Labor Market Analysis for Program Recommendation: 0614.10/Multimedia
(Games and Interactive Media)
(Games and Interactive Media – Design)
(Games and Interactive Media – Animation)
Orange County Center of Excellence, July 2025

Summary

Program LMI Endorsement	Endorsed: All LMI Criteria Met	☐	Endorsed: Some LMI Criteria Met	☒	Not LMI Endorsed	☐
Program LMI Endorsement Criteria						

Supply Gap:	Yes ☑			No ☐		

Comments: there is projected to be **680 annual job openings** throughout Los Angeles and Orange counties for *web and digital interface designers*, which **is less than the 1,235 awards conferred by educational institutions**. However, these educational programs also prepare students for **six other related occupations, which account for 2,322 additional annual job openings.** *Because this program trains a variety of occupations with high demand, there is most likely an undersupply of labor for web and digital interface designers.*

Self-Sufficiency Standard Living Wage[1]:	Yes ☑			No ☐		

Comments: **entry-level hourly wages for** *web and digital interface designers* **are $30.14, which is above the OC living wage of $27.13.**

Education:	Yes ☑			No ☐		

Comments: though the typical education requirement for *web and digital interface designers* is a bachelor's degree, **21% of workers in the field have completed some college or an associate degree as their highest level of education.**

Additional Considerations		
Emerging Occupation(s):	Yes ☐ Some ☐ No ☑	

Comments: N/A

OC Resilient Job(s):	Yes ☐ Some ☐ No ☑	

Comments: See Resilient Jobs and US News & World Report Best Jobs

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[1] The living wage endorsement criteria in this report uses the University of Washington's Center for Women's Welfare Self-Sufficiency Standard, which the COE refers to as a living wage; Orange County's living wage of $27.13, was last updated in March 2024.

U.S. News & World Report 2025 Best Jobs List[2]:	Yes ☐	Some ☐	No ☑
	Comments: See [Resilient Jobs and US News & World Report Best Jobs](#)		

The Orange County Center of Excellence for Labor Market Research (OC COE) prepared this report to determine whether there is a supply gap in the Los Angeles/Orange County regional labor market related to two occupations:

- Middle-Skill
  - *Web and Digital Interface Designers (15-1255)*
- Above Middle-Skill – denoted with a caret (^) throughout this report.
  - *Special Effects Artists and Animators (27-1014)^*

Based on the available data, typical education requirements for *web and digital interface designers* align with a community college education. Though the number of awards for this occupation exceeds demand, supply is overstated because educational programs also prepare students for another six related occupations. Additionally, entry-level wages are above the Self-Sufficiency Standard living wage. **Therefore, due to some of the regional labor market criteria being met, the COE endorses this proposed program.**

Exhibit 1 lists the occupational demand, supply, typical entry-level education, and educational attainment for the occupations included in this report.

Exhibit 1: Labor Market Endorsement Summary

Occupation (SOC)	Demand (Annual Openings)	Supply (CC and Non-CC)	Entry-Level Hourly Earnings (25th Percentile)	Typical Entry-Level Education	Community College Educational Attainment
Web and Digital Interface Designers (15-1255)	LA: 510 OC: 170 *TTL: 680*	LA: 965 OC: 271 *TTL: 1,235*	OC: $30.14	Bachelor's Degree	21%
Middle-Skill Total	**680**	**1,235**	**N/A**	**N/A**	**N/A**
Special Effects Artists and Animators (27-1014)^	LA: 935 OC: 112 *TTL: 1,047*	LA: 731 OC: 131 *TTL: 862*	OC: $32.79	Bachelor's Degree	27%
Above Middle-Skill (^) Total	**1,047**	**862**	**N/A**	**N/A**	**N/A**
Total	**1,726**	**2,098**	**N/A**	**N/A**	**N/A**

Demand:

- The number of jobs related to *web and digital interface designers* is projected to increase by 2% through 2028, equating to 680 annual job openings.

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[2] "100 Best Jobs," U.S. News & World Report, accessed January 28, 2025, https://money.usnews.com/careers/best-jobs/rankings/the-100-best-jobs.

- Hourly entry-level wages for *web and digital interface designers* are $30.14 in Orange County; all annual job openings have entry-level wages above the Self-Sufficiency Standard living wage.
- There were 2,881 online job postings *web and digital interface designers* over the past 12 months. The highest number of postings were for UI/UX designers, UX designers, and user experience designers.
- The typical entry-level education for *web and digital interface designers* is a bachelor's degree.
- Approximately 21% of workers in the field have completed some college or an associate degree as their highest level of educational attainment.

Supply:

- There was an average of 514 awards conferred by 26 community colleges in Los Angeles and Orange Counties from 2021 to 2024 for the middle-skill occupation.
  - Community colleges conferred an average of 265 awards from 2021 to 2024 applicable towards the above middle-skill occupation.
- Non-community college institutions conferred an average of 721 awards from 2020 to 2023 for the middle-skill occupation.
  - Non-community colleges conferred an average of 598 awards from 2020 to 2023 applicable towards the above middle-skill occupation.
- Orange County community college students that exited multimedia programs in the 2022-23 academic year had a median annual wage of $35,268 ($16.96) after exiting the program and 28% attained the regional living wage.
- Due to a low number of multimedia students in the 2021-22 academic year, student outcome data is not available for students employed in their field of study in Orange County.

Demand

Occupational Projections:

Exhibit 2 shows the annual percent change in jobs for these game and interactive media occupations from 2018 through 2028. Though there was a 7% decline across all occupations in Los Angeles and Orange counties from 2019 to 2020 due to the COVID-19 pandemic, employment in these game and interactive media occupations increased each year from 2019 to 2021. These game and interactive media occupations are projected to grow at a similar rate for all occupations through 2028.

