

Labor Market Information Pima County LWIA

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AGENDA

- LMI in WIOA Local Plans
- Economic Overview
 - Local Demographics
 - Individuals with Barriers to Entry
 - Unemployment
 - Industry Growth
- Existing and Emerging In-Demand Industries and Occupations
- Characteristics of High Unemployment
- LMI Data Sources

Local Plans [Sec. 108 (b)]

– The local plan should include:

- An analysis of the regional economic conditions, including:
 - **Existing and emerging in-demand industry sectors and occupations**
 - The employment needs of employers in those industry sectors and occupations
- An analysis of the knowledge and skills needed to meet the employment needs of the employers in the region
- An analysis of the workforce in the region, including **current labor force employment data**, labor market trends, and **the education and skill levels of the workforce in the region**

LMI should also be included in:

Youth Workforce Investment [Sec. 129 (c)(2)(M)]

- Program elements including **services that provide labor market information about in-demand industry sectors or occupations**

Training Services [Sec. 134 (C)(3)(G)(iii)]

- Training Services should be **directly linked to an in-demand industry sector or occupation in the local area**

Career Services [Sec. 134 (e)(3)(A)(1)]

- (iv) Labor exchange services including:
 - (I). job search and placement assistance and career counseling including
 - (aa). **information on in-demand industry sectors and occupations**

Economic Overview

PIMA COUNTY

How to use data:

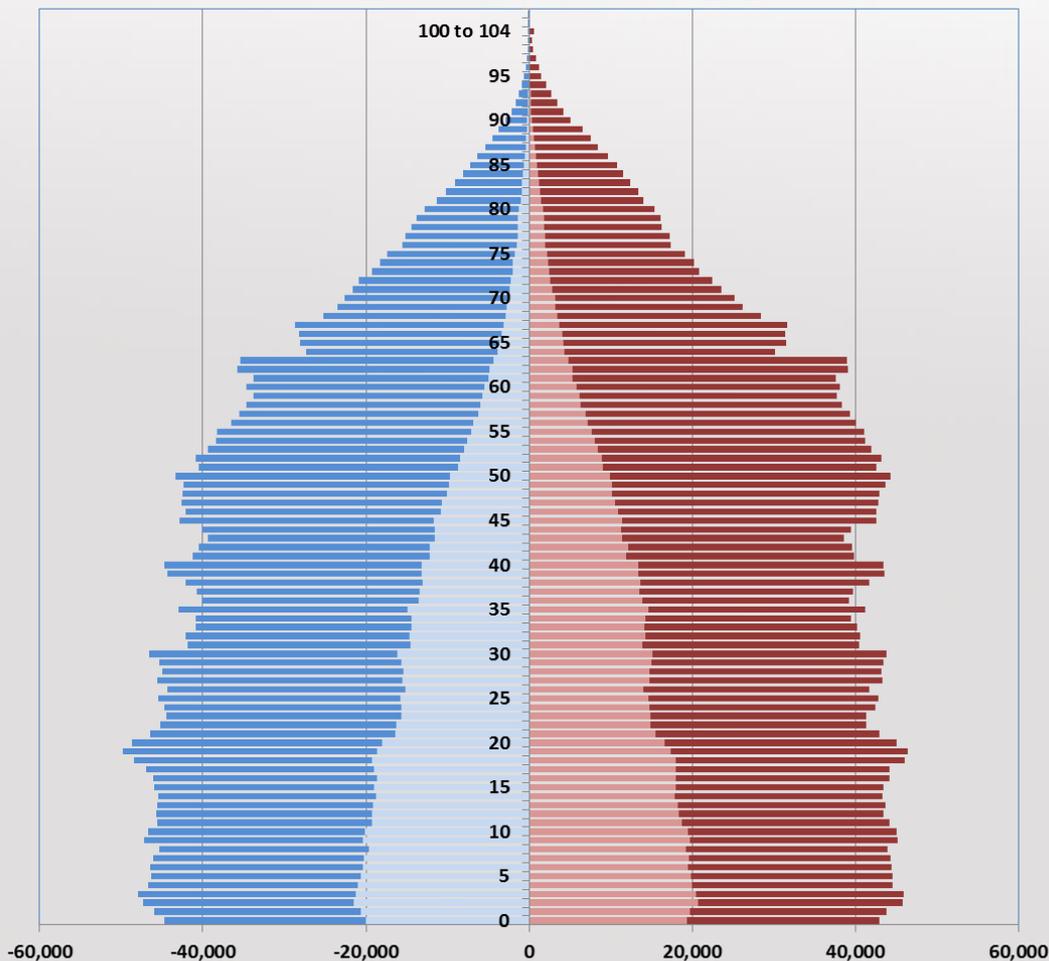
- Use data to drive decision, not validate decisions
- **Use more than one source of data** – don't lock yourself into a single estimate, consider all of the available data to get the most accurate picture
- **Know the limitations of your data set** – it's easy to accidentally misuse data and draw erroneous conclusions
- **Become familiar with different data sets (or someone who is)** – there is no one place to find all the data you need

Immerse yourself in the data

Be prepared to accept surprising surprises

Arizona Population

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



Arizona

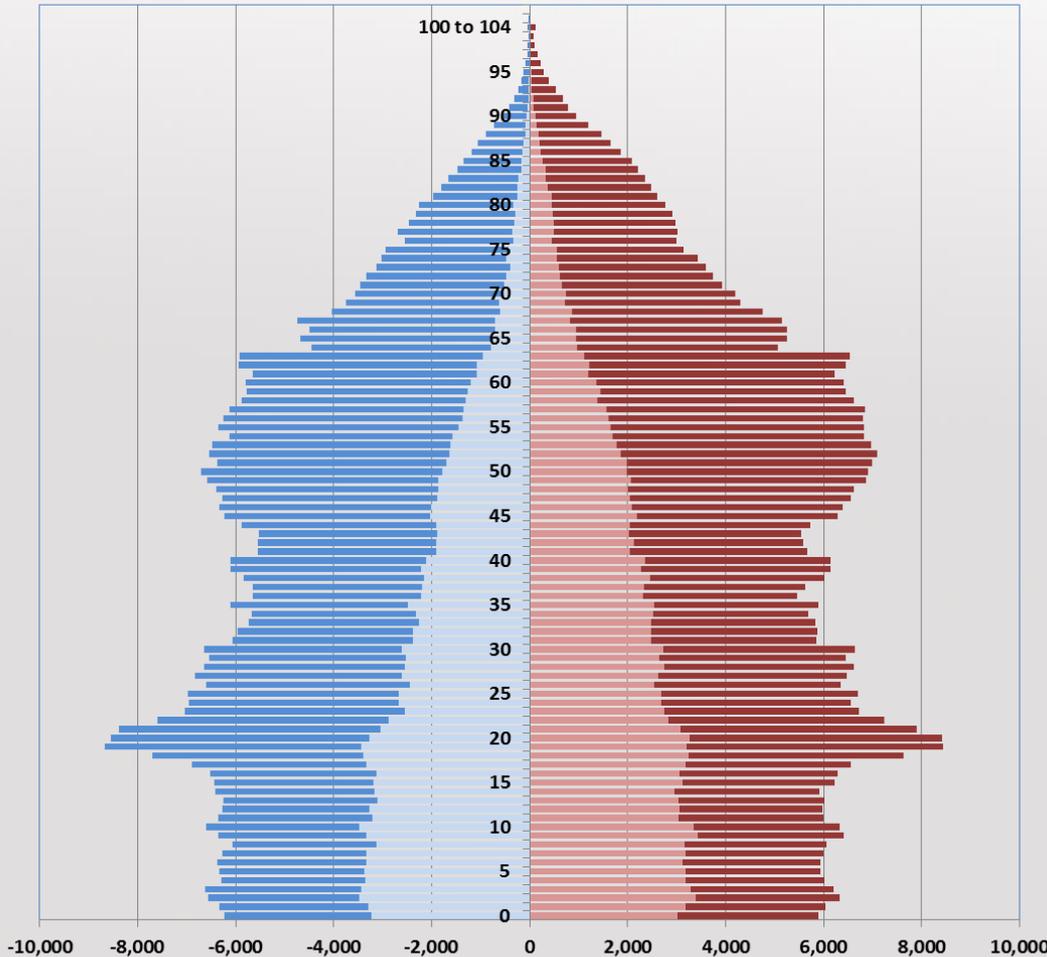
Census 2010

Total Population 6,392,017

Hispanic	1,895,228	29.6%
Male	951,818	14.9%
Female	943,410	14.8%
Non-Hispanic	4,497,621	70.4%
Male	2,224,188	34.8%
Female	2,273,433	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%

