

**WIOA Local Plan LMI**  
**Pima County**  
**Arizona Department of Administration**  
**Office of Employment and Population Statistics**

Pima County is the largest county in southern Arizona. It is predominantly rural with the major population center in Tucson, the county seat. Pima County has the second largest population in Arizona after Maricopa County, and it will continue to be a major economy in the state.

The workforce tends to be older and highly educated. It tends to have lower rates of unemployment than the whole state. The military has a large presence in Pima County, and there are many veterans there. Pima County also experiences some challenges to the workforce such as high rates of poverty and households that are reliant on public assistance programs.

Pima County has a slightly lower labor force participation rate than Arizona (58.8% and 59.7%, respectively)<sup>1</sup>. Both of these are much lower than the national labor force participation rate of 63.5%<sup>1</sup>. Part of Pima County's lower labor force participation rate might be attributable to the older population. The median age in Pima County is 37.9, which is higher than Arizona (36.5) or the United States (37.4)<sup>2</sup>. Also, Pima County has a higher rate of workers with disabilities between ages 18-64 than Arizona (11.6% and 9.9%, respectively)<sup>3</sup>. Workers with disabilities tend to drop out of the labor force at higher rates than workers without disabilities.

The source of health insurance coverage does not provide direct characteristics about the population, but it can be used to make inferences about the makeup of the community. Pima County has a higher proportion of residents receiving health insurance through public entities. This includes Medicare, Arizona's Medicaid system - Arizona Health Care Cost Containment System (AHCCCS), or direct care from the Veterans Administration (VA). Residents with only public coverage comprise 22.1% of the population compared to 21.1% in Arizona or 17.6% in the United States<sup>4</sup>. Then, 16.9% of Pima County residents have some form of public health insurance combined with private health insurance<sup>4</sup>. The rates for combined coverage are 15.6% in Arizona and 15.5% in the United States<sup>4</sup>.

Medicare coverage is more common in Pima County (18.3%) than in Arizona (16.5%) or the United States (15.5%)<sup>4</sup>. This can be explained by the demographic differences between Pima County and these other jurisdictions. Primarily, higher Medicare coverage would accompany a population that is relatively older and has a relatively higher rate of workers with disabilities.

Medicaid in Arizona is AHCCCS. There are proportionately more AHCCCS beneficiaries in Pima County (20.9%) than Arizona (20.0%) or the United States (17.8%)<sup>4</sup>. Of course, in the United States outside of Arizona, these beneficiaries are using each individual state's Medicaid program, not AHCCCS. Higher rates of AHCCCS can be explained by relatively higher rates of poverty in Pima County (19.0%) compared to Arizona (18.2%) or the United States (15.6%)<sup>2</sup>. Also, Pima County has a lower median household income (\$46,233) than Arizona (\$49,928) or the United States (\$53,482)<sup>2</sup>.

Aside from higher rates of poverty and AHCCCS recipients, Pima County tends to have higher rates of households using other means-tested public assistance programs. Temporary Assistance for Needy Families (TANF) households are 3.1% of the Pima County households compared to 2.5% in Arizona or 2.8% in the United States<sup>2</sup>. For Supplemental Security Income (SSI), Pima County has more households receiving SSI (4.9%) than Arizona (4.2%); however,

both of these indicators are lower than the households receiving SSI in the United States (5.3%)<sup>2</sup>. Finally, Pima County has 14.8% of households receiving SNAP (Supplemental Nutrition Assistance Program)<sup>2</sup>. In Arizona and the United States, SNAP households comprise 13.6% and 13.0% of households, respectively<sup>2</sup>. Younger parts of the population tend to experience disproportionate levels of poverty relative to older cohorts in the population.

Despite higher levels of poverty, Pima County tends to have lower rates of unemployment than either Arizona or the United States. For example, in March of 2016, Pima County's unemployment rate from Local Area Unemployment Statistics (LAUS) was 4.7% while both the United States and Arizona were 5.1%<sup>5</sup>. Even in the high unemployment year of 2010, Pima County's annual average unemployment rate (9.3%) was lower than both Arizona (10.4%) and the United States (9.6%)<sup>5</sup>.

