

Program Endorsement Brief: 0614.00/Digital Media Graphic Arts

Orange County Center of Excellence, June 2019

Summary

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 five middle-skill graphic arts occupations: web developers (SOC 15-1134), multimedia artists and animators (27-1014), graphic designers (27-1024), desktop publishers (43-9031), and printing press operators (51-5112). 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 the graphic arts occupations in this report is projected to **decrease by 2% through 2023**. However, nearly **4,200 job openings** will be available annually due to retirements and workers leaving the field.
- In the past 12 months, there were **12,605 online job postings** for graphic arts occupations throughout Los Angeles and Orange Counties.
- The typical entry-level education for these occupations ranges from a high school diploma to a bachelor's degree. The national-level educational attainment data indicates **between 27.2% and 42.7% of workers in the field have completed some college or an associate degree**.
- There are **19 community colleges** in the region that have graphic arts and digital media programs. Of these colleges, 12 colleges are located in Los Angeles County and 7 colleges are located in Orange County.
- Between 2015 and 2018, community colleges in the region **conferred an average of 231 awards annually** (associate degrees and certificates) in related training programs under related TOP Codes.
- Between June 2018 and May 2019, **16 related program recommendation requests under related TOP Codes (0614.00, 0614.30, and 1030.00)** were received.

Occupational Demand

Exhibit 1, on the following page, shows the five-year occupational demand projections for graphic arts occupations. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to decrease by 2% through 2023. However, due to retirements and workers leaving the field, there will be nearly 4,200 job openings per year through 2023.

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	36,408	35,402	(1,006)	(3%)	3,215
Orange	10,498	10,565	67	1%	960
Total	46,906	45,967	(939)	(2%)	4,174

Wages—Average entry-level hourly wages for graphic arts occupations throughout the region are between \$10.59 and \$18.37.² Average entry-level wages for three of these graphic arts occupations (desktop publishers, graphic designers, and web developers) 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). Typically, experienced workers earn between \$28.33 and \$59.02, which is higher than the living wage estimates for both counties. Regional average wages are below the average statewide wage of \$28.36 for these occupations. Wage information, by county, is included in Appendix A.

Job Postings—There were 12,605 online job postings related to graphic arts listed in the past 12 months. The highest number of job postings were for graphic designer, front end developer, web developer, user interface (UI)/user experience (UX) designer, and animator. The top specialized skills were: Adobe Photoshop, JavaScript, Adobe InDesign, Adobe Illustrator and Adobe Acrobat. The top three employers, by number of job postings, in the region were: Activision, Blizzard Entertainment, and Syndicatebleu.

Educational Attainment—The Bureau of Labor Statistics (BLS) lists a high school diploma as the typical entry-level education required for printing press operators, an associate degree for desktop publishers and web developers, and a bachelor’s degree for graphic designers and multimedia artists and animators. The national-level educational attainment data indicates that between 27.2% and 42.7% of workers in the field have completed some college or an associate degree. Of the 6% of job postings listing a minimum education requirement in Los Angeles/Orange County, 65% (501) request a high school diploma or vocational training and 35% (264) request an associate degree.

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 codes: Digital Media (0614.00), Website Design and Development (0614.30), and Graphic Art and Design (1030.00). Golden West, Santa Monica, and Saddleback have the most completions in the region. Between January 2018 and May 2019, there were 16 other related program recommendation requests from regional community colleges.

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.

² Entry-level wage is defined as the tenth percentile hourly wage. Wages for experienced workers are defined as the ninetieth percentile hourly wage.

Exhibit 2: Regional community college awards (certificates and degrees), 2015-2018

TOP Code	Program	College	2014-15 Awards	2015-16 Awards	2016-2017 Awards	3-Year Award Average
0614.00	Digital Media	Coastline	3	0	0	1
		East LA	0	1	0	0
		Golden West	21	13	9	14
		Irvine	12	8	15	12
		LA Trade-Tech	0	0	7	2
		Long Beach	0	0	1	0
		Subtotal/Average	36	22	32	30
0614.30	Website Design and Development	Coastline	0	1	0	0
		El Camino	1	0	0	0
		Irvine	14	8	2	8
		LA Pierce	2	2	0	1
		Mt San Antonio	0	0	9	3
		Saddleback	11	5	4	7
		Santa Ana	0	1	1	1
		Santiago Canyon	9	12	9	10
		Subtotal/Average	37	29	25	30
1030.00	Graphic Art and Design	Cerritos	10	6	10	9
		East LA	13	12	10	12
		El Camino	3	2	2	2
		Fullerton	5	16	14	12
		Glendale	7	14	9	10
		Golden West	31	32	22	28
		Irvine	1	2	0	1
		LA City	6	5	5	5
		LA Pierce	3	10	15	9
		LA Valley	4	3	3	3
		Long Beach	0	0	2	1
		Mt San Antonio	19	21	11	17
		Pasadena	3	10	7	7
		Saddleback	16	17	15	16
		Santa Ana	1	0	1	1
Santa Monica	34	30	26	30		

TOP Code	Program	College	2014-15 Awards	2015-16 Awards	2016-2017 Awards	3-Year Award Average
		Santiago Canyon	13	3	9	8
		Subtotal/Average	169	183	161	171
		Total/Average	242	234	218	231

Appendix A: Occupational demand and wage data by county

Exhibit 3. 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
Graphic Designers (27-1024)	16,203	16,045	(158)	(1%)	1,506	\$14.63	\$21.24	\$39.53
Web Developers (15-1134)	7,227	7,614	387	5%	589	\$18.53	\$27.18	\$58.57
Multimedia Artists and Animators (27-1014)	7,214	6,630	(584)	(8%)	548	\$12.84	\$33.57	\$59.36
Printing Press Operators (51-5112)	5,168	4,569	(599)	(12%)	511	\$10.51	\$15.69	\$28.27
Desktop Publishers (43-9031)	597	544	(53)	(9%)	61	\$16.39	\$25.51	\$40.24
Total	36,408	35,402	(1,006)	(3%)	3,215			

Exhibit 4. 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
Graphic Designers (27-1024)	4,289	4,305	16	0%	400	\$15.18	\$21.57	\$37.42
Web Developers (15-1134)	2,906	3,056	150	5%	236	\$17.90	\$27.91	\$56.09
Printing Press Operators (51-5112)	2,401	2,286	(115)	(5%)	244	\$11.05	\$16.17	\$27.64
Multimedia Artists and Animators (27-1014)	766	792	26	3%	66	\$11.78	\$24.25	\$43.73
Desktop Publishers (43-9031)	136	126	(10)	(7%)	14	\$17.85	\$28.77	\$41.35

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Total	10,498	10,565	67	1%	960			

Exhibit 5. 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
Graphic Designers (27-1024)	20,491	20,350	(141)	(1%)	1,905	\$14.73	\$21.33	\$39.86
Web Developers (15-1134)	10,133	10,670	537	5%	825	\$18.37	\$27.39	\$58.68
Multimedia Artists and Animators (27-1014)	7,979	7,422	(557)	(7%)	614	\$12.69	\$32.21	\$59.02
Printing Press Operators (51-5112)	7,569	6,855	(714)	(9%)	755	\$10.59	\$15.84	\$28.33
Desktop Publishers (43-9031)	733	670	(63)	(9%)	75	\$16.89	\$26.03	\$40.37
Total	46,906	45,967	(939)	(2%)	4,174			

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
- Employment Development Department, Unemployment Insurance Dataset
- Living Insight Center for Community Economic Development
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- MIT Living Wage
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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