



Ironworkers

Program Report For Greater South Bay and Peninsula Region (Santa Clara and San Mateo Counties)

November 2016

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Ironworking/Ironworker

CIP 2010: A program that prepares individuals to make and install structural, ornamental, and reinforcing metal structures and supports. Includes instruction in drafting, technical mathematics, blueprint interpretation, welding, riveting, beam placement, ornamental design, structural reinforcement, crane operation, safety, and applicable codes and standards.

Target Occupations‡

Reinforcing Iron and Rebar Workers (47-2171)

Structural Iron and Steel Workers (47-2221)

‡Based on EMSI crosswalk of the Classification of Instructional Programs (CIP) codes with Standard Occupational Classification (SOC) codes as published by the U.S. Department of Education.

In 2016, the number of Field Ironworking jobs in the target occupations in Santa Clara and San Mateo Counties totaled 501. The Bureau of Labor Statistics (BLS) expects the total number of positions to increase by about 11% over the next three years.

Occupation Summary for Ironworkers

501 Jobs (2016)¹ 50% below National average ²	11.4% % Change (2016-2019)³ Nation: -0.1%	\$29.25/hr Median Hourly Earnings Nation: \$25.07/hr
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¹Based on total number of jobs for target occupations in Santa Clara and San Mateo Counties.

²Represents occupation density as compared to national average (national average=1).

³Based on turnover and new jobs.

Target occupations that are mapped to the Ironworkers program are disaggregated to see which occupations are projected to see the highest number of annual openings (Structural Iron and Steel Workers), highest percentage rate of growth over the next three years (Reinforcing Iron and Rebar Workers), and the highest median hourly earnings (Structural Iron and Steel Workers). While Reinforcing Iron and Rebar Workers (15%) and Structural Iron and Steel Workers (10%) are expected to experience job growth, these occupations are less represented and concentrated in our region (Santa Clara and San Mateo Counties) compared to the national average.

Target Occupations

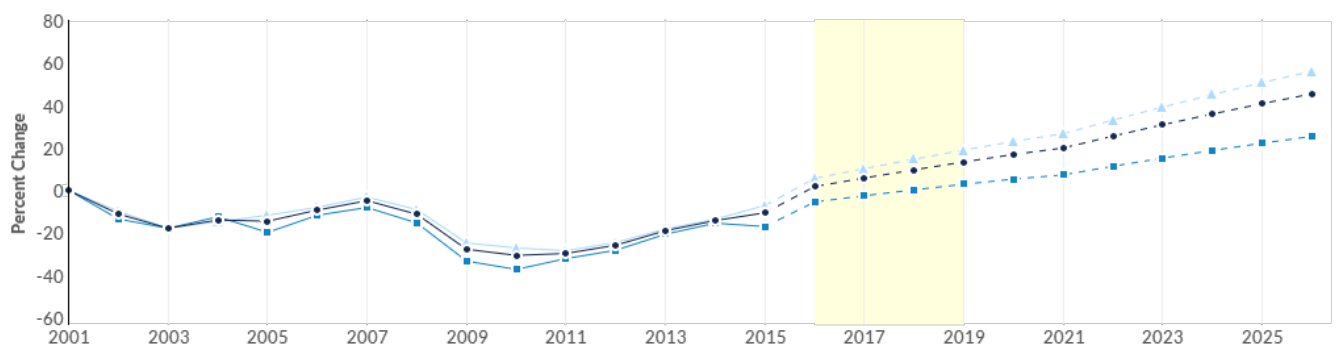
Occupation	2016 Jobs	Annual Openings	Median Hourly Earnings	Growth (2016 - 2019)	Location Quotient (2016)
Structural Iron and Steel Workers	353	18	\$32.12/hr	9.92%	0.50
Reinforcing Iron and Rebar Workers	148	10	\$22.38/hr	14.86%	0.53

Growth in the Ironworking occupations show how each occupation is projected to increase in jobs over the next three years. A growth of about 11% is expected in the next three years in Ironworking.