Some of this can be explained by the relatively older population of Pima County. Younger workers tend to experience higher rates of unemployment than older workers, so if a workforce is older, it might trend towards less unemployment. Another explanation could be that Pima County has a workforce with more education than either Arizona or the United States. As education increases, unemployment tends to trend downward. 30% of Pima County's population over the age of 25 has a bachelor's degree or higher<sup>6</sup>. This is higher than Arizona (27.1%) or the United States (11.0%)<sup>6</sup>.

Tucson is a large metropolitan area that is anticipated to continue growing into the future. This population tends to be older than the United States. Older populations tend to have lower labor force participation rates due to retirement and health issues. Older populations also tend to experience less unemployment and poverty than their younger counterparts.

A major challenge for Pima County is the rate of poverty. Pima County has disproportionate rates of poverty. Then, there is a disproportionate rate of residents who qualify for public assistance programs. Clearly, a robust job market that has high demand for workers would help alleviate these issues; however, if this were an easy feat, it would already be accomplished.

A major strength of the Pima County workforce is the high level of education. Pima County has high proportions of workers with a bachelor's degree or higher. These increased shares of higher education recipients come at the expense of lower shares of residents who failed to complete high school. This high level of education may help explain why Pima County tends to experience lower levels of unemployment than either Arizona or the United States.

Even though Pima County as a whole has lower levels of unemployment, these benefits are not shared equally throughout the County. Specifically, the southwestern region of Tucson has persistently high unemployment rates. In order to make a meaningful improvement in the total unemployment rate, reducing unemployment in this area will have the greatest impact.

### References

- 1: 2014 American Community Survey: 5 Year Estimates, Table S0501 (US Census Bureau)
- 2: 2014 American Community Survey: 5 Year Estimates, Table DP03 (US Census Bureau)
- 3: 2014 American Community Survey: 5 Year Estimates, Table S1810 (US Census Bureau)
- 4: 2014 American Community Survey: 5 Year Estimates, Table S2701 (US Census Bureau)
- 5: 2016, March Local Area Unemployment Statistics (US Bureau of Labor Statistics)
- 6: 2014 American Community Survey: 5 Year Estimates, Table S1501 (US Census Bureau)

# Existing and Emerging Industries

## Methodology

### Existing Demand Industries

Variables	Weight	Detail	Period	Constraints
Long-term projected employment change (numeric)	1	2-digit NAICS	2012-2022	na
Long-term projected employment change (percentage)	1	2-digit NAICS	2012-2022	na
Average OTY employment percentage change	1	2-digit NAICS	5, 10 year averages (2011 Q3-2015 Q2) & (2006 Q3-2015 Q2)	na
Average OTY employment percentage change	1	2-digit NAICS	5, 10 year averages (2011 Q3-2015 Q2) & (2006 Q3-2015 Q2)	na
Average share of Arizona total employment change	1	2-digit NAICS	5, 10 year averages (2011 Q3-2015 Q2) & (2006 Q3-2015 Q2)	na
Annual average weekly wage	3	3-digit NAICS	2014 Q3-2015 Q2	Top 50%
Location quotient for employment levels	2	3-digit NAICS	2014 Q3-2015 Q2	na
Location quotient for weekly wage levels	2	3-digit NAICS	2014 Q3-2015 Q2	na
Average OTY employment level change (numeric)	1	3-digit NAICS	2013 Q3-2015 Q2	na
Average OTY employment level change (percentage)	1	3-digit NAICS	2013 Q3-2015 Q2	na
Average OTY weekly wage level change (numeric)	1	3-digit NAICS	2013 Q3-2015 Q2	na
Average OTY weekly wage change (percentage)	1	3-digit NAICS	2013 Q3-2015 Q2	na
Annual average employment levels	2	3-digit NAICS	2014 Q3-2015 Q2	Top 33%

The Existing Demand Industries place the highest emphasis on the annual average weekly wage. The bottom 50% of wages are excluded from the Existing Demand Industries. Then, the annual average employment levels only includes the top 33% of employment levels.

The location quotient for each industry also has substantial weight. The location quotient is the ratio of the jobs in the local industry relative to all jobs in the local economy divided by the ratio of the jobs in the national industry relative to all jobs in the national economy. Location quotient values greater than 1 are considered to be industries showing a greater concentration in the local economy relative to the national economy. Location quotient values less than 1 are considered to be industries showing a lower concentration in the local economy relative to the national economy. Location quotient values that equal 1 are considered to roughly mirror the national economy.

