

# Utility Industry Occupation Report

CIP 46.0303

Cochise, Pima, SC

## Lineworker

CIP 2010: A program that prepares individuals to apply technical knowledge and skills to install, operate, maintain and repair local, long-distance, and rural electric power cables and communication lines; erect and construct pole and tower lines; and install underground lines and cables. Includes instruction in cable installation and repair, fibre-optic technology, trenching, mobile equipment and crane operation, high-voltage installations, maintenance and inspection, safety, remote communications, and applicable codes and standards. \* *Program Description – Settings*

## Occupation Gender Breakdown 2016

Gender	Jobs	Percent
Males	1,914	96.2%
Females	75	3.8%

## Occupation Age Breakdown 2016

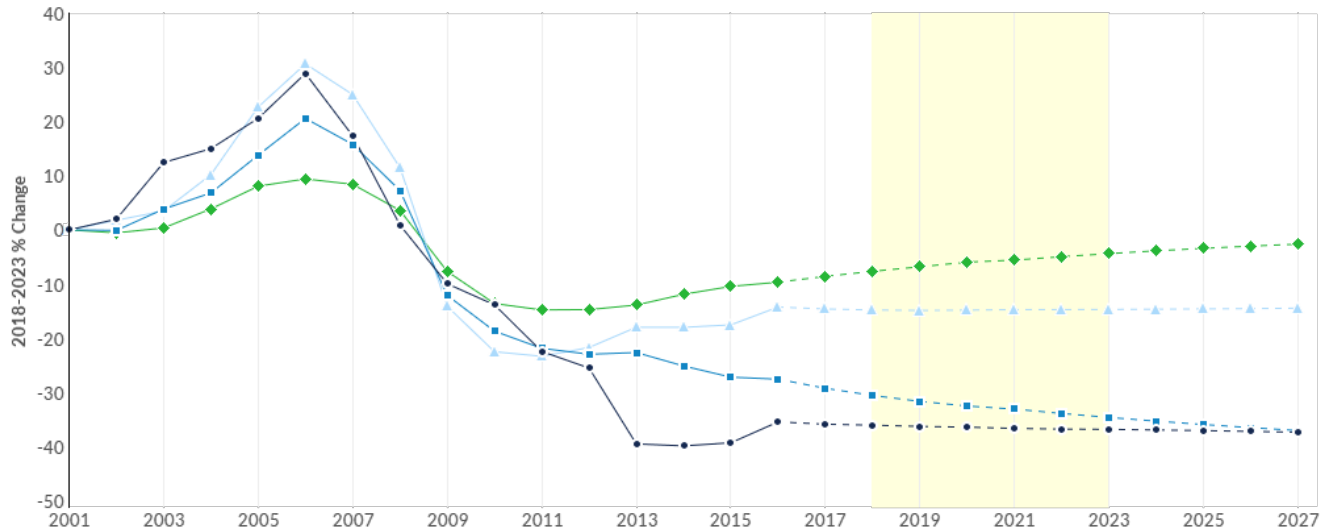
Age	Jobs	Percent
14-18	1	0.0%
19-24	40	2.0%
25-34	278	14.0%
35-44	485	24.4%
45-54	581	29.2%
55-64	487	24.5%
65+	118	5.9%

## Occupation Summary for 46.0303

<p><b>1,989</b> Jobs (2016) 12% below National average</p>	<p><b>-5.9%</b> % Change (2018-2023) Nation: 3.5%</p>	<p><b>\$26.32/hr</b> Median Hourly Earnings Nation: \$28.86/hr</p>
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October 10, 2017

# Occupation Change Summary



Region	2018 Jobs	2023 Jobs	Change	% Change	Median Hourly Earnings
● Cochise County, AZ	154	152	-2	-1%	\$27.98
● Cochise, Pima, SC	1,907	1,795	-112	-6%	\$26.32
● Arizona (AZ)	16,463	16,482	19	0%	\$27.39
● United States	774,054	801,473	27,419	4%	\$28.86

SOC	Description	Typical Entry Level Education	Work Experience Required	Typical On-The-Job Training
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	5 years or more	None
49-9051	Electrical Power-Line Installers and Repairers	High school diploma or equivalent	None	Long-term on-the-job training

## Occupation Breakdown - 2018 Jobs

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	117	1,774	14,640	647,396
49-9051	Electrical Power-Line Installers and Repairers	37	133	1,823	126,658
	Total	154	1,907	16,463	774,054

## Occupation Breakdown - 2023 Jobs

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	115	1,651	14,416	664,907
49-9051	Electrical Power-Line Installers and Repairers	38	144	2,067	136,566
	Total	152	1,795	16,482	801,473

## Occupation Breakdown - Change

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
49-9051	Electrical Power-Line Installers and Repairers	1	11	244	9,908
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	-2	-123	-224	17,511
	Total	-2	-112	19	27,419

## Occupation Breakdown - Median Hourly Earnings

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
49-9051	Electrical Power-Line Installers and Repairers	\$36.83	\$36.91	\$37.14	\$32.61
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$29.52	\$25.93	\$26.61	\$30.28
	Total	\$31.20	\$26.61	\$27.66	\$30.65








## Top Industries – Change from 2018-2023

NAICS Code	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
237110	Water and Sewer Line and Related Structures Construction	2	0	15	766
236118	Residential Remodelers	1	-3	74	1,595
221122	Electric Power Distribution	1	3	171	229
236220	Commercial and Institutional Building Construction	0	-23	30	2,601
903999	Local Government, Excluding Education and Hospitals	--	7	69	1,733
	Total	4	-16	359	6,924

Source: QCEW Employees, Non-QCEW Employees & Self-Employed - Emsi 2017.3 Class of Worker

## National Educational Attainment

First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)

Education Level	2016 Percent
Less than high school diploma	13.7% 
High school diploma or equivalent	42.0% 
Some college, no degree	25.8% 
Associate's degree	7.0% 
Bachelor's degree	9.6% 
Master's degree	1.4% 
Doctoral or professional degree	0.4% 

\* National Educational Attainment – Settings

**National Educational Attainment**  
 Electrical Power-Line Installers and Repairers (49-9051)

	<b>Education Level</b>	<b>2016 Percent</b>
●	Less than high school diploma	4.5% ■
●	High school diploma or equivalent	40.5% ■■■■■
●	Some college, no degree	37.3% ■■■■■
●	Associate's degree	12.5% ■■■
●	Bachelor's degree	4.8% ■
●	Master's degree	0.3%
●	Doctoral or professional degree	0.0%

\* National Educational Attainment – Settings

# Appendix A - Data Sources and Calculations

## Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

## Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

## Completers Data

The completers data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

## Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

## Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

## Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

## State Data Sources

This report uses state data from the following agencies: Arizona Department of Administration, Office of Employment and Population Statistics