

Program Endorsement Brief: 0612.20/Film Production

Los Angeles/Orange County Center of Excellence, May 2020

Summary Analysis

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 for five middle-skill film production-related occupations: multimedia artists and animators (27-1014), producers and directors (27-2012), sound engineering technicians (27-4014), camera operators, television, video, and motion picture (27-4031), and film and video editors (27-4032). 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 these middle-skill film production-related occupations in the region. Therefore, the COE endorses this proposed program.** Reasons include:

Demand:

- Over the next five years, there is projected to be **5,585 jobs available annually** in the region due to new jobs and replacements (e.g. retirements and workers leaving the field).
- The national-level educational attainment data indicates that between 18.1% and 44.1% of film production workers in the field have completed some college or an associate degree.
- The typical **entry-level hourly wages** for film production occupations throughout the region are between \$17.46 and \$28.16, **which is higher than the California Family Needs Calculator** hourly wage for one adult in the region (\$15.04 in Los Angeles County and \$17.36 in Orange County).²

Supply:

- Between 2016 and 2019, community colleges in the region conferred an average of **1,512 awards annually** in related programs.
- Between 2014 and 2017, non-community college institutions conferred an average of **2,268 awards annually** in related programs.

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.

² Living wage data was pulled from California Family Needs Calculator. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for the five film production-related occupations analyzed in this report. In Los Angeles/Orange County, the number of new jobs related to these occupations is projected to increase by 2% jobs through 2024. There will be 5,585 job openings per year through 2024 due to new jobs and workers leaving the field.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change	Annual Openings
Los Angeles	50,319	51,197	878	2%	5,281
Orange	2,568	2,732	164	6%	303
Total	52,887	53,930	1,043	2%	5,585

Wages — Typical entry-level hourly wages for film production-related occupations throughout the region are between \$17.46 and \$28.16.⁴ These wages are above the California Family Needs Calculator hourly wage for one adult in the region (Los Angeles County \$15.04 and Orange County \$17.36).⁵ Median wages for these occupations of interest are between \$30.12 and \$47.08 per hour. Wage information, by county, is included in Appendix A.

Job Postings — There have been 5,403 online job postings for film production-related occupations listed in the past 12 months. The highest number of job postings were for video editor, animator, producer, videographer, and associate producer. The top skills were: budgeting, scheduling, video editing, animation, project management, and Adobe Photoshop. The top three employers, by number of job postings, in the region were: Disney, Blizzard Entertainment, and National Broadcasting Company (NBC). Of the 5,403 online job postings, 35% list a minimum education requirement.

Educational Attainment — The Bureau of Labor Statistics (BLS) lists a postsecondary certificate as the typical entry-level education for sound engineering technicians and a bachelor's degree for the other four film production-related occupations. National-level educational attainment data indicates that between 18.1% and 44.1% of workers in the field have completed some college or an associate degree. Of the 35% of middle-skill job postings listing a minimum education requirement in Los Angeles/Orange County, 9% (178) requested high school or vocational training, 4% (74) requested an associate degree, and 87% (1,662) requested a bachelor's degree.

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.

⁴ Entry-level wage is defined as the twenty-fifth percentile hourly wage. Wages for experienced workers are defined as the seventy-fifth percentile hourly wage.

⁵ Living wage data was pulled from California Family Needs Calculator. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

Supply

Community College Supply — Exhibit 2 shows the annual and three-year average number of awards conferred by community colleges in the related TOP codes: Radio and Television (0604.00), Radio (0604.10), Television (including combined TV/Film/Video) (0604.20), Film Production (0612.20), Digital Media (0614.00), Multimedia (0614.10), Electronic Game Design (0614.20), Animation (0614.40), Computer Graphics and Digital Imagery (0614.60), Commercial Music (1005.00), Technical Theater (1006.00), and Graphic Art and Design (1030.00). The colleges with the most completions in the region are: LA City, Saddleback, and Santa Monica. During the last twelve months, there was one other related program recommendation request from a regional community college.