## Existing Demand Occupations

Variables	Weight	Detail	Period	Constraints
Average hourly wage	1	6-digit SOC	2014	na
Long-term projected employment change (percentage)	1	6-digit SOC	2012-2022	na
Percentage share of industry employment	1	6-digit SOC	2014	na

Within the Existing Demand Industries, the Existing Demand Occupations are occupations within these industries that are projected to grow. The highest ranked Existing Demand Occupations have high average hourly wages, high projected growth over the next ten years, and high shares of employment in each particular industry.

## Emerging Demand Industries

Variables	Weight	Detail	Period	Constraints
Long-term projected employment change (numeric)	3	2-digit NAICS	2012-2022	na
Long-term projected employment change (percentage)	3	2-digit NAICS	2012-2022	na
Average OTY employment percentage change	2	2-digit NAICS	5, 10 year averages (2011 Q3-2015 Q2) & (2006 Q3-2015 Q2)	na
Average OTY employment percentage change	2	2-digit NAICS	5, 10 year averages (2011 Q3-2015 Q2) & (2006 Q3-2015 Q2)	na
Average share of Arizona total employment change	1	2-digit NAICS	5, 10 year averages (2011 Q3-2015 Q2) & (2006 Q3-2015 Q2)	na
Annual average weekly wage	2	3-digit NAICS	2014 Q3-2015 Q2	Top 50%
Location quotient for employment levels	1	3-digit NAICS	2014 Q3-2015 Q2	na
Location quotient for weekly wage levels	1	3-digit NAICS	2014 Q3-2015 Q2	na
Average OTY employment level change (numeric)	3	3-digit NAICS	2013 Q3-2015 Q2	na
Average OTY employment level change (percentage)	3	3-digit NAICS	2013 Q3-2015 Q2	na
Average OTY weekly wage level change (numeric)	3	3-digit NAICS	2013 Q3-2015 Q2	na
Average OTY weekly wage change (percentage)	3	3-digit NAICS	2013 Q3-2015 Q2	na
Annual average employment levels	1	3-digit NAICS	2014 Q3-2015 Q2	Bottom 67%

The Emerging Demand Industries place different emphasis on the same variables as the Existing Demand Industries. First, the highest weights are given to the employment level and wage increases over the past year as well as the projected employment increase over the next decade. Annual average weekly wage is also included, and only the industries with wages over the median are included. Finally, this group only includes industries that have employment levels in the lower two-thirds of the economy, so these are smaller industries.

## Emerging Demand Occupations

Variables	Weight	Detail	Period	Constraints
Average hourly wage	1	6-digit SOC	2014	na
Long-term projected employment change (percentage)	1	6-digit SOC	2012-2022	na
Percentage share of industry employment	1	6-digit SOC	2014	na

The Emerging Demand Occupations within the Emerging Demand Industries use the same methodology as the Existing Demand Occupations within the Existing Demand Industries. These are the occupations within these industries that will have the highest wages and growth.

The Existing Demand Industries are large, well-established industries that have high wages, and they are expected to grow. The Emerging Demand Industries are smaller industries that have high wages, and they are expected to grow. The occupations within each grouping are the dominant high-wage and high-growth occupations within each industry group.

### Pima County

#### Existing Demand Industries- Individuals Employed

Rank	Industry Title	Annual Average Employment				
		Level (2014Q3- 2015Q2)	Location Quotient (2014Q3- 2015Q2)	Annual Gain/Loss (2013Q3-2015Q2 Numeric)	Annual Gain/Loss (2013Q3-2015Q2 Percentage)	Projected Annual Growth (2012- 2022 Percentage)
1	NAICS 622 Hospitals	16,212	1.3	875	6.2%	2.5%
1	NAICS 621 Ambulatory health care services	19,773	1.2	-1,131	-5.1%	2.5%
3	NAICS 441 Motor vehicle and parts dealers	5,495	1.1	139	2.6%	1.3%
4	NAICS 541 Professional and technical services	18,620	0.9	-81	-0.4%	1.7%
5	NAICS 423 Merchant wholesalers, durable goods	5,019	0.7	31	0.6%	1.4%
6	NAICS 531 Real estate	4,705	1.2	106	2.3%	1.7%
7	NAICS 522 Credit intermediation and related activities	5,483	0.8	-143	-2.5%	1.7%

Source: Arizona Department of Administration's Office of Employment and Population Statistics

These are the top seven large industries in Pima County with high wages that are anticipated to continue growing into the next decade.

