

Coconino County

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Agenda

- Review
 - LMI Definition
 - Work Force Programs
 - Occupation & Industry Classification System
- Brief LMI Overview
 - Demographics
 - Industry Employment
 - Hours & Income
- How to use LMI Data
- Occupation & Wages
- TERM
- Questions

Labor Market Information

Review

Labor Market Information

Includes all quantitative or qualitative data and analysis related to employment and the workforce

Key Elements

- **Quantitative:** Size and characteristics of the labor market, including the demand for and supply of labor and the intersection thereof
- **Qualitative:** Factors that influence labor market and economic conditions

Labor Market Information

Key Elements Continued

- **Quantitative:** Industry and occupational characteristics of the work being done
- **Quantitative:** Capacity and immediate results from education, training, and job placement
- **Quantitative:** Combination of data sets to describe the workforce by industry, occupation, or educational attainment

Labor Market Information

Key Elements Continued

- **Qualitative:** Factors that influence labor market and economic conditions
- **Qualitative:** Trends in the economy and workforce
- **Qualitative:** Needs and expectations of industries
- **Qualitative:** Perceived value of education and certificate programs

Labor Market Information

Labor Force Programs (short list)

- **Quarterly Census of Employment & Wages (QCEW):** UI covered employment & wages by industry
- **Current Employment Statistics (CES):** Nonfarm employment, hours, hourly earnings by industry
- **Occupational Employment Statistics (OES):** Occupational employment and wages by area and industry

Labor Market Information

Labor Force Programs (short list)

- **Local Area Unemployment Statistics (LAUS):** Civilian labor force, employment, unemployment, unemployment rate
- **Decennial Census:** Demographic data on population, income, and employment and commuting by geographic area (place of residence)

Labor Market Information

Labor Force Program Comparison

	Quarterly Census of Employment and Wages (QCEW)	Current Employment Statistics (CES)	Occupational Employment Statistics (OES)	Local Area Unemployment Statistics (LAUS)	Decennial Census
Description	Employment, employers, and total wages, quarterly and annual average, by industry and geographic area (place of employment)	Employment, average production worker wages, and weekly hours by industry and MSA (place of employment)	Occupational employment by geographic area (place of employment) and occupational wage distributions	Employed and unemployed persons by geographic area (place of residence)	Demographic data on population, income, and employment and commuting by geographic area (place of residence)

Labor Market Information

Labor Force Program Comparison

	Quarterly Census of Employment and Wages (QCEW)	Current Employment Statistics (CES)	Occupational Employment Statistics (OES)	Local Area Unemployment Statistics (LAUS)	Decennial Census
Methodology	Census of all employers and jobs covered by Unemployment Insurance (97% of total non-agricultural employment)	Survey of a sample of employers conducted monthly	Survey of a sample of employers conducted over a three-year cycle	Estimation based on modeling of demographics, CES employment, and UI Program activity	Census of all people living in the U.S., conducted every 10 years

Labor Market Information

Labor Force Program Comparison

	Quarterly Census of Employment and Wages (QCEW)	Current Employment Statistics (CES)	Occupational Employment Statistics (OES)	Local Area Unemployment Statistics (LAUS)	Decennial Census
Populations Excluded	Self-employed, railroad workers, student workers, elected officials, religious organizations, family farms	Self-employed, agriculture, domestic workers, military	Self-employed, some agricultural workers, domestic workers, military	Individuals not in the labor force	Institutionalized population excluded from some measures

Labor Market Information

Labor Force Program Comparison

	Quarterly Census of Employment and Wages (QCEW)	Current Employment Statistics (CES)	Occupational Employment Statistics (OES)	Local Area Unemployment Statistics (LAUS)	Decennial Census
Publication Frequency	Quarterly data available six months after the end of the quarter	Monthly data available by the third week of the following month	Biannual data available four months after the end of data collection	Monthly data available by the third week of the following month	Every ten years with data available two to four years later
Geographic Detail	U.S., states, regions, counties, communities	U.S., states, MSA's	U.S., states, regions	U.S., states, regions, counties, MSA's, cities over 25,000	U.S., states, counties, cities, census tracts, and block groups

Labor Market Information

Labor Force Program Comparison

	Quarterly Census of Employment and Wages (QCEW)	Current Employment Statistics (CES)	Occupational Employment Statistics (OES)	Local Area Unemployment Statistics (LAUS)	Decennial Census
Advantages	Complete universe of employers, fine level of geographic and industry detail	Current industry employment data, time series analysis	Occupational employment, wage distribution, and staffing information	Current labor force estimates	Complete universe of individuals, and fine level of geographic detail
Limitations	Six month time lag and some data confidentiality	Not available for small, local areas, revised and benchmarked	Not a time series, limitations on reporting to small regions	Frequent revisions as better data becomes available	Updated only every 10 years

Labor Market Information

Additional Programs/Tools

- **On The Map** - <http://onthemap.ces.census.gov/>: Web-based mapping and reporting applications that show the a link between where workers are employed & where they live. Available data includes race, ethnicity, educational attainment, sex, firm age, and firm size.
- **Quarterly Workforce Indicators (LED)** - <http://ledextract.ces.census.gov/static/data.html>: Provide local labor market statistics by industry, worker demographics, employer age and size.

Labor Market Information

Additional Programs/Tools

- American Fact Finder - <http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>: Web-based tool to access data from the Decennial Census, the American Community Survey, the Puerto Rico Community Survey, the Economic Census, the Population Estimates Program and Annual Economic Surveys. A great tool for small geographic areas.

Labor Market Information

Additional Programs/Tools

- **Wanted Analytics (Coming Soon-ish) -**
<https://www.wantedanalytics.com/>: Combines real-time, global business intelligence with years of hiring demand and talent supply data to help make better strategic business decisions. Hiring trend data can provide insight into workforce strategy, talent acquisition tactics for hard-to-fill positions, and candidate universe & landscape.

Labor Market Information

How Occupations & Industries are Defined & Organized

- Occupation (describes what a worker does)
 - Standard Occupation Classification (SOC)
 - Six digit occupation code (O*NET has eight)
 - **The more digits, the more detail (hierarchal)**
- Industry (describes what the business does)
 - North American Industry Classification System (NAICS)
 - Six digit industry code
 - **The more digits, the more detail (hierarchal)**

Labor Market Information

SOC CLASSIFICATION LEVELS

Broad categories lead to unique 6-digit codes for each occupation:

22 Major groups ; divided into...

98 Minor groups; divided into...

450 Broad occupations; divided into...

800+ Detailed occupations

Labor Market Information

SOC STRUCTURE EXAMPLE

Major Group: 15-0000 Computer and Mathematical Occupations

Minor Group: 15-1000 Computer Occupations

Broad Occupation: 15-1130 Software Developers and Programmers

Detailed Occupation: 15-1132 Software Developers, Applications

Labor Market Information

NAICS CLASSIFICATION LEVELS

Broad categories lead to unique 6-digit codes for each occupation:

11 Super sectors; divided into...

20 Major sectors ; divided into...

99 Subsector; divided into...

312 Industry Groups; divided into...

713 Industries; divided into...

1,064+ National Industries

Labor Market Information

NAICS STRUCTURE EXAMPLE

Sector: [54](#) Professional and Business Services

Sub-Sector: [541](#) Professional, Scientific and
Technical Services

Industry Group: [5417](#) Scientific Research and
Development Services

NAICS Industry: [54171](#) Research and
Development in the Physical Engineering and
Life Sciences

National Industry: [541711](#) Research and
Development in Biotechnology

Labor Market Information

Brief Overview

At a Glance: Demographics

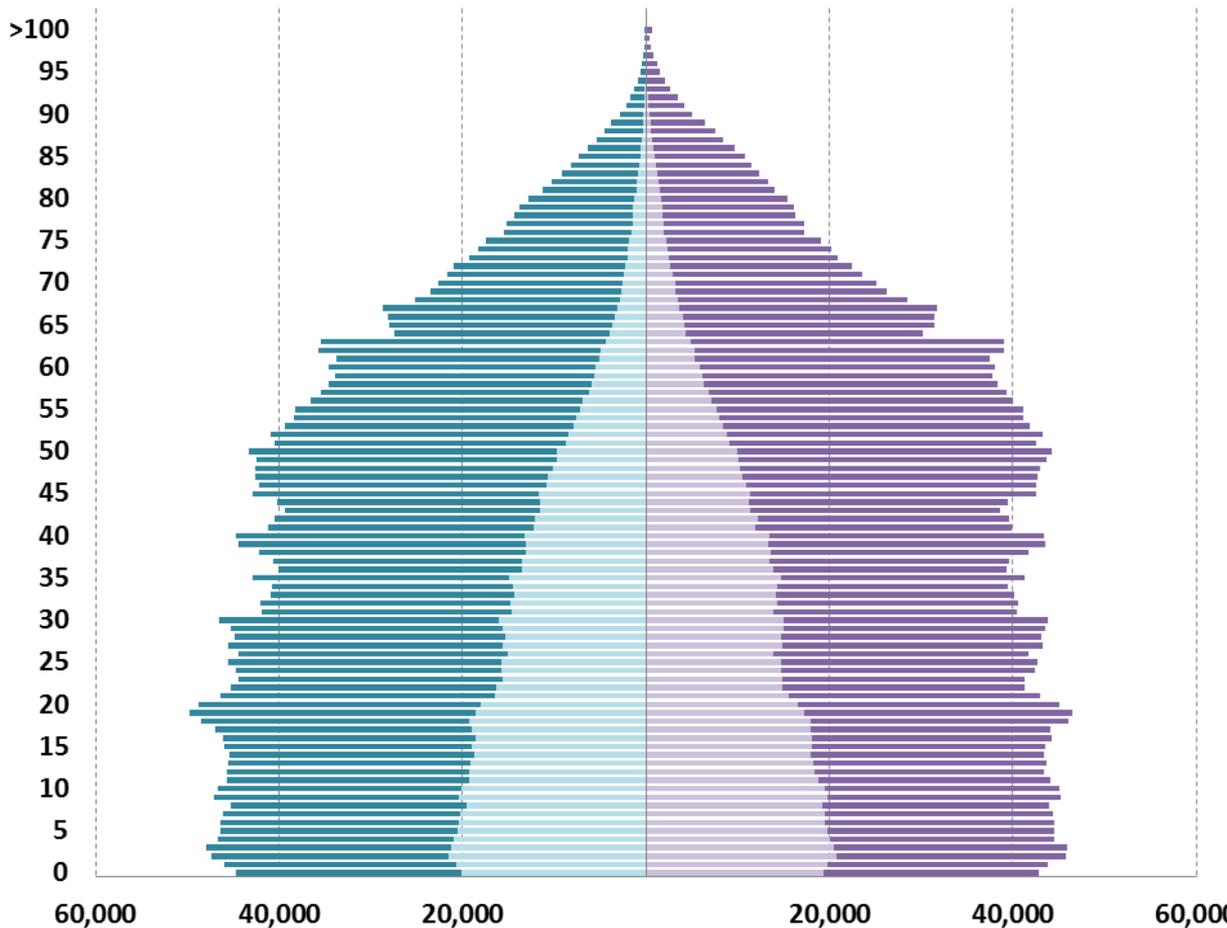
■ Hispanic Male
 ■ Non-Hispanic Male
 ■ Hispanic Female
 ■ Non-Hispanic Female

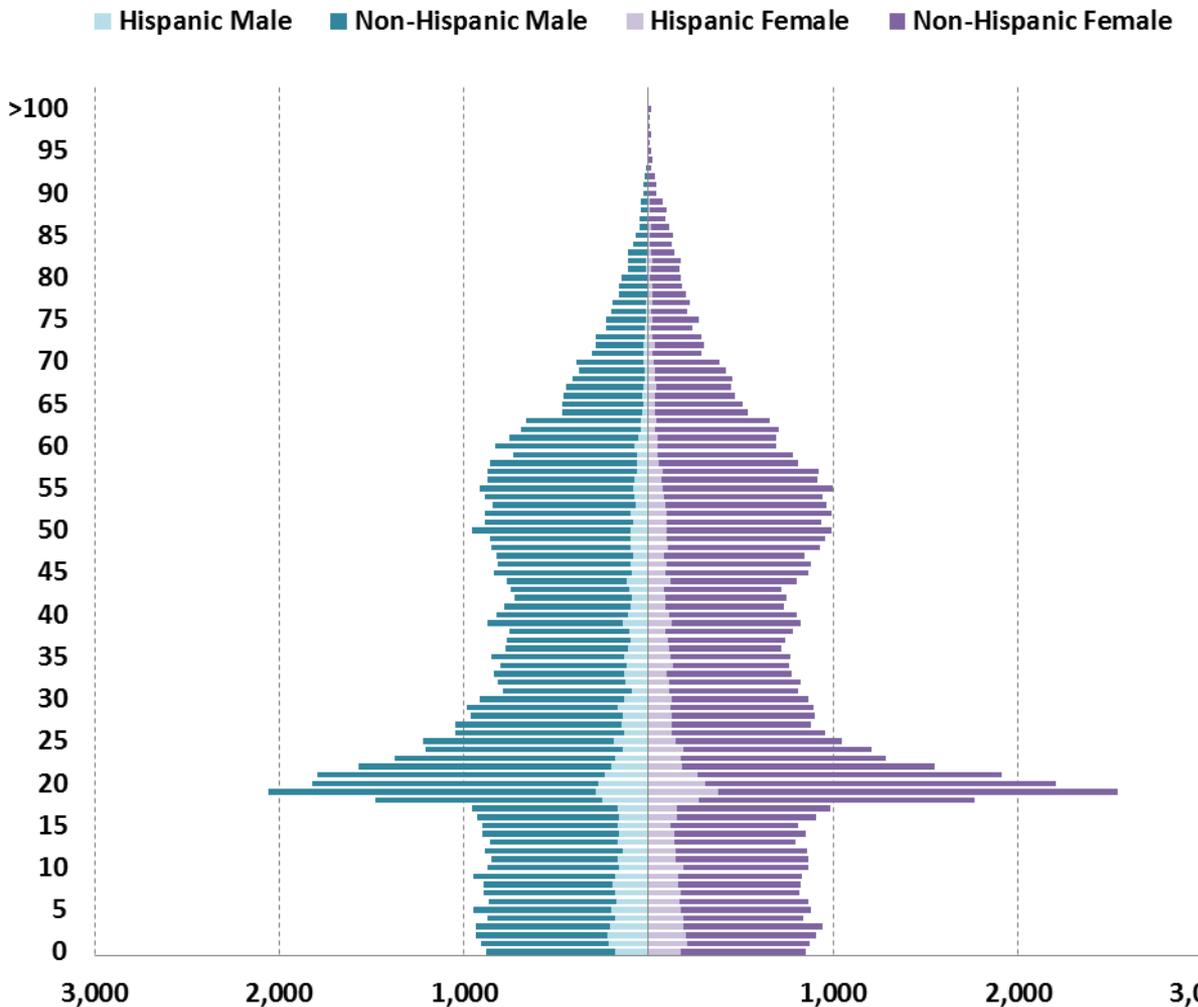
Arizona

Census 2010

Total Population: 6,392,017

Hispanic		
Male	951,790	14.9%
Female	943,359	14.8%
Non-Hispanic		
Male	2,224,033	34.8%
Female	2,272,835	35.6%
Under 17	1,537,878	24.1%
Age 17 - 24	724,347	11.3%
Age 25 - 34	856,693	13.4%
Age 35 - 44	822,494	12.9%
Age 45 - 54	842,546	13.2%
Age 55 - 64	726,228	11.4%
Over 64	881,831	13.8%



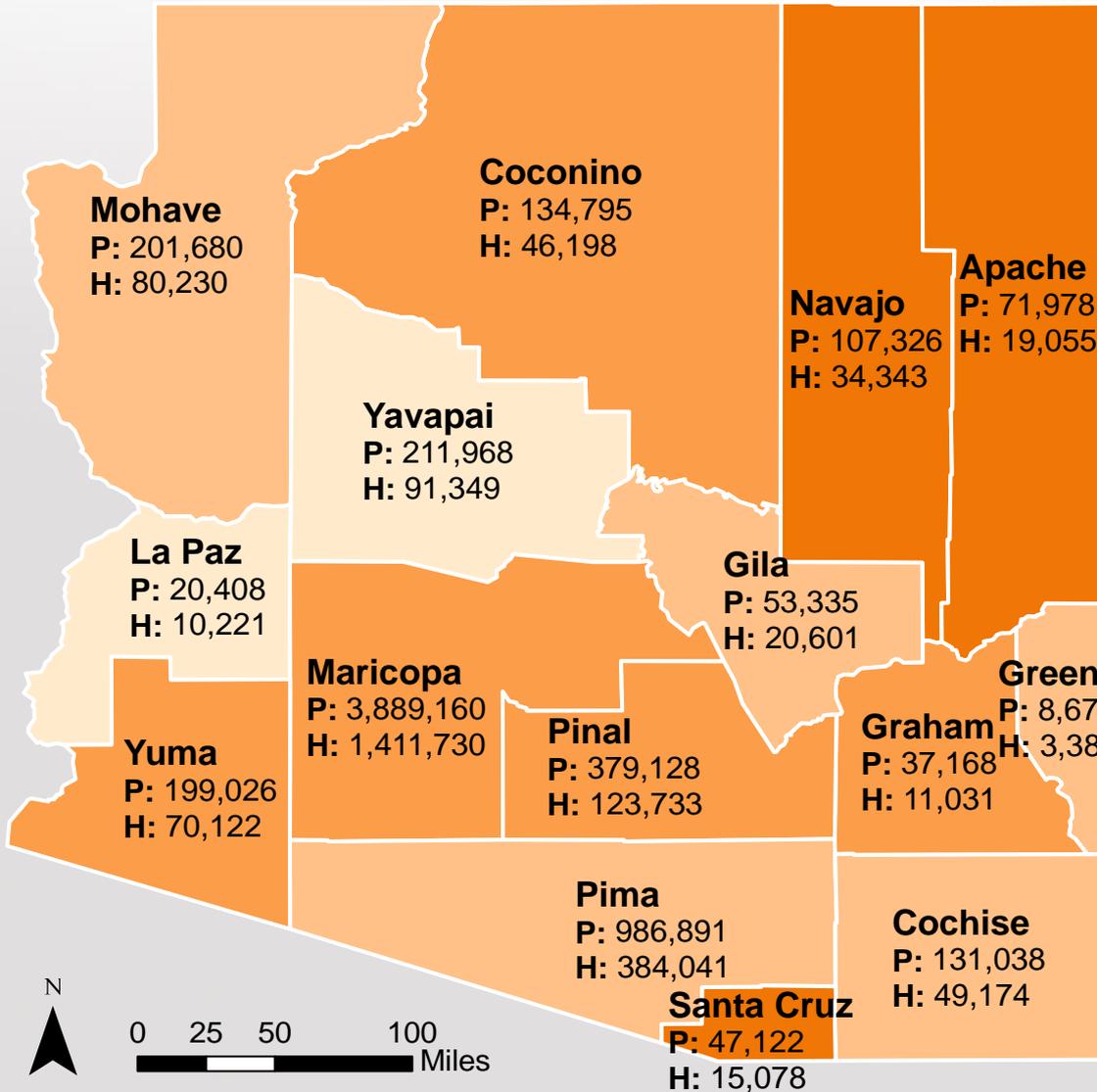


Coconino County

Census 2010

Total Population: 134,421

Hispanic		
Male	9,157	6.8%
Female	9,009	6.7%
Non-Hispanic		
Male	57,509	42.8%
Female	58,746	43.7%
Under 17	29,848	22.2%
Age 17 - 24	25,708	19.1%
Age 25 - 34	18,129	13.5%
Age 35 - 44	15,499	11.5%
Age 45 - 54	17,953	13.4%
Age 55 - 64	15,360	11.4%
Over 64	11,924	8.9%



