








# Special Effects Artists and Animators

Labor Market Analysis: San Diego County

August 2025

## Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL OF EDUCATION
 <b>Do Not Proceed</b>	 	 	<input type="checkbox"/> Doctorate Degree <input type="checkbox"/> Master's Degree <input checked="" type="checkbox"/> Bachelor's Degree <input type="checkbox"/> Associate Degree <input type="checkbox"/> Some College or Certificate <input type="checkbox"/> HS Diploma or Equivalent <input type="checkbox"/> Less Than a HS Diploma <input type="checkbox"/> Apprenticeship
SUPPORT FOR PROGRAM MODIFICATION?	NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING	NUMBER OF ANNUAL JOB OPENINGS	
<b>COE defers to the Region</b>	<b>HIGH</b> 	<b>LOW</b> 	

The San Diego & Imperial Center of Excellence (COE) developed this brief to assist the region’s community colleges with strategic planning and program development. According to available data, *Special Effects Artists and Animators* in San Diego County have a labor market demand of 39 annual job openings (while average demand for a single occupation in San Diego County is 289 annual job openings), and nine institutions supply 80 awards for this occupation, suggesting that there is an oversupply in the labor market. Entry-level wages are below the living wage. This brief does not recommend proceeding with the development of a new program and defers to the region for a program modification because 1) there is an estimated oversupply in San Diego County; 2) entry-level wages are below the living wage; and 3) there is a low number of annual job openings. College should note that the expected level of education for *Special Effects Artists and Animators* is a bachelor’s degree.

## Introduction

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

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

- Multimedia Specialist
- Multimedia Artist
- Digital Artist
- Multimedia Producer
- Media Producer
- Animator Radio Technician
- Graphics Specialist
- 3D Animator
- Motion Graphics Artist
- Graphic Artist

## Projected Occupational Demand

Between 2023 and 2028, *Special Effects Artists and Animators* are projected to increase by 14 net jobs or 3% (Exhibit 1). Employers in San Diego County will need to hire 39 employees annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

**Exhibit 1: Number of Jobs for *Special Effects Artists and Animators* (2023-2028)<sup>2</sup>**

Occupational Title	2023 Jobs	2028 Jobs	2023 - 2028 Net Jobs Change	2023 - 2028 % Net Jobs Change	Annual Job Openings (Demand)
Special Effects Artists and Animators	414	428	14	3%	39

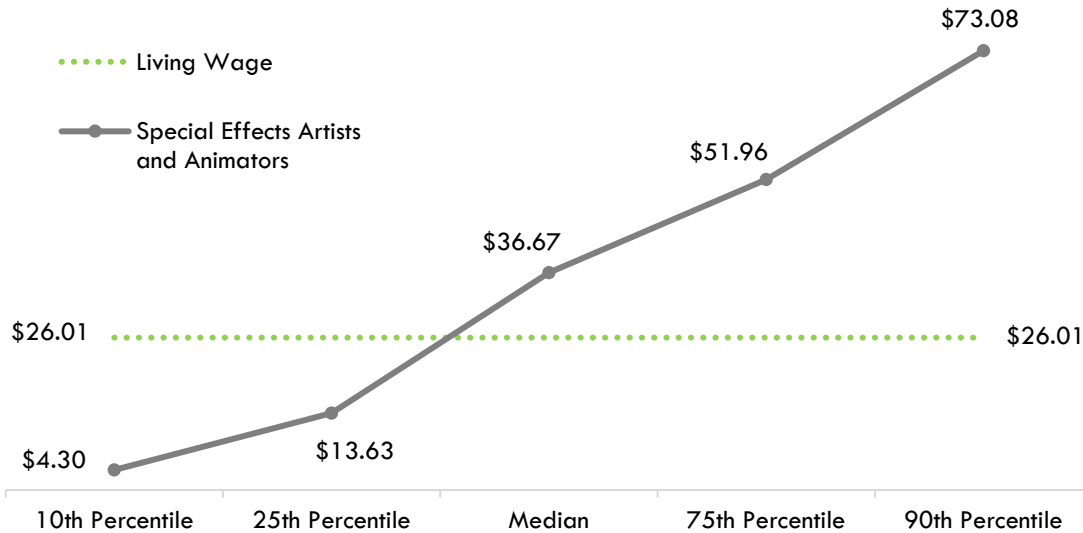
<sup>1</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. <https://www.bls.gov/soc/>.

