

**Program Endorsement Brief: 0614.40 – Animation**  
**Digital Media: Comics & Animation (Certificate of Achievement)**  
 Los Angeles/Orange County Center of Excellence, October 2021

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**Summary Analysis**

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

- *Special effects artists and animators (27-1014);*
- *Sound engineering technicians (27-4014); and*
- *Film and video editors (27-4032)*

Middle-skill occupations typically require some postsecondary education, but less than a bachelor’s degree.<sup>1</sup> 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 does not appear to be a supply gap for the occupations of interest. However, the oversupply is with the COE’s acceptable margin (25% over or under the number of annual openings) and is therefore considered “supply met” rather than a “supply gap.” While the majority of annual openings have entry-level wages that exceed the self-sufficiency standard wage in Los Angeles County, two of the three occupations in this report typically require a bachelor’s degree. **Therefore, 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 **2,127 jobs available annually** in the region due to new job growth and replacements, **which is**

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<sup>1</sup> 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.

**less than the 2,675 awards conferred annually** by educational institutions in the region.

- Although there are more awards conferred than job openings, the data suggests that the **demand has been met for these occupations within the LA/OC region** since the three-year average number of awards (supply) is within the COE's 25% margin of annual job openings (demand).
- Over the past 12 months, there were **2,100 online job postings related to the occupations of interest**. The highest number of job postings were for video editors, motion graphic designers, animators, storyboard artists, audio engineers, and VFX artists.
- **Living Wage Criteria** – In Los Angeles County, **the majority (84%) of annual job openings** for the occupations of interest have **entry-level wages above the self-sufficiency standard hourly wage** (\$18.10/hour).<sup>2</sup>
- **Educational Criteria** – Within the LA/OC region, **84% of the annual job openings** for these occupations related comics and animation **typically require a bachelor's degree**.
  - National-level educational attainment data indicates between 26% and 38% of workers in the field have completed some college or an associate degree.

**Supply:**

- Between 2017 and 2020, **22 community colleges** in the LA/OC region issued awards in programs that have historically trained for the occupations of interest, conferring an average of **815 awards**.
- Between 2016 and 2019, non-community college institutions in the region conferred an average of **1,860 awards**.

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<sup>2</sup> Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California on 10/18/2021. For more information, visit: <http://selfsufficiencystandard.org/california>.

## Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for the three occupations of interest. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 4% through 2025. There will be more than 2,100 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 Counties<sup>3</sup>**

Geography	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	Annual Openings
Los Angeles	19,814	20,607	793	4%	1,976
Orange	1,463	1,523	60	4%	150
<b>Total</b>	<b>21,277</b>	<b>22,131</b>	<b>854</b>	<b>4%</b>	<b>2,127</b>

## Wages

The labor market endorsement in this report considers the hourly wages for the three 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** — The majority (84%) of annual openings for the occupations of interest 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 \$17.16 and \$24.60. Experienced workers can expect to earn wages between \$51.32 and \$69.00, which are above the self-sufficiency standard wage.

**Orange County** — All three occupations 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 \$15.49 and \$19.46. Experienced workers can expect to earn wages between \$48.75 and \$59.11, which are above the self-sufficiency standard wage.

<sup>3</sup> 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 2,100 online job postings related to the occupations of interest. The highest number of job postings were for video editors, motion graphic designers, animators, storyboard artists, audio engineers, and VFX artists. The top skills were Adobe Photoshop, Adobe AfterEffects, video editing, animation, and Adobe Premiere. The top employers, by number of job postings, in the region were Blizzard Entertainment, Disney, and Sony Electronics.

