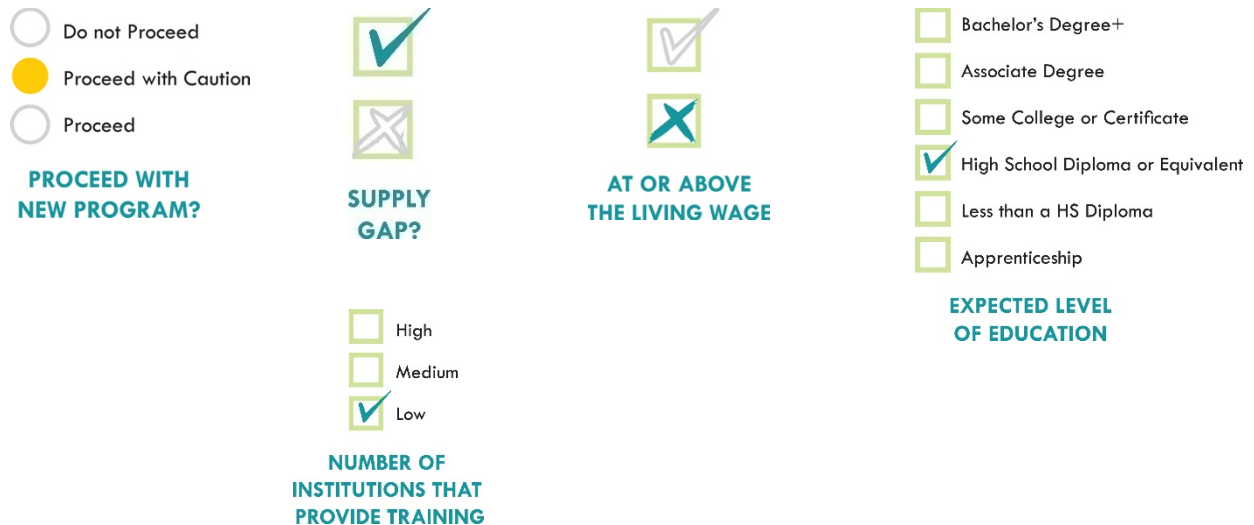


Automotive Collision Repair

Labor Market Analysis for San Diego Continuing Education

September 2019

Summary



This report provides labor market information for occupations selected by San Diego Continuing Education for its *Automotive Collision Repair* program. The training provided by this program is likely to lead to employment as *Automotive Body and Related Repairers; Automotive Glass Installers and Repairers; and Painters, Transportation Equipment*. According to available labor market information, these three occupations have a labor market demand of 244 annual job openings, while average demand for an occupation in San Diego County is 277 annual job openings. One community college supplies the region with six for-credit awards for *Automotive Collision Repair*: Palomar College. While associate degrees are offered for *Automotive Collision Repair*, Palomar College awards more certificates than associate degrees. More specifically, “Certificates 18 to < 30 units” have the largest number of awards over a three-year average. In terms of noncredit awards, only San Diego Continuing Education supplies awards—18 noncredit awards—for *Automotive Collision Repair*. In short, the region supplies 24 for-credit and noncredit awards for 244 annual job openings, suggesting that there is a supply gap. However, the brief recommends to proceed with caution because out of the three occupations, only *Painters, Transportation Equipment* provide entry-level earnings above the living wage. Additionally, The highest expected level of education for these occupations is a high school diploma or equivalent.

Introduction

This report provides labor market information (LMI) in San Diego County for occupations related to the six-digit Taxonomy of Programs¹ (TOP) code, Automotive Collision Repair (TOP 094900). The purpose of this brief is to assist noncredit program providers in the region, such as San Diego Continuing Education (SDCE), with program development and review. SDCE identified three occupations from the Standard Occupational Classification (SOC)² system for *Automotive Collision Repair*, which will be the focus of this report:

- **Automotive Body and Related Repairers** (SOC 49-3021): Repair and refinish automotive vehicle bodies and straighten vehicle frames.
- **Automotive Glass Installers and Repairers** (SOC 49-3022): Replace or repair broken windshields and window glass in motor vehicles.
- **Painters, Transportation Equipment** (SOC 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.

For the purpose of this report, these occupations are collectively referred to as *Automotive Collision Repair Occupations*.

Projected Occupational Demand

Between 2018 and 2023, *Automotive Collision Repair Occupations* are projected to increase by **101** net jobs or **five** percent (Exhibit 1a). Employers in San Diego County will need to hire **244** workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

¹ Taxonomy of Programs (TOP) is a system of codes used by the California Community Colleges for the purpose of collecting, calculating, or disseminating data about similar training programs.

² The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc).

