

Street Rod Construction/Automotive Collision Repair

Inland Empire/Desert Region (Riverside-San Bernardino-Ontario Metropolitan Statistical Area)

Summary

- Employment for the street rod construction/automotive collision repair occupational group is expected to increase by 5% through 2022. **Nearly 1,500 job openings** will be available over the five-year timeframe in the Inland Empire/Desert Region.
- The entry-level wage for each of the occupations in the street rod construction/automotive collision repair occupational group is **at or above the MIT Living Wage estimate of \$12.30 per hour** for a single adult living in the Inland Empire/Desert Region.
- There appears to be an opportunity for program growth based on the average annual number of program completions for the selected community college programs (**36 average annual community college awards**), and the annual openings for the automotive collision repair occupational group in the local region (**291 annual job openings**).

Introduction

The term “street rod” generally denotes a vehicle from 1948 or earlier that has undergone modifications to the engine, transmission, or interior.¹ To modify a vehicle, an individual must possess a diverse set of knowledge, skills, and abilities related to automotive repair. This report details occupations relevant to the automotive collision repair program. The automotive collision repair program provides individuals with the knowledge and skills required to transform a vehicle into a street rod. The three occupations included in the automotive collision repair occupational group are the following:

- Automotive Body and Related Repairers
- Automotive Glass Installers and Repairers
- Painters, Transportation Equipment

¹ Classic Auto Insurance, Street Rods vs. Rat Rods vs. Hot Rods, 2017, <https://www.classicins.com/blog/street-rat-and-hot-rods-infographic>, retrieved April 2, 2018

Job Opportunities

In 2017, there were more than 2,600 automotive collision repair jobs in the Inland Empire/Desert Region. This occupational group is projecting to increase employment 5% by 2022. Employers in the region will need to hire more than 1,450 workers over the next five years to fill new jobs and backfill jobs that workers are permanently vacating (includes retirements). Appendix A, Table 1 shows the projected job growth for each of the occupations in this group.

Exhibit 1: Five-year projections for the automotive collision repair occupational group in the Inland Empire/Desert Region

Region	2017 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Inland Empire/Desert Region	2,641	5%	1,457	291	18%

Source: EMSI 2018.1

Over the last 12 months (April 2017 to March 2018), there were 106 advertisements (ads) for jobs in the automotive collision repair occupational group in the Inland Empire/Desert Region. In the full-year 2017, there were 115 job ads; 108 job ads in 2016; 76 job ads in 2015; 118 job ads in 2014. Exhibit 2 shows the number of job ads posted during the last 12 months and the average time to fill each occupation in the local region and nationally.

Exhibit 2: Job ads by each of the automotive collision repair occupations in the Inland Empire/Desert Region during the last 12 months, Apr 2017 – Mar 2018

Occupation	Job Ads	Regional Average Time to Fill (Days)	National Average Time to Fill (Days)
Automotive Body and Related Repairers	104	41	42
Painters, Transportation Equipment	2	32	35
Automotive Glass Installers and Repairers	0	-	39
TOTAL	106		

Source: Burning Glass – Labor Insights

Earnings

The entry-level wage for each of the occupations in the automotive collision repair occupational group is at or above the MIT Living Wage estimate of \$12.30 per hour for a single adult living in the Inland Empire/Desert Region. The median wages for this occupational group are sufficient for an adult living in a household with one other working adult and one child (\$14.50 per hour, per adult or \$30,160 annually for each adult). Exhibit 3 displays wage information for this occupation group in the Inland Empire/Desert Region.

Exhibit 3: Earnings for the automotive collision repair occupational group in the Inland Empire/Desert Region

Occupation	Entry to Experienced Hourly Earnings Range*	Median Wage*	Average Annual Earnings
Painters, Transportation Equipment	\$13.87 to \$23.91	\$19.46	\$43,300
Automotive Body and Related Repairers	\$12.61 to \$24.56	\$15.10	\$39,700
Automotive Glass Installers and Repairers	\$12.30 to \$21.85	\$15.66	\$36,700

Source: EMSI 2018.1

*Entry Hourly is 25th percentile wage, the median is 50th percentile wage, experienced is 75th percentile wage.

Work Locations, Employers, Skills, and Education

Automotive glass installers and repairers (49-3022) was removed from the following tables due to lack of job postings. Exhibit 4 displays the top employers posting job ads as well as the top work locations from all job ads for the automotive collision occupational group during the last 12 months.

