

⚠ Endorsed: Caution Advised			
Program LMI Endorsement Criteria			
	Met <input type="checkbox"/>	Partially Met <input checked="" type="checkbox"/>	Not Met <input type="checkbox"/>
Supply Gap:	There are projected to be 2,099 annual job openings throughout Los Angeles and Orange counties for <i>automotive service technicians and mechanics</i> , which is less than the 2,150 awards conferred by educational institutions . However, the oversupply is within the COE's margin (10% over or under the number of annual job openings) to be considered "supply met" rather than a "supply gap."		
Self-Sufficiency Standard Living Wage ¹ :	Met <input type="checkbox"/>	Partially Met <input type="checkbox"/>	Not Met <input checked="" type="checkbox"/>
	The typical entry-level wage for <i>automotive service technicians and mechanics</i> is \$20.62 , which is below the OC living wage of \$27.13 .		
Education:	Met <input checked="" type="checkbox"/>	Partially Met <input type="checkbox"/>	Not Met <input type="checkbox"/>
	Typical education requirement for <i>automotive service technicians and mechanics</i> is some a postsecondary non-degree award and 37% of workers in the field have completed some college or an associate degree as their highest level of education .		

Summary

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 and Orange counties regional labor market related to one middle-skill occupation:

- *Automotive Service Technicians and Mechanics (49-3023)*

Based on the available data, typical education requirements for *automotive service technicians and mechanics* align with a community college education. Although supply exceeds demand, the supply gap is within the COE's acceptable margin to be considered supply is met as opposed to over-supplied. Entry-level wages are below the Self-Sufficiency Standard living wage. **Therefore, due to some regional labor market criteria being met, the COE endorses this proposed program.**

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.

Exhibit 1 lists the occupational demand, supply, typical entry-level education, and educational attainment for the middle-skill occupation 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
Automotive Service Technicians and Mechanics (49-3023)	LA: 1,521 OC: 577	LA: 1,518 OC: 632	OC: \$20.62	Postsecondary non-degree award	37%
Total	2,099	2,150	N/A	N/A	N/A

Demand

- In Los Angeles and Orange counties, the number of jobs related to automotive service technicians and mechanics is projected to decrease 2% through 2029, equating to 2,099 annual job openings.
- Hourly entry-level wages for automotive service technicians and mechanics are \$20.62 in Orange County, which is below the Self-Sufficiency Standard living wage.
- There were 5,535 online job postings for automotive service technicians and mechanics over the past 12 months. The highest number of postings were for automotive technicians, automotive mechanics, and automotive service advisors.
- The typical entry-level education for automotive service technicians and mechanics is postsecondary non-degree award.
- Approximately 37% of workers in the field have completed some college or an associate degree as their highest level of educational attainment.

Supply

- Between 2021 to 2024, an average of 1,549 awards were conferred by 15 community colleges for this middle-skill occupation in Los Angeles and Orange counties.
- From 2020 to 2023, non-community college institutions conferred an average of 601 awards for this middle-skill occupation.
- In the 2022-23 academic year, Orange County community college students that exited automotive technology programs had a median annual wage of \$37,676 (\$18.11 per hour) post-exit, and 21% attained the regional living wage.
- In 2021-22, 69% of Orange County automotive technology students that exited their programs reported working a job closely related to their field of study.

Demand

Occupational Projections

Exhibit 2 shows the annual percentage change in jobs for *automotive service technicians and mechanics* from 2019 through 2029. Between 2019 and 2020, employment levels across Los Angeles and Orange counties declined sharply due to the broader economic impacts of the COVID-19 pandemic. From 2021 to 2024, Orange County saw a growth of employment for

this occupation, experiencing its highest increase in 2024 (7%). Beginning in 2025, Orange County job levels are projected to remain stable through 2029.

