

Multimedia Artists and Animators

Labor Market Analysis: San Diego County

May 2018

Summary

The following list summarizes findings from the labor market analysis below for *Multimedia Artists and Animators*:

- Between 2017 and 2022, *Multimedia Artists and Animators* are projected to decline by two jobs or zero percent.
- Employers in San Diego County will need to hire 64 workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.
- Between 2010 and 2017, there was an average of 107 online job postings per year for *Multimedia Artists and Animators* in San Diego County.
- *Multimedia Artists and Animators* earn median hourly earnings of \$23.89; this is more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$13.09 per hour.
- According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, there are seven Taxonomy of Programs (TOP) codes associated with this occupation: 061220: Film Production, 061400: Digital Media, 061410: Multimedia, 061420: Electronic Game Design, 061440: Animation, 061460: Computer Graphics and Digital Imagery and 103000: Graphic Art and Design.
- According to the TOP data, eight colleges supply the region with awards for this occupation: San Diego City College, MiraCosta College, Palomar College, Grossmont College, San Diego Mesa College, Southwestern College, Cuyamaca College and San Diego Continuing Education.
- Comparing labor demand (annual openings) with labor supply suggests that there is an oversupply for this occupation in San Diego County, with 64 annual openings and 179 awards. Comparatively, there are 1,378 annual openings in California and 1,840 completions.
- Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were Activision, Sony Electronics Incorporated, CBS Broadcasting, Rockstar Games Incorporated and Qualcomm.
- The typical entry-level education is a bachelor's degree.

This report provides labor market information in San Diego County for the following occupational code in the Standard Occupational Classification (SOC)¹ system:

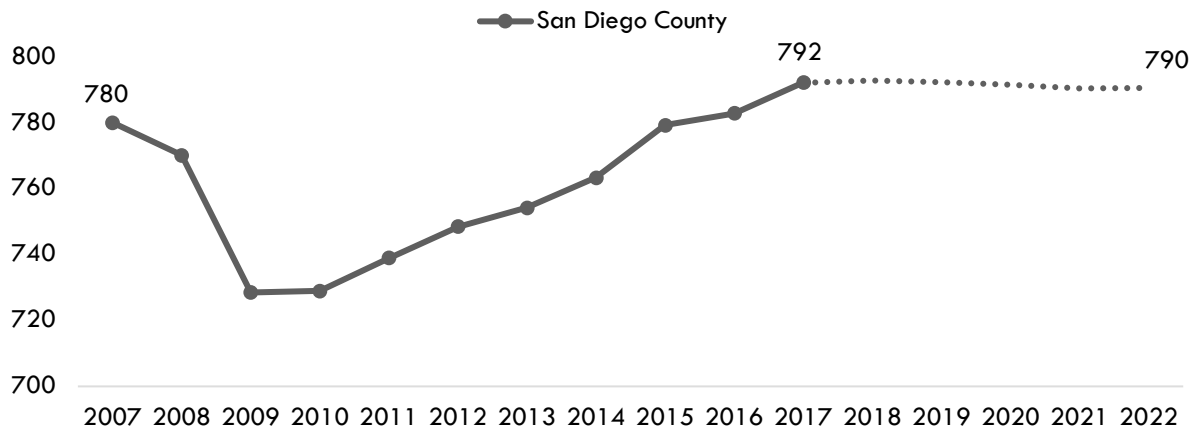
Multimedia Artists and Animators (SOC 27-1014): Create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials. Sample reported job titles include:

- Animator
- Multimedia Artist
- Digital Artist
- 3D Animator
- Web Designer
- Videographer
- Prop and Effects Designer
- Production Manager
- Production Assistant
- Multimedia Producer

Projected Occupational Demand

Between 2017 and 2022, *Multimedia Artists and Animators* are projected to decrease by **two jobs** or **zero percent** (Exhibit 1). Employers in San Diego County will need to hire **64 workers** annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.