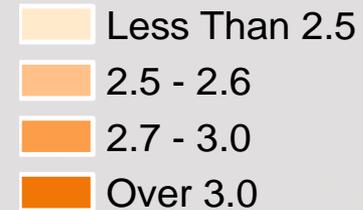
American Community Survey, 2013 5-Year Estimate

Household Size

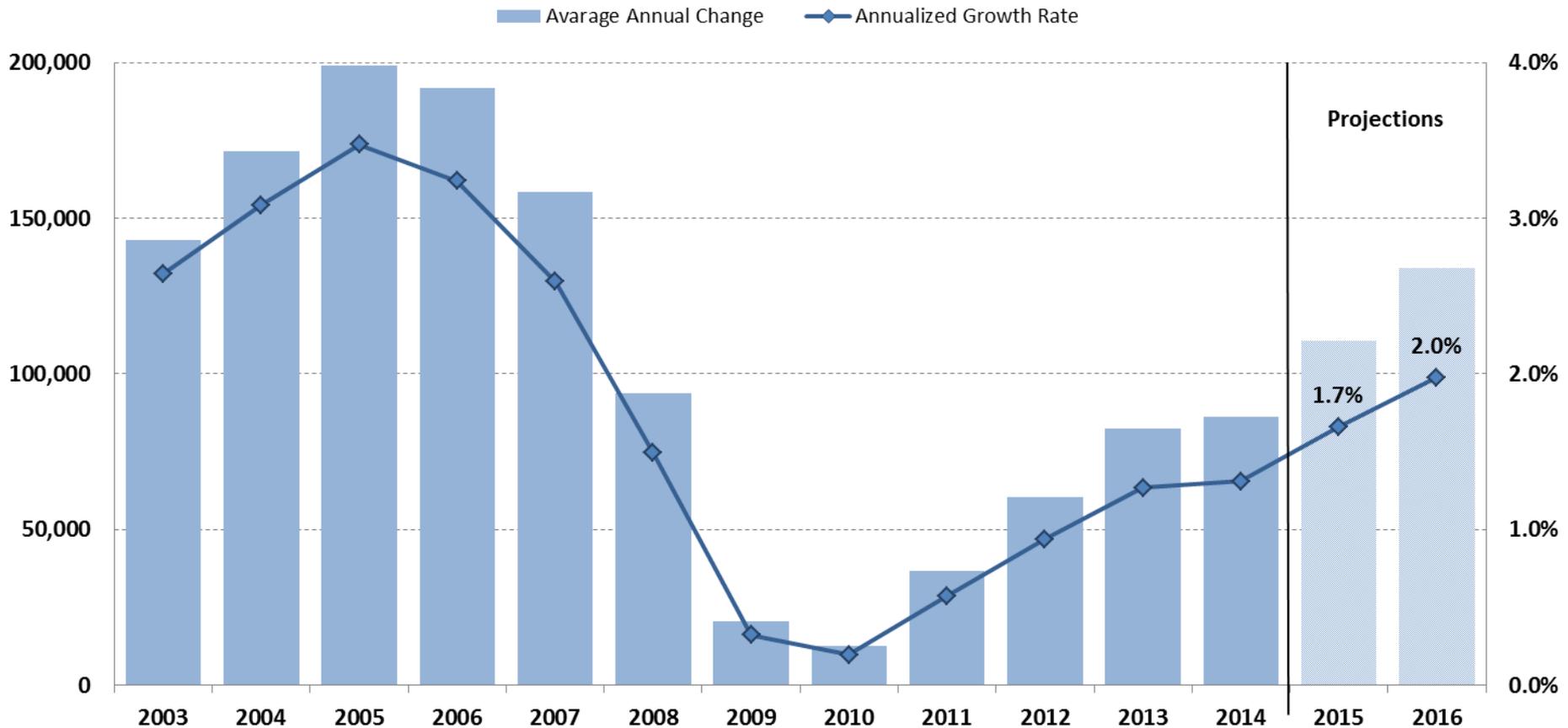
P: Population

H: Households

Average Household Size

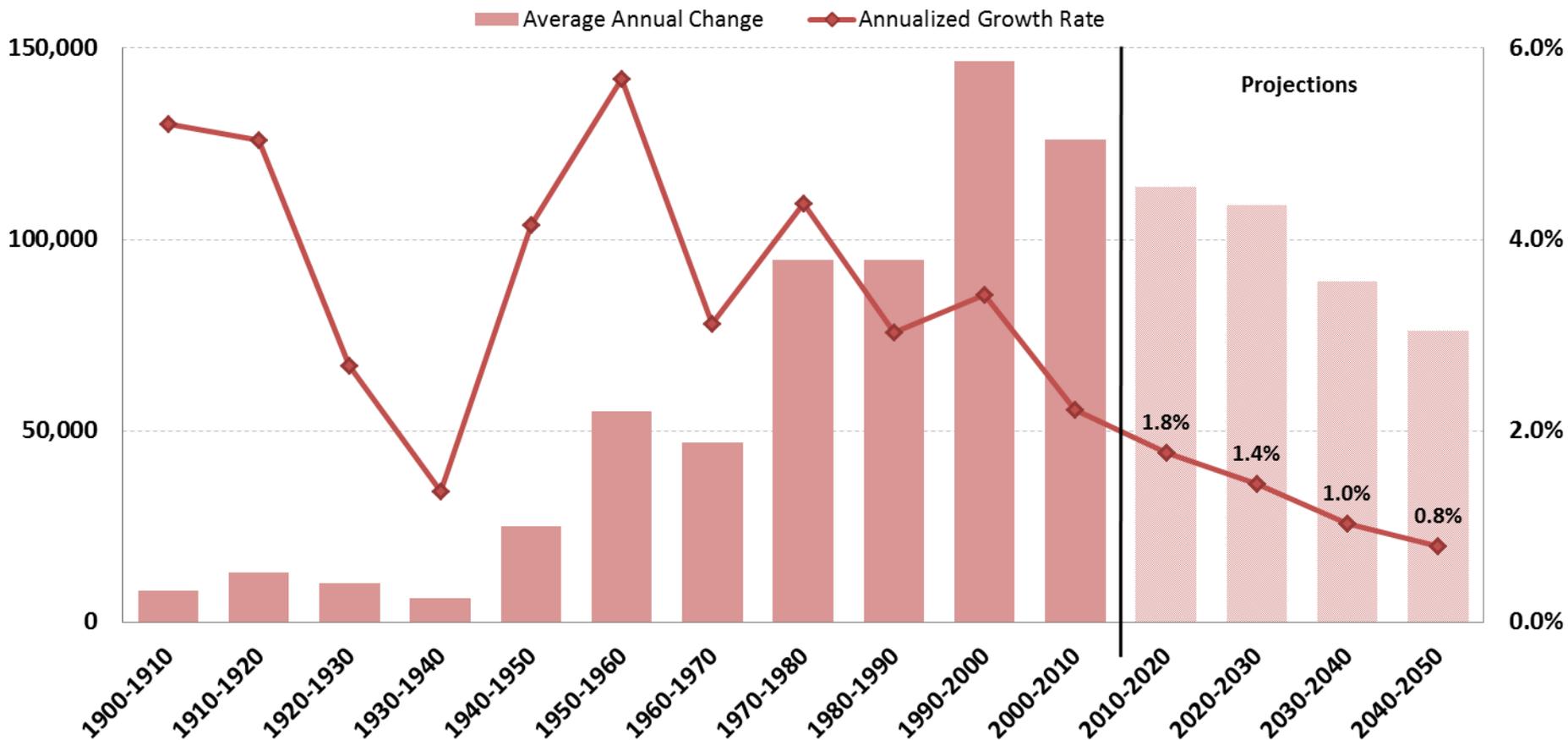


Arizona Population Growth, 2003 - 2016



Prepared by ADOA, Office of Employment and Population Statistics in cooperation with the U.S. Census Bureau

Arizona Population Growth, 1900-2050

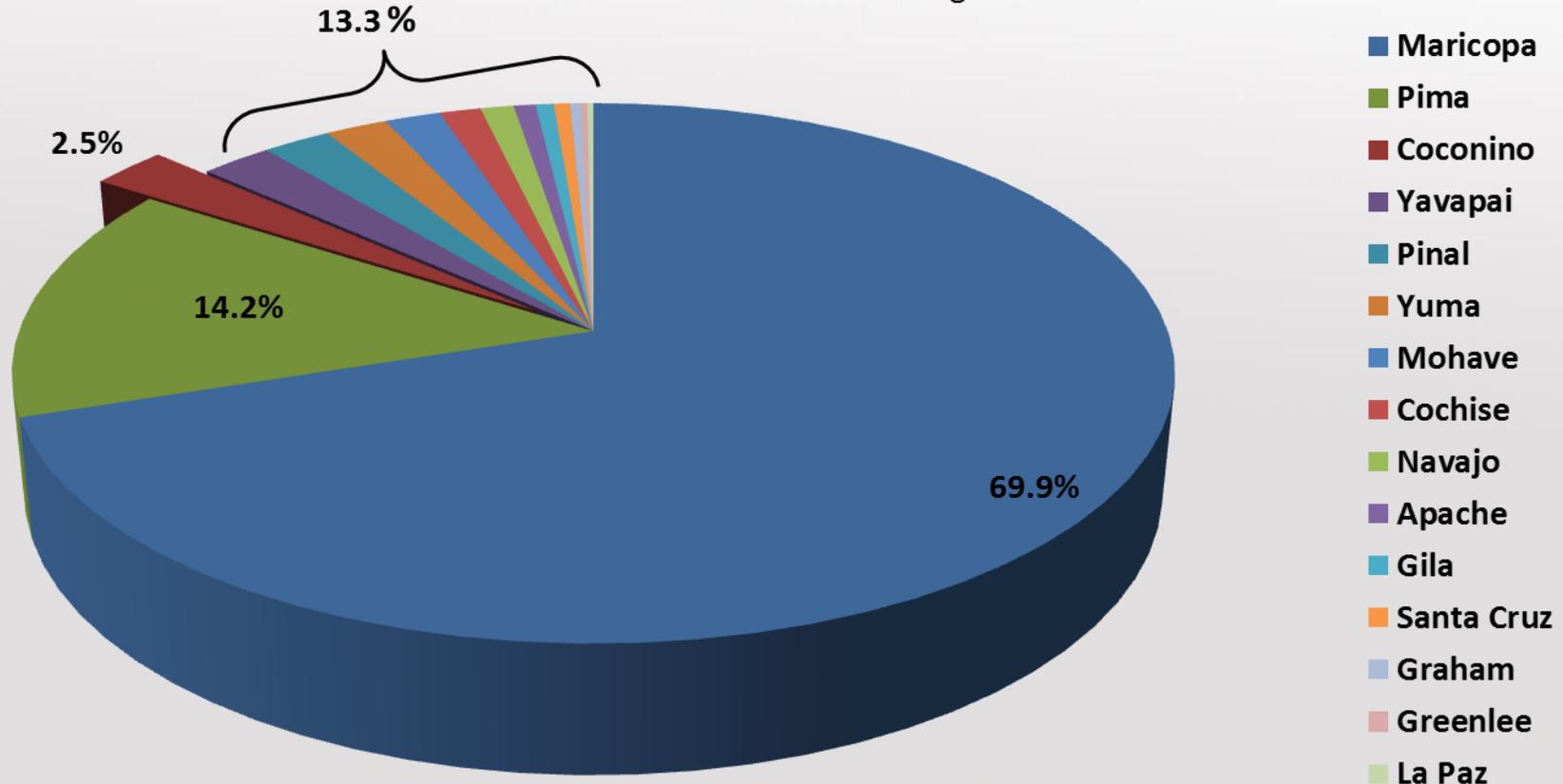


Prepared by ADOA, Office of Employment and Population Statistics in cooperation with the U.S. Census Bureau

At a Glance: Industry Employment

Arizona County Employment Share

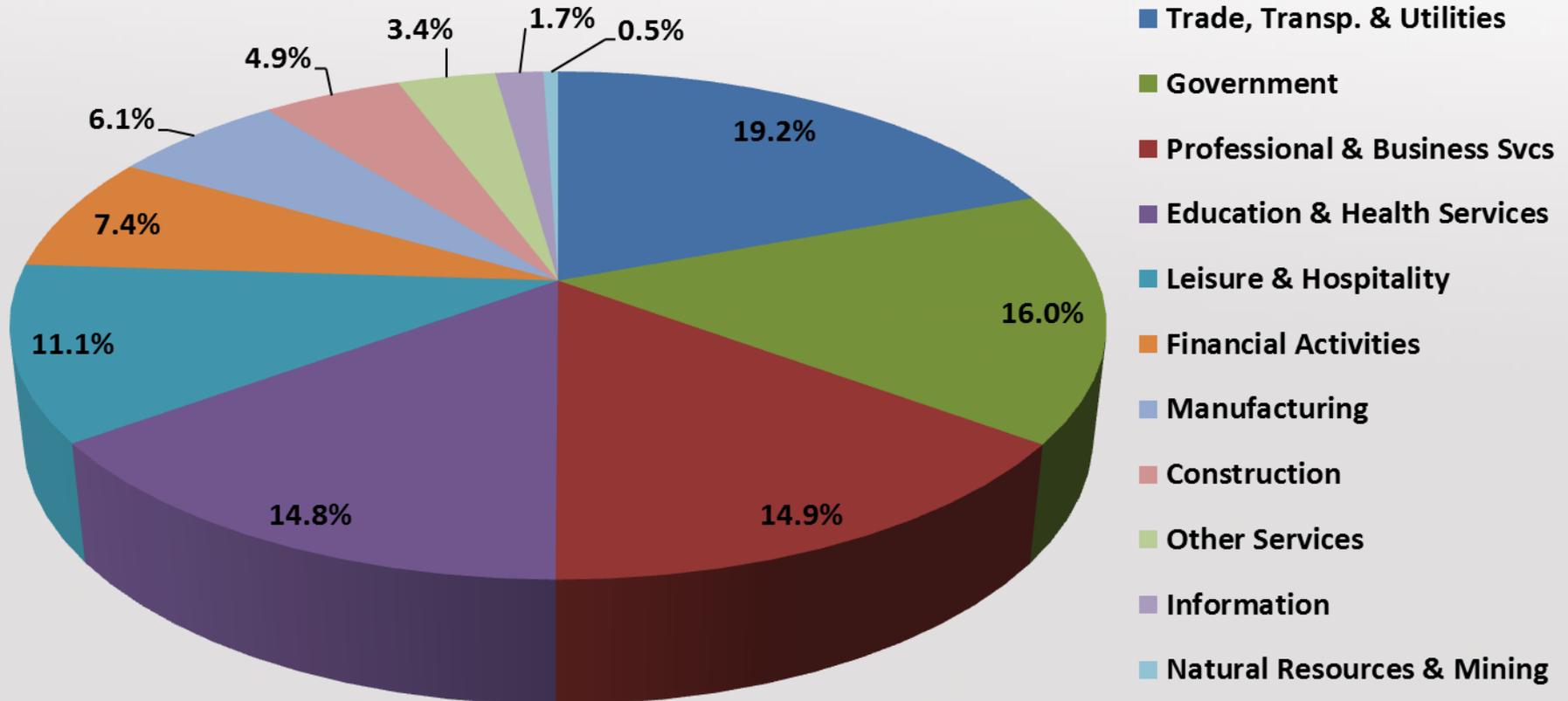
CES 2014 Annual Average



Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Arizona Industry Employment Share

