Labor Market Analysis for Program Recommendation: 1012.00/Applied Photography (*Photography*)

Orange County Center of Excellence, November 2022

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 **1,485 annual job openings** throughout Los Angeles and Orange counties for *photographers*, which **is more than the 153 awards conferred by educational institutions.**	
Living Wage: (Entry-Level, 25th)	Yes ☐	No ☑
	Comments: **Entry-level wages for *photographers* are $14.16, which is significantly below the OC living wage of $20.63.**	
Education:	Yes ☑	No ☐
	Comments: The typical entry-level education for *photographers* is a **high school diploma. However, over one-third of workers in the field have completed some college or an associate degree as their highest level of education.**	

Emerging Occupation(s)

Yes ☐	No ☑
Comments: N/A	

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 one middle-skill occupation:

- Photographers (27-4021)

Based on the available data there appears be a supply gap for *photographers* and typical education requirements for this occupation align with a community college education. However, entry-level wages are significantly below the 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: Occupational Demand and Supply in Los Angeles/Orange Counties

Occupation (SOC)	Demand (Annual Openings)	Supply (CC and Non-CC)	Entry-Level Hourly Earnings (25th Percentile)	Typical Entry-Level Education	Community College Educational Attainment
Photographers (27-4021)	1,485	153	OC: $14.16	High school diploma or equivalent	34%
Total	**1,485**	**153**	**N/A**	**N/A**	**N/A**

Demand:

- The number of jobs related to *photographers* is projected to increase 11% through 2026, equating to 1,485 annual job openings for these real estate occupations.
- Hourly entry-level wages for *photographers* are $14.16 in Orange County, which is significantly below the living wage of $20.63.
- There were 1,822 online job postings for *photographers* over the past 12 months. The highest number of postings were for photographers, videographers/photographers, and product photographers.
- The typical entry-level education for *photographers* is a high school diploma or equivalent.
- Approximately 34% 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 153 awards conferred by 11 community colleges in Los Angeles and Orange Counties from 2018 to 2021.
- Non-community college institutions did not confer any related awards from 2017 to 2020.
- Orange County community college students that exited applied photography programs in the 2018-2019 academic year had a median annual wage of $24,832 after exiting the program and 35% attained the regional living wage.
- Throughout Orange County, 58% of applied photography students that exited their program in 2017-18 reported that they are working in a job closely related to their field of study.

Demand

Occupational Projections:

Exhibit 2 shows the annual percent change in jobs for photographers from 2016 through 2026. Though there was a 7% decline across all occupations from 2019 to 2020 due to the COVID-19 pandemic, employment for *photographers* increased each year from 2019 to 2021. However, employment from 2016 to 2018 was volatile, with a large percentage increase in employment from 2016 to 2017, followed by a nearly equivalent percentage decrease in employment from 2017 to 2018. Employment for *photographers* are projected to grow at a slightly higher rate than all occupations through 2026.

