

# Long-Term Industry & Occupation Employment Projections

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## 2016-2026

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# Industry Projections Methodology: Estimation Process

- Projections are estimated using historical industry employment trends and are refined by a review of current U.S. and Arizona economic developments
- Long-term projections estimate employment from 2016 to 2026
  - Historic data are used for base-year 2016 employment levels
  - Projected data are modeled for forecast-year 2026 employment levels
- The principle data source was the Quarterly Census of Employment and Wages (QCEW) data analyzed at the individual employer level
  - Near census of all employment subject to UI Tax law
- The industry classification structure differs slightly from CES industry classification
  - Notably: State and local government education employment is categorized in NAICS 611: Educational Services

# Industry Projections Methodology:

## Data Sources

- Industry Projections Estimates **Include:**
  - Nonfarm employment by subsector group (3-digit NAICS)
  - Self-employed workers who work for profit or fees in their own business, profession, trade, or farm
  - Private household workers employed as domestic workers
  - Railway workers
  - Religious organization employees
  - Farm workers
- Industry Projections Estimates **Exclude:**
  - Unpaid family workers
  - Active duty military service men and woman

# Occupation Projections

## Methodology: Data Sources

- Occupational Staffing Patterns
  - OES survey responses are summarized by industry and matched to a NAICS code
  - Statewide responses are substituted in cases where local OES responses are not available
- Industry Employment Projections
  - Primary data source used to project changes in occupational employment

# Industry Projections Methodology: Economic Assumptions

- No major events will occur and government agencies will operate within their budgets
- Population distribution and the U.S. economy framework will not differ significantly
- Long-term employment patterns will continue in most industries

For a detailed list of economic assumptions and the projections methodology in entirety can be found at <https://laborstats.az.gov/employment-forecasts>

# Substate Regions

Projected employment was estimated for 12 substate regions including:

## Seven Arizona Counties

- Coconino; Maricopa; Pima; Pinal; Santa Cruz; Yavapai; and Yuma Counties

## Two Sub-County Areas

- City of Phoenix; Balance of Maricopa County

## Three Multi-County Areas

- Northeast Arizona: Apache, Navajo, and Gila Counties
- Southeast Arizona: Greenlee, Graham, and Cochise Counties
- Mohave and La Paz Counties

## Statewide Industry Highlights

- Total employment is projected to grow by 542,795 jobs over the ten-year period, reaching 3,465,150 jobs in 2026
- Industry employment is projected grow at a rate of 1.7% per year from 2016-2026, significantly faster than the 0.2% growth rate recorded from 2006-2016
- All eleven industry sectors are projected to add jobs
- The Educational and Health Services sector is projected to add the largest number of jobs (183,544 jobs and 2.6% growth)
- Construction is projected to record the largest percentage gain (3.0% growth and 47,838 jobs)

## Statewide Occupation Highlights

- 22 of the 22 Major Occupation Groups are projected to record employment gains
- Food Preparation and Serving Related Occupations are projected to record the largest numeric change (67,231 jobs and 2.4% growth)
- Healthcare Support Occupations are projected to record the fastest growth rate (3.7% growth and 32,187 jobs)
- Office and Admin Support Occupations are projected to record the largest number of job openings from transfers, exits and growth (607,814 jobs)



## Substate Highlights

- All substate areas are projected to add jobs over the ten-year period
- Balance of Maricopa County is projected to add the largest number of jobs and grow at the fastest rate (251,850 jobs and 2.1% annualized growth respectively)
- Balance of Maricopa County is projected to account for the largest share of the job growth (46% of projected jobs)
- Education and Health Services is the fastest growing industry in 8 of 11 local areas

## Arizona Economic Trends

- Arizona population levels are growing faster than U.S. population levels, but are projected to slow slightly by 2026
- The majority of the Baby boomer population to reach 65+ by 2026
- Domestic and international migration trends heavily focused in Maricopa County
- Real Manufacturing GSP continues to grow

## National Economic Trends

- Employment is projected to increase by 11.5 million over the 2016-2026 decade, an annual growth rate of 0.7%
- The labor force will continue to grow slowly and to become older
- The aging population is projected to result in a decline in the overall labor force participation rate over the 2016 to 2026 decade
- U.S. healthcare consumption projected to increase through 2026

## U.S. / AZ Comparison: Projected Employment Growth

Area	<u>Employment Levels</u>		<u>Employment Change</u>		
	2016	2026	Numeric Change	Percentage Change	Annualized % Change
Arizona	2,922,355	3,465,150	542,795	18.6%	1.7%
United States	156,063,800	167,582,300	11,518,500	7.4%	0.7%

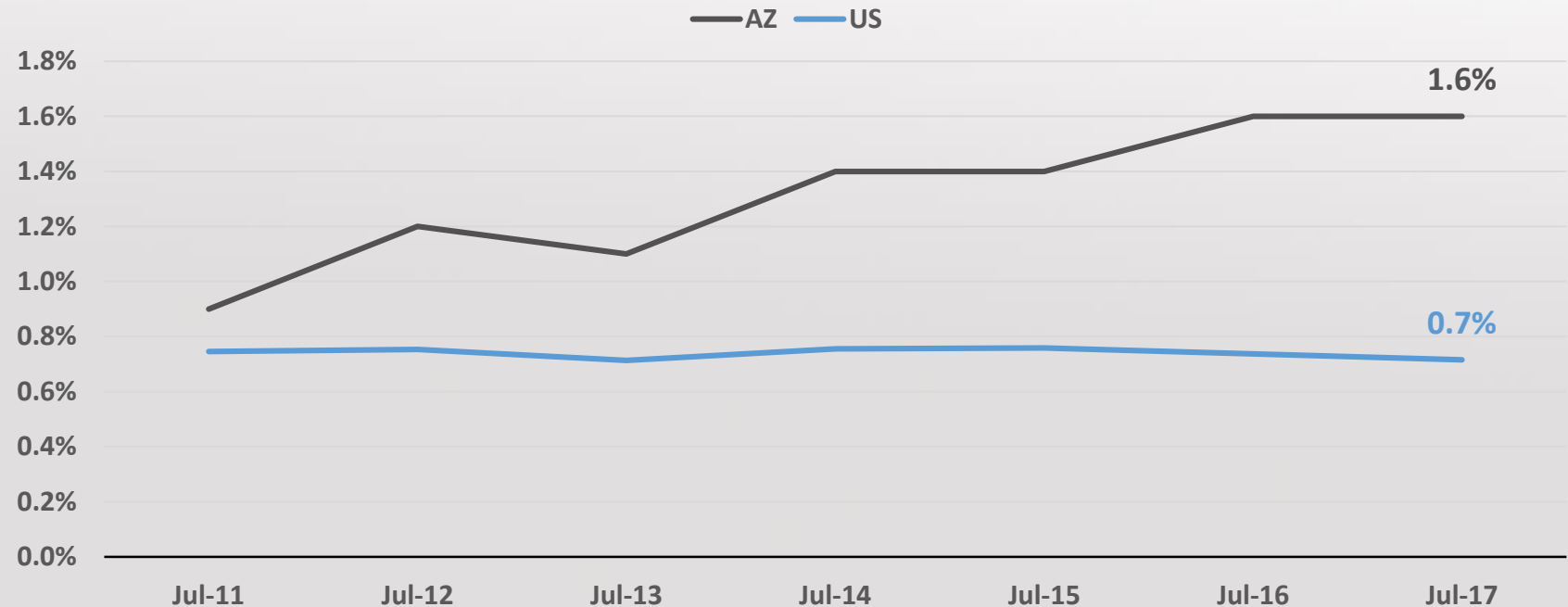
Arizona employment growth is projected to outpace the U.S. as a whole over the ten-year period

## U.S. / AZ Comparison: Historical Employment Growth

<b>Sector</b>	<b><u>June 2018 Over-the-Year</u></b>		<b>Number of Months Arizona Growth Surpassed U.S. Growth</b>
	<b><u>% Growth</u></b>	<b>United States</b>	
	<b>Arizona</b>		
Nonfarm Employment	2.6%	1.6%	42
Construction	10.0%	3.9%	29
Manufacturing	5.5%	2.3%	36
Ed & Health Services	3.5%	2.0%	51
Financial Activities	2.1%	1.5%	37

Arizona is only recording significantly slower growth within two sectors: Natural Resources and Mining and Other Services

## U.S. / AZ Comparison: Population Growth

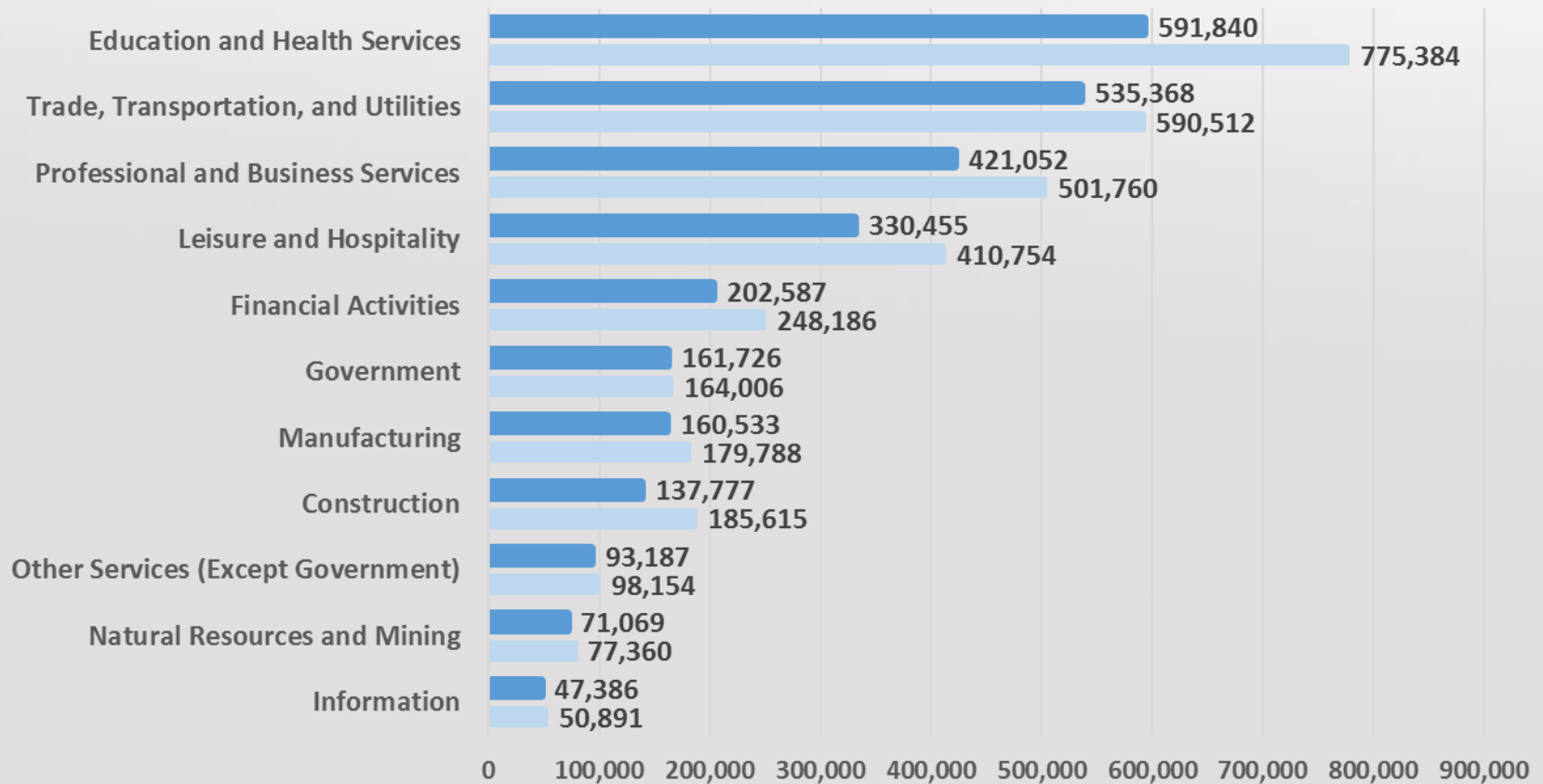


Source: US Census Bureau

- Arizona population growth has outpaces US population growth over the past 7 years
- Arizona population growth currently ranks 6<sup>th</sup> among all states