### Pima County

#### Existing Demand Industries: Average Wages

Rank	Industry Title	Weekly Average Wage			
		Level (2014Q3- 2015Q2)	Location Quotient (2014Q3- 2015Q2)	Gain/Loss (2013Q3-2015Q2 Numeric)	Gain/Loss (2013Q3-2015Q2 Percentage)
1	NAICS 622 Hospitals	\$986.0	1.0	\$1.0	0.1%
1	NAICS 621 Ambulatory health care services	\$1,097.5	1.2	\$24.0	2.3%
3	NAICS 441 Motor vehicle and parts dealers	\$885.8	1.2	\$15.1	1.8%
4	NAICS 541 Professional and technical services	\$1,284.3	0.9	-\$16.3	-1.2%
5	NAICS 423 Merchant wholesalers, durable goods	\$1,120.8	1.0	\$24.0	2.3%
6	NAICS 531 Real estate	\$759.0	0.9	\$23.0	3.2%
7	NAICS 522 Credit intermediation and related activities	\$1,085.0	0.9	\$0.8	0.4%

Source: Arizona Department of Administration's Office of Employment and Population Statistics

In these top six industries, these are the weekly average wages as well as the prior year wage gain or loss.

**Pima County: Leading Occupations within the Top Five Existing Industries  
Employment and Wages**

SOC Code	Occupation Title	2014 Average Levels		2012-2022
		Employment	Hourly Wage	Projected Annual Employment Growth Rate
11-1021	General and Operations Managers	4,830	\$ 42.29	1.4%
23-1011	Lawyers	1,350	\$ 45.39	2.4%
29-1171	Nurse practitioners	270	\$ 43.35	3.6%
29-1051	Pharmacists	930	\$ 54.81	2.7%
11-2022	Sales Managers	850	\$ 48.39	1.6%
17-2051	Civil engineers	1,120	\$ 43.04	2.7%
29-2021	Dental hygienists	660	\$ 38.56	3.1%
29-2032	Diagnostic Medical Sonographers	110	\$ 36.46	3.9%
13-1161	Market Research Analysts and Marketing Specialists	910	\$ 27.45	3.3%
29-1141	Registered Nurses	8,030	\$ 31.75	1.7%
41-2031	Retail Salespersons	12,410	\$ 11.99	1.6%
41-2022	Parts Salespersons	690	\$ 14.82	1.5%
29-1071	Physician assistants	170	\$ 42.03	4.3%
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	140	\$ 38.15	3.0%
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	400	\$ 35.92	1.4%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,460	\$ 16.62	1.6%
41-1012	First-Line Supervisors of Non-Retail Sales Workers	660	\$ 28.69	1.6%
11-9111	Medical and Health Services Managers	950	\$ 50.18	2.0%
11-2022	Sales Managers	850	\$ 48.39	1.8%
13-2011	Accountants and Auditors	2,200	\$ 27.51	2.5%
11-9041	Architectural and Engineering Managers	680	\$ 66.12	1.9%
29-1123	Physical Therapists	420	\$ 42.75	2.2%
53-7061	Cleaners of Vehicles and Equipment	1,280	\$ 9.45	1.6%

Source: Arizona Department of Administration's Office of Employment and Population Statistics

These are the top occupations within the top Existing Demand Industries. These occupations are large components of large industries that are anticipated to have high growth over the next decade.

