

Labor Market Analysis for Program Recommendation:
 2199.00/Other Public and Protective Services
 (Public Safety Dispatch Program)
 Orange County Center of Excellence, September 2024



Summary

Program LMI Endorsement	Endorsed: All LMI Criteria Met <input type="checkbox"/>	Endorsed: Some LMI Criteria Met <input checked="" type="checkbox"/>	Not LMI Endorsed <input type="checkbox"/>
Program LMI Endorsement Criteria			
	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Supply Gap:	Comments: there is projected to be 1,126 annual job openings throughout Los Angeles and Orange counties for these public safety occupations, which is more than the 81 awards conferred by educational institutions.		
	Yes <input type="checkbox"/>		No <input checked="" type="checkbox"/>
CA Insight Living Wage: (Entry-Level, 25 th) ¹	Comments: the majority (79%) of annual job openings for these public safety occupations have entry-level hourly wages below the OC living wage of \$20.63.		
	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Education:	Comments: though all (100%) annual job openings for these public safety occupations typically require a high school diploma, between 44% and 55% of workers in the field have completed some college or an associate degree as their highest level of education.		
Additional Considerations			
	Yes <input type="checkbox"/>		No <input checked="" type="checkbox"/>
Emerging Occupation(s):	Comments: N/A		
	Yes <input type="checkbox"/>		No <input checked="" type="checkbox"/>
OC Resilient Job(s):	Comments: See Resilient Jobs and US News & World Report Best Jobs		
	Yes <input type="checkbox"/>		No <input checked="" type="checkbox"/>
U.S. News & World Report 2024 Best Jobs List ² :	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 public safety occupations:

- Below Middle-Skill – denoted with an asterisk (*) throughout this report.
 - Dispatchers, Except Police, Fire, and Ambulance (43-5032)*
- Middle-Skill
 - Public Safety Telecommunications (43-5031)

¹ The living wage endorsement criteria in this report uses the California Insight Center’s living wage of \$20.63 for Orange County, last updated in September 2021, as currently employed by the Chancellor’s Office for the *Students Who Attained the Living Wage Strong Workforce Program* metric.

² "100 Best Jobs of 2024," U.S. News & World Report, accessed May 7, 2024, <https://money.usnews.com/careers/best-jobs/rankings/the-100-best-jobs>.

Based on the available data there appears to be a supply gap for these public safety occupations and typical education requirements for these occupations align with a community college education. However, the majority of annual job openings have entry-level wages below the California Insight 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 (25 th Percentile)	Typical Entry-Level Education	Community College Educational Attainment
Dispatchers, Except Police, Fire, and Ambulance (43-5032)*	LA: 669	LA: 81	OC: \$20.04	High school diploma or equivalent	44%
	OC: 208	OC: 0			
	TTL: 878	TTL: 81			
Below Middle-Skill Total	878	81	N/A	N/A	N/A
Public Safety Telecommunicators (43-5031)	LA: 194	<i>Accounted for Above</i>	OC: \$28.88	High school diploma or equivalent	55%
	OC: 55				
	TTL: 249				
Middle-Skill Total	249	Accounted for Above	N/A	N/A	N/A
Total	1,126	81	N/A	N/A	N/A

Demand:

- The number of jobs related to these public safety occupations is projected to increase 4% through 2028, equating to 1,126 annual job openings.
- Hourly entry-level wages for these public safety occupations range from \$20.04 to \$28.88 in Orange County; 79% of annual job openings have entry-level wages below the California Insight living wage.
- There were 2,131 online job postings for these public safety occupations over the past 12 months. The highest number of postings were for dispatchers, security dispatchers, and service dispatchers.
- The typical entry-level education for these public safety occupations is a high school diploma or equivalent.
- Between 44% and 55% of workers in these occupations have completed some college or an associate degree as their highest level of educational attainment.

Supply:

- There was an average of 7 awards conferred by 2 community colleges in Los Angeles County from 2020 to 2023. No related awards were conferred by Orange County community colleges during this period.
- Non-community college institutions conferred an average of 74 awards from 2019 to 2022. None of these awards were conferred by Orange County institutions.

- There are no community colleges in Orange County that offer other public and protective services programs. Therefore, student outcomes data is not available for the Orange County region.