Exhibit 1: Number of Jobs for *Multimedia Artists and Animators* (2007-2022)²



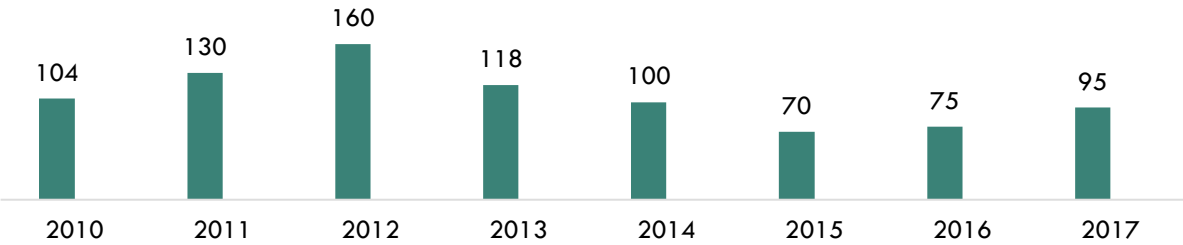
¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc/).

² Economic Modeling Specialists, Int'l. (EMSI). San Diego (6073). 2018.02 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2007-2022.

Online Job Postings

Between 2010 and 2017, there was an average of 107 online job postings per year for *Multimedia Artists and Animators* in San Diego County (Exhibit 2).

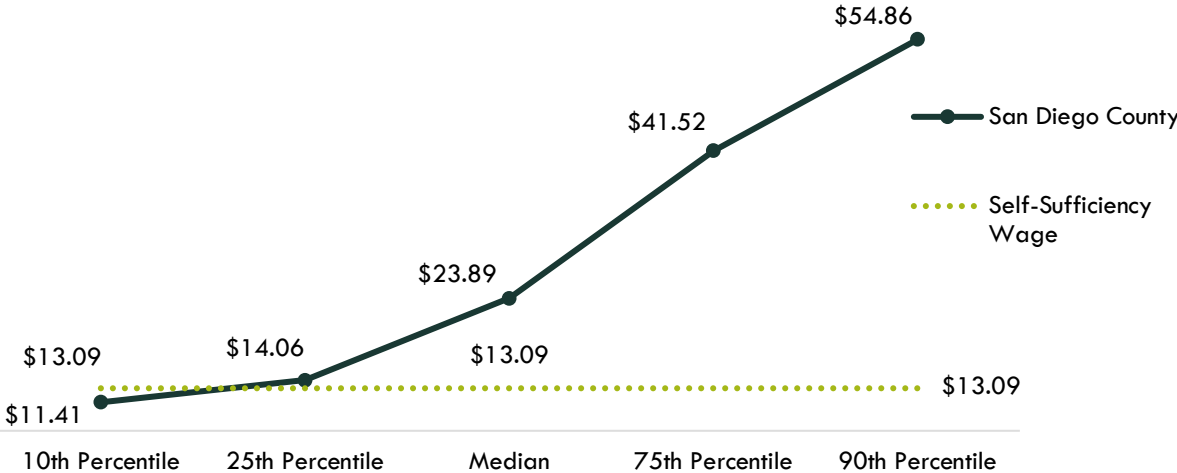
Exhibit 2: Number of Online Job Postings for *Multimedia Artists and Animators* in San Diego County (2010-2017)³



Earnings

Multimedia Artists and Animators earn median hourly earnings of \$23.89, more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$13.09 per hour (Exhibit 3).⁴

Exhibit 3: Hourly Earnings for *Multimedia Artists and Animators* in San Diego County⁵



³ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2010-2017.

⁴ The self-sufficient wage in San Diego for one adult is \$13.09 (insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california).

⁵ EMSI. San Diego (6073). 2018.02 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of related program completers/graduates/awards in San Diego County. According to the California Community Colleges Chancellor’s Office Management Information System (MIS) Data Mart, there are **seven** Taxonomy of Programs (TOP) codes associated with this occupation: 061220: Film Production, 061400: Digital Media, 061410: Multimedia, 061420: Electronic Game Design, 061440: Animation, 061460: Computer Graphics and Digital Imagery and 103000: Graphic Art and Design (Exhibit 4).

