

## Labor Market Assessment: 0956.40 – Sheet Metal and Structural Metal Field Iron Workers (Associate Degree; Certificate)

Los Angeles Center of Excellence, April 2022

### Summary

<b>Program Endorsement:</b>	<b>Endorsed: All Criteria Met</b> <input type="checkbox"/>	<b>Endorsed: Some Criteria Met</b> <input checked="" type="checkbox"/>	<b>Not Endorsed</b> <input type="checkbox"/>
<b>Program Endorsement Criteria</b>			
<b>Supply Gap:</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Living Wage: (Entry-Level, 25<sup>th</sup>)</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Education:</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Emerging Occupation(s)</b>			
	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

The Los Angeles Center of Excellence for Labor Market Research (LA COE) prepared this report to provide regional labor market supply and demand data related to four occupations:

- Reinforcing iron and rebar workers (47-2171);
- Sheet metal workers (47-2211);
- Structural iron and steel workers (47-2221); and
- Structural metal fabricators and fitters (51-2041)

Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.<sup>1</sup> This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupations.

Based on the available data, there appears to be a supply gap in the region for the occupations of interest. Although the majority of annual openings in Los Angeles and Orange counties have entry-level wages below the self-sufficiency standard wage, the three occupations with the majority of annual openings in the region have at least one-third of incumbent workers who have completed some college or an associate degree. **Due to some of the criteria being met, the LA COE endorses this proposed program.** Detailed reasons include:

#### Demand:

- **Supply Gap Criteria** – Over the next five years, there is projected to be **883 jobs available annually** in the region due to retirements and workers leaving the field, **which is more than the six awards conferred annually** by educational institutions in the region.

<sup>1</sup> The COE classifies middle-skill jobs as the following:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

- **Living Wage Criteria** – In Los Angeles County, the majority (73%) of annual openings for the occupations of interest have entry-level wages **below** the self-sufficiency standard wage (\$18.10/hour).<sup>2</sup>
- **Educational Criteria** – The Bureau of Labor Statistics (BLS) lists a **high school diploma or equivalent** as the typical entry-level education for the occupations in this report.
  - National-level educational attainment data indicates that between 20% and 34% of workers in the field have completed some college or an associate degree.
    - The three occupations with the majority of the annual openings for these occupations (sheet metal workers; structural iron and steel workers; and structural metal fabricators and fitters) have at least one-third of workers in the field who have completed some college or an associate degree.

### Supply:

- Between 2017 and 2020, **one community college** in the LA/OC region issued awards in sheet metal and structural metal program(s), conferring an average of **six awards**.
- Between 2016 and 2019, there were no non-community college institutions in the LA/OC region that conferred awards in relevant programs.

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<sup>2</sup> Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California. For more information, visit: <http://selfsufficiencystandard.org/california>.

## Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for the four occupations of interest. In the Los Angeles/Orange County region, the number of jobs related to these occupations is projected to decrease by 1% through 2025. However, there will be nearly 900 job openings per year through 2025 due to retirements and workers leaving the field.

*This report includes employment projection data by Emsi which uses EDD information. Emsi's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy, during the projection period, will be at approximately full employment. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it may impact the projections. At this time, it is not possible to quantify the full impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the full impacts of COVID-19 into account.*

**Exhibit 1: Occupational demand in Los Angeles and Orange Counties<sup>3</sup>**

Geography	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	Annual Openings
Los Angeles	5,744	5,671	(73)	(1%)	569
Orange	3,177	3,152	(25)	(1%)	314
<b>Total</b>	<b>8,921</b>	<b>8,823</b>	<b>(98)</b>	<b>(1%)</b>	<b>883</b>

## Wages

The labor market endorsement in this report considers the hourly wages for the four occupations of interest in Los Angeles County, as they relate to the county's self-sufficiency standard wage. Orange County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

**Los Angeles County** – The majority (73%) of annual openings for the occupations of interest have entry-level wages **below** the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County). Typical entry-level hourly wages are in a range between \$13.77 and \$20.45. Experienced workers can expect to earn wages between \$21.93 and \$42.56, which are above the self-sufficiency standard wage estimate.

**Orange County** – The majority (72%) of annual openings for the occupations of interest have entry-level wages **below** the self-sufficiency standard wage for one adult (\$20.63 in Orange County). Typical entry-level hourly wages are in a range between \$14.43 and \$21.28. Experienced workers can expect to earn wages between \$22.31 and \$43.90, which are above the self-sufficiency standard wage estimate.

