

Program Endorsement Brief: 0201.00/Architecture and Architectural Technology Architecture

Los Angeles/Orange County Center of Excellence, April 2019

Summary

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide regional labor market supply and demand data related to architecture and architectural technology. 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 relevant occupations.

The following summarizes key findings from this data brief:

- The number of jobs for architectural and civil drafters is projected to increase by 2% through 2023; more than 550 job openings will be available annually due to new job growth and replacement need (retirements).
- Over the past 12 months, there have been 107 online middle-skill postings for architectural and civil drafting-related jobs in Los Angeles and Orange Counties.
- Six other related program recommendation requests were received in 2018 from regional community colleges.
- Twenty colleges in the region have existing architecture and architectural technology, drafting technology, and architectural drafting programs.
- Between 2015 and 2018, community colleges in the region conferred an average of 545 awards annually (associate degrees and certificates) in related training programs.

Occupational Demand — In Los Angeles/Orange County, the number of jobs for architectural and civil drafters is projected to increase by 2% through 2023. There will be more than 550 job openings per year due to new job growth and replacement need (retirements).

Exhibit 1: Occupational demand in Los Angeles and Orange Counties¹

Geography	2018 Jobs	2023 Jobs	2018-2023 Change	2018-2023 % Change	Annual Openings
Los Angeles	4,272	4,360	88	2%	381
Orange	1,945	1,984	39	2%	174
Total	6,217	6,344	127	2%	555

¹ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Wages — Entry-level and median hourly wages for architectural and civil drafters in the region are \$18.62 and \$28.31, respectively. Entry-level wages are higher than the MIT Living hourly wage for one adult in the region (\$14.36 in Los Angeles County and \$15.85 in Orange County). Experienced workers earn \$40.75, which is higher than the living wage.

Job Postings — There were 107 online **middle-skill** postings for architectural and civil drafting-related jobs listed in the past 12 months. The majority of job postings were for CAD drafters structural designers, draftsmen, and civil designers. Top specialized skills include: AutoCAD, Revit, and interior design. The top employers, by number of job postings, in the region are Jacobs Engineering Group and Parsons Commercial Group.

Educational Attainment — The BLS lists an associate degree as the typical entry-level education for this occupation. The national-level educational attainment data indicates 62% of workers in the field have completed some college or an associate degree. Of job postings including a minimum education requirement in Los Angeles/Orange County, 55% request an associate degree.

Community College Supply — Appendix A shows the annual and three-year average number of awards conferred by community colleges in Architecture and Architectural Technology (0201.00), Drafting Technology (0953.00) and Architectural Drafting (0953.10). The colleges with the most architecture and architectural technology completions are: Mt San Antonio, East LA, and Orange Coast. Last year, there were six other related program recommendation requests from regional community colleges.

Appendix A: Regional community college awards (certificates and degrees), 2015-2018

TOP Code	Program	College	2015-16 Awards	2016-17 Awards	2017-18 Awards	3-Year Award Average
0201.00	Architecture and Architectural Technology	Cerritos	16	20	17	18
		Citrus	-	-	2	1
		Compton	2	-	-	1
		East LA	103	25	34	54
		El Camino	18	21	35	25
		Fullerton	8	9	8	8
		Glendale	4	3	4	4
		LA Harbor	14	10	5	10
		LA Pierce	7	4	8	6
		LA Trade-Tech	8	9	8	8
		LA Valley	3	2	4	3
		Long Beach	6	12	10	9
		Mt San Antonio	19	67	82	56
		Orange Coast	34	43	82	53
		Pasadena	7	5	11	8
		Rio Hondo	17	13	19	16
Saddleback	6	14	12	11		
Subtotal/Average			272	257	341	290

TOP Code	Program	College	2015-16 Awards	2016-17 Awards	2017-18 Awards	3-Year Award Average
0953.00	Drafting Technology	Cerritos	25	45	41	37
		Citrus	9	7	2	6
		East LA	20	41	33	31
		El Camino	16	14	11	14
		Fullerton	5	8	8	7
		Golden West	19	16	17	17
		Irvine	2	3	5	3
		LA Harbor	2	5	2	3
		LA Pierce	N/A	3	6	5
		LA Valley	1	1	2	1
		Mt San Antonio	55	30	45	43
		Pasadena	5	2	N/A	4
		Rio Hondo	21	19	9	16
		Saddleback	1	2	N/A	2
		Santa Ana	30	8	20	19
Subtotal/Average			204	203	321	243
0953.10	Architectural Drafting	Citrus	1	N/A	1	1
		Fullerton	-	-	4	1
		Long Beach	2	4	12	6
		Santa Ana	14	1	3	6
Subtotal/Average			5	16	15	12
Total/Average			481	476	677	545

Appendix B: Occupational demand and wage data by county

Exhibit 2. Los Angeles County

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Architectural and Civil Drafters (17-3011)	4,272	4,360	88	2%	381	\$18.49	\$28.47	\$41.27

Exhibit 3. Orange County

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Architectural and Civil Drafters (17-3011)	1,945	1,984	39	2%	174	\$18.86	\$27.92	\$39.18

Exhibit 4. Los Angeles and Orange Counties

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Architectural and Civil Drafters (17-3011)	6,217	6,344	127	2%	555	\$18.62	\$28.31	\$40.75

Appendix C: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (EMSI)
- Employment Development Department, Labor Market Information Division, OES
- Employment Development Department, Unemployment Insurance Dataset
- Living Insight Center for Community Economic Development
- California Community Colleges Chancellor's Office Management Information Systems
- MIT Living Wage

For more information, please contact:

Lori Sanchez, Director
 Center of Excellence, Los Angeles/Orange County Region
Lsanchez144@mtsac.edu
 April 2019