Exhibit 2: Annual Percent Change in Jobs for Photographers, 2016-2026

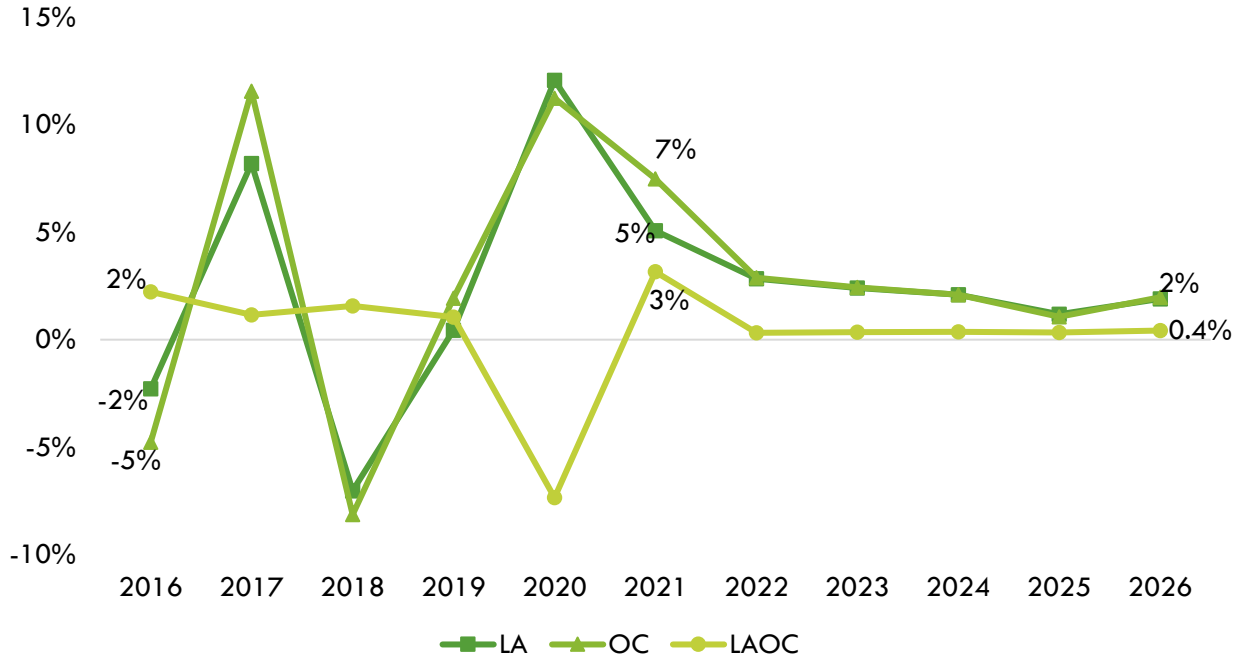


Exhibit 3 shows the five-year occupational demand projections for *photographers*. In Los Angeles/Orange County, the number of jobs for *photographers* is projected to increase by 11% through 2026. There is projected to be 1,485 jobs available annually.

Exhibit 3: Occupational Demand in Los Angeles and Orange Counties[1]

Geography	2021 Jobs	2026 Jobs	2021-2026 Change	2021-2026 % Change	Annual Openings
Los Angeles	9,738	10,794	1,056	11%	1,161
Orange	2,624	2,909	286	11%	324
Total	**12,362**	**13,703**	**1,342**	**11%**	**1,485**

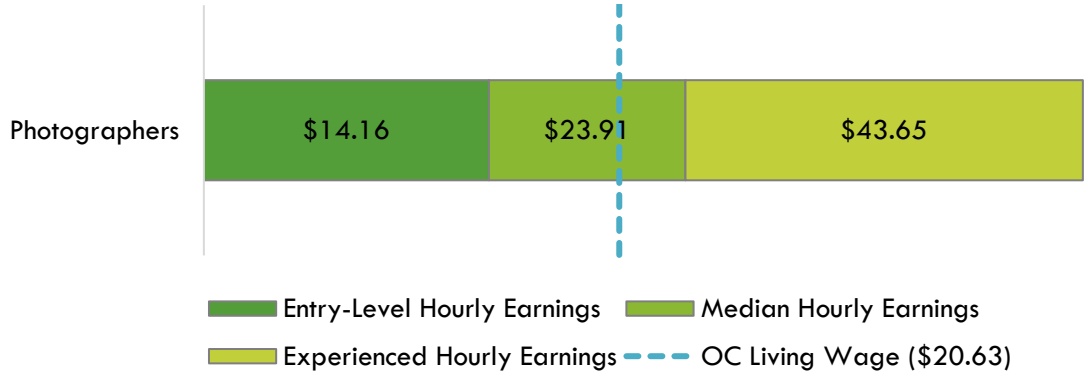
Wages:

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

The typical entry-level hourly wages for *photographers* are $14.16, which is significantly below the living wage for one adult ($20.63 in Orange County). Median wages are $23.91, which is above the living wage. Orange County's average wages are nearly identical to the average statewide wage of $42.40 for *photographers*. Exhibit 4 shows the wage range for *photographers* in Orange County and how it compares to the regional living wage.

