



Animation & Motion Arts

September 2017

Prepared by the Los Angeles/Orange County Center of Excellence for Labor Market Research

Occupation Codes and Descriptions

Currently, there are two occupations in the standard occupational classification (SOC) system related to the study of animation and motion arts. A list of occupation titles, job descriptions and reported job titles is included in Exhibit 1.¹

Exhibit 1 – Occupations, job descriptions and sample job title(s)

SOC	Title	Description	Sample Job Titles
27-1014	Multimedia Artists and Animators	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.	3D Animator, 3D Artist, Animation Director, Animator, Art Director, Artist, Creative Director, Graphic Artist, Graphic Designer, Illustrator
27-1024	Graphic Designers	Design or create graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects.	Artist, Creative Director, Creative Manager, Design Director, Designer, Graphic Artist, Graphic Designer, Online Producer, Production Artist, Publications Designer

Source: O*NET Online

Current and Future Employment

In Los Angeles County, the number of jobs related to animation and motion arts is expected to increase by 4% over the next five years. There are forecasted to be over 700 job openings each year during the five-year frame. Exhibit 2 contains detailed employment projections data for these occupations.

¹ New and emerging occupations (N&E) are incorporated into the O*NET-SOC classification system based on the evolving nature of workforce requirements stemming from changes in technology, society, law, and business practices. Incorporating N&E occupations into the O*NET system makes O*NET information more beneficial and responsive. <https://www.onetcenter.org/reports/NewEmerging.html>

**Exhibit 2 – Five-year projections for animation and motion arts-related occupations
in Los Angeles County**

SOC	Occupation	2016 Jobs	2021 Jobs	2016 - 2021 Change	2016 - 2021 % Change	Annual Openings
27-1014	Multimedia Artists and Animators	8,395	9,045	650	8%	292
27-1024	Graphic Designers	15,567	15,779	212	1%	415
		23,962	24,824	862	4%	707

Source: Economic Modeling Specialists International (EMSI)

Earnings

In Los Angeles County, the entry-level average wage for multimedia artists and animators is below the MIT Living Wage² estimate while the entry-level average wage for graphic designers is above the wage estimate of \$13.08 per hour for a single adult living in Los Angeles County. The average annual earnings for these occupations in the region are between \$52,586 and \$72,174 per year, assuming full-time employment.

Exhibit 3 contains hourly wages and annual average earnings for these occupations. Entry-level hourly earnings is represented by the 10th percentile of wages, median hourly earnings is represented by the 50th percentile of wages, and experienced hourly earnings is represented by the 90th percentile of wages, demonstrating various levels of employment.

**Exhibit 3 – Earnings for animation and motion arts-related occupations
in Los Angeles County, 2016-2021**

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings	Average Annual Earnings
27-1014	Multimedia Artists and Animators	\$12.37	\$33.19	\$59.50	\$72,174
27-1024	Graphic Designers	\$15.39	\$21.22	\$41.14	\$52,586

Source: Economic Modeling Specialists International (EMSI)

Employer Job Postings

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for occupations relevant to the field of study. Employer job postings are consulted to understand what employers are looking for in potential

² MIT Living Wage Calculator. <http://livingwage.mit.edu/>

candidates. To identify job postings related to animation and motion arts, the SOC codes introduced earlier were used.

Top Occupations

In 2016, there were 4,285 employer postings for animation and motion arts-related occupations. Over three-quarters of the postings (80%) were for graphic designers (3,417 job postings). There were 3,424 job postings for the same occupations in 2015, and 2,256 job postings in 2014.

Exhibit 4 – Top occupations in job postings (n=4,285)

SOC Code	Occupation	Job Postings, Full Year 2016
27-1024.00	Graphic Designers	3,417
27-1014.00	Multimedia Artists and Animators	868

Source: Labor Insight/Jobs (Burning Glass)

Top Titles

The top job titles for employers posting job ads for animation and motion arts-related occupations are listed in Exhibit 5. Graphic designer is mentioned as the job title in 40% of all relevant job postings (1,700 of 4,285 job postings).