Demand

Occupational Projections:

Exhibit 2 shows the annual percent change in jobs for the two public safety occupations researched in this report from 2018 through 2028. Employment in these public safety occupations declined 6% in Orange County from 2019 to 2020, which is lower than the 7% decline across all occupations in Los Angeles and Orange counties due to the COVID-19 pandemic.

In the two years preceding the pandemic, employment for these occupations rose in Orange County, with slight increases in 2018 and 2019. After a decrease in employment in 2020 and an increase through 2023, employment for these two occupations in Orange County is projected to experience a similar rate relative to all occupations in Los Angeles and Orange counties through 2028.

Exhibit 2: Annual Percent Change in Jobs for Public Safety Occupations, 2018-2028

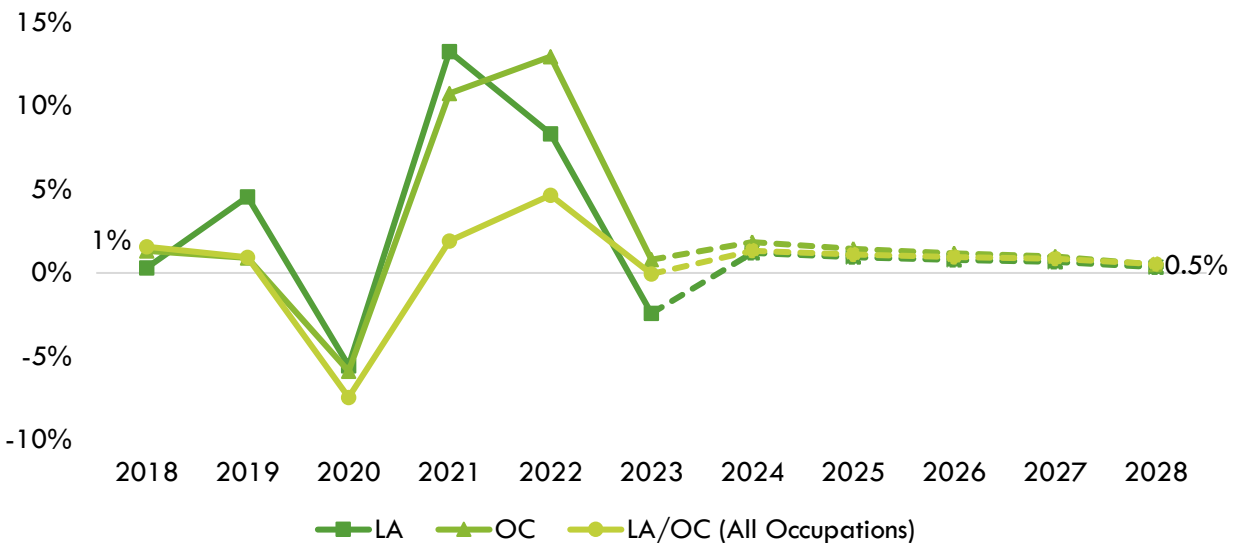


Exhibit 3 shows the five-year occupational demand projections for *dispatchers, except police, fire, and ambulance**. In Los Angeles/Orange County, the number of jobs related to this occupation is projected to increase by 4% through 2028. There is projected to be 878 jobs available annually.

Exhibit 3: Below Middle-Skill Occupational Demand in Los Angeles and Orange Counties³

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	6,623	6,836	213	3%	669
Orange	1,982	2,078	96	5%	208
Total	8,606	8,915	309	4%	878

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.

Exhibit 4 shows the five-year occupational demand projections for *public safety telecommunicators*. In Los Angeles/Orange County, the number of jobs related to this occupation is projected to increase by 8% through 2028. There is projected to be 249 jobs available annually.