Exhibit 2: Annual Percent Change in Jobs for Game and Interactive Media occupations, 2018-2028
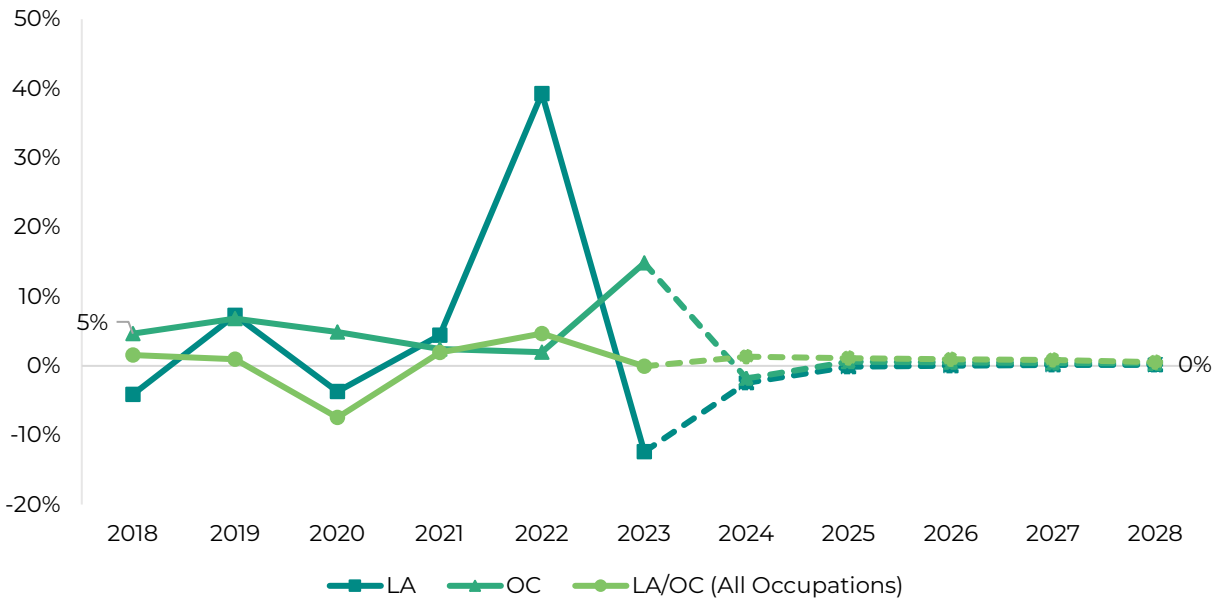

Exhibit 3 shows the five-year occupational demand projections for *web and digital interface designers*. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 2% through 2028. There is projected to be 680 jobs available annually.

Exhibit 3: Middle-Skill Occupational Demand in Los Angeles and Orange Counties[3]

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	6,721	6,853	132	2%	510
Orange	2,286	2,325	39	2%	170
Total	**9,007**	**9,177**	**171**	**2%**	**680**

Exhibit 4 shows the five-year occupational demand projections for *special effects artists and animators^*. In Los Angeles/Orange County, the number of jobs related to this occupation is projected to decrease by 5% through 2028. There are projected to be 1,047 jobs available annually.

Exhibit 4: Above-Middle Skill Occupational Demand in Los Angeles and Orange Counties

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	9,979	9,465	(515)	-5%	935
Orange	1,192	1,155	(38)	-3%	112
Total	**11,172**	**10,619**	**(552)**	**-5%**	**1,047**

[3] Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.
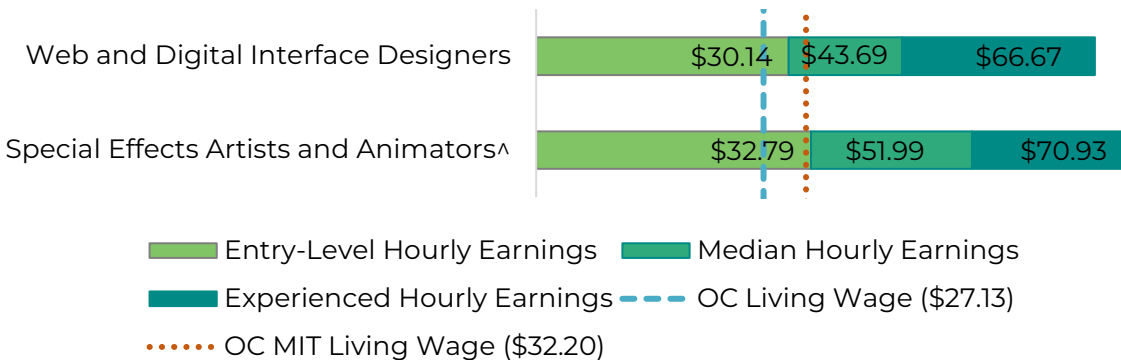
Wages:

The labor market endorsement in this report considers the entry-level hourly wages for *web and digital interface designers* in Orange County as they relate to the county's living wage. Los Angeles County wages are included below to provide a complete analysis of the LA/OC region.

In addition to the Self Sufficiency Standard living wage, data for the MIT Living Wage, updated on February 10, 2025, is provided as a reference. Currently, the MIT Living Wage in Orange County is $32.20. Both figures account for geographic-specific costs of necessities such as housing, food, health care, and transportation to assess the cost of living, and are noted in the exhibits below.

The typical entry-level hourly wage for *web and digital interface designers* is $30.14, which is above the Self-Sufficiency Standard living wage for one adult ($27.13 in Orange County). Orange County's average wages of $49.73 are below the average statewide wage of $63.19 for this occupation. Exhibit 5 shows the wage range for each of these game and interactive media occupations in Orange County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

Exhibit 5: Wages by Occupation in Orange County

The typical entry-level hourly wage for *web and digital interface* is $32.13, which is above the Self-Sufficiency Standard living wage for one adult ($24.03 in Los Angeles County). Los Angeles County's average wages of $52.70 are below the average statewide wage of $63.19 for this occupation. Exhibit 6 shows the wage range for each of these game and interactive media occupations in Los Angeles County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