Exhibit 2: Annual Percentage Change in Jobs for Automotive Service Technicians and Mechanics, 2019-2029

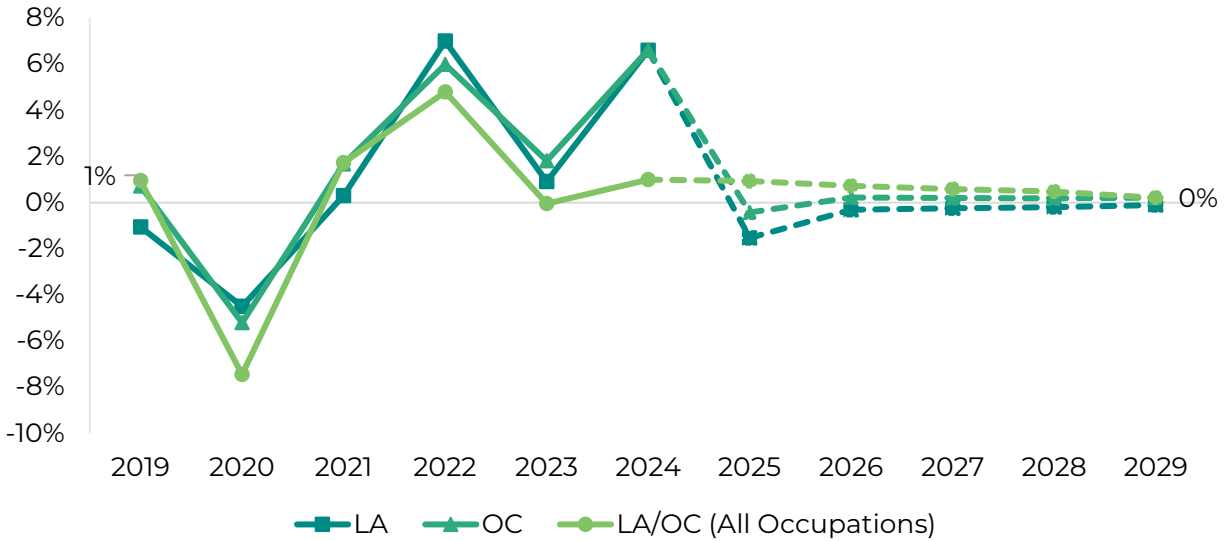


Exhibit 3 shows the five-year occupational demand projections for the middle-skill occupation *automotive service technicians and mechanics*. In Los Angeles and Orange counties, the number of jobs related to this occupation is projected to decrease 1.6% by 2029. There is projected to be 2,099 available annually.

Exhibit 3: Middle-Skill Occupational Demand in Los Angeles and Orange Counties²

Geography	2024 Jobs	2029 Jobs	2024-2029 Change	2024-2029 % Change	Annual Openings
Los Angeles	18,975	18,526	(449)	(2.4%)	1,521
Orange	6,859	6,886	27	0.4%	577
Total	25,834	25,412	(422)	(1.6%)	2,099

Wages

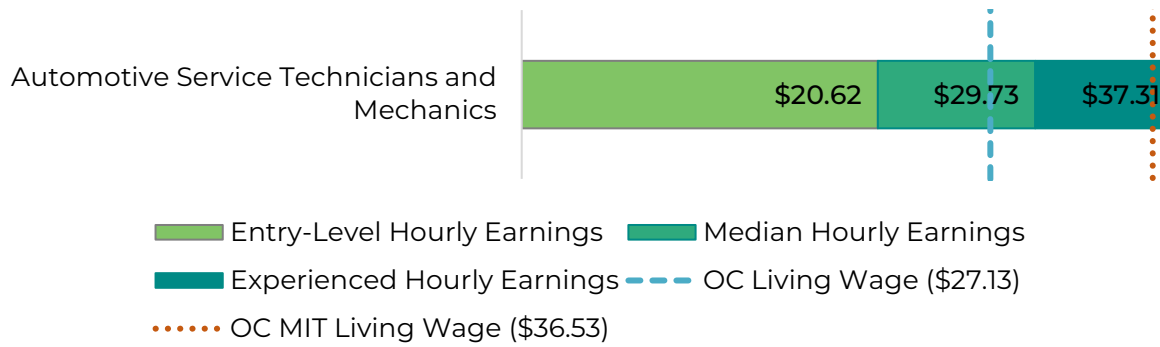
The labor market endorsement in this report considers the entry-level hourly wages for *automotive service technicians and mechanics* in Orange County as they relate to the county's living wage. Los Angeles County wages are included below to provide a complete analysis of the LA/OC region.

In addition to the Self Sufficiency Standard living wage, data for the MIT Living Wage (updated on February 15, 2026) is provided as a reference. Currently, the MIT Living Wage in Orange County is \$36.53. 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 notated in the exhibits below.