Exhibit 4: 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	1,663	1,780	117	7%	194
Orange	423	474	51	12%	55
Total	2,086	2,254	168	8%	249

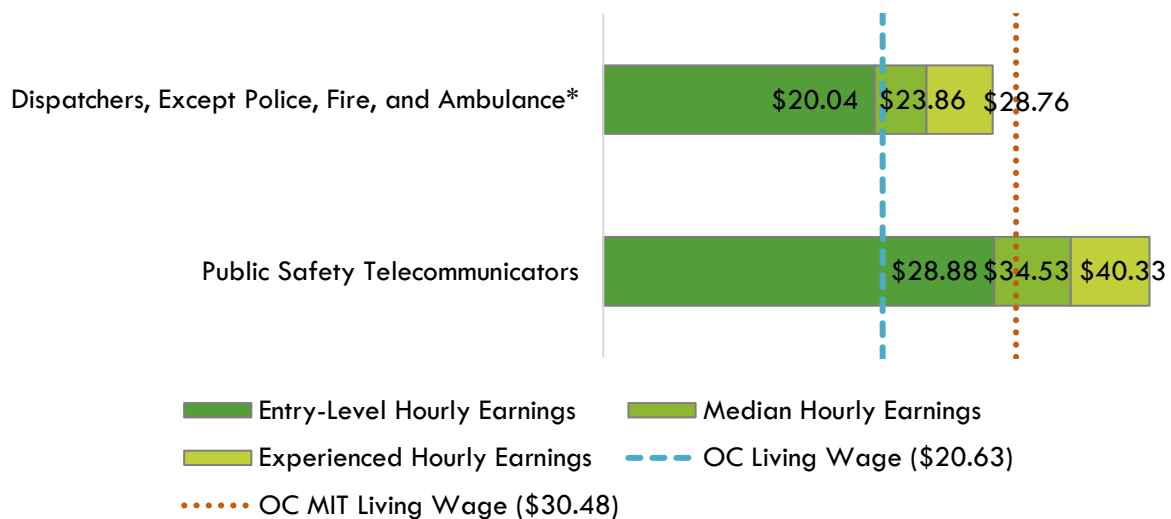
Wages:

The labor market endorsement in this report considers the entry-level hourly wages for these public safety occupations 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.

It is important to note that the living wage endorsement criteria in this report uses the California Insight Center's living wage of \$20.63 for Orange County, last updated in September 2021, as currently employed by the Chancellor’s Office for the *Students Who Attained the Living Wage Strong Workforce Program* metric. However, this figure is outdated and does not reflect recent increases in the cost of living. The MIT Living Wage, updated on February 14, 2024, better accounts for existing economic conditions, with the current MIT Living Wage in Orange County being \$30.48. Both figures are notated in the exhibits below.

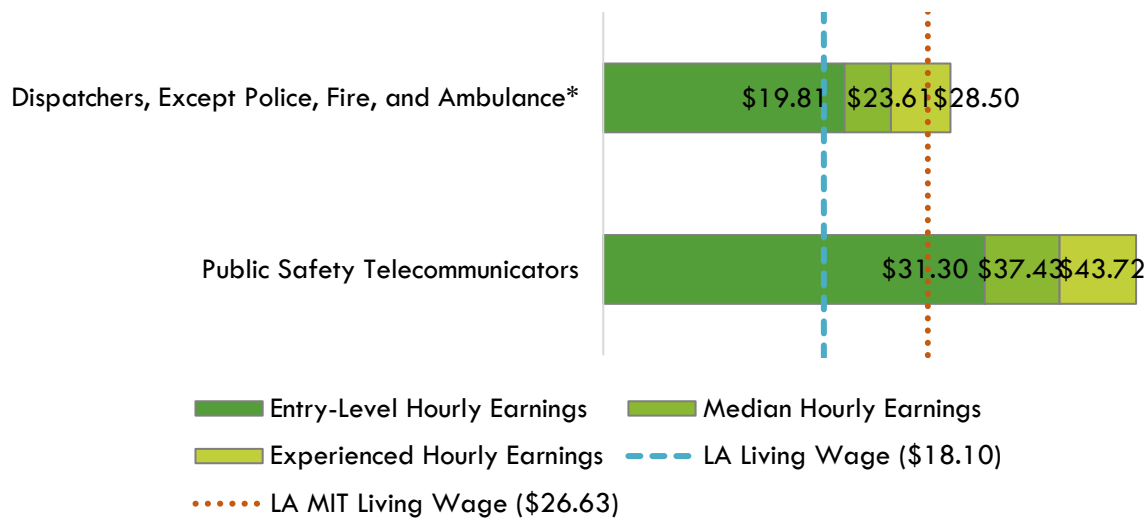
The majority (79%) of annual openings for these public safety occupations have entry-level wages below the California Insight living wage for one adult (\$20.63 in Orange County). Typical entry-level hourly wages range between \$20.04 and \$28.88. Orange County’s average wages of \$27.41 are below the average statewide wage of \$28.58 for these occupations. Exhibit 5 shows the wage range for each of these public safety 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