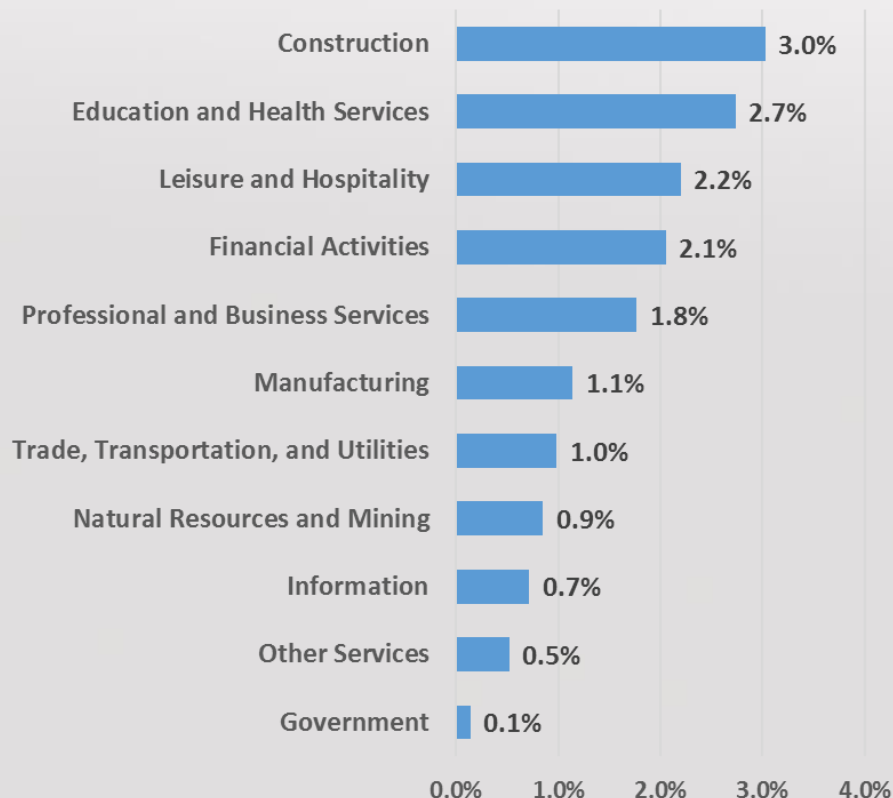
## Arizona Sector Employment Levels

■ 2016 Employment ■ 2026 Employment

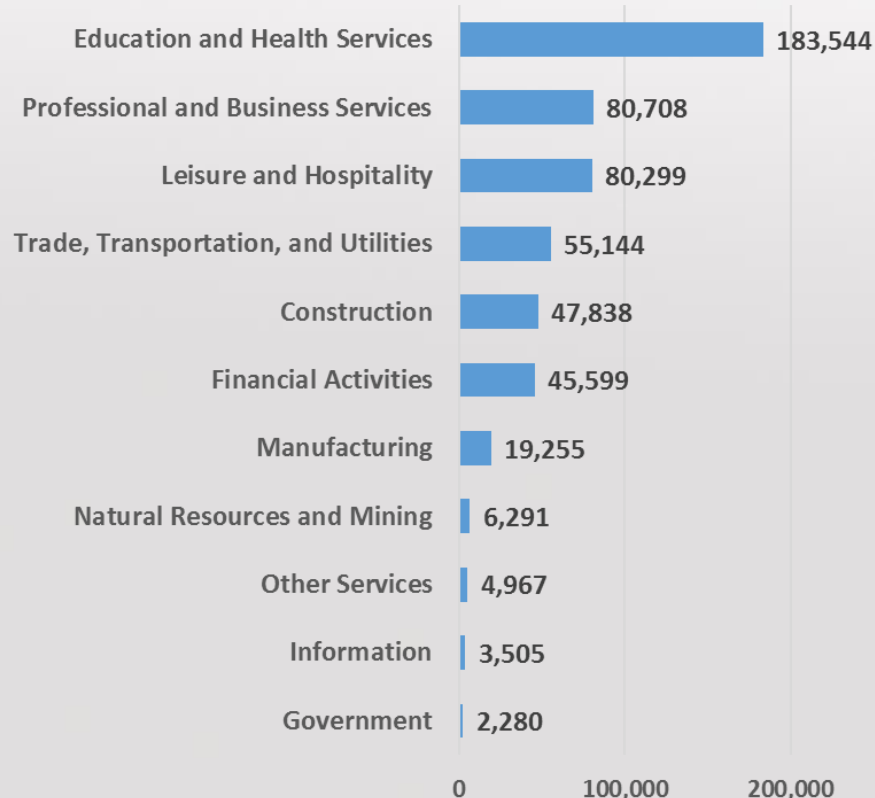


# Industry Comparisons

**Arizona Sector Employment**  
2016-2026 Annualized Percentage Change



**Arizona Sector Employment**  
2016-2026 Numeric Change





## Arizona Major Occupational Employment



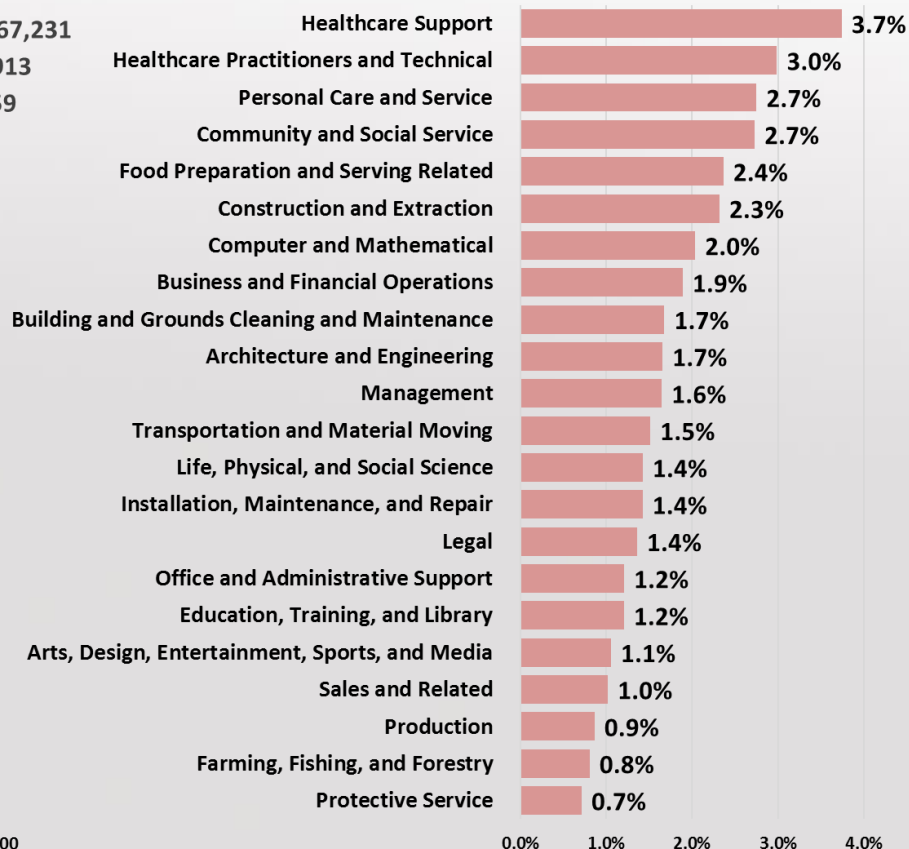
## Arizona Major Occupational Employment

2016 - 2026 Total Numeric Change



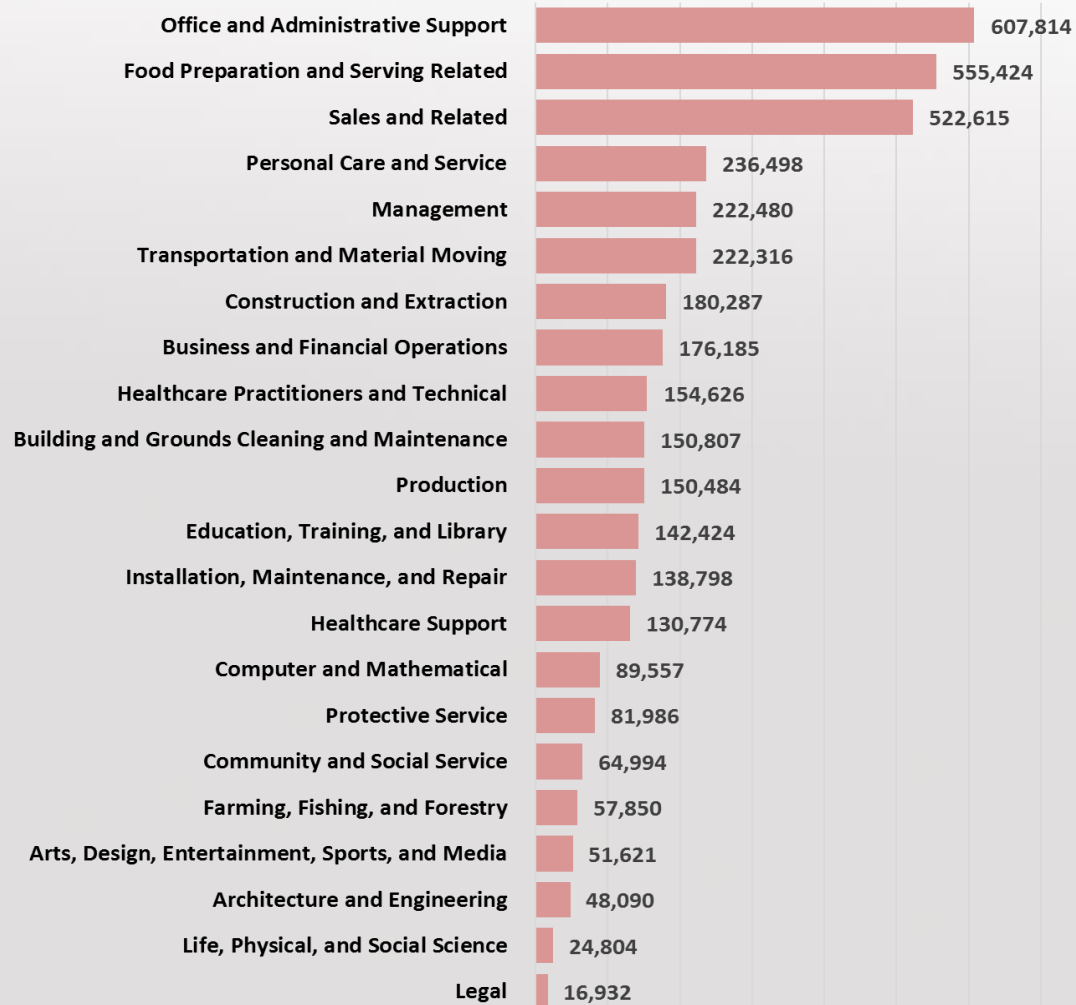
## Arizona Major Occupational Employment

