

**Program Endorsement Brief: 0614.00/Digital Media
Motion Design; Character and Background Design for Animation and Game Art;
Storyboarding**

Los Angeles/Orange County Center of Excellence, December 2018

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 digital media, **including motion design, character and background design for animation game art and storyboarding**. 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:

- Digital media jobs are decreasing slightly by less than 1% over the next five years, and around 5,100 job openings will be available annually due to replacement need.
- Over the past 12 months, there were 3,245 online middle-skill job postings related to digital media in Los Angeles and Orange Counties.
- Twelve other related program recommendation requests were received between January and November 2018 from regional community colleges.
- Eighteen colleges in the region have existing programs related to digital media.
- Between 2014 and 2017, community colleges in the region conferred an average of 121 awards annually (associate degrees and certificates) in related training programs.

Occupational Demand—In Los Angeles/Orange County, the number of jobs for digital media occupations is projected to decrease slightly by less than 1%. However, there will be around 5,100 job openings per year through 2022 due to retirements and workers leaving the industry (Exhibit 1).

Exhibit 1: Occupational demand in Los Angeles and Orange Counties¹

Geography	2017 Jobs	2022 Jobs	2017-2022 Change	2017-2022 % Change	Annual Openings
Los Angeles	48,237	48,006	(231)	(0%)	4,434
Orange	7,139	7,319	180	3%	666
Total	55,376	55,325	(51)	(0%)	5,100

Wages—Entry-level hourly wages for digital media occupations in the region are between \$7.90 and \$19.01. Entry-level wages for film/video editors and graphic designers are higher than the MIT Living hourly wage for one adult in the region (\$13.54 in Los Angeles County and \$15.31 in

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.

Orange County). Experienced workers earn between \$37.69 and \$101.31 per hour, which is higher than the living wage. Regional wages are above the average statewide wage for this occupation.

Job Postings— Real-time labor market information provides a more nuanced view of the current regional job market, and can identify more specific positions within the occupation codes, including motion design, character background and storyboarding. In order to find these digital media jobs, the following skills were searched: graphic design, live-action production, animation, game art and time-based media.

There were 3,245 online middle-skill job postings related digital media listed in the past 12 months. The majority of job postings are for graphic designer, animator, junior graphic designer, artist and production artist. The top three employers, by number of job postings, in the region are: Activision, Blizzard Entertainment and Electronic Arts. Top specialized skills are: Adobe Photoshop, Adobe InDesign and Adobe Illustrator. The following digital media skills were mentioned in jobs postings: motion graphics (201 job postings), character design (92), motion capture (82), storyboarding (48).

Educational Attainment—The BLS lists a Bachelor’s degree as the typical entry-level education for these digital media occupations. The national-level educational attainment data indicates between 27% and 30% of workers in the field have completed some college or an associate degree. In Los Angeles/Orange County, 55% of job postings request a high school education.

Community College Supply—Appendix A shows the three-year average number of awards conferred by community colleges in the related TOP codes: Digital Media (0614.00), Multimedia (0614.10), Electronic Game Design (0614.20) and Animation (0614.40). The colleges with the most completions in the region are: Mt. San Antonio, Santa Monica and Golden West. Between January and November 2018, there were 12 other related program recommendation requests from regional community colleges.

Appendix A: Regional community college awards (certificates and degrees), 2014-2017

TOP Code	Program	College	2014-15 Awards	2015-16 Awards	2016-2017 Awards	3-Year Award Average
0614.00	Digital Media	Coastline	-	3	-	1
		East LA	-	-	1	0
		Golden West	10	21	13	15
		Irvine	7	12	8	9
		LA Pierce	-	-	1	0
		Subtotal/Average	17	36	23	25
0614.10	Multimedia	Cypress	1	-	1	1
		East LA	1	1	-	1
		LA Mission	10	18	7	12
		Long Beach	-	1	1	1
		Orange Coast	5	-	3	3
		Pasadena	3	3	1	2

		Santa Monica	5	3	6	5
		Santiago Canyon	-	3	3	2
Subtotal/Average			25	29	22	25
0614.20	Electronic Game Design	Golden West	-	1	1	1
Subtotal/Average			0	0	0	0
0614.40	Animation	Cerritos	1	3	4	3
		Cypress	3	1	9	4
		East LA	3	9	3	5
		El Camino	-	1	-	0
		Glendale	4	3	4	4
		Irvine	1	-	-	0
		LA Mission	2	3	4	3
		Mt San Antonio	29	26	19	25
		Rio Hondo	7	10	11	9
		Santa Ana	3	2	5	3
		Santa Monica	15	13	12	13
Subtotal/Average			68	71	71	70
Total/Average			110	137	117	121

Appendix B: Occupational demand and wage data by county

Exhibit 2. Los Angeles County

Occupation (SOC)	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Graphic Designers (27-1024)	16,067	15,973	(94)	(1%)	1,501	\$14.81	\$21.21	\$39.72
Film and Video Editors (27-4032)	13,897	13,821	(76)	(1%)	1,406	\$19.09	\$32.53	\$99.26
Multimedia Artists and Animators (27-1014)	7,547	7,291	(256)	(3%)	609	\$12.32	\$32.90	\$58.95
Art Directors (27-1011)	5,666	5,755	89	2%	486	\$14.94	\$33.14	\$83.98
Fine Artists, Including Painters, Sculptors, and Illustrators (27-1013)	5,060	5,165	105	2%	433	\$7.91	\$10.60	\$37.61
Total	48,237	48,006	(231)	(0%)	4,434			

Exhibit 3. Orange County

Occupation (SOC)	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Graphic Designers (27-1024)	4,240	4,273	33	1%	399	\$15.33	\$21.55	\$37.61
Art Directors (27-1011)	955	984	29	3%	82	\$14.20	\$25.72	\$70.09
Fine Artists, Including Painters, Sculptors, and Illustrators (27-1013)	788	830	42	5%	71	\$7.90	\$10.60	\$34.22
Multimedia Artists and Animators (27-1014)	775	803	28	4%	67	\$11.45	\$23.45	\$43.39
Film and Video Editors (27-4032)	382	429	47	12%	47	\$20.97	\$29.17	\$60.06
Total	7,139	7,319	180	3%	666			

Exhibit 4. Los Angeles and Orange Counties

Occupation (SOC)	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Graphic Designers (27-1024)	20,307	20,246	(61)	(0%)	1,899	\$14.90	\$21.32	\$40.05
Film and Video Editors (27-4032)	14,279	14,250	(29)	(0%)	1,453	\$19.01	\$32.40	\$101.31
Multimedia Artists and Animators (27-1014)	8,322	8,094	(228)	(3%)	676	\$12.20	\$31.51	\$58.66
Art Directors (27-1011)	6,621	6,739	118	2%	567	\$14.82	\$32.18	\$83.16
Fine Artists, Including Painters, Sculptors, and Illustrators (27-1013)	5,848	5,995	147	3%	504	\$7.90	\$10.60	\$37.69
Total	55,376	55,325	(51)	(0%)	5,100			

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 (MIS)
- MIT Living Wage
- Chancellor's Office Curriculum Inventory (COCI 2.0)

For more information, please contact:

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

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