



Film, Television, Multimedia and Mass Communications Occupational Group

Los Angeles, Riverside, and San Bernardino counties, and California

Summary

- Employment for film, television, multimedia and mass communications occupational group is expected to expand 9% over the next 5 years, 57,730 job openings will be available over the five-year time frame.
- The median hourly wage and annual average earnings for each of the occupations in the film, television, multimedia and mass communications occupational group exceed the Self-Sufficiency Wage of all three counties for a single adult living in the region.
- Based on the average annual number of program completions between the selected program completions (53 annual average completions), and the annual job openings for film, television, multimedia and mass communications occupational group in the local region (11,546 annual job openings), there appears to be an opportunity for program growth.
- The majority of occupations in this cluster have a typical entry-level education of a Bachelor's degree. The majority of employers posting online job ads are also seeking workers for these positions with a bachelor's degree or higher, except for audio and video equipment technicians.

Job Opportunities

In 2016, there were more than 156,700 film, television, multimedia and mass communications occupational group jobs in California. About 64% or more than 100,570 of these job opportunities were located in Los Angeles, Riverside, or San Bernardino counties. Across the local region, employment related to the film, television, multimedia and mass communications occupational group is expected to increase 9% through 2021, slightly faster than the state overall at 8% during the same timeframe. Employers in the local region will need to hire more than 11,540 workers over the next five years to fill new jobs and to backfill jobs that workers are leaving (includes retirements). Appendix A, Table 1 shows the projected job growth for each of the occupations in this group.

Exhibit 1: Five-year projections for the film, television, multimedia and mass communications occupational group occupational group in Los Angeles, Riverside, and San Bernardino counties, and California

Region	2016 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
LA-Riv-SB counties	100,571	9%	57,730	11,546	21%
California	156,746	8%	89,369	17,874	21%

Source: EMSI 2017.3

In the last 12 months (October 2016 to September 2017), there were 1,124 advertisements (ads) for jobs in the film, television, multimedia and mass communications occupational group in Los Angeles, Riverside, and San Bernardino counties, within the information industry (NAICS 51); the industry were the majority of entertainment related occupations are employed. In the full-year 2016 there were 1,181 job ads; 1,055 job ads in 2015; 964 job ads in 2014; and 1,385 job ads in 2013. Exhibit 2 shows the number of job ads posted during the last 12 months for each of the occupations in this occupational group.

Exhibit 2: Job ads for each of the film, television, multimedia and mass communications occupational group in Los Angeles, Riverside, and San Bernardino counties within the information industry during the last 12 months (Oct 2016 – Sep 2017)

Occupation	Job Ads
Producers and Directors	407
Editors	236
Reporters and Correspondents	141
Multimedia Artists and Animators	110
Writers and Authors	81
Camera Operators, Television, Video, and Motion Picture	45

Film, television, multimedia and mass communications occupational group in LA, Riverside, and San Bernardino counties, October 2017

Occupation	Job Ads
Film and Video Editors	33
Sound Engineering Technicians	33
Audio and Video Equipment Technicians	24
Radio and Television Announcers	14
Broadcast News Analysts	0
TOTAL	1,124

Source: Burning Glass – Labor Insights

Earnings

The median wage and the annual average earnings for each occupation in the film, television, multimedia and mass communications occupational group is above the Self-Sufficiency Hourly Wage of \$13.81 (\$29,167 annually) for Los Angeles County, \$12.00 (\$25,337 annually) for Riverside County, and \$11.54 (\$24,375 annually) for San Bernardino for a single adult living in this region. See Exhibit 3 for wage information by occupation for the local region.

