

Program Endorsement Brief: 0948.00/Automotive Technology General Motors Automotive Technician

Los Angeles/Orange County Center of Excellence, September 2019

Summary Analysis

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide regional labor market supply and demand data related to automotive service technicians and mechanics (49-3023). Middle-skill occupations typically require some postsecondary education, but not a bachelor's degree. 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 occupations.

Based on the available data, it appears that there is a supply gap for this automotive service occupation in the region. Therefore, the COE endorses this proposed program for the following reasons:

Demand:

Over the next five years, there is projected to be 2,611 jobs available annually in the
region due to new jobs, retirements and workers leaving the field, which is more than
the 1,690 awards conferred annually by community colleges and non-community college
institutions in the region.

Supply:

- There are **15 community colleges** in the region that have an automotive technology program (0948.00), conferring an average of **1,542 awards** between 2015 and 2018.
- Between 2013 and 2016, there were four non-community college institutions in the region that conferred 148 awards in Automobile/ Automotive Mechanics Technology/ Technician (47.0604).

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 for automotive service technicians and mechanics is projected to increase by 1%. There will be more than 2,600 job openings per year through 2023 (Exhibit 1).

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.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties²

Geography	2018 Jobs	2023 Jobs	2018-2023 Change	2018-2023 % Change	Annual Openings
Los Angeles	20,042	20,050	8	0%	1,876
Orange	<i>7,</i> 111	7,443	332	5%	736
Total	27,153	27,493	340	1%	2,611

Wages — Typical entry-level and median hourly wages for automotive service technicians and mechanics in the region are \$13.62 and \$20.03, respectively.³ Entry-level wages for this occupation are lower than the California Family Needs Calculator hourly wage for one adult in the region (\$15.04 in Los Angeles County and \$17.36 in Orange County). Experienced workers can expect to earn \$27.39, which is higher than the California Family Needs Calculator wage estimates for both counties. Regional average wages are below the average statewide wage of \$22.45 for this occupation. Wage information, by county, is included in Appendix A.

Job Postings — In the past 12 months, there have been 5,801 online job postings for automotive service technicians and mechanics. The majority of job postings were for auto technician, mechanic, service technician, and lube technician. Top specialized skills included: automotive repair, customer service, and automotive services industry knowledge. The top three employers, by number of job postings, in the region are: AutoNation, Chrysler, and Group 1 Automotive. Of the 5,801 online job postings, 41% list a minimum education requirement.

Educational Attainment — The Bureau of Labor Statistics (BLS) lists a postsecondary certificate as the typical entry-level education for automotive service technicians and mechanics. The national-level educational attainment data indicates 35% of workers in the field have completed some college or an associate degree. Of the 41% of automotive service technicians and mechanics job postings listing a minimum education requirement in Los Angeles/Orange County, 97% (2,313) request a high school diploma or vocational training and 3% (69) request an associate degree.

Community College Supply — Exhibit 2 shows the annual and three-year average number of awards conferred by community colleges in Automotive Technology (0948.00). The colleges with the most automotive technology completions in the region were Santa Ana and LA Trade-Tech. In the past 12 months, there were four other related program recommendation requests from regional community colleges.

Non-Community College Supply — Exhibit 3 shows the annual and three-year average number of awards conferred by non-community college institutions in Automobile/Automotive Mechanics Technology/Technician (47.0604) programs.

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

³ Entry-level wage is defined as the twenty-fifth percentile hourly wage. Wages for experienced workers are defined as the seventy-fifth percentile hourly wage.

Exhibit 2: Regional community college awards (certificates and degrees), 2015-2018

TOP Code	Program	College	2015-16 Awards	2016-17 Awards	2017-18 Awards	3-Year Award Average
		Cerritos	37	52	57	49
		Citrus	69	81	85	78
		Compton	26	25	21	24
		Cypress	126	225	173	175
		East LA	70	53	84	69
		El Camino	45	60	97	67
		Fullerton	7	16	49	24
0948.00	Automotive Technology	Golden West	37	46	37	40
	reallieregy	LA Pierce	138	103	137	126
		LA Trade	220	245	147	204
		Long Beach	3	-	-	1
		Pasadena	24	46	40	37
		Rio Hondo	151	38	85	91
		Saddleback	29	44	23	32
		Santa Ana	207	78	1,291	525
		Total/Average	1,189	1,112	2,326	1,542

Exhibit 3: Regional non-community college awards, 2013-2016

CIP Code	Program	Institution	2013-14 Awards	2014-15 Awards	2015-16 Awards	3-Year Award Average
Auton	Automobile/	Baldwin Park Adult & Community Education	11	11	18	13
47.0604	Automotive Mechanics	GDS Institute	-	10	10	7
	Technology/	Hacienda La Puente Adult Education	39	40	38	39
	. commoran	UEI College - Gardena	86	84	98	89
		Total/Average	136	145	164	148

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry- Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Automotive Service Technicians and Mechanics (49-3023)	20,042	20,050	8	0%	1,876	\$13.10	\$19.48	\$26.60

Exhibit 5. Orange County

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry- Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Automotive Service Technicians and Mechanics (49-3023)	7,111	7,443	332	5%	736	\$15.12	\$21.68	\$29.30

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry- Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Automotive Service Technicians and Mechanics (49-3023)	27,153	27,493	340	1%	2,611	\$13.62	\$20.03	\$27.39

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
- Employment Development Department, Unemployment Insurance Dataset
- Living Insight Center for Community Economic Development
- 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:

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