



# Labor Market Analysis: 1009.00 – Applied Design Woodworking Manufacturing Technology: Furniture Design

Associate of Science (A.S.) degree

Los Angeles Center of Excellence, June 2025

<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"/>	

## SUMMARY

This report analyzes whether local labor market demand is being met by community college programs aligned with the identified middle-skill occupations<sup>1</sup> or whether a shortage of workers exists. Labor market demand is measured by annual job openings while education supply is measured by the number of awards (degrees and certificates) conferred on average each year.

Based on the available data, there appears to be a supply gap for the three identified middle-skill occupations in the region. While the majority of annual openings have entry-level wages that are lower than the self-sufficiency standard wage in both Los Angeles and Orange counties, the two target occupations with the most annual openings count 90% or more workers in the field that have completed an associate degree or less educational attainment.

**Recommendation:** Due to two of three program endorsement criteria being met, the Los Angeles Center of Excellence for Labor Market Research (LA COE) endorses this proposed program.

## Key Findings

### Supply Gap

- 548 annual job openings are projected in the region through 2028. This number is greater than the three-year average of 196 awards conferred by educational institutions in the region.

<sup>1</sup> Middle-skill occupations typically require some postsecondary education, but less than a bachelor’s degree. 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.

- There is not a dedicated SOC code for wooden furniture designers. The SOC codes in this report most closely align with the knowledge, skills and abilities needed to design and manufacture wooden furniture. Since these SOC codes include many jobs other than furniture designers, the demand data is most likely overstated.
- Over the past 12 months, there were **141 online job postings** for the target occupations that also listed “woodworking” and/or “furniture” as a specialized skill. The highest number of job postings were for woodworkers, furniture assembly technicians, cabinet makers, furniture refinishers, and furniture repair technicians.

### **Living Wage**

- 76% of annual job openings for these woodworking and furniture design occupations have entry-level wages **below** Los Angeles County’s self-sufficiency standard hourly wage (\$24.03/hour).<sup>2</sup>

### **Educational Attainment**

- 76% of the annual job openings typically require a high school diploma or equivalent for the target occupations in the LA/OC region.
- 20%-29% of workers in the field have completed some college or an associate degree, according to national educational attainment data.
  - While only 28% of *commercial and industrial designers* have completed an associate degree or less educational attainment, 90%-91% of *cabinetmakers and bench carpenters* and *furniture finishers*, the target occupations with the most annual openings, have completed an associate degree or less educational attainment.

### **Community college supply**

- 3 community colleges issued awards related to woodworking in the greater LA/OC region.
- 27 awards (degrees and certificates) were conferred on average each year between 2022 and 2024.

### **Other postsecondary supply**

- 9 educational institutions in the LA/OC region have conferred awards in programs related to applied design over the past three years.
- 169 awards were conferred on average each year by other postsecondary institutions throughout the greater LA/OC region between 2021 and 2023.

## **TARGET OCCUPATIONS**

LA COE prepared this report to provide regional labor market and postsecondary supply data related to three target occupations. Although *commercial and industrial designers* typically require a bachelor’s degree, they are included in this report since this occupation closely aligns with the knowledge, skills and abilities required to design and manufacture furniture. [For full occupation descriptions, please see Appendix.](#)

- **Commercial and Industrial Designers (21-1021)**<sup>3</sup>

<sup>2</sup> Center for Women’s Welfare, University of Washington. (2024). *The self-sufficiency standard for California 2024.* <http://selfsufficiencystandard.org/California>.

<sup>3</sup> [Industrial Designers \(bls.gov\)](https://www.bls.gov)

- **Cabinetmakers and Bench Carpenters (51-7011)**<sup>4</sup>
- **Furniture Finishers (51-7021)**<sup>5</sup>

## OCCUPATIONAL DEMAND

Exhibit 1 shows the five-year occupational demand projections for these woodworking and furniture design occupations. In the greater Los Angeles/Orange County region, the number of jobs related to these occupations is projected to decrease by 14% through 2028. However, there will be nearly 550 job openings per year through 2028 due to retirements and workers leaving the field. It is important to note that there is not a dedicated SOC code for wooden furniture design. The SOC codes in this report most closely align with the knowledge, skills and abilities needed to design and manufacture wooden furniture. Since these SOC codes include many jobs other than furniture designers, the data in Exhibit 1 is likely overstated. The majority of jobs in 2023 for these target occupations (69%) were located in Los Angeles County.