Exhibit 4: Related TOP Codes in San Diego County

SOC 27-1014: Multimedia Artists and Animators
TOP 061220: Film Production
TOP 061400: Digital Media
TOP 061410: Multimedia
TOP 061420: Electronic Game Design
TOP 061440: Animation
TOP 061460: Computer Graphics and Digital Imagery
TOP 103000: Graphic Art and Design

According to the TOP data, **eight** colleges supply the region with awards for this occupation: [San Diego City College](#), [MiraCosta College](#), [Palomar College](#), [Grossmont College](#), [San Diego Mesa College](#), [Southwestern College](#), [Cuyamaca College](#) and [San Diego Continuing Education](#) (Exhibit 5).

Exhibit 5: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions by Occupation (Program Year 2013-14 through PY2016-17 Average)

TOP6	TOP6 Title	3-Yr Annual Average CC Awards (PY14-15 to PY16-17)	Other Educational Institutions 3-Yr Annual Average Awards (PY13-14 to PY15-16)	3-Yr Total Average Supply (PY13-14 to PY16-17)
061220	Film Production	18	0	18
	<ul style="list-style-type: none"> • San Diego City 	18	0	

TOP6	TOP6 Title	3-Yr Annual Average CC Awards (PY14-15 to PY16-17)	Other Educational Institutions 3-Yr Annual Average Awards (PY13-14 to PY15-16)	3-Yr Total Average Supply (PY13-14 to PY16-17)
061400	Digital Media	37	0	37
	• MiraCosta	15	0	
	• Palomar	14	0	
	• San Diego City	8	0	
061410	Multimedia	40	0	40
	• Grossmont	1	0	
	• MiraCosta	19	0	
	• Palomar	6	0	
	• San Diego Mesa	14	0	
061420	Electronic Game Design	5	0	5
	• Palomar	1	0	
	• Southwestern	4	0	
061440	Animation	12	0	12
	• Palomar	12	0	
061460	Computer Graphics and Digital Imagery	11	0	11
	• Palomar	10	0	
	• San Diego Mesa	1	0	
103000	Graphic Art and Design	56	0	56
	• Cuyamaca	13	0	
	• Palomar	9	0	
	• San Diego Cont Ed	5	0	
	• San Diego City	19	0	
	• Southwestern	10	0	
			Total	179

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply⁶ suggests that there is an **oversupply** for this occupation in San Diego County, with **64** annual openings and **179** awards. Comparatively, there are **1,378** annual openings in California and **1,840** completions⁷ (Exhibit 6).

Exhibit 6: Labor Demand (Annual Openings) Compared to Labor Supply (Average Annual Awards)

Community Colleges and Other Postsecondary Educational Institutions	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	64	179	115
California	1,378	1,840	462

Please note: This is a basic analysis of supply and demand of labor for these occupations. This data should be used to discuss the potential gaps or oversupply of workers for these occupations; however, it should not be the only basis for determining whether or not a program should be developed. Additionally, the data does not include workers who are currently in the labor force who could fill these positions or workers who are not captured by publicly available data.

Student Outcomes

Based on the information available in the CTE LaunchBoard, students who took courses in the related TOP codes exhibited the following outcomes (Exhibit 7).

Exhibit 7: Strong Workforce Program Metrics for TOP 061410: Multimedia in the San Diego-Imperial Region (PY2015-16)

Metric	San Diego-Imperial	California
Number of course enrollments ⁸	578	6,994
Completed 12+ CTE Units in One Year ⁹	124	1,264

⁶ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor’s Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

⁷ EMSI. San Diego (6073). 2018.02 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

⁸ The number of enrollments in courses assigned to the TOP code in the selected year.

⁹ The number of students who completed 12 or more credit CTE units.

