

Program Endorsement Brief: 0948.00/Automotive Technology

Entry Level Quick Service Technician, Intermediate Level Technician, Emissions Essentials Technician, Fleet Technician, Industrial Vehicle Technician

Los Angeles/Orange County Orange County Center of Excellence, March 2021

Summary Analysis

Program Endorsement:	Endorsed: All Criteria Met <input type="checkbox"/>	Endorsed: Some Criteria Met <input checked="" type="checkbox"/>	Not Endorsed <input type="checkbox"/>
Program Endorsement Criteria			
Supply Gap:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Living Wage: (Entry-Level, 25th)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Education:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Emerging Occupation(s)			
	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to one middle-skill occupation: *automotive service technicians and mechanics (49-3023)*. Middle-skill occupations typically require some postsecondary education, but less than a bachelor’s degree.¹ This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with relevant occupation(s).

Based on the available data, there appears to be a supply gap for this occupation in the region. While automotive service technicians and mechanics typically requiring a postsecondary nondegree award, entry-level wages are below the living wage in both Los Angeles and Orange counties. **Therefore, due to some criteria being met, the COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, there is projected to be **nearly 2,200 jobs available annually** in the region due to retirements and workers leaving the field, **which is more than the 1,870 awards conferred annually** by educational institutions in the region.
- **Living Wage Criteria** – Typical **entry-level hourly wages** for automotive service technicians and mechanics are **\$13.55, which is lower than the California Family Needs Calculator** hourly wage (living wage) for one adult in Los Angeles County.

¹ The COE classifies middle-skill jobs as the following:

- 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.

- **Educational Criteria** – The Bureau of Labor Statistics (BLS) lists a postsecondary nondegree award as the typical entry-level education for automotive service technicians and mechanics.

Supply:

- There are **16 community colleges** in the LA/OC region that issue awards related to automotive service technicians and mechanics, conferring an average of **1,642 awards annually** between 2016 and 2019.
- Between 2014 and 2017, there was an average of **228 awards conferred annually** in related training programs by non-community college institutions.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for automotive service technicians and mechanics. In Los Angeles/Orange County, the number of jobs related to this occupation is projected to decrease by 7% through 2024. However, there will be nearly 2,200 job openings per year through 2024 due to retirements and workers leaving the field.

This report includes employment projection data by Emsi, which uses EDD information. Emsi’s projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy, during the projection period, will be at approximately full employment. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties²

Geography	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change	Annual Openings
Los Angeles	19,130	17,630	(1,500)	(8%)	1,583
Orange	6,888	6,544	(344)	(5%)	578
Total	26,019	24,174	(1,845)	(7%)	2,161

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.

Wages

The labor market endorsement in this report considers the entry-level hourly wage for this occupation in Los Angeles County as it relates to the county's living wage. Orange County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County: The typical entry-level hourly wage for automotive service technicians and mechanics is \$13.55, which is below the living wage for one adult (\$15.04 in Los Angeles County).³ Experienced workers can expect to earn \$26.89, which is higher than the living wage estimate.

Orange County: The typical entry-level hourly wage for automotive service technicians and mechanics is \$15.65, which is below the living wage for one adult (\$17.36 in Orange County).⁴ Experienced workers can expect to earn \$29.74, which is higher than the living wage estimate.

Job Postings

There were 4,576 online job postings related to automotive service technicians and mechanics listed in the past 12 months. The highest number of job postings were for car install technician, technician/cadet, and auto technician lead. The top skills were auto repair, automotive services industry knowledge, and customer services. The top employers, by number of job postings, in the region were Pep Boys, Goodyear, and Chrysler.

It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists postsecondary nondegree award as the typical entry-level education for automotive service technicians and mechanics. Furthermore, the national-level educational attainment data indicates 35.7% of automotive service technicians and mechanics workers in the field have completed some college or an associate degree. Of the 48% of job postings listing a minimum education requirement in Los Angeles/Orange County, 97.9% (2,140) requested an associate degree and 2.1% (47) requested high school or vocational training.

