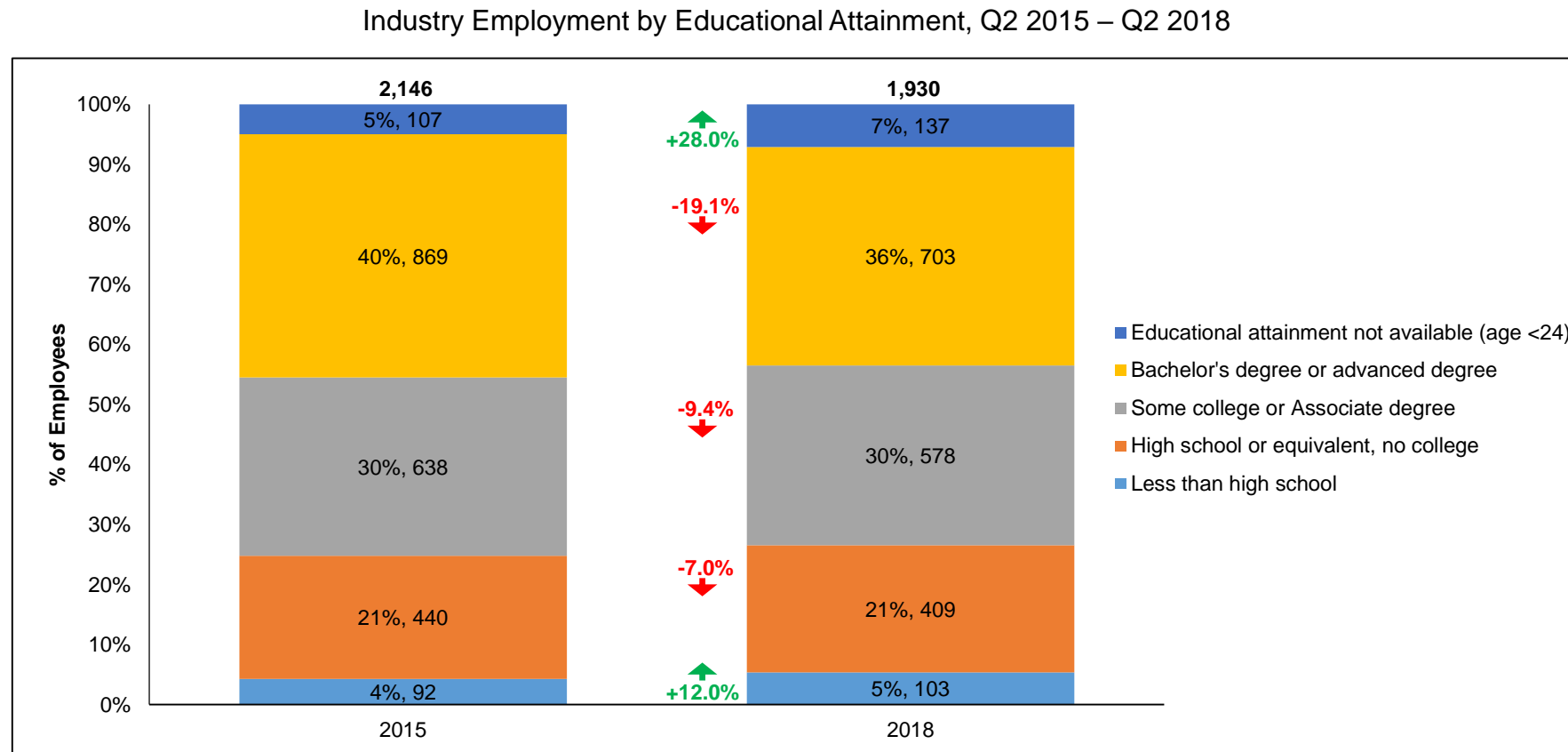
Largest Employers by 12-Month Regional Job Postings

Employer	Job Postings
Berkshire Bank	63
Assurance	55
AmeriPlan	28
Guardian Life Insurance	27
Citizens Financial Group	19
Trustees Reservations	13

Source: Burning Glass, 2019

Finance and Insurance by Education

More than 66% of Finance and Insurance workers in the Berkshires have at least some college education, although their share of total sector employment has decreased since 2015.