Exhibit 1a: Number of Jobs for Automotive Collision Repair Occupations (2008-2023)³

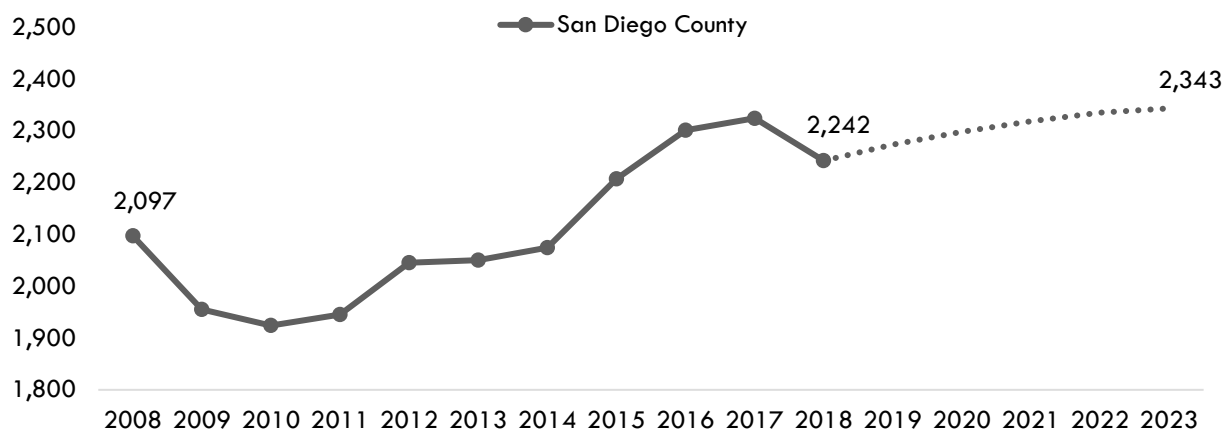


Exhibit 1b breaks down the projected number of jobs change by occupation more specifically. As Exhibit 1b shows, *Automotive Body and Related Repairers* has the largest labor market demand, with 149 job openings projected to be available annually between 2018 and 2023.

Exhibit 1b: Number of Jobs for Automotive Collision Repair Occupations in San Diego County (2018-2023)

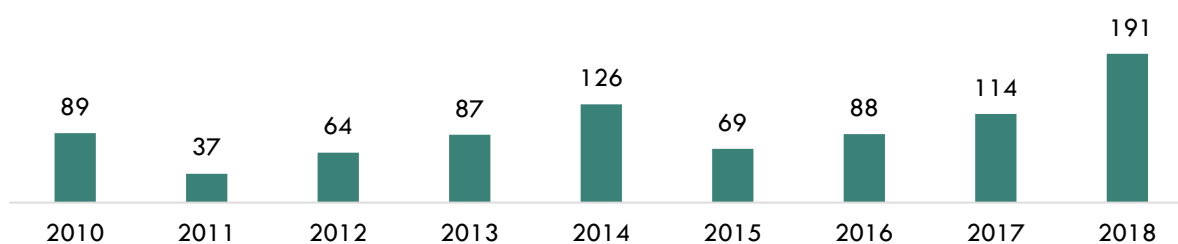
Occupational Title	2018 Net Jobs	2023 Net Jobs	2018 - 2023 Net Change	2018-2023 % Net Change	Annual Job Openings (Demand)
Automotive Body and Related Repairers	1,422	1,478	56	4%	149
Painters, Transportation Equipment	762	800	38	5%	88
Automotive Glass Installers and Repairers	58	65	7	12%	7
Total	2,242	2,343	101	5%	244

³ Emsi 2019.03; QCEW, Non-QCEW, Self-Employed.

Online Job Postings

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in labor market demand that are not captured by historical data. Between 2010 and 2018, there was an average of 96 online job postings per year for *Automotive Collision Repair Occupations* in San Diego County (Exhibit 2).

Exhibit 2: Number of Online Job Postings for Automotive Collision Repair Occupations in San Diego County (2010-2018)⁴



Earnings

Out of the three occupations, only Painters, Transportation Equipment provide entry-level earnings above the living wage (Exhibit 3a). As seen in Exhibit 3a, the median hourly earnings of *Automotive Collision Repair Occupations* range from \$14.44 to \$20.47. On average, the median hourly earnings for *Automotive Collision Repair Occupations* collectively is \$17.60; this is more than the living wage for a single adult in San Diego County, which is \$15.99 per hour (Exhibit 3b).⁵