**Exhibit 1: Current employment and occupational demand, Los Angeles and Orange counties**<sup>6</sup>

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	4,463	3,626	(838)	(19%)	365
Orange	2,033	1,959	(74)	(4%)	183
<b>Total</b>	<b>6,496</b>	<b>5,585</b>	<b>(912)</b>	<b>(14%)</b>	<b>548</b>

### Detailed Occupation Data

Exhibit 2 displays the current employment and projected occupational demand for each of the target occupations in Los Angeles County. Positive scores for automation resilience<sup>7</sup> reflect a lower-than-average threat of the occupation(s) being replaced by automation, while negative scores reflect a greater-than-average risk of automation. The average percentage of workers aged 55+ across all occupations in the Los Angeles/Orange County region is 26%; occupations with a larger share of workers aged 55 and older typically have greater replacement needs to offset the amount of impending retirements. On average, 81% of workers across all occupations in California are employed full-time.

<sup>4</sup> [Woodworkers \(bls.gov\)](https://www.bls.gov)

<sup>5</sup> [Ibid.](#)

<sup>6</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.

<sup>7</sup> Automation risk is calculated based on the percentage of time spent on high-risk compared to low-risk work, the number of high-risk jobs in compatible occupations, and the overall industry automation risk.

## Exhibit 2: Detailed employment and occupational demand, Los Angeles County<sup>8</sup>

Occupation	2023 Jobs	2028 Jobs	5-Yr % Change	Annual Openings	Automation Resilience	% Aged 55 and older	% Full Time Workers
Commercial and Industrial Designers	1,535	1,240	(19%)	89	18.7	25%	100%
Cabinetmakers and Bench Carpenters	2,489	1,976	(21%)	217	(24.3)	40%	Data unavail.
Furniture Finishers	438	409	(7%)	60	(15.3)	39%	Data unavail.
<b>Total</b>	<b>4,463</b>	<b>3,626</b>	<b>(19%)</b>	<b>365</b>	<b>-</b>	<b>-</b>	<b>-</b>

## WAGES

The labor market endorsement in this report considers the entry-level hourly wages for these woodworking and furniture design occupations 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 greater Los Angeles/Orange County region.

### Los Angeles County

The majority, 76%, of annual openings for woodworking and furniture design occupations have entry-level wages below the self-sufficiency standard wage for one adult (\$24.03 in Los Angeles County). Typical entry-level hourly wages are in a range between \$17.40 and \$33.53. (Exhibit 3).

One occupation has entry-level wages above the self-sufficiency standard wage:

- *Commercial and industrial designers*, \$33.53

Experienced workers can expect to earn wages between \$24.63 and \$60.66, which are higher than the self-sufficiency standard.

## Exhibit 3: Earnings for occupations in Los Angeles County

Occupation	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)	Median Annual Earnings*
Commercial and Industrial Designers	\$33.53	\$44.05	\$60.66	\$91,600
Cabinetmakers and Bench Carpenters	\$18.95	\$21.94	\$27.42	\$45,600
Furniture Finishers	\$17.40	\$21.11	\$24.63	\$43,900

\*Rounded to the nearest \$100

<sup>8</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.

## Orange County

The majority, 78%, of annual openings for woodworking and furniture design occupations have entry-level wages below the self-sufficiency standard wage for one adult (\$27.13 in Orange County). Typical entry-level hourly wages are in a range between \$18.40 and \$34.86 (Exhibit 4).

One occupation has entry-level wages above the self-sufficiency standard wage:

- *Commercial and industrial designers*, \$34.86

Experienced *furniture finishers* can expect to earn \$25.44, which is below the self-sufficiency standard wage. However, experienced *cabinetmakers and bench carpenters* and *commercial and industrial designers* can expect to earn wages between \$29.28 and \$61.54, which are higher than the self-sufficiency standard.