Exhibit 3: Earnings for the film, television, multimedia and mass communications occupational group in Los Angeles, Riverside, and San Bernardino counties and California

Occupation	Entry to Experienced Hourly Earnings Range*		Avg. Annual Earnings	
	LA-Riv-SB counties	LA-Riv-SB counties	LA-Riv-SB counties	California
Producers and Directors	\$20.69 to \$134.48	\$44.07	\$123,800	\$113,700
Editors	\$18.60 to \$57.32	\$25.30	\$68,500	\$67,400
Camera Operators, Television, Video, and Motion Picture	\$17.19 to \$58.60	\$27.88	\$70,000	\$68,300
Film and Video Editors	\$17.16 to \$104.42	\$32.59	\$98,700	\$94,700
Writers and Authors	\$14.80 to \$55.37	\$19.92	\$62,700	\$55,370.51
Sound Engineering Technicians	\$14.29 to \$66.17	\$29.19	\$75,700	\$74,000
Reporters and Correspondents	\$13.78 to \$39.58	\$20.24	\$51,100	\$49,500
Audio and Video Equipment Technicians	\$13.09 to \$45.38	\$22.37	\$55,000	\$52,800
Multimedia Artists and Animators	\$12.19 to \$57.19	\$29.74	\$67,400	\$68,200
Radio and Television Announcers	\$11.54 to \$58.59	\$22.05	\$65,700	\$65,800
Broadcast News Analysts	\$10.90 to \$65.81	\$30.12	\$73,400	\$71,200

Source: EMSI 2017.3

*Entry Hourly is 10th percentile wage, median is 50th percentile wage, experienced is 90th percentile wage.

Work Locations, Skills, and Education

According to job ads, the top worksite regional cities for jobs in this occupational group were Los Angeles, Burbank, Glendale, Santa Monica, and Culver City. Exhibit 4 lists the top specialized, soft, and software and programming skills that employers are seeking when looking for workers to fill these occupations. “N/A” indicates that there were not enough job postings for that occupation.

Exhibit 4: Top skills in greatest demand for the film, television, multimedia and mass communications occupational group in Los Angeles, Riverside, and San Bernardino counties, Oct 2016-Sep 2017

Occupation	Specialized skills	Soft skills	Software and Programming skills
Producers and Directors	<ul style="list-style-type: none"> • Video Production • Adobe Photoshop • Scheduling 	<ul style="list-style-type: none"> • Editing • Creativity • Writing 	<ul style="list-style-type: none"> • Adobe Photoshop • Microsoft Office • Adobe Indesign
Editors	<ul style="list-style-type: none"> • Journalism • Social Media • Adobe Photoshop 	<ul style="list-style-type: none"> • Editing • Writing • Creativity 	<ul style="list-style-type: none"> • Adobe Photoshop • Adobe Premiere • Adobe Aftereffects
Reporters and Correspondents	<ul style="list-style-type: none"> • Journalism • Broadcast • Social Media 	<ul style="list-style-type: none"> • Editing • Writing • Presentation Skills 	<ul style="list-style-type: none"> • Facebook • Social Media Platforms
Multimedia Artists and Animators	<ul style="list-style-type: none"> • Adobe Photoshop • Animation • MAYA 	<ul style="list-style-type: none"> • Creativity • Teamwork/ Collaboration • Communication Skills 	<ul style="list-style-type: none"> • Adobe Photoshop • MAYA • Adobe Aftereffects
Writers and Authors	<ul style="list-style-type: none"> • Copy Writing • Broadcast • Scheduling 	<ul style="list-style-type: none"> • Writing • Creativity • Editing 	<ul style="list-style-type: none"> • Microsoft Office • Microsoft PowerPoint • Adobe Photoshop
Camera Operators, Television, Video, and Motion Picture	<ul style="list-style-type: none"> • Video Production • Videography • Adobe Photoshop 	<ul style="list-style-type: none"> • Editing • Creativity • Detail-Oriented 	<ul style="list-style-type: none"> • Adobe Photoshop • Adobe Aftereffects • Adobe Premiere

Occupation	Specialized skills	Soft skills	Software and Programming skills
Film and Video Editors	<ul style="list-style-type: none"> • Video Editing • Adobe Aftereffects • Adobe Photoshop 	<ul style="list-style-type: none"> • Editing • Creativity • Meeting Deadlines 	<ul style="list-style-type: none"> • Adobe Aftereffects • Adobe Premiere • Adobe Photoshop
Sound Engineering Technicians	<ul style="list-style-type: none"> • Broadcast • Routers • Photography 	<ul style="list-style-type: none"> • Communication Skills • Troubleshooting • Physical Demand 	<ul style="list-style-type: none"> • Microsoft Operating Systems • VMware • Final Cut Pro
Audio and Video Equipment Technicians	<ul style="list-style-type: none"> • Microsoft Excel • Digital Video • Audio Recording 	<ul style="list-style-type: none"> • Building Effective Relationships • Communication Skills • Editing 	<ul style="list-style-type: none"> • Microsoft Excel • Adobe Aftereffects • Final Cut Pro
Radio and Television Announcers	<ul style="list-style-type: none"> • Social Media • Broadcast • Audio Vault Automation 	<ul style="list-style-type: none"> • Creativity • Detail-Oriented • Telephone Skills 	<ul style="list-style-type: none"> • Audio Vault Automation • Microsoft Excel
Broadcast News Analysts	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A

