

Labor Market Analysis for Noncredit Program Recommendation 2105.00/Administration of Justice



FOR LABOR MARKET RESEARCH

ORANGE COUNTY

(Investigations, Certificate of Completion)
(Patrol Operations, Certificate of Completion)
(Police Academy, Certificate of Completion)
(Public Safety Supervisory, Certificate of Completion)

(Public Safety Leadership Certificate of Completion)
(Public Safety Administrative Certificate of Completion)
(Public Safety Management Certificate of Completion)
(Special Investigator Basic, Certificate of Completion)

Orange County Center of Excellence, October 2024

Summary

Program LMI Endorsement	Endorsed: All LMI Criteria Met <input checked="" type="checkbox"/>	Endorsed: Some LMI Criteria Met <input type="checkbox"/>	Not LMI Endorsed <input type="checkbox"/>
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Program LMI Endorsement Criteria

	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Supply Gap:	<p><i>Comments:</i> there is projected to be 2,995 annual job openings throughout Los Angeles and Orange counties for these criminal justice occupations, which is less than the 4,993 awards conferred by educational institutions. However, these programs also prepare students for 20 other related occupations, which account for 18,312 additional annual job openings. Because these programs train for other occupations with high demand, there is most likely an undersupply of labor for these criminal justice occupations.</p>	
Self-Sufficiency Standard Living Wage ¹ :	<p><i>Comments:</i> all job openings for these criminal justice occupations have entry-level hourly wages above the OC living wage of \$27.13.</p>	
Education:	<p><i>Comments:</i> though the typical entry-level education for these criminal justice occupations is a high school diploma, between 41% and 49% of workers in the field have completed some college or an associate degree as their highest level of education.</p>	

Additional Considerations

Emerging Occupation(s):	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<i>Comments:</i> N/A		
OC Resilient Job(s):	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<i>Comments:</i> See Resilient Jobs and US News & World Report Best Jobs		
U.S. News & World Report 2024 Best Jobs List ² :	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<i>Comments:</i> See Resilient Jobs and US News & World Report Best Jobs		

¹ At the direction of the California Community College Chancellor's Office, 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, to determine Orange County's living wage of \$27.13, last updated in March 2024.

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>.

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 three middle-skill occupations:

- *First-Line Supervisors of Police and Detectives (31-1012)*
- *Correctional Officers and Jailers (31-3012)*
- *Police and Sheriff's Patrol Officers (33-3051)*

Based on the available data, there appears to be a supply gap for these criminal justice occupations. Though the number of awards for these occupations exceeds demand, supply is overstated because the related educational programs train for an additional 20 occupations. When considering the high demand for these occupations, there is most likely an undersupply of labor for the three criminal justice occupations. In addition, typical education requirements for these occupations align with a community college education and all annual job openings have entry-level wages above the Self-Sufficiency Standard living wage. **Therefore, due to all 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
First-Line Supervisors of Police and Detectives (33-1012)	LA: 261	LA: 1,353		High school diploma or equivalent	41%
	OC: 64	OC: 450	OC: \$64.62		
	TTL: 325	TTL: 1,803			
Correctional Officers and Jailers (33-3012)	LA: 337	LA: 54		High school diploma or equivalent	49%
	OC: 80	OC: 0	OC: \$30.50		
	TTL: 417	TTL: 54			
Police and Sheriff's Patrol Officers (33-3051)	LA: 1,813	LA: 2,285		High school diploma or equivalent	47%
	OC: 441	OC: 791	OC: \$43.41		
	TTL: 2,254	TTL: 3,076			
Total	2,995	4,933	N/A	N/A	N/A

Demand:

- The number of jobs related to these criminal justice occupations is projected to increase 6% through 2028, equating to 2,995 annual job openings.
- Hourly entry-level wages for these criminal justice occupations range from \$30.50 to \$64.62 in Orange County; all annual job openings have entry-level wages above the Self-Sufficiency Standard living wage.

- There were 16,527 online job postings for these criminal justice occupations over the past 12 months. The highest number of postings were for leasing consultant, property manager, and criminal justice agent.
- The typical entry-level education for these criminal justice occupations is a high school diploma or equivalent.
- Between 41% and 49% 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 3,266 awards conferred by 26 community colleges in Los Angeles and Orange Counties from 2020 to 2023.
- Non-community college institutions conferred an average of 1,713 awards from 2019 to 2022.
- Orange County community college students that exited administration of justice programs in the 2020-21 academic year had a median annual wage of \$46,656 (\$22.43 per hour) after exiting the program and 52% attained the regional living wage.
- Throughout Orange County, 44% of administration of justice students that exited their program in 2019-20 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 these criminal justice occupations from 2018 through 2028. Though there was a 7% decline across all occupations in Orange County from 2019 to 2020 due to the COVID-19 pandemic, employment in these criminal justice occupations declined only 1% during the same period.