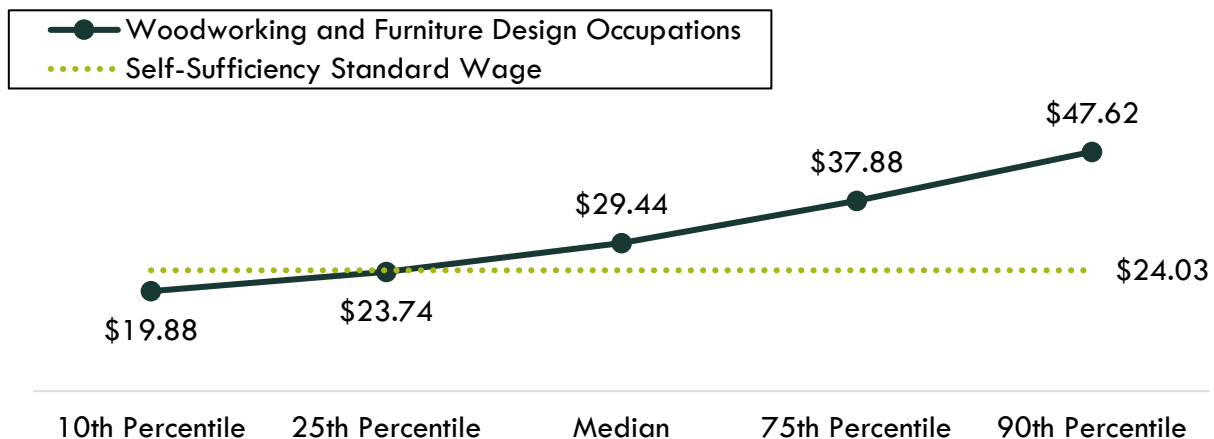
**Exhibit 4: Earnings for occupations in Orange County**

Occupation	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)	Median Annual Earnings*
Commercial and Industrial Designers	\$34.86	\$45.03	\$61.54	\$93,700
Cabinetmakers and Bench Carpenters	\$20.64	\$23.64	\$29.28	\$49,200
Furniture Finishers	\$18.40	\$22.27	\$25.44	\$46,300

\*Rounded to the nearest \$100

Across the greater Los Angeles and Orange County region, the average entry-level hourly earnings for the occupations in this report are \$23.74; this is below the living wage for one single adult in Los Angeles County (\$24.03). Exhibit 5 shows the average hourly wage for the occupations in this report, for entry-level to experienced workers.

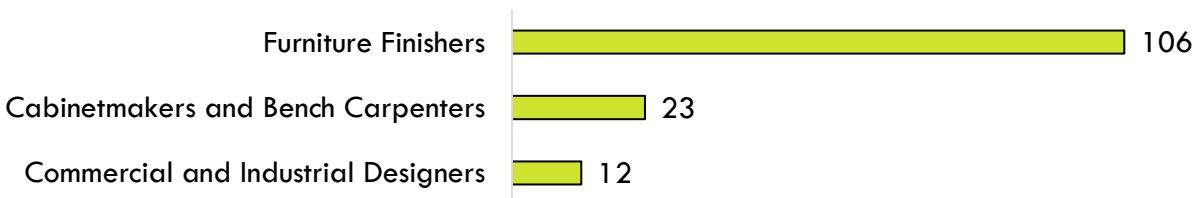
**Exhibit 5: Average hourly earnings for woodworking and furniture design occupations, Los Angeles and Orange counties**



## JOB POSTINGS

In the past 12 months in Los Angeles and Orange counties, there were 141 online job postings for the target occupations that also listed “woodworking” and/or “furniture” as a specialized skill. Exhibit 6 displays the number of job postings by occupation. The majority of job postings (75%) were for *furniture finishers*, followed by *cabinetmakers and bench carpenters* (16%) and *commercial and industrial designers* (9%).

**Exhibit 6: Job postings by occupation (last 12 months), Los Angeles and Orange counties**



Job postings were analyzed for the most common job titles, skills, and employers associated with the target occupations in this report (Exhibit 7).