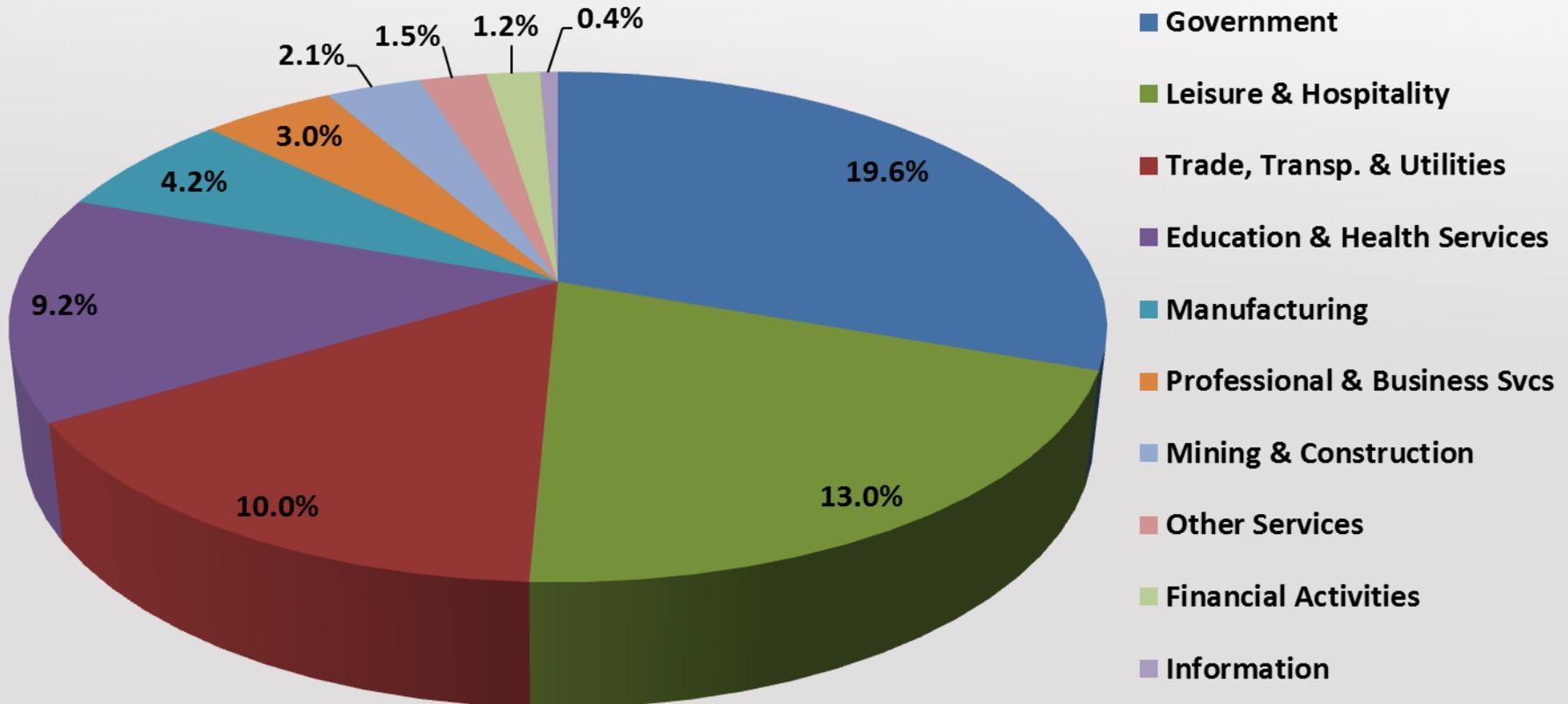
CES 2014 Annual Average



Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Coconino County Industry Employment Share

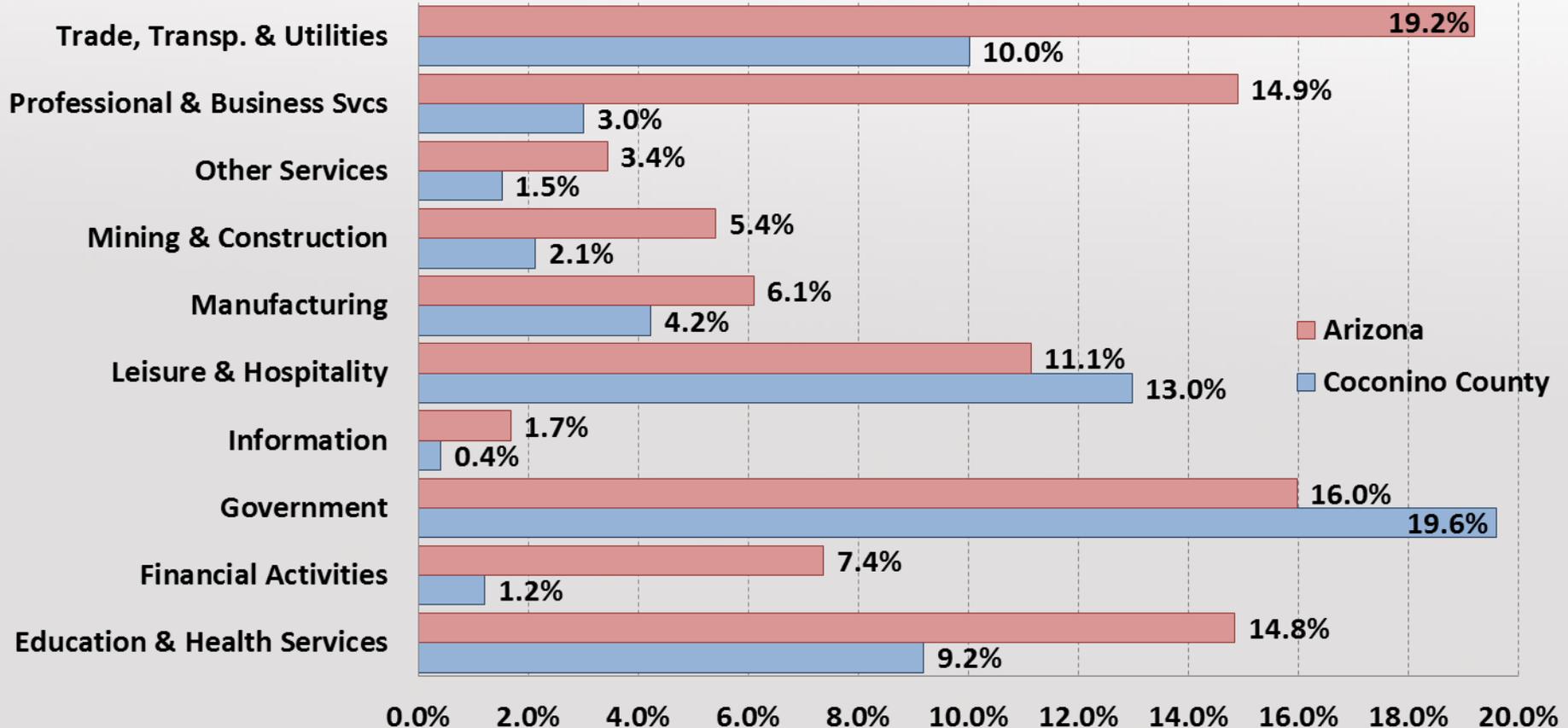
CES 2014 Annual Average



Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Industry Employment Share

CES 2014 Annual Average



Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Location Quotient (LQ)

2013 Annual QCEW

Allows comparison of relative employment and wage levels in the United States, states, counties, & MSAs

How to interpret:

- $LQ = 1$: The industry has the same share of employment/wages as the reference area
- $LQ > 1$: The industry has a higher share of employment/wages as the reference area
- $LQ < 1$: The industry has a lower share of employment/wages as the reference area

Coconino County Location Quotient (LQ)

2013 Annual QCEW

Industry	Employment LQ Relative to U.S.	Total Wage LQ Relative to U.S.	Employment LQ Relative to AZ	Total Wage LQ Relative to AZ
Total, all industries	0.88	0.79	0.87	0.80
Goods-Producing	0.75	0.90	0.88	0.97
Service-Providing	0.90	0.77	0.87	0.75
Natural Resources & Mining	0.21	0.24	0.21	0.28
Construction	0.78	0.69	0.68	0.62
Manufacturing	0.83	1.09	1.19	1.28
Trade, Transp., & Utilities	0.85	0.78	0.85	0.73
Information	0.32	0.17	0.39	0.27
Financial Activities	0.36	0.23	0.29	0.22
Professional & Business Svc.	0.34	0.24	0.31	0.26
Ed. & Health Services	1.00	1.41	1.01	1.27
Leisure & Hospitality	2.07	2.51	1.98	2.19
Other Services	0.67	0.73	0.77	0.80
Government	1.66	2.10	1.68	2.05

*Highlighted cells have a LQ > 1.25 or < .75

Total Nonfarm Employment Annual Average Growth Rate

	2014 ^(a)	2015 ^(b)	2016 ^(b)	
Arizona	2.1%	2.2%	2.4%	
Phoenix MSA ¹	2.4%	2.5%	2.6%	← Slightly Faster Growth
Tucson MSA ²	1.4%	1.6%	1.8%	
Balance of State ³	1.4%	1.6%	1.9%	← Slower Growth

1) Maricopa and Pinal counties

2) Pima County

3) Arizona less Maricopa, Pinal and Pima counties

a) Historical

b) Forecast

Total Nonfarm Employment Annual Average Growth

	2014^(a)	2015^(b)	2016^(b)
Arizona	53,000	56,600	63,100
Phoenix MSA ¹	43,400	45,500	49,900
Tucson MSA ²	4,900	5,700	6,600
Balance of State ³	4,700	5,400	6,600

1) Maricopa and Pinal counties

2) Pima County

3) Arizona less Maricopa, Pinal and Pima counties

a) Historical

b) Forecast

At a Glance: Hours & Income

American Community Survey, 2013 5-Year Estimate

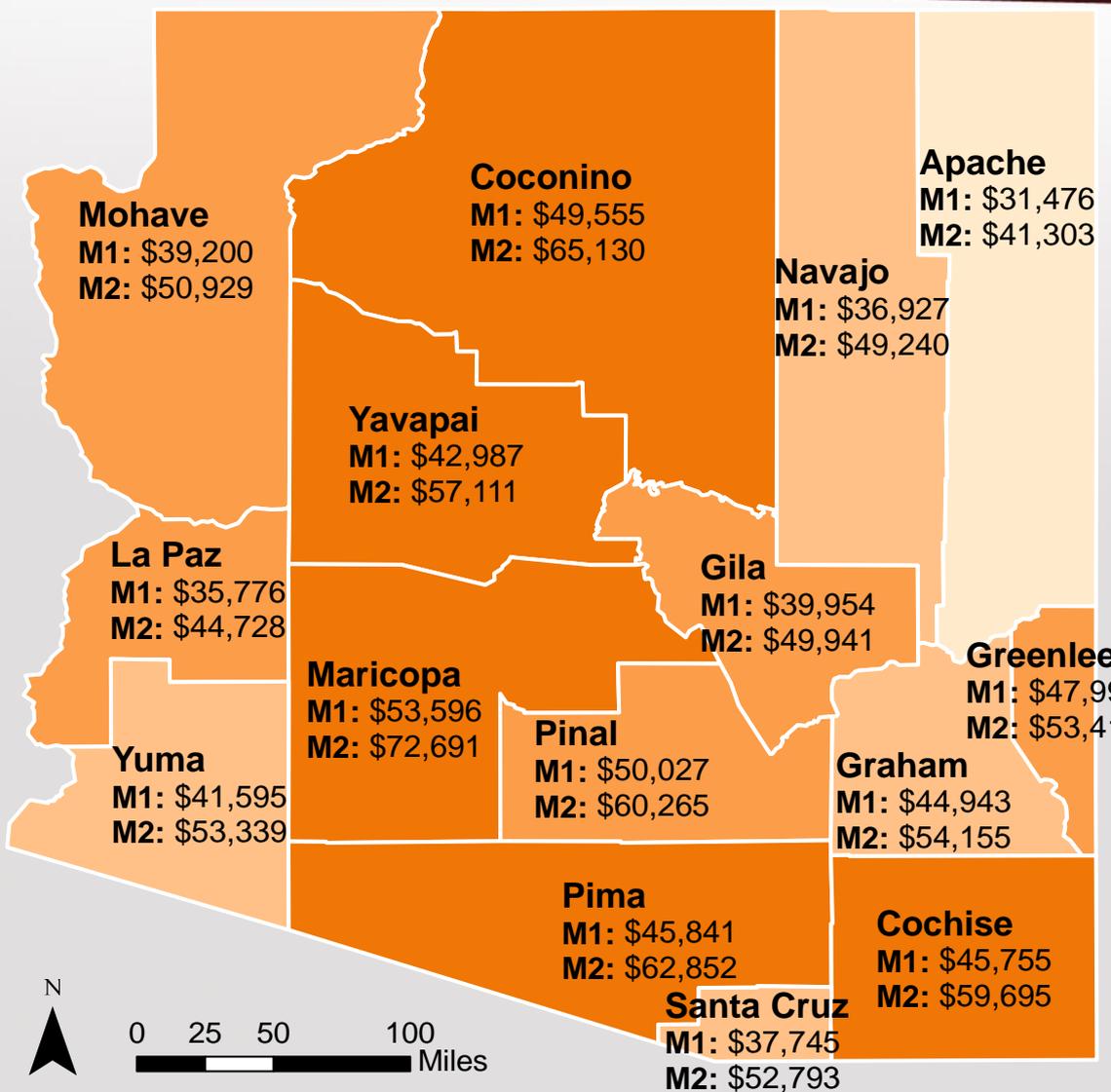
Household Income

M1: Median

M2: Mean

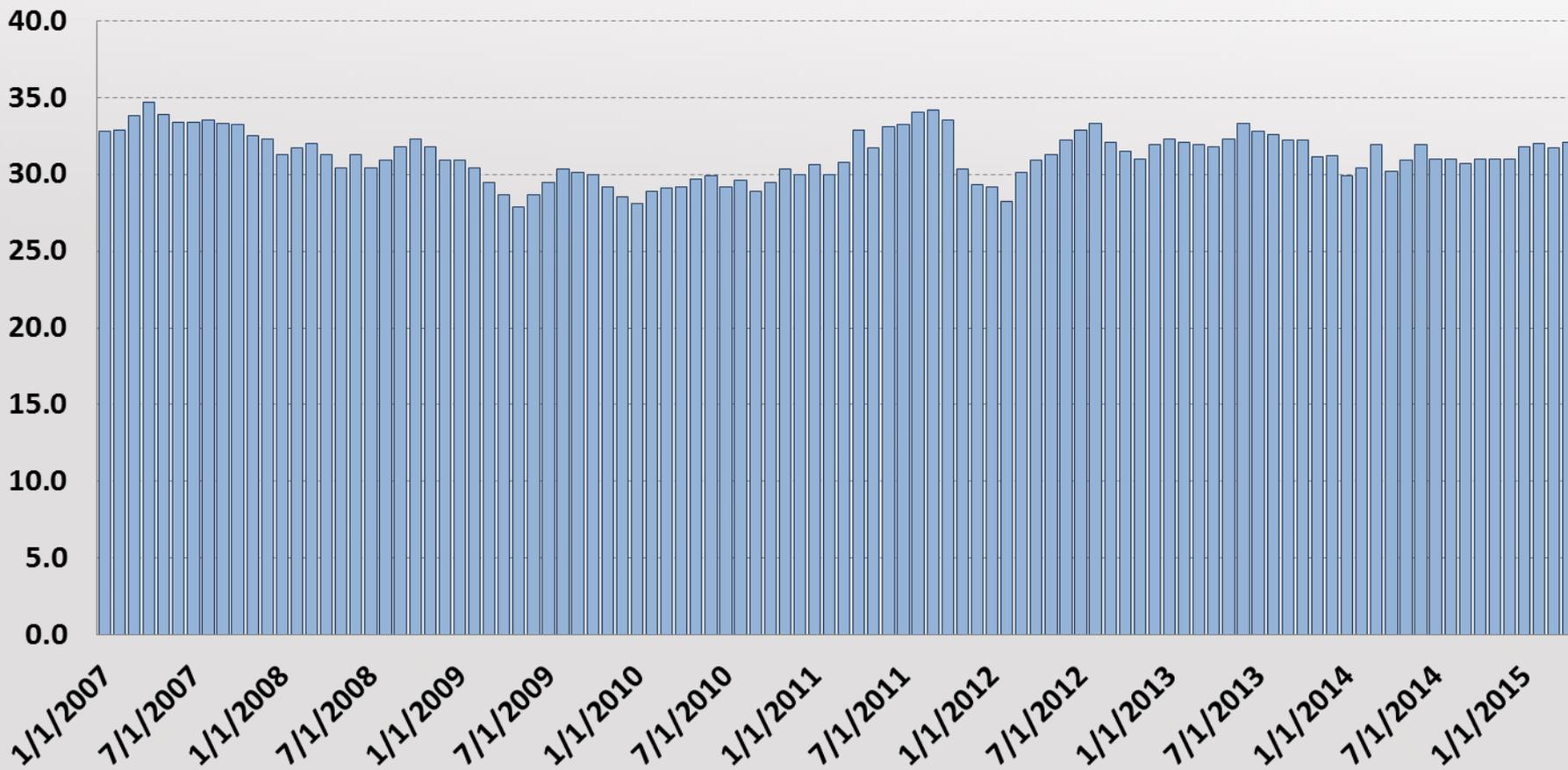
Per Capita Income

- Less Than \$15,000
- \$15,000 - \$20,000
- \$20,001 - \$22,500
- Over \$22,500



Coconino County-Total Private: Average Weekly Hours of All Employees

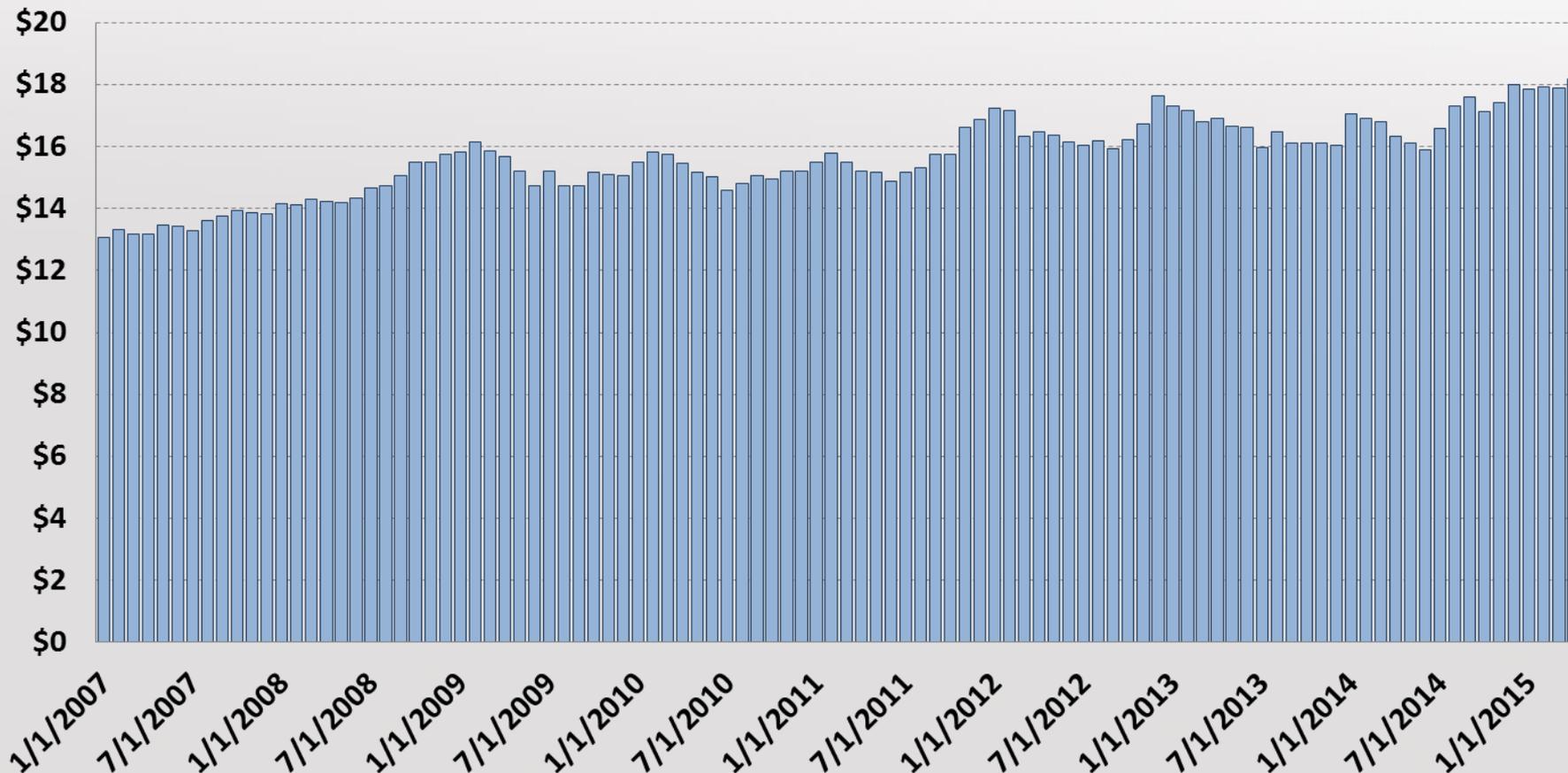
CES 2007-2015



Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Coconino County-Total Private: Average Hourly Earnings of All Employees

