

Labor Market Analysis: 0604.20/Television (including combined TV/film/video)

Film Studies - Associate in Arts for Transfer (A.A.-T) Degree; Associate of Arts (A.A.) degree; Certificate requiring 16 to <30 semester units

Assistant Editor Certificate - Certificate requiring 6 to <18 semester units

Field Audio Certificate - Certificate requiring 6 to <18 semester units

Grip and Lighting Certificate - Certificate requiring 6 to <18 semester units

Post-Production Sound Certificate - Certificate requiring 6 to <18 semester units

Camera Assistant Certificate - Certificate requiring 6 to <18 semester units

Production Management - Certificate requiring 6 to <18 semester units

Development and Writers' Assistant Certificate - Certificate requiring 6 to <18 semester units

Los Angeles Center of Excellence, January 2024

Summary

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

The Los Angeles Center of Excellence for Labor Market Research (LA COE) prepared this report to provide regional labor market supply and demand data related to five middle-skill occupations:

- **Audio and Video Technicians (27-4011)** Set up, maintain, and dismantle audio and video equipment, such as microphones, sound speakers, connecting wires and cables, sound and mixing boards, video cameras, video monitors and servers, and related electronic equipment for live or recorded events, such as concerts, meetings, conventions, presentations, podcasts, news conferences, and sporting events.¹
- **Sound Engineering Technicians (27-4014)** Assemble and operate equipment to record, synchronize, mix, edit, or reproduce sound, including music, voices, or sound effects, for theater, video, film, television, podcasts, sporting events, and other productions.²
- **Lighting Technicians (27-4015)** Set up, maintain, and dismantle light fixtures, lighting control devices, and the associated lighting electrical and rigging equipment used for photography, television, film, video, and live productions. May focus or operate light fixtures, or attach color filters or other lighting accessories.³

¹ [Broadcast, Sound, and Video Technicians \(bls.gov\)](#)

² [Broadcast, Sound, and Video Technicians \(bls.gov\)](#)

³ [Lighting Technicians \(bls.gov\)](#)

- **Camera Operators, Television, Video, and Film (27-4031)** Operate television, video, or film camera to record images or scenes for television, video, or film productions.⁴
- **Film and Video Editors (27-4032)** Edit moving images on film, video, or other media. May work with a producer or director to organize images for final production. May edit or synchronize soundtracks with images.⁵

Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.⁶ Although some of the occupations in this report typically require a bachelor's degree, they are considered middle-skill because approximately one-third of workers in the field have completed some college or an associate degree. 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 this program does not meet the traditional supply/demand endorsement criteria, there may be demand for these workers from local employers that is not reflected in traditional labor market data. For this reason, real-time labor market data is included in this report as well – to provide a more nuanced view of the regional job market for these middle-skill occupations related to film production. Entry-level wages exceed the self-sufficiency standard wage in Los Angeles County, and more than one-third of current workers in the field have completed some college/associate degree or less education. **Therefore, due to all of the criteria being met, the LA COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, **3,435 jobs are projected to be available annually** in the region due to new job growth and replacements, **which is less than the three-year average of 3,648 awards conferred** 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 **1,763 online job postings related to these middle-skill film production occupations**. The highest number of job

⁴ [Film and Video Editors and Camera Operators \(bls.gov\)](https://www.bls.gov/occupations/film-and-video-editors-and-camera-operators)

⁵ [Film and Video Editors and Camera Operators \(bls.gov\)](https://www.bls.gov/occupations/film-and-video-editors-and-camera-operators)

⁶ 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.

postings were for video editors, audiovisual technicians, videographers, videographers/editors, and broadcast engineers.

- **Living Wage Criteria** – Within Los Angeles County, all five occupations have **entry-level wages above the self-sufficiency standard hourly wage** (\$18.10/hour).⁷
- **Educational Criteria** – Within the greater LA/OC region, **59% of the annual job openings** for occupations related to film production **typically require a bachelor’s degree**.
 - However, the national-level educational attainment data indicates **between 36% and 54% of workers in the field have completed some college/associate degree or less education**.