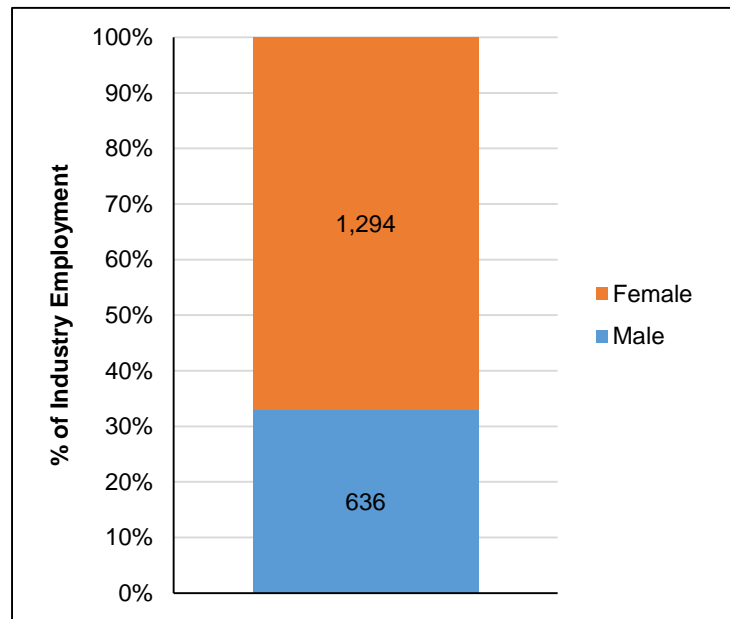


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – 2018

Finance and Insurance by Gender

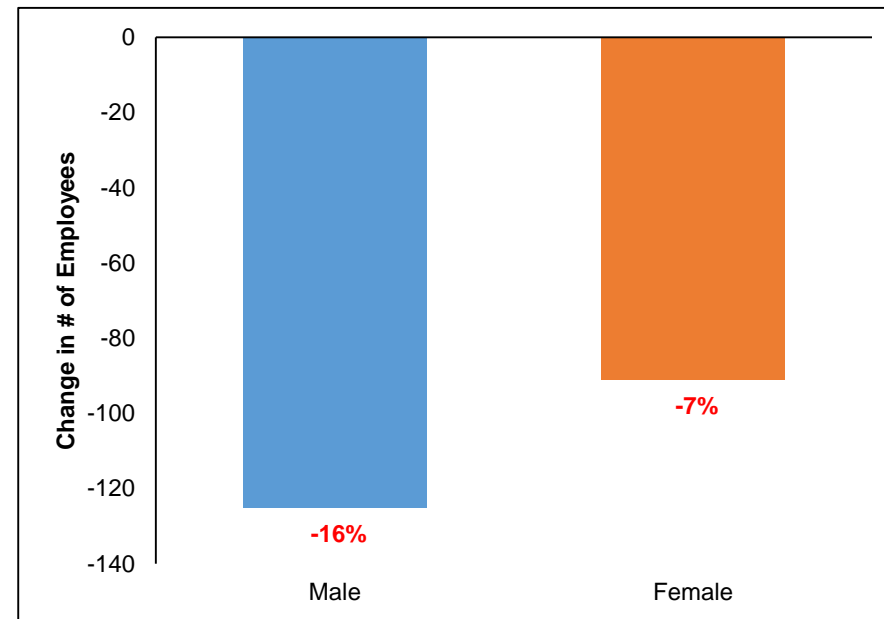
Nearly 70% of Finance and Insurance workers in the Berkshires are female.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics:
Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018

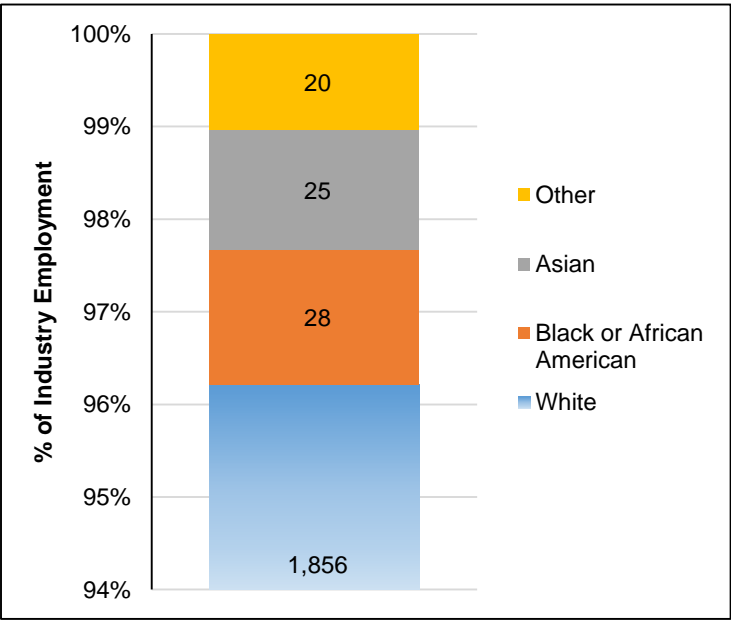


Source: US Census Longitudinal Employer-Household Dynamics:
Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Finance and Insurance by Race/Ethnicity