Exhibit 5 –Job titles (n=4,285)

Title	Job Postings, Full Year 2016
Graphic Designer	1,700
Production Artist	250
Animator	186
Visual Designer	161

Source: Labor Insight/Jobs (Burning Glass)

Top Employers

Exhibit 6 lists the major employers hiring professionals in the animation and motion arts field. Top employers posting job ads locally in 2016 included: Disney, Activision, Sony, and Artisan Creative. The top worksite cities in the region for these occupations were Los Angeles, Santa Monica, Burbank, and El Segundo.

Exhibit 6 – Top employers (n=1,212)

Employer	Job Postings, Full Year 2016
Disney	33
Activision	32
Sony Electronics Incorporated	29
Artisan Creative	24

Source: Labor Insight/Jobs (Burning Glass)

Skills

Adobe Photoshop is the most sought after job specific skill desired by employers for this occupation group, followed by graphic design, Adobe Indesign, Adobe Illustrator, Adobe Acrobat, and Adobe Creative Suite.

Exhibit 7 –Job skills (n=2,826)

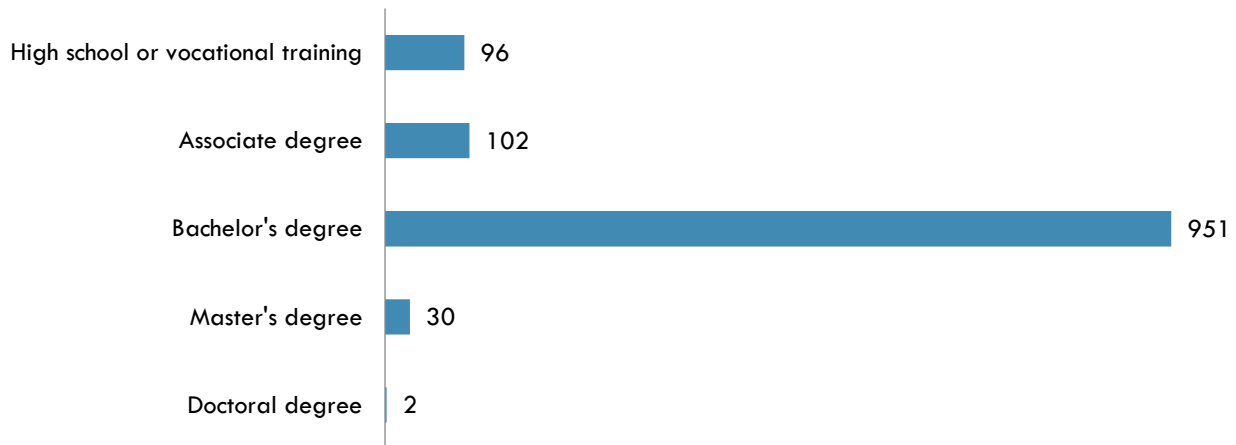
Skills	Job Postings, Full Year 2016
Adobe Photoshop	2,044
Graphic Design	1,964
Adobe Indesign	1,529
Adobe Illustrator	1,308
Adobe Acrobat	1,018
Adobe Creative Suite	986

Source: Labor Insight/Jobs (Burning Glass)

Advertised Education Levels

Exhibit 8 displays the education level requested by employers in online job ads. The majority of animation and motion arts employers in 2016 were looking for a candidate with a Bachelor's degree. Approximately 72% of job postings did not specify a level of education.

Exhibit 8 – 2016 Online job ads with minimum advertised education requirements for animation and motion arts-related occupations (n=1,181)



Source: Labor Insight/Jobs (Burning Glass)

Industry Concentration

Animation and motion arts-related jobs are most often found in the motion picture and video production industry (31% of total jobs in the industry). Exhibit 8 shows the industries that are the largest employers of animation workers in Los Angeles County.