**Pima County: Leading Occupations within the Top Five Existing Industries  
Occupation Requirements**

SOC Code	Occupation Title	Typical Requirement		
		Education Level	Work Experience	On-the-Job Training
11-1021	General and Operations Managers	Bachelor's degree	Less than 5 years	None
23-1011	Lawyers	Doctoral or professional degree	None	None
29-1171	Nurse practitioners	Master's degree	None	None
29-1051	Pharmacists	Doctoral or professional degree	None	None
11-2022	Sales Managers	Bachelor's degree	Less than 5 years	None
17-2051	Civil engineers	Bachelor's degree	None	None
29-2021	Dental hygienists	Associate's degree	None	None
29-2032	Diagnostic Medical Sonographers	Associate's degree	None	None
13-1161	Market Research Analysts and Marketing Specialists	Bachelor's degree	None	None
29-1141	Registered Nurses	Associate's degree	None	None
41-2031	Retail Salespersons	Less than high school	None	Short-term on-the-job training
41-2022	Parts Salespersons	Less than high school	None	Moderate-term on-the-job training
29-1071	Physician assistants	Master's degree	None	None
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	Bachelor's degree	None	None
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Bachelor's degree	None	Moderate-term on-the-job training
43-3031	Bookkeeping, Accounting, and Auditing Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training
41-1012	First-Line Supervisors of Non-Retail Sales Workers	High school diploma or equivalent	Less than 5 years	None
11-9111	Medical and Health Services Managers	Bachelor's degree	None	None
11-2022	Sales Managers	Bachelor's degree	Less than 5 years	None
13-2011	Accountants and Auditors	Bachelor's degree	None	None
11-9041	Architectural and Engineering Managers	Bachelor's degree	5 years or more	None
29-1123	Physical Therapists	Doctoral or professional degree	None	None
53-7061	Cleaners of Vehicles and Equipment	Less than high school	None	Short-term on-the-job training

Source: Arizona Department of Administration's Office of Employment and Population Statistics

This lists some of the typical job requirements for all of these occupations within the top Existing Demand Industries. There is a mix of education and training levels for all of these occupations. Even though some jobs do not require formal education, these occupations generally require some form of on-the-job training.

**Pima County: Leading Occupations within the Top Five Existing Industries  
Employer's Employment Needs**

<b>SOC Code</b>	<b>Occupation Title</b>	<b>Occupation Descriptor: Knowledge</b>	<b>Occupation Descriptor: Skills</b>	<b>Occupation Descriptor: Abilities</b>
11-9041	Architectural and Engineering Managers	Engineering and Technology	Reading Comprehension	Oral Comprehension
43-3031	Bookkeeping, Accounting, and Auditing Clerks	Clerical	Active Listening	Oral Comprehension
17-2051	Civil engineers	Engineering and Technology	Mathematics	Oral Comprehension
29-2021	Dental hygienists	Customer and Personal Service	Active Listening	Oral Comprehension
29-2032	Diagnostic Medical Sonographers	Customer and Personal Service	Active Listening	Near Vision
41-1012	First-Line Supervisors of Non-Retail Sales Workers	Customer and Personal Service	Monitoring	Oral Expression
11-1021	General and Operations Managers	Customer and Personal Service	Coordination	Oral Comprehension
23-1011	Lawyers	Law and Government	Critical Thinking	Oral Comprehension
13-1161	Market Research Analysts and Marketing Specialists	English Language	Reading Comprehension	Oral Expression
11-9111	Medical and Health Services Managers	Administration and Management	Coordination	Oral Comprehension
29-1171	Nurse practitioners	Psychology	Reading Comprehension	Problem Sensitivity
41-2022	Parts Salespersons	Customer and Personal Service	Active Listening	Near Vision
29-1051	Pharmacists	Customer and Personal Service	Reading Comprehension	Oral Comprehension
29-1123	Physical Therapists	Education and Training	Reading Comprehension	Oral Expression
29-1071	Physician assistants	Medicine and Dentistry	Reading Comprehension	Oral Comprehension
29-1141	Registered Nurses	Psychology	Social Perceptiveness	Problem Sensitivity
41-2031	Retail Salespersons	Customer and Personal Service	Persuasion	Oral Comprehension
11-2022	Sales Managers	Sales and Marketing	Monitoring	Oral Comprehension
53-7061	Cleaners of Vehicles and Equipment	Customer and Personal Service	Operation Monitoring	Extent Flexibility
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	Engineering and Technology	Reading Comprehension	Oral Comprehension
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Sales and Marketing	Active Listening	Oral Expression

Source: Arizona Department of Administration's Office of Employment and Population Statistics

These are the Knowledge, Skills, and Abilities that employers need for these occupations. Some of these require formal education, but others can be developed through work experience or on-the-job training.