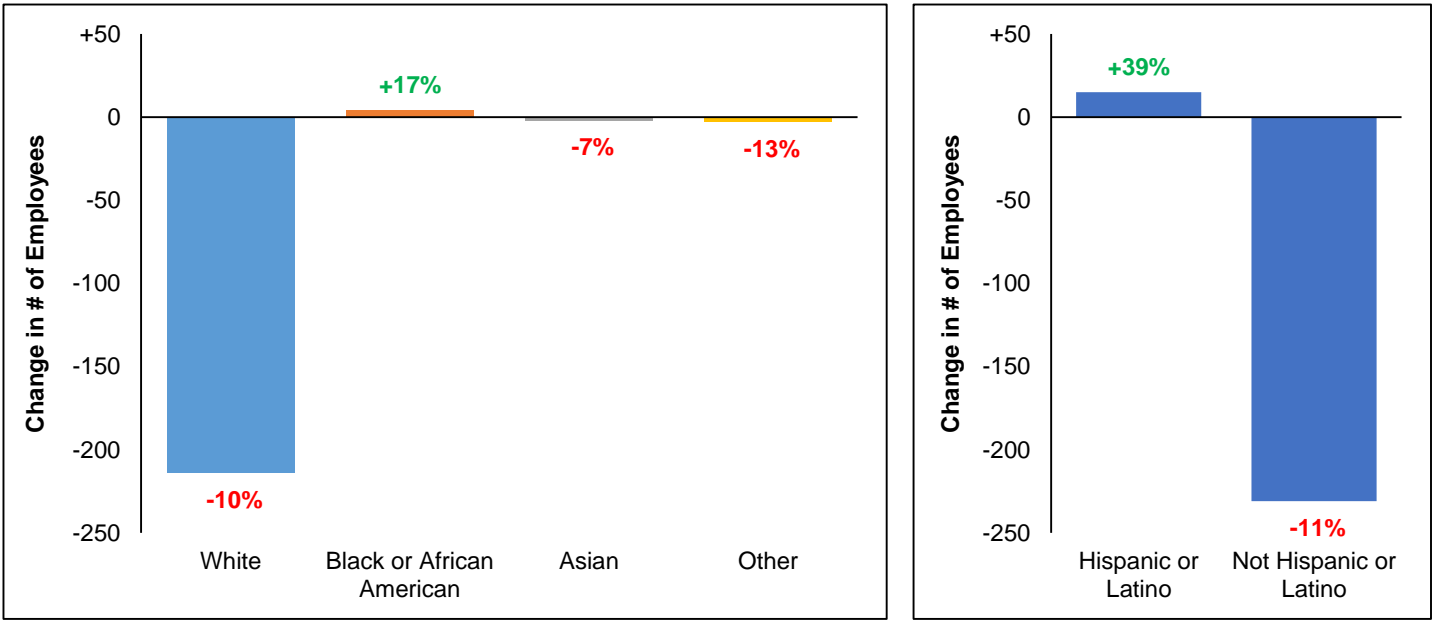
More than 95% of all workers in the Finance and Insurance sector in the Berkshires are white. The number of Black or African American workers has grown the most since 2015.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018

