

Program Endorsement Brief: 0948.00/Automotive Technology
Automotive Manual Drive Train Specialist Certificate
Automotive Light Repair Specialist Certificate
Orange County Center of Excellence, June 2019

Summary

The 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 four automotive technology occupations: automotive body and related repairers (SOC 49-3021), automotive service technicians and mechanics (SOC 49-3023), tire repairers and changers (SOC 49-3093), and automotive and watercraft service attendants (SOC 53-6031). 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.

The following summarizes key findings from this data brief:

- The number of jobs for the automotive technology occupations in this report is projected to **increase by 2% through 2023**. More than **4,100 job openings** will be available annually due to new job growth and replacement need.
- In the past 12 months, there were **7,375 online job postings** for these automotive technology occupations throughout Los Angeles and Orange Counties.
- The typical entry-level education for these occupations ranges from no formal educational credential to a postsecondary nondegree award. The national-level educational attainment data indicates **between 25.3% and 34.8% of workers in the field have completed some college or an associate degree**.
- There are **15 community colleges** in the region that have programs listed under related automotive technology TOP Codes. Of these colleges, 10 colleges are located in Los Angeles County and 5 colleges are located in Orange County.
- Between 2015 and 2018, community colleges in the region **conferred an average of 1,593 awards annually** (associate degrees and certificates) in training programs under related TOP Codes.
- Between June 2018 and May 2019, **6 other related program recommendation requests under the same TOP Code (0948.00)** were received.

Occupational Demand

Exhibit 1, on the following page, shows the five-year occupational demand projections for occupations related to automotive technology. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 2% through 2023. Due to retirements and workers leaving the field, there will be more than 4,100 job openings per year through 2023.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties¹

Geography	2018 Jobs	2023 Jobs	2018-2023 Change	2018-2023 % Change	Annual Openings
Los Angeles	28,825	29,140	315	1%	2,943
Orange	10,668	11,032	364	3%	1,185
Total	39,494	40,173	679	2%	4,127

Wages—Typical entry-level hourly wages for occupations related to automotive technology throughout the region are between \$10.64 and \$12.25.² Typical entry-level wages for all four automotive technology occupations are lower than the MIT Living hourly wage for one adult in the region (\$14.36 in Los Angeles County and \$15.85 in Orange County). Typically, experienced workers earn between \$22.29 and \$32.82, which is higher than the living wage estimates for both counties. Regional average wages are below the average statewide wage of \$19.43 for these occupations. Wage information, by county, is included in Appendix A.

Job Postings—There were 7,375 online job postings related to these automotive technology occupations listed in the past 12 months. The highest number of job postings were for auto technician, mechanic, service technician, and lube technician. The top specialized skills were: repair, auto repair, automotive services industry knowledge, and customer service. The top three employers, by number of job postings, in the region were: Chrysler, Autonation, and Bridgestone/Firestone.

Educational Attainment—The Bureau of Labor Statistics (BLS) lists no formal educational credential as the typical entry-level education required for automotive and watercraft service attendants, a high school diploma for automotive body and related repairers and tire repairers and changers, and a postsecondary nondegree award for automotive service technicians and mechanics. The national-level educational attainment data indicates that between 25.3% and 34.8% of workers in the field have completed some college or an associate degree. Of the 38% of job postings listing a minimum education requirement in Los Angeles/Orange County, 98% (2,759) requested a high school diploma or vocational training and 2% (69) requested an associate degree.

Community College Supply

Exhibit 2, on the following page, shows the three-year average number of awards conferred by community colleges in the related TOP code: Automotive Technology (0948.00). Because of the transferability of skills across programs, Exhibit 2 also shows the three-year average number of awards conferred in two other related TOP codes: Alternative Fuels and Advanced Transportation Technology (0948.40) and Motorcycle, Outboard and Small Engine Repair (0948.30). Over the past three years, Santa Ana had the most completions in the region. Between June 2018 and May 2019, there were six other related program recommendation requests from regional community colleges. Additionally, data is not available for automotive technician training programs beyond

¹ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

² Entry-level wage is defined as the tenth percentile hourly wage. Wages for experienced workers are defined as the ninetieth percentile hourly wage.

those offered by community colleges such as those provided by Universal Technical Institute (UTI) and UEI College, so the figures in Exhibit 2 likely understate the overall supply of qualified workers.

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

TOP Code	Program	College	2014-15 Awards	2015-16 Awards	2016-2017 Awards	3-Year Award Average
0948.00	Automotive Technology	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
		Golden West	37	46	37	40
		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	1291	525
		Subtotal/Average	1,189	1,112	2,326	1,542
0948.30	Motorcycle, Outboard and Small Engine Repair	LA Trade	5	13	16	11
		Subtotal/Average	5	13	16	11
0948.40	Alternative Fuels and Advanced Transportation Technology	Cerritos	-	1	-	0
		LA Trade	9	11	18	13
		Long Beach	21	-	3	8
		Rio Hondo	6	14	19	13
		Saddleback	5	4	8	6
		Subtotal/Average	69	92	89	83
		Total/Average	1,235	1,155	2,390	1,593

Appendix A: Occupational demand and wage data by county
Exhibit 3. 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 Body and Related Repairers (49-3021)	4,589	4,714	125	3%	470	\$12.28	\$16.09	\$29.61
Automotive Service Technicians and Mechanics (49-3023)	20,519	20,673	154	1%	1,936	\$11.02	\$16.68	\$28.94
Tire Repairers and Changers (49-3093)	2,122	2,100	(22)	(1%)	261	\$11.89	\$15.63	\$23.46
Automotive and Watercraft Service Attendants (53-6031)	1,595	1,652	57	4%	276	\$10.85	\$13.28	\$22.55
Total	28,825	29,140	315	1%	2,943			

Exhibit 4. 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 Body and Related Repairers (49-3021)	1,737	1,756	19	1%	169	\$12.26	\$22.46	\$38.30
Automotive Service Technicians and Mechanics (49-3023)	6,870	7,232	362	5%	721	\$11.10	\$16.74	\$38.26
Tire Repairers and Changers (49-3093)	1,170	1,123	(47)	(4%)	142	\$10.50	\$13.39	\$23.89
Automotive and Watercraft Service Attendants (53-6031)	891	921	30	3%	154	\$10.50	\$12.42	\$21.92
Total	10,668	11,032	364	3%	1,185			

Exhibit 5. 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 Body and Related Repairers (49-3021)	6,326	6,470	144	2%	639	\$12.25	\$17.61	\$32.82
Automotive Service Technicians and Mechanics (49-3023)	27,389	27,905	516	2%	2,657	\$11.01	\$16.68	\$31.53
Tire Repairers and Changers (49-3093)	3,292	3,224	(68)	(2%)	402	\$11.10	\$14.88	\$23.68
Automotive and Watercraft Service Attendants (53-6031)	2,486	2,573	87	3%	429	\$10.64	\$13.03	\$22.29
Total	39,494	40,173	679	2%	4,127			

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)
- MIT Living Wage
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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