



Game Design & Development

March 2018

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

Research Summary

The Los Angeles/Orange County Center of Excellence (COE) compiled this report to provide regional labor market supply and demand data related to **game design and development**.

The following list summarizes key findings from this data brief:

- Over the next five years, the number of jobs for multimedia artists and animators is expected to increase by 8%
- 27% of the multimedia artists and animators have some postsecondary coursework experience making this occupation relevant to community college students
- Between 2014 and 2017, there were no awards conferred in Los Angeles County for the program of interest.

Occupation Codes and Descriptions

Currently, there is one occupation in the standard occupational classification (SOC) system related to game design and development, and one emerging O*NET occupation: video game designers. The occupation titles, descriptions, and reported job titles are included in Exhibit 1.

Exhibit 1 – Occupations, descriptions, and sample job titles

SOC/O*NET Code	Title	Description	Sample of Reported 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
15-1199.11	Video Game Designers	Design core features of video games. Specify innovative game and role-play mechanics, story lines, and character biographies. Create and maintain design documentation. Guide and collaborate with production staff to produce games as designed.	Design Director, Designer/Writer, Game Designer, Game Designer/Creative Director, Lead Designer, Lead Game Designer, Lead Level Designer, Mid Level Game Designer, Senior Game Designer, World Designer

Source: O*NET Online

Current and Future Employment

In Los Angeles County, the number of jobs for multimedia artists and animators is expected to increase by 8% over the next five years. Over 600 job opportunities will be available annually for this occupation through 2022 due to new job growth and replacement need (e.g., retirements). Exhibit 2 contains detailed employment projections data for the occupation.

Exhibit 2 – Five-year projections for multimedia artists and animators

SOC	Occupation	2017 Jobs	2022 Jobs	2017-2022 Change	2017-2022 % Change	Annual Openings
27-1014	Multimedia Artists and Animators	6,907	7,452	545	8%	668

Source: Economic Modeling Specialists International (EMSI)

Earnings

In Los Angeles County, the entry-level average wage for multimedia artists and animators is \$12.11 per hour, which is below the MIT Living Wage¹ estimate of \$13.54 per hour for a single adult. The average annual earnings for these workers in the region is \$69,432 per year, assuming full-time employment.

Exhibit 3 contains hourly wages and annual average earnings for this occupation. 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 multimedia artists and animators

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings	Average Annual Earnings
27-1014	Multimedia Artists and Animators	\$12.11	\$31.43	\$57.26	\$69,432

Source: Economic Modeling Specialists International (EMSI)

¹ MIT Living Wage Calculator. <http://livingwage.mit.edu/>

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 who is employing in the field of game design and development, and what they are looking for in potential candidates.

To identify job postings related to game design and development, the SOC and O*NET codes 15-1199.11 and 27-1014 were used. In 2017, there were 968 employer postings related to game design and development. There were 822 job postings for the same occupation group in 2016, and 812 job postings in 2015.

Top Titles

The most common titles for employers posting ads for game design and development related jobs are listed in Exhibit 4. Animator is mentioned in 17% of all relevant job postings (162 out of 967 postings).

Exhibit 4 –Job titles (n=968)

Title	Job Postings, Full Year 2017
Animator	162
Graphic Designer	71
Interaction Designer	57
Visual Effects Artist	52
Game Designer	43
Content Producer	27
Interactive Designer	27
FX Artist	15

Source: Labor Insight/Jobs (Burning Glass)

Top Employers

Exhibit 5 lists the major employers hiring game design and development related workers. Top employers posting job ads included Activision, NBC, and Disney. The top worksite cities in the region for these occupations were Los Angeles, Santa Monica, and Glendale.

Exhibit 5 – Top employers (n=968)

Employer	Job Postings, Full Year 2017
Activision	48
NBC	30
Disney	24
Electronic Arts Incorporated	14
Sony Electronics	14

Age of Learning	11
CBS Broadcasting	9
Accenture	8
Zoic	8
20th Century Fox	7

Source: Labor Insight/Jobs (Burning Glass)

Advertised Education Levels

Exhibit 6 displays the education level requested by employers in online job ads. The majority of employers were looking for a candidate with a Bachelor’s degree. Approximately 67% of job postings did not specify a level of education.

Exhibit 6 – Advertised education requirements for game design and development related occupations (n=322)



Source: Labor Insight/Jobs (Burning Glass)

Education and Training

Exhibit 7 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. Nearly one-third of the current workforce has completed some community college education.

Exhibit 7 – Education and training requirements

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	27%

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

Student Outcomes

Between 2014 and 2017, there were no awards conferred in Los Angeles County for the program of interest.

Sources

O*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, and Bureau of Labor Statistics (BLS) Education Attainment

Notes

Data included in this analysis represents the labor market demand for positions most closely related to game design and development. 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 captures job post advertisements for occupations relevant to the field of study and 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.