Pima County Population

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



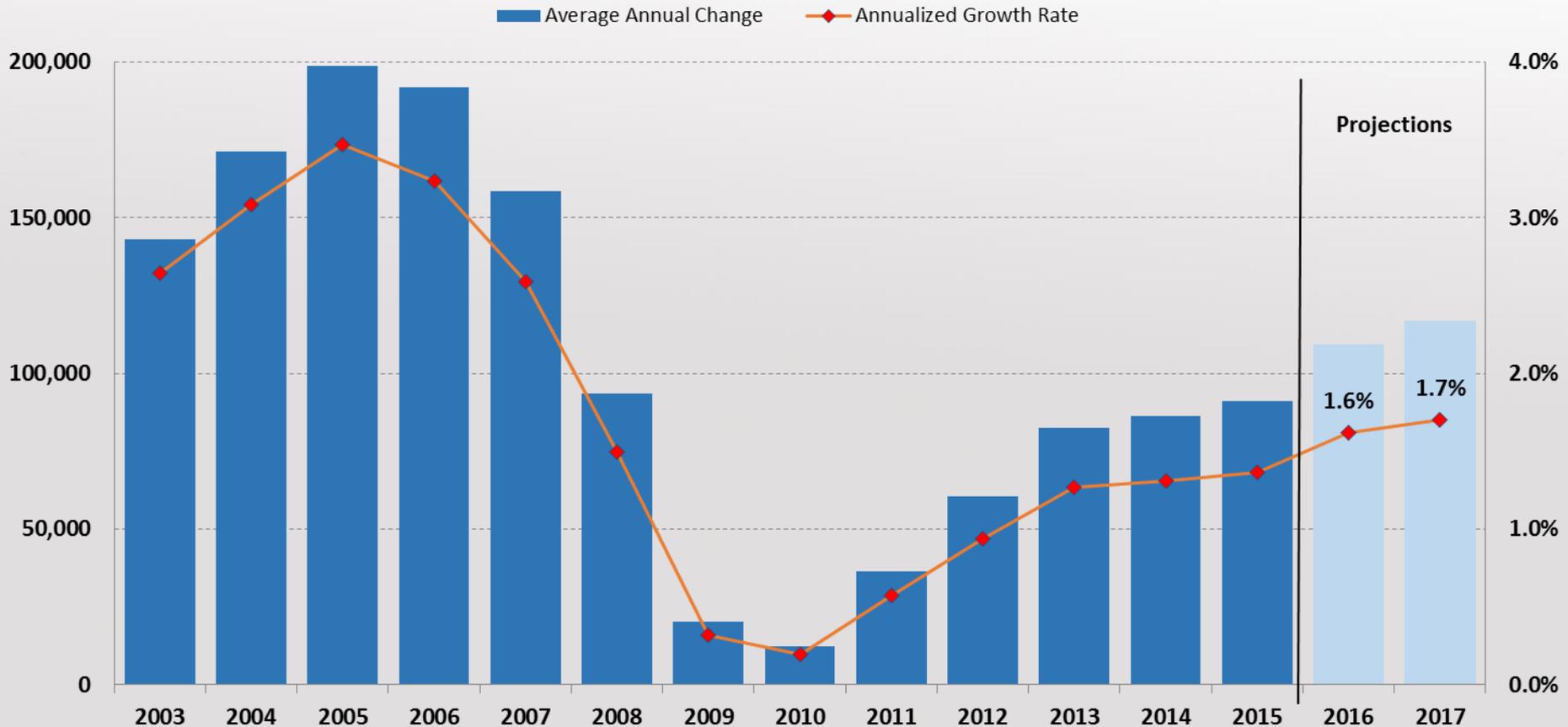
Pima County

Census 2010

Total Population 980,263

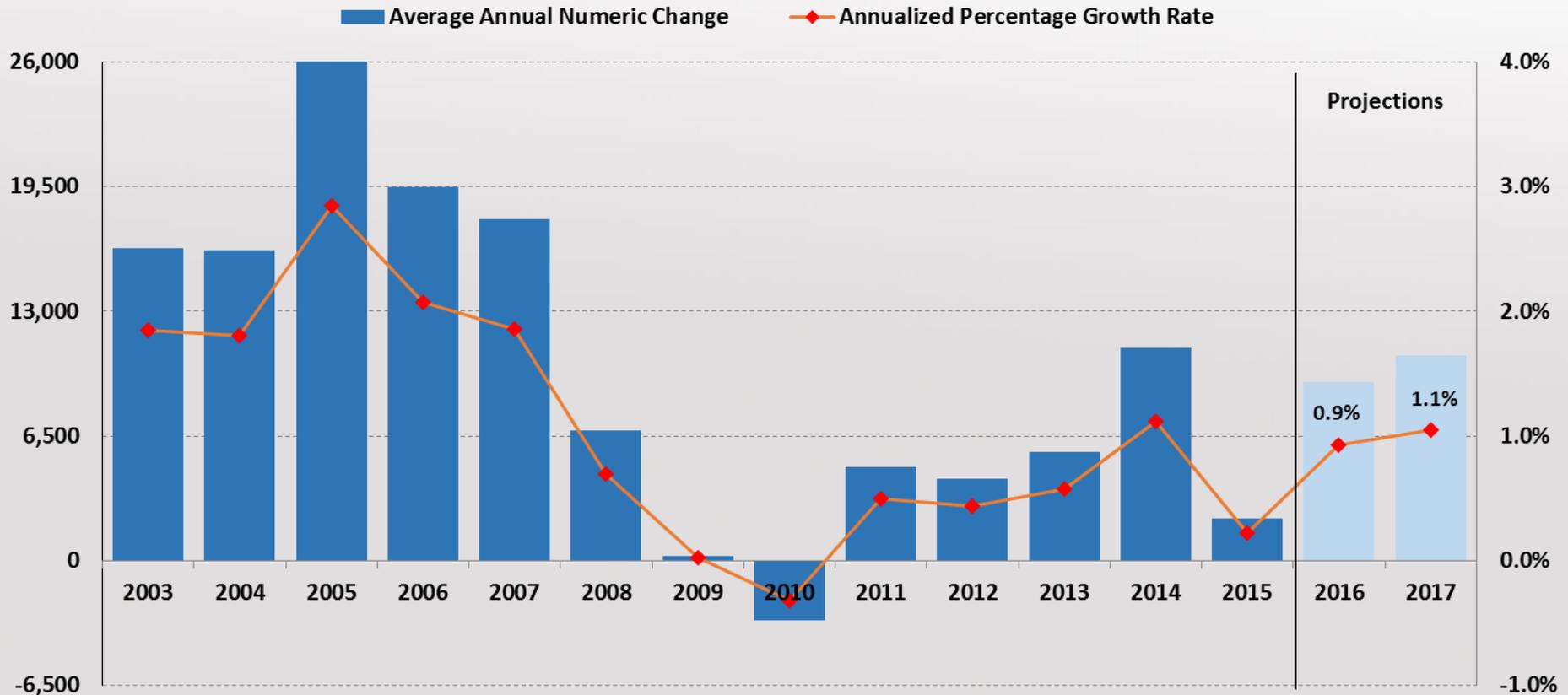
Hispanic	338,802	34.6%
Male	165,575	16.9%
Female	173,227	17.7%
Non-Hispanic	641,461	65.4%
Male	315,862	32.2%
Female	325,599	33.2%
Under 17	211,872	21.6%
Age 17-24	121,235	12.4%
Age 25-34	126,176	12.9%
Age 35-44	115,795	11.8%
Age 45-54	131,528	13.4%
Age 55-64	122,367	12.5%
Over 64	151,293	15.4%

Arizona's Population Growth and Growth Rates, 2003-2017



Source: Produced by the Arizona Office of Employment and Population Statistics using 2010 Census data in cooperation with the U.S. Census Bureau

Pima County's Population Growth and Growth Rates, 2003-2017



Source: Produced by the Arizona Office of Employment and Population Statistics using 2010 Census data in cooperation with the U.S. Census Bureau

Pima County Quick Facts (2014)

	Pima County	Arizona	United States
Median Household Income	\$46,233	\$49,928	\$53,482
Median Age	37.9	36.5	37.4
Individuals with a Disability Between 18-64	11.6%	9.9%	10.2%
Veterans	11.2%	10.0%	8.3%
Poverty Status	19.0%	18.2%	15.6%
Mean Travel Time to Work	24:12	24:42	25:42
Civilian Labor Force Participation Rate	58.8%	59.7%	63.5%
Population over 16	796,692	5,121,781	248,775,628

Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (DP03, S0501, S1810, S2101) in cooperation with the U.S. Census Bureau

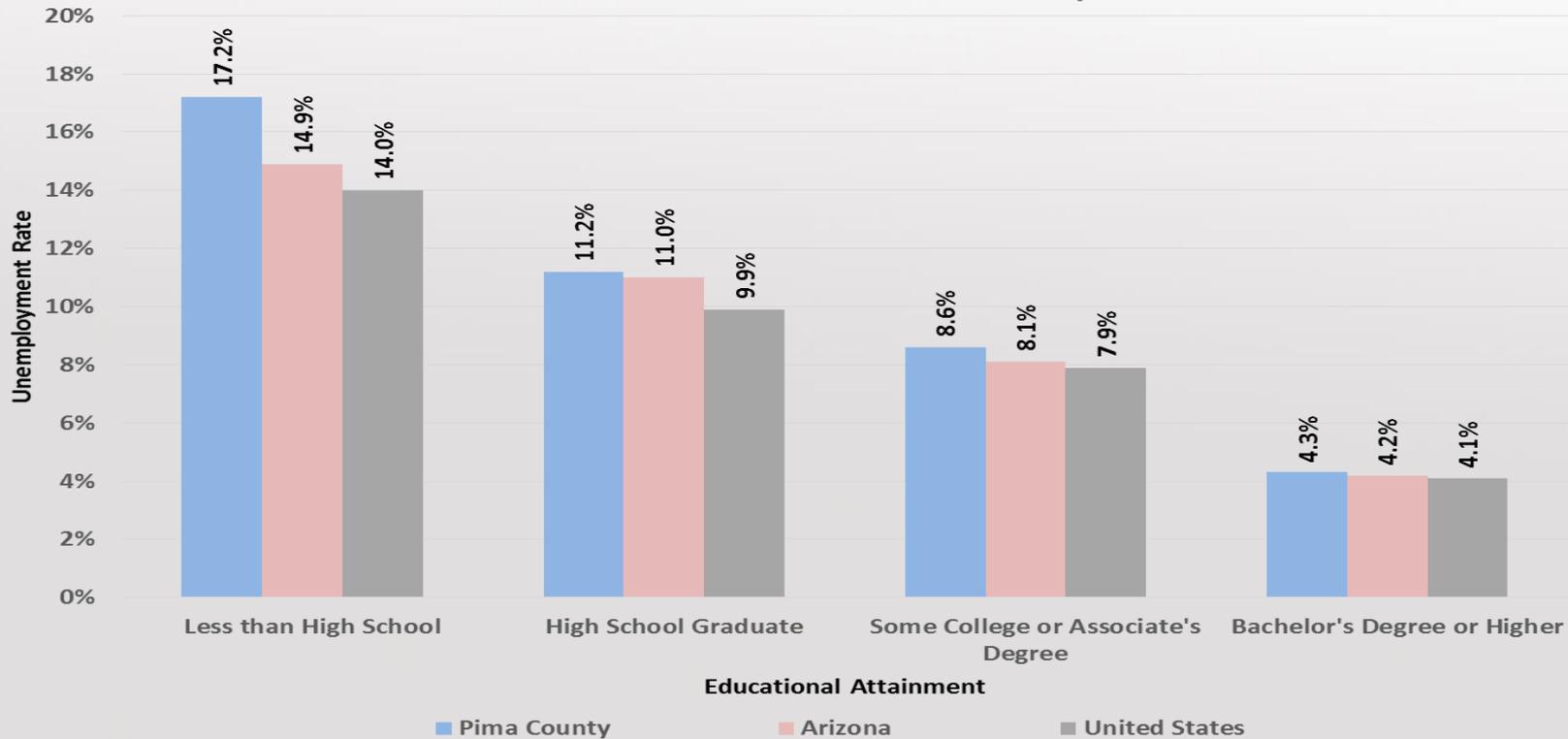
Highest Educational Level Achieved (Population over 25, 2014)

	Pima County	Arizona	United States
Less than High School	12.5%	14.1%	13.6%
High School Graduate (includes equivalency)	49.0%	50.4%	49.2%
Associate's Degree	8.4%	8.4%	7.9%
Bachelor's Degree	17.6%	17.1%	18.3%
Graduate or Professional Degree	12.4%	10.0%	11.0%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (S1501) in cooperation with the U.S. Census Bureau

- Pima County has a very well-educated population

Unemployment Rates by Educational Attainment (Ages 25-64) Pima County 2014



Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (B23006) in cooperation with the U.S. Census Bureau

- **Unemployment decreases with higher levels of education**

Pima County Public Assistance Households (2014)

	Pima County	Arizona	United States
TANF (Temporary Assistance for Needy Families)	3.1%	2.5%	2.8%
SSI (Supplemental Security Income)	4.9%	4.2%	5.3%
SNAP (Supplemental Nutrition Assistance Program)	14.8%	13.6%	13.0%
Medicaid/AHCCCS (Arizona Health Care Cost Containment System) (Individuals)	20.9%	20.0%	17.8%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (DP03, S2701) in cooperation with the U.S. Census Bureau

Pima County Health Insurance (2014)