In the two years preceding the pandemic, employment in Orange County for these occupations was flat in 2018, before a 4% increase 2019. After a decrease in employment from 2020 through 2023, employment for these three occupations in Orange County is projected to slightly increase through 2028, experiencing a similar rate relative to all occupations in Los Angeles and Orange counties.

Exhibit 2: Annual Percent Change in Jobs for Criminal Justice Occupations, 2018-2028

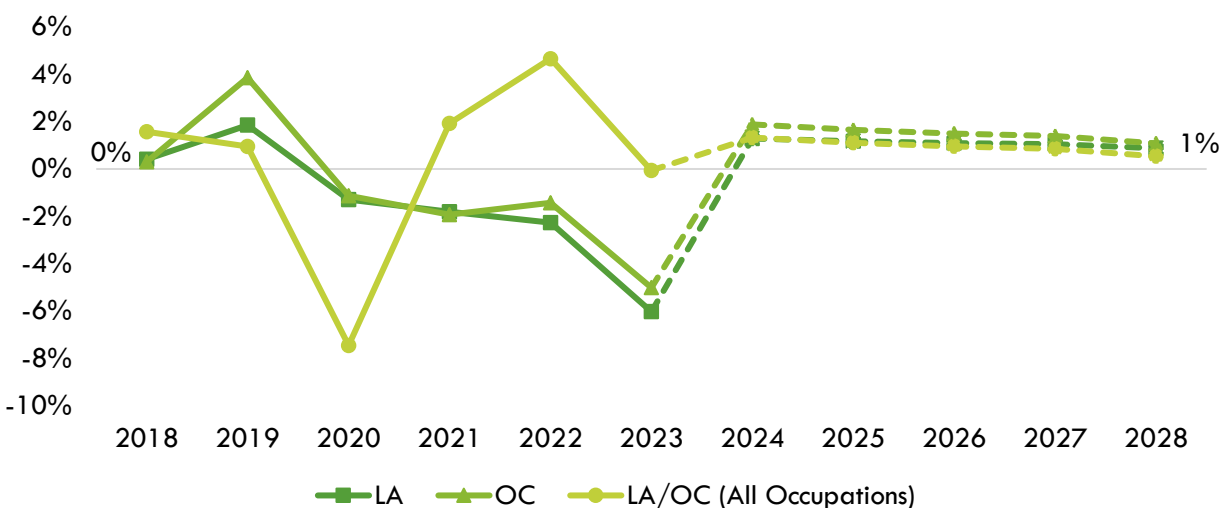


Exhibit 3 shows the five-year occupational demand projections for these criminal justice occupations. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 6% through 2028. There is projected to be 2,995 jobs available annually.

Exhibit 3: Occupational Demand in Los Angeles and Orange Counties³

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	27,027	28,538	1,512	6%	2,411
Orange	6,197	6,676	479	8%	584
Total	33,223	35,214	1,991	6%	2,995

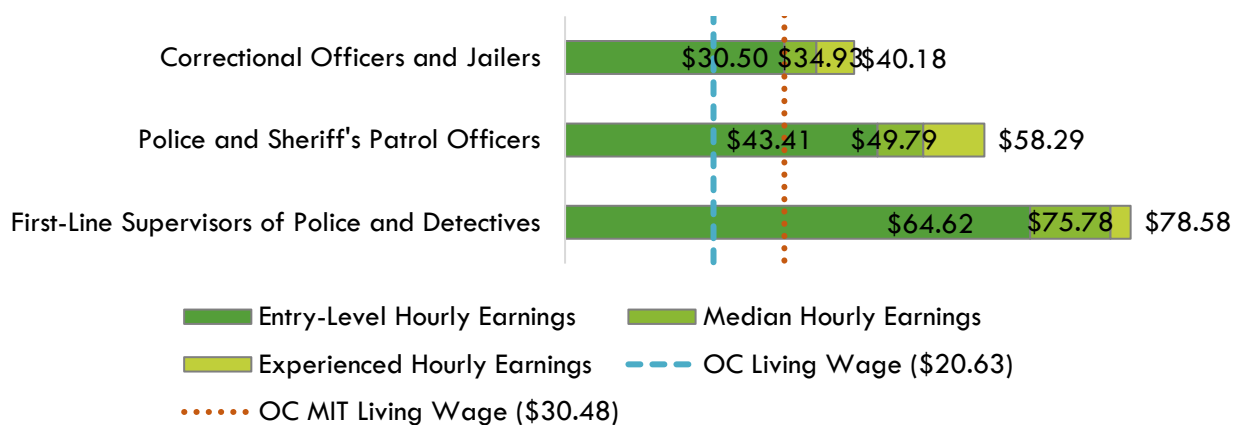
Wages:

The labor market endorsement in this report considers the entry-level hourly wages for these criminal justice 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.

At the direction of the California Community College Chancellor's Office, 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, to determine Orange County's living wage of \$27.13, last updated in March 2024. Additionally, data for the MIT Living Wage, updated on February 14, 2024, is provided as a reference. Currently, the MIT Living Wage in Orange County is \$30.48. Both figures, which account for geographic-specific costs of necessities such as housing, food, health care, and transportation to assess the cost of living, are notated in the exhibits below.