Exhibit 4: The top employers and work locations for the automotive collision repair occupational group in the Inland Empire/Desert Region during the last 12 months, Apr 2017 – Mar 2018

Occupation	Top Employers	Top Work Locations
Automotive Collision Repair Occupational Group (n=83)	<ul style="list-style-type: none"> Cox Enterprises, Inc. Caliber Collision Centers 	<ul style="list-style-type: none"> Fontana Riverside Indio

Source: Burning Glass – Labor Insights

Exhibit 5 lists the most in-demand specialized and soft skills that employers are seeking when looking for workers to fill automotive collision repair positions. N/A indicates that there is no information available as a result of a skill not applying to the occupation.

Exhibit 5: Most in-demand skills in highest demand for automotive collision repair occupations group in the Inland Empire/Desert Region, Apr 2017 – Mar 2018

Occupation	Specialized skills	Soft skills	Software and Programming skills
Automotive Body and Related Repairers (n=87)	<ul style="list-style-type: none"> • Repair • Motor Vehicle Operation • Inspection • Power Tools 	<ul style="list-style-type: none"> • Physical Demand • Communication Skills • Computer Skills 	<ul style="list-style-type: none"> • N/A
Painters, Transportation Equipment (n=2)	<ul style="list-style-type: none"> • Inspection • Workstations • Sealants 	<ul style="list-style-type: none"> • Team Work/ Collaboration • Work Area Maintenance • Computer Skills 	<ul style="list-style-type: none"> • Microsoft Office

Source: Burning Glass – Labor Insights

Exhibit 6 displays the entry-level education level education typically required to enter each occupation according to the Bureau of Labor Statistics, educational attainment for incumbent workers with “some college, no degree” and an “associate degree” according to the U.S. Census, and the minimum advertised education requirement requested by employers in online job ads.

Exhibit 6: Educational attainment and online job ads with minimum advertised education requirements for the automotive collision repair occupational group in the Inland Empire/Desert Region, Apr 2017 – Mar 2018

Occupation	Typical Entry-Level Education Requirement	Educational Attainment (Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework)	Minimum Advertised Education Requirement from Job Ads			
			Number of Job Postings (n=)	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Automotive Body and Related Repairers	High school diploma or equivalent	25%	66	100%	-	-
Painters, Transportation Equipment	High school diploma or equivalent	23%	2	100%	-	-

Source: EMSI 2018.1, Current Population Survey, Burning Glass – Labor Insights

Industry

Exhibit 7 displays the industries that employ the most automotive collision repair occupations in the two-county region. Staffing patterns show the industries that employ the most workers of a specific occupation. N/A indicates that no information was available due to the low number of job postings.

Exhibit 7: Top industries employing automotive collision repair occupations in the Inland Empire/Desert Region, Apr 2017 – Mar 2018

Occupation	Top Industries from Staffing Pattern (NAICS)	Industry Classification from Job Ads	
		Number of Job Postings (n=)	Top Industries from Job Ads (NAICS)
Automotive Body and Related Repairers	<ul style="list-style-type: none"> Automotive Repair and Maintenance (8111) 80% Automobile Dealers (4411) 13% 	38	<ul style="list-style-type: none"> Automotive Repair and Maintenance (8111)
Painters, Transportation Equipment	<ul style="list-style-type: none"> Automotive Repair and Maintenance (8111) 65% Motor Vehicle Body and Trailer Manufacturing (3362) 8% 	1	<ul style="list-style-type: none"> Automobile Dealers (4411)
Automotive Glass Installers and Repairers	<ul style="list-style-type: none"> Automotive Repair and Maintenance (8111) 93% 	0	<ul style="list-style-type: none"> N/A

Source: EMSI 2018.1, Burning Glass – Labor Insights

Student Completions

Exhibit 8 shows the annual average regional community college awards (associate degrees and certificates) conferred during the three academic years between 2014 and 2017, with the relevant TOP code as well as the program title used at each college, sourced from the Chancellor’s Office Curriculum Inventory (COCI). Please note, an award is not equivalent to a single person in search of a job opening since a student may earn more than one award, such as an associate degree in addition to a certificate. Community College student outcome information was obtained from the CTE LaunchBoard based on the selected TOP code(s) and region.