All annual openings for these public safety occupations have entry-level wages below the California Insight living wage for one adult (\$18.10 in Los Angeles County). Typical entry-level hourly wages range between \$19.81 and \$31.30. Los Angeles County’s average wages of \$28.02 are below the average statewide wage of \$28.58 for these occupations. Exhibit 6 shows the wage range for each of these public safety 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 2024 U.S. News & World Report (USN&WR) Best Job. Neither occupation met the criteria to be considered Great-Recession-Resilient and COVID-19 Pandemic Recession-Resilient jobs, nor were they listed as USN&WR Best Jobs.

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

Occupation	Great Recession-Resilient Job	COVID-19 Pandemic Recession-Resilient Job	2024 USN&WR Best Job
Below Middle-Skill			
Dispatchers, Except Police, Fire and Ambulance*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Middle-Skill			
Public Safety Telecommunicators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Job Postings:

Important Online Job Postings Data Note: Online job postings data is sourced from Lightcast, a labor market analytics firm that scrapes, collects, and organizes data from online job boards such as LinkedIn, Indeed, Glassdoor, Monster, GovernmentJobs.com, and thousands more. Lightcast uses natural language processing (NLP) to determine the related company, industry, occupation, and other information for each job posting. However, NLP has limitations that include understanding contextual words of phrases; determining differences in words that can be used as nouns, verbs, and/or adjectives; and misspellings or grammatical errors.⁴ For these reasons, job postings could be assigned to the wrong employer, industry, or occupation within Lightcast’s database.

Additionally, there are several limitations when analyzing job postings. A single job posting may not represent a single job opening, as employers may be creating a pool of candidates for future openings or hiring for multiple positions with a single posting. Additionally, not all jobs are posted online, and jobs may be filled through other methods such as internal promotion, word-of-mouth advertising, physical job boards, or a variety of other channels.

There were 2,131 online job postings related to these public safety occupations listed in the past 12 months. Exhibit 8 shows the number of job postings by occupation. Nearly 90% of job postings were for dispatchers, except police, fire and ambulance*, followed distantly by public safety telecommunicators (10%).

Exhibit 8: Number of Job Postings by Occupation (n=2,131)

Occupation	Job Postings	Percentage of Job Postings
Dispatchers, Except Police, Fire and Ambulance*	1,917	90%
Public Safety Telecommunicators	214	10%
Total Postings	2,131	100%

The top employers for dispatchers, except police, fire and ambulance*, in the region, by number of job postings, are shown in Exhibit 9.

Exhibit 9: Top Below Middle-Skill Employers by Number of Job Postings (n=1,917)

Employer	Job Postings	Percentage of Job Postings
Allied Universal	51	3%
AppleOne	41	2%
Vallarta Supermarkets	38	2%
Barker And Sons Plumbing	34	2%
AMR	30	2%
Good Guard Security	30	2%
Geopaq Logic	22	1%
Mv Transportation	21	1%
Transdev	21	1%
Robert Half	16	1%

⁴ K. R. Chowdhary, Fundamentals of Artificial Intelligence (Basingstoke: Springer Nature, 2020), <https://link.springer.com/book/10.1007/978-81-322-3972-7>.

The top employers for *public safety telecommunicators*, by number of job postings, are shown in Exhibit 10.

Exhibit 10: Top Above Middle-Skill Employers by Number of Job Postings (n=214)

Employer	Job Postings	Percentage of Job Postings
Allied Universal	9	4%
California State University	9	4%
City Of Anaheim	8	4%
Seattle Colleges Foundation	6	3%
American Two-Way	5	2%
Chapman University	4	2%
City Of Irvine	4	2%
Medresponse Ambulance	4	2%
Amwest	3	1%
California Highway Patrol	3	1%

The top specialized, soft, and computer skills listed by those most frequently mentioned in job postings (denoted in parentheses) are shown for *dispatchers, except police, fire and ambulance** in Exhibit 11.