<sup>2</sup> Lightcast 2025.02; QCEW, Non-QCEW, Self-Employed.

## Earnings

According to traditional<sup>3</sup> labor market information (LMI), entry-level hourly earnings for *Special Effects Artists and Animators* were \$13.63—or \$28,350.04 annual salary; this is less than the living wage for a single adult in San Diego County, which is \$26.01 per hour (Exhibit 2).

**Exhibit 2: Hourly Earnings<sup>4</sup> for *Special Effects Artists and Animators* in San Diego County<sup>5</sup>**



In online job postings, however, employers advertised between \$31 to \$35 per hour between January 1, 2022 and December 30, 2024 for *Special Effects Artists and Animators* in San Diego County (Exhibit 3).<sup>6</sup> This suggests that employers in recent years are increasing wages due to labor market forces that may not be captured by traditional LMI.

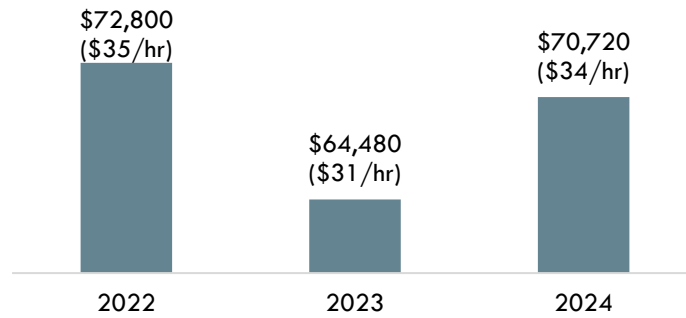
<sup>3</sup> Traditional LMI is generally historical data captured by the U.S. Bureau of Labor Statistics (BLS) or the California Employment Development Department (EDD). It does not account for recent technological, economic, or legislative changes that may affect labor market demand and wages.

<sup>4</sup> 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

<sup>5</sup> Lightcast 2025.02; QCEW, Non-QCEW, Self-Employed.

<sup>6</sup> Lightcast 2025.02; "Job Posting Analytics." 2022-2024.

**Exhibit 3: Entry-Level Advertised Salaries in Online Job Postings for Special Effects Artists and Animators in San Diego County (2022-2024)**



**Expected Level of Education**

According to traditional LMI (data reported to EDD and BLS), *Special Effects Artists and Animators* have a national educational attainment of a [bachelor’s degree](#) (Exhibit 4).<sup>7</sup>

**Exhibit 4: National Educational Attainment for Special Effects Artists and Animators<sup>8</sup>**

Occupational Title	Typical Entry-Level Education
Special Effects Artists and Animators	Bachelor’s degree

Similarly, online job postings between January 1, 2022 and December 31, 2024 in San Diego County had a [bachelor’s degree](#) as the most requested educational requirement for *Special Effects Artists and Animators*; however, employers also expected the following certifications (Exhibit 5).<sup>9</sup>

**Exhibit 5: Top Certifications for Special Effects Artists and Animators in San Diego County in Online Job Postings (2022-2024)<sup>10</sup>**

1. Secret Clearance
2. Security Clearance
3. Chartered Institute Of Management Accountants (CIMA)
4. CDL Class C License
5. Project Management Professional Certification

<sup>7</sup> Lightcast 2025.02; QCEW, Non-QCEW, Self-Employed.

<sup>8</sup> Lightcast 2025.02; QCEW, Non-QCEW, Self-Employed.

<sup>9</sup> Lightcast 2025.02; “Job Posting Analytics.” 2022-2024.