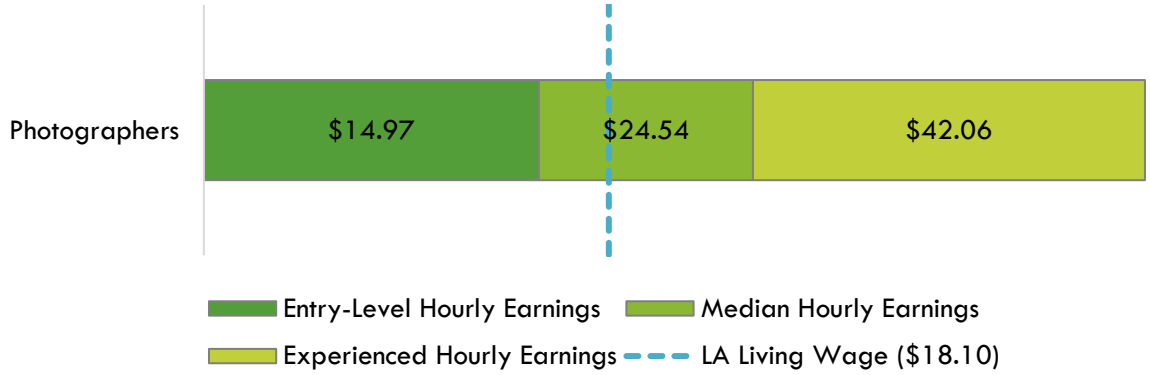
[1] Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Exhibit 4: Wages by Occupation in Orange County



The typical entry-level hourly wages for *photographers* are $14.97, which is significantly below the living wage for one adult ($18.10 in Los Angeles County). Median wages are $24.54, which is above the living wage. Los Angeles County's average wages are lower than the average statewide wage of $42.40 for *photographers*. Exhibit 4 shows the wage range for *photographers* in Los Angeles County and how it compares to the regional living wage.

Exhibit 5: Wages by Occupation in Los Angeles County



Job Postings:

There were 1,822 online job postings related to *photographers* listed in the past 12 months.

Exhibit 6: Number of Job Postings by Occupation (n=1,822)

Occupation	Job Postings	Percentage of Job Postings
Photographers	1,822	100%

The top employers in the region, by number of job postings, are shown in Exhibit 7.

Exhibit 7: Top Employers by Number of Job Postings (n=1,822)

Employer	Job Postings	Percentage of Job Postings
Balfour	56	3%
Shutterfly	52	3%
Cherry Hill Programs	51	3%
Nationwide Studios	32	2%
Disneyland Resort	25	1%
Lifetouch	23	1%
JCPenney Portraits	18	1%
Summit Portraits	14	1%
Wallbank	12	1%
White's Studios	12	1%

The top specialized, soft, and software/computer skills listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 8.

Exhibit 8: Top Skills by Number of Job Postings (n=1,822)