2016 - 2026 Annualized Percentage Change

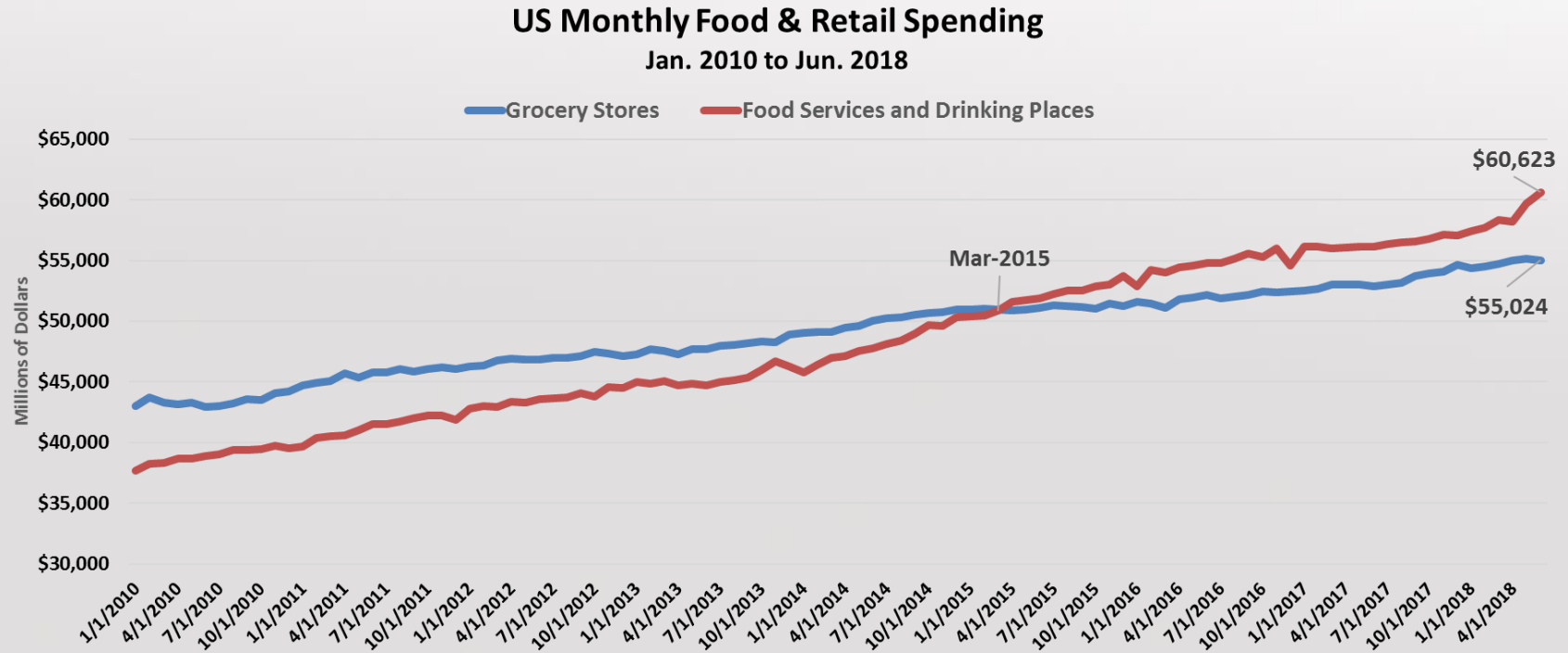


## Arizona Major Occupational Groups

2016 - 2026 Total Openings



# Food Preparation Occupation Growth



Source: U.S. Census Bureau Advance Retail Sales Date

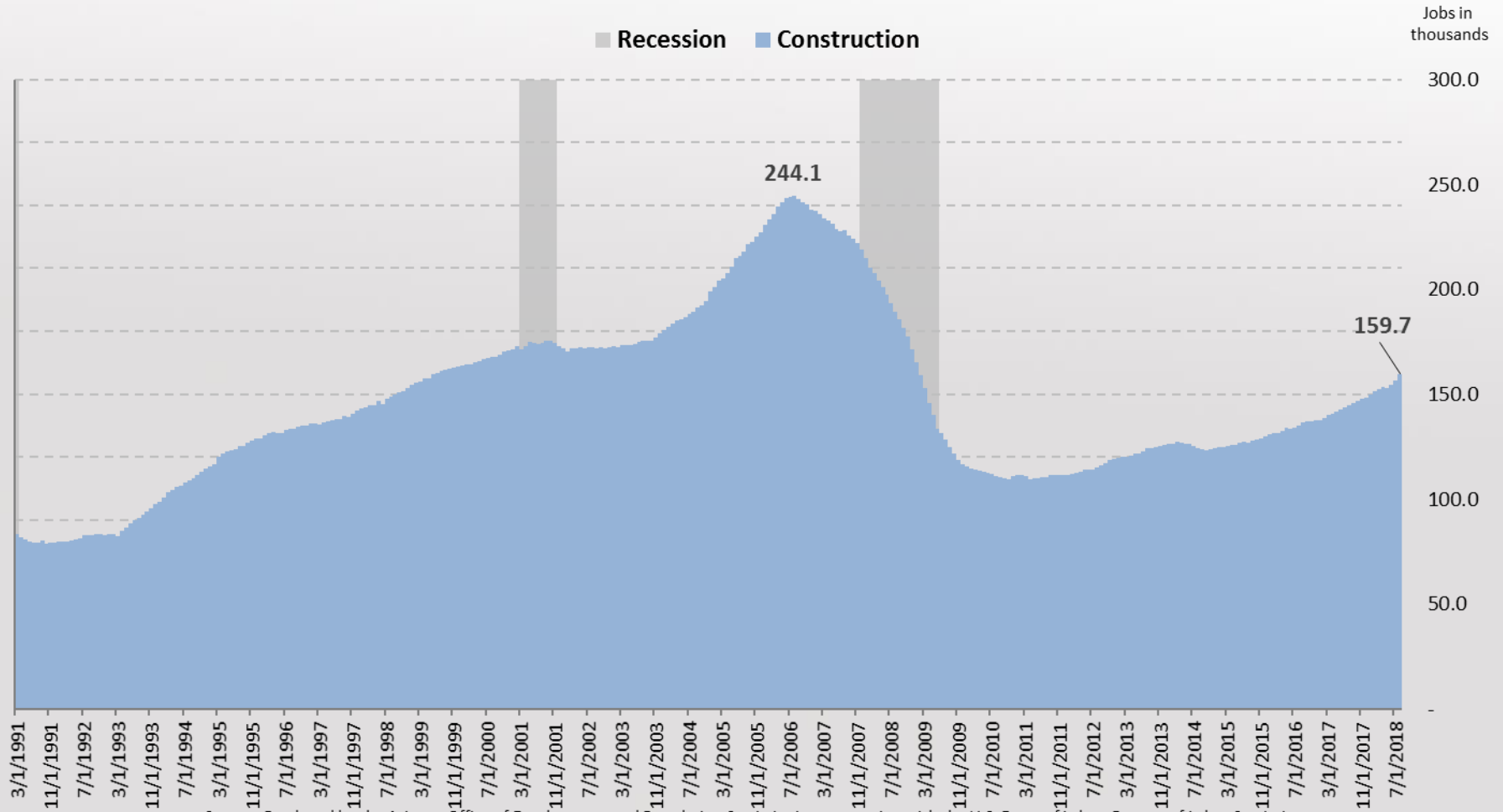
National shift in consumer spending habits where consumers started spending more on food and drink outside than on food purchased at grocery stores

## U.S. / AZ Comparison: Projected Construction Growth

Area	<u>Employment Levels</u>		<u>Employment Change</u>		
	2016	2026	Numeric Change	Percentage Change	Annualized % Change
Arizona	137,777	185,615	47,838	34.7%	3.0%
United States	6,711,000	7,575,700	864,700	12.9%	1.2%

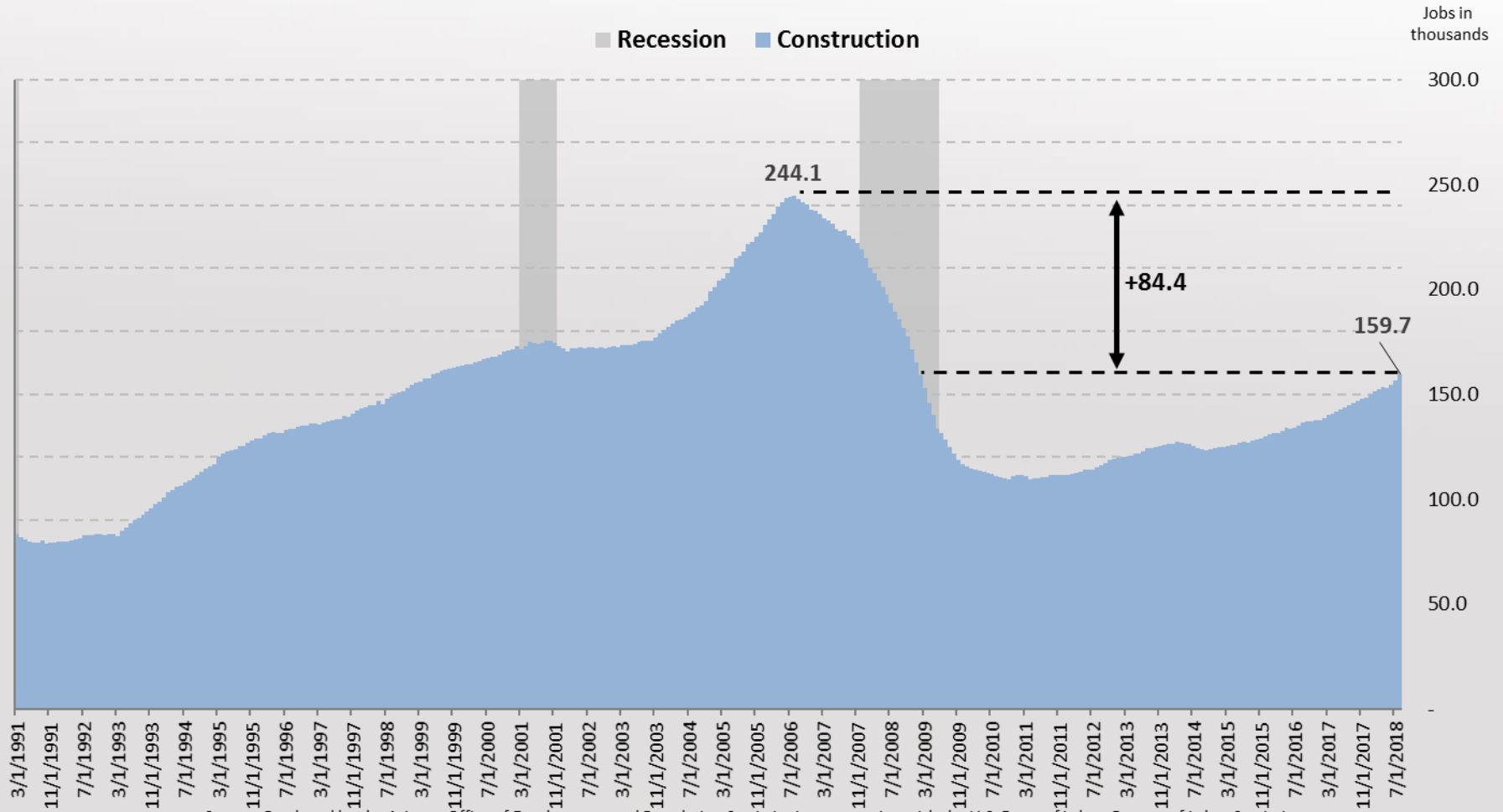
Arizona Construction growth is projected to outpace the U.S. as a whole over the ten-year period