Educational Supply

Community College Supply—Exhibit 2 shows the annual and three-year average number of awards conferred by community colleges in Automotive Technology (0948.00) and Alternative Fuels and Advanced Transportation Technology (0948.40). The colleges with the most completions in the region are Santa Ana, Cypress, and LA Trade. Over the past 12 months, there were two other related program recommendation requests from regional community colleges.

³ Living wage data was pulled from California Family Needs Calculator on 3/18/2021. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

⁴ Ibid.

Exhibit 2: Regional community college awards (certificates and degrees), 2016-2019

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
0948.00	Automotive Technology	Cerritos	52	57	58	56
		Citrus	81	85	114	93
		Compton	25	21	15	20
		East LA	53	84	70	69
		El Camino	60	97	70	76
		LA Pierce	103	137	86	109
		LA Trade	245	147	157	183
		Pasadena	46	40	107	64
		Rio Hondo	38	85	90	71
		Santa Monica	-	-	2	1
		LA Subtotal	703	753	769	742
		Cypress	225	173	362	253
		Fullerton	16	49	26	30
		Golden West	46	37	51	45
		Saddleback	44	23	48	38
		Santa Ana	78	1,291*	119	496
		OC Subtotal	409	1,573	606	863
Supply Subtotal/Average			1,112	2,326	1,375	1,605
0948.40	Alternative Fuels and Advanced Transportation Technology	Cerritos	1	-	1	1
		LA Trade	11	18	10	13
		Long Beach	-	3	7	3
		Rio Hondo	14	19	8	14
		LA Subtotal	26	40	26	31
		Saddleback	4	8	8	7
		OC Subtotal	4	8	8	7
Supply Subtotal/Average			30	48	34	37
Supply Total/Average			1,142	2,374	1,409	1,642

*Supply data includes 1,253 low-unit certificates automatically conferred (also known as auto-awarded) by Santa Ana College in the 2017-18 academic year. Awards were automatically conferred to both current and past students who had completed the unit requirements within the past few years; however, this low-unit program may not have necessarily prepared students for the occupation within this report, as compared to higher-unit programs at Santa Ana College and throughout the region. Therefore, *the three year-average number of awards is likely overstated.*

Non-Community College Supply— It is important to consider the supply from non-community college educational institutions in the region that provide training programs for automotive service technicians and mechanics. Exhibit 3 shows the annual and three-year average number of awards conferred by these institutions in the related Classification of Instructional Programs (CIP) Code: 47.0604 – Automobile/Automotive Mechanics Technology/Technicians.

Due to different data collection periods, the most recent three-year period of available data is from 2014 to 2017. Between 2014 and 2017, non-community college educational institutions in the region conferred an average of 228 awards annually in related training programs.

Exhibit 3: Regional non-community college awards, 2014-2017

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
47.0604	Automobile/Automotive Mechanics Technology/Technician	Baldwin Park Adult & Community Education	11	18	10	13
		GDS Institute	10	10	5	8
		Hacienda La Puente Adult Education	40	38	46	41
		UEI College-Gardena	84	98	69	84
		Universal Technical Institute-Southern California	-	1	245	82
Supply Total/Average			145	165	375	228

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Automotive Service Technicians and Mechanics (49-3023)	19,130	17,630	(1,500)	(8%)	1,583	\$13.55	\$19.67	\$26.89
Total	19,130	17,630	(1,500)	(8%)	1,583			

Exhibit 5. Orange County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Automotive Service Technicians and Mechanics (49-3023)	6,888	6,544	(344)	(5%)	578	\$15.65	\$21.99	\$29.74
Total	6,888	6,544	(344)	(5%)	578			

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-level Educational Attainment
Automotive Service Technicians and Mechanics (49-3023)	26,019	24,174	(1,845)	(7%)	2,161	Postsecondary nondegree award
Total	26,019	24,174	(1,845)	(7%)	2,161	

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

For more information, please contact:

Luke Meyer, Director
 Los Angeles/Orange County Center of Excellence
lmeyer7@mtsac.edu

March 2021