In Orange County, the typical entry-level wage for *automotive service technicians and mechanics* is \$20.62, which is below the Self-Sufficiency living wage of \$27.13 for a single adult. Exhibit 4 shows the wage range for *automotive service technicians and mechanics* in Orange County and how it compares to the regional living wage.

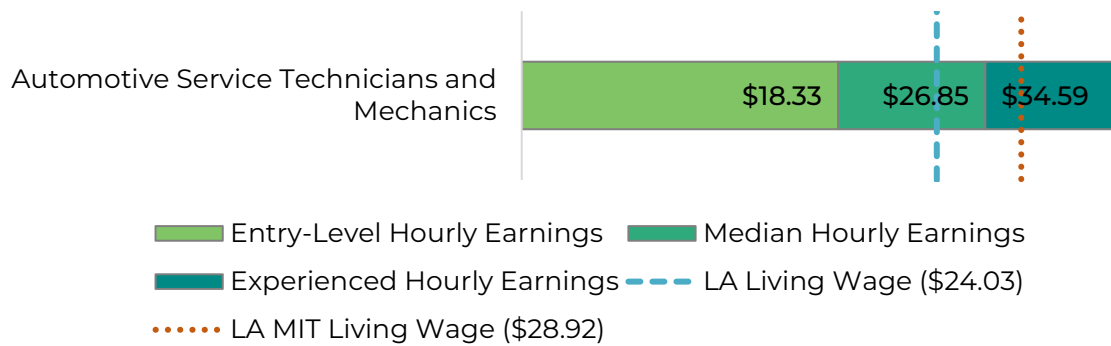
² Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Exhibit 4: Wages by Occupation in Orange County



In Los Angeles County, the typical entry-level wage for *automotive service technicians and mechanics* is \$18.33, which is below the Self-Sufficiency living wage of \$24.03 for a single adult. Exhibit 5 shows the wage range for *automotive service technicians and mechanics* in Los Angeles County and how it compares to the regional living wage.

Exhibit 5: Wages by Occupation in Los Angeles County



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

Exhibit 6 shows if this 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 Job³. *Automotive service technicians and mechanics* did not meet the criteria to be considered any of the three designations.

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

Occupation	Great Recession-Resilient Job	COVID-19 Pandemic Recession-Resilient Job	2025 USN&WR Best Job
Automotive Service Technicians and Mechanics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Job Postings

Important 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 5,535 online job postings related to *automotive service technicians and mechanics* listed in the past 12 months. Exhibit 7 shows the number of job postings by occupation.

Exhibit 7: Number of Job Postings by Occupation (n=5,535)

Occupation	Job Postings	Percentage of Job Postings
Automotive Service Technicians and Mechanics	5,535	100%
Total Postings	5,535	100%

The top job titles for *automotive service technicians and mechanics* in the region, by number of job postings, are shown in Exhibit 8.

Exhibit 8: Top Job Titles by Number of Job Postings for the Middle-Skill Occupation (n=5,535)

Job Titles	Job Postings	Percentage
Automotive Technicians	683	12%
Automotive Mechanics	311	6%
Automotive Service Advisors	199	4%
Automotive Technicians/Mechanics	192	3%
Service Technicians	169	3%
Mechanics	161	3%
Lube Technicians	160	3%
Vehicle Specialists	151	3%
General Service Technicians	133	2%
Tire and Lube Technicians	106	2%

The top employers for *automotive service technicians and mechanics* in the region, by number of job postings, are shown in Exhibit 9.

Exhibit 9: Top Employers by Number of Job Postings for the Middle-Skill Occupation (n=5,535)

Employer	Job Postings	Percentage of Job Postings
Pep Boys	229	4%
Valvoline	167	3%
Bridgestone Corporation	142	3%
Walmart	136	2%
CarMax	97	2%
Toyota Motor	97	2%
AutoNation	79	1%
Sonic Automotive	78	1%
Avis Budget Group	72	1%
Chevrolet	59	1%

The top specialized, soft, and computer skills for *automotive service technicians and mechanics* 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 the Middle-Skill Occupation (n=5,535)