Exhibit 6: Wages by Occupation in Los Angeles County
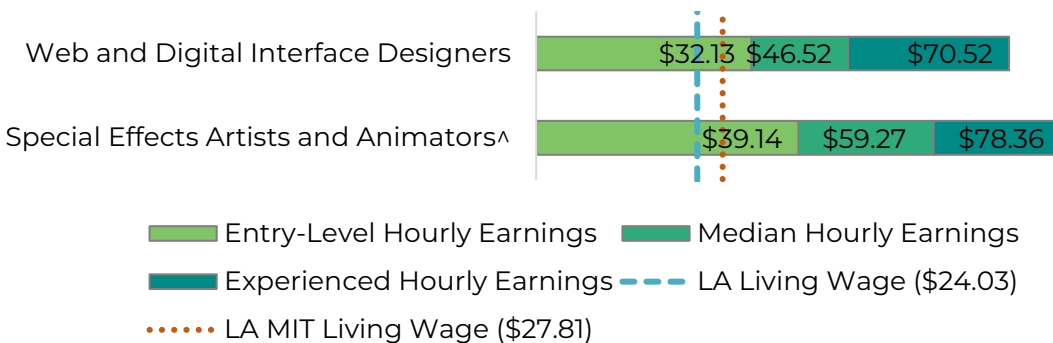
Resilient Jobs and U.S. News & World Report Best Jobs:

Exhibit 7 shows if each occupation is considered an Orange County Great Recession-Resilient, COVID-19 Pandemic Recession-Resilient Job, or a 2025 U.S. News & World Report (USN&WR) Best Job. Neither of these two game and interactive media occupations met the criteria for these designations.

Exhibit 7: Resilient Jobs and USN&WR Best Jobs Designations

Occupation	Great Recession-Resilient Job	COVID-19 Pandemic Recession-Resilient Job	2025 USN&WR Best Job
Web and Digital Interface Designers	☐	☐	☐
Special Effects Artists and Animators^	☐	☐	☐

Job Postings:

Important Online Job Postings Data Note: *There are limitations when analyzing job postings. A single job posting may not represent a single job opening for a variety of reasons.*

There were 3,434 online job postings related to these game and interactive media occupations listed in the past 12 months. Exhibit 8 shows the number of job postings by occupation. Approximately 84% of job postings were for *web and digital interface designers* and 16% were for *special effects artists and animators^*.

Exhibit 8: Number of Job Postings by Occupation (n=3,434)

Occupation	Job Postings	Percentage of Job Postings
Web and Digital Interface Designers	2,881	84%
Special Effects Artists and Animators^	553	16%
Total Postings	**3,434**	**100%**

Job Postings for Middle Skill Occupation

The top employers for *web and digital interface designers* in the region, by number of job postings, are shown in Exhibit 9.

Exhibit 9: Top Employers by Number of Job Postings for Middle-Skill Occupation (n=2,881)

Employer	Job Postings	Percentage of Job Postings
Canteen Vending	156	5%
Riot Games	110	4%
Amazon	109	4%
Netflix	88	3%
Disney	62	2%
Sony Interactive Entertainment	43	1%
The Judge Group	43	1%
Google	34	1%
Insight Global	32	1%

Employer	Job Postings	Percentage of Job Postings
Meta	30	1%

The top specialized, soft, and computer skills for *web and digital interface designers* listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 10.

Exhibit 10: Top Skills by Number of Job Postings for Middle-Skill Occupation (n=2,881)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
User Experience (UX) (1,317)	Communication (1,262)	Figma (Design Software) (807)
Prototyping (916)	Research (1,061)	Cascading Style Sheets (CSS) (470)
User Interface (UI) (862)	Innovation (575)	HyperText Markup Language (HTML) (458)
User Experience (UX) Design (830)	Leadership (522)	JavaScript (Programming Language) (409)
Figma (Design Software) (807)	Problem Solving (480)	Adobe Photoshop (342)
Wireframing (696)	Detail Oriented (406)	Adobe Creative Suite (266)
User Research (579)	Customer Service (333)	Adobe Illustrator (252)
Cascading Style Sheets (CSS) (470)	Presentations (326)	Unity Engine (187)
HyperText Markup Language (HTML) (458)	Advocacy (315)	Adobe XD (174)
Marketing (458)	Collaboration (305)	React.js (Javascript Library) (171)

Job Postings for Above Middle-Skill Occupation

The top employers for *special effects artists and animators^* in the region, by number of job postings, are shown in Exhibit 11.

Exhibit 11: Top Employers by Number of Job Postings for Above Middle-Skill Occupation(n=553)

Employer	Job Postings	Percentage of Job Postings
Canteen Vending	107	19%
Riot Games	31	6%
Apple	16	3%
Activision Blizzard	15	3%
Disney	10	2%

Employer	Job Postings	Percentage of Job Postings
Treyarch	9	2%
NBC	8	1%
Sony Interactive Entertainment	7	1%
Sphere Entertainment	7	1%
Netflix	6	1%

The top specialized, soft, and computer skills *special effects artists and animators^* listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 12.

Exhibit 12: Top Skills by Number of Job Postings for
Above Middle-Skill Occupation(n=553)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Adobe Photoshop (247)	Communication (302)	Adobe Photoshop (247)
Animations (228)	Research (206)	Autodesk Maya (155)
Workflow Management (210)	Problem Solving (135)	Adobe Illustrator (142)
Marketing (169)	Detail Oriented (122)	Adobe Creative Suite (117)
Autodesk Maya (155)	Presentations (111)	Adobe After Effects (95)
Adobe Illustrator (142)	Leadership (106)	Houdini (3D Animation Software) (84)
Visual Effects (137)	Innovation (100)	Adobe InDesign (78)
Graphic Design (123)	Self-Motivation (82)	Game Engine (75)
Adobe Creative Suite (117)	Management (71)	Unreal Engine (63)
Typography (97)	Ability To Meet Deadlines (62)	Python (Programming Language) (59)

Educational Attainment:

The Bureau of Labor Statistics (BLS) lists a bachelor's degree as the typical entry-level education for both *web and digital interface designers* and *special effects artists and animators*^. The national-level educational attainment data indicates between 21% and 27% of workers in the field have completed some college or an associate degree as their highest level of education. Exhibit 13 shows the educational attainment for each occupation, sorted by highest community college educational attainment to lowest.

