

Program Endorsement Brief

0948.00/Automotive Technology and 0949.00/Automotive Collision Repair

Advanced Automotive Collision Repair

Automotive Collision Management

Automotive Multi-Coat and Custom Paint

Automotive Electrical and Engine Performance

Automotive Drivetrain and Air Conditioning

Automotive Heavy Line and Chassis Technician

Los Angeles/Orange County Center of Excellence, January 2020

Summary Analysis

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 four middle-skill occupations: automotive body and related repairers (49-3021), automotive service technicians and mechanics (49-3023), first-line supervisors of mechanics, installers, and repairers (49-1011), insurance appraisers, auto damage (13-1032); and one below middle-skill occupation: painters, transportation equipment (51-9122). 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 the relevant occupations.

Based on the available data, there appears to be a supply gap for these occupations in the region. However, the entry-level wages for three of the five occupations are lower than the counties' living wages. **Therefore, the COE cautiously endorses this proposed program.**

Demand:

- Over the next five years, there are projected to be **4,920 jobs available annually** in the region due to new jobs, retirements, and workers leaving the field, **which is more than the 1,785 awards conferred** by educational institutions in the region.
- Although the Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entry-level education for three of the five automotive collision repair occupations and a postsecondary nondegree awards for two occupations, between 26% and 43% of workers in the field have completed some college or an associate degree.
 - However, it is worth noting that typical entry-level hourly wages for three of the five automotive collision repair occupations are below 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)².

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.

² Living wage data was pulled from California Family Needs Calculator on 12/10/19. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

- Experienced workers can expect to earn between \$24.85 and \$48.25, which is higher than the California Family Needs Calculator hourly wage estimate for both counties.

Supply:

- There are fifteen community colleges in the region that have automotive technology programs and six colleges that have automotive collision repair programs. When combined, these programs conferred an annual average of 1,637 awards, between 2015 and 2018.
- Between 2013 and 2016, there were an average of 148 awards conferred annually in related training programs by four non-community college institutions in the region.
- Over the past 12 months, there were five other related program recommendation requests from regional community colleges.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for automotive-related occupations. In Los Angeles/Orange County, the number of jobs for relevant occupations is projected to increase by 2% through 2023. There will be more than 4,900 job openings per year through 2023 due to new jobs, retirements, and workers leaving the field.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2018 Jobs	2023 Jobs	2018-2023 Change	2018-2023 % Change	Annual Openings
Los Angeles	37,396	37,803	407	1%	3,554
Orange	13,782	14,240	458	3%	1,366
Total	51,178	52,043	865	2%	4,920

Wages — Typical entry-level hourly wages for relevant occupations throughout the region are between \$12.72 and \$29.87.⁴ Entry-level wages for two of the five occupations are higher than the California Family Needs Calculator hourly wage for one adult in Los Angeles County (\$15.04 and Orange County (\$17.36). Experienced workers can expect to earn between \$24.85 and \$48.25, which is higher than the California Family Needs Calculator wage estimates for both counties. Wage information, by county, is included in Appendix A.

Job Postings — There were 11,566 online job postings related to automotive collision repair listed in the past 12 months. Online job posting information for the automotive-related occupations have been split into subgroups to illuminate how employer preferences differ based on specialty. Of the 11,566 online job postings, 44% list a minimum education requirement. Of the 44% of job postings for automotive-related occupations listing a minimum education requirement in Los

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.

⁴ 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.

Angeles/Orange County, 94% (4,823) requested a high school diploma and 6% (310) requested an associate degree.

Advanced Automotive Collision Repair Job Postings – There were 7,373 online job postings related to the advanced automotive collision repair occupations: automotive body and related repairers and automotive service technicians and mechanics. The highest number of job postings were for automotive technician, mechanic, service technician, and auto body technician. The top three employers, by number of job postings, in the region were: Chrysler, Pep Boys, and AutoNation. Of the 7,373 online job postings, 42% list a minimum education requirement.

Automotive Collision Management Job Postings – There were 4,123 online job postings related to the automotive collision management occupations: first-line supervisors of mechanics, installers, and repairers and insurance appraisers, auto damage. The highest number of job postings were for maintenance supervisor/manager, service manager, auto body estimator, and shop manager. The top three employers, by number of job postings, in the region were: AutoNation, Caliber Collision, and Pep Boys. Of the 4,123 online job postings, 49% list a minimum education requirement.