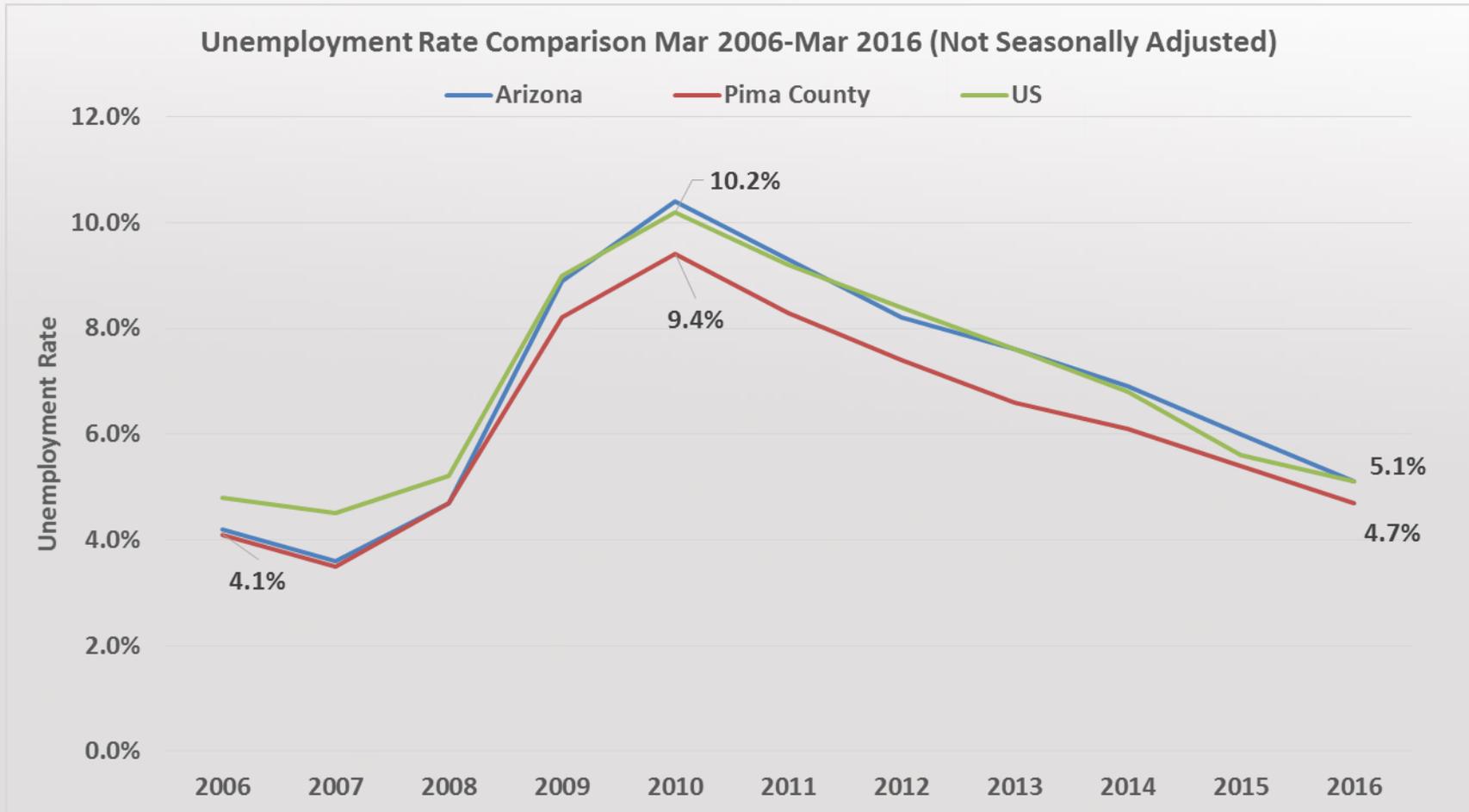
	Pima County	Arizona	United States
Private Coverage Only (Employer, Direct-Purchase, TRICARE)	46.5%	47.0%	52.7%
Public Coverage Only (Medicare, AHCCCS, Veteran's Admin.)	22.1%	21.1%	17.6%
Both Private and Public Coverage (Some combination of the above, ex. Tricare for Life and Medicare)	16.9%	15.6%	15.5%
Uninsured	14.5%	16.3%	14.2%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (S2701) in cooperation with the U.S. Census Bureau

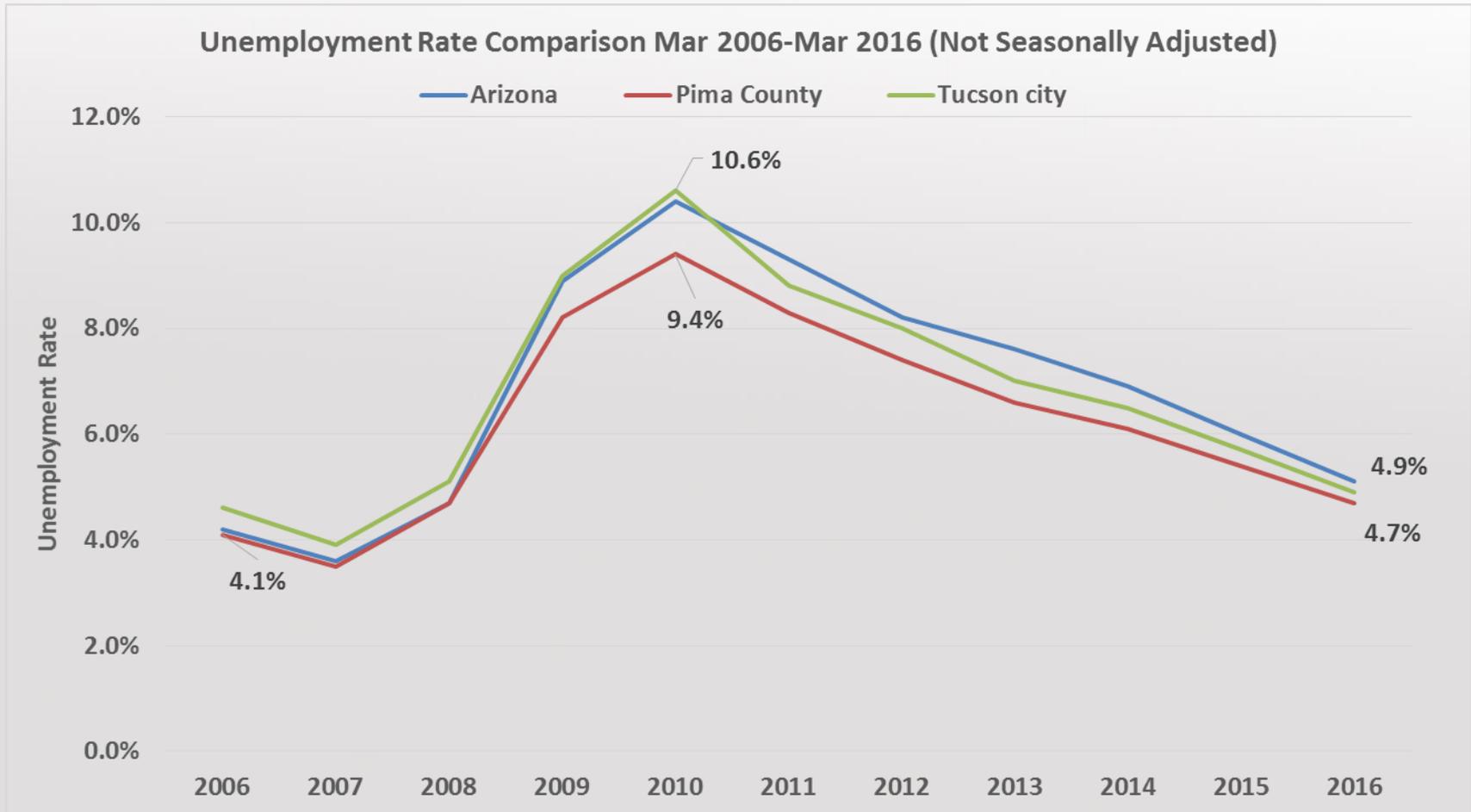
Pima County Detailed Health Insurance (2014)

	Pima County	Arizona	United States
Employment-based (private)	47.9%	48.7%	54.7%
Direct-purchase (private)	11.9%	12.5%	12.4%
TRICARE (private)	5.2%	3.2%	2.7%
Medicare (public)	18.3%	16.5%	15.5%
AHCCCS/Medicaid (public)	20.9%	20.0%	17.8%
VA (public)	3.4%	2.7%	2.1%
Uninsured	14.5%	16.3%	14.2%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (S2701) in cooperation with the U.S. Census Bureau



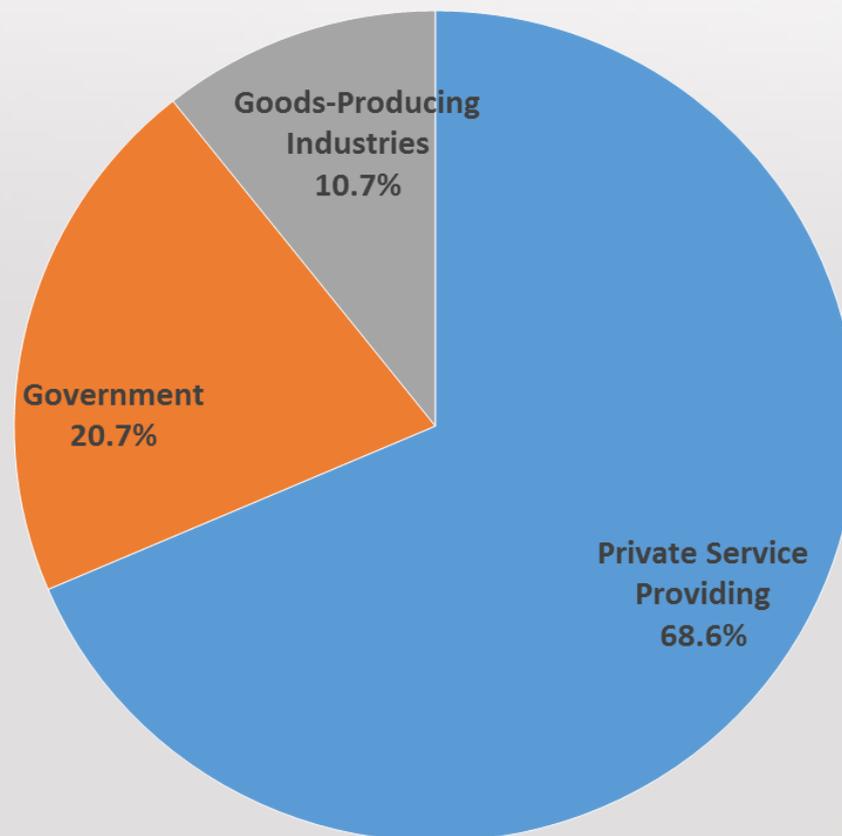
Source: Produced by the Arizona Office of Employment and Population Statistics using LAUS data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics



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

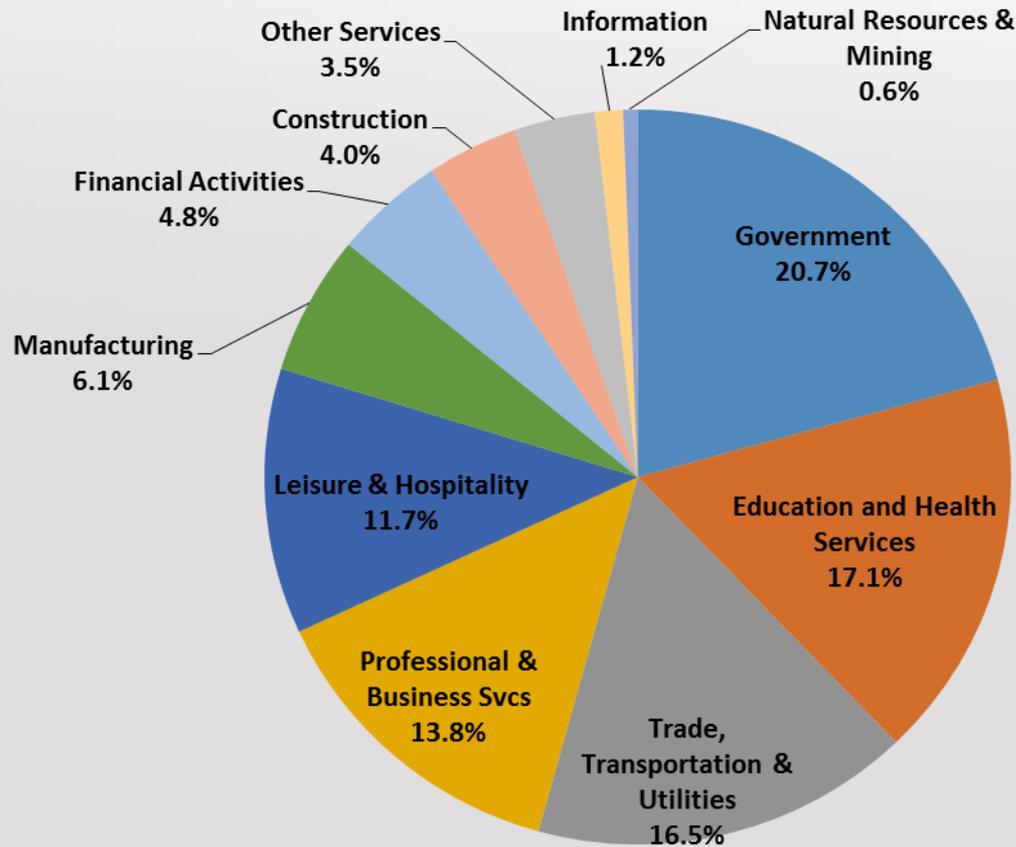
Pima County Broad Industry Total Nonfarm Employment Share