Exhibit 2: Regional community college awards, 2016-2019

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
0604.00	Radio and Television	LA Valley	10	14	16	13
		Long Beach	6	10	4	7
		Mt. San Antonio	-	-	2	1
		Santa Monica	19	27	8	18
		LA Subtotal	35	51	30	39
		Fullerton	-	2	3	2
		Saddleback	69	40	206	105
		Santa Ana	-	-	5	2
		Santiago Canyon	-	2	-	1
		OC Subtotal	69	44	214	109
Subtotal/Average			104	95	244	148
0604.10	Radio	LA Valley	8	5	7	7
		Mt. San Antonio	5	11	6	7
		Pasadena	5	9	9	8
		LA Subtotal	18	25	22	22
		Fullerton	7	9	6	7
		Saddleback	-	1	-	0
		OC Subtotal	7	10	6	8
Subtotal/Average			25	35	28	29
0604.20	Television (including combined TV/Film/Video)	Compton	3	2	-	2
		El Camino	19	20	20	20
		Glendale	8	2	8	6
		LA City	96	56	39	64
		LA Pierce	-	5	11	5
		LA Valley	30	20	29	26

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
		Long Beach	-	9	39	16
		Mt. San Antonio	16	21	48	28
		Pasadena	4	9	25	13
		LA Subtotal	176	144	219	180
		Cypress	-	-	3	1
		Fullerton	24	27	56	36
		Orange Coast	-	5	19	8
		Saddleback	6	6	2	5
		Santa Ana	5	11	14	10
		OC Subtotal	35	49	94	59
		Subtotal/Average	211	193	313	239
0612.20	Film Production	Cerritos	5	6	10	7
		LA City	58	34	61	51
		LA Valley	12	10	42	21
		Long Beach	-	4	3	2
		Santa Monica	24	27	40	30
		West LA	29	37	33	33
		LA Subtotal	128	118	189	145
		Orange Coast	36	48	49	44
		Saddleback	7	9	7	8
		OC Subtotal	43	57	56	52
		Subtotal/Average	171	175	245	197
0614.00	Digital Media	East LA	1	-	-	0
		LA Mission	-	-	1	0
		LA Trade	-	7	19	9
		Long Beach	-	1	-	0
		LA Subtotal	1	8	20	10
		Coastline	-	-	3	1
		Golden West	13	9	10	11
		Irvine	8	15	9	11
		OC Subtotal	21	24	22	22
		Subtotal/Average	22	32	42	32
0614.10	Multimedia	LA Mission	8	12	21	14
		Long Beach	1	1	-	1
		Pasadena	1	5	6	4

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
		Santa Monica	6	5	5	5
		LA Subtotal	16	23	32	24
		Cypress	1	1	-	1
		Orange Coast	3	-	1	1
		Santiago Canyon	3	10	9	7
		OC Subtotal	7	11	10	9
		Subtotal/Average	23	34	42	33
0614.20	Electronic Game Design	Golden West	1	1	3	2
		OC Subtotal	1	1	3	2
		Subtotal/Average	1	1	3	2
0614.40	Animation	Cerritos	4	3	7	5
		East LA	3	6	14	8
		El Camino	-	1	5	2
		Glendale	4	6	2	4
		LA Mission	4	4	8	5
		Mt. San Antonio	19	53	67	46
		Pasadena	-	-	2	1
		Rio Hondo	11	11	11	11
		Santa Monica	12	17	9	13
		LA Subtotal	57	101	125	94
		Cypress	9	3	7	6
		Fullerton	-	1	-	0
		Irvine	-	1	1	1
		Santa Ana	5	2	15	7
		OC Subtotal	14	7	23	15
		Subtotal/Average	71	108	148	109
0614.60	Computer Graphics and Digital Imagery	Citrus	7	23	13	14
		East LA	-	-	16	5
		LA Subtotal	7	23	29	20
		Coastline	1	2	5	3
		Cypress	11	1	7	6
		Fullerton	-	1	2	1
		North Orange Adult	2	4	9	5
		Orange Coast	28	35	38	34