Supply:

- There are **23 community colleges** in the greater LA/OC region that issue awards related to film production, conferring an average of **1,102 awards annually** between 2019 and 2022.
- Between 2019 and 2021, there was an average of **2,546 awards conferred annually** in related training programs by non-community college institutions throughout the greater LA/OC region.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for these middle-skill film production occupations. In the greater Los Angeles/Orange County region, the number of jobs related to these occupations is projected to increase by 10% through 2027. There will be more than 3,400 job openings per year through 2027 due to job growth and replacements. The vast majority of jobs in 2022 for these middle-skill film production occupations (94%) were located in Los Angeles County.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties⁸

Geography	2022 Jobs	2027 Jobs	2022-2027 Change	2022-2027 % Change	Annual Openings
Los Angeles	28,979	31,913	2,934	10%	3,235
Orange	1,993	2,101	108	5%	200
Total	30,972	34,014	3,042	10%	3,435

Wages

The labor market endorsement in this report considers the entry-level hourly wages for these middle-skill film production 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

⁷ Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California. For more information, visit: <http://selfsufficiencystandard.org/california>.

⁸ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

complete analysis of the greater LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County

All five 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 \$21.47 and \$27.25. Experienced workers can expect to earn wages between \$38.91 and \$64.80, which are higher than the self-sufficiency standard.

Exhibit 2: Earnings for Occupations in LA County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Audio and Video Technicians (27-4011)	\$23.15	\$33.44	\$51.35	\$69,600
Sound Engineering Technicians (27-4014)	\$22.18	\$32.09	\$59.94	\$66,800
Lighting Technicians (27-4015)	\$27.25	\$40.05	\$64.80	\$83,300
Camera Operators, Television, Video, and Film (27-4031)	\$21.47	\$36.13	\$38.91	\$75,100
Film and Video Editors (27-4032)	\$23.77	\$33.88	\$58.11	\$70,500

*Rounded to the nearest \$100

Orange County

The majority (67%) of annual openings for the middle-skill film production occupations have entry-level wages above the self-sufficiency standard wage for one adult (\$20.63 in Orange County). Typical entry-level hourly wages are in a range between \$18.14 and \$24.09. Three occupations in this report have entry-level wages above the county's self-sufficiency standard: *lighting technicians* (\$24.09), *audio and video technicians* (\$21.23), and *film and video editors* (\$20.70). Experienced workers can expect to earn wages between \$38.04 and \$57.26, which are higher than the self-sufficiency standard.

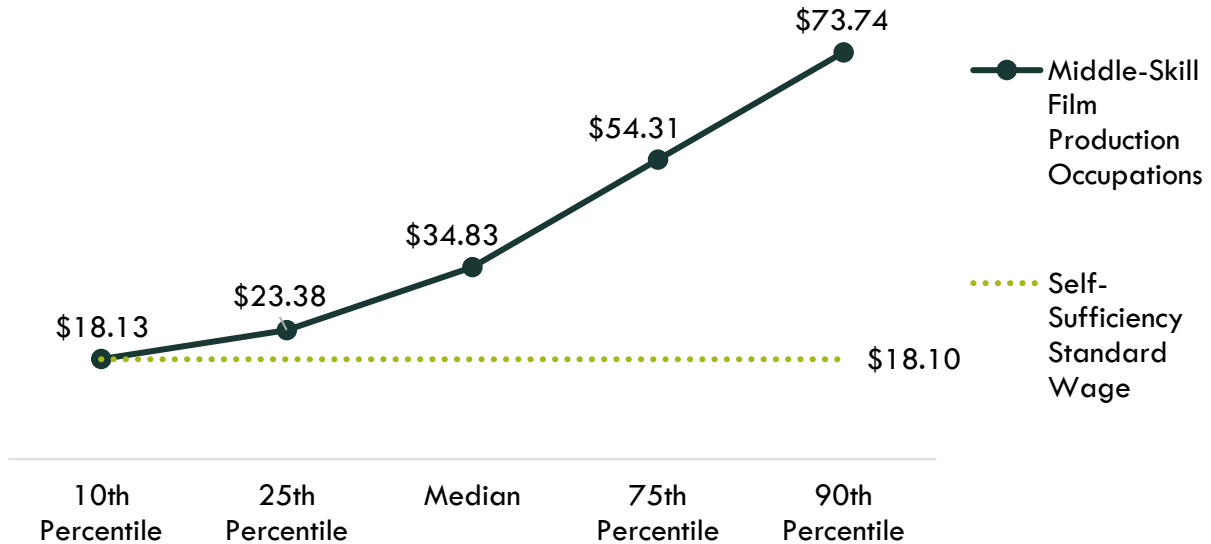
Exhibit 3: Earnings for Occupations in Orange County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Audio and Video Technicians (27-4011)	\$21.23	\$30.64	\$47.06	\$63,700
Sound Engineering Technicians (27-4014)	\$20.04	\$29.41	\$54.27	\$61,200
Lighting Technicians (27-4015)	\$24.09	\$35.40	\$57.26	\$73,600
Camera Operators, Television, Video, and Film (27-4031)	\$18.14	\$31.63	\$38.04	\$65,800
Film and Video Editors (27-4032)	\$20.70	\$30.53	\$54.12	\$63,500

*Rounded to the nearest \$100

On average, the entry-level earnings for the occupations in this report are \$23.38; this is above the living wage for one single adult in Los Angeles County (\$18.10). Exhibit 4 shows the average wage for the occupations in this report, from entry-level to experienced workers.