Exhibit 11: Top Skills for the Below Middle-Skill Occupations by Number of Job Postings (n=1,917)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Data Entry (343)	Communication (1,138)	Microsoft Excel (270)
Dispatching (138)	Customer Service (907)	Microsoft Office (260)
Invoicing (114)	Operations (550)	Microsoft Outlook (181)
Warehousing (112)	Multitasking (504)	Microsoft Word (111)
Billing (109)	Management (485)	Transportation Management Systems (80)
Bilingual (Spanish/English) (102)	Scheduling (448)	Microsoft PowerPoint (58)
Call Center Experience (92)	Detail Oriented (439)	Spreadsheets (48)
Customer Inquiries (91)	Problem Solving (344)	SAP Applications (33)
Alarm Devices (85)	Typing (283)	Google Sheets (32)
Transportation Management Systems (79)	Microsoft Excel (270)	Project Management Software (26)

The top specialized, soft, and computer skills listed by those most frequently mentioned in job postings (denoted in parentheses) are shown for *public safety telecommunicators* in Exhibit 12.

Exhibit 12: Top Skills for the Middle-Skill Occupation by Number of Job Postings (n=214)

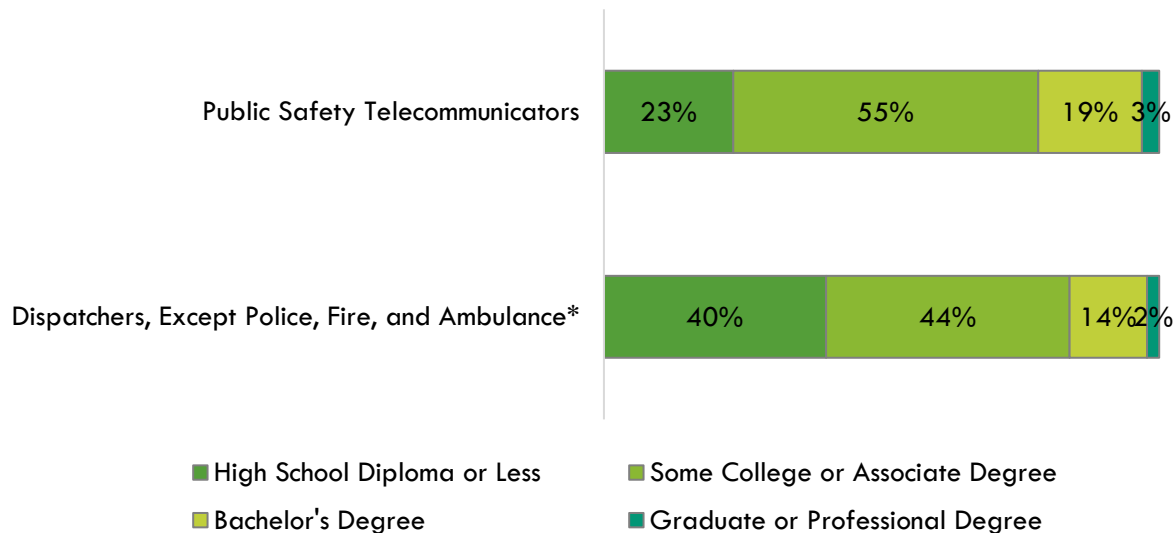
Top Specialized Skills	Top Soft Skills	Top Software and Computer Skills
Computer-Aided Dispatch (96)	Communication (157)	Microsoft Office (15)
Office Equipment (41)	Customer Service (91)	Microsoft Excel (14)
Law Enforcement (39)	Typing (68)	Microsoft Outlook (14)
Alarm Devices (37)	English Language (62)	Microsoft Word (11)

Top Specialized Skills	Top Soft Skills	Top Software and Computer Skills
Ambulances (36)	Operations (59)	Geographic Information Systems (6)
Communications Systems (35)	Clerical Works (58)	Spreadsheets (5)
Computer-Aided Design (35)	Record Keeping (46)	System Software (5)
Emergency Medical Services (31)	Management (44)	Enterprise Application Software (4)
Radio Operations (22)	Multitasking (44)	Google Maps (4)
Data Analysis (20)	Writing (43)	Mobile Security (4)

Educational Attainment:

The Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entry-level education for *public safety telecommunicators* and *dispatchers, except police, fire and ambulance**. However, the national-level educational attainment data indicates between 44% and 55% 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



Of the 46% of the cumulative job postings for *dispatchers, except police, fire and ambulance** that listed a minimum education requirement in Los Angeles/Orange County, 95% (839) requested a high school diploma or an associate degree and 5% (43) requested a bachelor's degree.