<sup>10</sup> Lightcast 2025.02; “Job Posting Analytics.” 2022-2024

## Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes. There are **three** TOP codes and **three** CIP codes related to *Special Effects Artists and Animators* (Exhibit 6).

**Exhibit 6: Related TOP and CIP Codes for *Special Effects Artists and Animators*<sup>11</sup>**

TOP or CIP Code	TOP or CIP Program Title
TOP 0614.10	Multimedia
TOP 0614.20	Electronic Game Design
TOP 0614.40	Animation
CIP 10.0304	Animation, Interactive Technology, Video Graphics and Special Effects
CIP 11.0204	Computer Game Programming
CIP 50.0411	Game and Interactive Media Design

According to TOP data, **six** community colleges supply the region with awards for this occupation, *MiraCosta College, Palomar College, San Diego College of Continuing Education, San Diego City College, San Diego Mesa College, and Southwestern College*. According to CIP data, **three** non-community-college institution supplies the region with awards, *National University, Newschool of Architecture and Design, and Platt College-San Diego* (Exhibit 7).

**Exhibit 7: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Year 2020-21 Through Program Year 2023-24 Average)**

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY21-22 to PY23-24)	Other Educational Institutions 3-Yr Annual Average Awards (PY20-21 to PY22-23)	Total Average Supply (PY20-21 to PY23-24)
0614.10	Multimedia	<b>53</b>	<b>0</b>	<b>53</b>
	MiraCosta	<b>6</b>	<b>0</b>	
	• Certificate 6 < 18 units	4	0	
	• Certificate 30 < 60 units	2	0	

<sup>11</sup> This brief uses a conservative estimate of program supply and only calculates awards from the TOP code listed in Exhibit 7.

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY21-22 to PY23-24)	Other Educational Institutions 3-Yr Annual Average Awards (PY20-21 to PY22-23)	Total Average Supply (PY20-21 to PY23-24)
	Palomar	<b>2</b>	<b>0</b>	
	• Certificate 16 < 30 units	1	0	
	• Certificate 8 < 30 units	1	0	
	• Associate degree	0	0	
	San Diego Continuing Education	<b>31</b>	<b>0</b>	
	• Noncredit 192 <288 hours	31	0	
	San Diego City	<b>0</b>	<b>0</b>	
	• Associate degree	<b>0</b>	0	
	San Diego Mesa	<b>14</b>	<b>0</b>	
	• Associate degree	13	0	
	• Certificate 16 < 30 units	1	0	
<b>0614.20</b>	<b>Electronic Game Design</b>	<b>10</b>	<b>0</b>	<b>10</b>
	Palomar	<b>1</b>	<b>0</b>	
	• Certificate 6 < 18 units	1	0	
	San Diego Mesa	<b>5</b>	<b>0</b>	
	• Associate degree	3	0	
	• Certificate 30 < 60 units	2	0	
	Southwestern	<b>4</b>	<b>0</b>	
	• Associate degree	3	0	
	• Certificate 16 < 30 units	1	0	
<b>0614.40</b>	<b>Animation</b>	<b>11</b>	<b>0</b>	<b>11</b>
	Palomar	<b>6</b>	<b>0</b>	
	• Associate degree	3	0	
	• Certificate 16 < 30 units	3	0	

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY21-22 to PY23-24)	Other Educational Institutions 3-Yr Annual Average Awards (PY20-21 to PY22-23)	Total Average Supply (PY20-21 to PY23-24)
	San Diego Mesa	1	0	
	• Certificate 30 < 60 units	1	0	
	Southwestern	4	0	
	• Certificate 6 < 18 units	4	0	
10.0304	Animation, Interactive Technology, Video Graphics, and Special Effects	0	6	6
	Newschool of Architecture and Design	0	6	
	• Bachelor's degree	0	6	
	Platt College-San Diego	0	0	
	• Certificate > 1 year	0	0	
50.0411	Game and Interactive Media Design	0	0	0
	National University	0	0	
	• Master's Degree	0	0	
			<b>Total</b>	<b>80</b>