**Exhibit 7: Most commonly requested job titles, skills and employers in job postings, Los Angeles and Orange counties**

Top Job Titles	Top Skills	Top Employers
<ul style="list-style-type: none"> <li>• Woodworkers</li> <li>• Furniture assembly technicians</li> <li>• Cabinet makers</li> <li>• Furniture refinishers</li> <li>• Furniture repair technicians</li> <li>• Furniture designers</li> <li>• Furniture makers</li> </ul>	<ul style="list-style-type: none"> <li>• Furniture cleaning</li> <li>• Furniture assembly</li> <li>• Carpentry</li> <li>• Woodworking</li> <li>• Power tool operation</li> <li>• Cabinetry</li> <li>• Hand tools</li> <li>• Sawing</li> <li>• Machinery</li> </ul>	<ul style="list-style-type: none"> <li>• Orange Woodworks</li> <li>• Abrego Handmade Furniture</li> <li>• Aerotek*</li> <li>• Plycon Transportation Group</li> <li>• Alexander&amp;Willis</li> <li>• Chrome Hearts</li> <li>• LECANGS</li> </ul>

\*Staffing company

In the greater Los Angeles/Orange County region, 13% of the target job postings listed a minimum educational requirement. Exhibit 8 details the number and percentage of job postings by educational level.

**Exhibit 8: Education levels requested in job postings for occupations related to woodworking and furniture design, Los Angeles and Orange counties**

Education Level	Job Postings	% of Job Postings
Bachelor's degree	4	21%
Associate degree	0	0%
High school diploma or vocational training	15	79%

## EDUCATIONAL ATTAINMENT

In the greater Los Angeles/Orange County region, the majority of annual job openings (76%) typically require a high school diploma or equivalent (Exhibit 9). The national-level data indicates between 20% and 29% of workers in the field have completed some college or an associate degree as their highest level of educational attainment. While only 28% of *commercial and industrial designers* have completed an associate degree or less educational attainment, 90%-91% of *cabinetmakers and bench carpenters* and *furniture finishers*, the target occupations with the most annual openings, have completed an associate degree or less educational attainment. The Bureau of Labor Statistics (BLS) lists the following typical entry-level education levels for the occupations in this report:

**Exhibit 9: Entry-level education preferred by employers nationally, Bureau of Labor Statistics**

Occupation	Education Level
Commercial and Industrial Designers	Bachelor's degree
Cabinetmakers and Bench Carpenters	High school diploma or equivalent
Furniture Finishers	High school diploma or equivalent

## EDUCATIONAL SUPPLY

### Community College Supply

Exhibit 10 shows the annual and three-year average number of awards conferred by community colleges in the related TOP code: Mill and Cabinet Work (0952.50). The college with the most completions in the region is Cerritos. In the past three years there have been no completions in the region under the target TOP code for this program – Applied Design (1009.00).

**Exhibit 10: Regional community college awards (certificates and degrees), 2022-2024**

TOP Code	Program	College	2021-22 Awards	2022-23 Awards	2023-24 Awards	3-Year Average
0952.50	Mill and Cabinet Work	Cerritos	3	37	29	23
		El Camino	1	4	3	3
		<b>LA Subtotal</b>	<b>4</b>	<b>41</b>	<b>32</b>	<b>26</b>
		Santiago Canyon	-	2	1	1
		<b>OC Subtotal</b>	<b>-</b>	<b>2</b>	<b>1</b>	<b>1</b>
<b>Supply Total/Average</b>			<b>4</b>	<b>43</b>	<b>33</b>	<b>27</b>

Exhibit 11 displays the community college awards broken down by award type. In this case, the majority of awards issued by community colleges are certificates of achievement (68%).