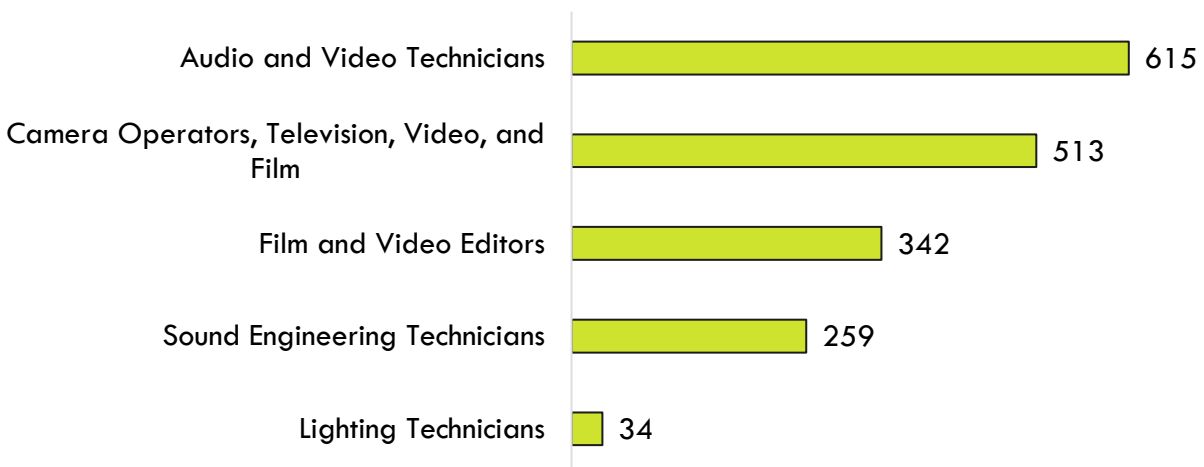
Exhibit 4: Average Hourly Earnings for Middle-Skill Film Production Occupations in LA/OC



Job Postings

There were 1,763 online job postings related to middle-skill film production occupations listed in the past 12 months. Exhibit 5 displays the number of job postings by occupation. The majority of job postings (35%) were for *audio and video technicians*, followed by *camera operators, television, video, and film* (29%) and *film and video editors* (19%). The highest number of job postings were for video editors, audiovisual technicians, videographers, videographers/editors, and broadcast engineers. The top skills were Adobe Premiere Pro, Adobe After Effects, post-production, video production, and Adobe Photoshop. The top three employers, by number of job postings, in the region were Encore Global, California State University, and Five Star Audio Visual.

Exhibit 5: 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:** *Camera operators, television, video and film; Film and video editors*
- **Postsecondary non-degree award:** *Audio and video technicians; Sound engineering technicians*
- **High school diploma or equivalent:** *Lighting technicians*

In the greater LA/OC region, the majority of annual job openings (59%) typically require a bachelor's degree. However, the national-level educational attainment data indicates between 36% and 54% of workers in the field have completed some college/associate degree or less education. Of the 33% of middle-skill film production job postings listing a minimum education requirement in the greater Los Angeles/Orange County region, 47% (271) requested high school or vocational training, 12% (71) requested an associate degree, and 41% (240) requested a bachelor's degree.

Educational Supply

Community College Supply

Exhibit 6 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, LA City, and LA Valley.

Exhibit 6: Regional community college awards (certificates and degrees), 2019-2022

TOP	Program	College	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
0604.00	Radio and Television	LA Valley	17	12	9	13
		Long Beach	2	2	7	4
		Santa Monica	29	16	8	18
		LA Subtotal	48	30	24	34
		Fullerton	-	2	1	1
		Saddleback	136	98	144	126
		OC Subtotal	136	100	145	127
Supply Subtotal/Average			184	130	169	161
0604.20	Television (including combined TV/film/video)	Cerritos	-	5	13	6
		El Camino	22	27	32	27
		Glendale	14	17	25	19
		LA City	34	45	35	38
		LA Pierce	26	29	31	29
		LA Valley	31	42	48	40
		Long Beach	35	42	49	42

TOP	Program	College	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
		Mt San Antonio	54	34	50	46
		Pasadena	45	65	51	54
		LA Subtotal	261	306	334	300
		Cypress	15	16	20	17
		Fullerton	48	52	55	52
		Orange Coast	40	22	46	36
		Saddleback	2	-	15	6
		Santa Ana	17	6	13	12
		OC Subtotal	122	96	149	122
		Supply Subtotal/Average	383	402	483	423
0612.20	Film Production	Cerritos	8	11	22	14
		LA City	62	45	116	74
		LA Valley	31	35	54	40
		Santa Monica	59	41	45	48
		West LA	7	28	10	15
		LA Subtotal	167	160	247	191
		Orange Coast	48	26	32	35
		Saddleback	3	-	-	1
		OC Subtotal	51	26	32	36
		Supply Subtotal/Average	218	186	279	228
1005.00	Commercial Music	Cerritos	5	8	13	9
		Citrus	51	51	26	43
		Compton	1	1	-	1
		East LA	-	2	-	1
		Glendale	-	2	-	1
		LA City	129	12	25	55
		LA Harbor	4	-	7	4
		LA Valley	10	6	18	11
		Long Beach	-	1	-	0
		Pasadena	-	2	-	1
		Rio Hondo	-	-	1	0
		LA Subtotal	200	85	90	125
		Cypress	17	10	12	13
		Fullerton	10	8	7	8
		Irvine	1	-	-	0

TOP	Program	College	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
		Orange Coast	8	1	1	3
		Saddleback	9	61	95	55
		Santa Ana	4	7	7	6
		OC Subtotal	49	87	122	86
Supply Subtotal/Average			249	172	212	211
1006.00	Technical Theater	Citrus	8	7	5	7
		East LA	15	6	32	18
		Glendale	1	-	2	1
		LA City	1	2	4	2
		LA Pierce	13	7	3	8
		LA Valley	2	1	1	1
		Pasadena	2	2	1	2
		Santa Monica	17	6	16	13
		LA Subtotal	59	31	64	51
		Cypress	3	7	6	5
		Fullerton	4	33	-	12
		Golden West	1	-	-	0
		Irvine	3	4	3	3
		Saddleback	2	4	3	3
		Santa Ana	3	6	2	4
		OC Subtotal	16	54	14	28
		Supply Subtotal/Average			75	85
Supply Total/Average			1,109	975	1,221	1,102

Non-Community College Supply

For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that provide training programs for middle-skill film production occupations. Exhibit 7 shows the annual and three-year average number of awards conferred by these institutions in relevant programs. Due to different data collection periods, the most recent three-year period of available data is from 2019 to 2021. Between 2019 and 2021, non-community college institutions in the region conferred an average of 2,546 bachelor's and sub-baccalaureate awards. Of the awards listed in Exhibit 7, the majority (68%) were bachelor's awards, while 32% were sub-baccalaureate awards. Bachelor's awards are included since some of the occupations in this report typically require a bachelor's degree. Sub-baccalaureate awards include associate degrees, postsecondary awards, and other academic awards that generally take fewer than four years to complete.

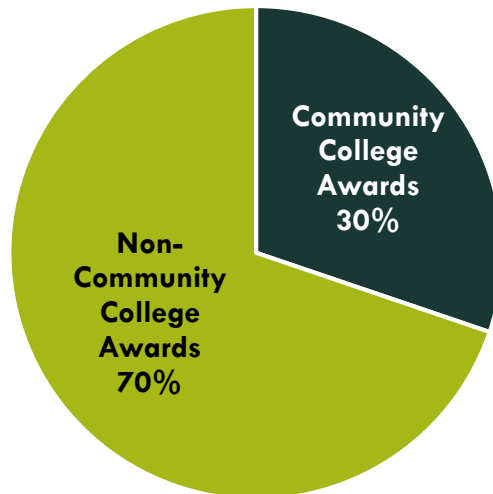
Exhibit 7: Regional non-community college awards, 2019-2021

CIP	Program	Institution	2019-20 Awards	2020-21 Awards	2-Year Average
09.0701	Radio and Television	CSU-Fullerton	189	185	187
		CSU-Los Angeles	154	147	151
		CSU-Northridge	396	427	412
		Loyola Marymount Univ.	-	1	1
		Pepperdine University	20	11	16
		University of La Verne	7	11	9
10.0202	Radio and Television Broadcasting Technology/Technician	Hollywood Cultural College	20	12	16
10.0203	Recording Arts Technology/Technician	CSU-Dominguez Hills	-	2	1
		Columbia College Hollywood	-	21	11
		Loyola Marymount Univ.	13	12	13
		Musicians Institute	73	48	61
50.0502	Technical Theatre/Theatre Design and Technology	California Institute of the Arts	18	17	18
		Chapman University	-	1	1
		Pepperdine University	6	3	5
		USC	4	10	7
		Vanguard University of Southern California	1	1	1
50.0602	Cinematography and Film/Video Production	Art Center College of Design	18	24	21
		Biola University	56	56	56
		CA Institute of the Arts	14	11	13
		Chapman University	146	101	124
		Columbia College Hollywood	-	105	53
		Fashion Institute of Design & Merch.-LA	12	10	11
		Los Angeles Film School	245	255	250
		Loyola Marymount Univ.	79	64	72
		Mt. Saint Mary's Univ.	14	14	14
		NY Film Academy	215	181	198
		USC	114	96	105
		Woodbury University	15	17	16

CIP	Program	Institution	2019-20 Awards	2020-21 Awards	2-Year Average
50.0699	Film/Video and Photographic Arts, Other	CA Institute of the Arts	-	2	1
		LA Film School	49	97	73
		Woodbury University	10	25	18
50.0913	Music Technology	CA College of Music	-	3	2
		LA College of Music	21	19	20
		LA Film School	474	524	499
50.1003	Music Management	Musicians Institute	21	12	17
		UCLA	3	4	4
		USC	81	61	71
Supply Total/Average			2,494	2,597	2,546

Exhibit 8 shows the proportion of community college awards conferred in LA/OC compared to the number of non-community college awards for the programs in this report. Nearly three-quarters of awards conferred in these programs are awarded by non-community colleges in the LA/OC region.

Exhibit 8: Community College Awards Compared to Non-Community College Awards in LA/OC Region, 3-Year Average



Appendix A: Occupational demand and wage data by county

Exhibit 9. Los Angeles County

Occupation (SOC)	2022 Jobs	2027 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Audio and Video Technicians (27-4011)	5,008	5,484	476	10%	565	\$23.15	\$33.44	\$51.35
Sound Engineering Technicians (27-4014)	4,510	4,756	246	5%	463	\$22.18	\$32.09	\$59.94
Lighting Technicians (27-4015)	2,548	2,703	155	6%	264	\$27.25	\$40.05	\$64.80
Camera Operators, Television, Video, and Film (27-4031)	5,580	6,218	638	11%	631	\$21.47	\$36.13	\$38.91
Film and Video Editors (27-4032)	11,332	12,752	1,419	13%	1,310	\$23.77	\$33.88	\$58.11
Total	28,979	31,913	2,934	10%	3,235	-	-	-

Exhibit 10. Orange County

Occupation (SOC)	2022 Jobs	2027 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Audio and Video Technicians (27-4011)	581	629	48	8%	63	\$21.23	\$30.64	\$47.06
Sound Engineering Technicians (27-4014)	340	361	21	6%	35	\$20.04	\$29.41	\$54.27
Lighting Technicians (27-4015)	270	280	10	4%	27	\$24.09	\$35.40	\$57.26
Camera Operators, Television, Video, and Film (27-4031)	348	353	5	2%	31	\$18.14	\$31.63	\$38.04
Film and Video Editors (27-4032)	455	478	23	5%	44	\$20.70	\$30.53	\$54.12
Total	1,993	2,101	108	5%	200	-	-	-

Exhibit 11. Los Angeles and Orange Counties

Occupation (SOC)	2022 Jobs	2027 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	% Age 55 and older*	Typical Entry-Level Education
Audio and Video Technicians (27-4011)	5,589	6,113	524	9%	629	22%	Postsecondary non-degree award
Sound Engineering Technicians (27-4014)	4,851	5,118	267	6%	498	21%	Postsecondary non-degree award
Lighting Technicians (27-4015)	2,817	2,983	165	6%	291	24%	HS diploma or equivalent
Camera Operators, Television, Video, and Film (27-4031)	5,928	6,571	643	11%	663	22%	Bachelor's degree
Film and Video Editors (27-4032)	11,787	13,229	1,442	12%	1,355	23%	Bachelor's degree
Total	30,972	34,014	3,042	10%	3,435	-	-

*The average percentage of workers age 55 and older across all occupations in the greater LA/OC region is 27%. These occupations have a smaller share of older workers, which typically indicates fewer replacements needs to offset the amount of impending retirements.

Appendix B: Sources

- O*NET Online
- Lightcast (formerly 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)

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