## Arizona Employment Level

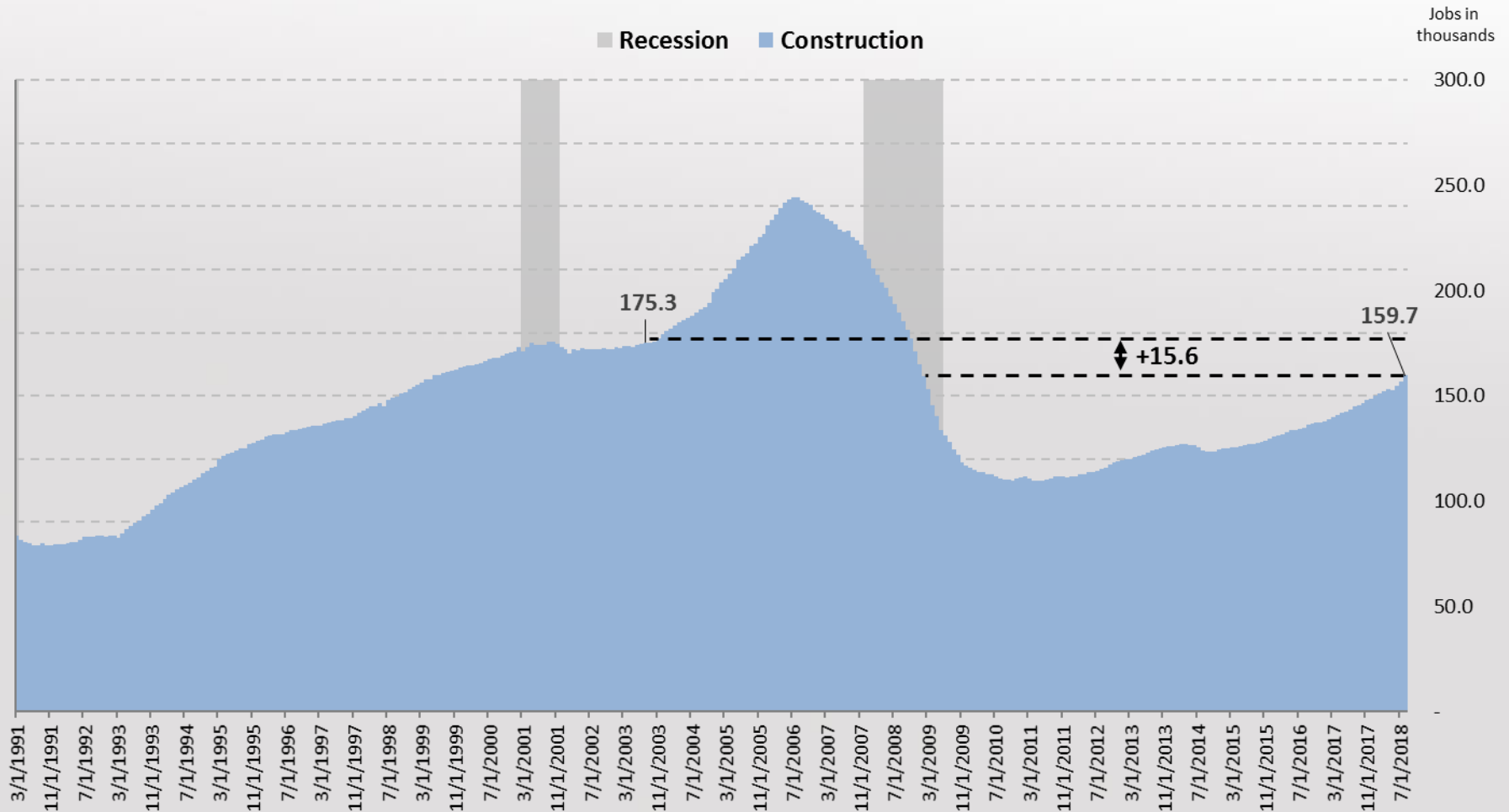


Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

## Arizona Employment Level



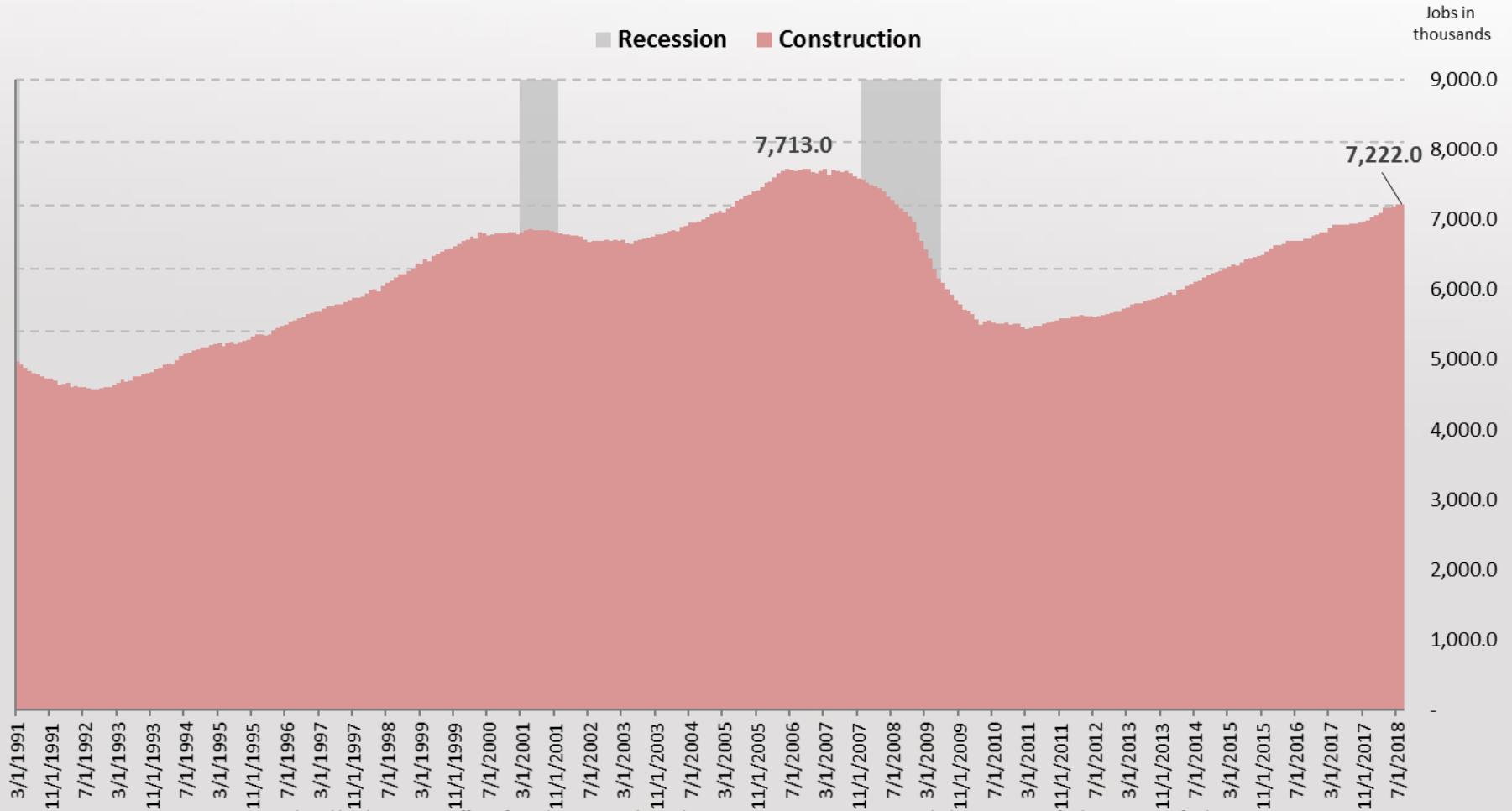
## Arizona Employment Level



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



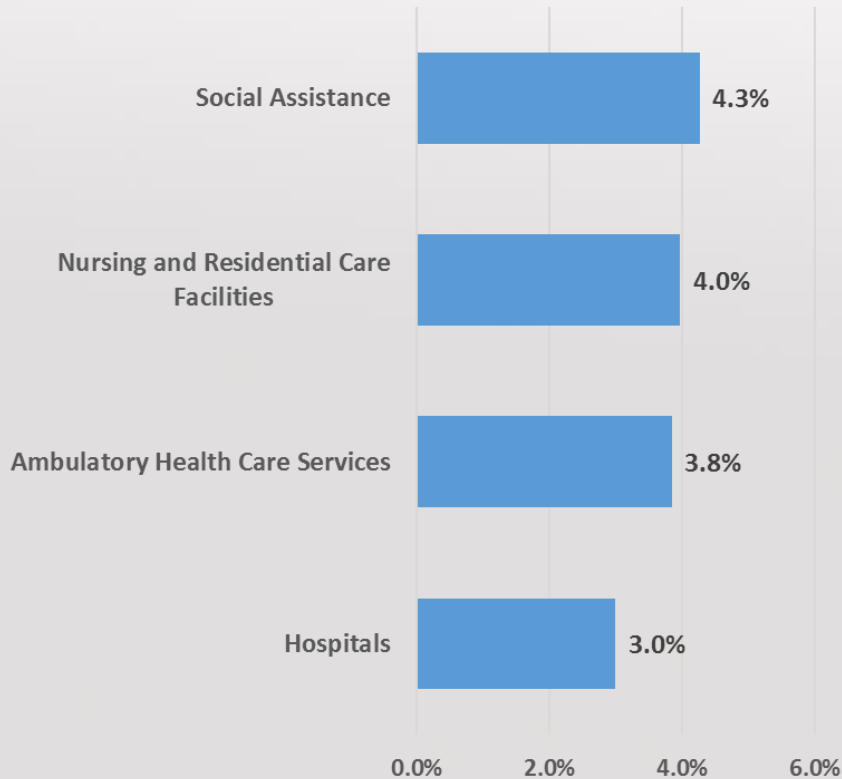
## United States Employment Level



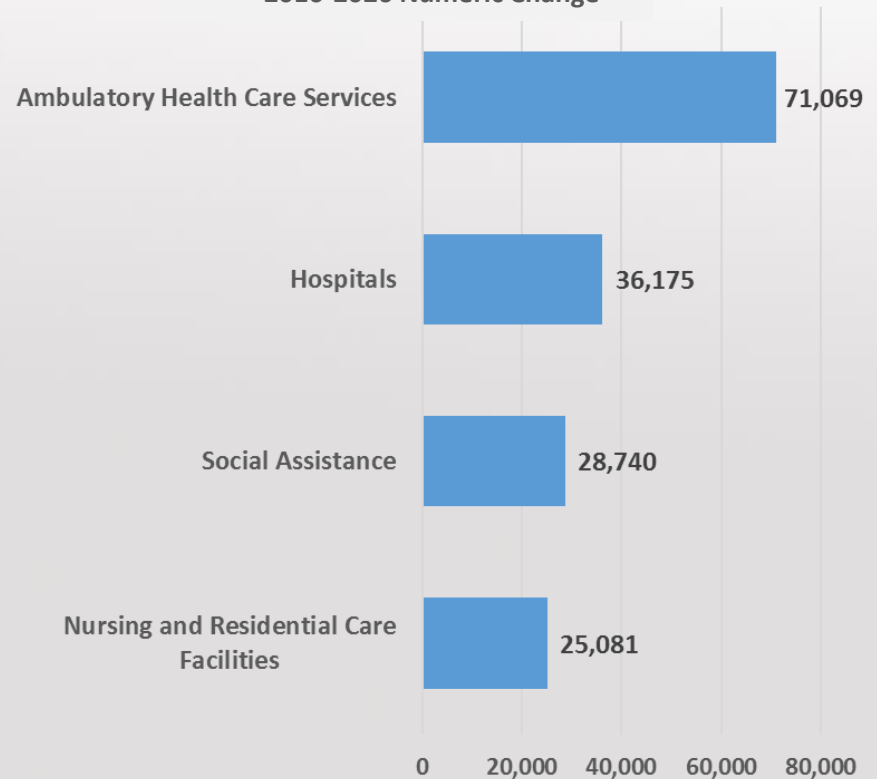
Source: Produced by the Arizona Office of Employment and Population Statistics in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