Exhibit 13: National-level Educational Attainment for Occupations

Special Effects Artists and Animators^: High School Diploma or Less 17%, Some College or Associate Degree 27%, Bachelor's Degree 42%, Master's or Higher 14%

Web and Digital Interface Designers: High School Diploma or Less 5%, Some College or Associate Degree 21%, Bachelor's Degree 55%, Master's or Higher 19%

Legend:
- ■ High School Diploma or Less
- ■ Some College or Associate Degree
- ■ Bachelor's Degree
- ■ Master's or Higher

Of the 36% of the cumulative job postings for *web and digital interface designers* that listed a minimum education requirement in Los Angeles/Orange County, 9% (97) requested a high school diploma or associate degree, and 85% (883) requested a bachelor's degree.

Of the 32% of the cumulative job postings for *special effects artists and animators*^ that listed a minimum education requirement in Los Angeles/Orange County, 7% (13) requested a high school diploma or an associate degree and 91% (160) requested a bachelor's degree.

Educational Supply

The following supply tables displays the total supply for these game and interactive media occupations that align with these TOP/CIP codes and program needs.

Community College Supply:

Exhibit 14 shows the three-year average number of awards conferred by community colleges in the related TOP codes:

- Digital Media (0614.00)
- Multimedia (0614.10)
- Electronic Game Design (0614.20)
- Website Design and Development (0614.30)
- Animation (0614.40)
- Graphic Art and Design (1030.00)

No awards were conferred by community colleges under the related TOP code, Applied Design (1009.00). The colleges with the most completions in the region are Santa Monica, Pasadena, and Mt. San Antonio. Over the past 12 months, there were no other related program recommendation requests from regional community colleges.

Exhibit 14: Regional Community College Awards (Certificates and Degrees), 2021-2024

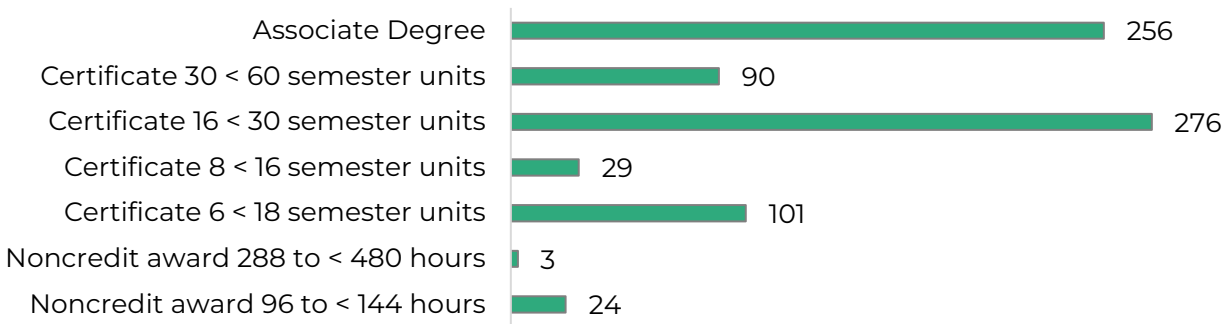| TOP Code	Program	College	2021-2022 Awards	2022-2023 Awards	2023-2024 Awards	3-Year Award Average
0614.00	Digital Media	LA Mission	5	1	0	2
		LA Trade	12	14	29	18
		Long Beach	0	0	5	2
		Mt San Antonio	0	2	1	1
		Pasadena	15	9	26	17
		Rio Hondo	1	0	1	1
		Santa Monica	19	6	21	15
		LA Subtotal	**52**	**32**	**83**	**56**
		Coastline	3	28	5	12
		Cypress	7	4	8	6
		Fullerton	0	0	4	1
		Irvine	3	1	2	2
		Saddleback	1	2	0	1
		Santa Ana	34	71	51	52
		OC Subtotal	**48**	**106**	**70**	**75**
Supply Subtotal/Average			**100**	**138**	**153**	**130**
0614.10	Multimedia	East LA	0	0	1	0
		Glendale	4	0	0	1
		LA Mission	28	16	20	21
		Long Beach	0	1	2	1

TOP Code	Program	College	2021-2022 Awards	2022-2023 Awards	2023-2024 Awards	3-Year Award Average
		LA Subtotal	**32**	**17**	**23**	**24**
		Cypress	3	2	0	2
		Orange Coast	8	7	20	12
		Santiago Canyon	0	1	1	1
		OC Subtotal	**11**	**10**	**21**	**14**
	Supply Subtotal/Average		**43**	**27**	**44**	**38**
0614.20	Electronic Game Design	LA City	0	0	7	2
		Long Beach	0	2	2	1
		Pasadena	5	4	18	9
		LA Subtotal	**5**	**6**	**27**	**13**
		Irvine	0	24	9	11
		OC Subtotal	**0**	**24**	**9**	**11**
	Supply Subtotal/Average		**5**	**30**	**36**	**24**
0614.30	Website Design and Development	Citrus	1	0	0	0
		LA Pierce	5	0	3	3
		Long Beach	0	6	9	5
		Mt San Antonio	1	0	0	0
		Pasadena	7	3	10	7
		Santa Monica	2	5	3	3
		West LA	3	4	6	4
		LA Subtotal	**19**	**18**	**31**	**23**
		Coastline	0	4	0	1
		Fullerton	2	0	1	1
		Irvine	4	1	0	2
		Orange Coast	13	8	14	12
		Saddleback	4	6	6	5
		Santiago Canyon	5	2	0	2
		OC Subtotal	**28**	**21**	**21**	**23**
	Supply Subtotal/Average		**47**	**39**	**52**	**46**
0614.40	Animation	Cerritos	7	13	11	10
		East LA	17	6	4	9
		El Camino	4	2	1	2
		Glendale	6	5	3	5
		LA City	2	2	7	4
		LA Mission	11	12	4	9