2015 Annual Average, Not Seasonally Adjusted



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

Pima County Industry Nonfarm Employment Share 2015 Annual Average, Not Seasonally Adjusted



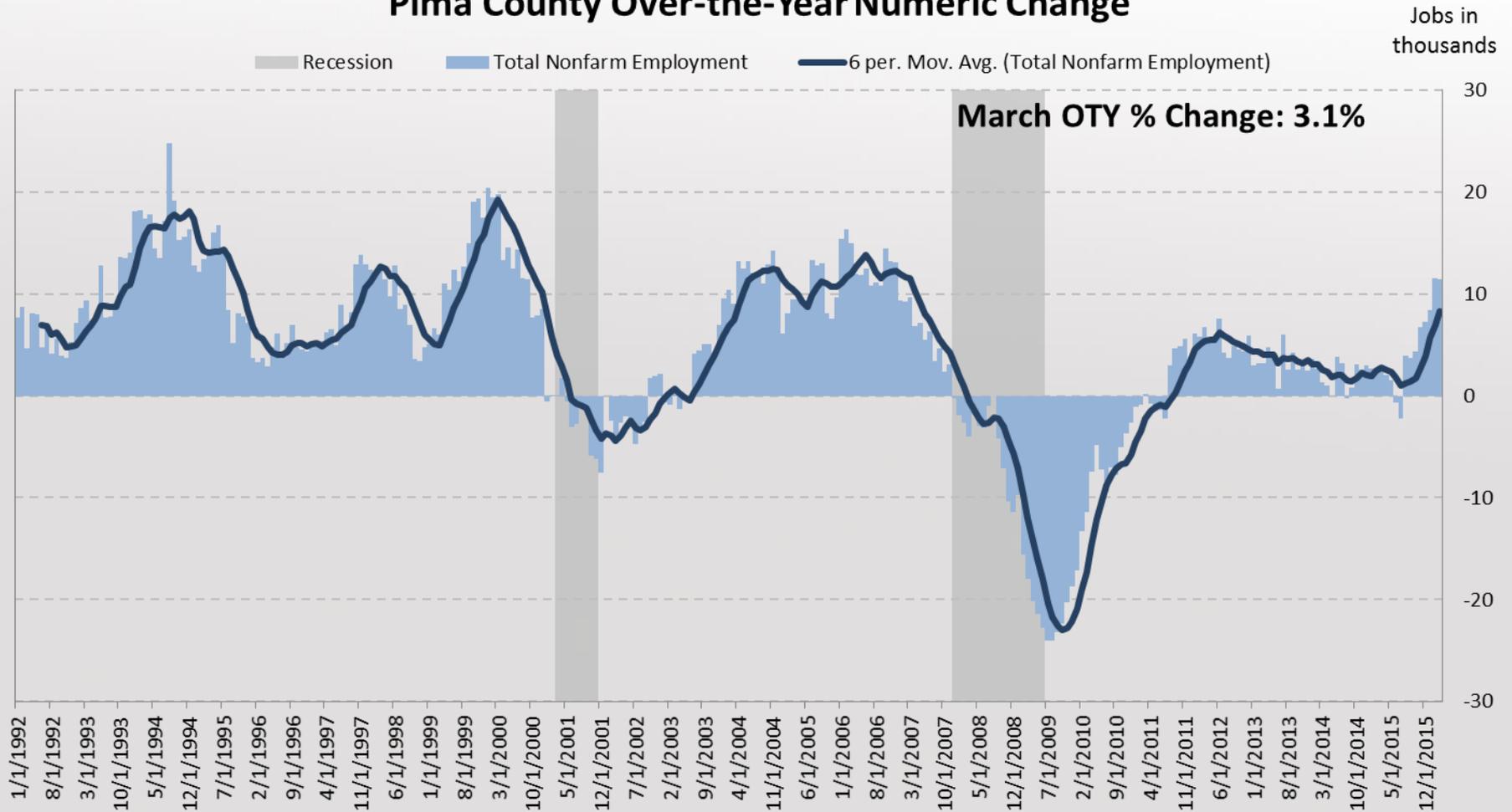
Source: Produced by the Arizona Office of Employment and Population Statistics using CES data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Pima County Industry Nonfarm Employment Share 2001 & 2015 Annual Averages

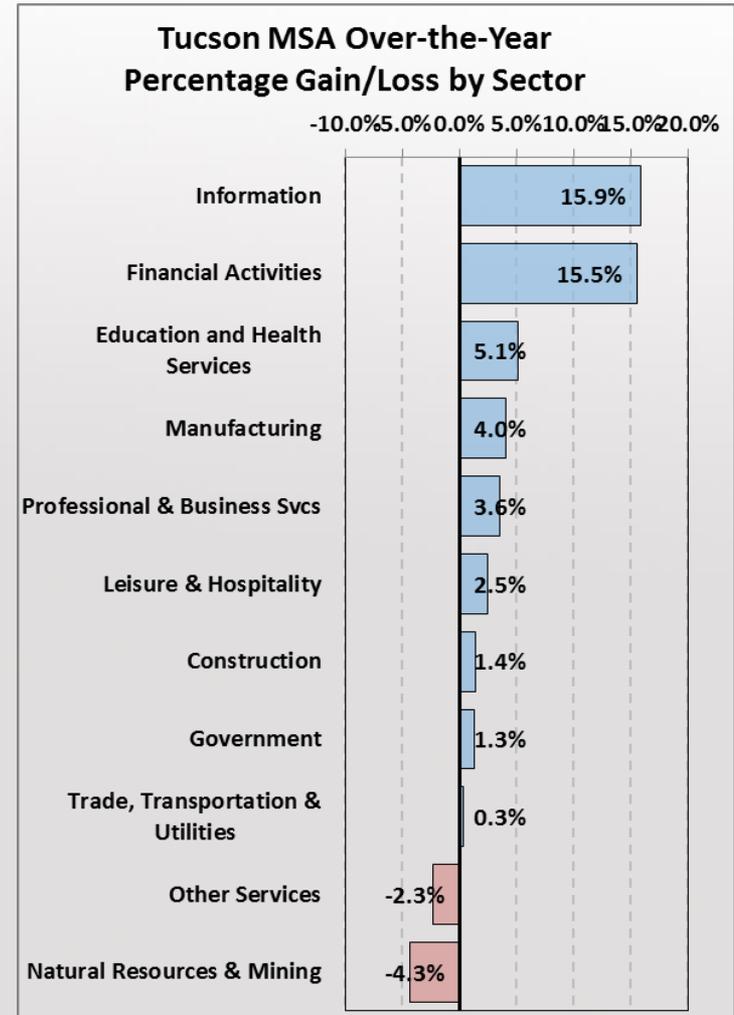
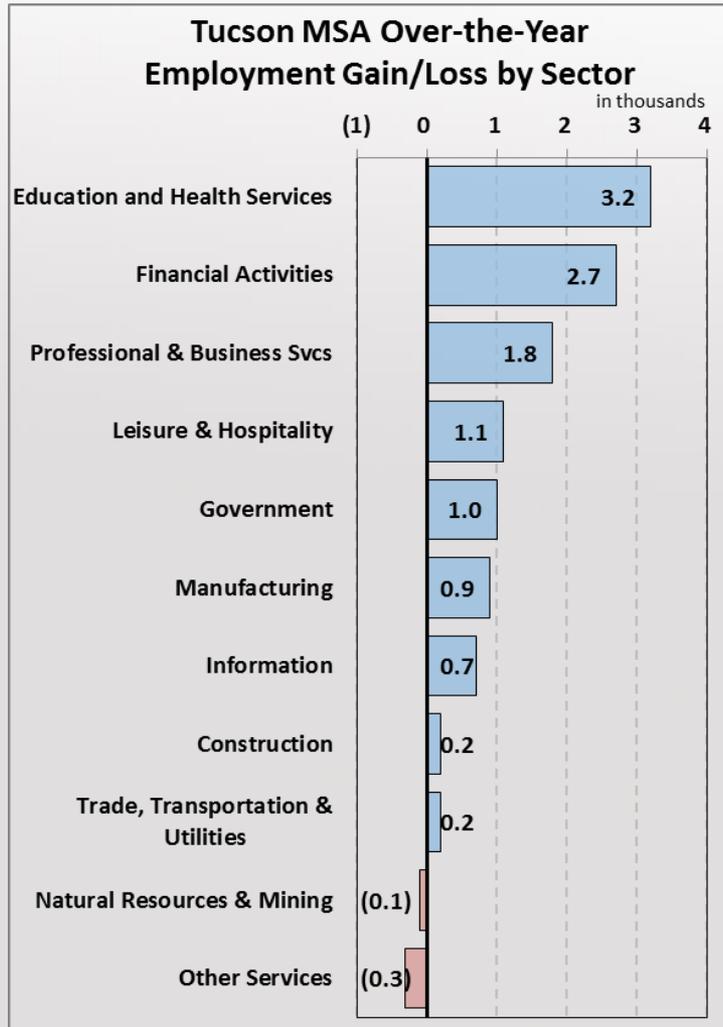
Industry	Employment Share		
	2001	2015	Change
Construction	6.6%	4.0%	-2.6%
Financial Activities	4.2%	4.8%	0.6%
Government	21.4%	20.7%	-0.7%
Information	2.3%	1.2%	-1.1%
Leisure & Hospitality	11.1%	11.7%	0.6%
Manufacturing	9.5%	6.1%	-3.4%
Natural Resources & Mining	0.5%	0.6%	0.1%
Other Services	4.1%	3.5%	-0.6%
Professional & Business Svcs	12.0%	13.8%	1.8%
Trade, Transportation & Utilities	16.1%	16.5%	0.4%
Total Nonfarm	100.0%	100.0%	0.0%