# Healthcare Industry Highlights

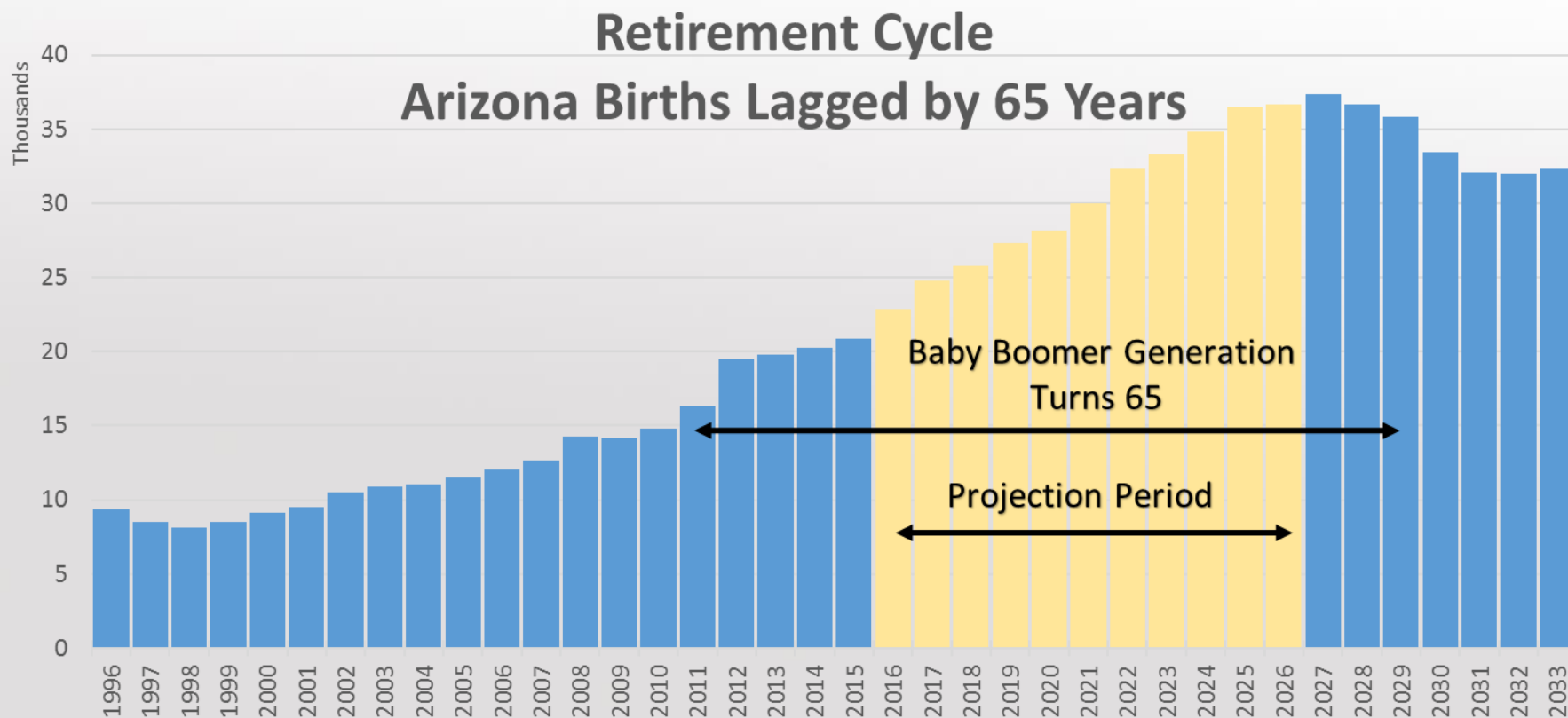
**Arizona Sector Employment**  
2016-2026 Annualized Percentage Change



**Arizona Sector Employment**  
2016-2026 Numeric Change



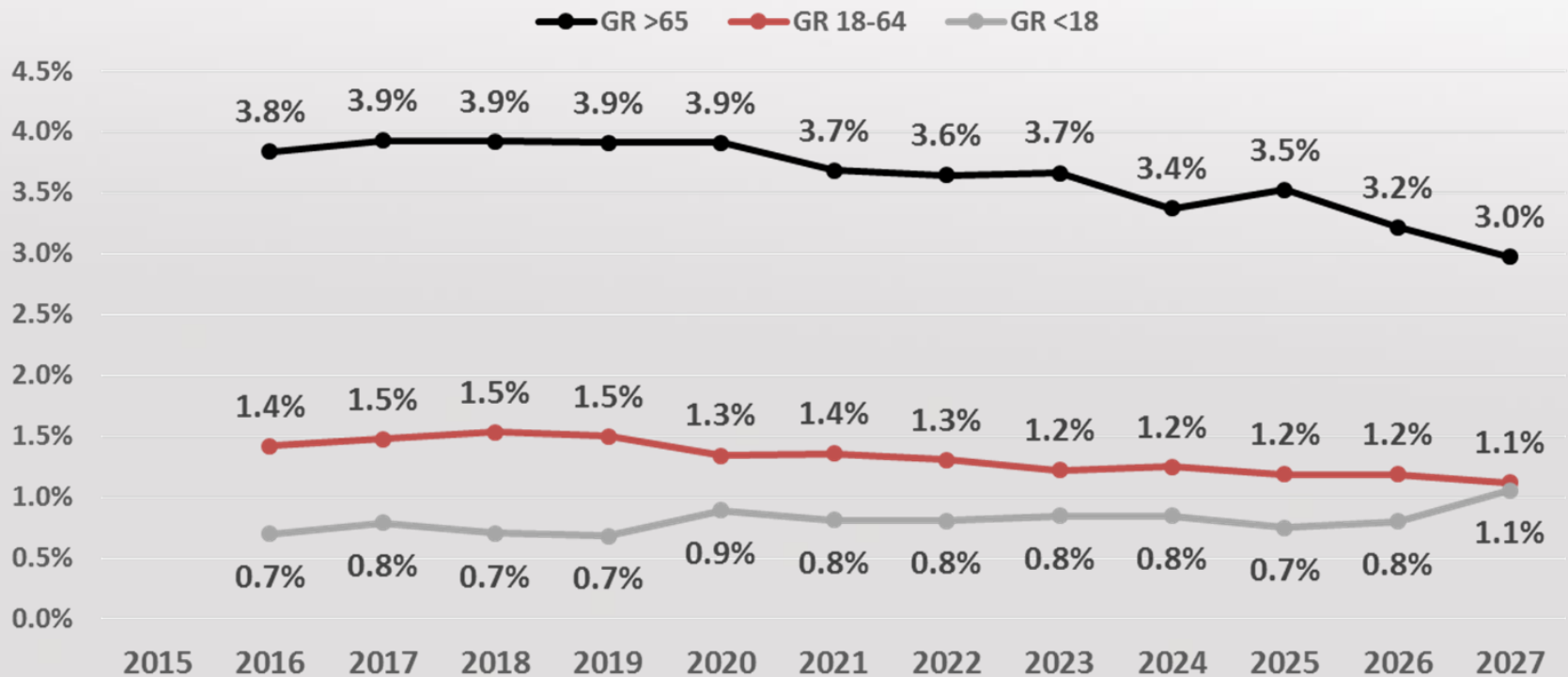
Employment in the Healthcare and Social Assistance sector is projected to account for nearly one-third of all new jobs



Source: National Center for Health Statistics

The Baby Boomer Generation will be eligible for retirement (age 62) by the end of the projections period

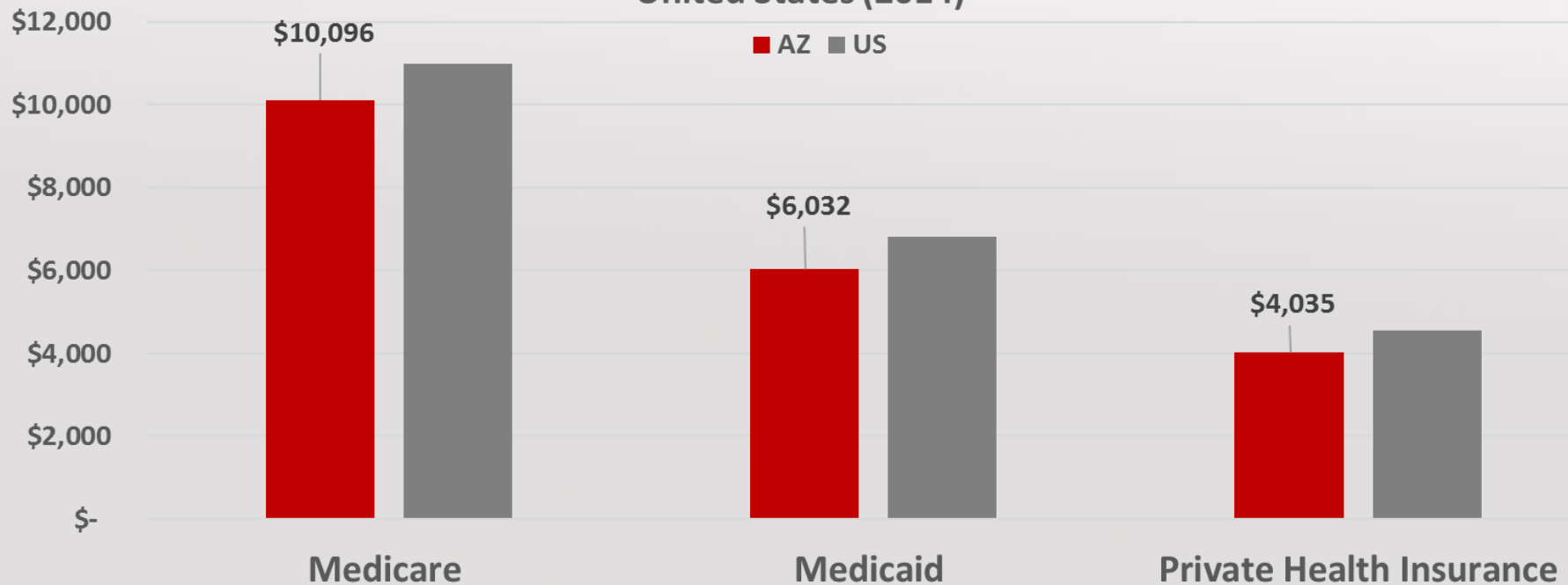
## Arizona Population Growth Rate by Age Category, 2016-2027

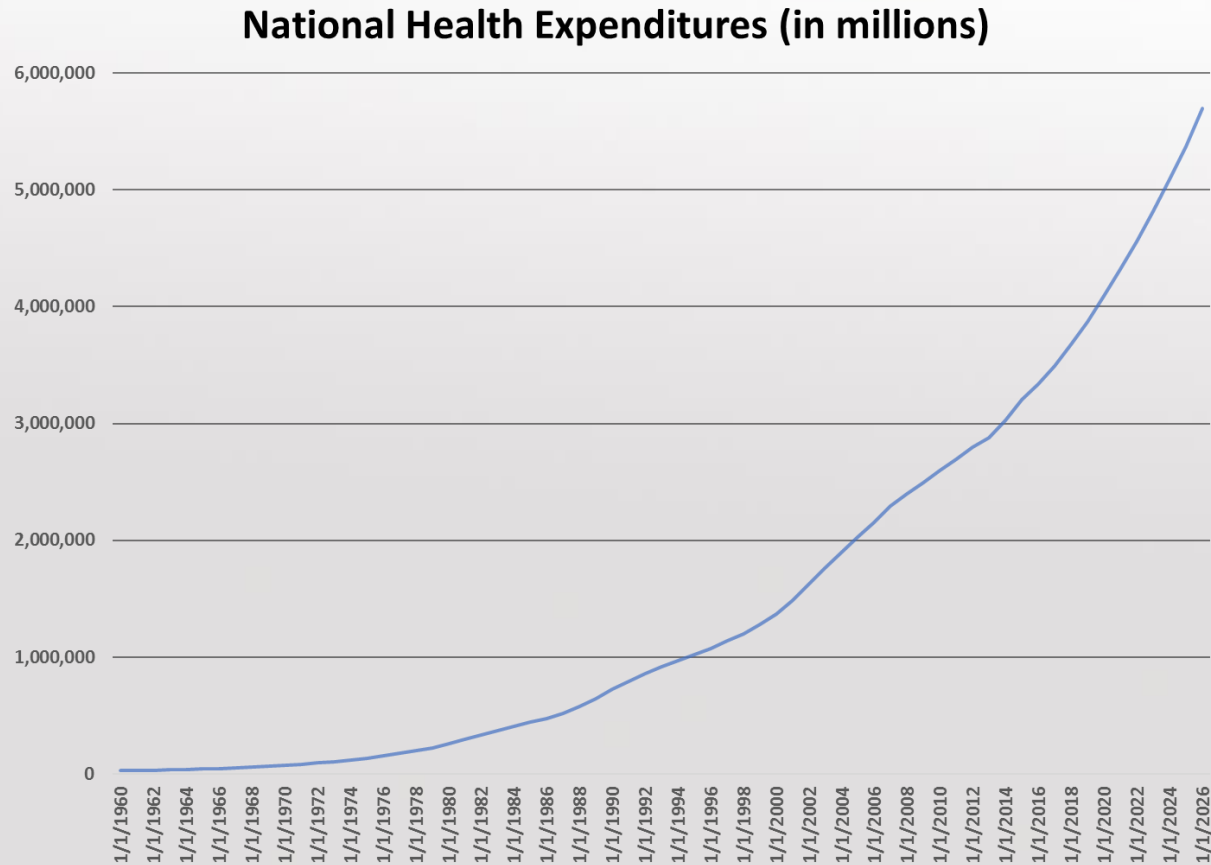


Source: Arizona Office of Economic Opportunity

The 65+ population is projected to grow at nearly 2-3 times the rate of the 18-64 age group and 3-4 times the rate of the 17 and under age group

