

# Building Construction Technology Occupation Report



CIP 46.0415

Cochise, Pima, SC







## Building Construction Technology

CIP 2010: A program that prepares individuals to apply technical knowledge and skills to residential and commercial building construction and remodeling. Includes instruction in construction equipment and safety; site preparation and layout; construction estimating; blueprint reading; building codes; framing; masonry; heating, ventilation, and air conditioning; electrical and mechanical systems; interior and exterior finishing; and plumbing.

## Occupation Gender Breakdown 2016

	Gender	Jobs	Percent
•	Males	1,903	95.0% 
•	Females	99	5.0% 

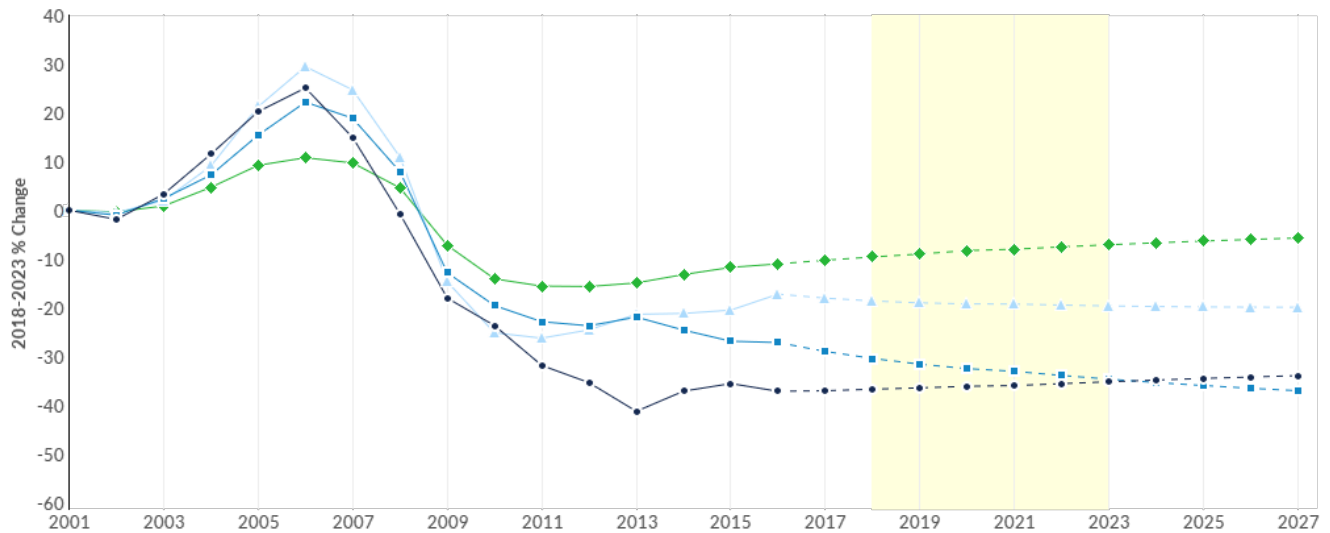
## Occupation Age Breakdown 2016

	Age	Jobs	Percent
•	14-18	2	0.1%
•	19-24	41	2.0% 
•	25-34	265	13.2% 
•	35-44	479	23.9% 
•	45-54	590	29.5% 
•	55-64	503	25.1% 
•	65+	123	6.1% 

## Occupation Summary for 46.0415

<b>2,002</b> Jobs (2016) 6% below National average	<b>-6.1%</b> % Change (2018-2023) Nation: 2.8%	<b>\$25.89/hr</b> Median Hourly Earnings Nation: \$27.75/hr
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# Occupation Change Summary



Region	2018 Jobs	2023 Jobs	Change	% Change	Median Hourly Earnings
● Cochise County, AZ	143	146	3	2%	\$26.63
● Cochise, Pima, SC	1,912	1,796	-116	-6%	\$25.89
● Arizona (AZ)	15,781	15,583	-198	-1%	\$26.38
● United States	722,207	742,264	20,057	3%	\$27.75

SOC	Description	Typical Entry Level Education	Work Experience Required	Typical On-The-Job Training
17-3022	Civil Engineering Technicians	Associate's degree	None	None
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	5 years or more	None

## 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
17-3022	Civil Engineering Technicians	25	138	1,141	74,811
	<b>Total</b>	<b>143</b>	<b>1,912</b>	<b>15,781</b>	<b>722,207</b>

## 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
17-3022	Civil Engineering Technicians	31	144	1,168	77,357
	Total	146	1,796	15,583	742,264

## Occupation Breakdown - Change

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
17-3022	Civil Engineering Technicians	6	6	27	2,546
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	-2	-123	-224	17,511
	Total	3	-116	-198	20,057

## Occupation Breakdown - Median Hourly Earnings

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$29.52	\$25.93	\$26.61	\$28.18
17-3022	Civil Engineering Technicians	\$27.95	\$25.36	\$24.52	\$24.03
	Total	\$29.28	\$25.89	\$26.46	\$27.75

## Top Industries – Change from 2018 - 2023








NAICS Code	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
541330	Engineering Services	6	-3	-6	1,453
237110	Water and Sewer Line and Related Structures Construction	2	0	15	772
236118	Residential Remodelers	1	-3	74	1,591
236220	Commercial and Institutional Building Construction	0	-23	30	2,601
903999	Local Government, Excluding Education and Hospitals	--	6	70	1,670
	Total	9	-22	182	8,088

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

October 10, 2017

## 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

### Civil Engineering Technicians (17-3022)

	Education Level	2016 Percent
●	Less than high school diploma	4.0% 
●	High school diploma or equivalent	22.6% 
●	Some college, no degree	33.5% 
●	Associate's degree	21.6% 
●	Bachelor's degree	15.2% 
●	Master's degree	2.6% 
●	Doctoral or professional degree	0.5% 

\* 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