*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.*

## Educational Attainment

The Bureau of Labor Statistics (BLS) lists a bachelor's degree as the typical entry-level education for *special effects artists and animators* (27-2014) and *film and video editors* (27-4032), and a postsecondary non-degree award for *sound engineering technicians* (27-4014). In the LA/OC region, the majority of annual job openings (84%) typically require a bachelor's degree. National-level educational attainment data indicates that between 26% and 38% of workers in the field have completed some college or an associate degree. Of the 35% of job postings listing a minimum education requirement in Los Angeles/Orange County, 19% (135) requested a high school or vocational training, 4% (28) requested an associate degree, and 78% (565) requested a bachelor's degree.

## Educational Supply

**Community College Supply** — Exhibit 2 shows the annual and three-year average number of awards conferred by community colleges in programs that have historically trained for the occupations of interest. The colleges with the most completions in the region are Saddleback, Mt. San Antonio, and LA City. Over the past 12 months, there were four other related program recommendation requests from regional community colleges.

**Exhibit 2: 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
0604.00	Radio and Television	LA Valley	14	16	17	16
		Long Beach	10	4	2	5
		Mt San Antonio	-	2	-	1
		Santa Monica	27	8	29	21
		<b>LA Subtotal</b>	<b>51</b>	<b>30</b>	<b>48</b>	<b>43</b>
		Fullerton	2	3	-	2
		Saddleback	40	206	136	127
		Santa Ana	-	5	-	2
		Santiago Canyon	2	-	-	1
		<b>OC Subtotal</b>	<b>44</b>	<b>214</b>	<b>136</b>	<b>131</b>
<b>Supply Subtotal/Average</b>			<b>95</b>	<b>244</b>	<b>184</b>	<b>174</b>

TOP Code	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
0604.20	Television (including combined TV/Film/Video)	Compton	2	-	-	1
		El Camino	20	20	22	21
		Glendale	2	8	14	8
		LA City	56	39	34	43
		LA Pierce	5	11	26	14
		LA Valley	20	29	31	27
		Long Beach	9	39	35	28
		Mt San Antonio	21	48	54	41
		Pasadena	9	25	45	26
		<b>LA Subtotal</b>	<b>144</b>	<b>219</b>	<b>261</b>	<b>208</b>
		Cypress	-	3	15	6
		Fullerton	27	56	48	44
		Orange Coast	5	19	40	21
		Saddleback	6	2	2	3
		Santa Ana	11	14	17	14
		<b>OC Subtotal</b>	<b>49</b>	<b>94</b>	<b>122</b>	<b>88</b>
<b>Supply Subtotal/Average</b>			<b>193</b>	<b>313</b>	<b>383</b>	<b>296</b>
0612.20	Film Production	Cerritos	6	10	8	8
		LA City	34	61	62	52
		LA Valley	10	42	31	28
		Long Beach	4	3	-	2
		Santa Monica	27	40	59	42
		West LA	37	33	7	26
		<b>LA Subtotal</b>	<b>118</b>	<b>189</b>	<b>167</b>	<b>158</b>
		Orange Coast	48	49	48	48
		Saddleback	9	7	3	6
		<b>OC Subtotal</b>	<b>57</b>	<b>56</b>	<b>51</b>	<b>55</b>
<b>Supply Subtotal/Average</b>			<b>175</b>	<b>245</b>	<b>218</b>	<b>213</b>
0614.40	Animation	Cerritos	3	7	13	8
		East LA	6	14	12	11
		El Camino	1	5	5	4
		Glendale	6	2	6	5
		LA Mission	4	8	11	8
		Mt San Antonio	53	67	58	59
		Pasadena	-	2	1	1
		Rio Hondo	11	11	9	10
		Santa Monica	17	9	19	15
<b>LA Subtotal</b>	<b>101</b>	<b>125</b>	<b>134</b>	<b>120</b>		

TOP Code	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
		Cypress	3	7	1	4
		Fullerton	1	-	1	1
		Irvine Valley	1	1	1	1
		Orange Coast	-	-	1	0
		Santa Ana	2	15	-	6
		<b>OC Subtotal</b>	<b>7</b>	<b>23</b>	<b>4</b>	<b>11</b>
<b>Supply Subtotal/Average</b>			<b>108</b>	<b>148</b>	<b>138</b>	<b>131</b>
<b>Supply Total/Average</b>			<b>571</b>	<b>950</b>	<b>923</b>	<b>815</b>

**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 3 shows the annual and three-year average number of awards conferred by these institutions in programs crosswalked to the TOP in Exhibit 2. 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 1,860 awards.

