

Occupational Profile: Electricians

GENERAL OCCUPATION DESCRIPTION

Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems. Exclude "Security and Fire Alarm Systems Installers".

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

REQUIRED EDUCATION

As shown in the table (right), 54% of interviewed employers reportedly required a high-school diploma or less for this occupation. A further 46% required a 2-year degree or equivalent.

Required Education	
Percent of Employers Requiring HS Diploma or Less	54.1%
Percent of Employers Requiring 2-Year Degree or Equiv	45.8%
Percent of Employers Requiring BS Diploma or More	0.1%

Source: Bureau of Labor Statistics

WAGES

Electrician is generally considered a medium-wage occupation, with excellent possibility for wage advancement with experience. Employers in the Greater Phoenix region and the State of Arizona as a whole generally pay less as compared with the overall United States.

Location	Pay Period	2005				
		10%	25%	Median	75%	90%
United States	Hourly	\$12.44	\$15.74	\$20.57	\$27.10	\$33.88
	Yearly	\$25,900	\$32,700	\$42,800	\$56,400	\$70,500
Greater Phoenix	Hourly	\$10.32	\$13.63	\$17.58	\$21.61	\$25.63
	Yearly	\$21,469	\$28,367	\$36,591	\$44,977	\$53,329
Arizona	Hourly	\$9.83	\$13.07	\$17.51	\$21.24	\$25.68
	Yearly	\$20,400	\$27,200	\$36,400	\$44,200	\$53,400

Source: Bureau of Labor Statistics

As shown in the table to right, a national comparison of wages for this occupation reveals Arizona ranks 41st in terms of median wages.

RANK	Location	Median Wage 2005	
		Hourly	Annual
1	Hawaii	\$29.16	\$60,700
2	Minnesota	\$28.83	\$60,000
3	Michigan	\$28.13	\$58,500
4	Alaska	\$28.03	\$58,300
5	Illinois	\$27.05	\$56,300
41	ARIZONA	\$17.51	\$36,400

Source: Bureau of Labor Statistics

The table below provides a comparison of wages by sub-industry for the Greater Phoenix region (2005). As shown, "Primary metal manufacturing" firms generally pay more than other main manufacturing sectors.

Wages by Industry: Greater Phoenix (2005)	Rounded Employment	Mean Wage	10th Percentile Wage	25th Percentile Wage	Median Wage	75th Percentile Wage	90th Percentile Wage
Primary Metal Manufacturing	60	\$22.54	\$11.89	\$22.13	\$24.01	\$25.92	\$27.07
Wood Product Manufacturing	50	\$15.99	\$9.61	\$11.82	\$14.93	\$17.58	\$21.31
Transportation Equipment Manufacturing	50	\$12.73	\$8.98	\$9.69	\$10.87	\$14.95	\$19.39
Paper Manufacturing	40	\$18.33	\$9.46	\$12.41	\$18.65	\$21.58	\$31.36
Fabricated Metal Product Manufacturing	10	\$21.96	\$10.13	\$12.58	\$21.59	\$31.16	\$33.72
Machinery Manufacturing	n/a	\$15.83	\$11.83	\$13.16	\$15.45	\$18.49	\$20.91

Source: Bureau of Labor Statistics

EMPLOYMENT

As shown in the table below, this occupation has a projected 39% growth over 10 years (between 2003 and 2013) for the Greater Phoenix region. There is an average projected 447 job openings each year, comprised of 297 new jobs and 150 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				
Electricians	656,200	733,700	12%	20,720	n/a	n/a
Arizona	Employment		Percent Change	Job Openings	Growth	Separations
	2002	2012				
Electricians	N/A	N/A	N/A	N/A	n/a	n/a
Greater Phoenix	Employment		Percent Change	Job Openings	Growth	Separations
	2003	2013				
Electricians	7,576	10,549	39%	447	297	150

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 12%, which is higher than the average of 3.9% per year reflected by the BLS data above.

Additionally, the ERISS data provides an indicator of turnover for this occupation, which is reported to be high at 23%.

ERISS Occupational Survey Data (2004)			
Phoenix MSA	Growth	Turnover	Demand
Electricians	12.0%	23.0%	35.0%

Source: 2003 ERISS occupational survey

Comparison of employment projections for top five regions for Electrician

As shown in the table to right, a national comparison reveals the Greater Phoenix region ranks 3rd at 39% in terms of projected 10-year growth for this occupation (State of Arizona information not available).

RANK	Location	Employment		Percent Change
		2004	2014	
1	Colorado	12,400	18,120	46%
2	Nevada	8,340	11,980	44%
3	Wyoming	2,180	3,030	39%
3	Greater Phoenix	7,576	10,549	39%
4	Idaho	3,250	4,280	32%
4	Utah	6,230	8,190	32%
5	Florida	45,900	56,240	23%

Source: Bureau of Labor Statistics

Employment by Industry

The table below shows the industries that most commonly employ Electricians, and the proportion of employment accounted for at the national level. As shown, "Electrical contractors" account for the most employment (60.8%).

Percent of Employment Nationally by Industry	
Percent	Industry
60.8%	Electrical contractors
8.8%	Self-employed workers, primary job
2.8%	Local government, excluding education and hospitals

Source: Bureau of Labor Statistics

Geo-Location Overlay of Employers with 50 or More Employees that Potentially Employ Occupation (n = 68)