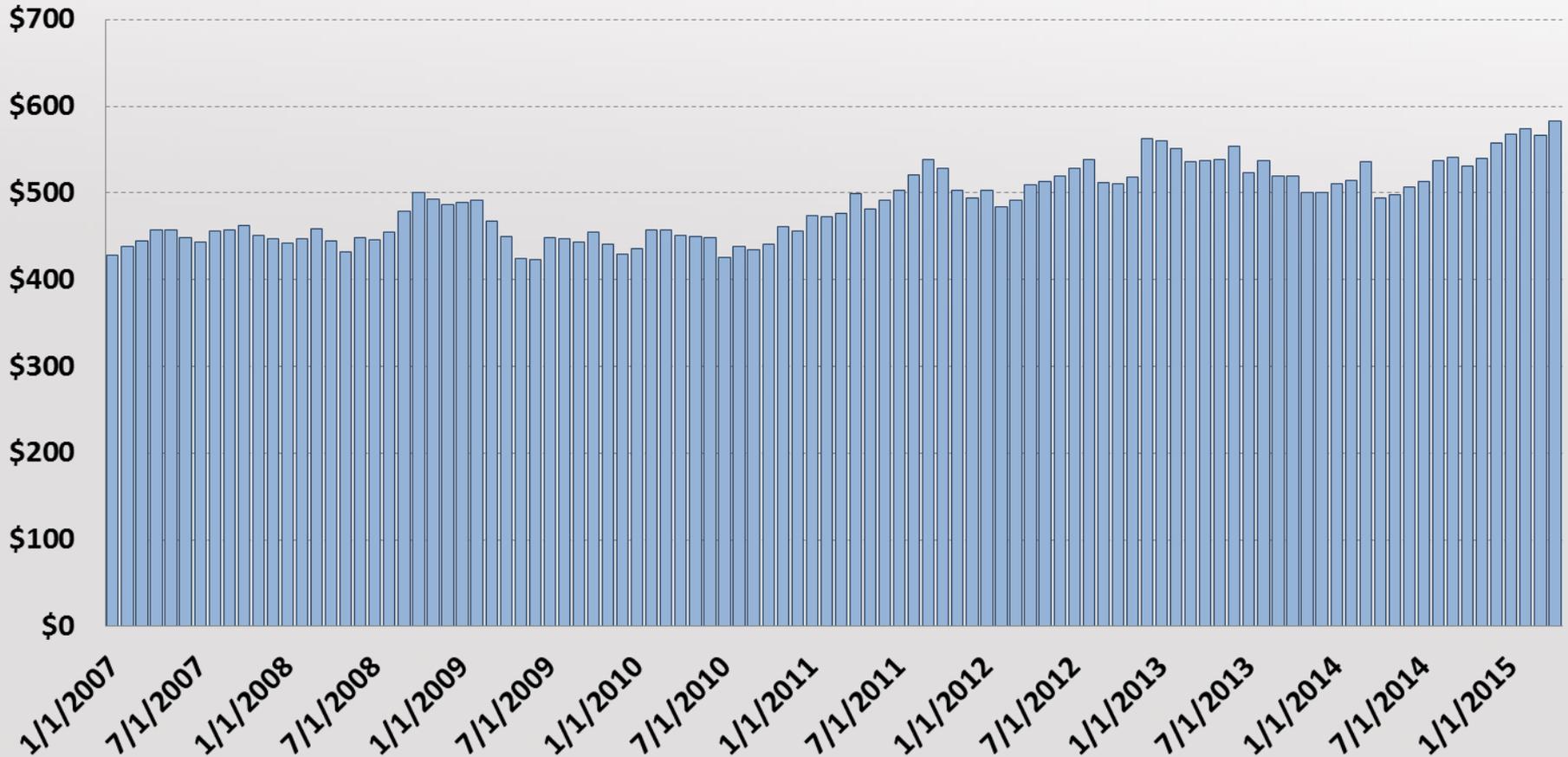
CES 2007-2015



Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Coconino County-Total Private: Average Weekly Earnings of All Employees

CES 2007-2015



Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Labor Market Information

How to Use LMI Data

How should I use this data?

- **Craft your question carefully** – the more muddled the question, the more difficulty you will have in finding the answer
- **Become familiar with different data sets (or someone who is)** – there is no one place to find all the data you need
- **Know the limitations of your data set** – it’s easy to accidentally misuse data and draw erroneous conclusions
- **Use more than one source of data** – don’t lock yourself into a single estimate, consider all of the available data to get the most accurate picture

“A single model is no substitute for judicious consideration of the various indicators”

-Federal Reserve

How can labor market information data help companies & job seekers?

- Occupation Questions
 - What is considered a competitive wage for a particular occupation?
 - What is the turnover rate for a particular occupation?
- Labor Supply Questions
 - What is the potential labor supply level for a city?
 - What is the potential labor supply level for a city worksite?
 - What are the demographics of the workers in that area?
 - What is the education level of a population in a city?

How can labor market information data help companies & job seekers?

- Industry Questions
 - How many firms in my industry are already located in that region?
 - What is the average wage for my industry?
 - What are the characteristics of the new hires in that industry?

Example Question 1:

What is competitive wage for web developers?

1. Go to Employment and Population Statistics <https://laborstats.az.gov/>
2. Select
 - a) Data by BLS Program
 - b) Occupational Employment Statistics (OES)
 - c) 2013 Occupational Employment & Wage Estimates
 - d) Coconino County---2013 Occupational Employment & Hourly Wage Estimates (info on more than 300 occupations)
3. Look up occupation: (SOC 15-1134) Web Developers

Coconino County---2013 Occupational Employment & Hourly Wage Estimates

Occ. Code	Occupational Title	Mean Wage	10 th Percentile Wage	25 th Percentile Wage	Median Percentile Wage	75 th Percentile Wage	90 th Percentile Wage	Rounded Employment
15-1134	Web Developers	\$25.77	\$17.82	\$19.82	\$23.89	\$28.94	\$40.04	30

Example Question 2:

What is the expected turnover rate for web developers?

1. Go to Employment and Population Statistics <https://laborstats.az.gov/>
2. Select
 - a) Data by Topic
 - b) Employment Forecasts
 - c) Occupation Projections data
 - d) 2014-2016 Statewide Occupation Forecast Tables & Graphs
3. Look up occupation: (SOC 15-1134) Web Developers
4. Divide Openings Due Separations (101) by Total Openings (237) to get a turnover rate of 42.6%

Example Question 3:

What is the potential labor supply level **in** Flagstaff City?

1. Go to Employment and Population Statistics <https://laborstats.az.gov/>
2. Select
 - a) Data by BLS Program
 - b) Local Area Unemployment
 - c) LAUS Tables – Special Unemployment Report
 - d) Click to display or hide list of files
 - e) 2015 Special Unemployment Report
3. Look up Flagstaff City: April 2015 Labor Force – **40,354**

Example Question 4:

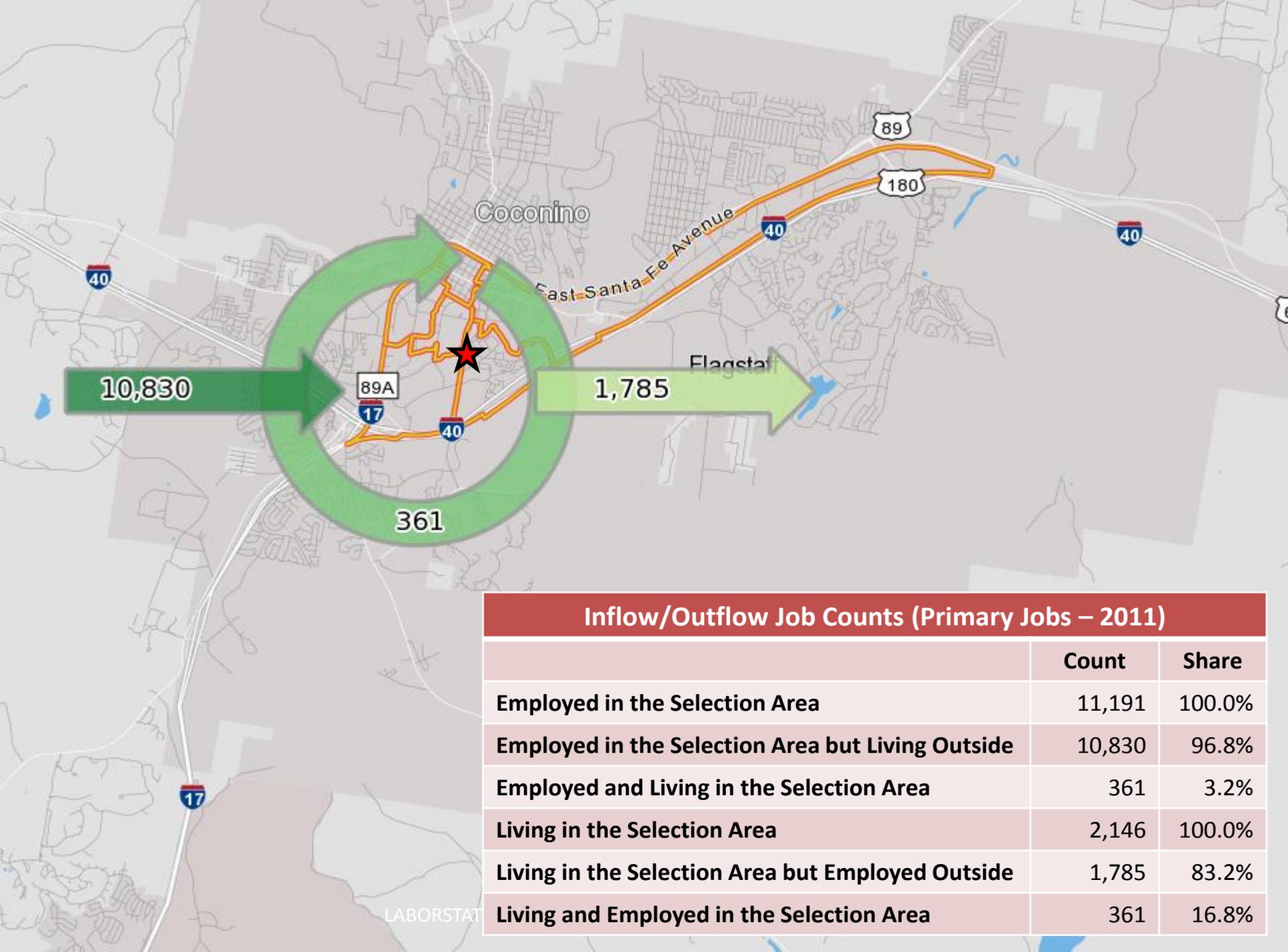
What is the potential labor supply level *for a worksite in* Flagstaff?

1. Go to On The Map <http://onthemap.ces.census.gov/>
2. Select
 - a) Start
 - i. Search: Flagstaff
 - ii. Search All Names: Places (Cities, CDPs, etc.)
 - b) Selection
 - i. Drawing Tools: Draw Polygon - 2 (Tract 10, Coconino, AZ); 3 (Tract 10, Coconino, AZ); 2 (Tract 8, Coconino, AZ); 3 (Tract 8, Coconino, AZ); 1 (Tract 10, Coconino, AZ); 1 (Tract 8, Coconino, AZ)
 - ii. Add Layer Selection: Census Block Groups

Example Question 4:

What is the potential labor supply level *for a worksite in* Flagstaff?

- C. Perform Analysis on Selection Area
- D. Analysis Settings
 - i. Analysis Type
 - a) Inflow/Outflow
 - ii. Year
 - a) Year: 2011
 - b) Job Type: Primary Jobs
 - iii. Go!



Inflow/Outflow Job Counts (Primary Jobs – 2011)

	Count	Share
Employed in the Selection Area	11,191	100.0%
Employed in the Selection Area but Living Outside	10,830	96.8%
Employed and Living in the Selection Area	361	3.2%
Living in the Selection Area	2,146	100.0%
Living in the Selection Area but Employed Outside	1,785	83.2%
Living and Employed in the Selection Area	361	16.8%

Example Question 5:

What are some of the demographics of the **workers in that area?**

1. Continue from previous steps (What is the potential labor supply level for a worksite in Flagstaff)
2. Perform Analysis on Selection Area
 - a) Analysis Type
 - a) Area Profile

Jobs by Worker Ethnicity (Primary Jobs – 2011)

	Count	Share
Not Hispanic or Latino	9,456	84.5%
Hispanic or Latino	1,735	15.5%

Jobs by Worker Sex (Primary Jobs – 2011)

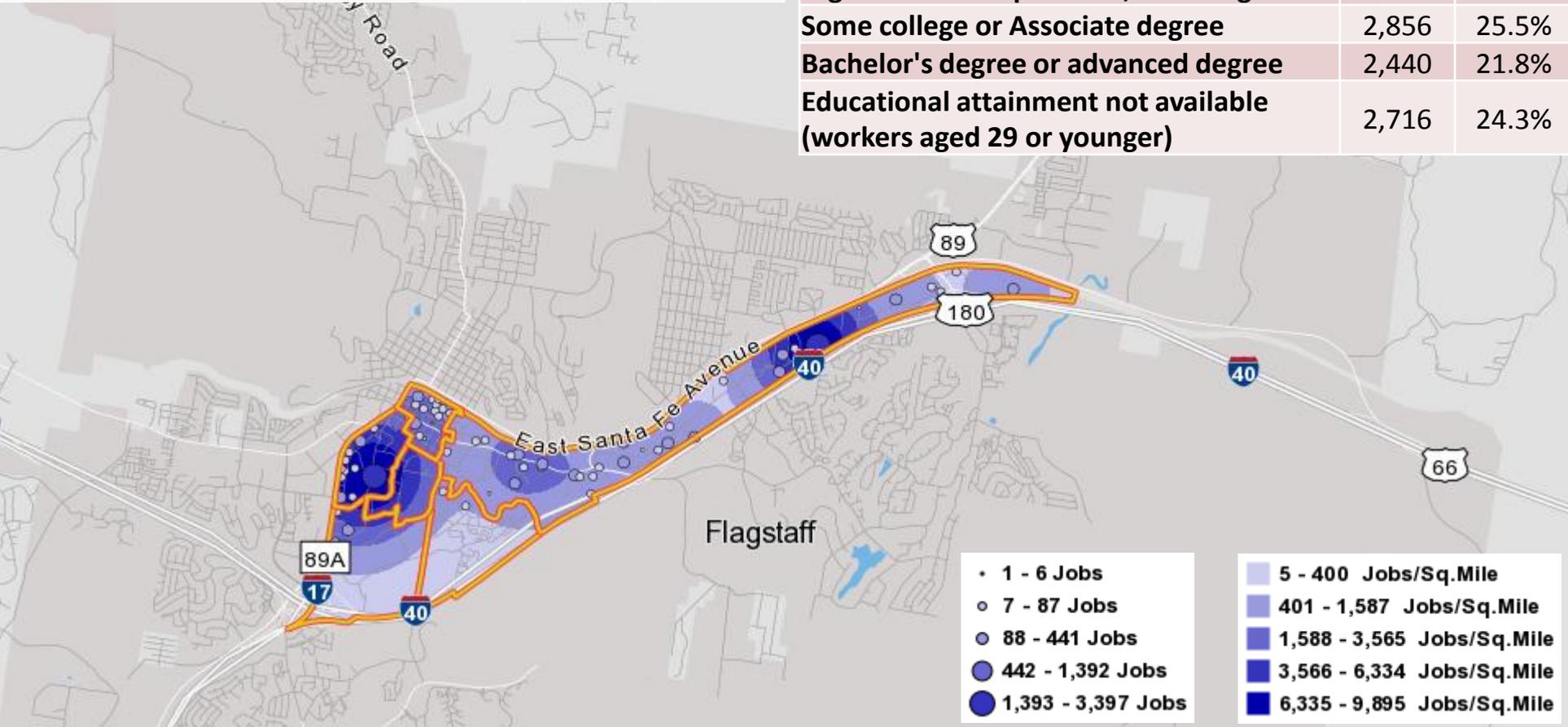
	Count	Share
Male	5,958	53.2%
Female	5,233	46.8%

Jobs by Worker Age (Primary Jobs – 2011)

	Count	Share
Age 29 or younger	2,716	24.3%
Age 30 to 54	6,237	55.7%
Age 55 or older	2,238	20.0%

Jobs by Worker Educational Attainment (Primary Jobs – 2011)

	Count	Share
Less than high school	900	8.0%
High school or equivalent, no college	2,279	20.4%
Some college or Associate degree	2,856	25.5%
Bachelor's degree or advanced degree	2,440	21.8%
Educational attainment not available (workers aged 29 or younger)	2,716	24.3%



Example Question 6:

What is the education level of the population in a Flagstaff?