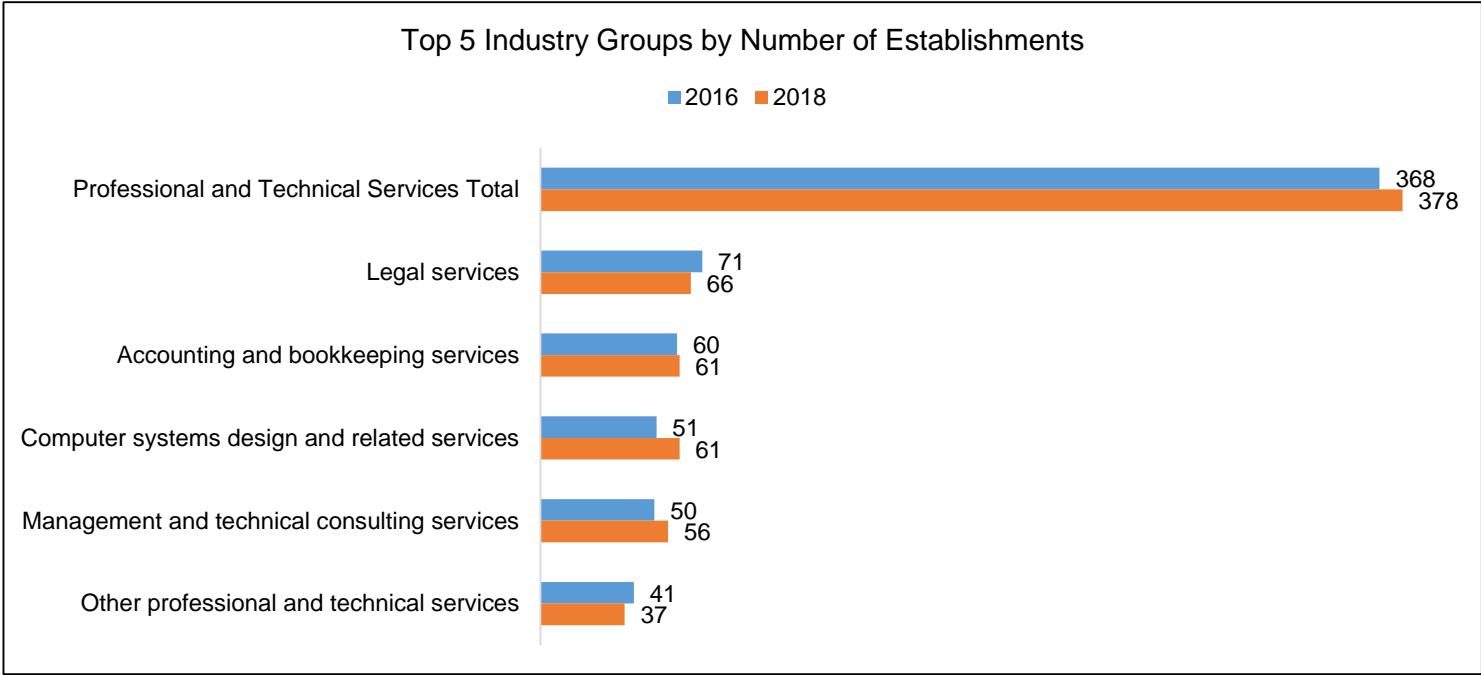


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Professional and Technical Services

Professional and Technical Services Groups and Employers

Professional and Technical Services include legal, management consulting, accounting and bookkeeping, and architectural and engineering services. There are slightly more establishments in this sector in 2018 than in 2016. H&R Block had the highest number of job postings in this sector in the Berkshires over the past year (36).



Source: DUA/BLS Quarterly Census of Employment and Wages, Q3 2016 – 2018

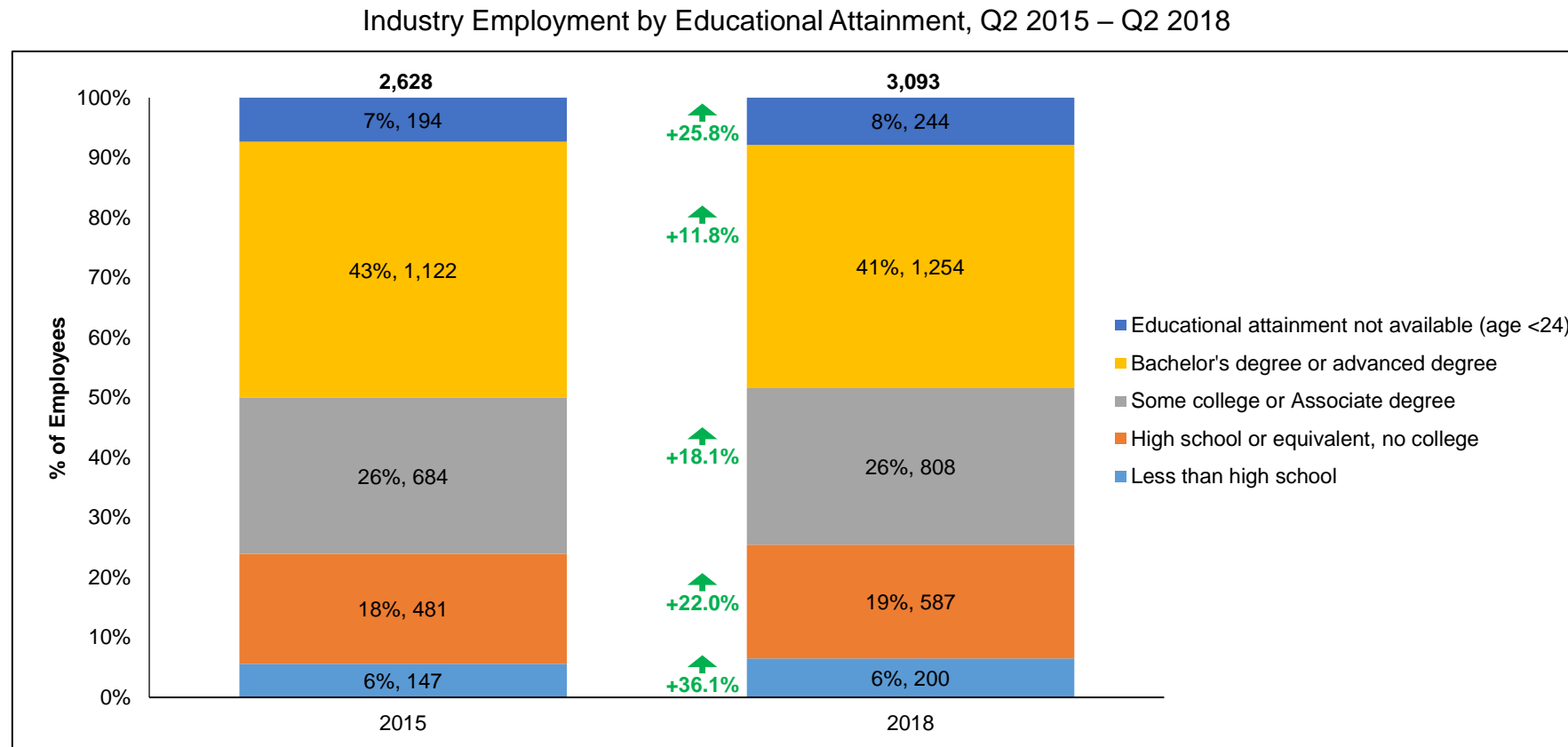
Largest Employers by 12-Month Regional Job Postings

