

Program Endorsement Brief: 0952.10/Carpentry

Orange County Center of Excellence, August 2020

Summary Analysis

Program Endorsement:	Endorsed: All Criteria Met		orsed: iteria Met	Not Endorsed	
	Program E	indorsement Crite	ria		
Supply Gap:	Yes	$\overline{\checkmark}$	No		
Meets Living Wage: (Entry-Level, 25th)	Yes		No		
Typical Entry-Level Education:	HS Diploma or Some College/ Less Cert./AA		Bachelor's Degree	Graduate Degree	
	Emergi	ng Occupation(s)			
Yes			No 🗹		· ·

The Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to two middle-skill occupations: First-Line Supervisors of Construction Trades and Extraction Workers (47-1011) and Carpenters (47-2031). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree. 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 for middle-skill carpentry occupations in the region. However, the Bureau of Labor Statistics (BLS) lists a high school diploma as the typical entry-level education for middle-skill carpentry occupations. Therefore, due to some of the criteria being met, the COE endorses this proposed program. Reasons include:

Demand:

- Over the next five years, there is projected to be 7,817 jobs available annually in the LA/OC region due to new job growth and replacements, which is more than the 31 awards conferred annually by educational institutions in the region.
 - However, the First-Line Supervisors of Construction Trades and Extraction Workers (47-1011) SOC code includes various construction and extraction occupations. Since the SOC code does not solely represent middle-skill carpentry occupations, the number of annual job openings is overstated.

¹ 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.

- Over the past 12 months, there were 1,787 online job postings related to these carpentry occupations. The highest number of job postings were for carpenters, construction superintendents, foremen, construction foremen, journey carpenters, and project superintendents.
- The BLS lists a *high school diploma* or equivalent as the typical entry-level education for these middle-skill carpentry occupations.
 - Within the LA/OC region, all of the annual job openings for these middle-skill carpentry occupations typically require only a high school diploma or equivalent as the entry-level education.
 - However, the national-level educational attainment data indicates between
 25.2% and 31.6% of workers in the field have completed some college or an associate degree.
- Within Orange County, all of the annual job openings for these middle-skill carpentry occupations have entry-level wages above the county's living wage (\$17.36).²

Supply:

- There are 3 educational institutions in the region, all of which are community
 colleges, that issue awards related to carpentry, conferring an average of 31 awards
 annually between 2016 and 2019.
- Over the past 12 months, there were **no other related program recommendation** requests from regional community colleges.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for middle-skill carpentry occupations. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 5% through 2024. There will be more than 7,800 job openings per year through 2024 due to job growth and replacements. It is important to note that First-Line Supervisors of Construction Trades and Extraction Workers (47-1011) SOC code includes a variety of construction and extraction supervisory occupations and not solely carpentry-related occupations. Therefore, the data in Exhibit 1 is overstated for middle-skill carpentry occupations.

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 impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.

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² Living wage data was pulled from California Family Needs Calculator on 7/8/2020. For more information, visit the California Family Needs Calculator website: https://insightcced.org/2018-family-needs-calculator/.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change	Annual Openings
Los Angeles	45,384	47,269	1,885	4%	5,209
Orange	21,497	22,985	1,488	7%	2,608
Total	66,881	70,254	3,373	5%	7,817

Wages—

The labor market endorsement in this report considers the entry-level hourly wages for these middle-skill carpentry occupations in Orange County as they relate to the county's living wage. Los Angeles 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.

Orange County—All of the annual openings for these middle-skill carpentry occupations have entry-level wages above the California Family Needs Calculator hourly wage (living wage) for one adult (\$17.36 in Orange County). ⁴ Typical entry-level hourly wages are between \$17.79 and \$28.87. Experienced workers can expect to earn wages between \$38.50 and \$48.83, which are higher than the living wage estimate. Orange County's average wages are above the average statewide wage of \$30.32 for these occupations.

Los Angeles County— The majority (63%) of annual openings for these middle-skill carpentry occupations have entry-level wages below the California Family Needs Calculator hourly wage (living wage) for one adult (\$15.04 in Los Angeles County). Typical entry-level hourly wages are between \$14.80 and \$24.96. Experienced workers can expect to earn wages between \$33.22 and \$44.35, which are higher than the living wage estimate. Los Angeles County's average wages are below the average statewide wage of \$30.32 for these occupations.

Job Postings—There were 1,787 online job postings related to middle-skill carpentry occupations listed in the past 12 months. The highest number of job postings were for carpenters, construction superintendents, foremen, construction foremen, journey carpenters, and project superintendents. The top skills were: scheduling, carpentry, construction management, project management, and repair. The top three employers, by number of job postings, in the region were: Eleven Western Builders Incorporated, Johnson Construction Management, and Create Construction Management.

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 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.

Educational Attainment—The Bureau of Labor Statistics (BLS) lists a high school diploma as the typical entry-level education for middle-skill carpentry occupations. In Orange County, all of the

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

 $^{^4}$ Living wage data was pulled from California Family Needs Calculator on 7/6/2020. For more information, visit the California Family Needs Calculator website: https://insightcced.org/2018-family-needs-calculator/.

annual job openings typically only require a high school diploma or equivalent. However, the national-level educational attainment data indicates between 25.2% and 31.6% of workers in the field have completed some college or an associate degree. Of the 22% of middle-skill carpentry job postings listing a minimum education requirement in Los Angeles/Orange County, 92% (362) requested a high school diploma and 8% (32) requested an associate degree.

Educational Supply

Community College Supply—Exhibit 2, on the following page, shows the three-year average number of awards conferred by community colleges in the related TOP code: Carpentry (0952.10). The college with the most completions in the region is LA Trade-Tech. Over the past 12 months, there were no other related program recommendation requests from regional community colleges.

Currently, there are no non-community college programs or awards associated with this occupation in the Los Angeles/Orange County region.

Exhibit 2: Regional community college awards (certificates and degrees), 2016-2019

TOP Code	Program	College	2016- 2017 Awards	2017- 2018 Awards	2018- 2019 Awards	3-Year Award Average
0952.10 Carpentry		LA Trade-Tech	29	38	21	29
		LA Subtotal	29	38	21	29
	Carpentry	Fullerton	1	-	3	1
		Santiago Canyon	1	-	1	1
		OC Subtotal	2	-	4	2
Supply Total/Average			31	38	25	31

Appendix A: Occupational demand and wage data by county

Exhibit 4. Orange County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry- Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	8,359	9,050	691	8%	1,052	\$28.87	\$38.03	\$48.83
Carpenters (47-2031)	13,138	13,935	797	6%	1,555	\$1 <i>7.</i> 79	\$26.14	\$38.50
Total	21,497	22,985	1,488	7%	2,608			

Exhibit 5. Los Angeles County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry- Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	16,130	16,929	799	5%	1,914	\$24.96	\$33.92	\$44.35
Carpenters (47-2031)	29,253	30,340	1,087	4%	3,295	\$14.80	\$22.48	\$33.22
Total	45,384	47,269	1,885	4%	5,209			

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	24,489	25,979	1,490	6%	2,967
Carpenters (47-2031)	42,392	44,275	1,883	4%	4,851
Total	66,881	70,254	3,373	5%	7,817

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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