All annual openings for these criminal justice occupations have entry-level wages above the Self-Sufficiency Standard living wage for one adult (\$27.13 in Orange County). Typical entry-level hourly wages range between \$30.50 and \$64.62. Orange County's average wages are lower than the average statewide wage of \$52.55 for these occupations. Exhibit 4 shows the wage range for each of these criminal justice occupations in Orange County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

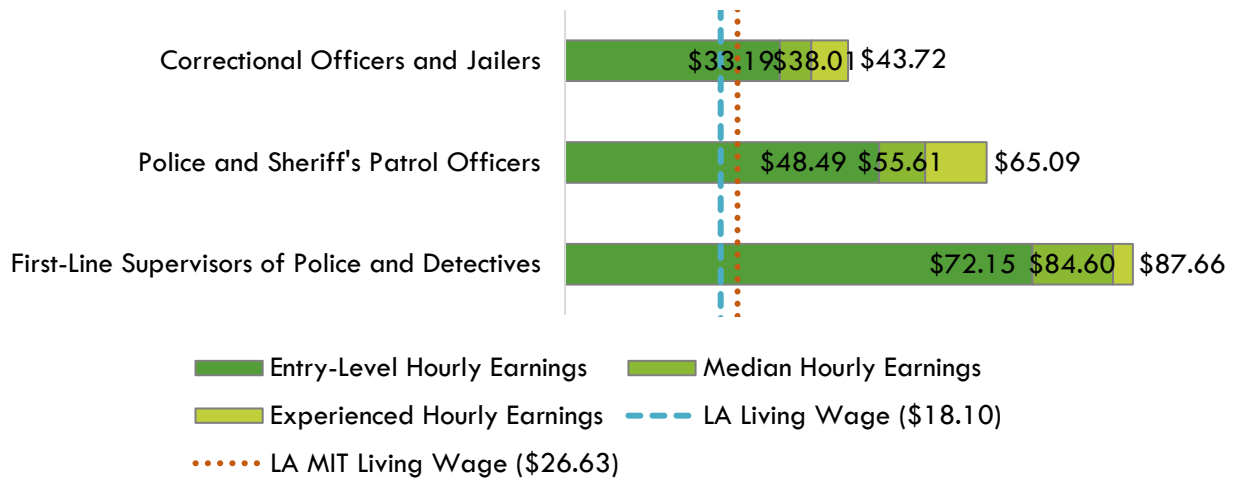
Exhibit 4: Wages by Occupation in Orange County



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.

All annual openings for these criminal justice occupations have entry-level wages above the Self-Sufficiency Standard living wage for one adult (\$24.03 in Los Angeles County). Typical entry-level hourly wages range between \$33.19 and \$72.15. Los Angeles County’s average wages are above the average statewide wage of \$52.55 for these occupations. Exhibit 5 shows the wage range for each of these criminal justice occupations in Los Angeles County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

Exhibit 5: Wages by Occupation in Los Angeles County



Resilient Jobs and U.S. News & World Report Best Jobs:

Exhibit 6 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. Only one occupation, *correctional officers and jailers*, met the criteria to be considered a COVID-19 Pandemic Recession-Resilient Job. None of these criminal justice occupations are Great Recession-Resilient Jobs or USN&WR Best Jobs.

Exhibit 6: Resilient Jobs and USN&WR Best Jobs Designations

Occupation	Great Recession-Resilient Job	COVID-19 Pandemic Recession-Resilient Job	2024 USN&WR Best Job
First-Line Supervisors of Police and Detectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correctional Officers and Jailers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police and Sheriff's Patrol Officers	<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 1,667 online job postings related to these criminal justice occupations listed in the past 12 months. Exhibit 7 shows the number of job postings by occupation. Over 70% of job postings were for police and sheriff's patrol officers.

Exhibit 7: Number of Job Postings by Occupation (n=1,667)

Occupation	Job Postings	Percentage of Job Postings
Police and Sheriff's Patrol Officers	1,187	71%
Correctional Officers and Jailers	261	16%
First-Line Supervisors of Police and Detectives	219	13%
Total Postings	1,667	100%

The top employers in the region, by number of job postings, are shown in Exhibit 8.

Exhibit 8: Top Employers by Number of Job Postings (n=1,667)

Employer	Job Postings	Percentage of Job Postings
United States Department of Homeland Security	318	19%
Allied Universal	110	7%
United States Secret Service	34	2%
Blackstone Consulting	27	2%
City Of Glendale, Ca	27	2%
County Orange-Health Care Agency	25	1%
Citizenship And Immigration Services	24	1%
Seattle Colleges Foundation	23	1%
State of California	23	1%
City Of Glendale	21	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 specialized, soft, and computer skills listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 9.