Employer	Job Postings
H&R Block	36
Perspecta	21
Berkshire Sterile Manufacturing	16
GP Strategies Corporation	11
Teach For America	6
Pittsfield Plastics Engineering, Inc	5

Source: Burning Glass, 2019

Professional and Technical Services by Education

41% of workers in Professional and Technical Services in the Berkshires have a Bachelor's degree or higher.

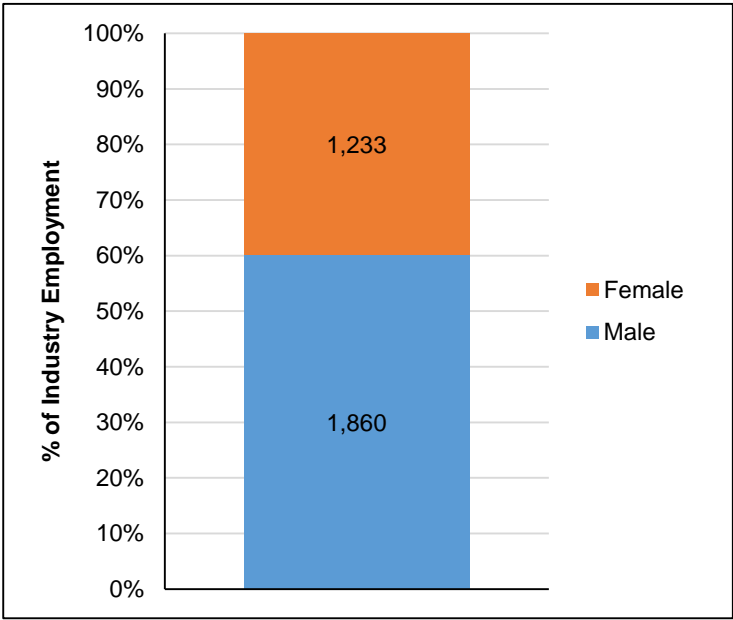


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – 2018

Professional and Technical Services by Gender

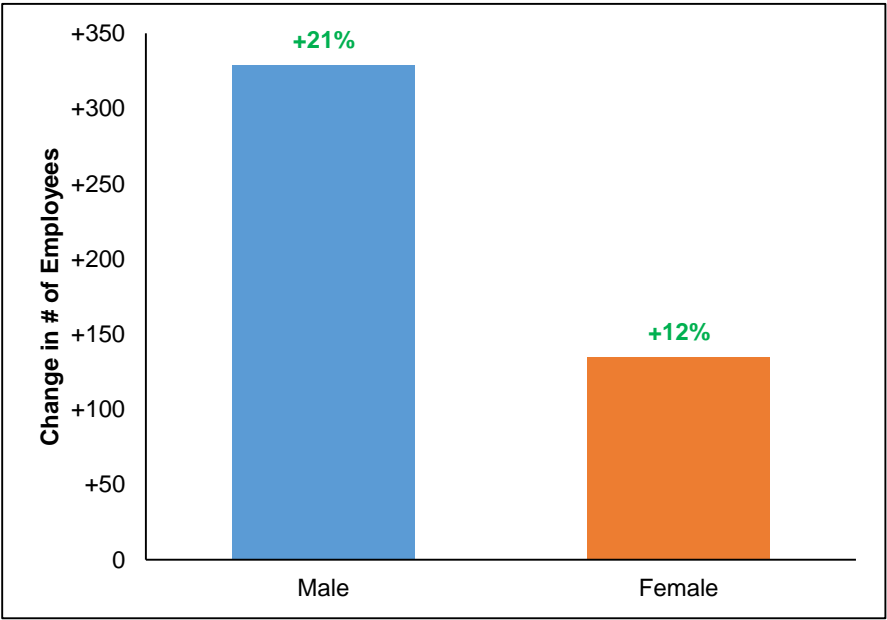