Growth for Ironworkers

	501	558	57	11.4%
	2016 Jobs	2019 Jobs	Change (2016-2019)	% Change (2016-2019)
Occupation	2016 Jobs	2019 Jobs	Change	% Change
Reinforcing Iron and Rebar Workers (47-2171)	148	170	22	15%
Structural Iron and Steel Workers (47-2221)	353	388	35	10%

Regional Trends

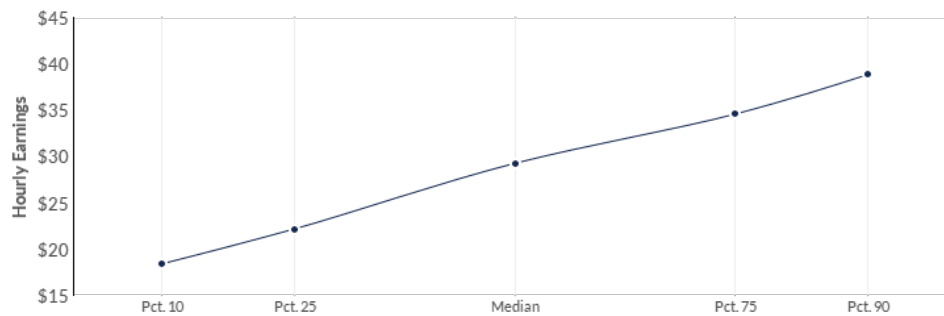


	Region	2016 Jobs	2019 Jobs	Change	% Change
●	Region	501	558	57	11.4%
●	San Mateo County, CA	161	175	14	8.7%
●	Santa Clara County, CA	340	383	43	12.6%

The percentile earnings table shows the range the Ironworking occupations earn in the region. While the median earnings are approximately \$29/hour, wages can range from below \$22/hour to above \$34/hour. Each of the target occupations' range in wages is also displayed.

Percentile Earnings for Ironworkers

\$22.16/hr	\$29.25/hr	\$34.57/hr
25th Percentile Earnings	Median Earnings	75th Percentile Earnings





Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings
Reinforcing Iron and Rebar Workers (47-2171)	\$17.73	\$22.38	\$27.90
Structural Iron and Steel Workers (47-2221)	\$24.01	\$32.12	\$37.37

Target Occupations Demographics

The demographics among those employed in Ironworking occupations in Santa Clara and San Mateo Counties for 2016 show that a majority are male (97%) and more than a quarter are between the ages of 45-54 (28%) and almost half are White (49%).








Occupation Gender Breakdown

Gender	2016 Jobs	2016 Percent
Males	485	96.8% 
Females	16	3.2% 

Occupation Age Breakdown

Age	2016 Jobs	2016 Percent
14-18	3	0.5% 
19-24	29	5.8% 
25-34	111	22.2% 
35-44	135	26.9% 
45-54	142	28.3% 
55-64	69	13.7% 
65+	13	2.6% 

Occupation Race/Ethnicity Breakdown

Race/Ethnicity	2016 Jobs	2016 Percent
White	244	48.6% 
Hispanic or Latino	200	40.0% 
Asian	25	5.0% 
Black or African American	19	3.7% 
Two or More Races	6	1.1% 
Native Hawaiian or Other Pacific Islander	4	0.8% 
American Indian or Alaska Native	3	0.6% 