**Exhibit 11: Regional community college awards (certificates and degrees), 2022-2024**

Award Type	# of Awards	% of Awards
A.A./A.S. degrees	9	34%
Certificates	18	68%
	<b>27</b>	<b>100%</b>

## Other Postsecondary Supply

For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that provide training programs for applied design. Exhibit 12 shows the number of awards conferred by these institutions in relevant programs. Due to different data collection periods, the most recent data is from 2021 to 2023. Between 2021 and 2023, other postsecondary college institutions in the region conferred an average of 169 bachelor’s and sub-baccalaureate awards. Sub-baccalaureate awards include associate degrees, postsecondary awards, and other academic awards that typically take fewer than four years to complete. In the past three years, there were no completions under these woodworking-related CIP codes – Woodworking, General (48.0701) or Furniture Design and Manufacturing (48.0702).

**Exhibit 12: Other regional postsecondary awards, 2021-2023**

CIP Code	Program	Postsecondary Institution	2020-21 Awards	2021-22 Awards	2022-23 Awards	3-Year Average
50.0401	Design and Visual Communications, General	Azusa Pacific Univ.	-	12	10	7
		Biola University	9	9	8	9
		CA College of ASU	7	1	-	3
		Fashion Institute of Design & Merch.	69	57	40	55
		Gnomon	42	31	-	24
		LA Pacific College	1	1	1	1
		Otis College of Art and Design	30	39	42	37
		UCLA	-	1	-	0
		USC	22	29	47	33
<b>Supply Total/Average</b>			<b>180</b>	<b>180</b>	<b>148</b>	<b>169</b>

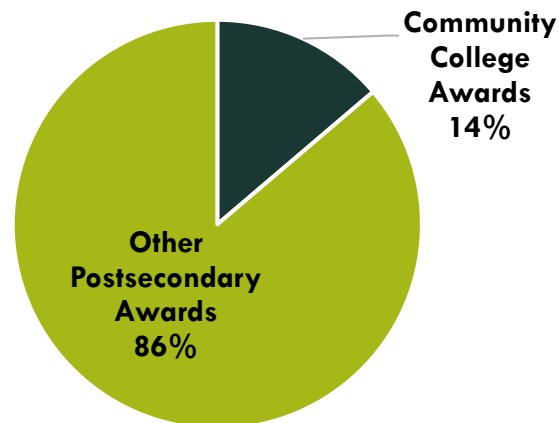
Exhibit 13 shows the breakdown of other postsecondary awards by award type. Just over half of awards issued by other postsecondary schools are bachelor’s degrees (52%).

**Exhibit 13: Regional community college awards (certificates and degrees), 2022-2024**

Award Type	# of Awards	% of Awards
Bachelor’s degrees	88	52%
Sub-baccalaureate awards	81	48%
	<b>169</b>	<b>100%</b>

Exhibit 14 shows the proportion of community college awards conferred in the greater Los Angeles/Orange County region compared to the number of other postsecondary awards for the programs in this report. The majority of awards conferred in these programs are awarded by other institutions in the greater Los Angeles/Orange County region.

**Exhibit 14: Percentage of community college awards compared to other postsecondary institution awards in the Los Angeles/Orange County region**



## **APPENDIX: OCCUPATION DESCRIPTIONS**

LA COE prepared this report to provide regional labor market supply and demand data related to these target occupations:

- **Commercial and Industrial Designers (21-1021)** Design and develop manufactured products, such as cars, home appliances, and children’s toys. Combine artistic talent with research on product use, marketing, and materials to create the most functional and appealing product design.<sup>9</sup>
- **Cabinetmakers and Bench Carpenters (51-7011)** Cut, shape, and assemble wooden articles or set up and operate a variety of woodworking machines, such as power saws, jointers, and mortisers to surface, cut, or shape lumber or to fabricate parts for wood products.<sup>10</sup>
- **Furniture Finishers (51-7021)** Shape, finish, and refinish damaged, worn, or used furniture or new high-grade furniture to specified color or finish.<sup>11</sup>

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<sup>9</sup> [Industrial Designers \(bls.gov\)](https://www.bls.gov)

<sup>10</sup> [Woodworkers \(bls.gov\)](https://www.bls.gov)

<sup>11</sup> [Woodworkers \(bls.gov\)](https://www.bls.gov)

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**DATA SOURCES**

- O\*NET Online
- Lightcast (formerly 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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