In the Berkshires, 60% of Professional and Technical Services workers are male.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018

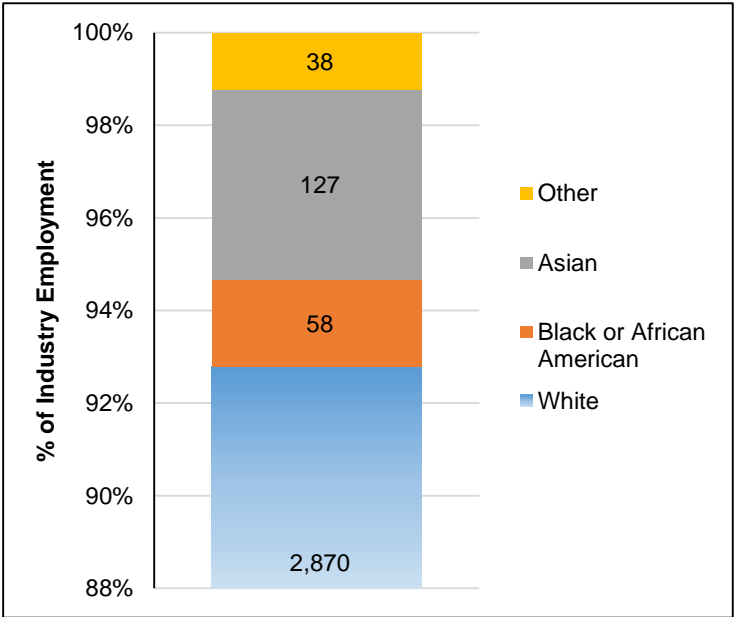


Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Professional and Technical Services by Race/Ethnicity

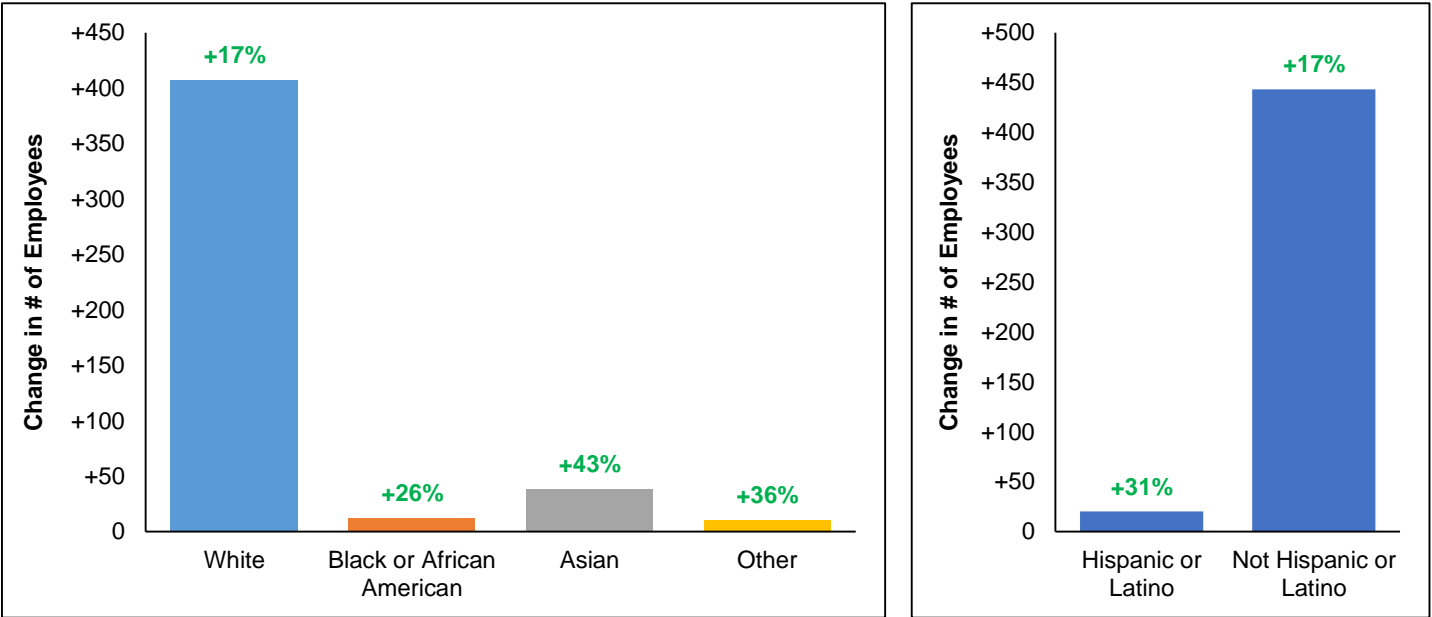
More than 92% of workers in the Professional and Technical Services industry in the Berkshires are white. Though there have been increases since 2015 in the number of Black or African American, Asian and Hispanic or Latino workers, the numbers are still relatively small.