Automotive Multi-Coat and Custom Paint Job Postings – There were 70 online job postings related to automotive multi-coat and custom paint: painters, transportation equipment. The highest number of job postings were for paint technician, paint prepper, and paint specialist. The top three employers, by number of job postings, in the region were: Tesla Motors, AutoNation, and High Tech Coatings, Inc. Of the 70 online job postings, 64% list a minimum education requirement.

Educational Attainment — The Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entry-level education for first-line supervisors of mechanics, installers, and repairers; automotive body and related repairers; and painters, transportation equipment. The typical entry-level education for insurance appraisers, auto damage; and automotive service technicians and mechanics is a postsecondary nondegree award. The national-level educational attainment data indicates that between 26% and 43% of workers in the field have completed some college or an associate degree.

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 Automotive Collision Repair (0949.00) programs. The colleges with the most completions in the region are Santa Ana, LA Trade, and Cypress. Over the past 12 months, there were five other related program recommendation requests from regional community colleges.

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		
0948.00	Automotive Technology	Cerritos	37	52	57	49		
		Citrus	69	81	85	78		
		Compton	26	25	21	24		
		East LA	70	53	84	69		
		El Camino	45	60	97	67		
		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		
		LA Subtotal	783	703	753	746		
		Cypress	126	225	173	175		
		Fullerton	7	16	49	24		
		Golden West	37	46	37	40		
		Saddleback	29	44	23	32		
		Santa Ana	207	78	1,291	525		
		OC Subtotal	406	409	1,573	406		
		Subtotal/Average			1,189	1,112	2,326	1,542
		0949.00	Automotive Collision Repair	Cerritos	20	33	21	25
Compton	13			1	7	7		
El Camino	18			6	10	11		
LA Trade	19			21	32	24		
Rio Hondo	16			-	-	5		
LA Subtotal	86			61	70	72		
Cypress	20			25	22	22		
OC Subtotal	20			25	22	22		
Subtotal/Average				106	86	92	95	
Supply Total/Average			1,295	1,198	2,418	1,637		

Non-Community College Supply — Exhibit 3 displays the annual and three-year average number of awards conferred by non-community colleges in automobile/automotive mechanics technology/technician programs.

Exhibit 3: Regional other postsecondary institution awards, 2013-2016

CIP Code	Program	College	2013-14 Awards	2014-15 Awards	2015-16 Awards	3-Year Award Average
47.0604	Automobile/ Automotive Mechanics Technology/ Technician	Baldwin Park Adult & Community Education	11	11	18	13
		GDS Institute	-	10	10	7
		Hacienda La Puente Adult Education	39	40	38	39
		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 (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Automotive Service Technicians and Mechanics (49-3023)	20,036	19,918	(118)	(1%)	1,860	\$13.08	\$19.46	\$26.58
First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)	9,480	9,925	445	5%	901	\$29.46	\$38.16	\$47.51
Automotive Body and Related Repairers (49-3021)	4,726	4,801	75	2%	472	\$13.76	\$20.90	\$28.69
Painters, Transportation Equipment (51-9122)	2,340	2,402	62	3%	256	\$12.45	\$15.09	\$24.50
Insurance Appraisers, Auto Damage (13-1032)	813	756	(57)	(7%)	64	\$25.13	\$29.88	\$37.19
Total	37,396	37,803	407	1%	3,554			

Exhibit 5. Orange County

Occupation (SOC)	2018 Jobs	2023 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)	7,117	7,364	247	3%	715	\$15.11	\$21.67	\$29.29
First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)	3,654	3,859	205	6%	355	\$31.05	\$40.20	\$50.03
Automotive Body and Related Repairers (49-3021)	1,715	1,759	44	3%	173	\$15.37	\$23.23	\$31.77
Painters, Transportation Equipment (51-9122)	778	789	11	1%	83	\$13.43	\$16.17	\$26.18
Insurance Appraisers, Auto Damage (13-1032)	518	470	(48)	(9%)	41	\$23.89	\$28.34	\$35.23
Total	13,782	14,240	458	3%	1,366			

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 (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Automotive Service Technicians and Mechanics (49-3023)	27,154	27,281	127	0%	2,575	\$13.60	\$20.02	\$27.38
First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)	13,134	13,784	650	5%	1,256	\$29.87	\$38.72	\$48.25
Automotive Body and Related Repairers (49-3021)	6,442	6,560	118	2%	645	\$14.19	\$21.39	\$29.58
Painters, Transportation Equipment (51-9122)	3,118	3,191	73	2%	339	\$12.72	\$15.38	\$24.85
Insurance Appraisers, Auto Damage (13-1032)	1,331	1,226	(105)	(8%)	105	\$24.59	\$29.30	\$36.41
Total	51,178	52,043	865	2%	4,920			

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)

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