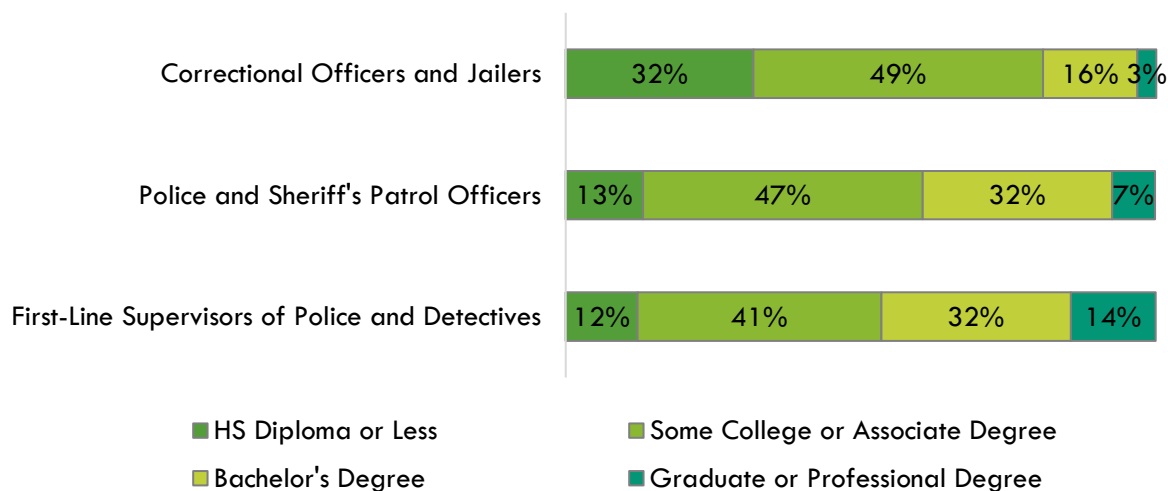
Exhibit 9: Top Skills by Number of Job Postings (n=1,667)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Law Enforcement (742)	Investigation (602)	Microsoft Excel (63)
Patrolling (327)	Communication (582)	Microsoft Outlook (63)
Rehabilitation (308)	Operations (542)	Microsoft PowerPoint (50)
Criminal Justice (260)	Tactfulness (404)	Microsoft Word (44)
Forensic Psychology (255)	Customer Service (371)	Spreadsheets (32)
International Laws (255)	English Language (352)	Microsoft Office (30)
Motorcycles (255)	Problem Solving (326)	Autodesk Revit (12)
All Terrain Vehicles (247)	Spanish Language (317)	Business Software (10)
Code Enforcement (235)	Writing (310)	Student Information Systems (10)
Economics (171)	Management (269)	Microsoft Access (8)

Educational Attainment:

The Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entry-level education for these criminal justice occupations. However, the national-level educational attainment data indicates between 41% and 49% of workers in the field have completed some college or an associate degree as their highest level of education. Exhibit 10 shows the educational attainment for each occupation, sorted by highest community college educational attainment to lowest.

Exhibit 10: National-level Educational Attainment for Occupations



Of the 70% of the cumulative job postings for these criminal justice occupations that listed a minimum education requirement in Los Angeles/Orange County, 64% (750) requested a high school diploma or an associate degree and 36% (397) requested a bachelor's degree.

Educational Supply

Community College Supply:

Exhibit 11 shows the three-year average number of awards conferred by community colleges in the related TOP codes⁵:

- Administration of Justice (2105.00)
- Corrections (2105.10)
- Probation and Parole (2105.20)
- Industrial and Transportation Security (2105.30)
- Forensics, Evidence, and Investigation (2105.40)
- Police Academy (2105.50)

The colleges with the most completions in the region are East LA, Rio Hondo, and Citrus. Over the past 12 months, there were four related program recommendation requests from regional community colleges.

Exhibit 11: 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
2105.00	Administration of Justice	Cerritos	121	99	94	105
		Citrus	253	219	143	205
		Compton	22	22	34	26
		East LA	491	405	334	410
		El Camino	112	104	78	98
		Glendale	47	42	28	39
		LA City	52	34	39	42
		LA Harbor	56	33	30	40
		LA Mission	54	70	44	56
		LA Pierce	86	90	74	83
		LA Southwest	36	31	30	32
		LA Trade	19	30	11	20
		LA Valley	51	39	36	42
		Long Beach	150	135	152	146
		Mt San Antonio	112	108	75	98
		Pasadena	127	77	62	89
		Rio Hondo	186	217	155	186
Santa Monica	46	49	44	46		