Similarly, of the 54% of the postings for the *public safety telecommunicators* that listed a minimum education requirement, 99% (115) requested a high school diploma or an associate degree and 1% (1) requested a bachelor's degree.

Educational Supply

Community College Supply:

Exhibit 14 shows the three-year average number of awards conferred by community colleges in the related TOP code: Other Public and Protective Services (2199.00). The colleges with the most completions in the region are Rio Hondo and LA Trade. 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), 2020-2023

TOP Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
2199.00	Other Public and Protective Services	LA Trade	1	1	2	1
		Rio Hondo	4	10	2	5
		LA Subtotal	5	11	4	7
		-	-	-	-	-
		OC Subtotal	-	-	-	-
Supply Total/Average			5	11	4	7

Exhibit 15 shows the annual average community college awards by type from 2020-21 to 2022-23. The majority of the awards are for associate degrees, followed closely by certificates between 16 and less than 30 semester units.

Exhibit 15: Annual Average Community College Awards by Type, 2020-2023



Community College Student Outcomes:

Exhibit 16 shows the Strong Workforce Program (SWP) metrics for other public and protective services programs in Rancho Santiago Community College District (RSCCD), the Orange County Region, and California. Note, there are no community colleges in RSCCD and Orange County that offer other public and protective services programs. Therefore, student outcomes data is not available at the district- and county-levels.

Exhibit 16: Other Public and Protective Services (2199.00) Strong Workforce Program Metrics, 2021-22⁵

SWP Metric	RSCCD	OC Region	California
SWP Students	N/A	N/A	347
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	N/A	N/A	20%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	N/A	N/A	30%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	N/A	N/A	51
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2019-20)	Insufficient Data	Insufficient Data	24
SWP Students with a Job Closely Related to Their Field of Study (2019-20)	N/A	N/A	Insufficient Data
Median Annual Earnings for SWP Exiting Students (2020-21)	N/A	N/A	\$43,972 (\$21.14)
Median Change in Earnings for SWP Exiting Students (2020-21)	N/A	N/A	18%
SWP Exiting Students Who Attained the Living Wage (2020-21)	N/A	N/A	59%

Non-Community College Supply:

To comprehensively analyze the regional supply, it is crucial to include data from other institutions offering other public safety training programs. Exhibit 17 displays the annual and three-year average awards granted by these institutions under the related Classification of Instructional Programs (CIP) code: Traffic, Customs, and Transportation Clerk/Technician. The available data covers 2019 to 2022. During this period, non-community college institutions in the region conferred an average of 74 awards annually in related programs.

Exhibit 17: Regional Non-Community College Awards, 2019-2022

CIP Code	Program	College	2019-2020 Awards	2020-2021 Awards	2021-2022 Awards	3-Year Award Average
52.0410	Traffic, Customs, and Transportation Clerk/Technician	Diversified Vocational College	73	92	57	74
Supply Total/Average			73	92	57	74

⁵ All SWP metrics are for 2020-21 unless otherwise noted.

Regional Demographics

This section examines demographic data for the OC population compared to occupational data, to identify potential diversity and equity issues. As noted in the student outcomes section, there are no community colleges in Orange County that offer other public and protective services programs. Therefore, student demographic data is not available.