TOP Code	Program	College	2021-2022 Awards	2022-2023 Awards	2023-2024 Awards	3-Year Award Average
		Long Beach	0	1	0	0
		Mt San Antonio	26	40	61	42
		Pasadena	12	21	20	18
		Rio Hondo	10	17	8	12
		Santa Monica	103	37	107	82
		LA Subtotal	**198**	**156**	**226**	**193**
		Coastline	1	2	6	3
		Irvine	2	3	2	2
		Orange Coast	0	8	5	4
		OC Subtotal	**3**	**13**	**13**	**10**
	Supply Subtotal/Average		**201**	**169**	**239**	**203**
1030.00	Graphic Art and Design	Cerritos	13	18	13	15
		East LA	6	9	4	6
		El Camino	0	1	1	1
		Glendale	10	8	10	9
		LA City	19	14	10	14
		LA Harbor	0	1	1	1
		LA Pierce	22	12	22	19
		LA Valley	5	1	5	4
		Long Beach	7	5	12	8
		Mt San Antonio	21	25	17	21
		Pasadena	12	11	82	35
		Rio Hondo	23	54	35	37
		Santa Monica	51	68	106	75
		LA Subtotal	**189**	**227**	**318**	**245**
		Cypress	6	18	16	13
		Fullerton	15	18	17	17
		Golden West	16	13	8	12
		Irvine	27	17	27	24
		Saddleback	22	22	11	18
		Santiago Canyon	5	5	17	9
		OC Subtotal	**91**	**93**	**96**	**93**
	Supply Subtotal/Average		**280**	**320**	**414**	**338**
	Supply Total/Average		**676**	**723**	**938**	**779**

Exhibit 15 shows the annual average community college awards by type from 2021-22 to 2023-24. The plurality of the awards are for certificates between 16 and less than 30 semester units, followed by associate degree, and certificates between 6 and less than 18 semester units.

Exhibit 15: Annual Average Community College Awards by Type, 2021-2024

Award Type	Value
Associate Degree	256
Certificate 30 < 60 semester units	90
Certificate 16 < 30 semester units	276
Certificate 8 < 16 semester units	29
Certificate 6 < 18 semester units	101
Noncredit award 288 to < 480 hours	3
Noncredit award 96 to < 144 hours	24

Community College Student Outcomes:

Exhibit 16 shows the Strong Workforce Program (SWP) metrics for multimedia programs in South Orange County Community College District (SOCCCD), the Orange County Region, and California. Per the California Community Colleges Curriculum Inventory (COCI), SOCCCD does not currently offer any programs or courses under this Multimedia (0614.10) TOP code. Therefore, student outcomes data is not available at the community college district level.

Of the 4,858 California multimedia students in the 2023-24 academic year, 19% (907) attended an Orange County college. Orange County students that exited multimedia programs in the 2022-23 academic year had lower median annual earnings ($35,268 or $16.96 per hour) compared to all multimedia students in California ($37,048, $17.81 or per hour). Additionally, a lower percentage of Orange County students that exited multimedia programs in the 2022-23 academic year attained a living wage (28%) compared to all multimedia students in California (32%). Due to the low number of students, the number of Orange County multimedia students with a job closely related to their field of study in the 2021-22 academic year is unavailable. However, 57% of multimedia students in California had a job closely related to their field of study.

Exhibit 16: Multimedia (0614.10) Strong Workforce Program Metrics, 2021-24[4]

SWP Metric	SOCCCD	OC Region	California
SWP Students	N/A	907	4,858
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	N/A	13%	28%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	N/A	76%	46%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	N/A	20	244
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2022-23)	N/A	17	262
SWP Students with a Job Closely Related to Their Field of Study (2021-22)	N/A	Insufficient Data	57%

[4] All SWP metrics are for 2023-24 unless otherwise noted.

SWP Metric	SOCCCD	OC Region	California
Median Annual Earnings for SWP Exiting Students (2022-23)	N/A	$35,268 ($16.96)	$37,048 ($17.81)
Median Change in Earnings for SWP Exiting Students (2022-23)	N/A	9%	36%
SWP Exiting Students Who Attained the Living Wage (2022-23)	N/A	28%	32%

Non-Community College Supply:

To comprehensively analyze the regional supply, it is crucial to include data from other institutions offering multimedia programs. Exhibit 17 displays the annual and three-year average awards granted by these institutions under the related Classification of Instructional Programs (CIP) codes:

- Digital Communication and Media/Multimedia (09.0702)
- Animation, Interactive Technology, Video Graphics and Special Effects (10.0304)
- Web Page, Digital/Multimedia and Information Resources Design (11.0801)
- Digital Arts (50.0102)
- Design and Visual Communications, General (50.0401)
- Graphic Design (50.0409)
- Game and Interactive Media Design (50.0411)

The available data covers 2020 to 2023. During this period, non-community college institutions in the region conferred an average of 1,319 awards annually in related program.

Exhibit 17: Regional Non-Community College Awards, 2020-2023

CIP Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
09.0702	Digital Communication and Media/Multimedia	Azusa Pacific University	0	3	1	1
		California College of ASU	28	5	0	11
		California Institute of the Arts	5	6	16	9
		California State University-Dominguez Hills	57	33	17	36
		University of Southern California	48	56	165	90
		Vanguard University of Southern California	1	0	0	0

CIP Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
		Westcliff University	0	34	20	18
		Woodbury University	0	0	0	0
	Supply Subtotal/Average		**139**	**137**	**219**	**165**
10.0304	Animation, Interactive Technology, Video Graphics and Special Effects	ABC Adult School	1	1	0	1
		Art Center College of Design	41	62	79	61
		Azusa Pacific University	0	14	12	9
		California College of ASU	11	2	12	8
		California Institute of the Arts	45	70	50	55
		Chapman University	22	23	45	30
		Laguna College of Art and Design	25	29	26	27
		Los Angeles Film School	35	67	85	62
		Loyola Marymount University	26	13	14	18
		New York Film Academy	10	24	6	13
		Southern California Institute of Architecture	14	11	19	15
		University of Southern California	0	0	14	5
		Woodbury University	0	0	24	8
	Supply Subtotal/Average		**230**	**316**	**386**	**311**
11.0801	Web Page, Digital/Multimedia and Information Resources Design	Los Angeles Pacific College	4	6	2	4
		Platt College-Anaheim	0	0	0	0
		Westcliff University	3	4	1	3
	Supply Subtotal/Average		**7**	**10**	**3**	**7**