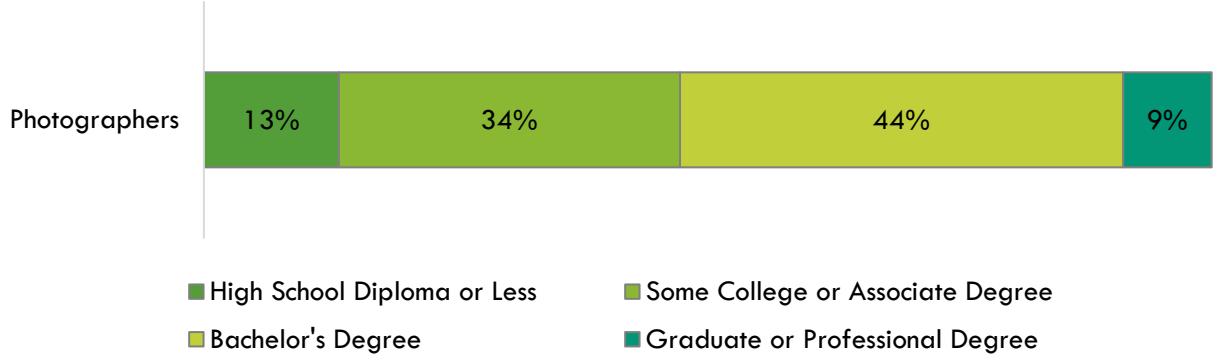
Top Specialized Skills	Top Soft Skills	Top Software and Computer Skills
Photography (1,028)	Customer Service (453)	Adobe Photoshop (289)
Adobe Photoshop (289)	Valid Driver's License (374)	Adobe Photoshop Lightroom (134)
Marketing (202)	Editing (364)	Capture One (Photo Editing Software) (83)
Adobe Photoshop Lightroom (134)	Communications (362)	Microsoft Office (74)
Product Photography (118)	Sales (301)	Adobe Creative Suite (73)
Videography (117)	Detail Oriented (281)	Adobe Illustrator (57)
Workflow Management (85)	Lifting Ability (194)	Adobe Premiere Pro (42)
Capture One (Photo Editing Software) (83)	Computer Literacy (133)	Microsoft Excel (34)
Post-Production (80)	Self-Motivation (115)	Mac OS (29)
Adobe Creative Suite (73)	Management (113)	TikTok (28)

Educational Attainment:

The Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entry-level education for *photographers*. However, the national-level educational attainment data indicates 34% of workers in the field have completed some college or an associate degree as their highest level of education. Exhibit 9 shows the educational attainment for *photographers*.

Of the 32% of the cumulative job postings for *photographers* that listed a minimum education requirement in Los Angeles/Orange County, 78% (452) requested a high school diploma or an associate degree and 22% (125) requested a bachelor's degree.

Exhibit 9: National-level Educational Attainment for Occupations



Educational Supply

Community College Supply:

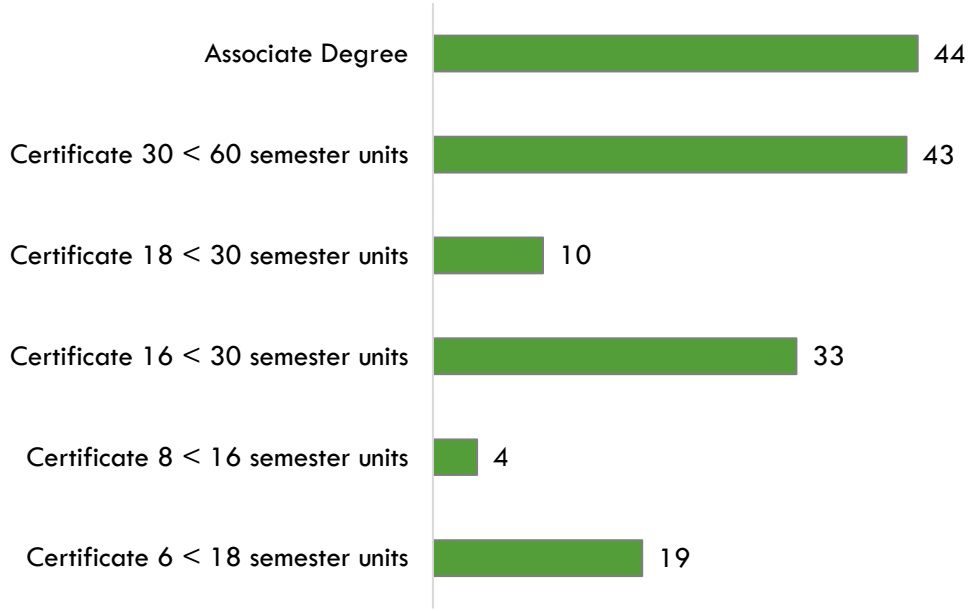
Exhibit 10 shows the three-year average number of awards conferred by community colleges in the related TOP code: Applied Photography (1012.00). The colleges with the most completions in the region are: Santa Monica, Pasadena, LA City, and Orange Coast. Over the past 12 months, there were no other related program recommendation requests from regional community colleges.