1. Go to The Census Bureau <http://www.census.gov/>
2. Select
 - a) Data
 - b) Data Tools and Apps
 - c) The American FactFinder
 - d) Advanced Search
 - i. Show Me All

Example Question 6:

What is the education level of the population in a Flagstaff?

- e) Geographies
 - i. Select a geographic type: Place – 160
 - ii. Select a state: Arizona
 - iii. Select one or more geographic areas: Flagstaff City, Arizona
- 3. Select Table, File or Document Title: Selected Social Characteristics in the United States, 2013 American Community Survey 1-Year Estimates

Example Question 6:

What is the education level of the population in a Flagstaff?

Subject	Estimate	Margin of Error	Percent	Percent Margin of Error
Population 25 years and over	36,511	+/-1,411	36,511	(X)
Less than 9th grade	1,441	+/-1,085	3.90%	+/-3.0
9th to 12th grade, no diploma	1,959	+/-745	5.40%	+/-2.1
High school graduate (includes equivalency)	5,702	+/-1,193	15.60%	+/-3.3
Some college, no degree	7,970	+/-1,582	21.80%	+/-4.3
Associate's degree	3,700	+/-1,181	10.10%	+/-3.2
Bachelor's degree	8,687	+/-1,398	23.80%	+/-3.6
Graduate or professional degree	7,052	+/-1,414	19.30%	+/-3.7

An '(X)' means that the estimate is not applicable or not available

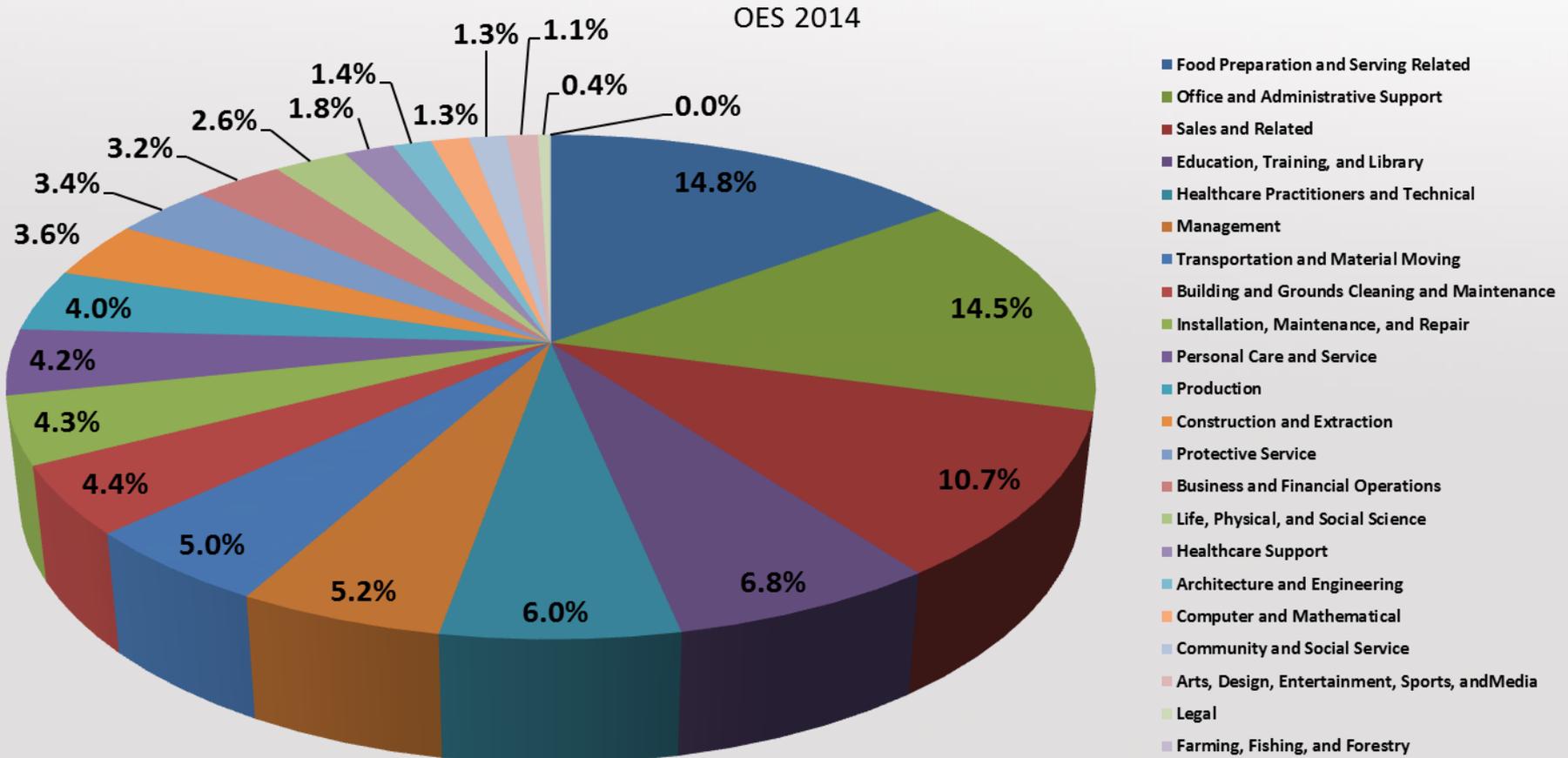
Labor Market Information

Occupations & Wages

Coconino County---2014 Occupational Employment & Hourly Wage Estimates

Occ. Code	Major Occupations	Rounded Employment	Mean Wage	10th Percentile Wage	25th Percentile Wage	Median Wage	75th Percentile Wage	90th Percentile
35-0000	Food Preparation and Serving Related	8,510	\$ 11.35	\$ 8.17	\$ 8.58	\$ 9.26	\$ 12.11	\$ 17.61
43-0000	Office and Administrative Support	8,370	\$ 15.70	\$ 9.09	\$ 11.17	\$ 14.76	\$ 18.70	\$ 23.34
41-0000	Sales and Related	6,140	\$ 14.20	\$ 8.30	\$ 8.85	\$ 10.49	\$ 15.40	\$ 23.44
25-0000	Education, Training, and Library	3,900	\$ 24.92	\$ 10.60	\$ 14.79	\$ 20.81	\$ 28.84	\$ 43.60
29-0000	Healthcare Practitioners and Technical	3,450	\$ 36.59	\$ 13.83	\$ 20.43	\$ 30.81	\$ 43.11	\$ 59.53
11-0000	Management	2,990	\$ 40.97	\$ 17.30	\$ 25.09	\$ 36.07	\$ 50.62	\$ 69.36
53-0000	Transportation and Material Moving	2,870	\$ 15.88	\$ 8.69	\$ 10.11	\$ 14.69	\$ 20.18	\$ 23.61
37-0000	Building and Grounds Cleaning and Maintenance	2,530	\$ 10.78	\$ 8.20	\$ 8.65	\$ 9.47	\$ 12.03	\$ 14.66
49-0000	Installation, Maintenance, and Repair	2,480	\$ 20.78	\$ 10.78	\$ 14.19	\$ 19.01	\$ 25.67	\$ 34.17
39-0000	Personal Care and Service	2,430	\$ 11.54	\$ 8.25	\$ 8.79	\$ 9.98	\$ 12.77	\$ 17.08
51-0000	Production	2,290	\$ 15.08	\$ 8.27	\$ 8.81	\$ 11.08	\$ 19.46	\$ 27.67
47-0000	Construction and Extraction	2,090	\$ 20.02	\$ 12.24	\$ 14.62	\$ 18.05	\$ 23.51	\$ 31.63
33-0000	Protective Service	1,970	\$ 22.50	\$ 9.85	\$ 14.81	\$ 21.95	\$ 28.73	\$ 35.44
13-0000	Business and Financial Operations	1,820	\$ 28.04	\$ 15.85	\$ 20.57	\$ 26.73	\$ 34.12	\$ 41.90
19-0000	Life, Physical, and Social Science	1,500	\$ 25.35	\$ 13.60	\$ 15.71	\$ 22.26	\$ 31.60	\$ 40.10
31-0000	Healthcare Support	1,010	\$ 15.42	\$ 10.24	\$ 12.16	\$ 14.22	\$ 17.66	\$ 21.40
17-0000	Architecture and Engineering	780	\$ 35.38	\$ 20.33	\$ 26.99	\$ 34.07	\$ 43.44	\$ 54.04
15-0000	Computer and Mathematical	770	\$ 30.57	\$ 15.20	\$ 21.42	\$ 28.82	\$ 37.97	\$ 48.11
21-0000	Community and Social Service	760	\$ 19.57	\$ 11.94	\$ 14.34	\$ 17.67	\$ 22.52	\$ 28.53
27-0000	Arts, Design, Entertainment, Sports, and Media	640	\$ 19.33	\$ 8.83	\$ 10.58	\$ 14.66	\$ 24.90	\$ 35.27
23-0000	Legal	240	\$ 34.79	\$ 17.82	\$ 21.43	\$ 30.44	\$ 46.46	\$ 58.95
45-0000	Farming, Fishing, and Forestry	20	\$ 16.45	\$ 10.54	\$ 12.51	\$ 17.01	\$ 20.53	\$ 21.49

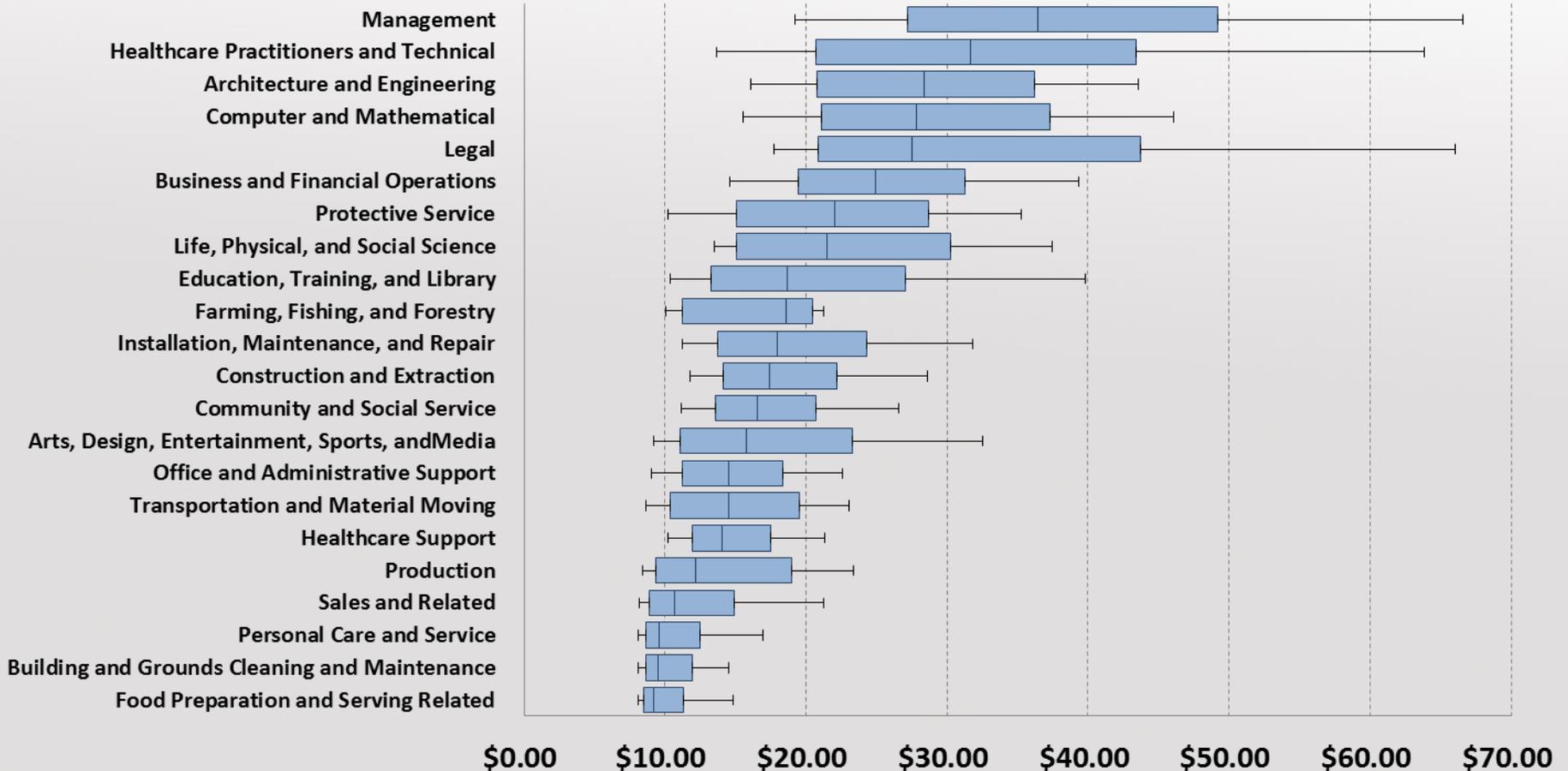
Coconino County Major Occupation Employment Share



Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

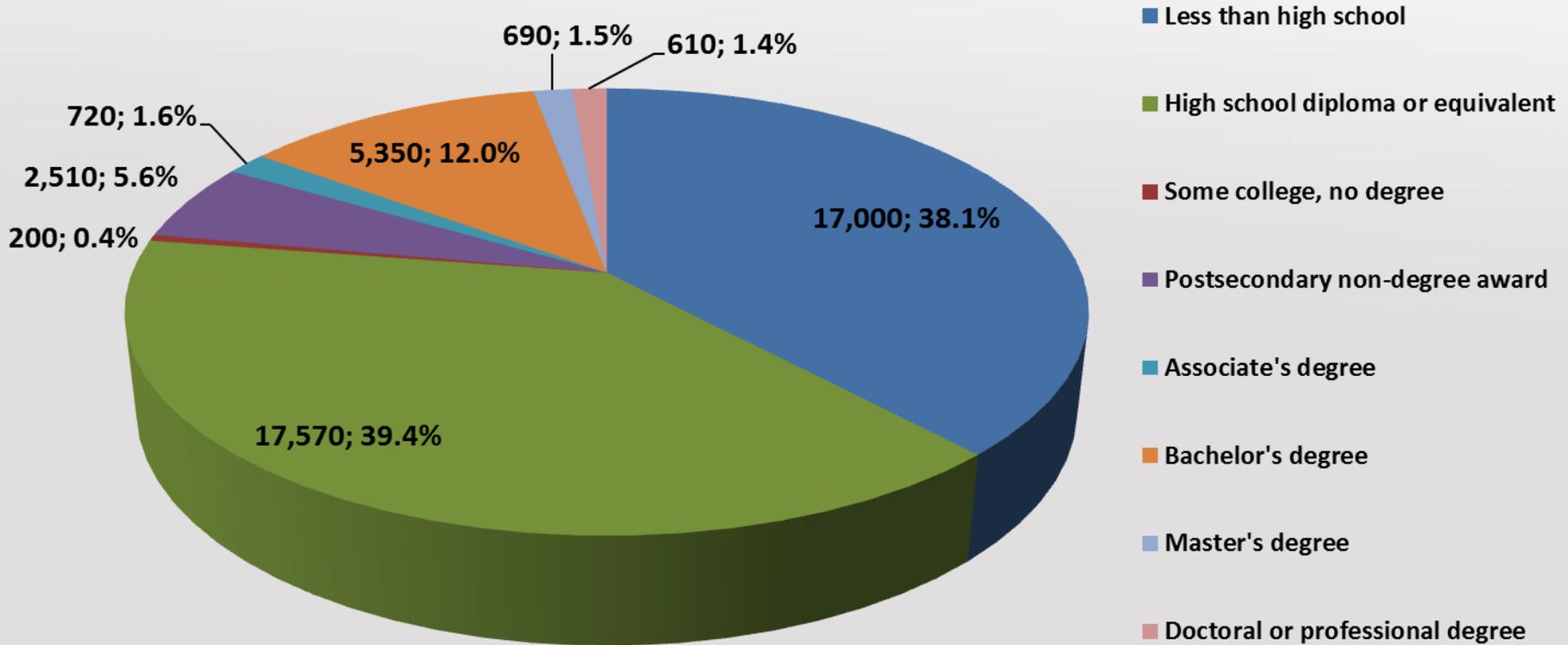
Coconino County-Major Occupational Hourly Wage Percentiles

10th Percentile Wage - 25th Percentile Wage - Median - 75th Percentile Wage - 90th Percentile Wage



Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Coconino County Occupational Employment - Typical Education Needed for Entry (OES 2014)



Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Employment and Population Statistics