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

Pima County Over-the-Year Numeric Change



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



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

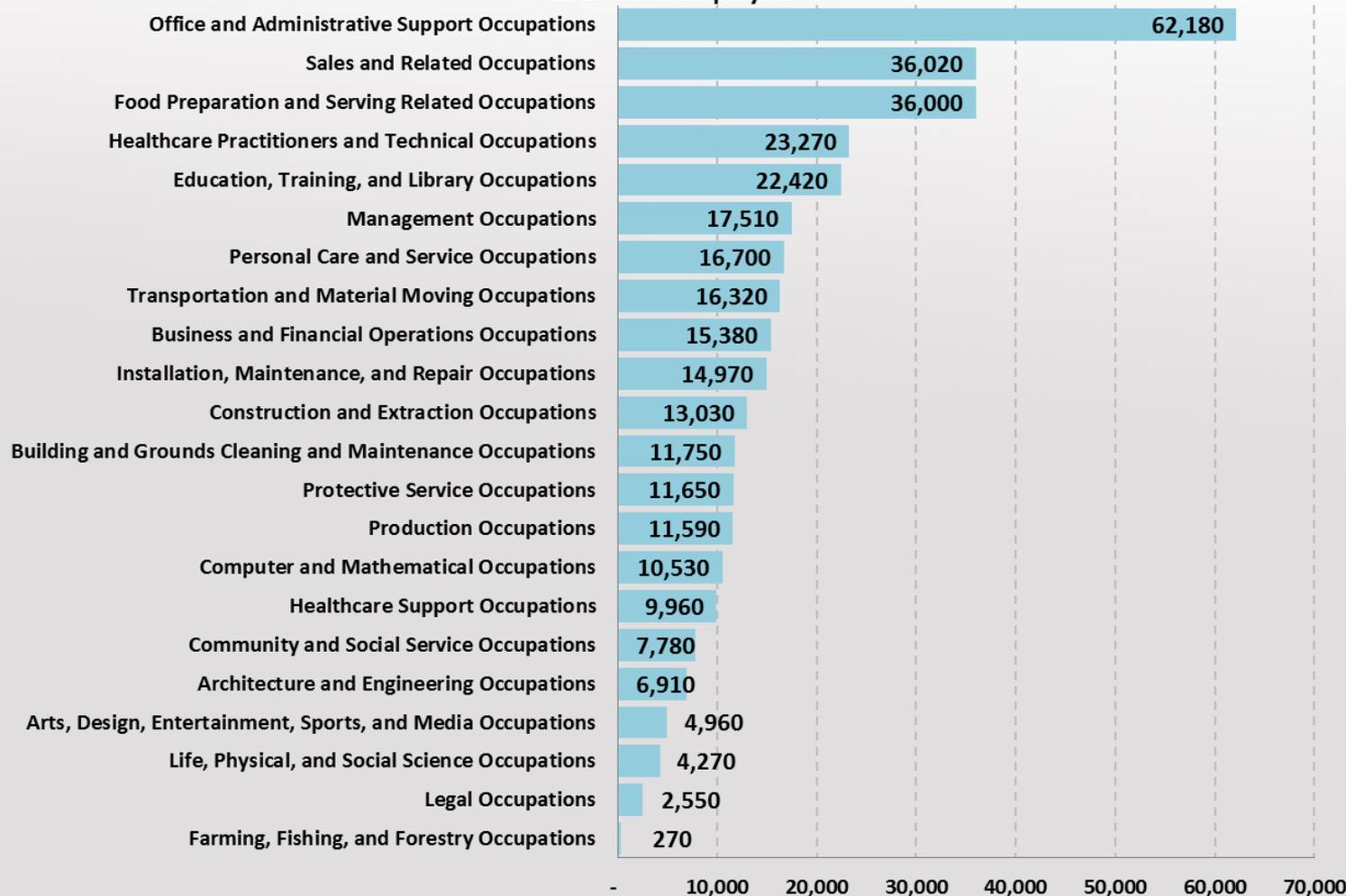
Tucson Metro Area Short-Term Industry Employment Projections 2015-2017

Industry Code	Industry Title	Base Employment 2015 Q2	Projected Employment 2017 Q2	Numeric Change	Percent Change
101100	Natural Resources and Mining	2,982	2,605	-377	-6.5%
101200	Construction	14,786	15,665	879	2.9%
101300	Manufacturing	22,269	22,387	118	0.3%
102100	Trade, Transportation, and Utilities	60,892	62,076	1,184	1.0%
102200	Information	4,385	4,532	147	1.7%
102300	Financial Activities	16,277	17,210	933	2.8%
102400	Professional and Business Services	49,024	52,290	3,266	3.3%
102500	Education and Health Services	96,976	101,403	4,427	2.3%
102600	Leisure and Hospitality	46,108	48,830	2,722	2.9%
102700	Other Services (Except Government)	11,801	12,035	234	1.0%
102800	Government	26,111	26,236	125	0.2%
102900	Unclassified	19,255	19,994	739	1.9%

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

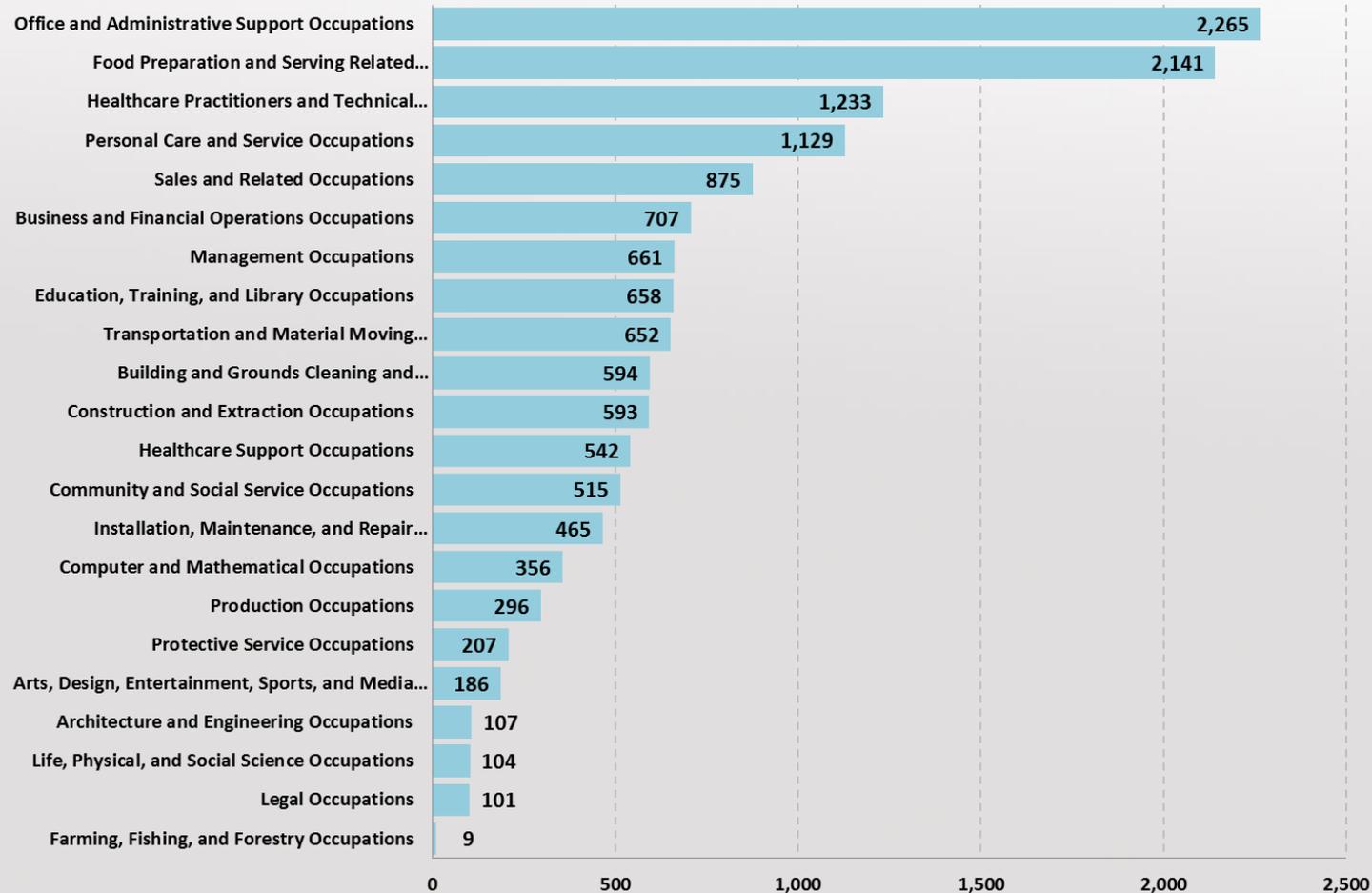
Tucson Major Occupational Groups

2015 Total Employment



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

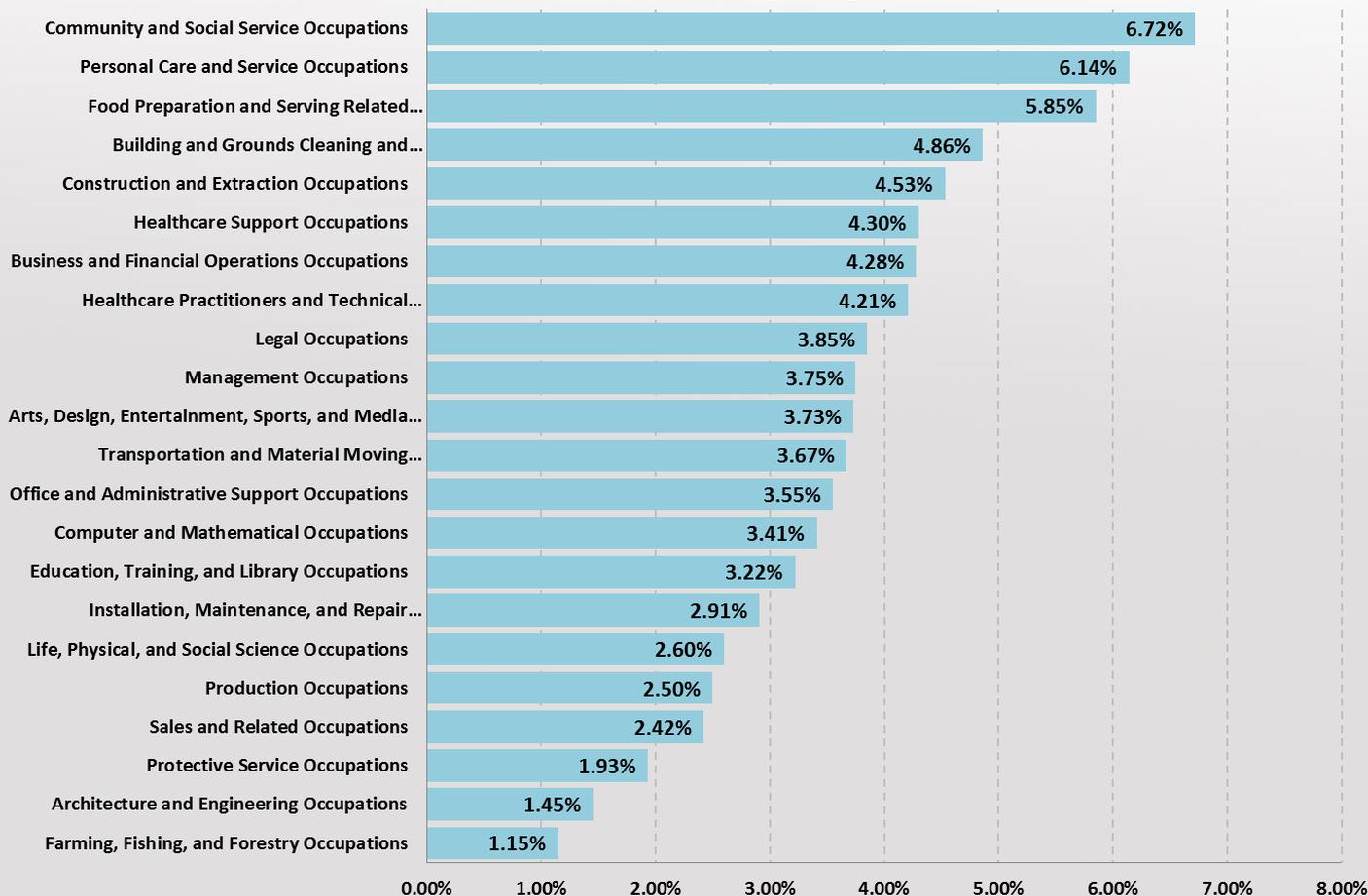
Tucson Major Occupational Groups 2015 - 2017 Total Numeric Change



