

# Occupational Profile: Plumbers, Pipefitters, and Steamfitters

## GENERAL OCCUPATION DESCRIPTION

Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems.

Source: O\*NET online. <http://online.onetcenter.org>

## REQUIRED EDUCATION

As shown in the table to right, over 71% of interviewed employers reportedly require a High School diploma or less, while an additional 29% require a two-year degree or the equivalent.

Required Education	
Percent of Employers Requiring HS Diploma or Less	71.01%
Percent of Employers Requiring 2-Year Degree or Equiv	28.99%
Percent of Employers Requiring BS Diploma or More	0%

Source: Bureau of Labor Statistics

## WAGES

Plumber, Pipefitter, and Steamfitter is considered a medium to high-wage occupation, with moderate possibility for wage advancement with experience. Employers in Greater Phoenix and the State of Arizona generally pay lower as compared with the overall United States.

Location	Pay Period	2005				
		10%	25%	Median	75%	90%
United States	Hourly	\$11.89	\$15.29	\$20.27	\$26.86	\$33.83
	Yearly	\$24,700	\$31,800	\$42,200	\$55,900	\$70,400
Greater Phoenix	Hourly	\$9.44	\$12.11	\$16.56	\$20.44	\$26.38
	Yearly	\$19,645	\$25,201	\$34,461	\$42,536	\$54,897
Arizona	Hourly	\$9.66	\$12.77	\$16.60	\$20.62	\$25.31
	Yearly	\$20,100	\$26,600	\$34,500	\$42,900	\$52,600

Source: Bureau of Labor Statistics

As shown in the table to right, a national comparison of wages for this occupation reveals Arizona ranks 42nd in terms of median wages.

RANK	Location	Median Wage 2005	
		Hourly	Annual
1	Illinois	\$30.64	\$63,700
2	Alaska	\$27.58	\$57,400
3	New York	\$27.14	\$56,500
4	Minnesota	\$26.53	\$55,200
5	New Jersey	\$26.22	\$54,500
42	ARIZONA	\$16.60	\$34,500

Source: Bureau of Labor Statistics

The table below provides a comparison of wages by sub-industry for the Greater Phoenix region (2005). As shown, the main employment sector, "Specialty Trade Contractors" pays lower than the other main employment sector "Heavy and Civil Engineering Construction."

Wages by Industry: Greater Phoenix MSA (2005)	Rounded Employment	Mean Wage	10th Percentile Wage	25th Percentile Wage	Median Wage	75th Percentile Wage	90th Percentile Wage
Specialty Trade Contractors	4,270	\$16.59	\$8.99	\$11.80	\$16.14	\$20.60	\$25.75
Heavy and Civil Engineering Construction	470	\$18.54	\$10.63	\$13.69	\$18.26	\$21.74	\$28.10
Construction of Buildings	90	\$15.84	\$8.70	\$10.83	\$15.28	\$18.97	\$25.30

## EMPLOYMENT

As shown in the table below, this occupation has a projected 30% growth rate over 10 years (between 2003 and 2013) for the Greater Phoenix region. There are an average projected 326 job openings each year, comprised of 195 new jobs and 131 positions vacated by individuals leaving the field (due to retirement, death, career changes, or other reasons).

	10-YEAR CHANGE			AVERAGE ANNUAL		
	Employment		Percent Change	Job Openings	Growth	Separations
United States	2004	2014				
Plumbers, pipefitters, and steamfitters	498,600	576,600	16%	19,270	n/a	n/a
Arizona	Employment		Percent Change	Job Openings	Growth	Separations
	2004	2014				
Plumbers, pipefitters, and steamfitters	9,080	13,380	47%	640	n/a	n/a
Greater Phoenix	Employment		Percent Change	Job Openings	Growth	Separations
	2003	2013				
Plumbers, pipefitters, and steamfitters	5,710	7,657	30%	326	195	131

Source: Bureau of Labor Statistics

\*Job Openings refers to the average annual job openings due to growth and net replacement.

Source: Bureau of Labor Statistics

\*\*N/A is displayed in cases where data is not available or cannot be published because of federal data privacy standards.

An additional source of information regarding this occupation can be provided by analysis of employer survey data collected for the Maricopa County Community Colleges by the ERISS Corporation in 2004. As shown, the ERISS survey data shows a projected 1-year growth rate of 9%, which is higher than the average of 3% per year reflected by the BLS data above.

Additionally, the ERISS data provides an indicator of yearly turnover for this occupation, which is reported to be moderate to high at 14%.

ERISS Occupational Survey Data (2004)			
Greater Phoenix	Growth	Turnover	Demand
Plumbers, Pipefitters, and Steamfitters	9%	14%	23%

### Comparison of employment projections for top five regions for Plumber, Pipefitter, and Steamfitter

As shown in the table to right, a national comparison reveals the State of Arizona ranks 2nd in terms of projected 10-year growth for this occupation (47%).

RANK	Location	Employment		Percent
		2004	2014	Change
1	Colorado	9,290	13,850	49%
2	<b>ARIZONA</b>	9,080	13,380	47%
3	Wyoming	1,160	1,700	46%
3	Nevada	6,280	9,160	46%
4	Utah	5,350	7,280	36%
5	Idaho	2,260	2,990	33%

Source: Bureau of Labor Statistics

### Employment by Industry

The table below shows the industries that most commonly employ Plumber, Pipefitter, and Steamfitter, and the proportion of employment accounted for at the national level. As shown, "Plumbing, heating, and air-conditioning contractors" is the largest employer for this occupation (56.7%).

Percent of Employment Nationally by Industry	
Percent	Industry
56.7%	Plumbing, heating, and air-conditioning contractors
12.9%	Self-employed workers, primary job
3.3%	Electrical contractors
3%	Local government, excluding education and hospitals
2.7%	Nonresidential building construction

Source: Bureau of Labor Statistics

### Geo-Location Overlay of Employers with 10 or More Employees that Potentially Employ Occupation (n = 126)