Industries Employing Ironworking Occupations

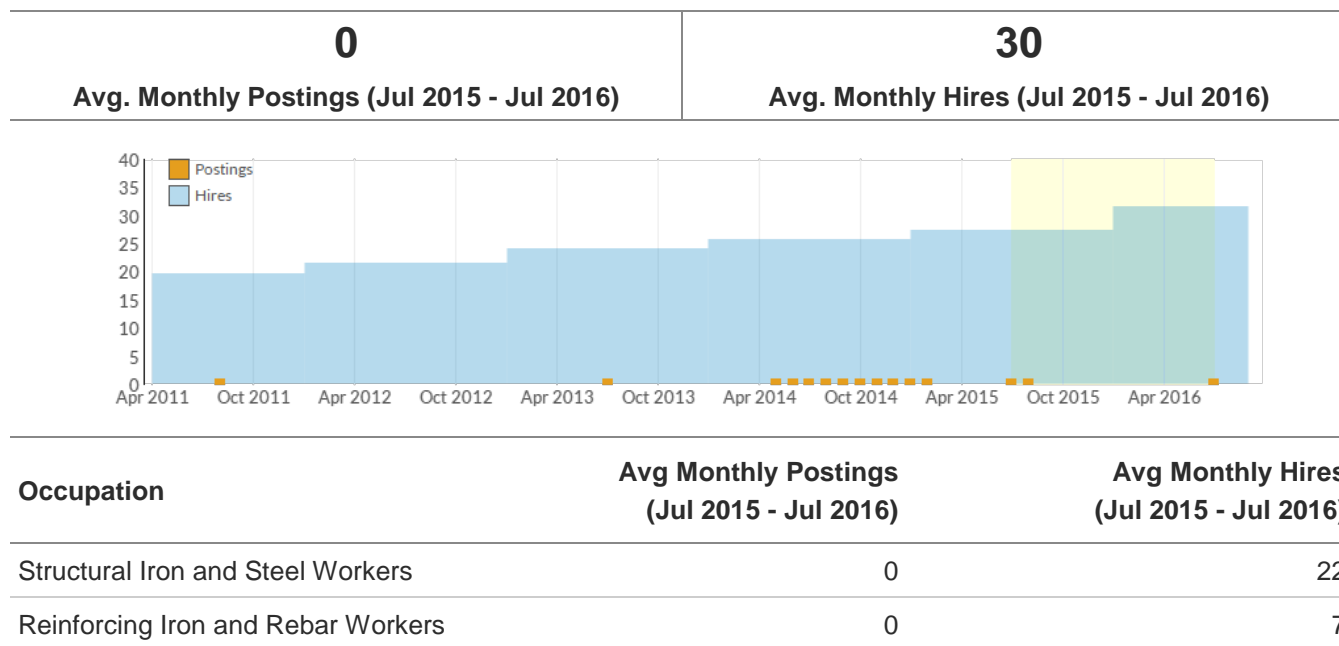
A number of industries in Santa Clara and San Mateo Counties employ those trained in Ironworking and its related occupations. The following table represents a regional industry breakdown of the number of Ironworking positions employed, the percentage of Ironworkers employed by industry and the percentage Ironworking jobs represent within all jobs by each industry. While Commercial and Institutional Building Construction employed 21% of all regional Ironworking positions in 2016, Ironworkers composed a minority of all jobs in that industry (1.3%).

Industries Employing Ironworkers

Industry	Occupation Group Jobs in Industry (2016)	% of Occupation Group in Industry (2016)	% of Total Jobs in Industry (2016)
Commercial and Institutional Building Construction	106	21.1%	1.3%
Glass and Glazing Contractors	62	12.3%	7.6%
Framing Contractors	56	11.3%	7.4%
Siding Contractors	32	6.4%	7.8%
Poured Concrete Foundation and Structure Contractors	30	6.0%	0.7%

In an average month, there were 0 unique (internet) job postings for Ironworking jobs, and 30 actually hired from July 2015 to July 2016. This means there was approximately 0 unique (internet) job posting for occupations in Ironworking. In cases where there were more hires compared to job postings, it suggests that the internet may not be the primary way that job openings for these occupations are advertised.

Job Postings vs. Hires



The top five hard and soft skills employers list in Ironworking job posting descriptions are listed below. The “Postings with Skill” column is the total amount of (internet) job postings that mention the skills listed below. These numbers may be higher than the average monthly postings from above, because this number includes duplicated (internet) job postings.

Top Hard Skills

Skill	Postings with Skill
Construction	2
Decking	2
Paneling	2
Registration	2
Appointment Scheduling	1

Top Soft Skills

Skill	Postings with Skill
Scheduling (Project Management)	1

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.

CareerBuilder/Emsi Job Postings

Job postings are collected from various sources and processed/enriched by Careerbuilder to provide information such as standardized company name, occupation, skills, and geography. Emsi performs additional filtering and processing to improve compatibility with Emsi data.

State Data Sources

This report uses state data from the following agencies: California Labor Market Information Department