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

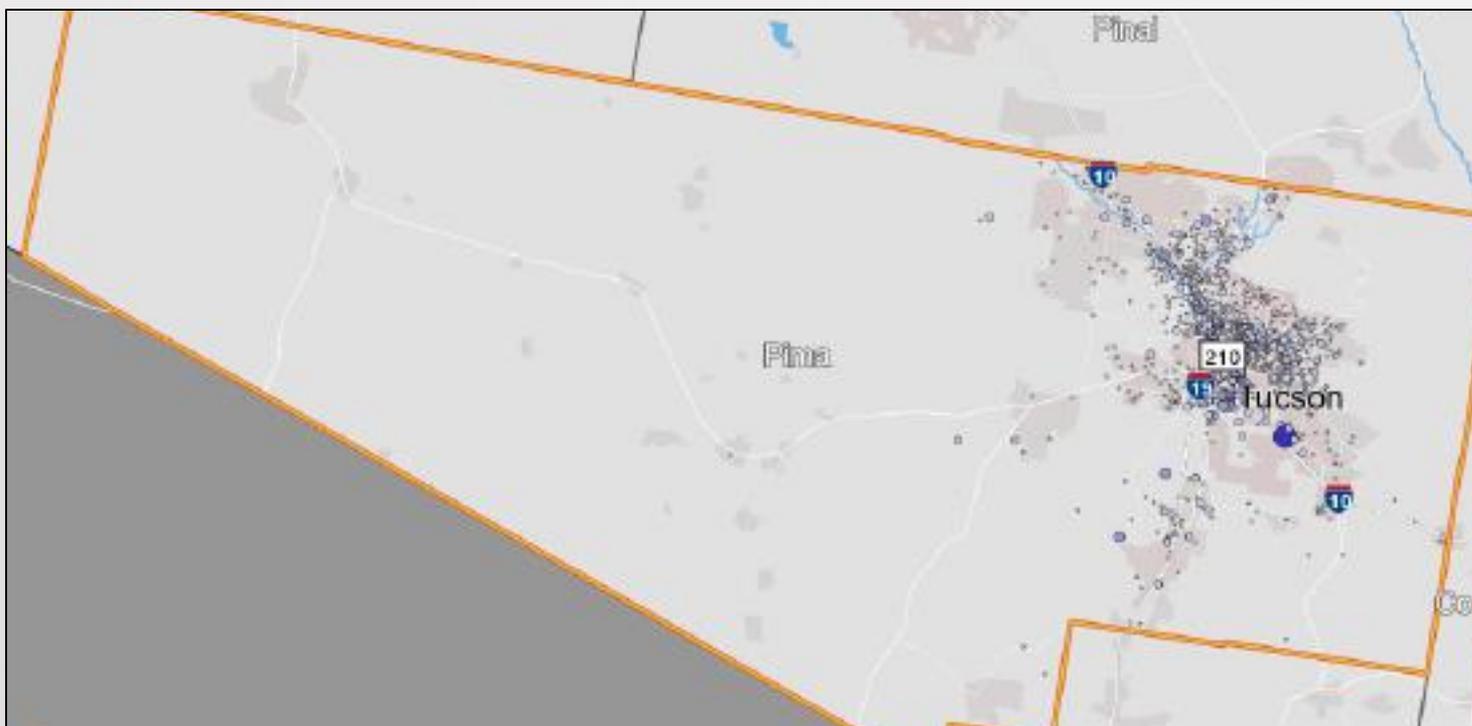
Tucson Major Occupational Groups

2015 - 2017 Total Percentage Change



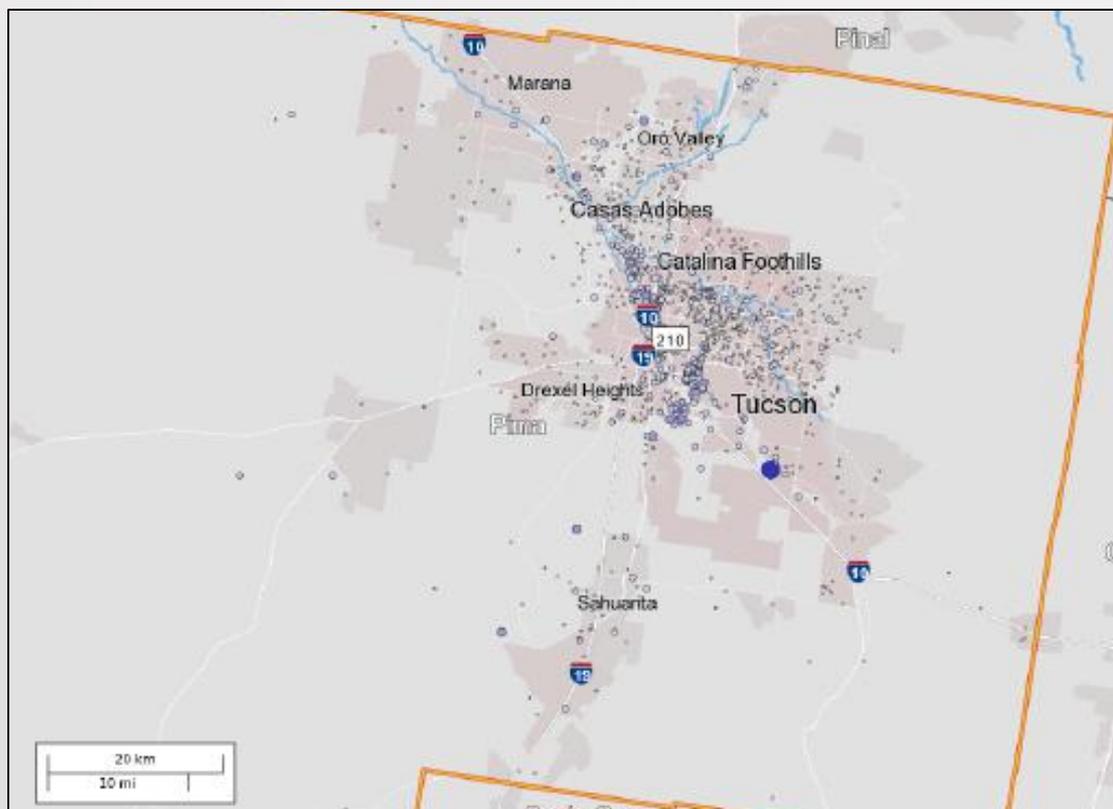
Source: Produced by the Arizona Office of Employment and Population Statistics using OES data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Job Locations (Goods Producing) Pima County 2014



Source: Produced by the Arizona Office of Employment and Population Statistics using On The Map in cooperation with the U.S. Census Bureau

Job Locations (Goods Producing) Tucson 2014



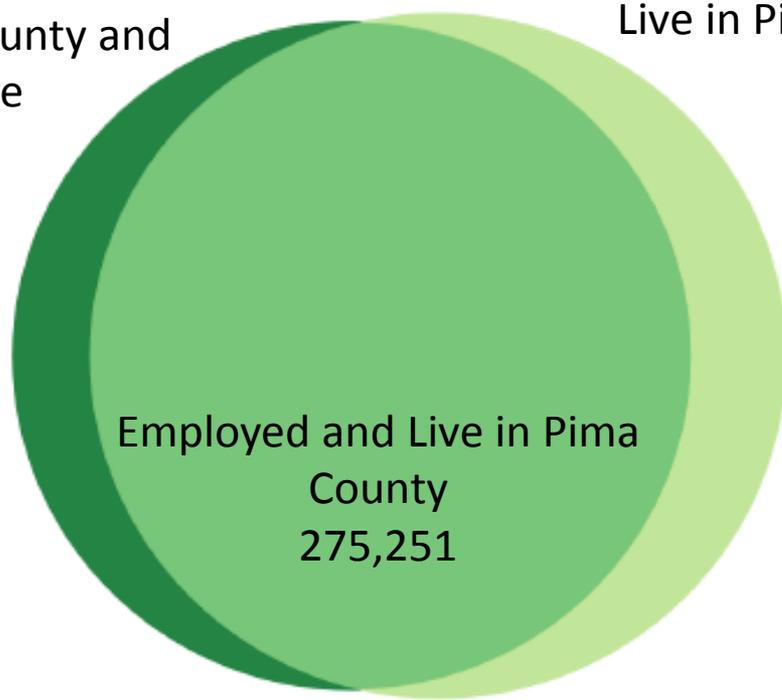
Source: Produced by the Arizona Office of Employment and Population Statistics using On The Map in cooperation with the U.S. Census Bureau

Pima County Commuting Patterns

Pima County 2014

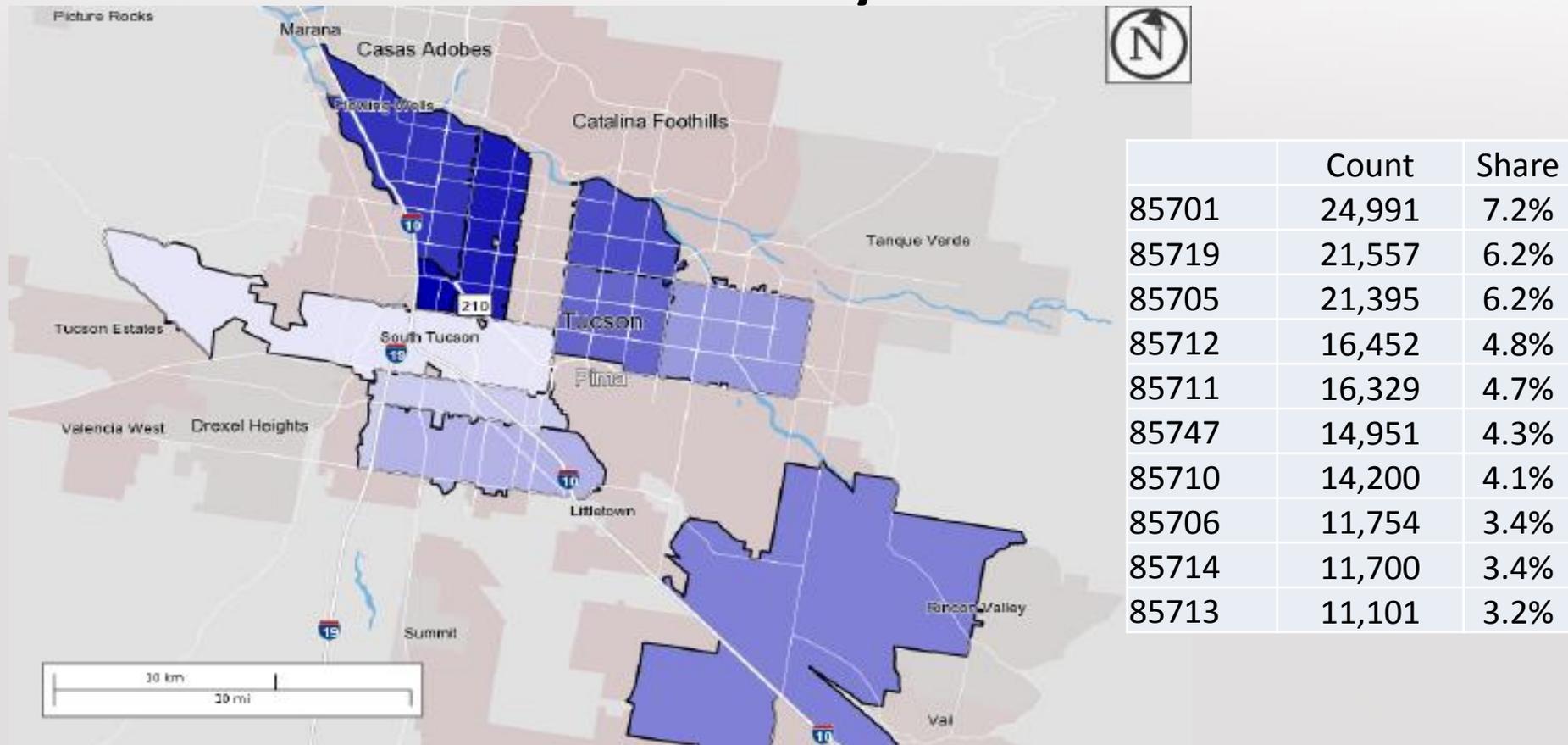
Employed in Pima County and
Live Elsewhere
54,777

Live in Pima County and Work
Elsewhere
70,944



Source: Produced by the Arizona Office of Employment and Population Statistics using On The Map in cooperation with the U.S. Census Bureau

Top 10 Zip Codes by Quantity of Jobs Pima County 2014



Source: Produced by the Arizona Office of Employment and Population Statistics using On The Map in cooperation with the U.S. Census Bureau

Existing and Emerging Demand Industries and Occupations

Methodology

- Objective:
 - To identify industries and occupations with favorable labor market traits that support long-term economic and workforce strategies
- Labor market traits include:
 - Above-average employment and wage growth
 - Projected long-term employment growth
 - Competitive advantages in employment and wages

Existing and emerging demand industries were selected based on their overall performance in each labor market indicator category, and an overall ranking score was calculated

Methodology cont.