**Per Capita Healthcare Expense by Type of Healthcare Cost, Arizona and United States (2014)**





Source: Centers for Medicare and Medicaid Services

National health expenditures are projected to grow exponentially and nearly double by 2026

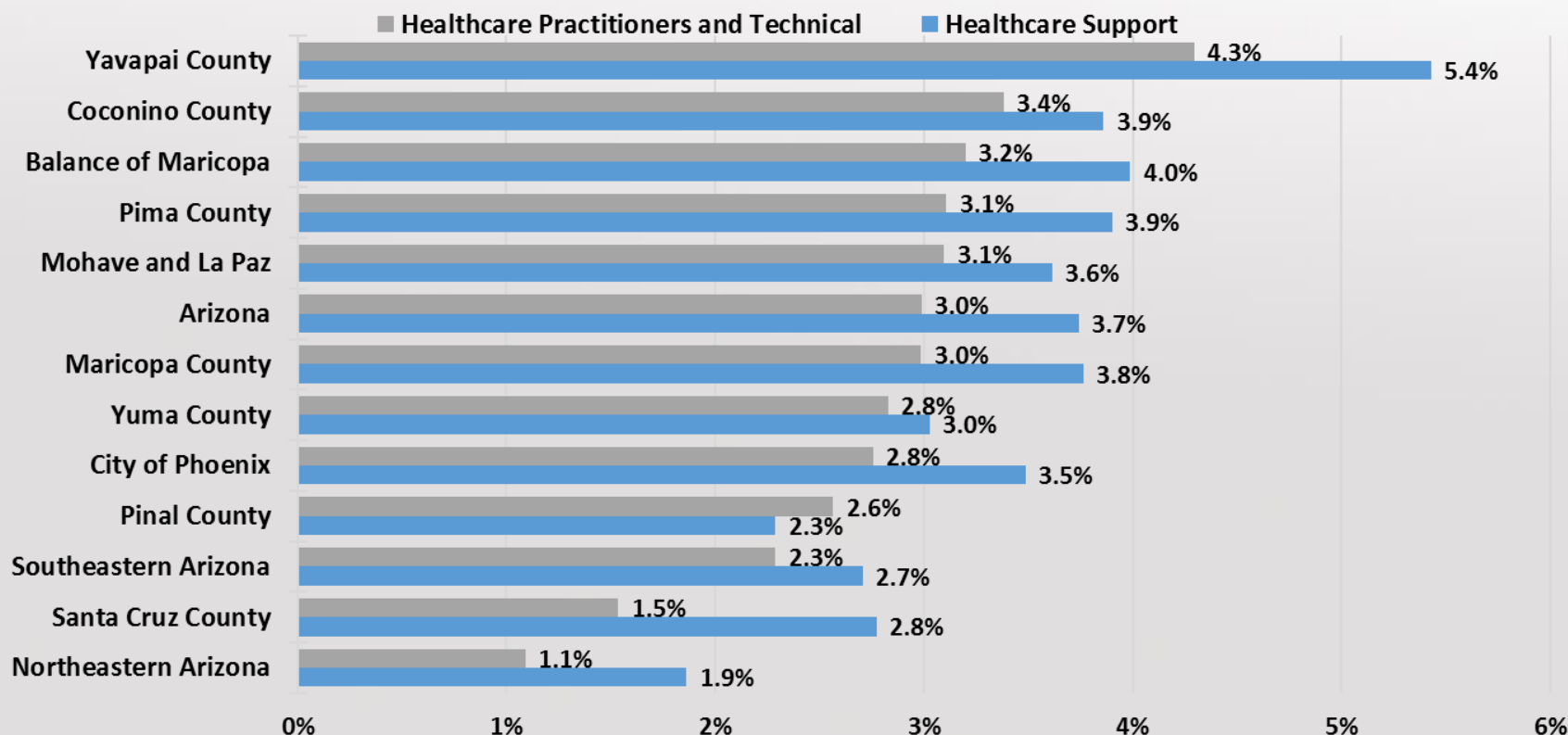
# Opportunities within Healthcare Occupations

- Healthcare growth is occurring throughout the state
  - Healthcare occupations are the fastest growing occupations in all substate areas except NE Arizona
- Healthcare occupations offer above average wages
  - Fifty-six of the 71 healthcare occupations earn median wages above state median wage (\$17.45/hr)
- Healthcare occupations are projected to record above average growth
  - Sixty-six of the 71 healthcare occupations are projected to record faster rates of growth than the state total growth (1.7% annualized growth)
- Employment growth is projected to occur at all educational levels

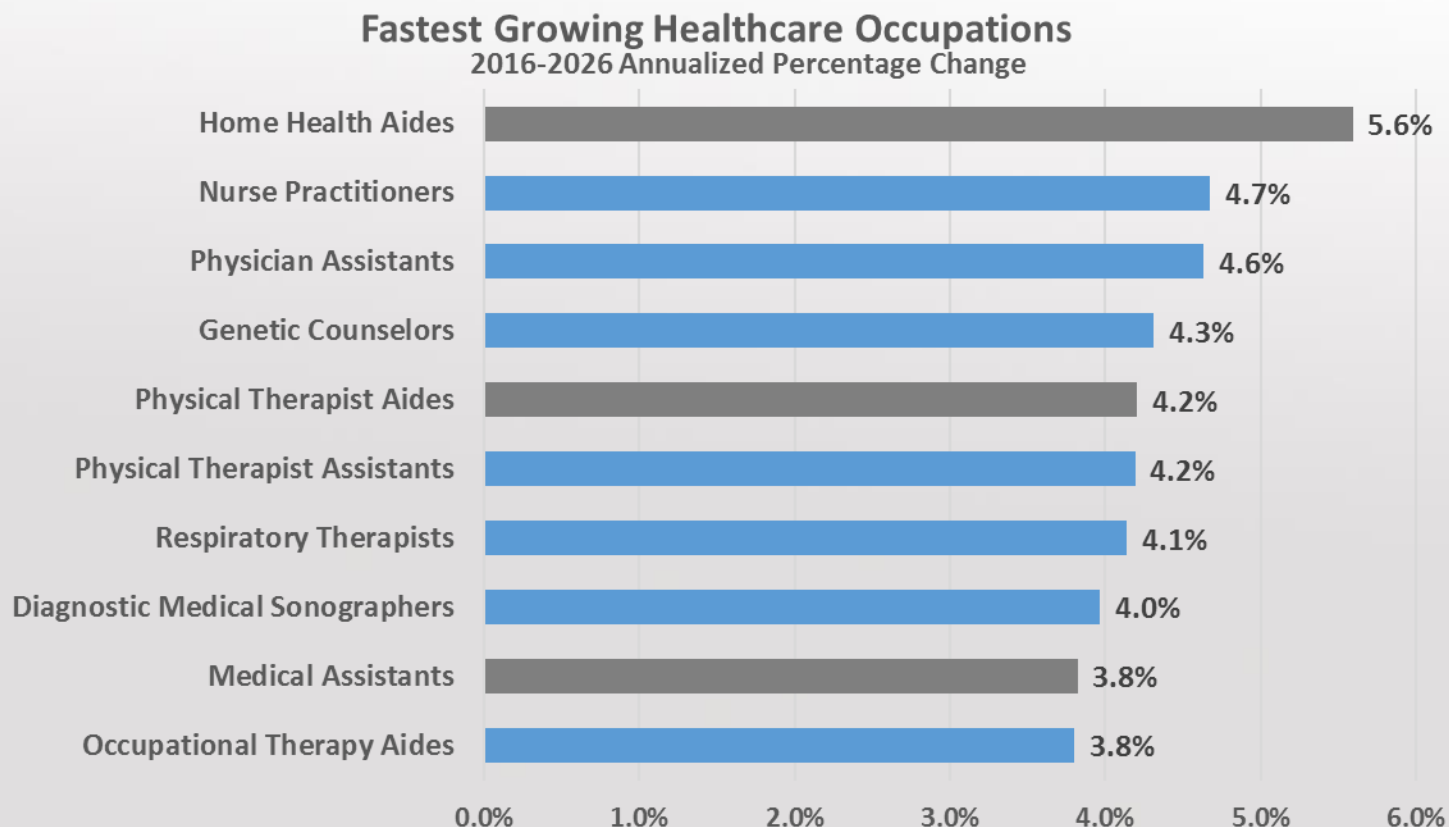


## Projected Annualized Percentage Growth

2016-2026



Healthcare Practitioners and Technical or Healthcare Support occupations are projected to record the largest growth in all substate areas except NE Arizona



\*Blue bars indicate a median wage above state median wage

Seven of the top ten fastest growing Healthcare Occupations have median wages above state median wage (\$17.45)

# Local Area Highlights

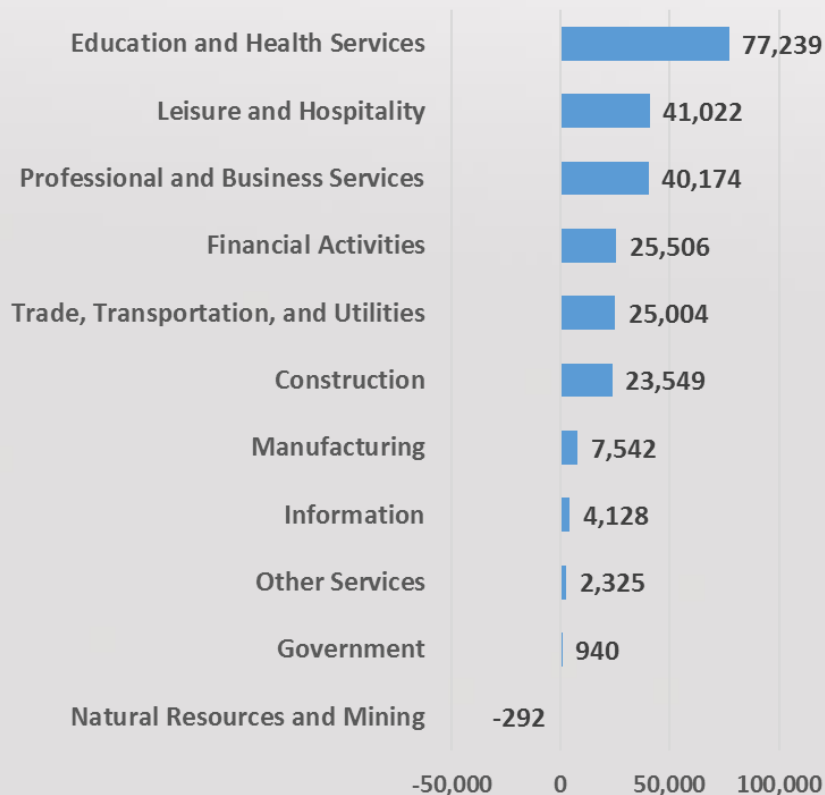
# Substate Comparisons

Area	<u>Employment Levels</u>		<u>Employment Change</u>		
	2016	2026	Numeric Change	Percentage Change	Annualized % Change
Balance of Maricopa	1,095,951	1,347,801	251,850	23.0%	2.1%
Yavapai County	67,789	83,152	15,363	22.7%	2.1%
Maricopa County	2,049,838	2,458,528	408,690	19.9%	1.8%
Coconino County	68,723	81,506	12,783	18.6%	1.7%
Arizona	2,922,355	3,465,150	542,795	18.6%	1.7%
Pima County	388,695	454,204	65,509	16.9%	1.6%
City of Phoenix	953,887	1,110,727	156,840	16.4%	1.5%
Mohave and La Paz	59,372	68,714	9,342	15.7%	1.5%
Pinal County	69,048	79,212	10,164	14.7%	1.4%
Yuma County	76,018	84,786	8,768	11.5%	1.1%
Southeastern Arizona	53,597	58,473	4,876	9.1%	0.9%
Santa Cruz County	14,862	16,214	1,352	9.1%	0.9%
Northeastern Arizona	74,413	80,361	5,948	8.0%	0.8%