Industry Employment, Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2018

Percent and Absolute Change in Industry Employment, Q2 2015 – Q2 2018



Source: US Census Longitudinal Employer-Household Dynamics: Quarterly Workforce Indicators, Q2 2015 – Q2 2018

Appendix: Professional Licensing

Regional Occupation Demand and DPL Licensing

DPL Board / License Type	STARS	Licenses	2018 Employment
Allied Health			
Occupational Therapist	4	49	103
Physical Therapist	4	63	157
Educational Psychologist	4	53	167
Cosmetology			
Cosmetologist (Hairdresser)	3	387	330
Electricians			
Electrician	4	222	400
Engineers And Land Surveyors			
Engineer*	4	61	393
Gas Fitters			
Gas Fitter	4	283	211
Public Accountancy			
Certified Public Accountant	5	46	584
Real Estate			
Real Estate Salesperson	3	387	241
Social Workers			
Social Worker, Licensed*	4	315	470
Social Worker Assistant	3	82	375

Closer Look: DPL Licenses Matched to Multiple SOC Occupations

DPL Board / License Type / Occupation Title	STARS	Licenses	2018 Employment
Engineers and Land Surveyors			
ENGINEER	4	61	393
Civil Engineers	4		140
Industrial Engineers	4		140
Mechanical Engineers	4		113
Social Workers			
SOCIAL WORKER, LICENSED	3	315	470
Healthcare Social Workers	4		315
Mental Health and Substance Abuse Social Workers	3		155

Source: Division of Professional Licensure, 2000-2019;
Bureau of Labor Statistics, Occupational Employment Statistics, 2020 Projections

*Matched to multiple SOC occupations. All license-occupation matches available in data tool.

Source: Division of Professional Licensure, 2000-2019;
Bureau of Labor Statistics, Occupational Employment Statistics, 2020 Projections

Occupations ranked 3+ stars only. Not inclusive of occupations licensed by agencies other than the Division of Professional Licensure.
Licenses must have been issued between 2000 and 2019, and not be expired as of 2019.

Glossary

Standard Occupational Classification (SOC)

The 2018 **Standard Occupational Classification (SOC)** system is used by federal statistical agencies to classify workers and jobs into occupational categories for the purpose of collecting, calculating, analyzing, or disseminating data.

To facilitate classification and presentation of data, the SOC is organized into a tiered system with four levels: major group, minor group, broad occupation, and detailed occupation. The 23 major groups (below) are broken into minor groups, which, in turn, are divided into broad occupations. At the highest level of specification, there are 867 detailed occupations with unique SOC codes.