Metric	San Diego-Imperial	California
Completed 48+ CTE Contact Hours in One Year ¹⁰	N/A	317
Number of students who got a degree or certificate ¹¹	23	251
Number of students who transferred ¹²	26	264
Employed in the second fiscal quarter after exit ¹³	58%	57%
Employed in the fourth fiscal quarter after exit ¹⁴	57%	55%
Job closely related to field of study ¹⁵	N/A	N/A
Median earnings in the second fiscal quarter after exit ¹⁶	\$6,556	\$5,204
Median change in earnings ¹⁷	87%	73%
Attained a living wage ¹⁸	48%	34%

Top Employers and Work Locations

Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were [Activision](#), [Sony Electronics Incorporated](#), [CBS Broadcasting](#), [Rockstar Games Incorporated](#) and [Qualcomm](#) (Exhibit 8).

Exhibit 8: Top Employers in San Diego County for *Multimedia Artists and Animators*

Top Employers	
<ul style="list-style-type: none"> • Activision • Sony Electronics Incorporated • CBS Broadcasting • Rockstar Games Incorporated • Qualcomm • Becton Dickinson • Intuit 	<ul style="list-style-type: none"> • Hewlett-Packard • KUSI • Amazon • Dexcom • Accenture • Callaway Golf Company • Carefusion Corporation

¹⁰ The number of students who completed 48 or more noncredit CTE instructional contact hours.

¹¹ The number of unduplicated students who earned a locally-issued certificate, Chancellor's Office approved certificate, associate degree, and/or California Community Colleges bachelor's degree in the selected TOP code.

¹² Students who took non-introductory courses or completed a California Community Colleges Chancellor's Office award in the selected TOP code in selected year who subsequently enrolled for the first time in a four-year institution the following year.

¹³ Among all exiters with a valid SSN, the percentage who were employed two quarters after exiting California Community Colleges.

¹⁴ Among exiting students with a valid SSN, the percentage who were employed four quarters after exiting California Community Colleges.

¹⁵ Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

¹⁶ Among exiting students, the median second-quarter earnings one year after the year in which they exited California Community Colleges.

¹⁷ Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting California Community Colleges.

¹⁸ Among completers and skills builders who exited, the proportion of students who attained a living wage.

Skills, Education and Certifications

Exhibit 9 indicates the educational attainment for the occupation found currently in the national labor force. There is no typical on-the-job training for this profession. The typical entry-level education is a bachelor's degree.¹⁹

Exhibit 9: National Educational Attainment of Multimedia Artists and Animators²⁰

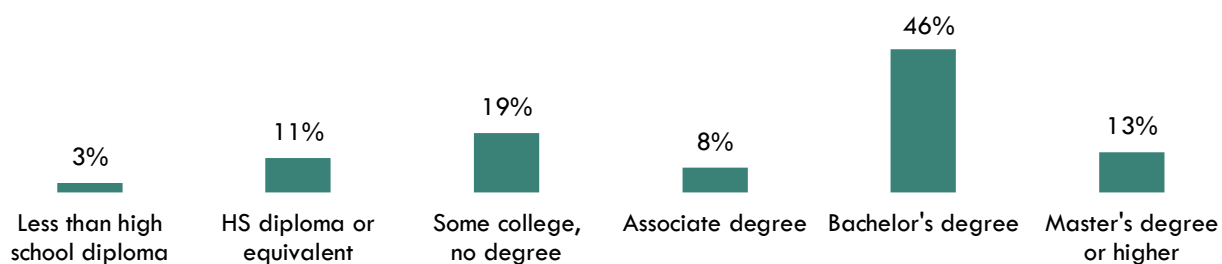


Exhibit 10 lists the top specialized and soft skills that appeared in online job postings for between January 1, 2015 and December 31, 2017.

Exhibit 10: Top Skills for Multimedia Artists and Animators in San Diego County²¹

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Teamwork/Collaboration • Animation • Interaction Design • UX Wireframes • Maya 	<ul style="list-style-type: none"> • Creativity • Communication Skills • Organizational Skills • Editing • Detail-Oriented 	<ul style="list-style-type: none"> • Adobe Photoshop • Adobe Illustrator • Adobe InDesign • Adobe Acrobat • Adobe Creative Suite

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¹⁹ EMSI. San Diego (6073). 2018.02 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

²⁰ Bureau of Labor Statistics, Educational attainment for workers 25 years and older by detailed occupation. bls.gov/emp/ep_table_111.htm.

²¹ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2015-2017.