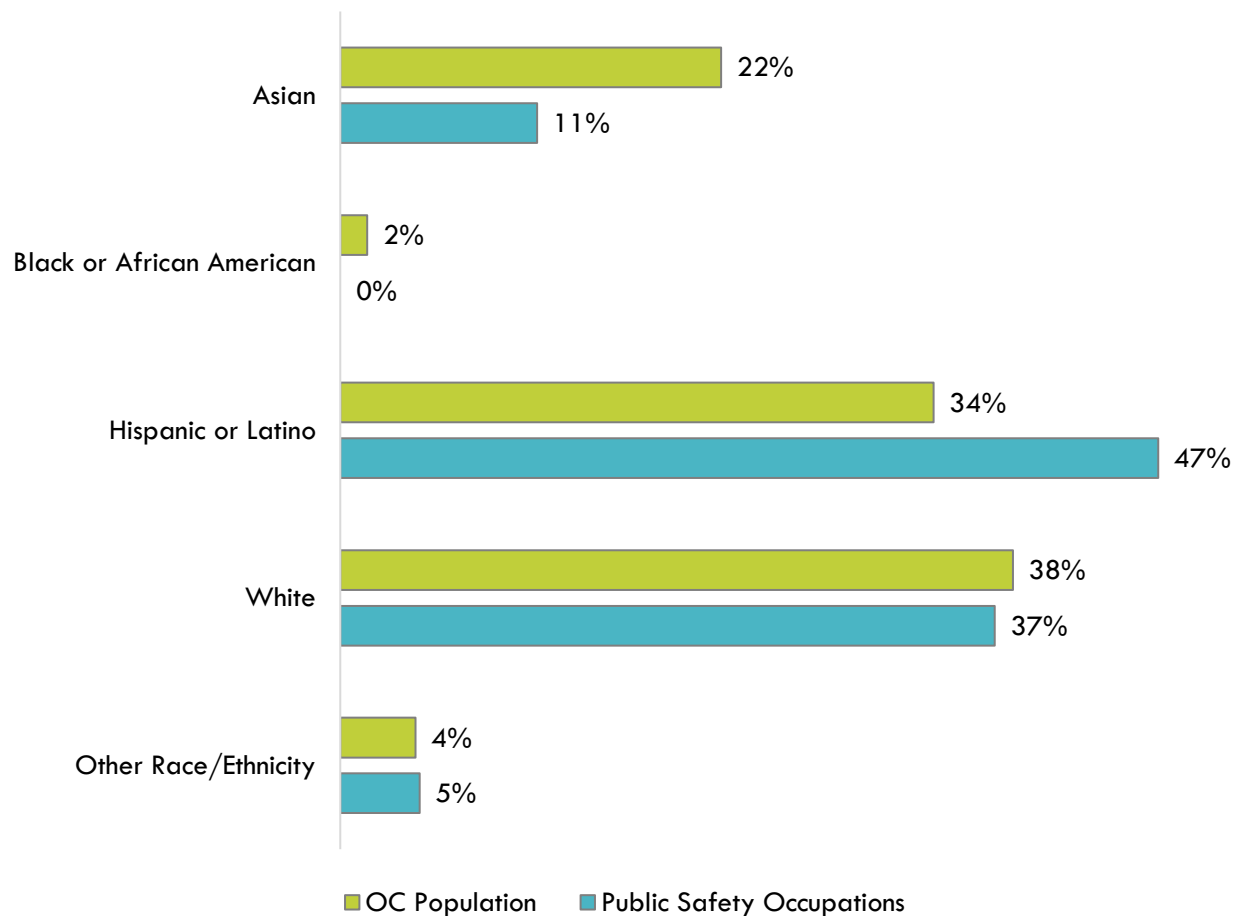
Ethnicity:

Exhibit 18 compares the ethnicity of the Orange County population with occupation-specific data for the two public safety occupations included in this report.

Notably, 47% of workers employed in these public safety occupations are Hispanic or Latino, which is much higher than the population (34%). Conversely, 22% of workers in these public safety occupations are Asian, which is double the population (11%).

Examining disaggregated data for each occupation (not shown), Hispanic or Latino individuals (54%) account for the majority of *dispatchers, except police, fire and ambulance**, which is a below middle-skill occupation and has the lowest entry-level wages of the two public safety occupations. White individuals account for a large majority (78%) of *public safety telecommunicators*, which is a middle-skill occupation and offers the highest entry-level wages of the two public safety occupations.

Exhibit 18: Program and County Demographics by Ethnicity



Age:

Exhibit 19 compares the age of the Orange County population with occupation-specific data for the two public safety occupations included in this report.

Approximately 62% of workers in these two public safety occupations are age 25 to 49, which is significantly higher than the population (34%).