**Pima County  
Emerging Demand Industries- Individuals Employed**

Rank	Industry Title	Annual Average Employment				Projected Annual Growth (2012-2022 Percentage)
		Level (2014)	Location Quotient (2014)	Annual Gain/Loss (2013-2014 Numeric)	Annual Gain/Loss (2013-2014 Percentage)	
1	NAICS 488 Support activities for transportation	1,711	1.1	117	7.9%	1.0%
2	NAICS 524 Insurance carriers and related activities	3,926	0.7	524	17.1%	1.7%
3	NAICS 221 Utilities	1,961	1.4	-86	-3.6%	1.0%
4	NAICS 212 Mining, except oil and gas	2,174	4.2	37	1.8%	1.1%
5	NAICS 811 Repair and maintenance	3,760	1.2	-49	-1.3%	1.0%
6	NAICS 562 Waste management and remediation services	727	0.7	77	14.9%	2.5%
7	NAICS 237 Heavy and civil engineering construction	1,436	0.6	109	9.7%	3.0%
8	NAICS 481 Air transportation	320	0.3	5	4.8%	1.0%
9	NAICS 493 Warehousing and storage	531	0.3	66	16.5%	1.0%
10	NAICS 484 Truck transportation	1,946	0.5	30	1.8%	1.0%
11	NAICS 425 Electronic markets and agents and brokers	451	0.2	-3	-0.7%	1.4%
12	NAICS 511 Publishing industries, except internet	1,883	1.0	-34	-1.7%	0.6%
13	NAICS 327 Nonmetallic mineral product manufacturing	725	0.7	63	12.0%	0.3%
14	NAICS 551 Management of companies and enterprises	2,433	0.4	-86	-3.3%	1.7%
15	NAICS 424 Merchant wholesalers, nondurable goods	2,141	0.4	-121	-5.2%	1.4%
16	NAICS 335 Electrical equipment and appliance mfg.	640	0.7	14	2.7%	0.3%
17	NAICS 332 Fabricated metal product manufacturing	2,686	0.7	72	2.9%	0.3%
18	NAICS 334 Computer and electronic product manufacturing	2,482	0.9	-132	-4.8%	0.3%
19	NAICS 339 Miscellaneous manufacturing	1,348	0.9	64	5.3%	0.3%
20	NAICS 518 Data processing, hosting and related services	217	0.3	11	6.1%	0.6%
21	NAICS 533 Lessors of nonfinancial intangible assets	19	0.3	4	36.8%	1.7%
22	NAICS 325 Chemical manufacturing	358	0.2	42	16.5%	0.3%
23	NAICS 515 Broadcasting, except internet	621	0.9	1	0.2%	0.6%
24	NAICS 517 Telecommunications	776	0.4	20	2.8%	0.6%
25	NAICS 213 Support activities for mining	122	0.1	11	13.5%	1.1%

Source: Arizona Department of Administration's Office of Employment and Population Statistics

These are the smaller industries in Pima County that will show substantial employment level growth in the next decade.