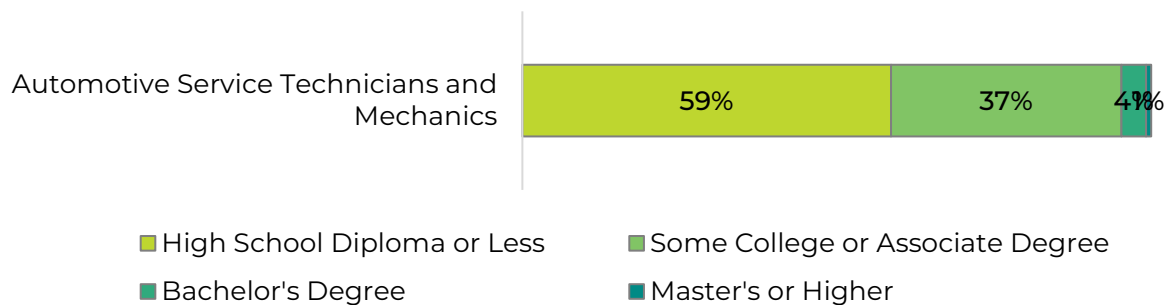
Top Specialized Skills	Top Soft Skills	Top Computer Skills
Automotive Services (1,665)	Communication (2,194)	Microsoft Office (100)
Changing Oil (1,076)	Customer Service (2,086)	Microsoft Outlook (95)
Good Driving Record (1,006)	Detail Oriented (1,311)	Microsoft Excel (83)
Suspension (Vehicle) (896)	Problem Solving (889)	Apache Struts (71)
Brakes (872)	Troubleshooting (Problem Solving) (845)	Inventory Control Systems (39)
Lifting Ability (739)	Management (760)	Microsoft Word (36)
Vehicle Inspection (703)	Sales (694)	Microsoft PowerPoint (30)
Vehicle Maintenance (665)	Operations (483)	Web Browsers (30)
Mechanics (647)	Verbal Communication Skills (373)	Firefox (28)
Oil and Gas (579)	Strong Work Ethic (370)	Microsoft Edge (28)

Educational Attainment

The Bureau of Labor Statistics (BLS) lists postsecondary non-degree award for as the typical entry-level education for *automotive service technicians and mechanics*.

The national-level educational attainment data indicates that 37% of workers in the field have completed some college or an associate degree as their highest level of education. Exhibit 11 shows the educational attainment for this occupation.

Exhibit 11: National-level Educational Attainment for Occupation



Requested Minimum Education Requirement

In Los Angeles and Orange Counties, 33% (1,842) of job postings for *automotive service technicians and mechanics* included a stated minimum education requirement:

- 97% (1,785) requested a high school diploma or associate degree
- 3% (50) requested a bachelor's degree.

Educational Supply

The following supply tables display the total supply for *automotive service technicians and mechanics* that align with these TOP and CIP codes and program needs.

Community College Supply

Exhibit 12 shows the three-year average number of awards conferred by community colleges in the related TOP code:

- Diesel Technology (0947.00)
- Automotive Technology (0948.00)
- Alternative Fuels and Advanced Transportation Technology (0948.40)

The colleges with the most completions in the region are Cypress (226), followed by LA Trade (210), then Pasadena (155). Over the past 12 months, there were no related program recommendation requests from regional community colleges.

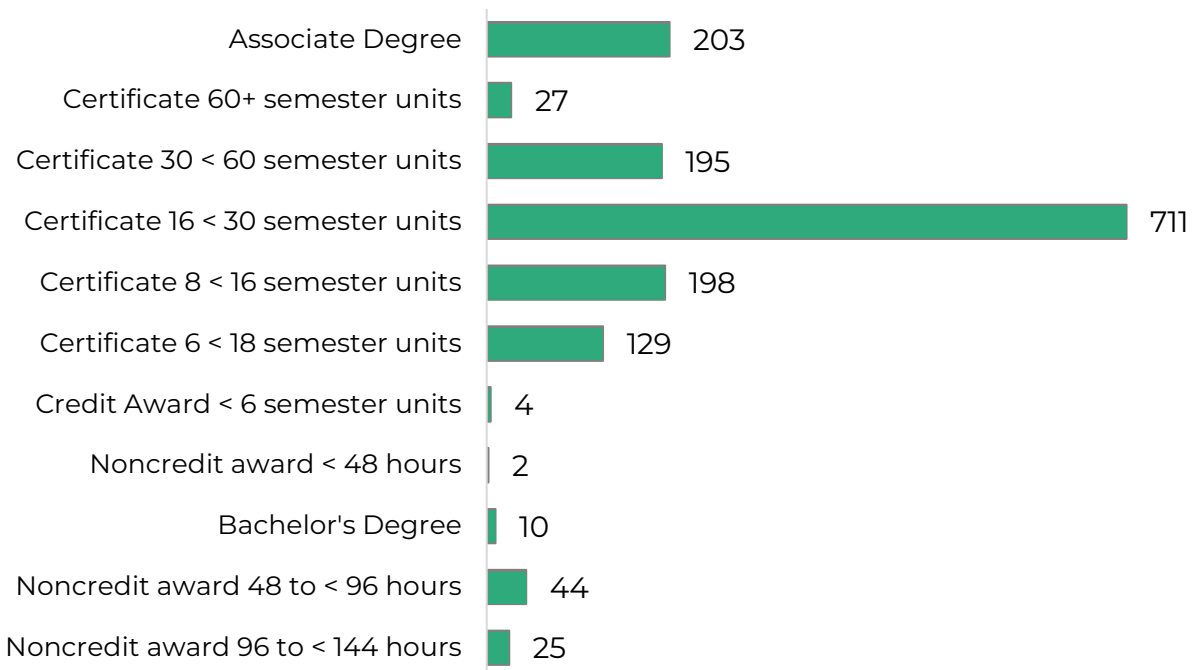
Exhibit 12: Regional Community College Awards (Certificates and Degrees), 2021-2024