CIP Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
50.0102	Digital Arts	California College of ASU	15	15	0	10
		Gnomon	31	29	48	36
		Los Angeles Academy of Figurative Art	0	5	0	2
		Los Angeles Pacific College	2	0	1	1
		Otis College of Art and Design	52	90	101	81
		University of Southern California	47	50	36	44
Supply Subtotal/Average			**147**	**189**	**186**	**174**
50.0401	Design and Visual Communications, General	Azusa Pacific University	0	12	10	7
		Bethesda University	0	0	0	0
		Biola University	9	9	8	9
		California College of ASU	7	1	0	3
		California State Polytechnic University-Pomona	0	0	0	0
		FIDM-Fashion Institute of Design & Merchandising	69	57	40	55
		Gnomon	42	31	0	24
		Los Angeles Pacific College	1	1	1	1
		Otis College of Art and Design	30	39	42	37
		University of California-Los Angeles	0	1	0	0
		University of La Verne	0	0	0	0
		University of Southern California	30	49	62	47
Supply Subtotal/Average			**188**	**200**	**163**	**184**

CIP Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
50.0409	Graphic Design	Art Center College of Design	99	106	87	97
		California College of ASU	9	4	7	7
		California Institute of the Arts	12	15	12	13
		California State Polytechnic University-Pomona	113	105	116	111
		California State University-Dominguez Hills	0	0	0	0
		Chapman University	24	29	25	26
		Concordia University-Irvine	7	9	7	8
		FIDM-Fashion Institute of Design & Merchandising	25	12	11	16
		Laguna College of Art and Design	26	24	24	25
		Los Angeles Film School	47	52	46	48
		Los Angeles Pacific College	2	7	5	5
		New York Film Academy	0	0	0	0
		Otis College of Art and Design	15	9	1	8
		University of La Verne	0	0	0	0
		Whittier College	0	0	5	2
Supply Subtotal/Average			**379**	**372**	**346**	**366**
50.0411	Game and Interactive Media Design	Azusa Pacific University	0	1	5	2
		Biola University	0	4	3	2
		Chapman University	0	3	0	1
		Gnomon	0	0	31	10
		Laguna College of Art and Design	50	31	35	39

CIP Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
		New York Film Academy	12	6	14	11
		University of California-Irvine	0	0	0	0
		University of Southern California	37	35	36	36
		Woodbury University	7	10	19	12
		Supply Subtotal/Average	**106**	**90**	**143**	**113**
		Supply Total/Average	**1,196**	**1,314**	**1,446**	**1,319**

Regional Demographics

This section examines demographic data for Orange County community college students in multimedia programs compared to the OC population, along with occupational data, to identify potential diversity and equity issues addressable by community college programs.
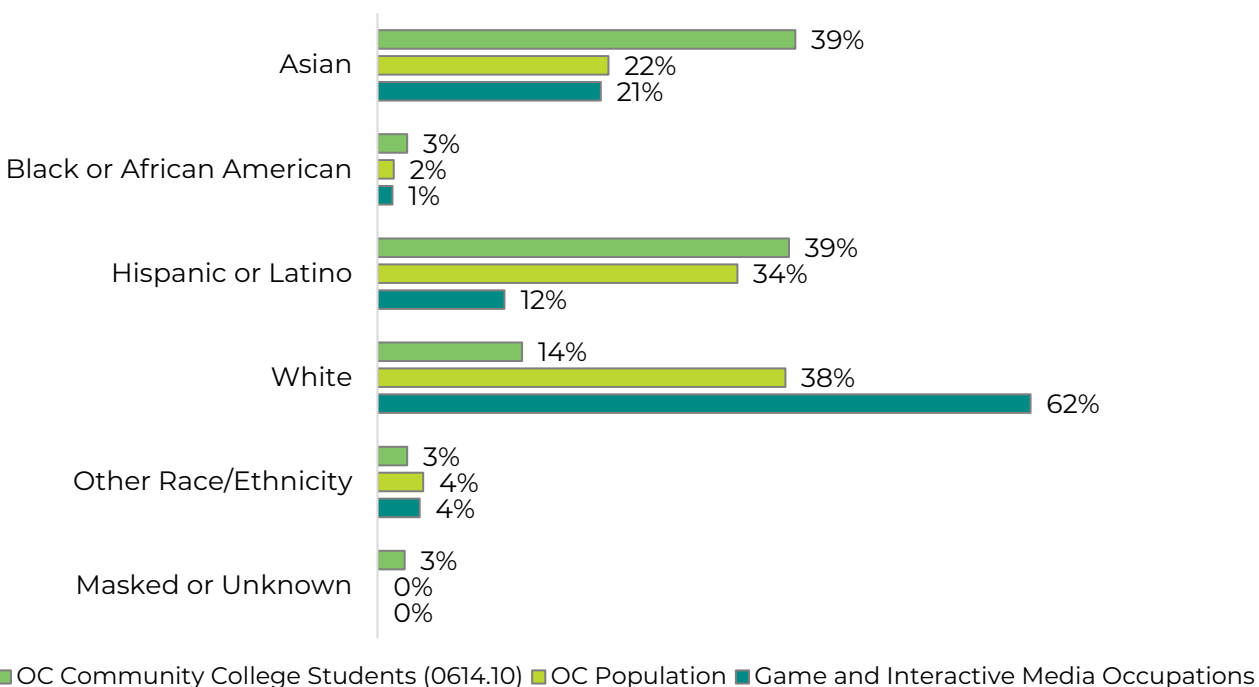
Ethnicity:

Exhibit 18 compares the ethnicity of Orange County community college students enrolled in multimedia programs, the overall Orange County population, and occupation-specific data for the two game and interactive media occupations included in this report.

Notably, 62% of workers employed in these game and interactive media occupations are white, which is significantly higher than the population (38%) and community college multimedia students (14%). Conversely, 12% of workers employed in these game and interactive media occupations are Hispanic or Latino, which is much lower than the population (34%) and community college multimedia students (39%). Additionally, 21% of workers employed in these occupations are Asian, which is aligned with the population (22%), but much lower compared to community college multimedia students (39%).