**Pima County  
Emerging Demand Industries- Average Wage**

		Weekly Average Wage			
Rank	Industry Title	Location		Gain/Loss (2013Q3-2015Q2 Numeric)	Gain/Loss (2013Q3-2015Q2 Percentage)
		Level (2014Q3- 2015Q2)	Quotient (2014Q3- 2015Q2)		
1	NAICS 488 Support activities for transportation	\$870.0	1.0	\$37.5	4.7%
2	NAICS 524 Insurance carriers and related activities	\$988.0	0.8	\$27.0	2.8%
3	NAICS 221 Utilities	\$1,839.3	1.2	\$151.0	11.6%
4	NAICS 212 Mining, except oil and gas	\$1,512.0	1.3	\$28.0	1.9%
5	NAICS 811 Repair and maintenance	\$806.5	1.2	\$86.1	13.4%
6	NAICS 562 Waste management and remediation services	\$821.3	0.9	\$12.6	1.6%
7	NAICS 237 Heavy and civil engineering construction	\$1,144.0	1.1	\$91.4	9.4%
8	NAICS 481 Air transportation	\$980.0	0.8	\$44.5	5.0%
9	NAICS 493 Warehousing and storage	\$871.0	1.3	-\$13.0	-1.4%
10	NAICS 484 Truck transportation	\$780.3	1.0	\$16.5	2.2%
11	NAICS 425 Electronic markets and agents and brokers	\$1,715.5	1.1	\$64.0	3.9%
12	NAICS 511 Publishing industries, except internet	\$1,567.3	1.0	\$91.5	6.7%
13	NAICS 327 Nonmetallic mineral product manufacturing	\$970.0	1.1	\$21.1	2.7%
14	NAICS 551 Management of companies and enterprises	\$944.0	0.5	\$1.6	0.9%
15	NAICS 424 Merchant wholesalers, nondurable goods	\$863.5	0.8	\$26.6	3.5%
16	NAICS 335 Electrical equipment and appliance mfg.	\$1,148.8	1.1	\$26.3	2.7%
17	NAICS 332 Fabricated metal product manufacturing	\$918.8	1.1	\$1.1	0.2%
18	NAICS 334 Computer and electronic product manufacturing	\$1,731.8	1.0	\$34.9	2.1%
19	NAICS 339 Miscellaneous manufacturing	\$768.8	0.8	\$21.6	3.1%
20	NAICS 518 Data processing, hosting and related services	\$1,626.8	1.1	\$20.0	1.4%
21	NAICS 533 Lessors of nonfinancial intangible assets	\$1,090.3	0.7	-\$51.9	-1.8%
22	NAICS 325 Chemical manufacturing	\$1,197.3	0.8	\$13.4	2.1%
23	NAICS 515 Broadcasting, except internet	\$1,026.3	0.8	\$22.6	2.4%
24	NAICS 517 Telecommunications	\$1,201.5	0.9	-\$10.0	-0.7%
25	NAICS 213 Support activities for mining	\$859.8	0.6	-\$21.1	-1.5%

Source: Arizona Department of Administration's Office of Employment and Population Statistics

These are the average weekly wages for each industry as well as the gains or losses in wages over from the prior year.

**Pima County: Leading Occupations within the Top Five Emerging Industries  
Employment and Wages**

SOC Code	Occupation Title	2014 Average Levels		2012-2022
		Employment	Hourly Wage	Projected Annual Employment Growth Rate
11-1021	General and Operations Managers	4,830	\$ 42.29	1.1%
41-3021	Insurance sales agents	770	\$ 29.12	1.7%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	6,320	\$ 15.67	1.1%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	1,470	\$ 28.60	1.0%
49-3011	Aircraft Mechanics and Service Technicians	1,100	\$ 26.70	1.7%
11-1021	General and Operations Managers	4,830	\$ 42.29	0.8%
11-2022	Sales Managers	850	\$ 48.39	2.0%
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	1,810	\$ 25.79	1.0%
49-3021	Automotive Body and Related Repairers	200	\$ 22.87	1.0%
53-3032	Heavy and Tractor-Trailer Truck Drivers	1,990	\$ 17.56	1.2%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	5,100	\$ 22.46	1.8%
49-3023	Automotive Service Technicians and Mechanics	1,670	\$ 20.61	1.0%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	5,100	\$ 22.46	0.9%
43-4051	Customer Service Representatives	10,780	\$ 13.17	1.8%
43-9061	Office Clerks, General	7,590	\$ 15.94	0.6%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	1,470	\$ 28.60	0.5%
49-9031	Home appliance repairers	140	\$ 23.04	1.0%
49-9098	Helpers--Installation, Maintenance, and Repair Workers	570	\$ 16.04	1.0%
43-5041	Meter readers, utilities	50	\$ 22.42	-1.7%
11-3071	Transportation, Storage, and Distribution Managers	180	\$ 38.15	1.0%
43-9041	Insurance claims and policy processing clerks	460	\$ 16.68	1.7%

Source: Arizona Department of Administration's Office of Employment and Population Statistics

Within the Emerging Demand Industries, these are the top occupations based on wages, employment levels, and projected growth.