Labor market variables were given different weights depending on the importance of each variable when defining existing and emerging demand industry requirements

- **Existing demand industries** were identified as industries with large employment bases and above-average wages
- **Emerging demand industries** were identified as industries with small employment levels and large short-term historic employment and wage growth

Location Quotient (LQ)

- A location quotient (LQ) is measurement of a region's industrial specialization relative to a larger geographic unit (usually the nation)
- It allows a subject area's distribution of employment by industry to be compared to a base area's distribution
 - Subject Area: Arizona, Maricopa County, Pima County, etc.
 - Base Area: United States
- Allows comparison of relative employment and wage levels in the United States, states, counties, & MSAs

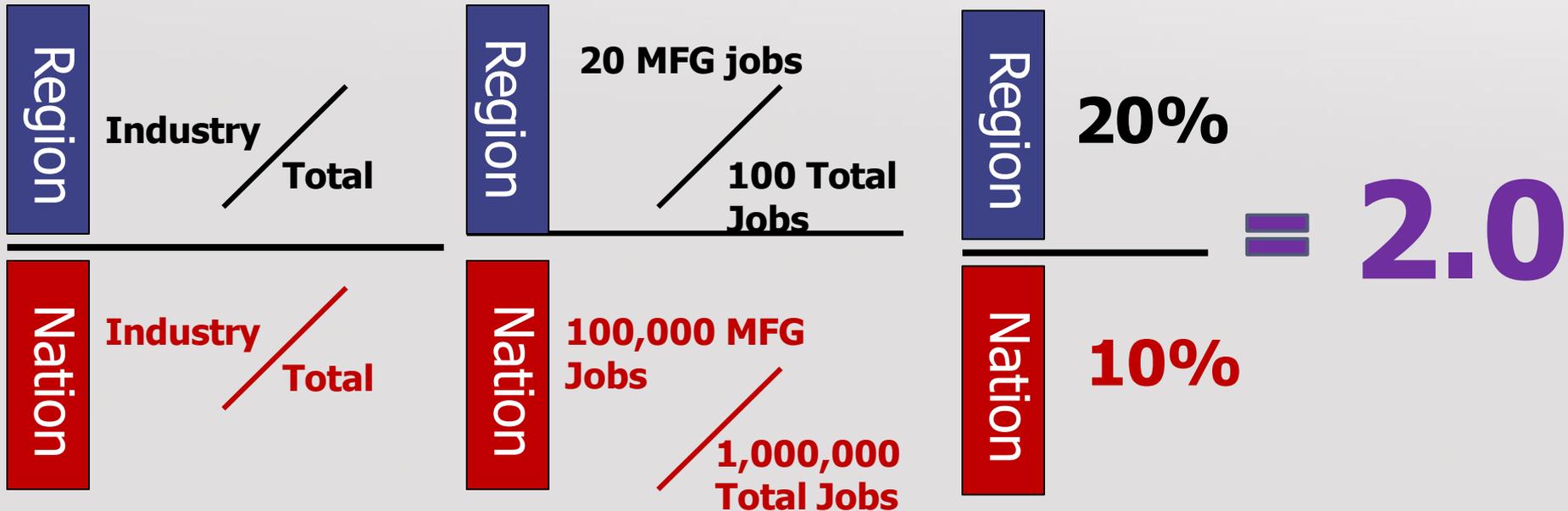
Location Quotient (LQ) Formula

Formula

Job Example

Percent

LQ



Location Quotient (LQ) Calculated

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

Example: an LQ of 1.0 in manufacturing means that the region and the nation are equally specialized in manufacturing; while an LQ of 2.0 means that the region has a higher concentration in manufacturing than the nation.

Model Weighting Structure

Pima County

Existing Demand Industry Detail

Variables	Weight	Constraints	Detail	Period
Average Employment Level	2	Top 33%	3-Digit Industry	2014-2015
Average Weekly Wage Level	3	Top 50%	3-Digit Industry	2014-2015
Employment Growth Numeric	1	na	3-Digit Industry	2014-2015
Employment Growth Percentage	1	na	3-Digit Industry	2014-2015
Average Wage Growth Numeric	1	na	3-Digit Industry	2014-2015
Average Wage Growth Percentage	1	na	3-Digit Industry	2014-2015
Employment Location Quotient	2	na	3-Digit Industry	2014-2015
Wage Location Quotient	2	na	3-Digit Industry	2014-2015
Employment Growth Numeric	1	na	2-Digit Super Sector	2011-2015
Employment Growth Percentage	1	na	2-Digit Super Sector	2011-2015
Employment Share Change	1	na	2-Digit Super Sector	2011-2015
Projected Employment Growth Numeric	1	na	2-Digit Super Sector	2012-2022
Projected Employment Growth Percentage	1	na	2-Digit Super Sector	2012-2022

Existing and Emerging Demand Industries were selected based on thirteen employment characteristics

Industries were ranked by each economic variable individually and then averaged together to calculate an overall industry ranking

Pima County

Existing Demand Industry Detail

VARIABLE RANKINGS

Overall Rank	3-Digit NAICS Industry	Average Employment Level	Average Weekly Wage Level	Employment Growth	Average Wage Growth	Employment Location Quotient	Wage Location Quotient
1	NAICS 621 Ambulatory health care services	1	3	7	1	3	1
2	NAICS 622 Hospitals	3	5	1	5	1	3
3	NAICS 441 Motor vehicle and parts dealers	4	6	2	4	4	2
4	NAICS 541 Professional and technical services	2	1	5	7	5	6

Economic estimates are listed for reference for each existing and emerging demand industry identified

Pima County

Existing Demand Industry Detail

NAICS 621 Ambulatory health care services

Average Employment Level <i>(3-Digit Industry; 2014-2015)</i>	19,773
Average Weekly Wage Level <i>(3-Digit Industry; 2014-2015)</i>	\$1,098
Employment Growth <i>(3-Digit Industry; 2014-2015)</i>	-5.1%
Average Wage Growth <i>(3-Digit Industry; 2014-2015)</i>	2.3%
Employment Location Quotient <i>(3-Digit Industry; 2014-2015)</i>	1.2
Wage Location Quotient <i>(3-Digit Industry; 2014-2015)</i>	1.2
Employment Growth <i>(2-Digit Super Sector; 2011-2015)</i>	0.7%
Employment Share Change <i>(2-Digit Super Sector; 2011-2015)</i>	0.3%
Projected Employment Growth <i>(2-Digit Super Sector; 2012-2022)</i>	2.5%

Existing Demand Occupations

Pima County

Existing Demand Industry Detail

NAICS 621 Ambulatory health care services

Rank	Occupation Title	Industry Employment Share
1	Nurse practitioners	1.4%
2	Dental hygienists	2.9%
3	Physician assistants	1.1%
4	Medical and Health Services Managers	2.0%
5	Physical Therapists	1.5%

Top occupations within each industry were identified by wage, employment growth and employment share characteristics

Pima County	
Existing Demand Occupation Detail	
Nurse practitioners	
SOC Code	29-1171
Education Requirement	Master's degree
Work Experience Requirement	None
On-the-Job Training Requirement	None
Knowledge Requirement	Psychology
Skill Requirement	Reading Comprehension
Ability Requirement	Problem Sensitivity
Employment Level	270
<i>(6-Digit SOC Code; 2014)</i>	
Average Hourly Wage	\$43.4
<i>(6-Digit SOC Code; 2014)</i>	
Projected Employment Growth	3.6%
<i>(2-Digit Super Sector; 2012-2022)</i>	
Industry Employment Share	1.39
<i>(6-Digit SOC Code; 2014)</i>	

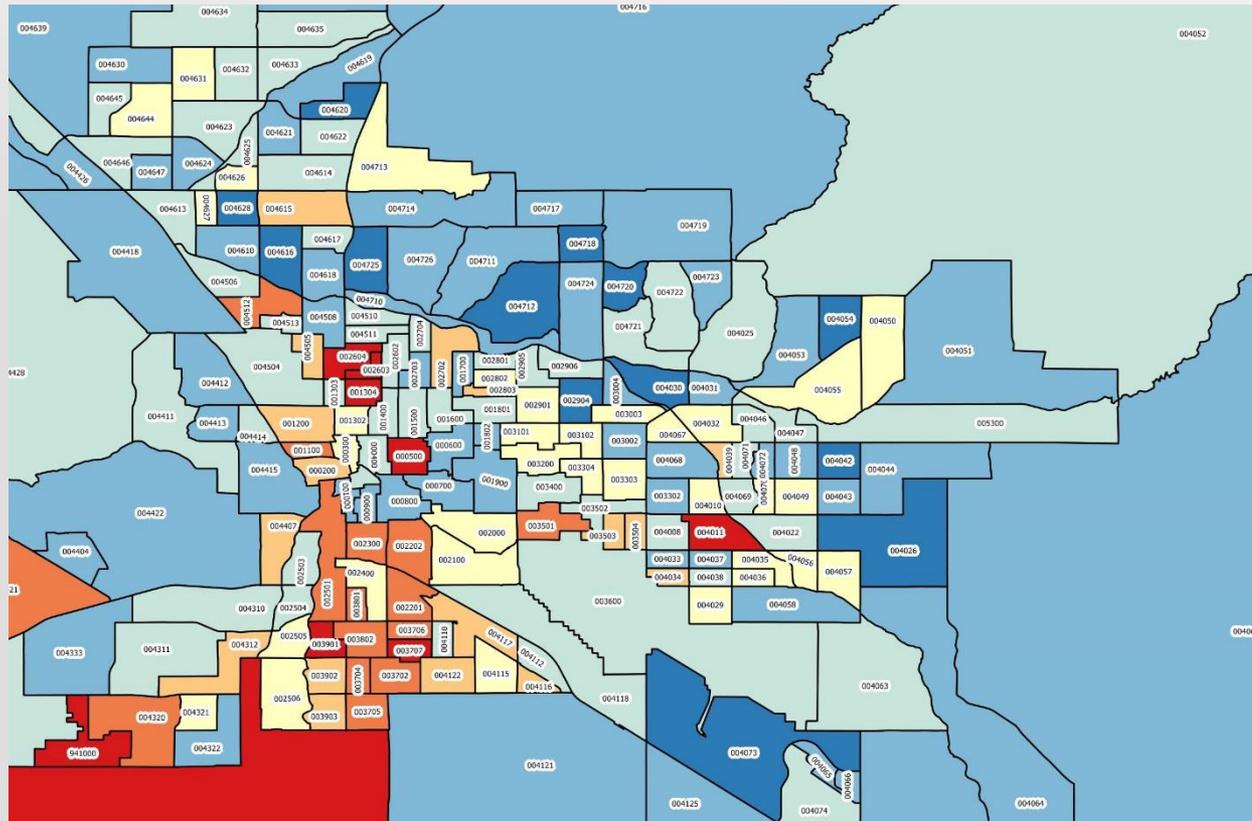
Occupation requirements are provided to identify the needs of employers