Coconino County---2014 Occupational Employment & Hourly Wage Estimates

Occ. Code	Major Occupations	Rounded Employment	Mean Wage	10th Percentile Wage	25th Percentile Wage	Median Wage	75th Percentile Wage	90th Percentile
Less Than High School								
47-2051	Cement Masons and Concrete Finishers	120	\$ 17.98	\$ 12.74	\$ 14.07	\$ 17.59	\$ 21.27	\$ 23.31
47-2081	Drywall and Ceiling Tile Installers	30	\$ 17.64	\$ 12.49	\$ 13.41	\$ 14.94	\$ 21.62	\$ 26.89
47-2141	Painters, Construction and Maintenance	160	\$ 17.43	\$ 13.07	\$ 15.26	\$ 17.31	\$ 20.01	\$ 22.46
53-7081	Refuse and Recyclable Material Collectors	70	\$ 17.05	\$ 12.07	\$ 14.21	\$ 17.17	\$ 20.37	\$ 22.63
53-7051	Industrial Truck and Tractor Operators	90	\$ 16.77	\$ 10.75	\$ 12.99	\$ 16.43	\$ 21.08	\$ 23.04
High School Diploma or Equivalent								
11-3071	Transportation, Storage, and Distribution Managers	60	\$ 45.11	\$ 25.95	\$ 31.81	\$ 45.18	\$ 54.70	\$ 63.96
11-9199	Managers, All Other	140	\$ 43.65	\$ 19.95	\$ 30.88	\$ 43.25	\$ 55.07	\$ 64.49
49-9051	Electrical PowerLine Installers and Repairers	30	\$ 40.72	\$ 31.56	\$ 39.46	\$ 41.53	\$ 44.35	\$ 46.70
33-1012	FirstLine Supervisors of Police and Detectives	110	\$ 37.87	\$ 29.80	\$ 32.08	\$ 35.72	\$ 42.36	\$ 52.43
33-3021	Detectives and Criminal Investigators	60	\$ 35.23	\$ 17.25	\$ 28.13	\$ 33.86	\$ 44.54	\$ 54.64
Some College, No Degree								
15-1151	Computer User Support Specialists Computer, Automated Teller, and Office Machine	200	\$ 20.40	\$ 12.39	\$ 14.83	\$ 20.02	\$ 24.30	\$ 29.17
49-2011	Repairers	null	\$ 13.23	\$ 9.07	\$ 10.96	\$ 13.15	\$ 15.05	\$ 17.69
Postsecondary Non-Degree Award								
33-1021	First Line Supervisors of Fire Fighting and Prevention Workers	160	\$ 33.19	\$ 17.70	\$ 28.76	\$ 34.39	\$ 40.49	\$ 44.56
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	null	\$ 32.26	\$ 29.96	\$ 31.23	\$ 33.34	\$ 35.45	\$ 36.71
51-1011	First Line Supervisors of Production and Operating Workers	160	\$ 31.21	\$ 17.12	\$ 24.05	\$ 29.40	\$ 40.05	\$ 47.29
27-4011	Audio and Video Equipment Technicians	40	\$ 22.67	\$ 10.54	\$ 14.04	\$ 19.05	\$ 28.82	\$ 43.36
31-9011	Massage Therapists	60	\$ 22.49	\$ 8.22	\$ 8.70	\$ 18.52	\$ 38.00	\$ 43.42

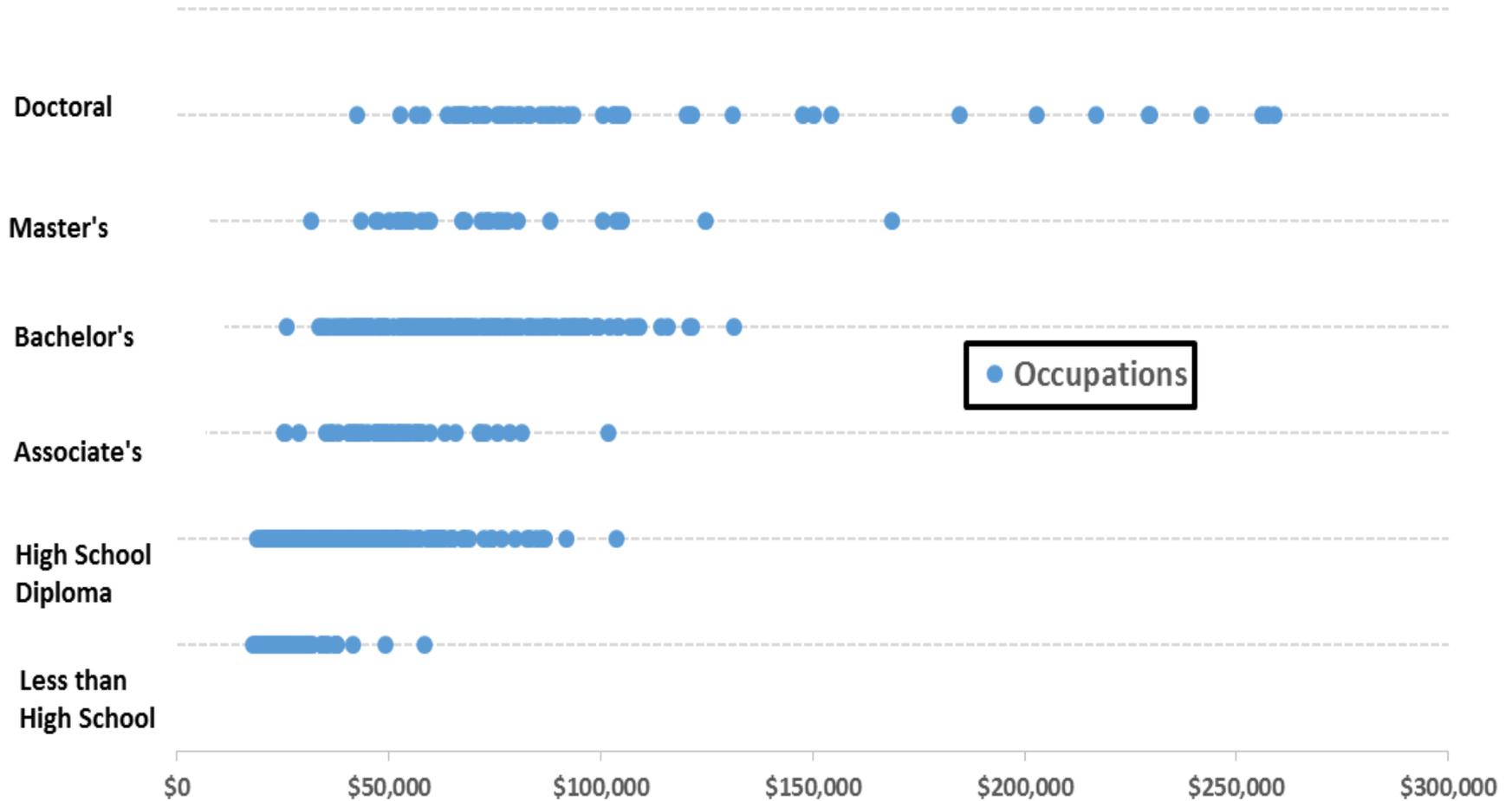
Employment and Population Statistics



Coconino County---Top 5 2014 Occupational Employment & Hourly Wage Estimates

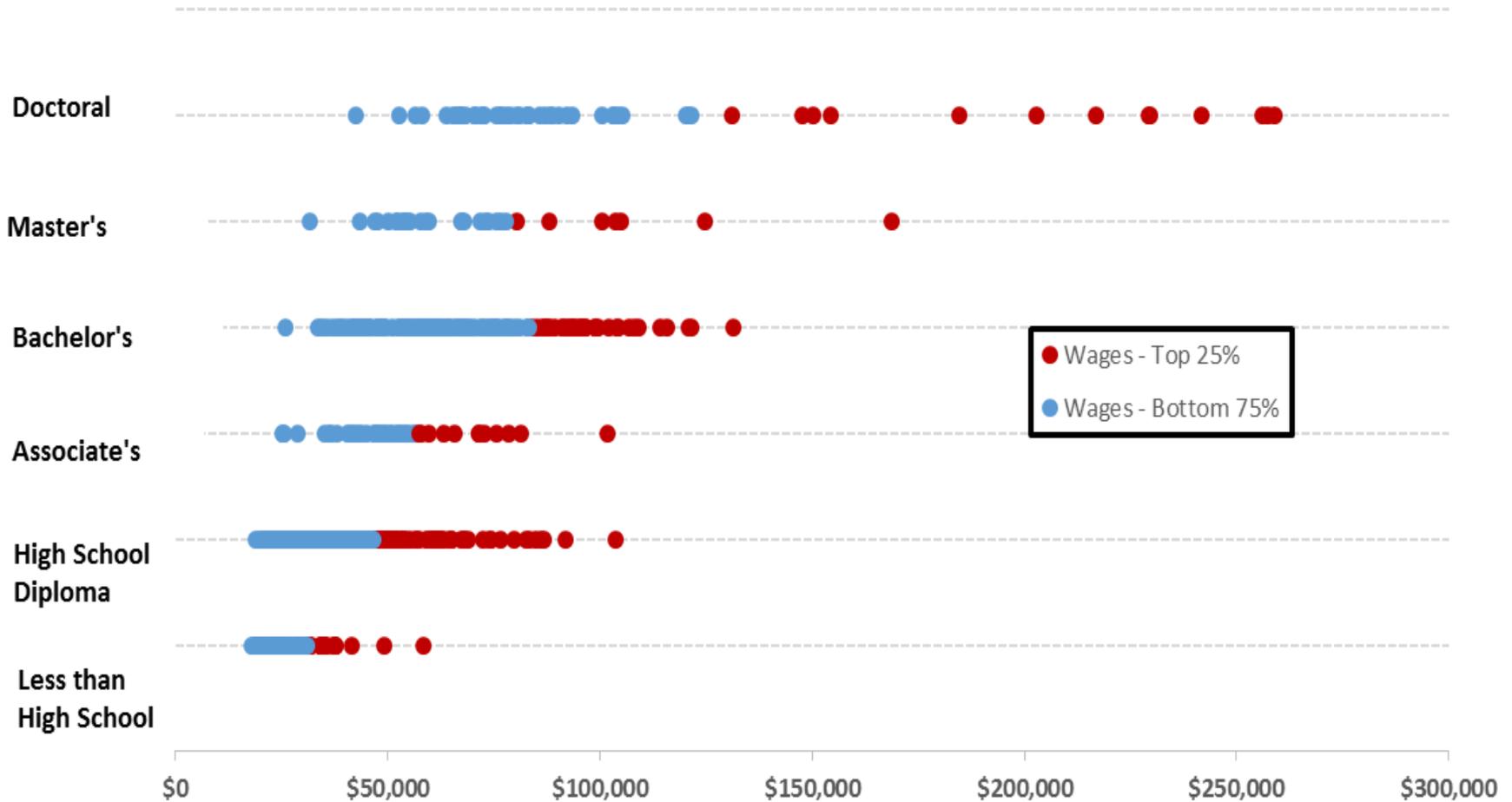
Occ. Code	Major Occupations	Rounded Employment	Mean Wage	10th Percentile Wage	25th Percentile Wage	Median Wage	75th Percentile Wage	90th Percentile
Associate's Degree								
29-2021	Dental Hygienists	60	\$ 39.89	\$ 34.75	\$ 38.22	\$ 41.00	\$ 43.78	\$ 45.45
29-2034	Radiologic Technologists	70	\$ 30.43	\$ 24.57	\$ 26.31	\$ 29.06	\$ 34.13	\$ 37.93
17-3023	Electrical and Electronics Engineering Technicians	30	\$ 29.85	\$ 15.19	\$ 25.02	\$ 31.40	\$ 36.75	\$ 41.17
17-3029	Engineering Technicians, Except Drafters, All Other	50	\$ 25.88	\$ 15.76	\$ 19.42	\$ 26.11	\$ 31.59	\$ 37.61
15-1134	Web Developers	40	\$ 25.72	\$ 14.52	\$ 20.41	\$ 24.01	\$ 29.40	\$ 40.42
Bachelor's Degree								
11-1011	Chief Executives	60	\$ 67.63	\$ 25.30	\$ 32.92	\$ 58.68	NA	NA
11-2031	Public Relations and Fundraising Managers	30	\$ 60.52	\$ 31.01	\$ 34.80	\$ 44.20	\$ 74.10	NA
11-3051	Industrial Production Managers	null	\$ 57.12	\$ 33.82	\$ 41.38	\$ 50.23	\$ 80.93	NA
11-3121	Human Resources Managers	60	\$ 51.08	\$ 27.87	\$ 34.55	\$ 43.72	\$ 56.25	NA
11-3021	Computer and Information Systems Managers	70	\$ 50.82	\$ 27.36	\$ 32.77	\$ 44.50	\$ 57.84	\$ 76.93
Master's Degree								
29-1071	Physician Assistants	60	\$ 53.32	\$ 29.94	\$ 40.64	\$ 47.76	\$ 57.33	\$ 87.51
11-9033	Education Administrators, Postsecondary	null	\$ 53.24	\$ 28.83	\$ 39.39	\$ 51.15	\$ 65.46	\$ 78.61
29-1171	Nurse Practitioners	70	\$ 44.98	\$ 32.18	\$ 36.95	\$ 46.65	\$ 53.53	\$ 58.04
29-1122	Occupational Therapists	20	\$ 35.54	\$ 23.94	\$ 30.62	\$ 35.53	\$ 42.08	\$ 46.74
19-3051	Urban and Regional Planners	null	\$ 30.76	\$ 21.92	\$ 25.45	\$ 29.93	\$ 36.64	\$ 42.75
Doctoral or Professional Degree								
29-1069	Physicians and Surgeons, All Other	150	\$ 117.58	\$ 79.91	NA	NA	NA	NA
29-1062	Family and General Practitioners	20	\$ 78.32	\$ 49.09	\$ 52.85	\$ 60.37	NA	NA
29-1021	Dentists, General	60	\$ 70.60	\$ 47.86	\$ 52.01	\$ 58.32	\$ 82.92	NA
29-1051	Pharmacists	120	\$ 58.75	\$ 49.40	\$ 53.25	\$ 59.32	\$ 66.17	\$ 71.69
23-1023	Judges, Magistrate Judges, and Magistrates	40	\$ 44.73	\$ 28.86	\$ 33.39	\$ 48.76	\$ 55.22	\$ 59.11

Mean Annual Wage by Education Requirement Arizona, 2014



Mean Annual Wage by Education Requirement

Arizona, 2014



Mean Annual Wage by Education Requirement

Arizona, 2014



High-Wage Occupations by Education Requirement

Arizona, 2014

Less Than High School	
Rotary Drill Operators	\$58,240
Carpet Installers	\$49,171
Loading Machine Operators	\$41,496
High School Diploma	
Power Distributors	\$84,718
Criminal Investigators	\$83,283
Real Estate Broker	\$79,601
Associate's Degree	
Air Traffic Controller	\$101,878
Dental Hygienist	\$81,224
Diagnostic Medical Sonographer	\$75,504

Bachelor's Degree	
Engineering Managers	\$131,518
Info Systems Managers	\$121,513
Petrol Engineers	\$120,827
Master's Degree	
Education Administrator	\$105,081
Physician Assistant	\$103,604
Nurse Practitioners	\$100,588
Doctoral Degree	
Anesthesiologists	\$258,814
Orthodontist	\$257,296
Oral and Maxillofacial Surgeons	\$256,006

Training & Education Resource Model

(TERM) 2012-2022

Training & Education Resources Model

The TERM is an occupational ranking system which identifies potential job market opportunities by considering several labor market factors including:

- Openings Percentile
- Hourly Wage Percentile
- O*NET Percentile
- Growth Rate Percentile
- Turnover Rate Percentile

Training & Education Resources Model

$(3 \cdot \text{openings percentile} + 3 \cdot \text{wage percentile} + \text{O*NET percentile} + \text{growth percentile} + \text{turnover rate percentile}) / 9$

- **Openings:** The average projected openings expected per year from growth & turnover
- **Hourly Wage:** The average wage of an occupation calculated by dividing annual wages by 2,080 hours (40 hours * 52 weeks)
- **O*NET:** Occupational Information Network which provides standardized & occupation-specific descriptors
- **Growth Rate:** The ten-year projected rate of employment growth
- **Turnover Rate:** The proportion of jobs that will be filled based on annual separation needs

Top Occupations – Arizona TERM

Top 10 Occupations - Associate's Degree		
Occupation	Total Openings per Year	Salary
Registered Nurses	2190	\$71,427
Diagnostic Medical Sonographers	85	\$75,504
Radiologic Technologists	176	\$59,738
Dental Hygienists	240	\$81,224
Web Developers	134	\$65,790
Respiratory Therapists	104	\$52,354
Cardiovascular Technologists and Technicians	54	\$57,491
Radiation Therapists	33	\$72,654
Magnetic Resonance Imaging Technologists	31	\$71,406
Computer Network Support Specialists	153	\$63,066

Average Salary - \$67,065

Top Occupations – Arizona TERM

Top 10 Occupations - High School		
Occupation	Total Openings per Year	Salary
Plumbers, Pipefitters, and Steamfitters	326	\$50,544
Electricians	751	\$44,408
Real Estate Brokers	119	\$79,602
Carpenters	753	\$38,875
Sales Representatives, Wholesale and Manufacturing	1034	\$61,069
Insurance Sales Agents	603	\$60,403
Industrial Machinery Mechanics	297	\$53,373
Commercial Pilots	128	\$74,194
Claims Adjusters, Examiners, and Investigators	328	\$61,402
Detectives and Criminal Investigators	159	\$83,283

Average Salary - \$60,715

Top Occupations by Total Openings Arizona TERM

Top 10 Occupations - High School

Occupation	Projected Total Openings per Year*	Salary
Customer Service Representatives	3466	\$31,117
Office Clerks	1927	\$32,323
Secretaries and Administrative Assistants	1598	\$33,218
Maintenance and Repair Workers	1082	\$35,464
Sales Representatives, Wholesale and Manufacturing	1034	\$61,069
Medical Secretaries	908	\$31,366
Sales Representatives, Services	904	\$54,142
Security Guards	891	\$27,102
Bookkeeping, Accounting, and Auditing Clerks	885	\$35,506
Receptionists and Information Clerks	780	\$27,019

Average Salary - \$36,833

Top Occupations by Total Openings Arizona TERM

Top 10 Occupations - Associate's Degree

Occupation	Projected Total Openings per Year*	Salary
Registered Nurses	2190	\$71,427
Preschool Teachers, Except Special Education	414	\$25,355
Dental Hygienists	240	\$81,224
Paralegals and Legal Assistants	233	\$47,674
Medical and Clinical Laboratory Technicians	233	\$42,058
Radiologic Technologists	176	\$59,738
Computer Network Support Specialists	153	\$63,066
Electrical and Electronic Engineering Technicians	146	\$54,101
Web Developers	134	\$65,790
Respiratory Therapists	104	\$52,354

Average Salary - \$56,279

Fastest growing Associate's Degree occupations earn considerably more compared to occupations that only require a High School Education

Employment Forecast

Thank You!
Any Questions?