## Demand vs. Supply

Comparing labor demand with labor supply<sup>12</sup> suggests that there is an **oversupply** for this occupation in San Diego County, with 39 annual openings and 80 awards. Comparatively, there are 1,058 annual openings in California and 1,687 awards, suggesting that there is an **oversupply** across the state (Exhibit 8).<sup>13</sup>

**Exhibit 8: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)**

	<b>Demand</b> (Annual Openings)	<b>Supply</b> (Annual Awards)	<b>Supply Gap or Oversupply</b>
San Diego	39	80	<b>- 41</b>
California	1,058	1,687	<b>- 629</b>

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

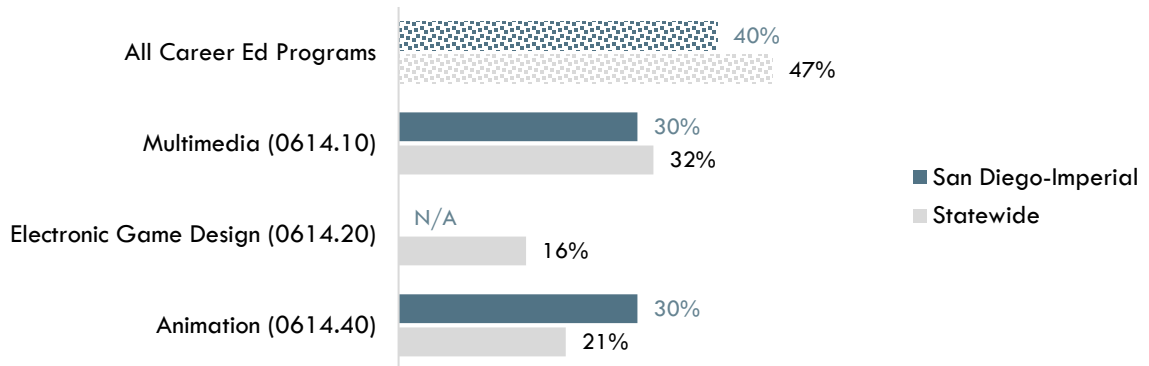
<sup>12</sup> Labor supply can be found from two different sources: Lightcast or the California Community Colleges Chancellor's Office MIS Data Mart. Lightcast uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

<sup>13</sup> "Supply and Demand," Centers of Excellence Student Outcomes, [coecc.net/our-resources](http://coecc.net/our-resources).

## Student Outcomes and Regional Comparisons

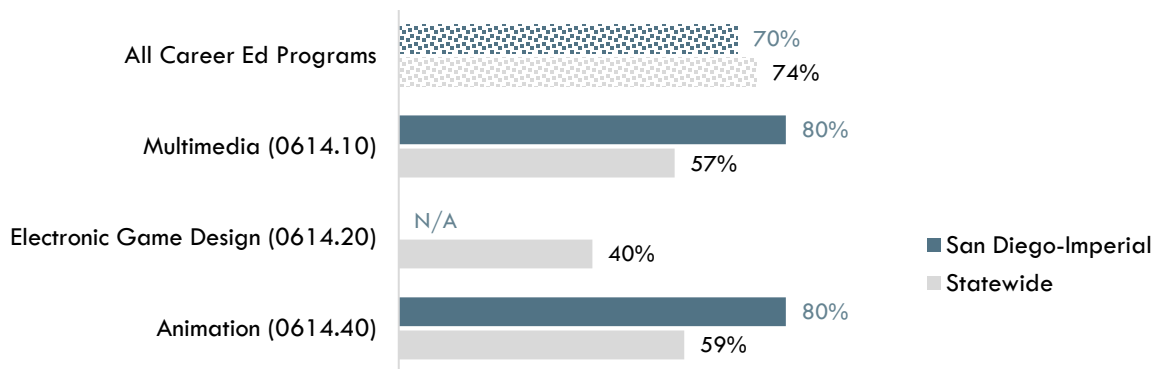
According to the California Community Colleges DataVista, 30% of students in the San Diego-Imperial region earned a living wage after completing a program related to *Special Effects Artists and Animators*, compared to 16 to 32% statewide and 47% of students in Career Education programs in general across the state (Exhibit 9).<sup>14</sup>