Considerations:

- The analysis provided identifies industries with favorable labor market trends
- Ultimately, local areas are responsible for selecting their own existing and emerging demand industries and occupations to highlight within their local plans
- The process utilized to identify existing and emerging demand industries and occupations does not factor in:
 - existing government initiatives
 - industry support
 - on-the-ground community involvement
- However, this analysis can be extremely useful when coupled with local insight to identify well-rounded existing and emerging industries and occupations within the local areas

Characteristics of High Unemployment

Unemployment by Census Tract Tucson (2015)



Unemployment Rate

2015 percent unemployment

- 0 - 1.9
- 2 - 3.9
- 4 - 5.9
- 6 - 7.9
- 8 - 9.9
- 10 - 11.9
- 12 - 100

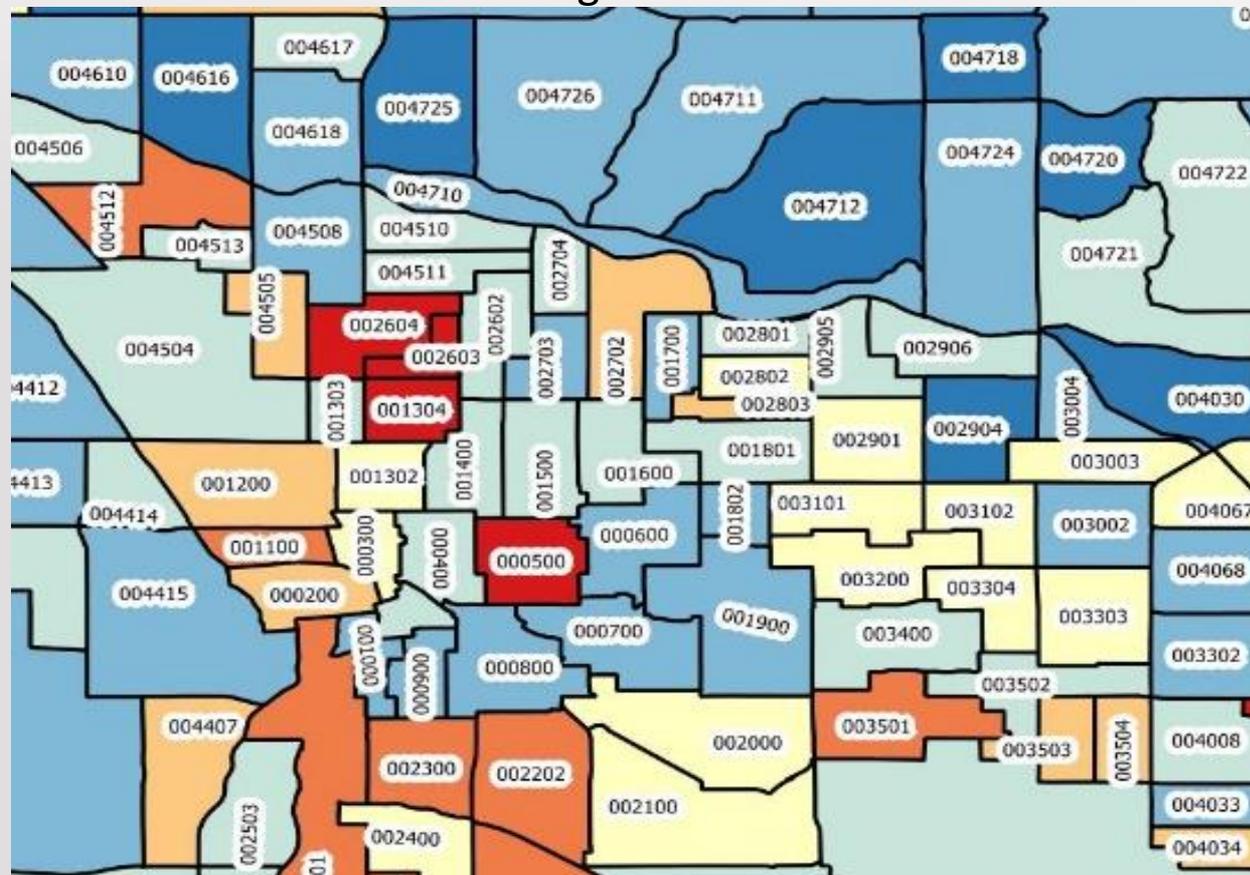
source: ADOA,
Office of Employment and
Population Statistics
Derived from
2010-2014 ACS survey and
2015 BLS LAUS program

Unemployment by Census Tract Central Tucson (2015) (Road Boundaries Approximate)

Orange Grove Rd.

Silverbell Rd.

Kolb Rd.



Unemployment Rate
2015 percent unemployment

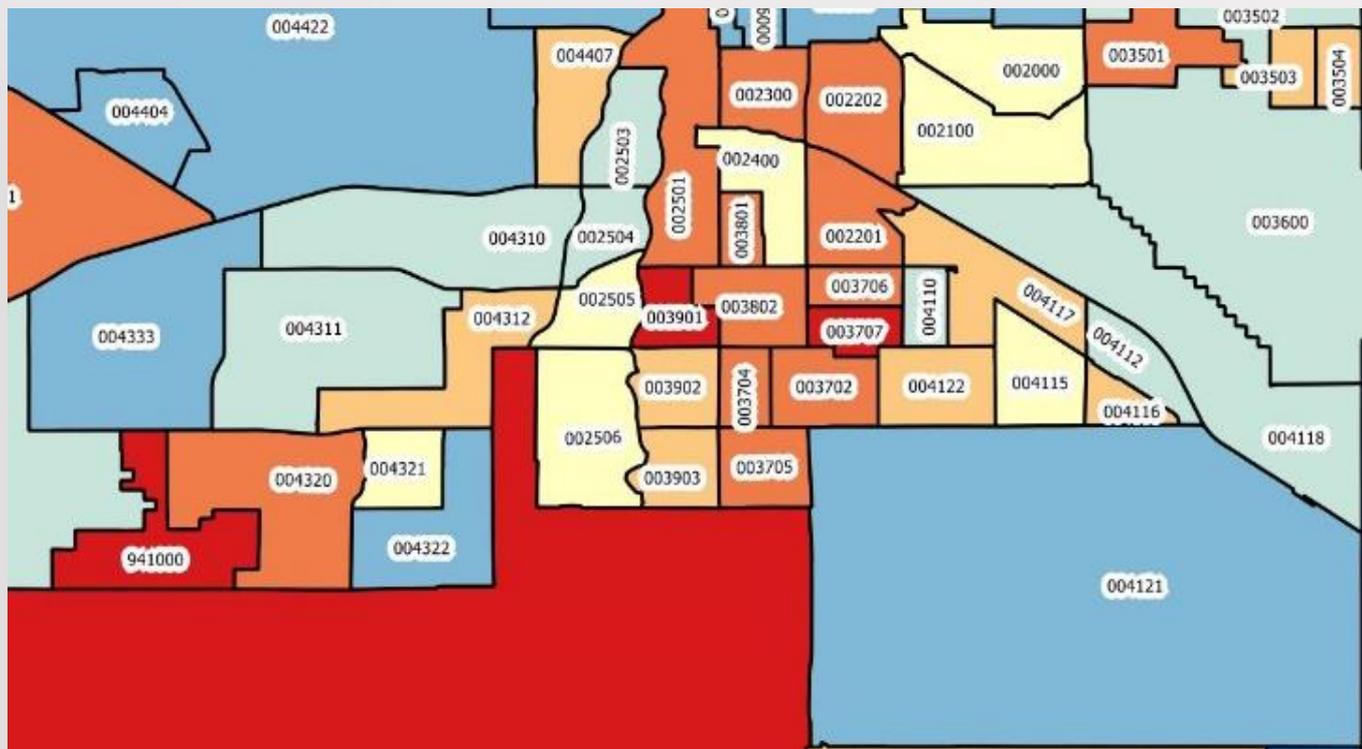
- 0 - 1.9
- 2 - 3.9
- 4 - 5.9
- 6 - 7.9
- 8 - 9.9
- 10 - 11.9
- 12 - 100

source: ADOA,
Office of Employment and
Population Statistics
Derived from
2010-2014 ACS survey and
2015 BLS LAUS program

Ajo Way

Unemployment by Census Tract Southern Tucson (2015) (Road Boundaries Approximate)

22nd St.



Unemployment Rate

2015 percent unemployment

- 0 - 1.9
- 2 - 3.9
- 4 - 5.9
- 6 - 7.9
- 8 - 9.9
- 10 - 11.9
- 12 - 100

source: ADOA,
Office of Employment and
Population Statistics
Derived from
2010-2014 ACS survey and
2015 BLS LAUS program

Old Vail Rd.

Census Tract Quick Facts: Top 10 by Number Employed (Pima County, 2015)

Census Tract	Civilian Labor Force	Employed	Unemployed	Unemployment Rate
004329	4,674	4,622	52	1.1%
004107	4,741	4,571	170	3.6%
004427	3,992	3,808	184	4.6%
000500 (UofA)	4,304	3,789	515	12.0%
004429	3,939	3,789	150	3.8%
004638	3,917	3,758	159	4.1%
004334	3,923	3,741	182	4.6%
004411	3,834	3,660	174	4.5%
004636	3,630	3,553	77	2.1%
004624	3,530	3,412	118	3.3%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2015 LAUS data and 2014 ACS survey data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics and the U.S. Census Bureau

Census Tract Quick Facts: Top 10 by Civilian Labor Force (Pima County, 2015)

Census Tract	Civilian Labor Force	Employed	Unemployed	Unemployment Rate
004107	4,674	4,571	170	3.6%
004329	4,741	4,622	52	1.1%
000500 (UofA)	3,992	3,789	515	12.0%
004427	4,304	3,808	184	4.6%
004429	3,939	3,789	150	3.8%
004334	3,917	3,741	182	4.6%
004638	3,923	3,758	159	4.1%
004411	3,834	3,660	174	4.5%
004636	3,630	3,553	77	2.1%
004011	3,530	3,110	476	13.3%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2015 LAUS data and 2014 ACS survey data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics and the U.S. Census Bureau

Census Tract Quick Facts: Top 12 by Unemployment Rate (Pima County, 2015)

Census Tract	Civilian Labor Force	Employed	Unemployed	Unemployment Rate
001304	2,331	1,901	430	18.4%
940900	731	599	132	18.1%
940700	402	331	71	17.7%
002604	1,568	1,327	241	15.4%
005200	1,649	1,428	221	13.4%
004011	3,586	3,110	476	13.3%
004330	166	145	21	12.7%
940800	1,332	1,170	162	12.2%
941000	1,189	1,044	145	12.2%
002603	1,452	1,276	176	12.1%
003707	1,385	1,218	167	12.1%
000500 (UofA)	4,304	3,789	515	12.0%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2015 LAUS data and 2014 ACS survey data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics and the U.S. Census Bureau

Data Sources

LaborStats.az.gov

Employment Data:

laborstats.az.gov/employment

Unemployment Data:

laborstats.az.gov/unemployment

Wage & Income Data:

laborstats.az.gov/wages-income

Employment Projections Data:

laborstats.az.gov/employment-forecasts

Population Data:

laborstats.az.gov/population

Other Labor Market Sources

Commuting Patterns Data:

On the Map: onthemap.ces.census.gov/

Demographics Data:

American Community Survey: census.gov/programs-surveys/acs/

Personal Income & State GDP Data:

US Bureau of Economic Analysis: bea.gov/regional/index.htm

Interactive Employment Mapping:

Maricopa Association of Governments: <http://geo.azmag.gov/maps/azdemographics/>

Skills and Training Requirement Data:

O*NET: onetonline.org/find/descriptor/browse

Any Questions?

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