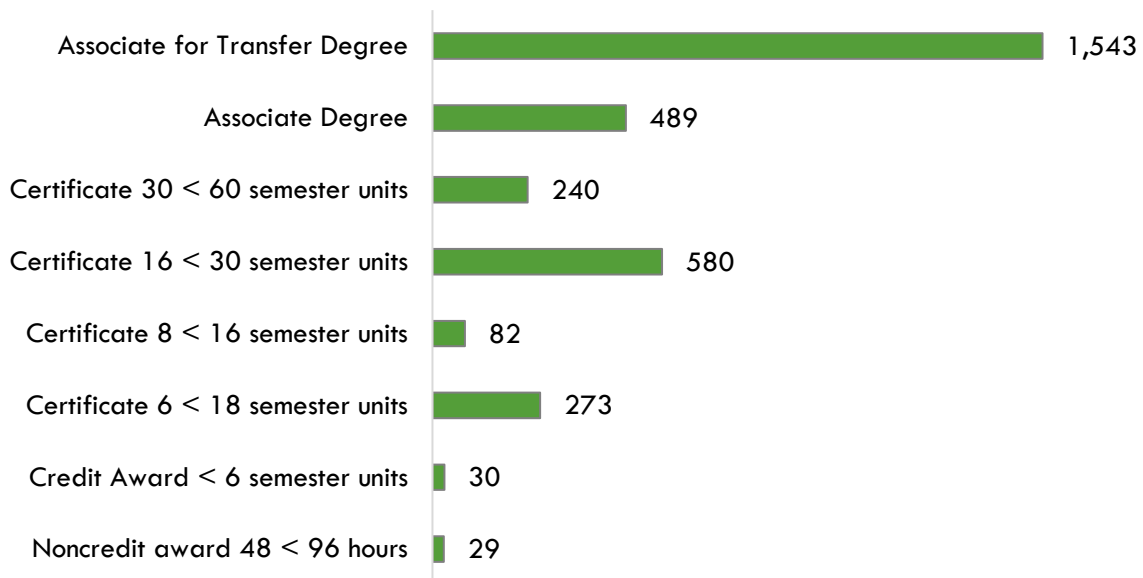
⁵ One TOP code – Geographic Information Systems (2206.10) – was removed from supply. A review of existing Geographic Information Systems programs and courses in Los Angeles and Orange counties showed that only one course (Crime Mapping and Analysis at Rio Hondo) was directly related to criminal justice. Because no other programs or courses directly prepare students for criminal justice occupations, this TOP code was removed from supply.

TOP Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
		West LA	141	77	51	90
		LA Subtotal	2,162	1,881	1,514	1,852
		Coastline	25	15	13	18
		Cypress	47	33	61	47
		Fullerton	152	119	109	127
		Golden West	159	189	154	167
		Irvine	74	75	49	66
		Santa Ana	80	85	83	83
		OC Subtotal	537	516	469	507
		Supply Subtotal/Average	2,699	2,397	1,983	2,360
2105.10	Corrections	Citrus	14	14	3	10
		East LA	6	46	164	72
		LA Trade	1	0	1	1
		Rio Hondo	4	12	12	9
		LA Subtotal	25	72	180	92
		Golden West	0	0	1	0
		Saddleback	6	11	2	6
		Santa Ana	7	15	26	16
		OC Subtotal	13	26	29	23
		Supply Subtotal/Average	38	98	209	115
2105.20	Probation and Parole	East LA	14	48	74	45
		LA Mission	1	2	3	2
		Rio Hondo	0	6	13	6
		LA Subtotal	15	56	90	54
		-	-	-	-	-
		OC Subtotal	-	-	-	-
		Supply Subtotal/Average	15	56	90	54
2105.30	Industrial and Transportation Security	Citrus	12	4	2	6
		East LA	0	5	0	2
		LA Subtotal	12	9	2	8
		Coastline	10	10	18	13
		Cypress	4	1	0	2
		OC Subtotal	14	11	18	15
		Supply Subtotal/Average	26	20	20	22
2105.40		East LA	28	63	75	55

TOP Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
	Forensics, Evidence, and Investigation	El Camino	6	10	4	7
		Long Beach	22	19	15	19
		Rio Hondo	0	13	14	9
		LA Subtotal	56	105	108	90
		Fullerton	0	0	9	3
		OC Subtotal	0	0	9	3
Supply Subtotal/Average			56	105	117	93
2105.50	Police Academy	East LA	234	116	270	207
		LA Mission	0	1	0	0
		Rio Hondo	96	166	146	136
		LA Subtotal	330	283	416	343
		Golden West	11	14	7	11
		Santa Ana	0	356	453	270
		OC Subtotal	11	370	460	280
Supply Subtotal/Average			341	653	876	623
Supply Total/Average			3,175	3,329	3,295	3,266

Exhibit 12 shows the annual average community college awards by type from 2020-21 to 2022-23. The plurality of the awards are for associate for transfer degrees, followed by certificates between 16 and less than 30 semester units and associate degrees.

Exhibit 12: Annual Average Community College Awards by Type, 2020-2023



Community College Student Outcomes:

Exhibit 13 shows the Strong Workforce Program (SWP) metrics for administration of justice programs in Coast Community College District (CCCD), the Orange County Region, and California. Of the 6,406 administration of justice students in the 2021-22 academic year, 18% (1,175) attended a CCCD college.