Source: Burning Glass – Labor Insights

Exhibit 5 displays the entry-level education level education typically required to enter each occupation according to the Bureau of Labor Statistics, educational attainment for incumbent workers with “some college, no degree” and an “associate degree” according to the U.S. Census, and the minimum advertised education requirement requested by employers in online job ads. “N/A” indicates that there were not enough job postings for that occupation.

Exhibit 5: Educational attainment and online job ads with minimum advertised education requirements for the film, television, multimedia and mass communications occupational group in Los Angeles, Riverside, and San Bernardino counties, Oct 2016-Sep 2017

Occupations	Typical Entry-Level Education Requirement	Educational Attainment (Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework)	Minimum Advertised Education Requirement from Job Ads		
			High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Producers and Directors	Bachelor's degree	18%	1%	3%	96%
Editors	Bachelor's degree	14%	6%	-	94%
Reporters and Correspondents	Bachelor's degree	12%	-	1%	99%
Multimedia Artists and Animators	Bachelor's degree	29%	2%	-	98%
Writers and Authors	Bachelor's degree	12%	6%	-	94%
Camera Operators, Television, Video, and Motion Picture	Bachelor's degree	29%	28%	20%	52%
Film and Video Editors	Bachelor's degree	29%	-	-	100%
Sound Engineering Technicians	Postsecondary nondegree award	44%	-	-	100%
Audio and Video Equipment Technicians	Postsecondary nondegree award	44%	73%	-	27%
Radio and Television Announcers	Bachelor's degree	34%	-	-	100%
Broadcast News Analysts	Bachelor's degree	34%	N/A	N/A	N/A

Source: EMSI 2017.3, Current Population Survey, Burning Glass – Labor Insights

Industry

Exhibit 6 displays the industries that employ the most film, television, multimedia and mass communications occupations in the local region. Staffing patterns show the industries employ the most of a specific occupation. “N/A” indicates that there were not enough job postings for that occupation.

Exhibit 6: Top Industries employing each film, television, multimedia and mass communications occupational group occupational group in the local region

Occupation	Top Industries Staffing Pattern (NAICS)	Top Industries Job Ads (NAICS)
Producers and Directors	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121) 	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121) • Radio and Television Broadcasting (5151)
Editors	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121) • Newspaper, Periodical, Book, and Directory Publishers (5111) 	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121) • Radio and Television Broadcasting (5151)
Reporters and Correspondents	<ul style="list-style-type: none"> • Radio and Television Broadcasting (5151) • Newspaper, Periodical, Book, and Directory Publishers (5111) 	<ul style="list-style-type: none"> • Radio and Television Broadcasting (5151) • Newspaper, Periodical, Book, and Directory Publishers (5111)
Multimedia Artists and Animators	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121) • Independent Artists, Writers, and Performers (7115) 	<ul style="list-style-type: none"> • Software Publishers (5112) • Motion Picture and Video Industries (5121) • Radio and Television Broadcasting (5151)
Writers and Authors	<ul style="list-style-type: none"> • Independent Artists, Writers, and Performers (7115) • Motion Picture and Video Industries (5121) 	<ul style="list-style-type: none"> • Software Publishers (5112) • Radio and Television Broadcasting (5151) • Motion Picture and Video Industries (5121)