Exhibit 10: Regional Community College Awards (Certificates and Degrees), 2018-2021

TOP Code	Program	College	2018-2019 Awards	2019-2020 Awards	2020-2021 Awards	3-Year Award Average
1012.00	Applied Photography	East LA	24	5	1	10
		El Camino	10	10	7	9
		Glendale	0	6	5	4
		LA City	37	38	5	26
		LA Pierce	0	2	3	2
		Mt San Antonio	40	31	10	27
		Pasadena	10	5	1	5
		Santa Monica	23	37	33	31
		LA Subtotal	**144**	**134**	**65**	**114**
		Cypress	5	5	2	4
		Fullerton	20	11	4	12
		Orange Coast	32	18	21	23
		OC Subtotal	**57**	**34**	**27**	**39**
		Supply Total/Average	**201**	**168**	**92**	**153**

Exhibit 11 shows the annual average community college awards by type from 2018-19 through 2020-21. The plurality of the awards are for associate degrees, followed by certificates between 30 and less than 60 semester units, and certificates between 16 and less than 30 semester units.

Exhibit 11: Annual Average Community College Awards by Type, 2018-2021



Community College Student Outcomes:

Exhibit 12 shows the Strong Workforce Program (SWP) metrics for applied photography programs at North Orange County Community College District (NOCCCD) the Orange County Region, and California. Of the 1,178 applied photography students in the 2019-20 academic year, 9% (37%) attended a NOCCCD college.

NOCCCD students that exited applied photography programs in the 2018-19 academic year had slightly lower median annual earnings ($23,924) compared to all applied photography students in Orange County ($24,832). Both figures are significantly below the living wage.

Exhibit 12: Applied Photography (1012.00) Strong Workforce Program Metrics, 2019-20[2]

SWP Metric	NOCCCD	OC Region	California
SWP Students	437	1,178	18,874
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	19%	18%	20%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	Insufficient Data	95%	55%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	13	24	287
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2018-19)	26	57	1,225
SWP Students with a Job Closely Related to Their Field of Study (2017-18)	44%	58%	51%
Median Annual Earnings for SWP Exiting Students (2018-19)	$23,924 ($11.50)	$24,832 ($11.94)	$26,642 ($12.81)

[2] All SWP metrics are for 2019-20 unless otherwise noted.

SWP Metric	NOCCCD	OC Region	California
Median Change in Earnings for SWP Exiting Students (2018-19)	32%	35%	21%
SWP Exiting Students Who Attained the Living Wage (2018-19)	0%	25%	38%

Non-Community College Supply:

For a comprehensive regional supply analysis, it is also important to consider the supply from other institutions in the region that provide training programs for *photographers*. There is only one non-community college – Mount Saint Mary's University in Los Angeles County – that offers a commercial photography program. However, Mount Saint Mary's did not confer any awards from 2017 to 2020.

Exhibit 13: Regional Non-Community College Awards, 2017-2020

CIP Code	Program	College	2017-2018 Awards	2018-2019 Awards	2019-2020 Awards	3-Year Award Average
50.0406	Commercial Photography	Mount Saint Mary's University	0	0	0	0
		Supply Total/Average	**0**	**0**	**0**	**0**

