

Labor Market Assessment: 1030.00 – Graphic Art and Design
Graphic Design I & II (Certificate); Interactive Design I & II (Certificate)
 Los Angeles/Orange County Center of Excellence, February 2022

Summary

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

The Los Angeles/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 four middle-skill occupations:

- *Web developers and digital interface designers (15-1257);*
- *Special effects artists and animators (27-1014);*
- *Graphic designers (27-1024); and*
- *Desktop publishers (43-9031).*

Middle-skill occupations typically require some postsecondary education, but less than a bachelor’s degree.¹ 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 the occupations of interest in the region. Although all four occupations have entry-level wages that exceed the self-sufficiency standard wage in Los Angeles County, 75% of the annual openings in the LA/OC region typically require a bachelor’s degree. **Due to some of the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria**—Over the next five years, there is projected to be **3,369 jobs available annually** in the region due to new job growth and replacements, **which is more than the 1,320 awards conferred annually** by educational institutions in the region.

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.

- **Living Wage Criteria**—In Los Angeles County, all four occupations have entry-level wages **above** the self-sufficiency standard wage (\$18.10/hour).²
- **Educational Criteria** – Within the LA/OC region, **75% of the annual openings** for the occupations of interest **typically require a bachelor’s degree**.
 - National-level educational attainment data indicates that between 25% and 40% of incumbent workers have completed some college or an associate degree.

Supply:

- Between 2017 and 2020, **25 community colleges** in the LA/OC region issued awards in programs that have historically trained for the occupations of interest, conferring an average of **404 awards**.
- Between 2016 and 2019, non-community college institutions in the region conferred an average of **916 awards in relevant programs**.

² 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 Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 2% through 2025. There will be nearly 3,400 job openings per year through 2025 due to job growth and replacements.

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 Counties³

Geography	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	Annual Openings
Los Angeles	27,625	28,326	701	3%	2,682
Orange	7,820	7,845	25	0%	687
Total	35,445	36,171	726	2%	3,369

Wages

The labor market endorsement in this report considers the hourly wages for the four 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 LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County—All four occupations have entry-level wages **above** the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County). Typical entry-level hourly wages are in a range between \$19.21 and \$23.54. Experienced workers can expect to earn wages between \$39.24 and \$61.61.

Orange County—The majority (68%) 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 \$15.40 and \$22.20. Two occupations in this report have entry-level wages above the self-sufficiency standard wage: *web developers and digital interface designers* (\$22.01) and *desktop publishers* (\$22.20). Experienced workers can expect to earn wages between \$38.39 and \$51.91.

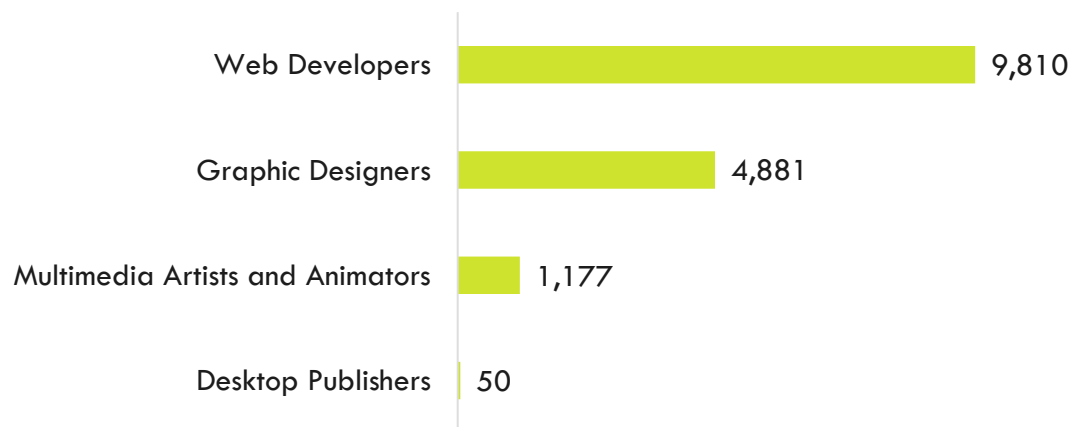
³ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Job Postings

Over the past 12 months, there have been 15,918 online job postings related to the occupations of interest. Exhibit 2 displays the number of job postings by occupation. The majority of job postings (62%) were for *web developers*, followed by *graphic designers* (31%). The highest number of job postings were for graphic designers, UI/UX designers, front-end developers, web developers, and junior graphic designers. The top skills were Adobe Photoshop, JavaScript, Adobe InDesign, Adobe Illustrator, and Adobe Acrobat. The top employers, by number of job postings, in the region were Disney, Amazon, and Deloitte.