TOP Code	Program	College	2021-2022 Awards	2022-2023 Awards	2023-2024 Awards	3-Year Award Average
0947.00	Diesel Technology	Citrus	30	51	31	37
		LA Trade	41	31	75	49
		LA Subtotal	71	82	106	86
		Santa Ana	0	14	22	12
		OC Subtotal	0	14	22	12
Supply Subtotal/Average			71	96	128	98
0948.00	Automotive Technology	Cerritos	45	75	184	101
		Citrus	35	100	64	66
		Compton	24	58	15	32
		East LA	43	52	23	39
		El Camino	35	43	57	45
		LA Pierce	49	82	77	69
		LA Trade	108	142	199	150
		Long Beach	66	94	107	89
		Pasadena	166	84	214	155
		Rio Hondo	92	80	101	91
		LA Subtotal	663	810	1,041	838
		Cypress	219	200	258	226
		Fullerton	26	42	21	30
		Golden West	69	111	200	127
		Saddleback	26	35	180	80
		Santa Ana	52	76	159	96
		OC Subtotal	392	464	818	558
Supply Subtotal/Average			1,055	1,274	1,859	1,396

TOP Code	Program	College	2021-2022 Awards	2022-2023 Awards	2023-2024 Awards	3-Year Award Average
0948.40	Alternative Fuels and Advanced Transportation Technology	LA Trade	6	18	11	12
		Long Beach	9	7	2	6
		Rio Hondo	44	20	33	32
		LA Subtotal	59	45	46	50
		Saddleback	6	4	4	5
		OC Subtotal	6	4	4	5
Supply Subtotal/Average			65	49	50	55
Supply Total/Average			1,191	1,419	2,037	1,549

Exhibit 13 shows the annual average community college awards by type from 2021-22 to 2023-24. The plurality of the awards are for certificate 16 less than 30 semester units, followed by associate degree then certificate 8 less than 16 semester units.

Exhibit 13: Annual Average Community College Awards by Type, 2021-2024



Community College Student Outcomes

Exhibit 14 shows the Strong Workforce Program (SWP) metrics for automotive technology programs in the Coast Community College District (CCCD), the Orange County Region, and California. Of the 2,061 Orange County automotive technology students in the 2023-24 academic year, 14% (280) attended a CCCD college.

CCCD students that exited automotive technology programs in the 2022-23 academic year had lower median annual earnings (\$36,188 or \$17.40 per hour) compared to all automotive technology students in Orange County (\$37,676 or \$18.11 per hour). A higher percentage of CCCD automotive technology students attained the living wage (25%) when compared to all automotive technology students in Orange County (21%).