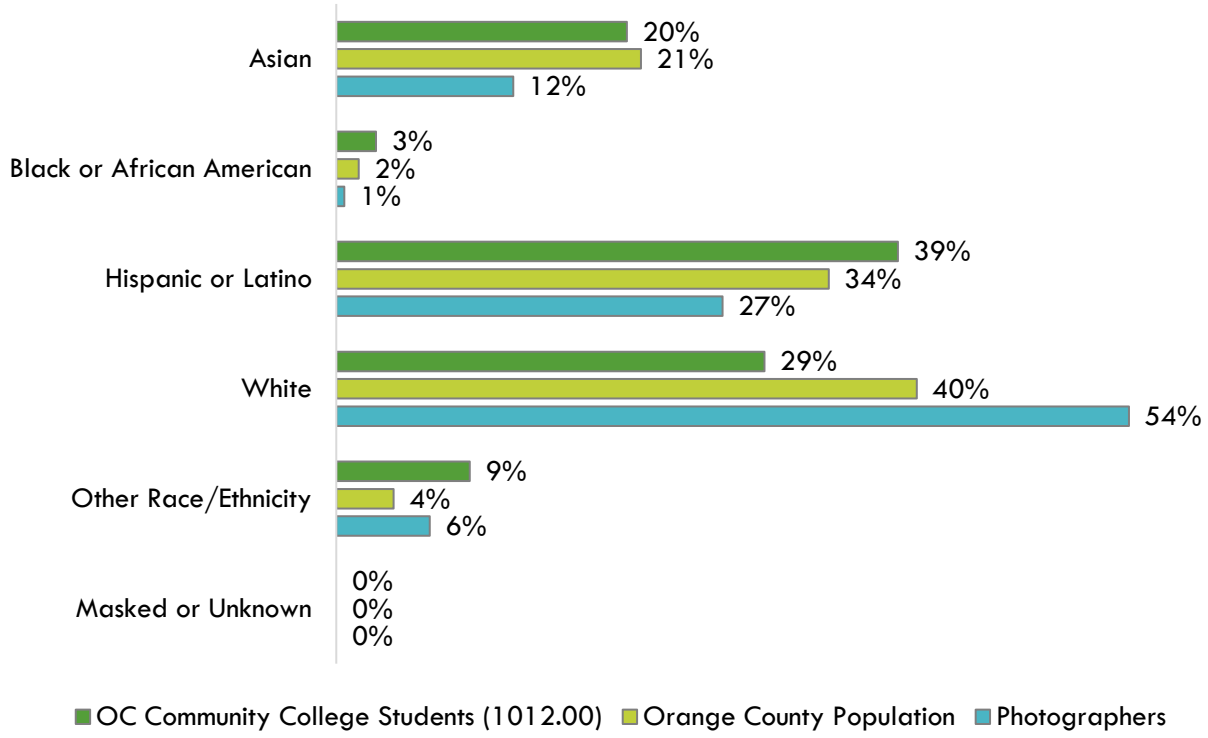
Regional Demographics

This section analyzes demographic data for Orange County community college students enrolled in applied photography compared to the OC population, as well occupational data, for the purpose of identifying potential diversity and equity issues that can be addressed by community college programs.

Ethnicity:

Exhibit 14 shows the ethnicity of Orange County community college students enrolled in applied photography programs compared to the overall Orange County population, as well as *photographers*. Notably, 54% of *photographers* are White, which is much higher than the population (40%) and community college applied photography students (29%). Conversely, 39% of applied photography students are Hispanic or Latino, which is higher than the population (34%), and significantly higher than *photographers* (27%). Similarly, 20% of applied photography students are Asian, which is nearly equivalent to the population (21%), but higher than *photographers* (12%).