Occupation	Top Industries Staffing Pattern (NAICS)	Top Industries Job Ads (NAICS)
Camera Operators, Television, Video, and Motion Picture	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121) 	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121)
Film and Video Editors	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121) 	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121)
Sound Engineering Technicians	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121) • Sound Recording Industries (5122) 	<ul style="list-style-type: none"> • Radio and Television Broadcasting (5151)
Audio and Video Equipment Technicians	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121) 	<ul style="list-style-type: none"> • Motion Picture and Video Industries (5121)
Radio and Television Announcers	<ul style="list-style-type: none"> • Radio and Television Broadcasting (5151) • Motion Picture and Video Industries (5121) 	<ul style="list-style-type: none"> • Radio and Television Broadcasting (5151)
Broadcast News Analysts	<ul style="list-style-type: none"> • Radio and Television Broadcasting (5151) 	<ul style="list-style-type: none"> • N/A

Source: EMSI 2017.3, Burning Glass – Labor Insights

Student Completions

Exhibits 7-10 show the annual average regional community college awards (associate degrees and certificates) conferred during the three academic years between 2013 and 2016 with the relevant TOP code. Please note, an award is not equivalent to a single person in search of a job opening since a student may earn more than one award, such as an associate degree in addition to a certificate.

Community College student outcome information was obtained from the CTE LaunchBoard based on the selected TOP code(s) and region:

Exhibit 7: Annual average community college student completions for the television program in the Riverside-San Bernardino-Ontario MSA

0604.20 – Television (including combined TV/film/video)	Annual Avg. CC Headcount (2015-16)	CC Annual Avg. Awards (2013-16)
Chaffey	120	
Certificate 12 to < 18 units		1*
Riverside	428	
Associate Degree		3
Certificate 18 to < 30 semester units		5
Certificate 6 to < 18 semester units		2
Mt. San Jacinto	189	
Total CC Headcount (2015-16)	737	
Total annual average community college awards		10

Source: LaunchBoard, IPEDS

*Chaffey awarded 1 certificate in 2015-16

0604.20 – Television (including combined TV/film/video) program outcomes in the Riverside-San Bernardino-Ontario MSA in academic year 2014-15:

- The median annual wage after program completion is \$12,163.
- 24% of students are earning a living wage.
- Median change in earnings was 83%
- 58% of students are employed within six months after completing a program

Exhibit 8: Annual average community college student completions for the mass communications program in the Riverside-San Bernardino-Ontario MSA

0610.00 Mass Communications	Annual Avg. CC Headcount (2015-16)	CC Annual Avg. Awards (2013-16)
Desert	253	
Associate Degree		3
Chaffey	92	
Crafton Hills	20	
San Bernardino Valley	126	
Total CC Headcount (2015-16)	491	
Total annual average community college awards		3

Source: LaunchBoard, IPEDS

0610.00 Mass Communications program outcomes in the Riverside-San Bernardino-Ontario MSA in academic year 2014-15:

- The median annual wage after program completion is \$7,202.
- 59% of students are employed within six months after completing a program

Some outcome data not available for this TOP code due to low completions.

Exhibit 9: Annual average community college student completions for the film production program in the Riverside-San Bernardino-Ontario MSA

0612.20 – Film Production	Annual Avg. CC Headcount (2015-16)	CC Annual Avg. Awards (2013-16)
San Bernardino		
Certificate 18 to < 30 semester units		1*
Chaffey	35	
Mt. San Jacinto	18	
Total CC Headcount (2015-16)	53	
Total annual average community college awards		1

Source: LaunchBoard, IPEDS

*San Bernardino awarded 1 certificate in 2014-15

0612.20 – Film Production program outcomes in the Riverside-San Bernardino-Ontario MSA in academic year 2014-15:

*No outcome data available for this TOP code due to low completions.

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Exhibit 10: Annual average community college student completions for the multimedia program in the Riverside-San Bernardino-Ontario MSA

0614.10 – Multimedia	Annual Avg. CC Headcount (2015-16)	CC Annual Avg. Awards (2013-16)
Norco College	29	
Associate Degree		3
Certificate 30 to < 60 semester units		3
Chaffey	105	
Associate Degree		2
Certificate 30 to < 60 semester units		1
Mt. San Jacinto	413	
Associate Degree		12
Certificate 30 to < 60 semester units		8
San Bernardino		
Certificate 18 to < 30 semester units		3
Moreno Valley		
Associate Degree		3
Certificate 30 to < 60 semester units		4
Total CC Headcount (2015-16)	547	
Total annual average community college awards		39