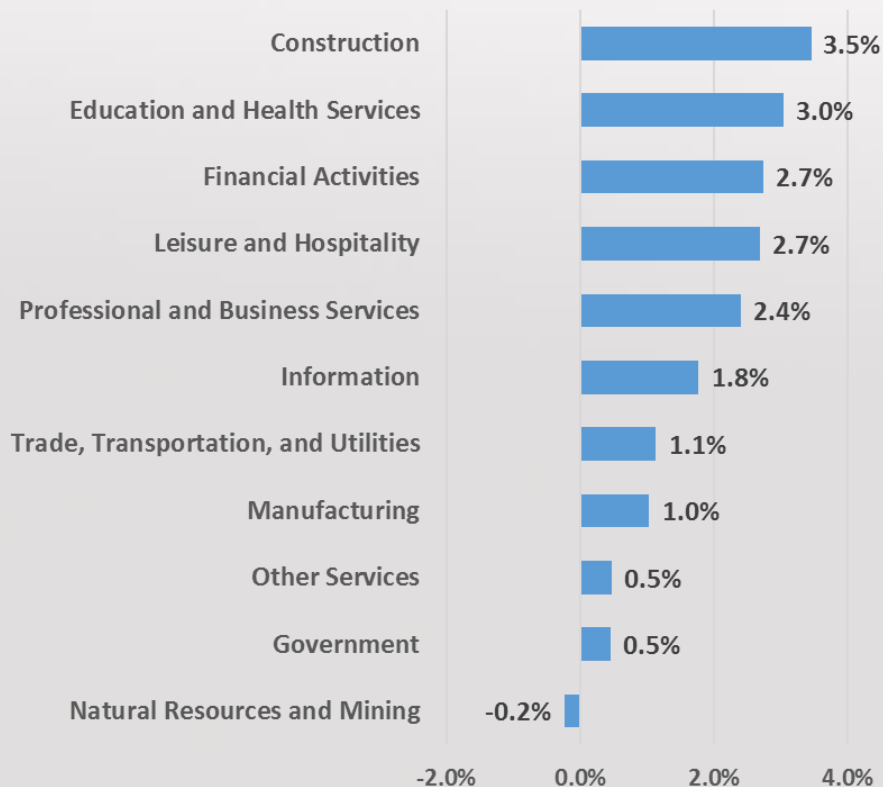
Maricopa County is projected to account for 75% of total employment growth within the state (Balance of Maricopa 46% and Phoenix 29%, respectively)

# Substate Comparisons

**Balance of Maricopa Sector Employment**  
2016-2026 Numeric Change



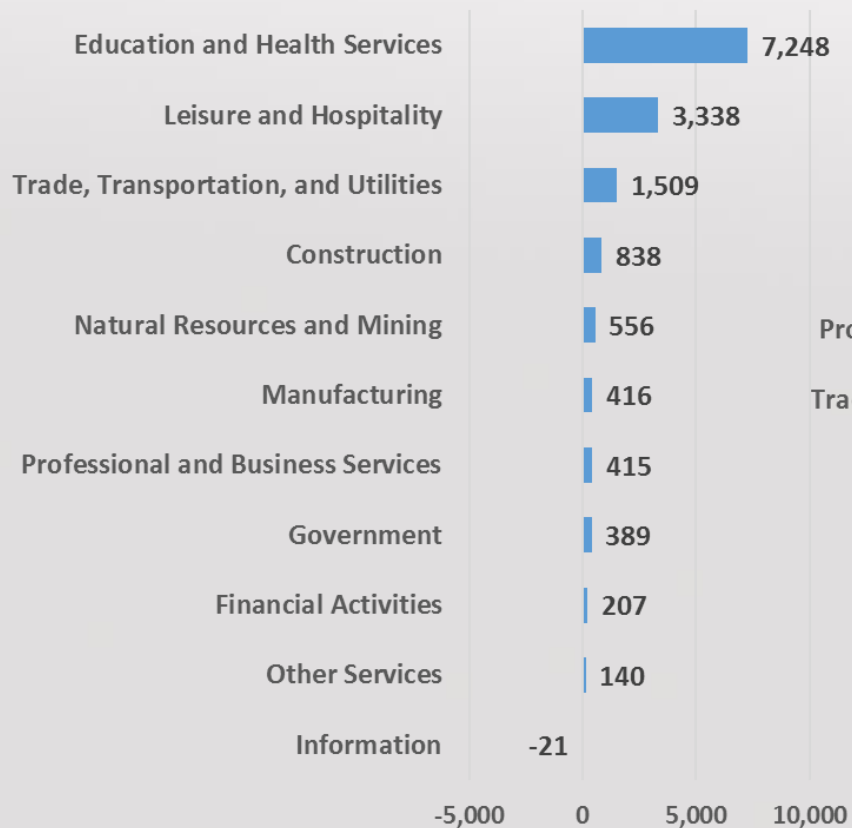
**Balance of Maricopa Sector Employment**  
2016-2026 Annualized Percentage Change