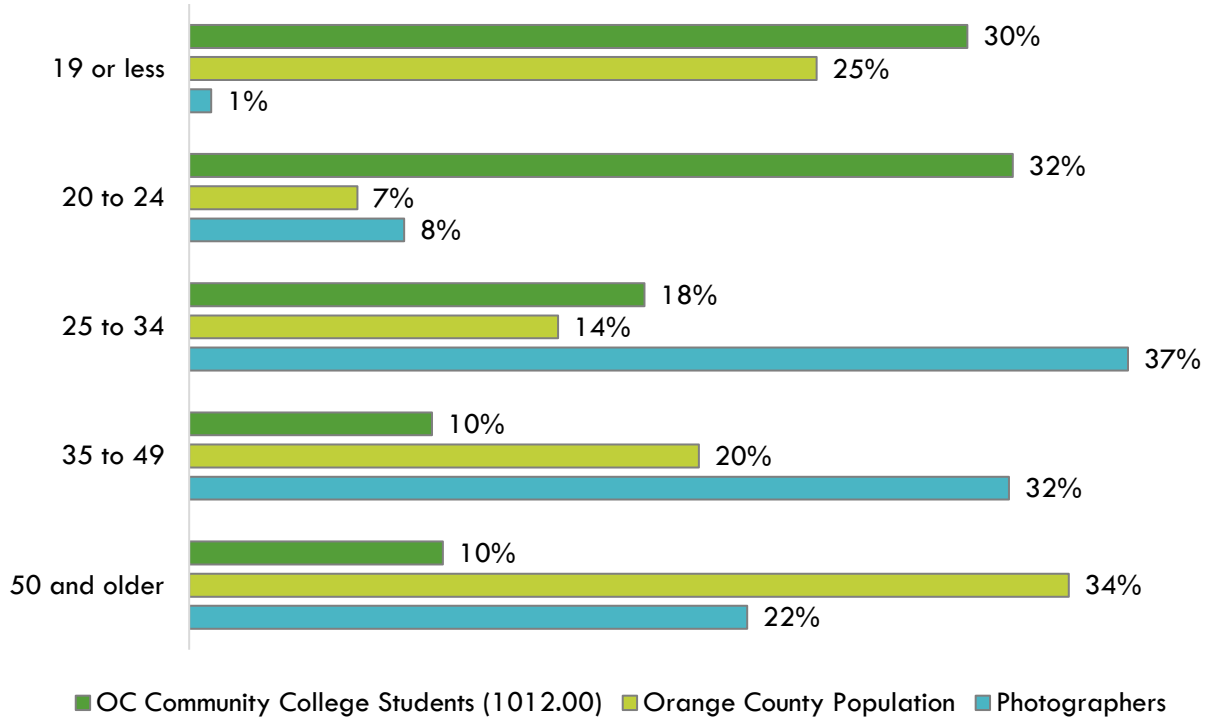
Exhibit 14: Program and County Demographics by Ethnicity



Age:

Exhibit 14 shows the age of Orange County community college students enrolled in applied photography programs compared to the overall Orange County population, as well as *photographers*. Nearly 70% of *photographers* are 25 to 49, which is significantly higher than the population (34%) and community college applied photography students (28%). Conversely, 62% of community college applied photography students are 24 or less, which is significantly higher than the population (32%), and *photographers* (9%)