**Exhibit 3: Regional non-community college awards, 2016-2019**

CIP Code	Program	Institution	2016-17 Awards	2017-18 Awards	2018-19 Awards	3-Year Average
09.0701	Radio and Television	CSU-Fullerton	191	174	205	190
		CSU-Long Beach	-	-	1	0
		CSU-Los Angeles	152	174	158	161
		CSU-Northridge	448	414	399	420
		Pepperdine University	26	26	25	26
		The Academy of Radio and TV Broadcasting	11	23	34	23
		University of La Verne	9	11	22	14
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

CIP Code	Program	Institution	2016-17 Awards	2017-18 Awards	2018-19 Awards	3-Year Average
50.0602	Cinematography and Film/Video Production	Art Center College of Design	32	28	18	26
		Biola University	49	42	62	51
		California Institute of the Arts	17	10	11	13
		Chapman University	162	160	174	165
		Fashion Institute of Design & Merchandising-LA	14	13	14	14
		Los Angeles Film School	77	145	220	147
		Loyola Marymount University	82	71	71	75
		Mount Saint Mary's University	16	8	12	12
		New York Film Academy	94	230	205	176
		University of La Verne	1	-	-	0
		University of Southern California	96	101	105	101
		Woodbury University	8	16	13	12
		50.0699	Film/Video and Photographic Arts, Other	California Institute of the Arts	38	45
Los Angeles Film School	-			30	34	21
Woodbury University	9			18	24	17
<b>Supply Total/Average</b>			<b>1,672</b>	<b>1,879</b>	<b>2,028</b>	<b>1,860</b>

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Special Effects Artists and Animators (27-1014)	7,155	7,314	159	2%	720	\$22.23	\$40.04	\$61.61
Sound Engineering Technicians (27-4014)	3,050	3,078	28	1%	312	\$17.16	\$30.25	\$51.32
Film and Video Editors (27-4032)	9,610	10,215	605	6%	944	\$24.60	\$39.49	\$69.00
<b>Total</b>	<b>19,814</b>	<b>20,607</b>	<b>793</b>	<b>4%</b>	<b>1,976</b>			

Exhibit 5. Orange County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Special Effects Artists and Animators (27-1014)	818	822	4	0%	79	\$15.49	\$30.51	\$52.00
Sound Engineering Technicians (27-4014)	227	229	2	1%	24	\$15.80	\$28.43	\$48.75
Film and Video Editors (27-4032)	419	472	53	13%	47	\$19.46	\$32.88	\$59.11
<b>Total</b>	<b>1,463</b>	<b>1,523</b>	<b>60</b>	<b>4%</b>	<b>150</b>			



**Exhibit 6. Los Angeles and Orange Counties**

<b>Occupation (SOC)</b>	<b>2020 Jobs</b>	<b>2025 Jobs</b>	<b>5-Yr Change</b>	<b>5-Yr % Change</b>	<b>Annual Openings</b>	<b>Typical Entry-Level Education</b>
Special Effects Artists and Animators (27-1014)	7,972	8,136	164	2%	799	Bachelor's degree
Sound Engineering Technicians (27-4014)	3,276	3,307	31	1%	336	Postsecondary non-degree award
Film and Video Editors (27-4032)	10,028	10,687	659	7%	992	Bachelor's degree
<b>Total</b>	<b>21,277</b>	<b>22,131</b>	<b>854</b>	<b>4%</b>	<b>2,127</b>	

**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
- 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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October 2021



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