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 the following typical entry-level education levels for the occupations in this report:

- **Bachelor's degree:** *special effects artists and animators; graphic designers*
- **Associate degree:** *web developers and digital interface designers; desktop publishers*

In the LA/OC region, the majority of annual openings (75%) typically require a bachelor's degree. National-level educational attainment data indicates that between 25% and 40% of incumbent workers 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 by community colleges programs that have historically trained for the occupations of interest. The colleges with the most completions in the region are Golden West, Santa Monica, and Orange Coast.

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

TOP Code	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
0614.00	Digital Media	Glendale	-	-	1	0
		LA Mission	-	1	4	2
		LA Trade-Tech	7	19	11	12
		Long Beach	1	-	-	0
		Rio Hondo	-	-	2	1
		LA Subtotal	8	20	18	15
		Coastline	-	3	-	1
		Golden West	9	10	10	10
		Irvine Valley	15	9	1	8
		Santa Ana	-	-	1	0
		OC Subtotal	24	22	12	19
Supply Subtotal/Average			32	42	30	35
0614.10	Multimedia	East LA	-	-	2	1
		LA Mission	12	21	18	17
		Long Beach	1	-	-	0
		Pasadena	5	6	1	4
		Santa Monica	5	5	5	5
		LA Subtotal	23	32	26	27
		Cypress	1	-	1	1
		Orange Coast	-	1	2	1
		Santiago Canyon	10	9	3	7
		OC Subtotal	11	10	6	9
		Supply Subtotal/Average			34	42
0614.30	Website Design and Development	LA Pierce	-	3	2	2
		Mt San Antonio	9	9	7	8
		Pasadena	-	-	1	0
		Santa Monica	-	-	2	1
		LA Subtotal	9	12	12	11

TOP Code	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
		Coastline	-	1	1	1
		Fullerton	-	3	-	1
		Irvine Valley	2	3	-	2
		Orange Coast	-	-	9	3
		Saddleback	4	7	2	4
		Santa Ana	1	-	2	1
		Santiago Canyon	9	24	3	12
		OC Subtotal	16	38	17	24
Supply Subtotal/Average			25	50	29	35
0614.50	Desktop Publishing	East LA	-	1	1	1
		LA Subtotal	-	1	1	1
		Fullerton	-	1	2	1
		Santa Ana	6	7	-	4
		OC Subtotal	6	8	2	5
Supply Subtotal/Average			6	9	3	6
0614.60	Computer Graphics and Digital Imagery	Citrus	23	13	12	16
		East LA	-	16	1	6
		LA Subtotal	23	29	13	22
		Coastline	2	5	1	3
		Cypress	1	7	5	4
		Fullerton	1	2	1	1
		N. Orange Adult	4	9	3	5
		Orange Coast	35	38	21	31
		Saddleback	7	4	4	5
		Santa Ana	3	-	11	5
		OC Subtotal	53	65	46	55
Supply Subtotal/Average			76	94	59	76
1030.00	Graphic Art and Design	Cerritos	10	11	11	11
		East LA	10	18	3	10
		El Camino	2	-	1	1
		Glendale	9	6	4	6
		LA City	5	6	22	11
		LA Pierce	15	22	15	17

TOP Code	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
		LA Valley	3	2	5	3
		Long Beach	2	1	2	2
		Mt San Antonio	11	15	11	12
		Pasadena	7	9	7	8
		Rio Hondo	-	30	20	17
		Santa Monica	26	31	50	36
		LA Subtotal	100	151	151	134
		Fullerton	14	12	12	13
		Golden West	22	57	32	37
		Irvine Valley	-	5	16	7
		Saddleback	15	23	15	18
		Santa Ana	1	4	3	3
		Santiago Canyon	9	5	1	5
		OC Subtotal	61	106	79	82
		Supply Subtotal/Average	161	257	230	216
		Supply Total/Average	334	494	383	404

Non-Community College Supply—For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that may provide training programs for the occupations of interest. Exhibit 4 shows the annual and three-year average number of awards conferred by these institutions in programs crosswalked to the community college programs listed in Exhibit 3. Due to different data collection periods, the most recent three-year period of available data is from 2016 to 2019. Between 2016 and 2019, non-community college institutions in the region conferred an average of 916 awards.