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
		Saddleback	8	7	4	6
		Santa Ana	7	3	-	3
		OC Subtotal	57	53	65	58
		Subtotal/Average	64	76	94	78
1005.00	Commercial Music	Cerritos	4	9	3	5
		Citrus	40	58	58	52
		Glendale	-	3	-	1
		LA City	212	183	313	236
		LA Harbor	9	2	6	6
		LA Valley	18	21	7	15
		Long Beach	7	4	-	4
		LA Subtotal	290	280	387	319
		Cypress	13	15	9	12
		Fullerton	12	6	5	8
		Irvine	-	-	1	0
		Orange Coast	7	3	7	6
		Saddleback	1	11	7	6
		Santa Ana	2	5	7	5
		OC Subtotal	35	40	36	37
		Subtotal/Average	325	320	423	356
1006.00	Technical Theater	Citrus	4	9	5	6
		East LA	-	10	7	6
		LA City	20	-	38	19
		LA Pierce	10	12	12	11
		LA Valley	6	2	4	4
		Long Beach	-	1	-	0
		Mt. San Antonio	-	-	1	0
		Pasadena	-	2	4	2
		Santa Monica	11	16	17	15
		LA Subtotal	51	52	88	64
		Cypress	6	3	3	4
		Fullerton	22	10	11	14
		Golden West	3	-	-	1
		Irvine	5	2	3	3
		Orange Coast	-	-	1	0

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
		Saddleback	1	2	-	1
		Santa Ana	1	3	1	2
		OC Subtotal	38	20	19	26
		Subtotal/Average	89	72	107	89
1030.00	Graphic Art and Design	Cerritos	6	10	11	9
		East LA	12	10	18	13
		El Camino	2	2	-	1
		Glendale	14	9	6	10
		LA City	5	5	6	5
		LA Pierce	10	15	22	16
		LA Valley	3	3	2	3
		Long Beach	-	2	1	1
		Mt San Antonio	21	11	15	16
		Pasadena	10	7	9	9
		Rio Hondo	-	-	30	10
		Santa Monica	30	26	31	29
		LA County	113	100	151	121
		Fullerton	16	14	12	14
		Golden West	32	22	57	37
		Irvine	2	-	5	2
		Saddleback	17	15	23	18
		Santa Ana	-	1	4	2
		Santiago Canyon	3	9	5	6
				OC Subtotal	70	61
		Subtotal/Average	183	161	257	200
		Supply Total/Average	1,289	1,302	1,946	1,512

Non-Community College Supply — It is important to consider the supply from non-community college institutions in the region that provide training programs for occupations related to film production. Exhibit 3 shows the annual and three-year average number of awards conferred by institutions in the related Classification of Instructional Programs (CIP) Code: Radio and Television (090.0701), Recording Arts Technology/Technician (10.0203), Animation, Interactive Technology, Video Graphics and Special Effects (10.0304), Computer Graphics (10.0803), Technical Theatre/Theatre Design and Technology (50.0502), and Cinematography and Film/Video Production (50.0602).

Due to different data collection periods, the most recent three-year period of available data is from 2014 to 2017. Between 2014 and 2017, non-community colleges in the region conferred an average of 2,268 awards annually in related training programs.

Exhibit 3: Regional Non-Community College awards, 2014-2017

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
09.0701	Radio and Television	California State University-Fullerton	202	198	191	197
		California State University-Los Angeles	144	187	152	161
		California State University-Northridge	414	414	448	425
		Loyola Marymount University	1	-	-	0
		Pepperdine University	24	23	26	24
		The Academy of Radio and TV Broadcasting	11	20	11	14
		University of La Verne	18	20	9	16
Subtotal/Average			814	862	837	838
10.0203	Recording Arts Technology/ Technician	Los Angeles Film School	320	214	161	232
		Loyola Marymount University	10	9	18	12
		Musicians Institute	171	184	159	171
		SAE Institute of Technology-Los Angeles	166	120	121	136
Subtotal/Average			667	527	459	551
10.0304	Animation, Interactive Technology, Video Graphics and Special Effects	Art Center College of Design	17	28	28	24
		Gnomon School of Visual Effects	17	29	36	27
		Laguna College of Art and Design	7	22	22	17
		Los Angeles Film School	43	19	11	24
		Loyola Marymount University	18	22	12	17
		Mt Sierra College	7	5	3	5
		New York Film Academy	26	26	28	27
Shepherd University	1	2	1	1		
Subtotal/Average			136	153	141	142
11.0803	Computer Graphics	Los Angeles ORT College-Van Nuys Campus	1	-	-	0
Subtotal/Average			1	-	-	0