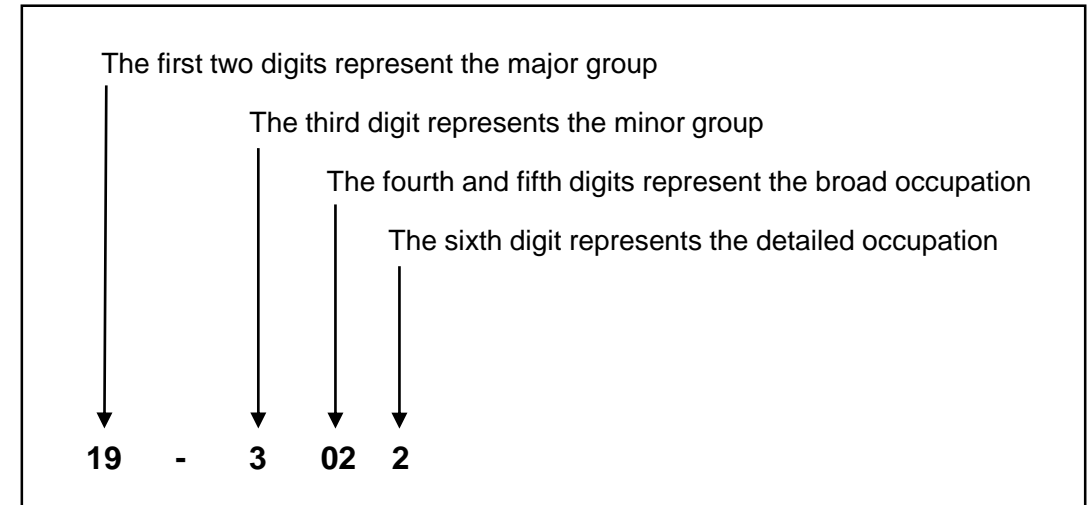
<i>Code</i>	<i>Title</i>	<i>Code</i>	<i>Title</i>
11-0000	Management Occupations	35-0000	Food Preparation and Serving Related Occupations
13-0000	Business and Financial Operations Occupations	37-0000	Building and Grounds Cleaning and Maintenance Occupations
15-0000	Computer and Mathematical Occupations	39-0000	Personal Care and Service Occupations
17-0000	Architecture and Engineering Occupations	41-0000	Sales and Related Occupations
19-0000	Life, Physical, and Social Science Occupations	43-0000	Office and Administrative Support Occupations
21-0000	Community and Social Service Occupations	45-0000	Farming, Fishing, and Forestry Occupations
23-0000	Legal Occupations	47-0000	Construction and Extraction Occupations
25-0000	Educational Instruction and Library Occupations	49-0000	Installation, Maintenance, and Repair Occupations
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	51-0000	Production Occupations
29-0000	Healthcare Practitioners and Technical Occupations	53-0000	Transportation and Material Moving Occupations
31-0000	Healthcare Support Occupations	55-0000	Military Specific Occupations
33-0000	Protective Service Occupations		

A complete description of SOC codes, titles and definitions can be found at www.bls.gov/soc/

Standard Occupational Classification (SOC)

Each item in the 2018 SOC is designated by a six-digit code.

- Major group codes end with 0000 (e.g., 29-0000 Healthcare Practitioners and Technical Occupations).
- Minor groups generally end with 000 (e.g., 29-1000 Health Diagnosing or Treating Practitioners)—the exceptions are minor groups 15-1200 Computer Occupations, 31-1100 Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides, and 51-5100 Printing Workers, which end with 00.
- Broad occupations end with 0 (e.g., 29-1020 Dentists).
- Detailed occupations end with a number other than 0 (e.g., 29-1022 Oral and Maxillofacial Surgeons).



A complete description of SOC codes, titles and definitions can be found at www.bls.gov/soc/

North American Industry Classification System (NAICS)

The 2017 **North American Industry Classification System (NAICS)** is an industry classification system that groups establishments into industries based on the similarity of their production processes. It is a comprehensive system covering all economic activities. There are 20 sectors and 1,057 industries in 2017 NAICS United States.

NAICS uses a six-digit coding system to identify particular industries and their placement in this hierarchical structure of the classification system. The first two digits of the code designate the sector, the third digit designates the subsector, the fourth digit designates the industry group, the fifth digit designates the NAICS industry, and the sixth digit designates the national industry.

The NAICS sectors and their two-digit codes are:

<i>Code</i>	<i>Industry</i>	<i>Code</i>	<i>Industry</i>
11	Agriculture, Forestry, Fishing and Hunting	53	Real Estate and Rental and Leasing
21	Mining, Quarrying, and Oil and Gas Extraction	54	Professional, Scientific, and Technical Services
22	Utilities	55	Management of Companies and Enterprises
23	Construction	56	Administrative and Support and Waste Management and Remediation Services
31-33	Manufacturing	61	Educational Services
42	Wholesale Trade	62	Health Care and Social Assistance
44-45	Retail Trade	71	Arts, Entertainment, and Recreation
48-49	Transportation and Warehousing	72	Accommodation and Food Services
51	Information	81	Other Services (except Public Administration)
52	Finance and Insurance	92	Public Administration

A complete description of NAICS codes, industries and definitions can be found at <https://www.census.gov/eos/www/naics/>