**Exhibit 9: Percentage of Students Who Earned a Living Wage by Program, PY2022-23<sup>15</sup>**



According to the California Community Colleges DataVista, 80% of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a program related to *Special Effects Artists and Animators*, compared to 40 to 59% statewide and 74% of students in Career Education programs in general across the state (Exhibit 10).<sup>16</sup>

**Exhibit 10: Percentage of Students in a Job Closely Related to Field of Study by Program, PY2021-22<sup>17</sup>**



<sup>14</sup> DataVista, California Community Colleges, [datavista.cccco.edu/](https://datavista.cccco.edu/).

<sup>15</sup> Most recent year with available data is Program Year 2022-23. Among completers and skills builders who exited, the percentage of students who attained a living wage.

<sup>16</sup> DataVista, California Community Colleges, [datavista.cccco.edu/](https://datavista.cccco.edu/).

<sup>17</sup> Most recent year with available data is Program Year 2021-22. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

## Employers

Between January 1, 2022 and December 31, 2024, the top five employers in San Diego County for *Special Effects Artists and Animators* were [Sony Interactive Entertainment](#), [Randstad](#), [Activision Blizzard](#), [Intrepid Studios](#), and [Viejas Enterprises](#) based on online job postings (Exhibit 11).

**Exhibit 11: Top Employers for Special Effects Artists and Animators in San Diego County<sup>18</sup>**

Top Employers	
<ul style="list-style-type: none"> <li>• Sony Interactive Entertainment</li> <li>• Randstad</li> <li>• Activision Blizzard</li> <li>• Intrepid Studios</li> <li>• Viejas Enterprises</li> </ul>	<ul style="list-style-type: none"> <li>• Qdstaff</li> <li>• Amazon</li> <li>• Viejas Casino And Resort</li> <li>• ATR International</li> <li>• Qualcomm</li> </ul>

## Skills

Exhibit 12 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2022 and December 31, 2024.

**Exhibit 12: Top Skills for Special Effects Artists and Animators in San Diego County<sup>19</sup>**

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> <li>• Animations</li> <li>• Graphic Design</li> <li>• Marketing</li> <li>• Multimedia</li> <li>• Photography</li> <li>• Typography</li> <li>• Illustration</li> <li>• Branding</li> <li>• Visual Effects</li> <li>• Workflow Management</li> <li>• Content Creation</li> <li>• Project Management</li> <li>• Motion Graphics</li> <li>• Brand Management</li> <li>• Web Design</li> </ul>	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Detail Oriented</li> <li>• Time Management</li> <li>• Management</li> <li>• Problem Solving</li> <li>• Presentations</li> <li>• Editing</li> <li>• Innovation</li> <li>• Writing</li> <li>• Interpersonal Communications</li> <li>• Ability To Meet Deadlines</li> <li>• Verbal Communication Skills</li> <li>• Organizational Skills</li> <li>• Leadership</li> </ul>	<ul style="list-style-type: none"> <li>• Adobe Photoshop</li> <li>• Adobe Illustrator</li> <li>• Adobe InDesign</li> <li>• Adobe After Effects</li> <li>• Adobe Creative Suite</li> <li>• Autodesk Maya</li> <li>• Game Engine</li> <li>• Microsoft PowerPoint</li> <li>• Unreal Engine</li> <li>• AAA Video Games</li> <li>• ZBrush</li> <li>• Houdini</li> <li>• Python</li> <li>• HyperText Markup Language</li> <li>• Adobe Premiere Pro</li> </ul>

<sup>18</sup> Lightcast 2025.02; "Job Posting Analytics." 2022-2024.

<sup>19</sup> Lightcast 2025.02; "Job Posting Analytics." 2022-2024.

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