Exhibit 9 – Industries with the largest number of animation and motion arts-related occupations, 2016

NAICS (6-Digit)	Industry	Occupation Group Jobs in Industry	% of Occupation Group in Industry
512110	Motion Picture and Video Production	7,363	31%
541430	Graphic Design Services	2,807	12%
541410	Interior Design Services	1,819	8%
711510	Independent Artists, Writers, and Performers	1,116	5%
541490	Other Specialized Design Services	843	4%

Source: Economic Modeling Specialists International (EMSI)

Education and Training

Exhibit 10 shows the typical entry-level education requirement for the occupations of interest, along with the typical on-the-job training, and percentage of workers in the field who hold a community college award or have completed some postsecondary courses. Approximately 30% of the workforce in the field of animation and motion arts have completed some community college education as their highest level of education.

Exhibit 10 – Education and training requirements, 2016

SOC	Occupation	Typical entry-level education	Typical on-the-job training	% of Community College Award Holders or Some Postsecondary Coursework
27-1014	Multimedia Artists and Animators	Bachelor's degree	Moderate-term on-the-job training	27%
27-1024	Graphic Designers	Bachelor's degree	None	30%

Source: Economic Modeling Specialists International, Bureau of Labor Statistics Employment Projections (Educational Attainment)

There are nine community colleges in Los Angeles County that train students in programs related to the field of animation and motion arts. Exhibit 11 displays the headcount and annual average community college awards for each of the colleges training in this field. Headcount is the actual number of students enrolled, regardless of credit hours. It is also important to note that an award is not equivalent to a single person in search of a job opening, since a student may earn more than one award (e.g. an associate degree and a certificate).

Between 2012 and 2015, the total annual average community college awards conferred was 50 (24 associate degrees and 26 certificates) across one program: Animation (0614.40).

Table 11 – CCC Student Awards (by TOP and College)

TOP Code	Program	College	2012 - 2015 Annual Average			Total Average CC Awards
			CCC Headcount	CCC Associate Degrees	CCC Certificates	
0614.40	Animation	Cerritos	91	1	N/A	1
		Citrus	55	N/A	N/A	N/A
		East LA	138	1	N/A	1
		El Camino	76	N/A	N/A	N/A
		Glendale	135	2	2	4
		LA Mission	N/A	3	1	4
		Mt San Antonio	402	7	13	20
		Rio Hondo	109	5	N/A	5
		Santa Monica	618	5	10	15
			1,623	24	26	50

Source: California Community Colleges Chancellor's Office MIS Data Mart

Student Outcomes

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of the Animation Program (TOP code 0614.40) in Los Angeles County for the 2013-14 academic year.

- The median annual wage after program completion is \$12,587
- 24% of students are earning a living wage
- 53% of students are employed within six months after completing a program

Source: CTE LaunchBoard

Program Recommendation

This report was compiled by the Los Angeles/Orange County Center of Excellence to provide regional labor market data for the program recommendation of animation and motion arts. This report is to help determine whether there is demand in the local labor market that is not being met by the supply from programs of study (CCC and non-CCC) that align with this occupation group.

Based on the data, the COE has determined that there is an unmet need for an animation and motion arts program in Los Angeles County. Reasons include:

- There are over 700 annual openings in the region for animation and motion arts-related occupations
- On average, 50 awards (associate degrees and certificates) are conferred each year, signaling there is not a steady supply of graduates to meet the job demand.
- Over one-quarter of multimedia artists and animators and three-tenths of graphic designers have completed some postsecondary work, signaling that these occupations are relevant for community college students.

Sources

O*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

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Notes

Data included in this analysis represents the labor market demand for positions related to the field of animation and motion arts. Standard occupational classification (SOC) codes were chosen based on the national education level required for employment (associate degree and postsecondary certificate) as well as the proportion of current workers who hold a community college award or have had some community college training. This selection process narrows the labor market analysis to the most relevant employment opportunities for students with community college education and/or training.

Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information was used to provide a more nuanced view of the current job market, as it captures job post advertisements for occupations relevant to the field of study. Job postings should not be used to establish current job openings, because the numbers may include duplicate job postings or postings intended to gather a pool of applicants. Real-time labor market information can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions.