

# HVAC Occupation Report



## CIP 47.0201

Cochise, Pima, SC








### Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician

CIP 2010: A program that prepares individuals to apply technical knowledge and skills to repair, install, service and maintain the operating condition of heating, air conditioning, and refrigeration systems. Includes instruction in diagnostic techniques, the use of testing equipment and the principles of mechanics, electricity, and electronics as they relate to the repair of heating, air conditioning and refrigeration systems.

### Occupation Gender Breakdown 2016

	Gender	Jobs	Percent
●	Males	1,143	98.7% 
●	Females	15	1.3% 

### Occupation Age Breakdown 2016

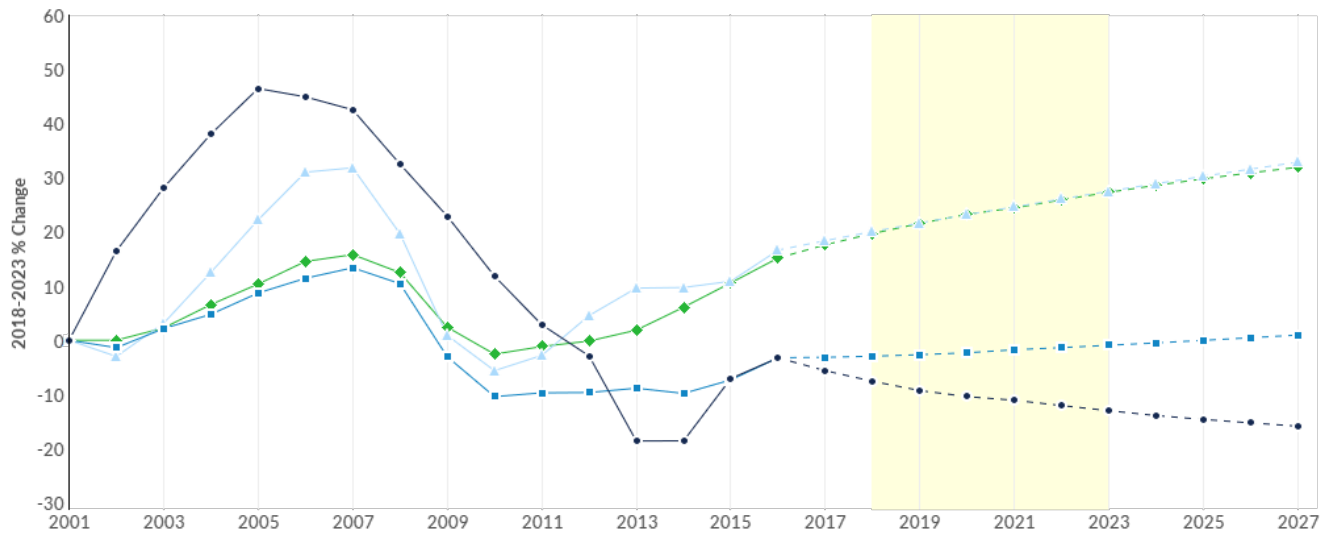
	Age	Jobs	Percent
●	14-18	3	0.3% 
●	19-24	75	6.4% 
●	25-34	269	23.2% 
●	35-44	308	26.6% 
●	45-54	283	24.4% 
●	55-64	180	15.5% 
●	65+	40	3.5% 

### Occupation Summary for 47.0201

<b>1,159</b> Jobs (2016) 16% above National average	<b>2.1%</b> % Change (2018-2023) Nation: 6.4%	<b>\$21.11/hr</b> Median Hourly Earnings Nation: \$20.97/hr
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# Occupation Change Summary



	Region	2018 Jobs	2023 Jobs	Change	% Change	Median Hourly Earnings
●	Cochise County, AZ	71	67	-4	-6%	\$15.91
●	Cochise, Pima, SC	1,162	1,186	24	2%	\$21.11
●	Arizona (AZ)	7,597	8,068	471	6%	\$19.78
●	United States	348,909	371,084	22,175	6%	\$20.97

SOC	Description	Typical Entry Level Education	Work Experience Required	Typical On-The-Job Training
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Postsecondary non-degree award	None	Long-term on-the-job training

## Occupation Breakdown - 2018 Jobs

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	71	1,162	7,597	348,909
	Total	71	1,162	7,597	348,909

## Occupation Breakdown - 2023 Jobs

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	67	1,186	8,068	371,084
	Total	67	1,186	8,068	371,084

## Occupation Breakdown - Change

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	-4	24	471	22,175
	Total	-4	24	471	22,175

## Occupation Breakdown - Median Hourly Earnings

Occupation	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$15.91	\$21.11	\$19.78	\$20.97
	Total	\$15.91	\$21.11	\$19.78	\$20.97

## Top Industries – Change from 2018-2023








NAICS Code	Description	Cochise County, AZ	Cochise, Pima, SC	Arizona (AZ)	United States
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	--	--	3	96
901199	Federal Government, Civilian, Excluding Postal Service	--	1	1	-36
236118	Residential Remodelers	--	2	9	226
454310	Fuel Dealers	--	--	-2	-304
238220	Plumbing, Heating, and Air-Conditioning Contractors	-4	18	343	20,419
	Total	-4	19	355	20,402

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

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## National Educational Attainment

Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)

	Education Level	2016 Percent
●	Less than high school diploma	11.7% 
●	High school diploma or equivalent	39.5% 
●	Some college, no degree	30.9% 
●	Associate's degree	13.0% 
●	Bachelor's degree	4.1% 
●	Master's degree	0.5% 
●	Doctoral or professional degree	0.2% 

\* 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