When examining disaggregated data for each occupation (not shown), there is a higher percentage of Hispanic or Latino workers in *special effects artists and animators^* (13%) compared to *web and digital interface designers* (8%). Similarly, white workers show a higher percentage in *special effects artists and animators^ (66%)* than in *web and digital interface designers* (44%). However, Asian workers are less represented in *special effects artists and animators^* (15%) compared to *web and digital interface designers* (45%). Similarly, Black and African American workers account for 1% of *special effects artists and animators^* and 3% of *web and digital interface designers*. Although both occupations have the typical entry-level education as a bachelor's degree, *special effects artists and animators^* have higher entry-level wages.

Exhibit 18: Program and County Demographics by Ethnicity

Asian
- OC Community College Students (0614.10): 39%
- OC Population: 22%
- Game and Interactive Media Occupations: 21%

Black or African American
- OC Community College Students (0614.10): 3%
- OC Population: 2%
- Game and Interactive Media Occupations: 1%

Hispanic or Latino
- OC Community College Students (0614.10): 39%
- OC Population: 34%
- Game and Interactive Media Occupations: 12%

White
- OC Community College Students (0614.10): 14%
- OC Population: 38%
- Game and Interactive Media Occupations: 62%

Other Race/Ethnicity
- OC Community College Students (0614.10): 3%
- OC Population: 4%
- Game and Interactive Media Occupations: 4%

Masked or Unknown
- OC Community College Students (0614.10): 3%
- OC Population: 0%
- Game and Interactive Media Occupations: 0%

Legend: ■ OC Community College Students (0614.10) ■ OC Population ■ Game and Interactive Media Occupations
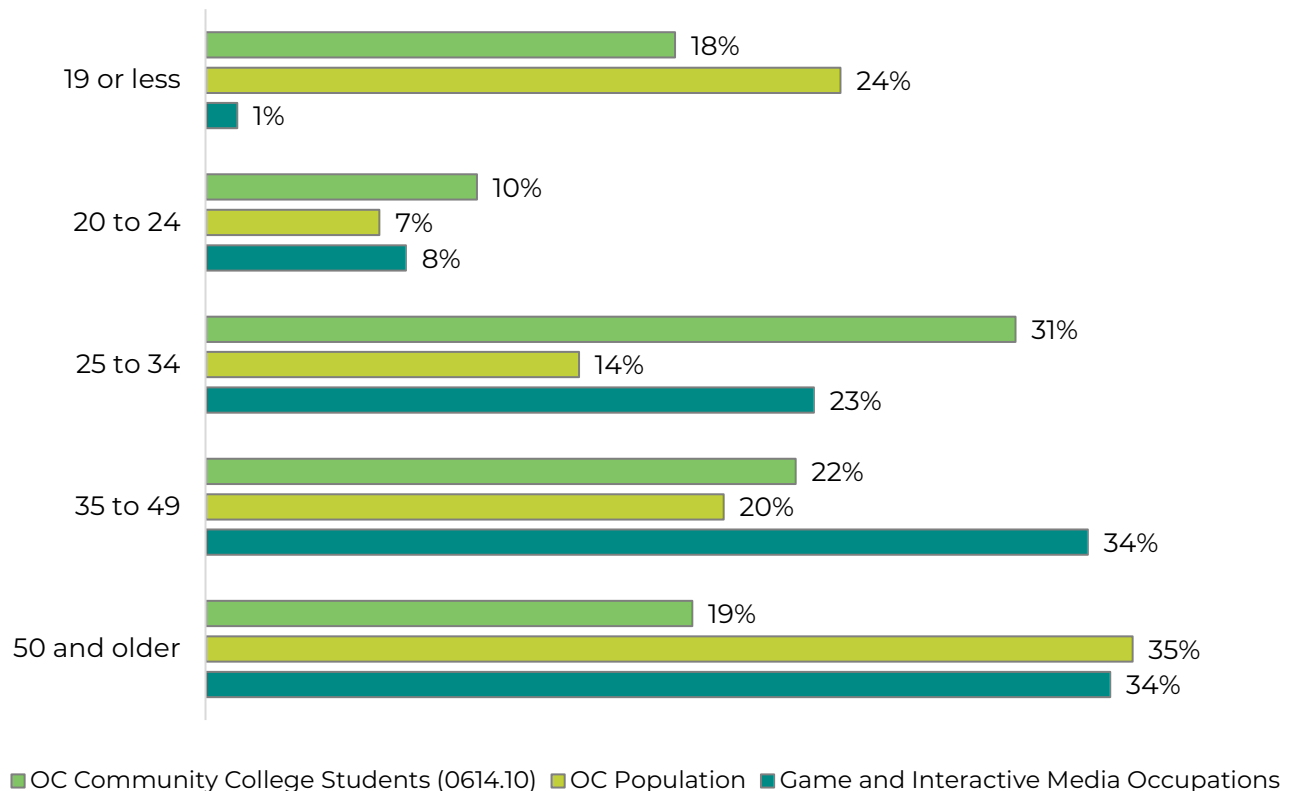
Age:

Exhibit 19 compares the age of Orange County community college students enrolled in real estate programs, the overall Orange County population, and occupation-specific data for the two game and interactive media occupations included in this report.

Notably, 68% of workers in the field are 35 or older, which is significantly higher than community college multimedia programs (41%) and the population (55%). Conversely, workers 25 to 34 years of age are underrepresented (23%) compared to community college multimedia students (31%) but overrepresented compared to the population (14%). Similarly, individuals 19 years or less are underrepresented in these game and interactive media occupations (1%) compared to community college multimedia students (18%) and the population (24%).

When examining disaggregated data for each occupation (not shown), *special effects artists and animators^* has the highest percentage of workers in the field aged 35 or older (72%). The occupation with the highest percent of individuals aged 25 to 34 is *Web and digital interface designers (45%)*. This occupation offers a slightly lower entry-level wage and is the only middle-skill occupation of the two game and interactive media occupations.