Exhibit 14: Automotive Technology (0948.00) Strong Workforce Program Metrics, 2021-24⁴

SWP Metric	CCCD	OC Region	California
SWP Students	280	2,061	18,453
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	50%	40%	38%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	82%	74%	75%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	89	417	2,192
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2022-23)	Insufficient Data	17	138
SWP Students with a Job Closely Related to Their Field of Study (2021-22)	Insufficient Data	69%	70%
Median Annual Earnings for SWP Exiting Students (2022-23)	\$36,188 (\$17.40)	\$37,676 (\$18.11)	\$38,572 (\$18.54)
Median Change in Earnings for SWP Exiting Students (2022-23)	29%	52%	46%
SWP Exiting Students Who Attained the Living Wage (2022-23)	25%	21%	33%

Non-Community College Supply

To comprehensively analyze the regional supply, it is crucial to include data from other institutions offering automotive technology programs. Exhibit 15 displays the annual and three-year average awards granted by these institutions under the related Classification of Instructional Programs (CIP) code: Automobile/Automotive Mechanics Technology/Technician (47.0604).

No awards were conferred under the related CIP codes:

- Vehicle Emissions Inspection and Maintenance Technology/Technician (47.0612)
- Alternative Fuel Vehicle Technology/Technician (47.0614)
- High Performance and Custom Engine Technician/Mechanic (47.0617)

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

The available data covers 2020 to 2023. During this period, non-community college institutions in the region conferred an average of 601 awards annually in related programs.

Exhibit 15: Regional Non-Community College Awards, 2020-2023

CIP Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
47.0604	Automobile / Automotive Mechanics Technology / Technician	Baldwin Park Adult & Community Education	3	4	6	4
		UEI College-Garden Grove	7	64	101	57
		UEI College-Gardena	73	91	82	82
		UEI College-West Covina	78	102	132	104
		Universal Technical Institute-Southern California	206	391	463	353
Supply Total/Average			367	652	784	601

Regional Demographics

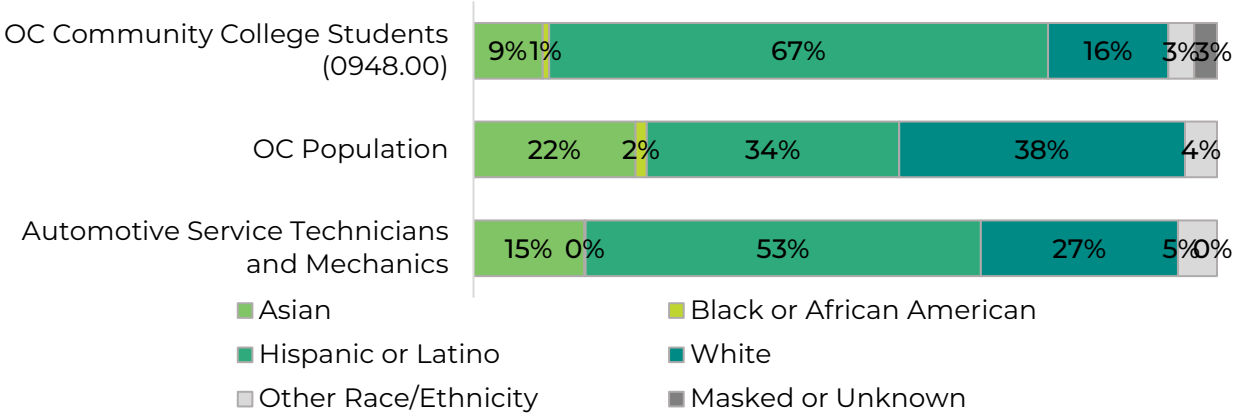
The following section presents occupational, community college program, and population demographic data for Orange County. This comparison can help identify possible equity gaps between the local workforce and the student pipeline who are preparing for this occupation. These insights can inform program development, outreach, and support strategies to better align community college programs with current labor market needs.

Ethnicity

Exhibit 16 compares the ethnicity of Orange County community college students enrolled in automotive technology programs, the overall Orange County population, and occupation-specific data for *automotive service technicians and mechanics*.

Nearly 53% of *automotive service technicians and mechanics* are Hispanic or Latino, which is less than their representation in automotive technology programs at 67%, suggesting a potential disconnect between education and employment outcomes. In contrast, white individuals make up 27% of the workforce but account for only 16% of program enrollment, indicating that white workers may be entering these jobs through alternate training pathways. Meanwhile, Asian individuals (students 9%, workers 15%) and Black or African American individuals (students 1%, workers 0%) show different trends, with Asians showing higher workforce representation compared to enrollment, and Black individuals seeing minimal representation in both areas.