CCCD students that exited administration of justice programs in the 2020-21 academic year had significantly higher median annual earnings (\$61,732 or \$29.68 per hour) compared to all administration of justice students in Orange County (\$46,656 or \$22.43 per hour). A higher percentage of CCCD administration of justice students attained the living wage (59%) when compared to all administration of justice students in Orange County (52%).

Exhibit 13: Administration of Justice (2105.00) Strong Workforce Program Metrics, 2021-22⁶

SWP Metric	CCCD	OC Region	California
SWP Students	1,175	6,406	75,749
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	9%	12%	20%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	Insufficient Data	Insufficient Data	55%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	107	446	7,062
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2019-20)	81	401	5,573
SWP Students with a Job Closely Related to Their Field of Study (2019-20)	Insufficient Data	44%	53%
Median Annual Earnings for SWP Exiting Students (2020-21)	\$61,732 (\$29.68)	\$46,656 (\$22.43)	\$40,498 (\$19.47)
Median Change in Earnings for SWP Exiting Students (2020-21)	20%	19%	28%
SWP Exiting Students Who Attained the Living Wage (2020-21)	59%	52%	59%

⁶ All SWP metrics are for 2020-21 unless otherwise noted.

Non-Community College Supply:

To comprehensively analyze the regional supply, it is crucial to include data from other institutions offering programs that train for these criminal justice occupations. Exhibit 14 displays the annual and three-year average awards granted by these institutions under the related Classification of Instructional Programs (CIP) codes:

- Corrections (43.0102)
- Criminal Justice/Law Enforcement Administration (43.0103)
- Criminal Justice/Safety Studies (43.0104)
- Criminalists and Criminal Science (43.0402)
- Geospatial Intelligence (43.0407)

No awards were conferred under the following related CIP codes:

- Criminal Justice and Corrections, General (43.0100)
- Criminal Justice/Police Science (43.0107)
- Juvenile Corrections (43.0110)
- Law Enforcement Investigation and Interviewing (43.0114)
- Law Enforcement Record-Keeping and Evidence Management (43.0115)
- Critical Incident Response/Special Police Operations (43.0119)
- Corrections and Criminal Justice, Other (43.0199)
- Homeland Security (43.0301)
- Security Science and Technology, General (43.0401)
- Criminalistics and Criminal Science (43.0402)

The available data covers 2019 to 2022. During this period, non-community college institutions in the region conferred an average of 1,713 awards annually in related programs.

Exhibit 14: Regional Non-Community College Awards, 2019-2022

CIP Code	Program	College	2019-2020 Awards	2020-2021 Awards	2021-2022 Awards	3-Year Award Average
43.0102	Corrections	San Joaquin Valley College-Lancaster	14	8	7	10
Supply Subtotal/Average			14	8	7	10
43.0103	Criminal Justice/Law Enforcement Administration	Abraham Lincoln University	2	3	3	3
		Azusa Pacific University	37	49	31	39
		Los Angeles Pacific University	12	14	8	11
		University of Antelope Valley	18	17	9	15
Supply Subtotal/Average			69	83	51	68
43.0104	Criminal Justice/Safety Studies	California State University-Dominguez Hills	202	294	248	248
		California State University-Fullerton	322	350	343	338
		California State University-Long Beach	206	301	232	246

CIP Code	Program	College	2019-2020 Awards	2020-2021 Awards	2021-2022 Awards	3-Year Award Average
		California State University-Los Angeles	307	329	347	328
		California State University-Northridge	314	330	440	361
		Hope International University	0	2	8	3
		Marymount California University	24	25	11	20
		Platt College-Anaheim	16	7	6	10
		Platt College-Los Angeles	24	9	4	12
		University of Massachusetts Global	79	60	47	62
		Woodbury University	0	0	12	4
Supply Subtotal/Average			1,494	1,707	1,698	1,633
43.0402	Criminalistics and Criminal Science	Abraham Lincoln University	0	0	1	0
Supply Subtotal/Average			0	0	1	0
43.0407	Geospatial Intelligence	Mount Saint Mary's University	2	2	2	2
Supply Subtotal/Average			2	2	2	2
Supply Total/Average			1,579	1,800	1,759	1,713

Regional Demographics

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

Ethnicity:

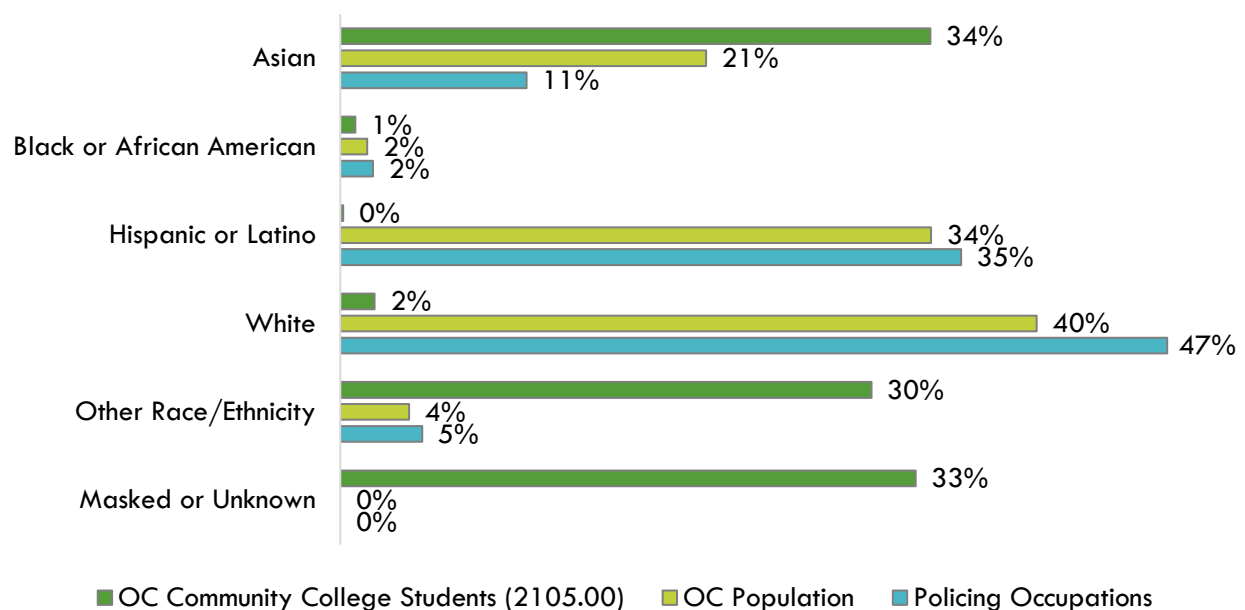
Exhibit 15 compares the ethnicity of Orange County community college students enrolled in administration of justice programs, the overall Orange County population, and occupation-specific data for the three criminal justice occupations included in this report.

Notably, the ethnicity for 33% of community college administration of justice students is masked or unknown. This significant percentage of masked or unknown data likely contributes to the low percentage of white (2%) and Hispanic or Latino (0%) community college justice students. The plurality of workers (47%) employed in these criminal justice occupations are white, which is higher than their share in the county population (40%). Additionally, 35% of workers in the field are Hispanic or Latino, which is nearly identical to the population (34%).

When solely considering available student demographic data, the plurality of community college administration of justice students are Asian (34%), which is significantly higher than the population (21%) and these criminal justice occupations (11%). Approximately 30% of students are another race or ethnicity (30%), which is significantly higher than the population (4%) and workers in the field (5%).

Examining disaggregated data for each occupation (not shown), white workers account for the majority of *first-line supervisors of police and detectives* (67%) and *police and sheriff's patrol officers* (51%). These occupations offer the highest (\$59.98) and second highest (\$38.53) entry-level wages of three criminal justice occupations, respectively. Among *first-line supervisors of police and detectives*, 0% are Asian. The occupation with the highest percentages of Asian (15%) and Hispanic or Latino (66%) workers is *correctional officers and jailers*. This occupation has the lowest entry-level wage (\$28.37) of the three criminal justice occupations.

Exhibit 15: Program and County Demographics by Ethnicity



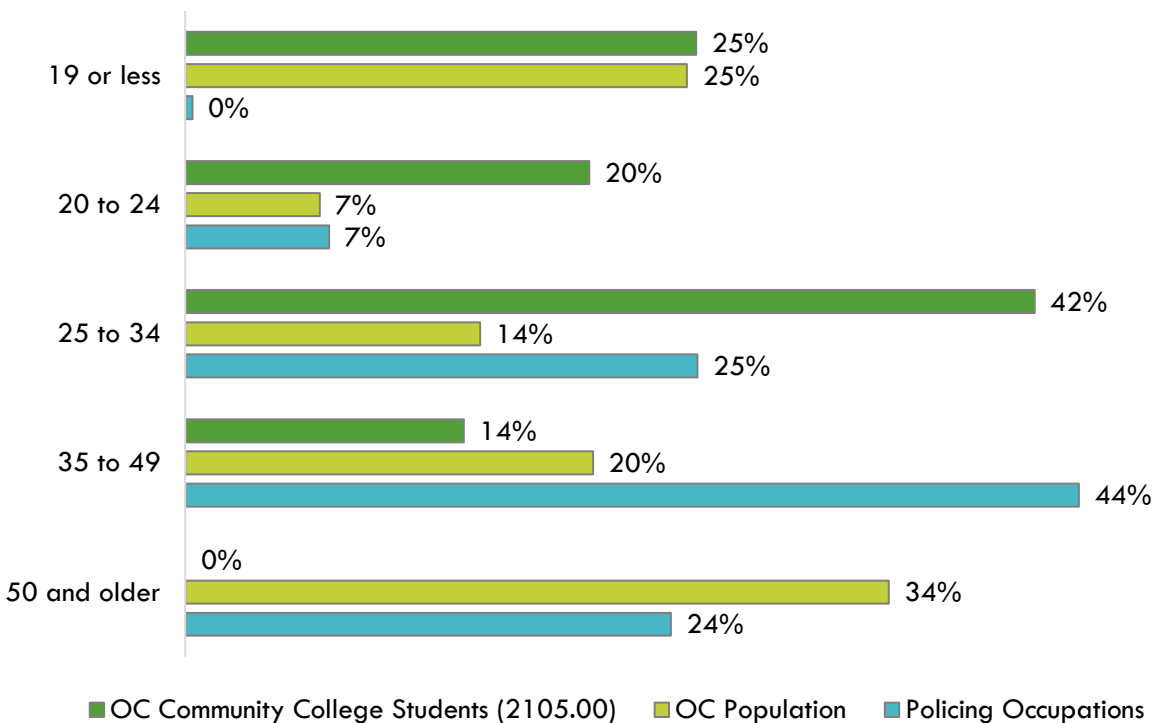
Age:

Exhibit 16 compares the age of Orange County community college students enrolled in administration of justice programs, the overall Orange County population, and occupation-specific data for the three criminal justice occupations included in this report.

Nearly 68% of workers in these criminal justice occupations are age 35 and older, which is higher than their representation in the population (54%) and significantly higher than their share amongst community college administration of justice students (14%). Age group 50 and older accounts for 0% of community college administration of justice students. Most community college administration of justice students are 19 to 34 (87%), which is significantly higher than the 32% of workers in the field and 46% of the county population in this age range.

Examining disaggregated data for each occupation (not shown), individuals 50 and older account for the majority of *first-line supervisors of police and detectives* (52%). In addition, the majority and/or plurality of *correctional officers and jailers* (54%) and *police and sheriff's patrol officers* (41%) are 35 to 49.

Exhibit 16: Program and County Demographics by Age



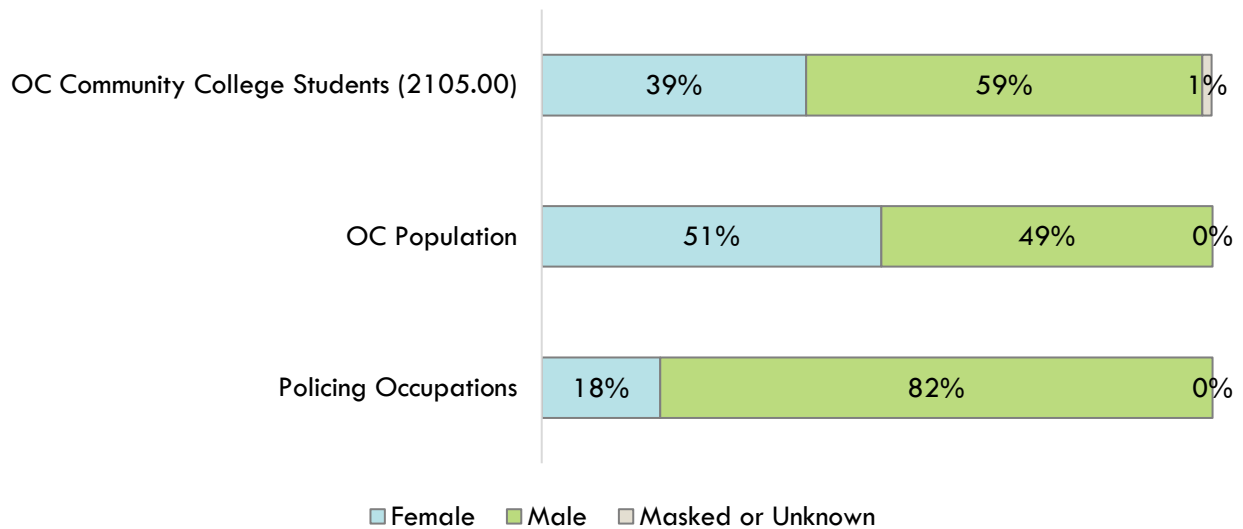
Sex:

Exhibit 17 compares the sex of Orange County community college students enrolled in administration of justice programs, the overall Orange County population, and occupation-specific data for these criminal justice occupations.

Though the population is split nearly evenly between women and men, only 39% of community college administration of justice students and 18% of workers in the field are women.

Examining disaggregated data for each occupation (not shown), there are significantly larger percentages of men than women across all three occupations. Notably, 92% of *first-line supervisors of police and detectives* are men. The occupation with the largest percentage of women is *correctional officers and jailers* (32%). This occupation has the lowest entry-level wage of the three criminal justice occupations.

Exhibit 17: 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>“Living Wage” measures the income necessary for an individual or family to afford basic expenses by assessing the costs such as housing, food, child care, health care, transportation, and taxes.</p> <p>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 (\$56,451 annually) in Orange County. For more information, see: http://www.selfsufficiencystandard.org/California</p> <p>The MIT Living Wage, updated on February 14, 2024, is a nationally recognized living wage metric and is provided for reference. The current MIT Living Wage in Orange County is \$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>

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