Exhibit 19: Program and County Demographics by Age

19 or less: 18%, 24%, 1%
20 to 24: 10%, 7%, 8%
25 to 34: 31%, 14%, 23%
35 to 49: 22%, 20%, 34%
50 and older: 19%, 35%, 34%

■ OC Community College Students (0614.10)   ■ OC Population   ■ Game and Interactive Media Occupations
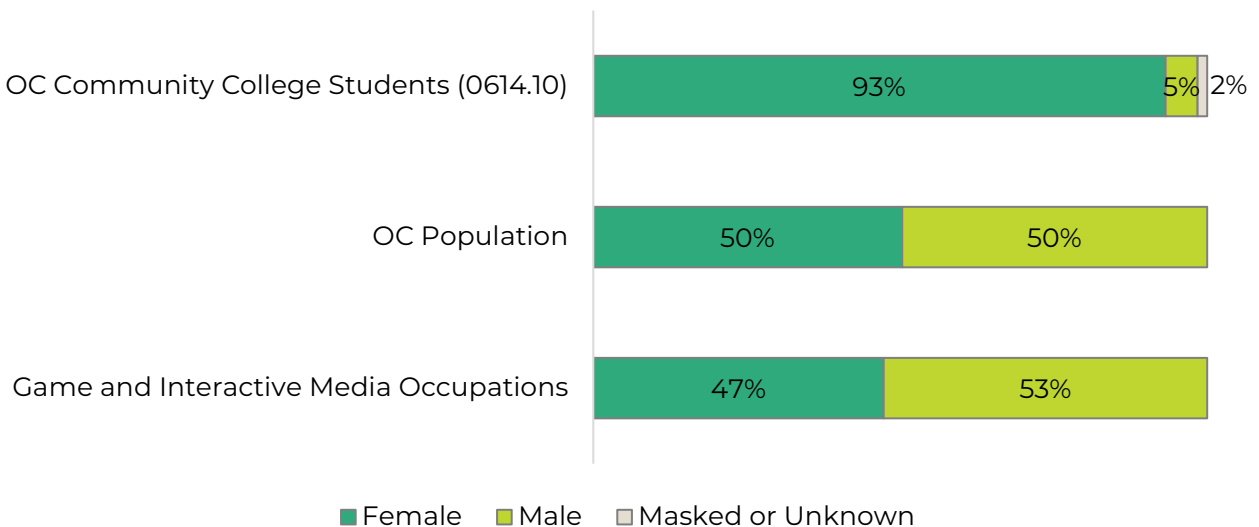
Sex:

Exhibit 20 compares the sex of Orange County community college students enrolled in multimedia programs, the overall Orange County population, and occupation-specific data for these game and interactive media occupations.

Though the population is split evenly between women and men, over half of workers in the field are men (53%) while 93% of community college multimedia students are women.

Examining disaggregated data for each occupation (not shown), it is important to note that *special effects artists and animators^* has a larger percentage of men (55%) than women (45%). Conversely, *web and digital interface designers* has a smaller percentage of men (41%) compared to women (59%).

Exhibit 20: Program and County Demographics by Sex

Legend: ■ Female ■ Male ▫ Masked or Unknown

Category	Female	Male	Masked or Unknown
OC Community College Students (0614.10)	93%	5%	2%
OC Population	50%	50%	
Game and Interactive Media Occupations	47%	53%	

Appendix A: Methodology

OC COE prepared this report by analyzing occupational and educational program data. Occupational data comes from Lightcast, a labor market analytics firm which compiles information from the California Employment Development Department (EDD), U.S. Bureau of Labor Statistics (BLS), and other agencies. Analysis of emerging occupations is predicated on online job postings data combined with Occupational Information Network (O*NET) profile descriptions. Program supply data was sourced from the California Community Colleges Chancellor's Office Data Mart (MIS Data Mart) (datamart.cccco.edu) and the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data), also known as IPEDS, which was integrated into the COE's Supply Table. (IPEDS).

Using a TOP-SOC crosswalk, the OC COE identified middle-skill jobs for which programs within these TOP codes train. Middle-skill jobs include:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

The OC COE determined labor market supply for each occupation (SOC code) by analyzing the number of 3-year average program completers or awards in related TOP and CIP codes. TOP code data comes from MIS Data Mart and CIP code data comes from the IPEDS. The TOP is a system of numerical codes used at the state level to collect and report information on California community college programs and courses throughout the state that have similar outcomes. CIP codes are a taxonomy of academic disciplines at institutions of higher education throughout the United States and Canada. The California Community Colleges are the only system that use TOP codes.

The analysis reflects labor market demand for occupations closely related to the proposed program as expressed by the requesting college in consultation with the OC COE. assess current and projected employment based on data trends for detailed occupations, as well as annual average awards granted by regional postsecondary educational institutions. Real-time labor market information (online job postings) assesses employer preferences but cannot be used to measure the quantity of open positions, number of jobs, or annual openings.

All findings are based on the most current available data and a combination of primary and secondary sources. While care was taken to ensure accuracy, the OC COE, its host district, and the California Community Colleges Chancellor's Office are not responsible for individual decisions made based on this report.

Appendix B: Data Sources

Data Type	Source
Occupational Projections, Wages, and Job Postings	Traditional and real-time labor market information are captured using data from Lightcast, a labor market analytics firm.
Living Wage	Per the CCCCCO's this report's endorsement criteria uses the University of Washington's Center for Women's Welfare Self-Sufficiency Standard last updated in March 2024, which is $27.13 per hour ($57,294 annually) in Orange County. The MIT Living Wage, updated on February 10, 2025, is a nationally recognized living wage metric and is provided for reference. The current MIT Living Wage in Orange County is $32.20.
Typical Education and Training Requirements, and Educational Attainment	The Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which BLS publishes projections data.
Emerging Occupation Descriptions, Additional Education Requirements, and Employer Preferences	The O*NET database includes information on skills, abilities, knowledges, work activities, and interests associated with occupations.
Educational Supply	The CCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions).
Student Metrics and Demographics	Data Vista, a statewide data system supported by the California Community Colleges Chancellor's Office provides data on progress, success, employment, and earnings outcomes for California community college students.
Population and Occupation Demographics	The Census Bureau's American Community Survey (ACS) is the premier source for detailed population and housing information. Data is sourced from IPUMS USA, a database providing access to ACS and other Census Bureau data products.

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