Arizona Department of Administration

Employment and Population Statistics

Contact Information

Website: <https://laborstats.az.gov/>

Phone: 602.771.2222

Email: labor.info@azstats.gov

Employment Forecast

Occupation Forecast 2014-2016

Employment Forecast

Occupation Projections

<https://laborstats.az.gov/employment-forecasts>

Short Term (2 years)

- Annual Publication
- Current Period: 2014-2016
- Produced for the State, Phoenix and Tucson MSA, and Balance of State areas

Long Term (10 years)

- Biennial Publication
- Current Period: 2012-2022
- Produced for the State, Phoenix and Tucson MSA, and Balance of State areas

Employment Forecast

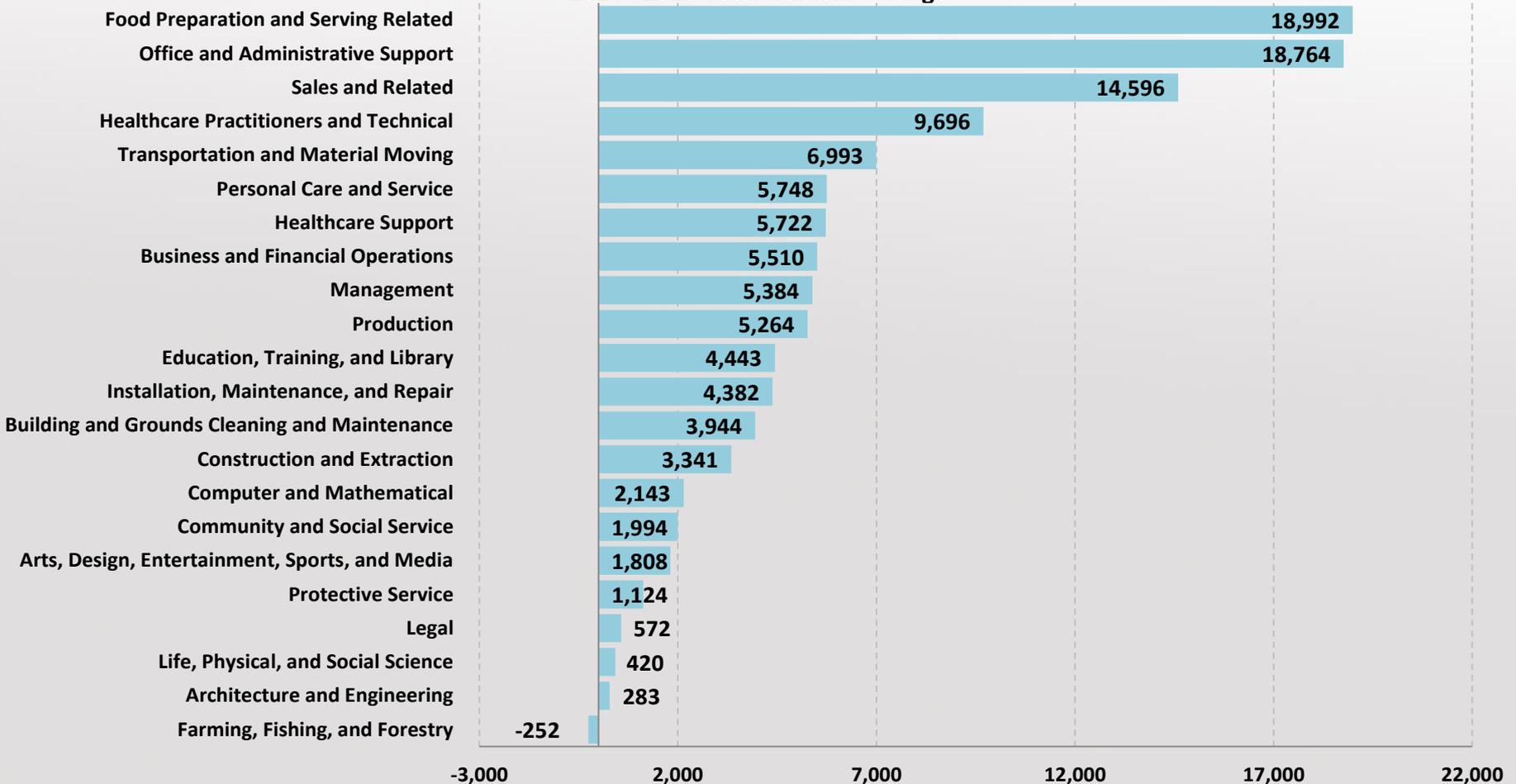
Occupation Projections

<https://laborstats.az.gov/employment-forecasts>

- Estimates are categorized by what the worker does (Standard Occupational Classification System, SOC)
- Occupation projections are produced using industry projections in conjunction with industry staffing patterns
- Projections are available for the state, Phoenix MSA, Tucson MSA, & balance of state (the sum of all other counties outside of the Phoenix & Tucson MSA)