Exhibit 8: Annual average community college student completions for automotive collision repair programs in the Inland Empire/Desert Region

0949.00 – Automotive Collision Repair	Annual Community College Headcount (2016-17)	Community College Annual Average Awards (2014-17)
Chaffey – Automotive Collision Repair Technology		
Associate Degree		*1
Riverside – Automotive Body Repair	150	
Associate Degree		1
Certificate 30 to < 60 semester units		5
San Bernardino – Basic Automotive Collision Repair and Refinishing, Advanced Automotive Collision Repair and Refinishing	107	
Associate Degree		4
Certificate 30 to < 60 semester units		7
Certificate 18 to < 30 semester units		19
Total Community College Headcount (2016-17)	256	
Total Annual Average Community College Awards		36

Source: LaunchBoard, IPEDS

*Chaffey awarded 1 Associate degree in 2014-15

0949.00 – Automotive Collision Repair program Strong Workforce outcomes in the Inland Empire/Desert Region in the academic year 2015-16:

- Number of course enrollments: 425 (California median: 486)*
- Number of students who transferred to a 4-year institution: N/A (CA: 19) [2014-15]
- Employed in the second fiscal quarter after exit: 66% (CA: 67%)
- Median earnings in the second fiscal quarter after exit: \$5,245 (CA:\$5,963)
- Employed in the fourth fiscal quarter after exit: 63% (CA: 66%)
- Median annual earnings: \$20,140 (CA: \$20,654)
- The percentage in a job closely related to the field of study: 25% (CA: 70%) [2014-15]
- Median change in earnings: 150% (CA: 85%)
- The proportion of students who attained a living wage: 39% (CA: 40%)

*academic year 2016-17



Sources

O*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

Employment Development Department, Labor Market Information Division, OES

Employment Development Department, Unemployment Insurance Dataset

CTE LaunchBoard

Statewide CTE Outcomes Survey

Living Insight Center for Community Economic Development

California Community Colleges Chancellor's Office Management Information Systems (MIS)

Chancellor's Office Curriculum Inventory (COCI, version 2.0)

Classic Auto Insurance

The Integrated Postsecondary Education Data System (IPEDS)

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Appendix A: Occupation definitions, sample job titles, five-year projections, and earnings for automotive collision repair occupations

Occupation Definitions (SOC code), Education and Training Requirement, Community College Education Attainment

Automotive Body and Related Repairers (49-3021)

Repair and refinish automotive vehicle bodies and straighten vehicle frames.

Sample job titles: Auto Body Man, Auto Body Repair Technician, Auto Body Repairer, Auto Body Repairman, Auto Body Technician, Autobody Technician, Automotive Painter, Body and Frame Man, Body Man, Body Technician

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: More than twelve months on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 25%

Automotive Glass Installers and Repairers (49-3022)

Replace or repair broken windshields and window glass in motor vehicles.

Sample job titles: Automotive Glass Installer (Auto Glass Installer), Automotive Glass Technician (Auto Glass Technician), Automotive Glazier (Auto Glazier), Glass Installer, Glass Installer Technician, Glass Technician, Glass Technician/Installer, Master Automotive Glass Technician (Master Auto Glass Technician), Windshield Installer, Windshield Repair Technician

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: One to twelve months on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 28%

Painters, Transportation Equipment (51-9122)

Operate or tend painting machines to paint surfaces of transportation equipment, such as automobiles, buses, trucks, trains, boats, and airplanes. Includes painters in auto body repair facilities.

Sample job titles: Auto Painter (Automobile Painter), Auto Refinisher (Automobile Refinisher), Automotive Paint Technician (Auto Paint Technician), Automotive Painter, Automotive Refinish Technician, Body Technician/Painter, Finish Painter, Paint Prepper, Paint Technician, Top Coater

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: One to twelve months on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 23%

Table 1. 2017 to 2022 job growth for the automotive collision repair occupational group, Inland Empire/Desert Region

Occupation (SOC)	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Automotive Body and Related Repairers (49-3021)	1,651	1,744	93	6%	890	178
Painters, Transportation Equipment (51-9122)	776	812	36	5%	445	89
Automotive Glass Installers and Repairers (49-3022)	214	229	15	7%	122	24
Total	2,641	2,786	145	5%	1,457	291

Source: EMSI 2018.1