Exhibit 14: Program and County Demographics by Age

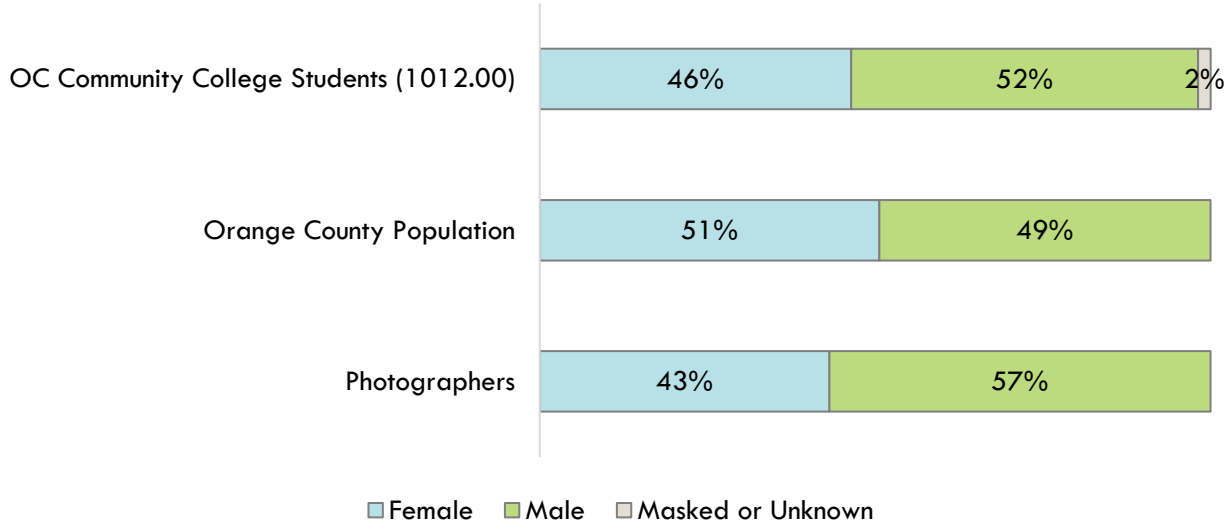


Sex:

Exhibit 15 shows the sex of Orange County community college students enrolled in applied photography programs compared to the overall Orange County population as well as *photographers*.

Though the Orange County population is split nearly evenly between men and women, there is a slightly higher percentage of male students in applied photography programs (52%) and male *photographers* (57%).

Exhibit 15: Program and County Demographics by Sex



Appendix A: Methodology A

The OC COE prepared this report by analyzing data from occupations and education programs. Occupational data is derived from Lightcast, a labor market analytics firm that consolidates data from the California Employment Development Department (EDD), U.S. Bureau of Labor Statistics (BLS) and other government agencies. Program supply data is drawn from two systems: Taxonomy of Programs (TOP) and Classification of Instructional Programs (CIP).

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 an occupation or SOC code by analyzing the number of program completers or awards in a related TOP or CIP code. The COE developed a "supply table" with this information, which is the source of the program supply data for this report. TOP code data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP code data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data), also known as IPEDS. 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 in the United States and Canada. Institutions outside of the California Community College system do not use TOP codes in their reporting systems.

Data included in this analysis represent the labor market demand for relevant positions most closely related to the proposed program as expressed by the requesting college in consultation with the OC COE. 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 which 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.

All representations have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. The most recent data available at the time of the analysis was examined; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

Appendix B: Data Sources

Data Type	Source
Occupational Projections, Wages, and Job Postings	Traditional labor market information data is sourced from Lightcast, a labor market analytics firm. Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment Statistics and the American Community Survey. For more information, see https://lightcast.io/
Living Wage	The living wage is derived from the Insight Center's California Family Needs Calculator, which measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, child care, health care, transportation, and taxes. For more information, see: https://insightcced.org/family-needs-calculator/ The living wage for one adult in Orange County is $20.63 per hour ($42,910.40 annually). This figure is used by the CCCCO to calculate the percentage of students that attained the regional living wage.
Typical Education and Training Requirements, and Educational Attainment	The Bureau of Labor Statistics (BLS) provides information about education and training requirements for hundreds of occupations. 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. For more information, see https://www.bls.gov/emp/documentation/education/tech.htm
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. For more information, see https://www.onetonline.org/help/online/
Educational Supply	The CCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. For more information, see: https://datamart.cccco.edu The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions). For more information, see https://nces.ed.gov/ipeds/use-the-data/survey-components/7/completions
Student Metrics and Demographics	LaunchBoard, a statewide data system supported by the California Community Colleges Chancellor's Office and hosted by Cal-PASS Plus, provides data on progress, success, employment, and earnings outcomes for California community college students. For more information, see: https://www.calpassplus.org/LaunchBoard/Home.aspx

Data Type	Source
Population and Occupation Demographics	The Census Bureau's American Community Survey (ACS) is the premier source for detailed population and housing information. For more information, see: https://www.census.gov/programs-surveys/acs Data is sourced from IPUMS USA, a database providing access to ACS and other Census Bureau data products. For more information, see: https://usa.ipums.org/usa/about.shtml

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