Source: LaunchBoard, IPEDS

0614.10 – Multimedia program outcomes in the Riverside-San Bernardino-Ontario MSA in academic year 2014-15:

- The median annual wage after program completion is \$12,514.
- 19% of students are earning a living wage.
- Median change in earnings was 29%
- 53% of students are employed within six months after completing a program



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

CTE LaunchBoard

Statewide CTE Outcomes Survey

Living Insight Center for Community Economic Development

California Community Colleges Chancellor's Office Management Information Systems (MIS)

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Appendix A: Occupation definitions, five-year projections, and earnings for the film, television, multimedia and mass communications occupational group

Occupation Definitions (SOC code), Education and Training Requirement, Community College Education Attainment

Multimedia Artists and Animators (27-1014)

Create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: One to twelve months on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 29%

Producers and Directors (27-2012)

Produce or direct stage, television, radio, video, or motion picture productions for entertainment, information, or instruction. Responsible for creative decisions, such as interpretation of script, choice of actors or guests, set design, sound, special effects, and choreography.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 18%

Radio and Television Announcers (27-3011)

Speak or read from scripted materials, such as news reports or commercial messages, on radio or television. May announce artist or title of performance, identify station, or interview guests.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: Less than one month on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 34%



Broadcast News Analysts (27-3021)

Analyze, interpret, and broadcast news received from various sources.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 12%

Reporters and Correspondents (27-3022)

Collect and analyze facts about newsworthy events by interview, investigation, or observation. Report and write stories for newspaper, news magazine, radio, or television.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 12%

Editors (27-3041)

Plan, coordinate, or edit content of material for publication. May review proposals and drafts for possible publication. Includes technical editors.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 14%

Writers and Authors (27-3043)

Originate and prepare written material, such as scripts, stories, advertisements, and other material.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: One to twelve months on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 12%



Audio and Video Equipment Technicians (27-4011)

Set up, or set up and operate audio and video equipment including microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, sound and mixing boards, and related electronic equipment for concerts, sports events, meetings and conventions, presentations, and news conferences. May also set up and operate associated spotlights and other custom lighting systems.

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: Less than one month on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 44%

Sound Engineering Technicians (27-4014)

Operate machines and equipment to record, synchronize, mix, or reproduce music, voices, or sound effects in sporting arenas, theater productions, recording studios, or movie and video productions.

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: Less than one month on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 44%

Camera Operators, Television, Video, and Motion Picture (27-4031)

Operate television, video, or motion picture camera to record images or scenes for various purposes, such as TV broadcasts, advertising, video production, or motion pictures.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 29%

Film and Video Editors (27-4032)

Edit moving images on film, video, or other media. May edit or synchronize soundtracks with images.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 29%

Table 1. 2016 to 2021 job growth for the film, television, multimedia and mass communications occupational group in Los Angeles, Riverside, and San Bernardino counties

Occupation (SOC)	2016 Jobs	2021 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Producers and Directors (27-2012)	27,602	31,192	3,590	13%	16,467	3,293
Writers and Authors (27-3043)	14,807	15,697	890	6%	7,741	1,548
Film and Video Editors (27-4032)	14,563	16,511	1,948	13%	8,826	1,765
Audio and Video Equipment Technicians (27-4011)	11,660	12,828	1,168	10%	6,905	1,381
Editors (27-3041)	7,860	8,260	400	5%	4,624	925
Multimedia Artists and Animators (27-1014)	7,816	8,393	577	7%	4,219	844
Camera Operators, Television, Video, and Motion Picture (27-4031)	7,402	7,864	462	6%	3,859	772
Sound Engineering Technicians (27-4014)	4,566	4,780	214	5%	2,408	482
Reporters and Correspondents (27-3022)	2,213	2,426	213	10%	1,521	304
Radio and Television Announcers (27-3011)	1,688	1,706	18	1%	902	180
Broadcast News Analysts (27-3021)	395	422	27	7%	257	51

Occupation (SOC)	2016 Jobs	2021 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Total	100,571	110,078	9,507	9%	57,730	11,546

Source: EMSI 2017.3