Exhibit 16: Program and County Demographics by Ethnicity

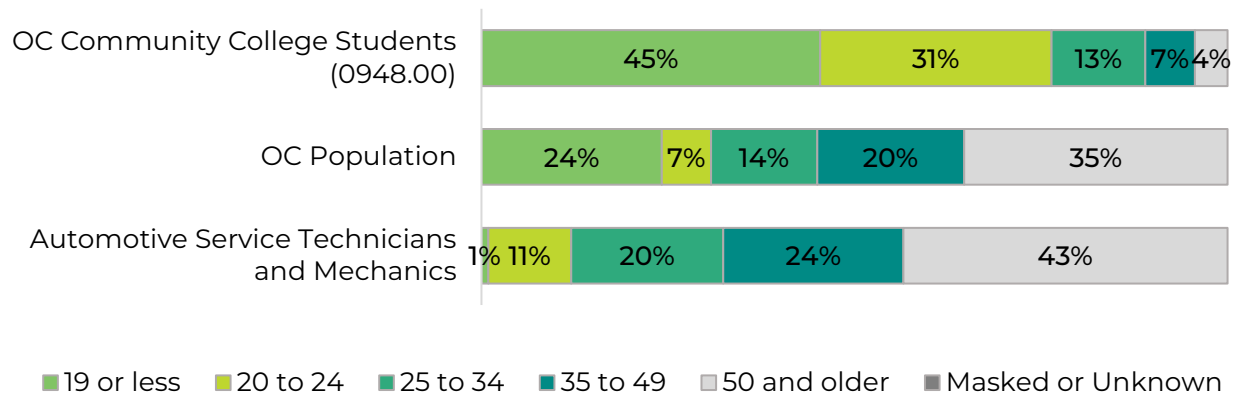


Age

Exhibit 17 compares the age of Orange County community college students enrolled in automotive technology programs, the overall Orange County population, and occupation-specific data for *automotive service technicians and mechanics*.

Community college students enrolled in automotive technology programs skew younger, with 76% under age 25 compared to just 12% of workers in the field. In contrast, 67% of workers are aged 35 or older, suggesting that these roles may require additional experience or advanced training prior to entry.

Exhibit 17: Program and County Demographics by Age

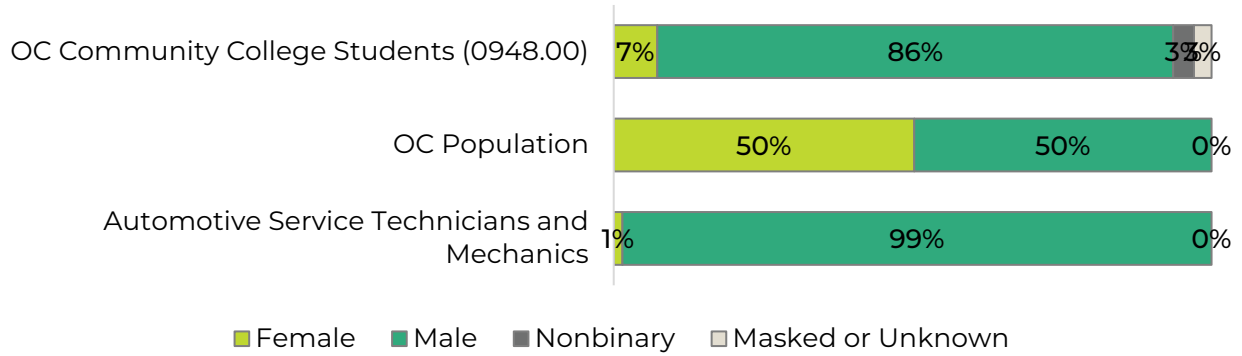


Sex

Exhibit 18 compares the sex of Orange County community college students enrolled in automotive technology programs, the overall Orange County population, and occupation-specific data for *automotive service technicians and mechanics*.

Although the population has an even gender distribution, only 1% of the workers and 7% of community college students are women, highlighting gender imbalances in the field.

Exhibit 18: Program and County Demographics by Sex



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 have 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 (v.2026.2), a labor market analytics firm.
Living Wage	Per the CCCC'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 15, 2026, is a nationally recognized living wage metric and is provided for reference. The current MIT Living Wage in Orange County is \$36.53.
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 (v.2.0), 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.

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

Jesse Crete, Ed. D., Regional Director

crete_jesse@rscdd.edu

May 2026



FOR LABOR MARKET RESEARCH

ORANGE COUNTY