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
50.0502	Technical Theatre/Theatre Design and Technology	Chapman University	-	1	-	0
		Pepperdine University	2	5	3	3
		University of Southern California	6	7	6	6
		Vanguard University of Southern California	2	-	1	1
Subtotal/Average			10	13	10	11
50.0602	Cinematography and Film/Video Production	Art Center College of Design	22	24	32	26
		Biola University	47	46	49	47
		Chapman University	165	119	162	149
		FIDM-Fashion Institute of Design & Merchandising-Los Angeles	21	10	14	15
		Los Angeles Film School	217	181	77	158
		Loyola Marymount University	67	50	82	66
		Mount Saint Mary's University	4	9	16	10
		New York Film Academy	179	184	94	152
		University of La Verne	-	-	1	0
		University of Southern California	100	89	96	95
		Woodbury University	10	5	8	8
Subtotal/Average			832	717	631	726
Supply Total/Average			2,460	2,272	2,078	2,268

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

Occupation (SOC)	2019 Jobs	2024 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)
Producers and Directors (27-2012)	22,720	23,098	378	2%	2,322	\$28.43	\$47.39	\$70.22
Film and Video Editors (27-4032)	12,233	12,589	356	3%	1,284	\$23.47	\$35.43	\$67.75
Multimedia Artists and Animators (27-1014)	6,556	6,616	60	1%	729	\$22.20	\$34.63	\$48.87
Camera Operators, Television, Video, and Motion Picture (27-4031)	4,905	5,121	216	4%	533	\$18.21	\$30.43	\$45.33
Sound Engineering Technicians (27-4014)	3,906	3,773	(133)	(3%)	413	\$17.55	\$30.61	\$50.96
Total	50,319	51,197	878	2%	5,281			

Exhibit 5. Orange County

Occupation (SOC)	2019 Jobs	2024 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)
Producers and Directors (27-2012)	1,051	1,114	63	6%	119	\$22.99	\$40.06	\$61.50
Multimedia Artists and Animators (27-1014)	611	636	25	4%	74	\$11.61	\$25.30	\$40.29
Film and Video Editors (27-4032)	386	437	51	13%	50	\$18.53	\$31.20	\$58.14
Sound Engineering Technicians (27-4014)	301	311	10	3%	35	\$16.33	\$28.40	\$46.88
Camera Operators, Television, Video, and Motion Picture (27-4031)	219	235	16	7%	25	\$14.75	\$25.54	\$40.80
Total	2,568	2,732	164	6%	303			

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2019 Jobs	2024 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)
Producers and Directors (27-2012)	23,771	24,212	441	2%	2,441	\$28.16	\$47.08	\$69.91
Film and Video Editors (27-4032)	12,619	13,026	407	3%	1,335	\$23.33	\$35.32	\$67.04
Multimedia Artists and Animators (27-1014)	7,167	7,252	85	1%	803	\$21.37	\$33.92	\$48.34
Camera Operators, Television, Video, and Motion Picture (27-4031)	5,123	5,356	233	5%	558	\$18.09	\$30.12	\$45.17
Sound Engineering Technicians (27-4014)	4,207	4,084	(123)	(3%)	448	\$17.46	\$30.45	\$50.65
Total	52,887	53,930	1,043	2%	5,585			

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)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor’s Office Curriculum Inventory (COCI 2.0)

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