Examining disaggregated data for each occupation (not shown), individuals age 25 to 34 comprise the majority (55%) of *public safety telecommunicators*, which is a middle-skill occupation and offers the highest entry-level wages of the two public safety occupations. The plurality of *dispatchers, except police, fire and ambulance** are 35 to 49 (33%), followed closely by age groups 50 and older (29%) and 25 to 34 (28%). This occupation is below middle-skill and has the lowest entry-level wages of the two public safety occupations.

Exhibit 19: Program and County Demographics by Age

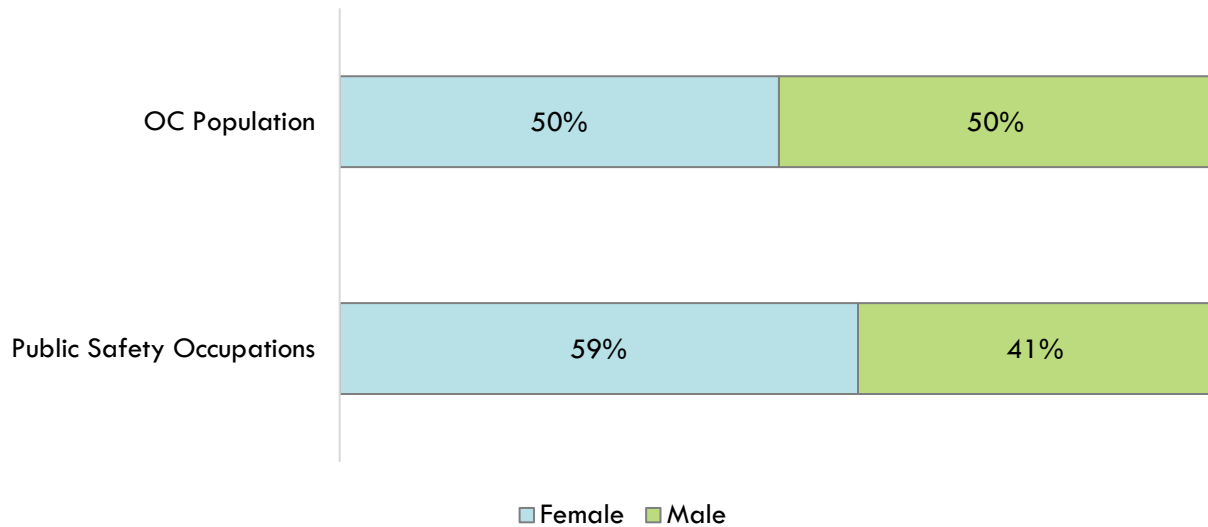


Sex:

Exhibit 20 compares the sex of the Orange County population with occupation-specific data for the two public safety occupations included in this report.

Though the population is split evenly between women and men, only 41% of workers in the field are men. Examining disaggregated data for each occupation (not shown), women account for the majority of *public safety telecommunicators* (75%) and *dispatchers, except police, fire and ambulance** (57%). The occupation with the highest percentage of men is *dispatchers, except police, fire and ambulance**, which is classified a below middle-skill occupation and has the lowest entry-level wages of the two public safety occupations.

Exhibit 20: Program and County Demographics by Sex



Appendix A: Methodology

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	<p>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/</p>
Living Wage	<p>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, last updated in September 2021, assesses the cost of housing, food, child care, health care, transportation, and taxes. For more information, see: https://insightccd.org/family-needs-calculator/</p> <p>The living wage for one adult in Orange County is \$20.63 per hour (\$42,910.40 annually). This figure is used by the CCCCCO to calculate the percentage of students that attained the regional living wage. However, this figure is outdated and does not reflect recent increases in the cost of living.</p> <p>The MIT Living Wage, updated on February 14, 2024, better accounts for existing economic conditions, with the current MIT Living Wage in Orange County being \$30.48. For more information, see: https://livingwage.mit.edu/counties/06059</p>
Typical Education and Training Requirements, and Educational Attainment	<p>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</p>
Emerging Occupation Descriptions, Additional Education Requirements, and Employer Preferences	<p>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/</p>
Educational Supply	<p>The CCCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. For more information, see: https://datamart.cccco.edu</p> <p>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</p>

Data Type	Source
Student Metrics and Demographics	<p>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</p>
Population and Occupation Demographics	<p>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</p> <p>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</p>

For more information, please contact the Orange County Center of Excellence:

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September 2024