Exhibit 4: Regional non-community college awards, 2016-2019

CIP Code	Program	Institution	2016-17 Awards	2017-18 Awards	2018-19 Awards	3-Year Average
09.0702	Digital Communication and Media/Multimedia	CSU-Dominguez Hills	50	41	58	50
		Fremont College	1	1	1	1
		Los Angeles ORT College (CLOSED)	15	10	8	11
		Marymount California University	-	-	3	1
		Vanguard University of Southern California	12	7	8	9
10.0301	Graphic Communications, General	CSU-Los Angeles	2	5	10	6
10.0304	Animation, Interactive Technology, Video Graphics and Special Effects	Art Center College of Design	28	9	18	18
		Gnomon	36	36	40	37
		Laguna College of Art and Design	22	11	37	23
		Los Angeles Film School	11	44	51	35
		Loyola Marymount University	12	20	15	16
		Mt Sierra College	3	6	-	3
		New York Film Academy	28	14	19	20
11.0801	Web Page, Digital/Multimedia and Information Resources Design	DeVry University-CA	36	18	7	20
		University of Phoenix-CA	1	1	2	1
11.0803	Computer Graphics	ABC Adult School	-	5	4	3
		Los Angeles Pacific College	-	-	33	11
50.0102	Digital Arts	Los Angeles Academy of Figurative Art	3	-	3	2
		Marymount California University	12	17	15	15
		Otis College of Art and Design	63	92	69	75

CIP Code	Program	Institution	2016-17 Awards	2017-18 Awards	2018-19 Awards	3-Year Average
		University of Southern California	22	16	14	17
		Woodbury University	3	4	1	3
50.0401	Design and Visual Communications, General	Bethesda University	3	-	-	1
		Biola University	3	2	5	3
		Fashion Institute of Design & Merchandising-LA	181	155	142	159
		Gnomon	28	37	48	38
		Otis College of Art and Design	37	43	34	38
		Platt College-LA	-	5	-	2
		University of La Verne	1	-	-	0
		50.0409	Graphic Design	Art Center College of Design	71	50
California Institute of the Arts	11			11	9	10
California State Polytechnic University-Pomona	123			128	92	114
CSU-Dominguez Hills	-			1	-	0
Chapman University	24			19	17	20
Concordia University-Irvine	12			9	7	9
Fashion Institute of Design & Merchandising-Los Angeles	44			36	38	39
Laguna College of Art and Design	24			21	24	23
Los Angeles Film School	-			-	3	1
Los Angeles Pacific College	-			-	1	0
Mt Sierra College	15			10	-	8
New York Film Academy	-			3	3	2
Otis College of Art and Design	-			-	1	0
Platt College-LA	7			3	-	3
University of La Verne	1	-	-	0		
Supply Total/Average			945	890	913	916

Appendix A: Occupational demand and wage data by county

Exhibit 5. Los Angeles County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Web Developers and Digital Interface Designers (15-1257)	7,056	7,428	372	5%	594	\$23.54	\$35.67	\$49.82
Special Effects Artists and Animators (27-1014)	7,164	7,893	729	10%	898	\$22.23	\$40.05	\$61.61
Graphic Designers (27-1024)	13,230	12,844	(386)	(3%)	1,171	\$19.21	\$28.29	\$39.24
Desktop Publishers (43-9031)	175	161	(14)	(8%)	19	\$22.43	\$29.78	\$45.19
Total	27,625	28,326	701	3%	2,682	-	-	-

Exhibit 6. Orange County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Web Developers and Digital Interface Designers (15-1257)	2,708	2,799	91	3%	217	\$22.01	\$33.48	\$46.88
Special Effects Artists and Animators (27-1014)	810	822	12	1%	85	\$15.40	\$30.40	\$51.91
Graphic Designers (27-1024)	4,242	4,169	(73)	(2%)	379	\$19.13	\$27.84	\$38.39
Desktop Publishers (43-9031)	60	56	(4)	(7%)	6	\$22.20	\$29.14	\$44.00
Total	7,820	7,845	25	0%	687			

Exhibit 7. Los Angeles and Orange Counties

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-Level Education
Web Developers and Digital Interface Designers (15-1257)	9,764	10,226	462	5%	811	Associate degree
Special Effects Artists and Animators (27-1014)	7,975	8,715	740	9%	983	Bachelor's degree
Graphic Designers (27-1024)	17,471	17,013	(458)	(3%)	1,550	Bachelor's degree
Desktop Publishers (43-9031)	235	217	(18)	(8%)	25	Associate degree
Total	35,445	36,171	726	2%	3,369	-

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)

For more information, please contact:

Luke Meyer, Director
 Los Angeles/Orange County Center of Excellence
Lmeyer7@mtsac.edu