# Substate Comparisons

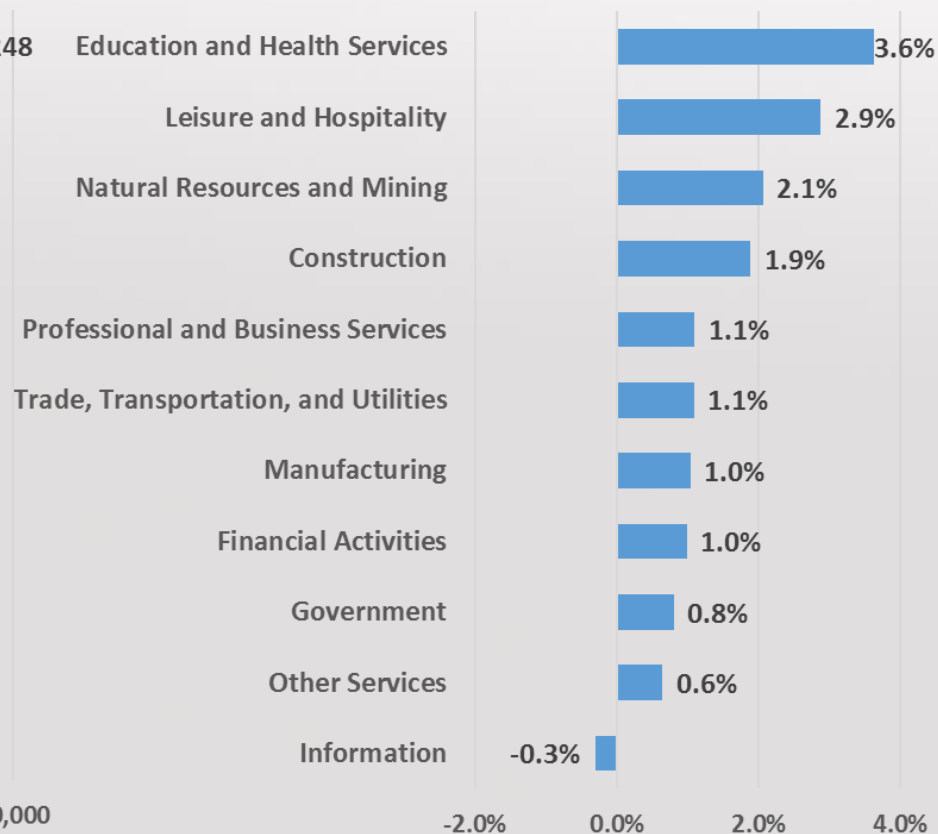
## Yavapai County Sector Employment

2016-2026 Numeric Change



## Yavapai County Sector Employment

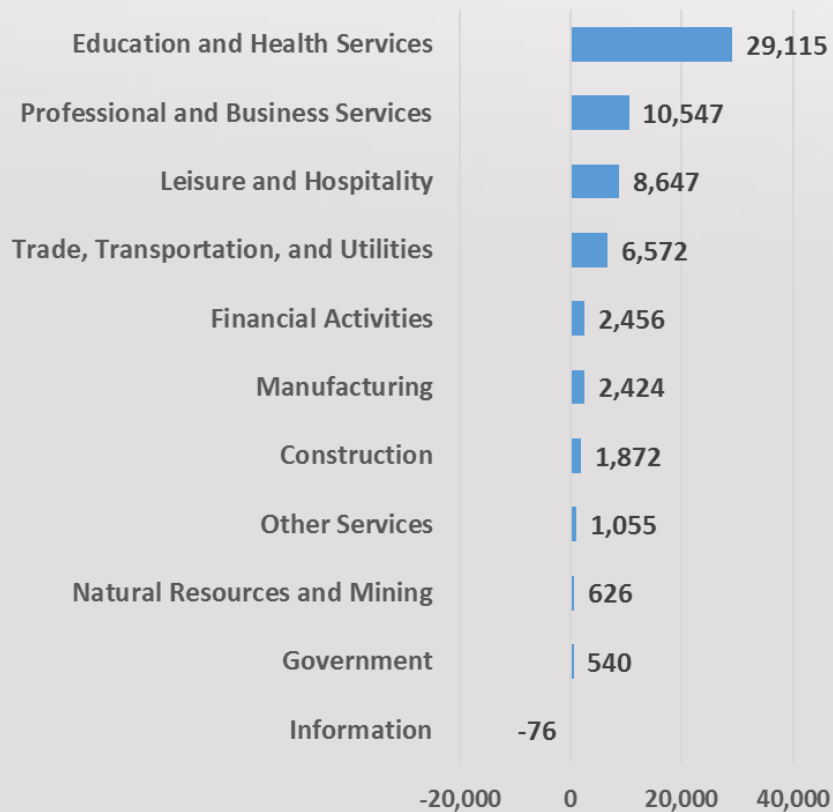
2016-2026 Annualized Percentage Change



# Substate Comparisons

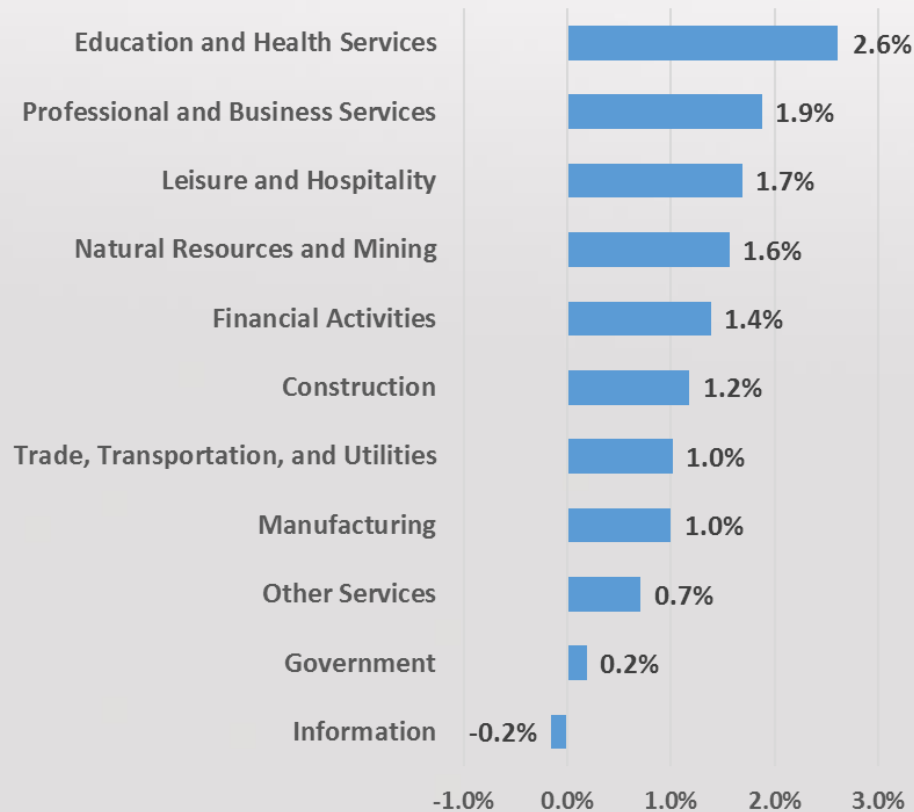
**Pima County Sector Employment**

2016-2026 Numeric Change



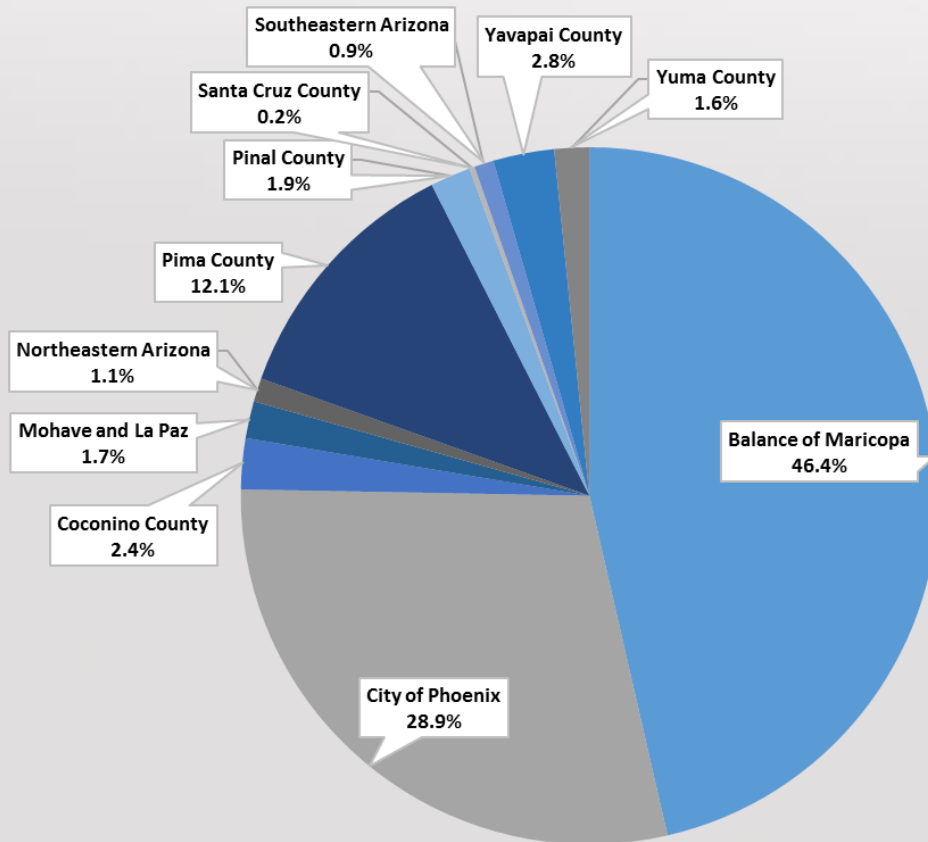
**Pima County Sector Employment**

2016-2026 Annualized Percentage Change



# Substate Comparisons:

## Share of Total Growth by Local Area

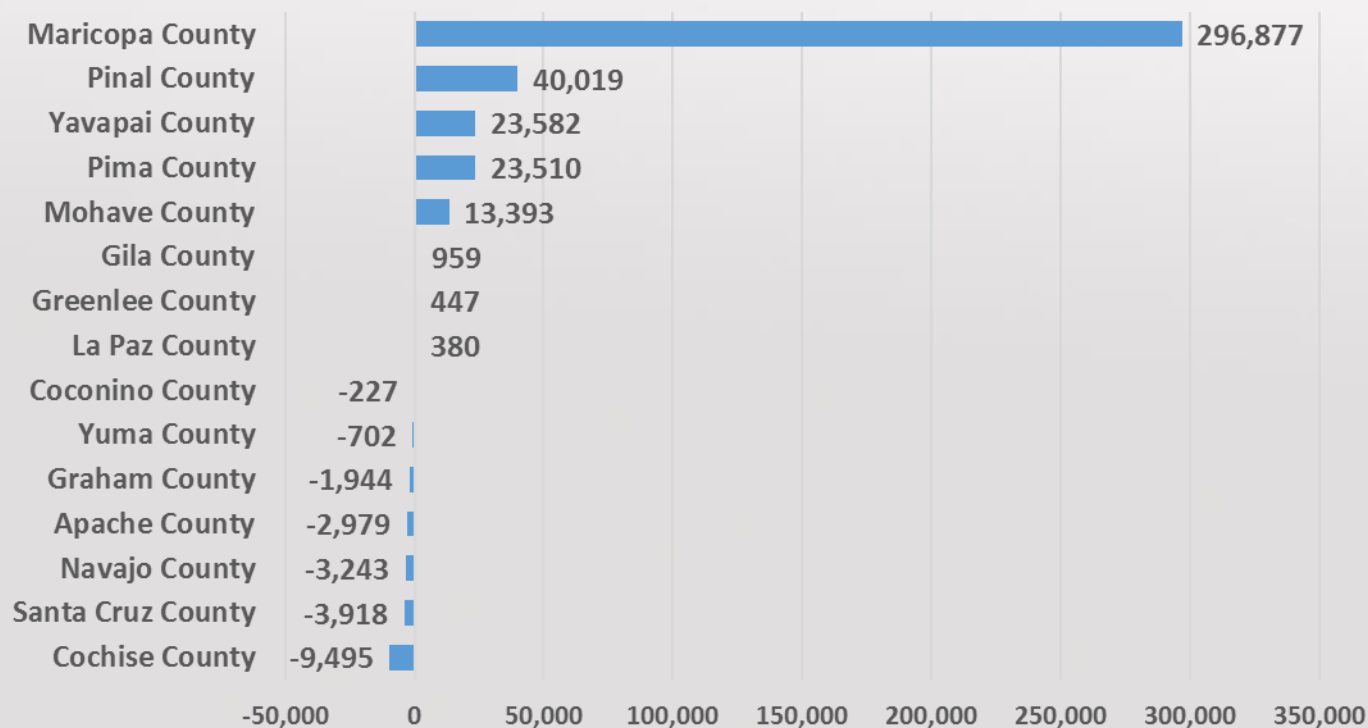


Maricopa County is projected to account for 75.3% of total employment growth within the state



# Population Considerations:

## Net Migration Change by County 2010 to 2017

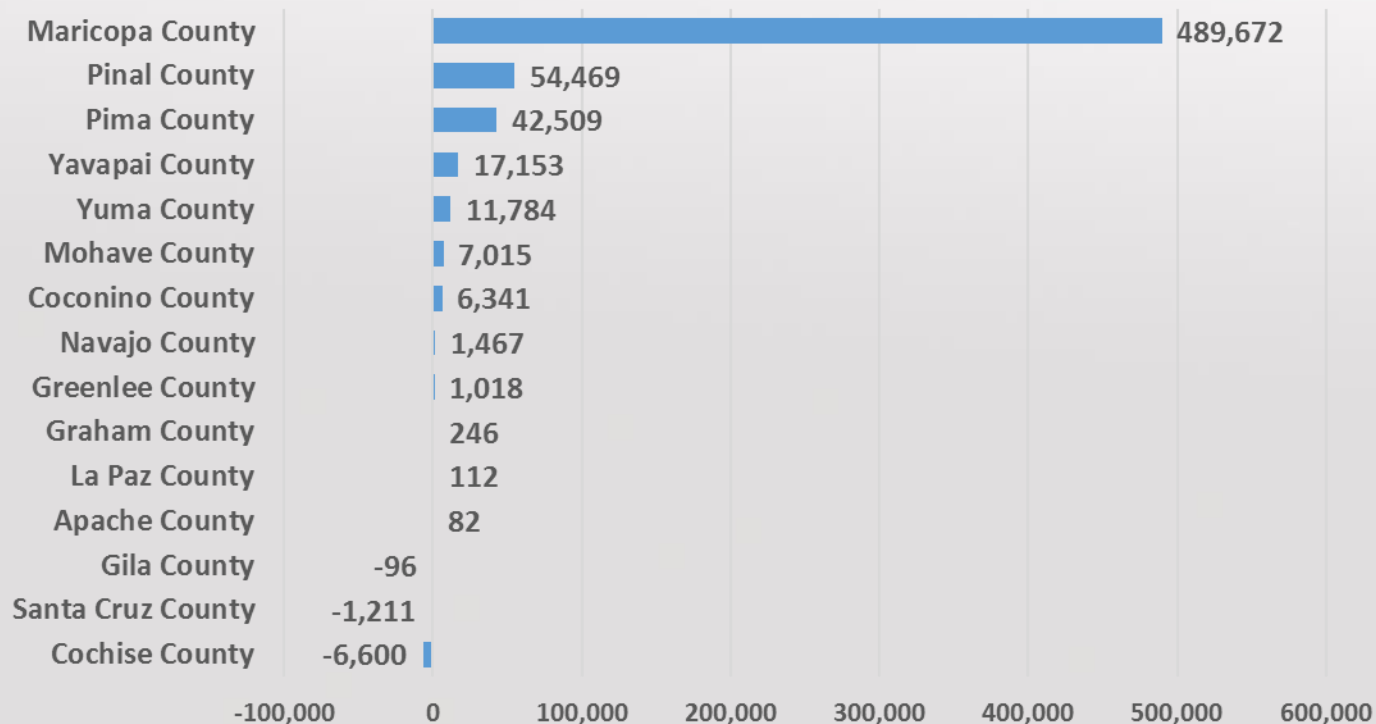


Source: US Census Bureau Data Table PEPTCOMP

Maricopa County accounted for 79% of net migration growth and 83% of total domestic migration growth for the state

# Population Considerations:

## Total Population Change by County 2010 to 2017



Source: US Census Bureau Data Table PEPTCOMP

Maricopa, Pima and Pinal Counties accounted for 94% of total population growth within the state

## Report Summary

- Total employment is projected to grow by 542,795 jobs over the 2016-2026 decade (1.7% annual growth compared to 0.2% annual growth from 2006-2016)
- All 11 industry sectors and all 22 major occupation groups are projected to add jobs
- Employment growth is projected to occur within all 12 substate areas with Balance of Maricopa recording the largest percentage gain (2.1% growth)
- The Educational and Health Services sector is projected to add the largest number of jobs (183,544 jobs and 2.6% growth), while Construction is projected to record the largest percentage gain (3.0% growth and 47,838 jobs)
- Education and Health Services is the fastest growing industry in 9 of 11 local areas

# Thank You!

## Any Questions?

### Upcoming Release Schedule:

- July Employment Report on Aug. 16<sup>th</sup>