**Pima County: Leading Occupations within the Top Five Emerging Industries  
Occupation Requirements**

SOC Code	Occupation Title	Typical Requirement		
		Education Level	Work Experience	On-the-Job Training
11-1021	General and Operations Managers	Bachelor's degree	Less than 5 years	None
41-3021	Insurance sales agents	High school diploma or equivalent	None	Moderate-term on-the-job training
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	High school diploma or equivalent	None	Short-term on-the-job training
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	High school diploma or equivalent	Less than 5 years	None
49-3011	Aircraft Mechanics and Service Technicians	Postsecondary non-degree award	None	None
11-1021	General and Operations Managers	Bachelor's degree	Less than 5 years	None
11-2022	Sales Managers	Bachelor's degree	Less than 5 years	None
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	5 years or more	None
49-3021	Automotive Body and Related Repairers	High school diploma or equivalent	None	Moderate-term on-the-job training
53-3032	Heavy and Tractor-Trailer Truck Drivers	Postsecondary non-degree award	None	Short-term on-the-job training
43-1011	First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	Less than 5 years	None
49-3023	Automotive Service Technicians and Mechanics	High school diploma or equivalent	None	Long-term on-the-job training
43-1011	First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	Less than 5 years	None
43-4051	Customer Service Representatives	High school diploma or equivalent	None	Short-term on-the-job training
43-9061	Office Clerks, General	High school diploma or equivalent	None	Short-term on-the-job training
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	High school diploma or equivalent	Less than 5 years	None
49-9031	Home appliance repairers	High school diploma or equivalent	None	Moderate-term on-the-job training
49-9098	Helpers--Installation, Maintenance, and Repair Workers	High school diploma or equivalent	None	Moderate-term on-the-job training
43-5041	Meter readers, utilities	High school diploma or equivalent	None	Short-term on-the-job training
11-3071	Transportation, Storage, and Distribution Managers	High school diploma or equivalent	5 years or more	None
43-9041	Insurance claims and policy processing clerks	High school diploma or equivalent	None	Moderate-term on-the-job training

Source: Arizona Department of Administration's Office of Employment and Population Statistics

This lists some of the typical job requirements for all of these occupations within the top Emerging Demand Industries. There is a mix of education and training levels for all of these occupations. Even though some jobs do not require formal education, these occupations generally require some form of on-the-job training.

**Pima County: Leading Occupations within the Top Five Emerging Industries**

**Employer's Employment Needs**

SOC Code	Occupation Title	Occupation Descriptor:	Occupation Descriptor:	Occupation Descriptor:
		Knowledge	Skills	Abilities
49-3021	Automotive Body and Related Repairers	Mechanical	Repairing	Visual Color Discrimination
43-4051	Customer Service Representatives	Customer and Personal Service	Speaking	Oral Expression
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	Customer and Personal Service	Active Listening	Oral Expression
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	Mechanical	Monitoring	Oral Expression
43-1011	First-Line Supervisors of Office and Administrative Support Workers	Customer and Personal Service	Monitoring	Oral Expression
11-1021	General and Operations Managers	Customer and Personal Service	Coordination	Oral Expression
53-3032	Heavy and Tractor-Trailer Truck Drivers	Transportation	Operation and Control	Control Precision
49-9031	Home appliance repairers	Customer and Personal Service	Quality Control Analysis	Hearing Sensitivity
41-3021	Insurance sales agents	Customer and Personal Service	Active Listening	Oral Comprehension
43-9061	Office Clerks, General	Clerical	Active Listening	Oral Comprehension
11-2022	Sales Managers	Sales and Marketing	Monitoring	Oral Comprehension
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	Clerical	Reading Comprehension	Oral Comprehension
49-9098	Helpers--Installation, Maintenance, and Repair Workers	Mechanical	Equipment Maintenance	Extent Flexibility
49-9098	Helpers--Installation, Maintenance, and Repair Workers	Mechanical	Equipment Maintenance	Extent Flexibility
49-3011	Aircraft Mechanics and Service Technicians	Mechanical	Equipment Maintenance	Finger Dexterity

Source: Arizona Department of Administration's Office of Employment and Population Statistics

These are the knowledge, skills, and abilities that employers need for these occupations. Some of these require formal education, but others can be developed through work experience or on-the-job training.

This handout introduces many new and complex concepts. Questions can always be sent to Danny Wilson at [Daniel.Wilson@azdoa.gov](mailto:Daniel.Wilson@azdoa.gov)