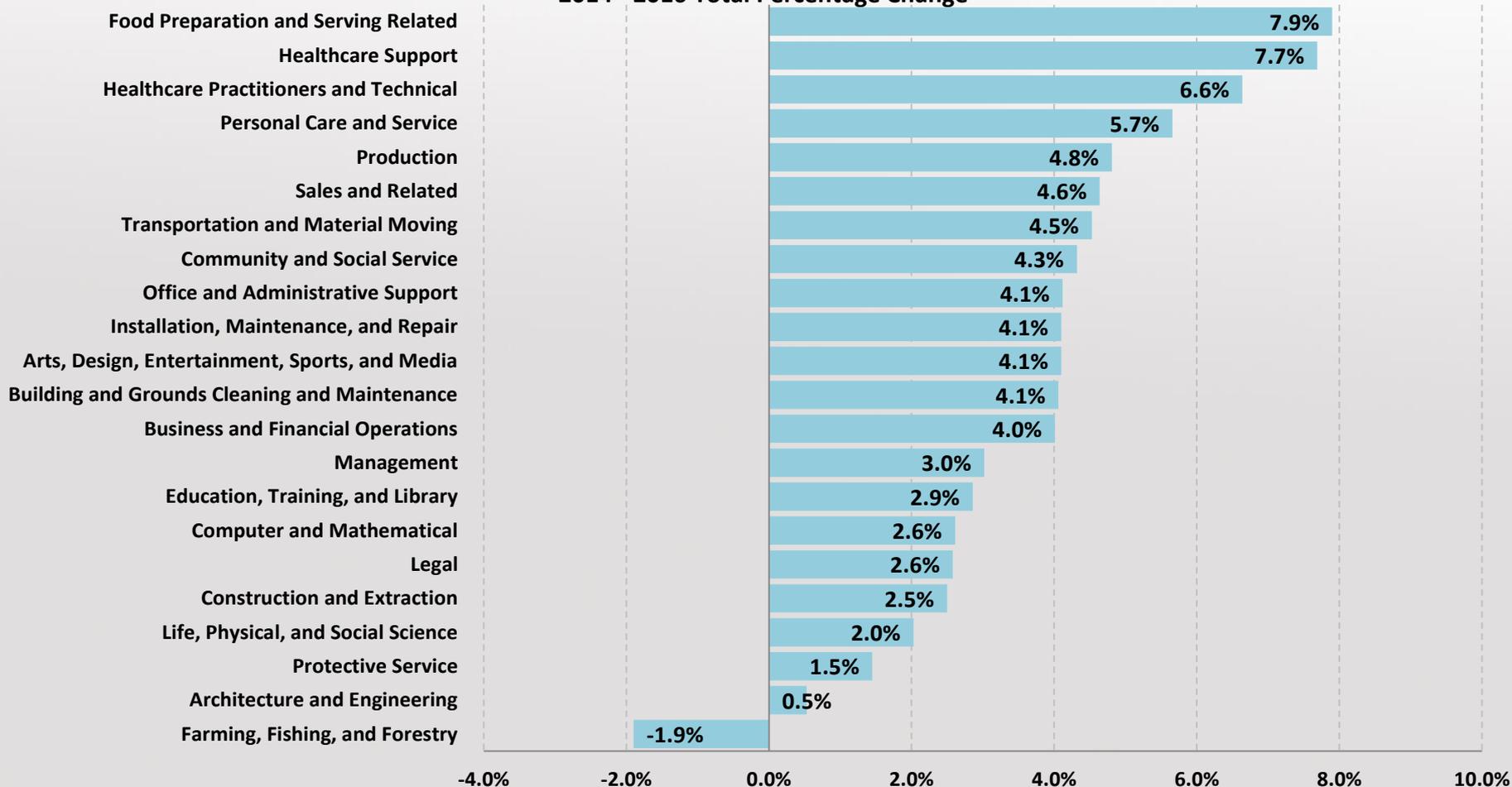
Arizona Major Occupational Groups

2014 - 2016 Total Numeric Change

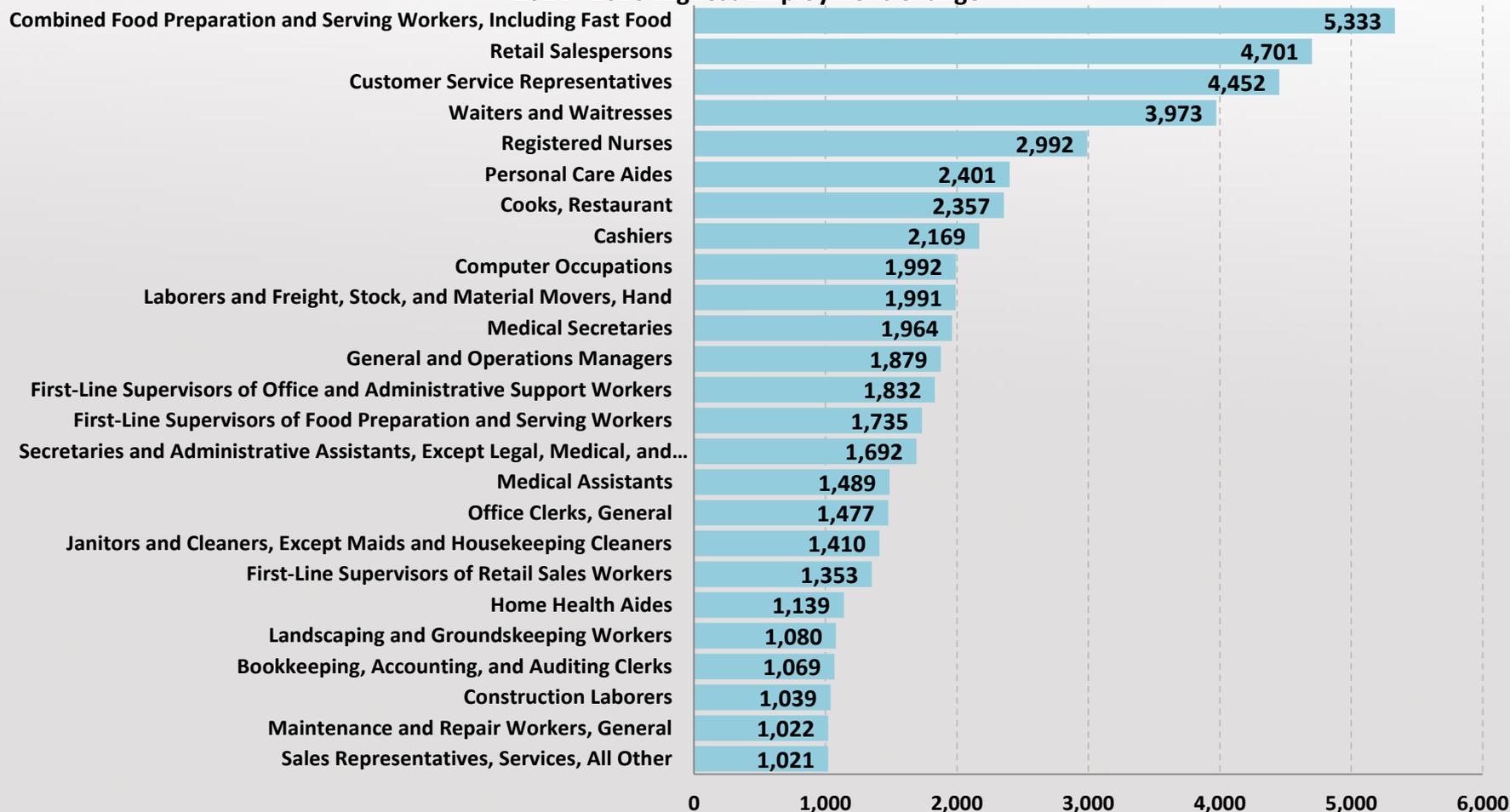


Arizona Major Occupational Groups

2014 - 2016 Total Percentage Change

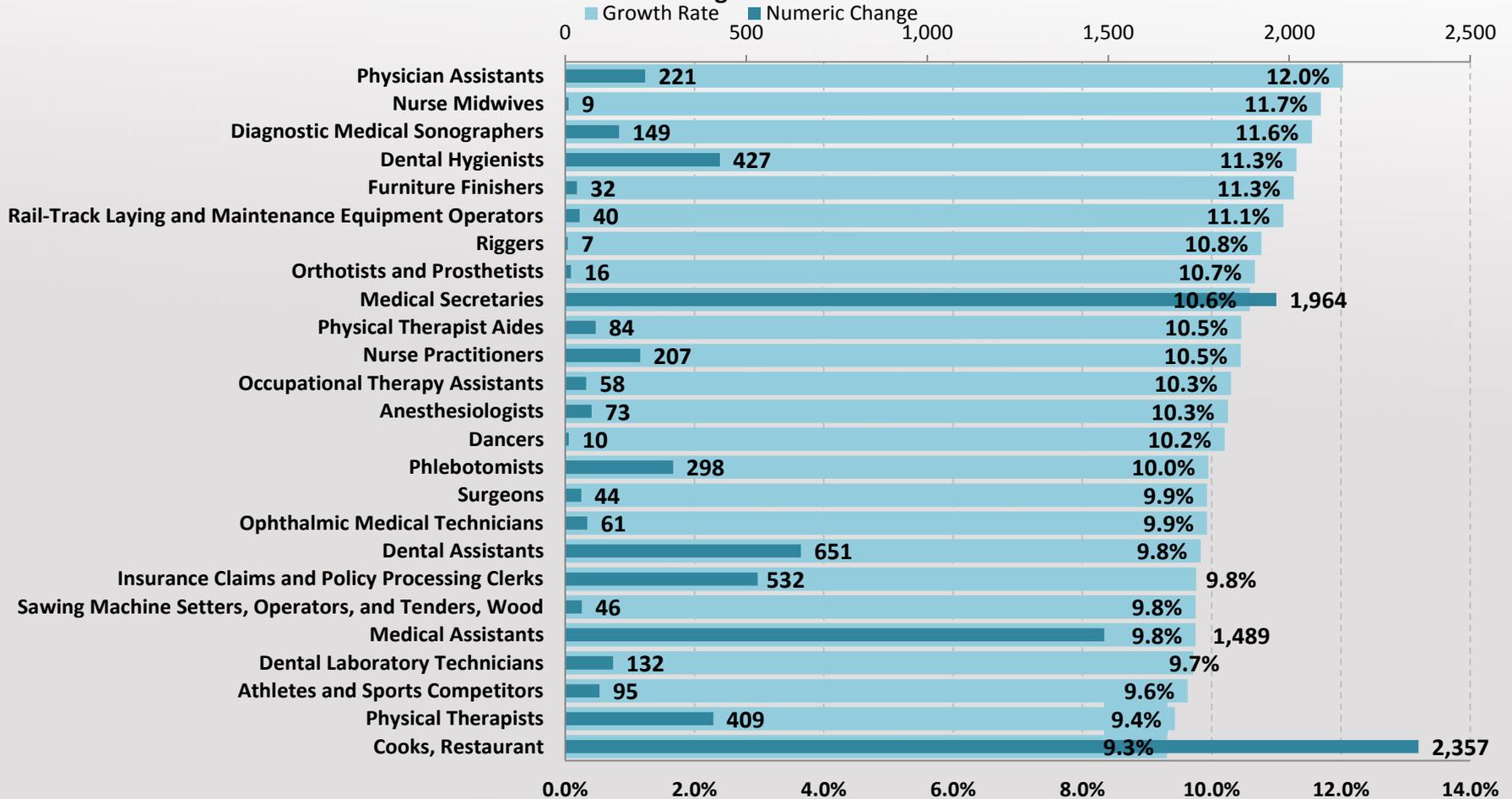


Top 25 Arizona Detailed Occupations 2014 - 2016 Highest Employment Change

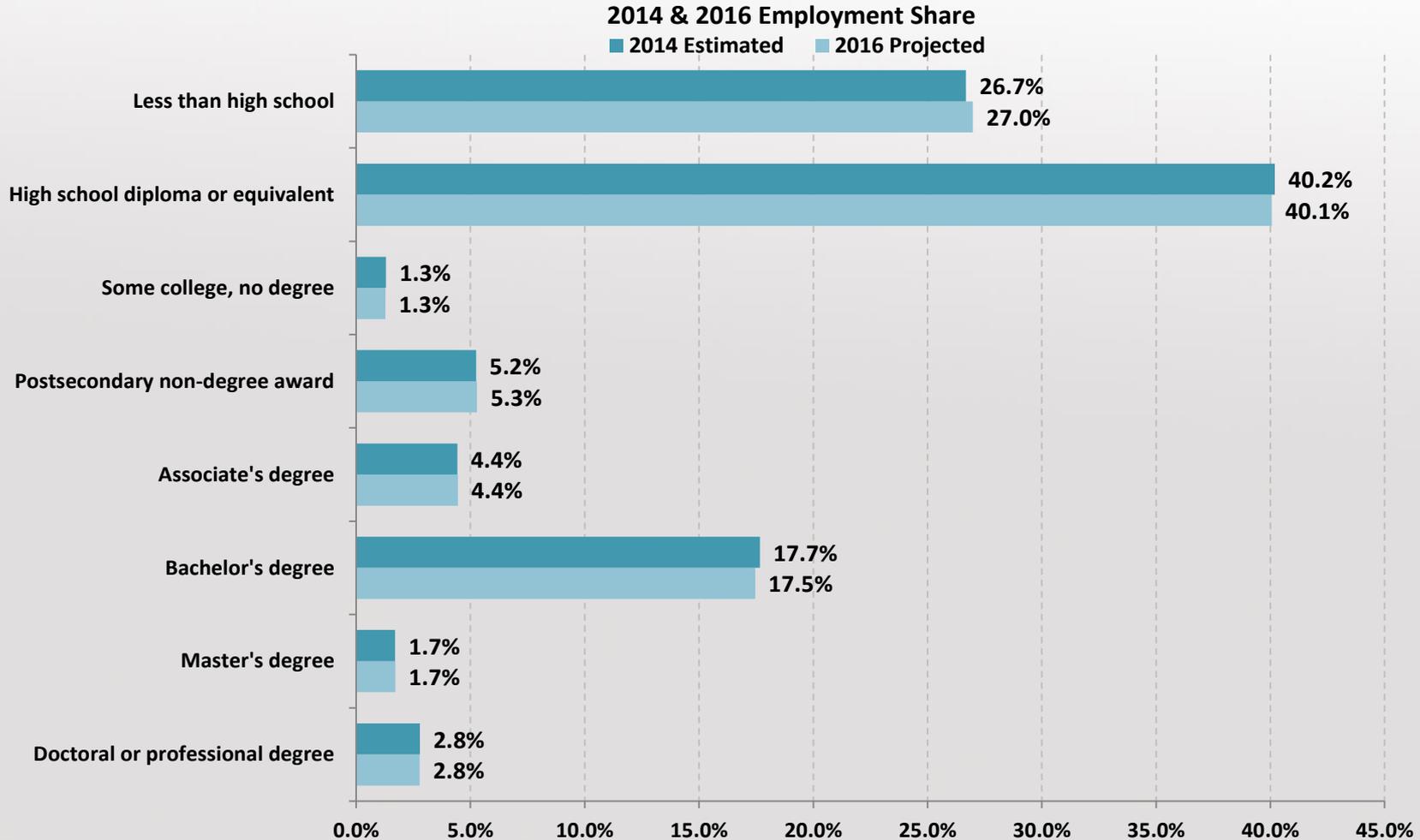


Top 25 Arizona Detailed Occupations

2014 - 2016 Highest Growth Rates

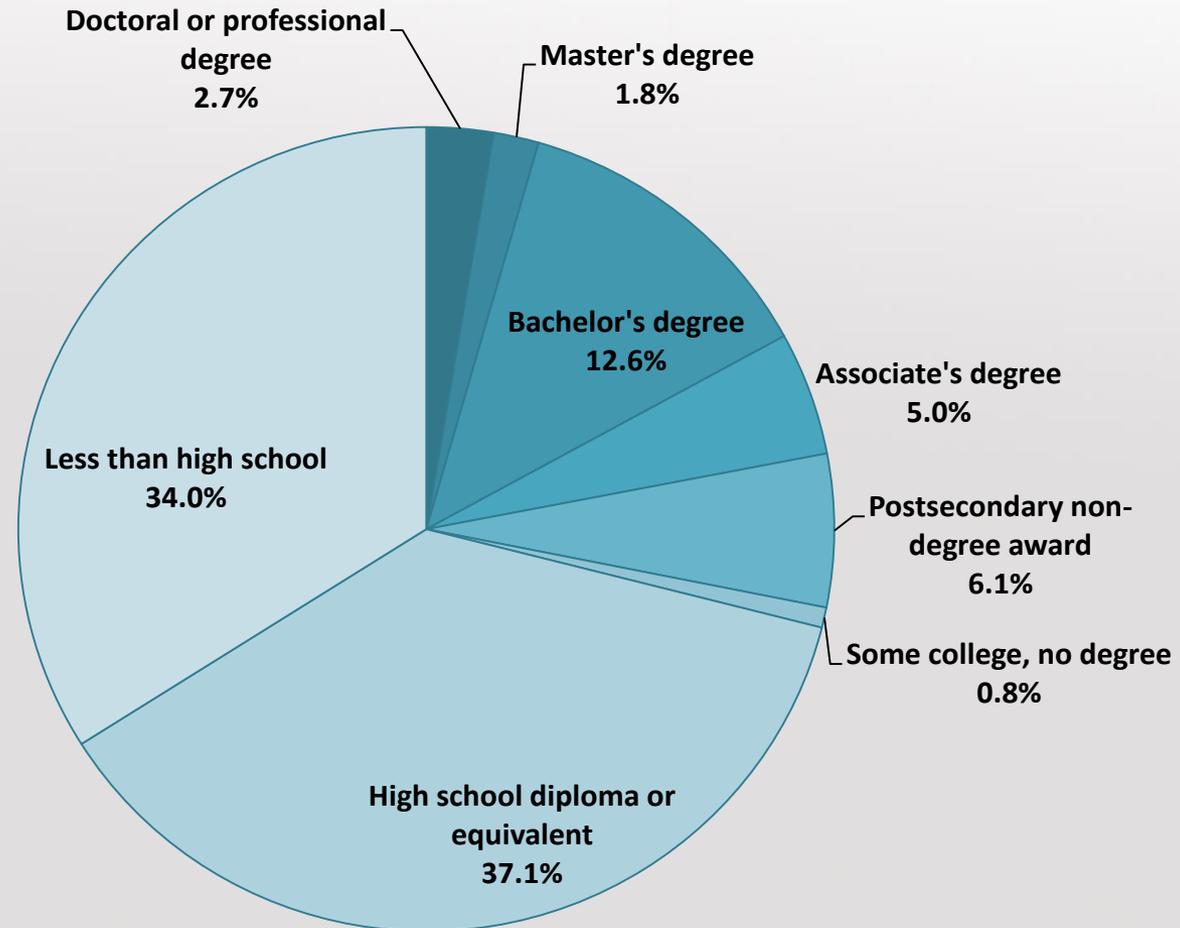


Arizona Share of Occupations by Minimum Education Requirement



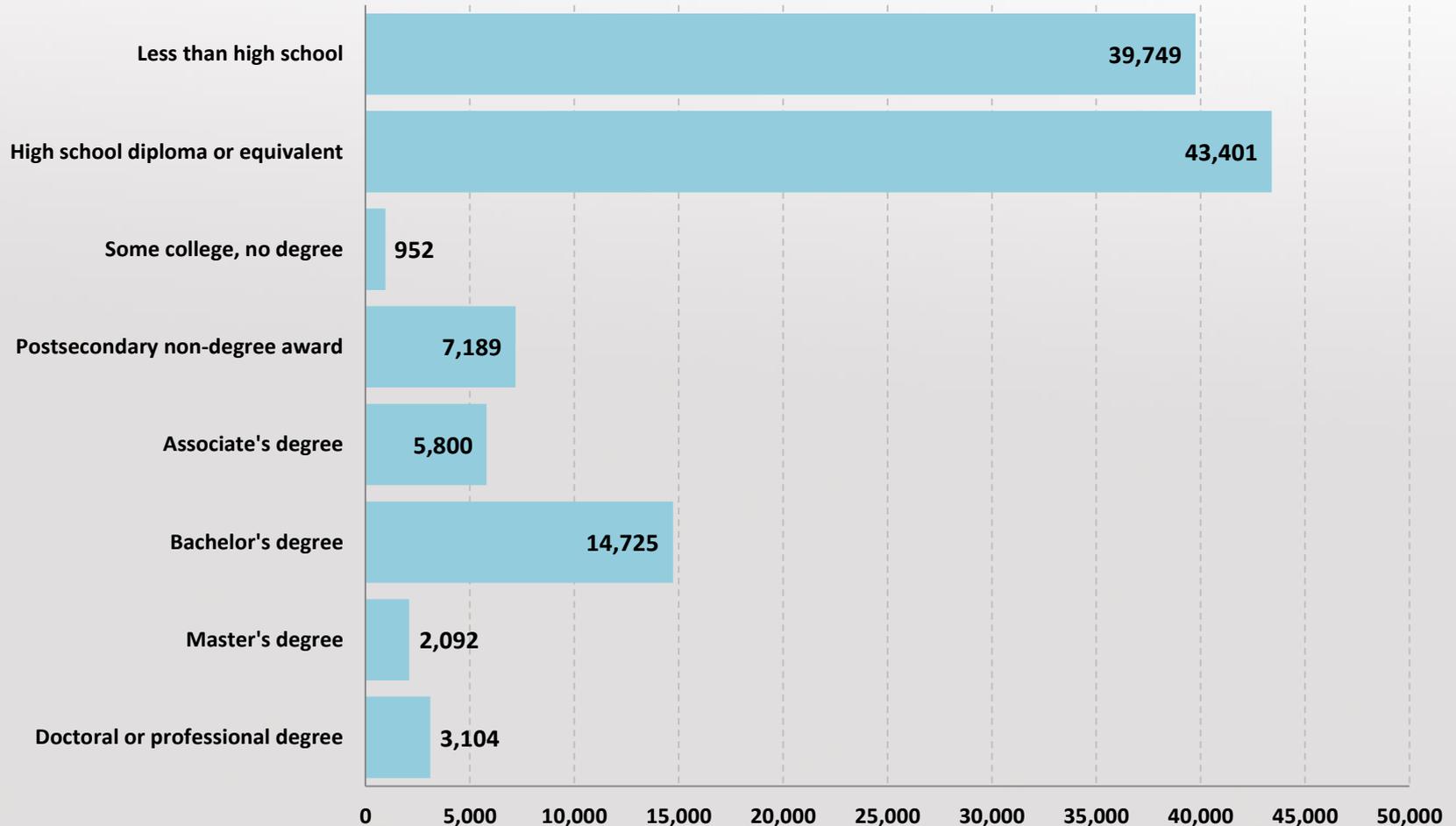
Arizona Share of Occupations by Minimum Education Requirement

2014 - 2016 Employment Change



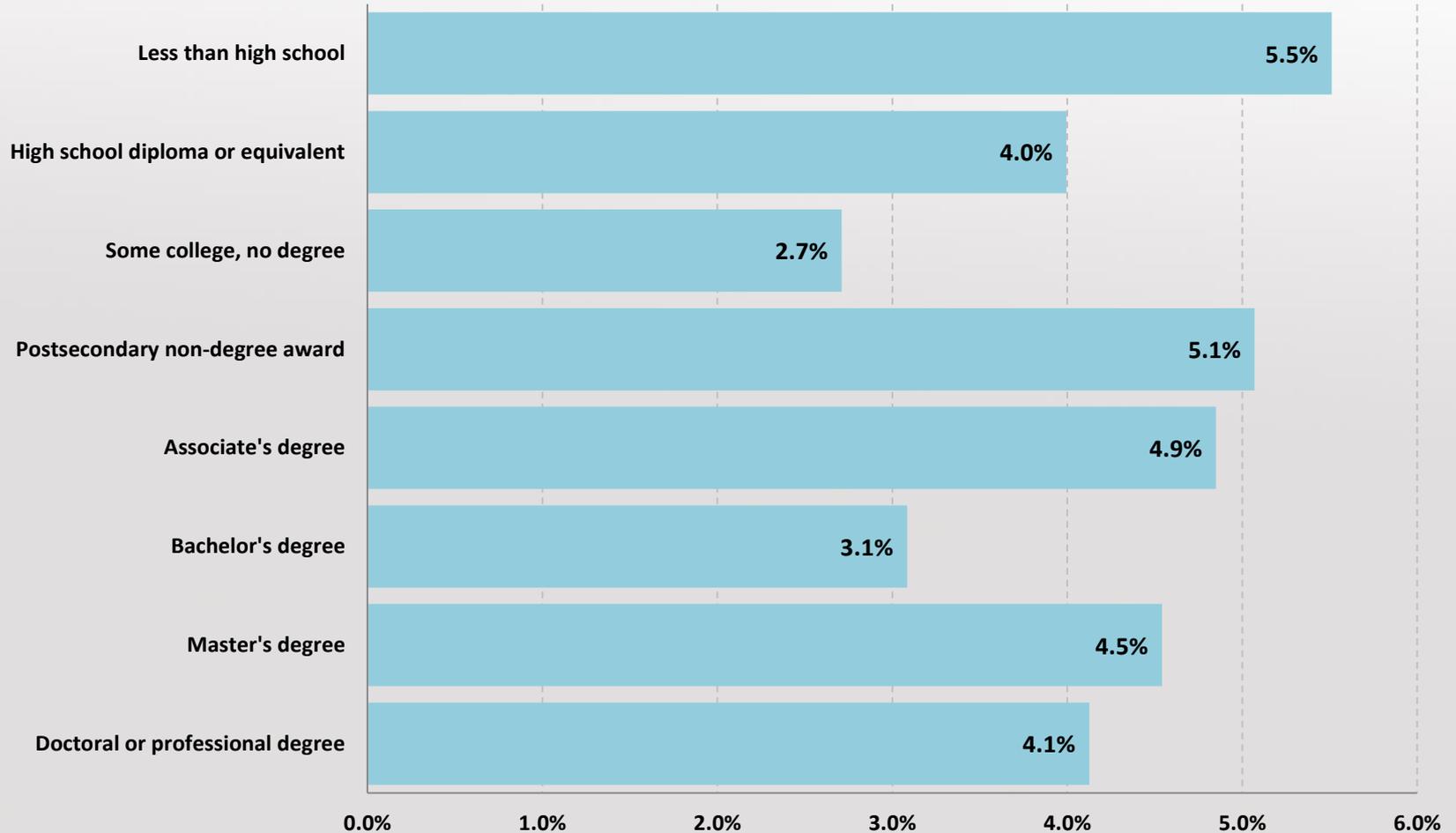
Arizona Occupations by Minimum Education Requirement

2014 - 2016 Total Numeric Change

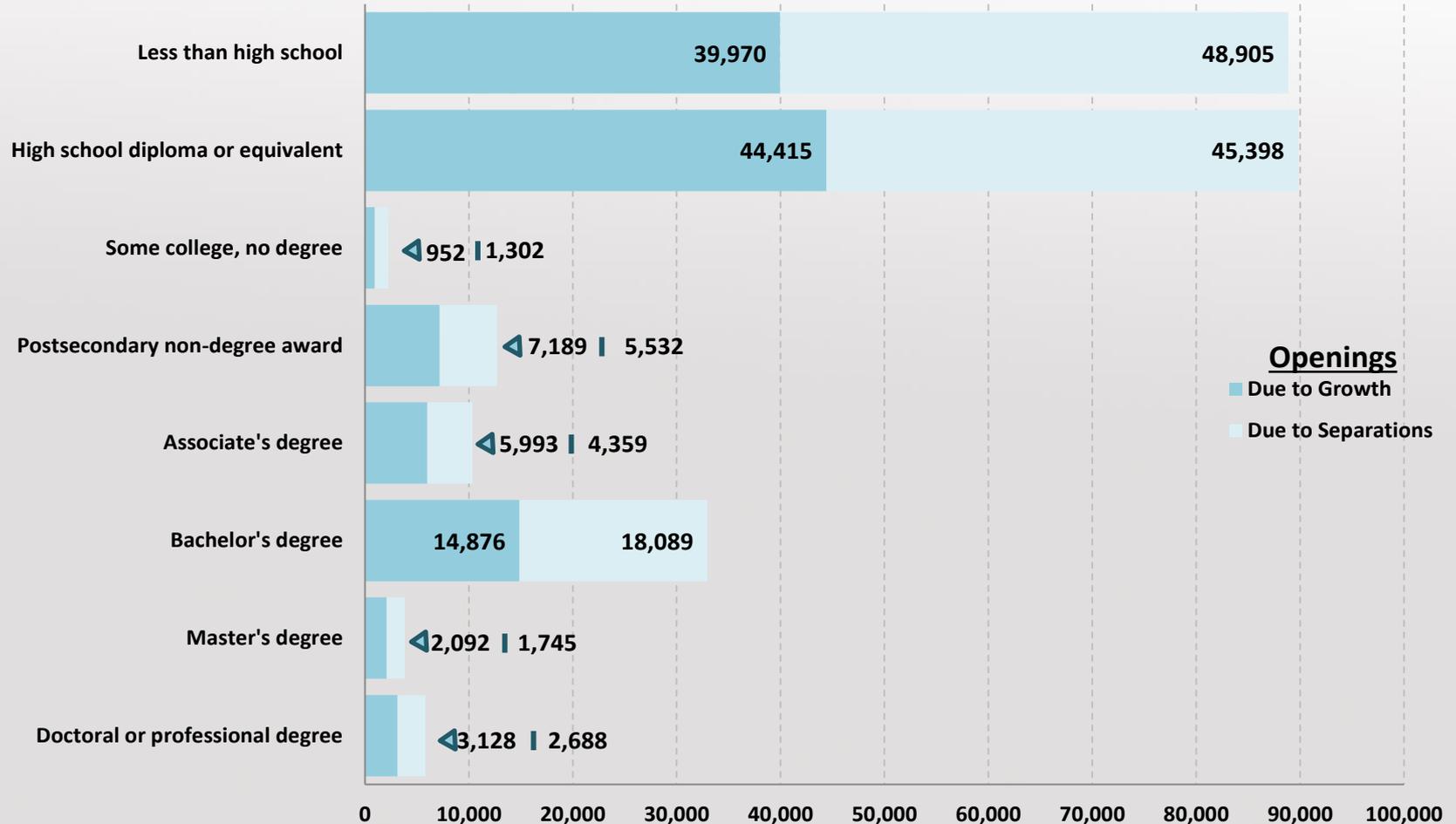


Arizona Occupations by Minimum Education Requirement

2014 - 2016 Total Percentage Change (Growth Rate)



Arizona Occupations by Minimum Education Requirement 2014 - 2016 Total Openings by Growth & Separations



Arizona Occupations by Minimum Education Requirement

2014 - 2016 Total Openings by Growth & Separations