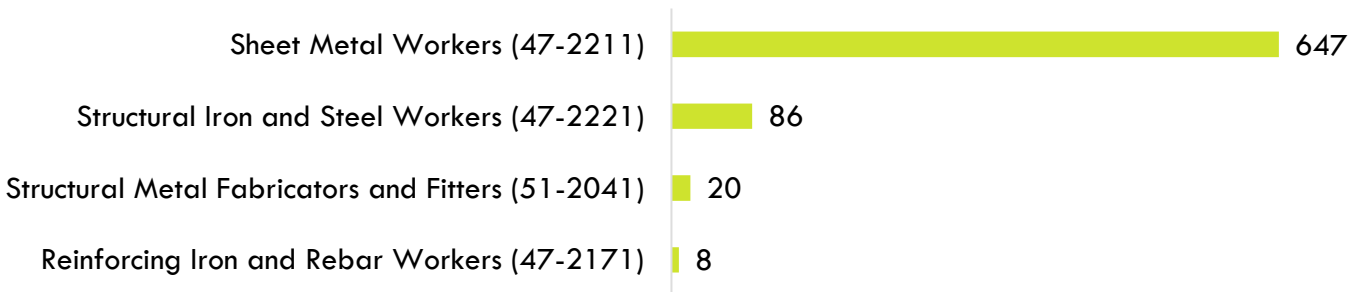
<sup>3</sup> Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

## Job Postings

Over the past 12 months, there have been 761 online job postings related to the four occupations of interest. Exhibit 2 displays the number of job postings by occupation. The majority of job postings (85%) were for *sheet metal workers*. The highest number of job postings were for field installers, sheet metal workers, fabricators, metal fabricators, and deburr technicians. The top skills were welding, power tools, hand tools, sheet metal fabrication, MIG welding, and TIG welding. The top employers, by number of job postings, in the region were Pearce Services, SpaceX, and Honeywell.

*It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the full impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.*

**Exhibit 2: Job postings by occupation (last 12 months)**



## Educational Attainment

The Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entry-level education for each of the four occupations in this report. National-level educational attainment data indicates that between 20% and 34% of workers in the field have completed some college or an associate degree.

**NOTE:** The three occupations with the majority of the annual openings for these occupations (*sheet metal workers; structural iron and steel workers; and structural metal fabricators and fitters*) have at least one-third of workers in the field who have completed some college or an associate degree.

## Educational Supply

**Community College Supply** – Exhibit 3 shows the annual and three-year average number of awards conferred in Sheet Metal and Structural Metal program(s) (TOP 0956.40). Between 2017 and 2020, Long Beach was the only community college in the LA/OC region with completions.

**Exhibit 3: Regional community college awards (certificates and degrees), 2017-2020**

TOP	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
0956.40	Sheet Metal and Structural Metal	Long Beach	1	15	1	6
		<b>LA Subtotal</b>	<b>1</b>	<b>15</b>	<b>1</b>	<b>6</b>
<b>Supply Total/Average</b>			<b>1</b>	<b>15</b>	<b>1</b>	<b>6</b>

**Non-Community College Supply** – Between 2016 and 2019, there were no non-community college institutions in the LA/OC region that conferred awards in relevant programs.

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Reinforcing Iron and Rebar Workers (47-2171)	882	895	13	1%	86	\$13.77	\$16.25	\$21.93
Sheet Metal Workers (47-2211)	2,254	2,273	19	1%	214	\$15.66	\$23.19	\$36.59
Structural Iron and Steel Workers (47-2221)	1,425	1,462	37	3%	155	\$20.45	\$29.70	\$42.56
Structural Metal Fabricators and Fitters (51-2041)	1,184	1,041	(143)	(12%)	114	\$15.46	\$20.04	\$25.98
<b>Total</b>	<b>5,744</b>	<b>5,671</b>	<b>(73)</b>	<b>(1%)</b>	<b>569</b>	<b>-</b>	<b>-</b>	<b>-</b>

Exhibit 5. Orange County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Reinforcing Iron and Rebar Workers (47-2171)	466	458	(8)	(2%)	43	\$14.43	\$16.84	\$22.31
Sheet Metal Workers (47-2211)	1,274	1,307	33	3%	126	\$17.59	\$25.97	\$41.02
Structural Iron and Steel Workers (47-2221)	854	856	2	0%	88	\$21.28	\$30.82	\$43.90
Structural Metal Fabricators and Fitters (51-2041)	583	531	(52)	(9%)	57	\$16.06	\$20.81	\$26.97
<b>Total</b>	<b>3,177</b>	<b>3,152</b>	<b>(25)</b>	<b>(1%)</b>	<b>314</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Exhibit 6. Los Angeles and Orange Counties**

<b>Occupation (SOC)</b>	<b>2020 Jobs</b>	<b>2025 Jobs</b>	<b>5-Yr Change</b>	<b>5-Yr % Change</b>	<b>Annual Openings</b>	<b>Typical Entry-Level Education</b>
Reinforcing Iron and Rebar Workers (47-2171)	1,348	1,353	5	0%	129	HS diploma or equivalent
Sheet Metal Workers (47-2211)	3,528	3,580	52	1%	340	HS diploma or equivalent
Structural Iron and Steel Workers (47-2221)	2,279	2,318	39	2%	243	HS diploma or equivalent
Structural Metal Fabricators and Fitters (51-2041)	1,767	1,573	(194)	(11%)	171	HS diploma or equivalent
<b>Total</b>	<b>8,921</b>	<b>8,823</b>	<b>(98)</b>	<b>(1%)</b>	<b>883</b>	<b>-</b>

**Appendix B: Sources**

- O\*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- California Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- Self-Sufficiency Standard at the Center for Women's Welfare, University of Washington
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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