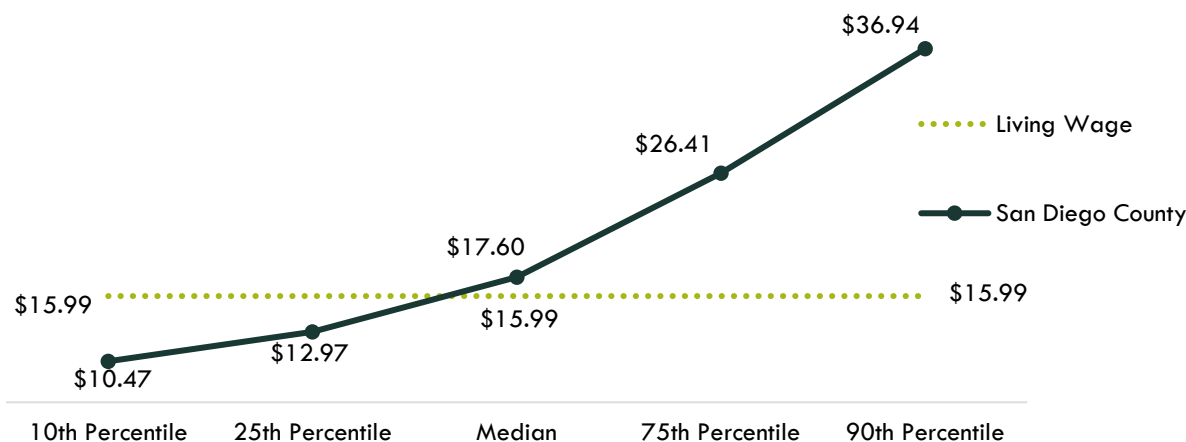
Exhibit 3a: Hourly Earnings for Automotive Collision Repair Occupations in San Diego County

Occupational Title	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Painters, Transportation Equipment	\$15.89	\$20.47	\$28.07
Automotive Body and Related Repairers	\$11.77	\$17.88	\$29.29
Automotive Glass Installers and Repairers	\$11.24	\$14.44	\$21.87

⁴ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2018.

⁵ "California Family Needs Calculator." Insight Center for Community Economic Development, last updated 2018. insightccd.org/2018-family-needs-calculator.

Exhibit 3b: Average Hourly Earnings⁶ for Automotive Collision Repair Occupations in San Diego County⁷



Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards conferred by a course or program in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.⁸ According to TOP and CIP⁹ data, **one** community college supplies the region with for-credit awards for Automotive Collision Repair (TOP 094900): **Palomar College**. While associate degrees are offered for *Automotive Collision Repair Occupations*, this institution awards more certificates than associate degrees (Exhibit 4a).

Exhibit 4a: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Years 2015-16 through 2017-18)

College	Award Type	PY 15-16	PY 16-17	PY 17-18	3-Year Avg
Palomar	Associate of Science (A.S.) degree	0	3	1	1
	Associate of Arts (A.A.) degree	2	0	0	1
	Certificate 18 to < 30 units	3	5	4	4
	Total	5	8	5	6

⁶ 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

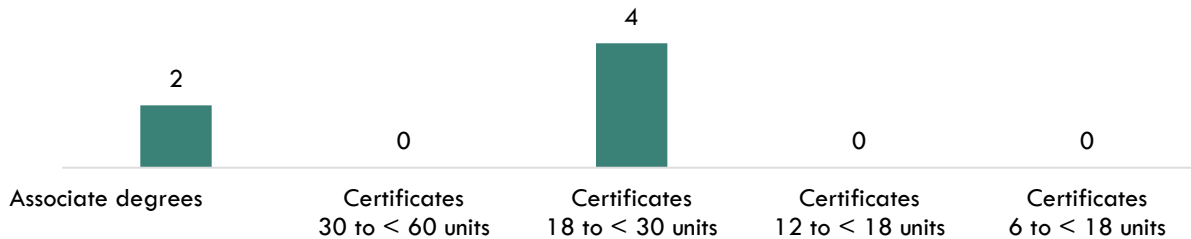
⁷ Emsi 2019.03; QCEW, Non-QCEW, Self-Employed.

⁸ TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data)

⁹ There is one CIP code related to Automotive Collision Repair (TOP 094900): Autobody/Collision and Repair Technology/Technician (CIP 470603).

More specifically, “Certificates 18 to < 30 units” have the largest number of awards over a three-year average (Exhibit 4b).

Exhibit 4b: Total Number of Awards by Type for Automotive Collision Repair (TOP 094900) in San Diego County (Three-Year Average 2015-16 through 2017-18)



In terms of noncredit awards, only San Diego Continuing Education provides noncredit awards for Automotive Collision Repair (TOP 094900), with an average of 18 noncredit awards between program years 2015-16 and 2017-18 (Exhibit 5).

Exhibit 5: Number of Noncredit Awards Conferred by SDCE (Program Years 2015-16 through 2017-18)

Program Title	Award Type	PY 15-16	PY 16-17	PY 17-18	3-Year Avg
Auto Body and Paint Technician	Program Award	5	14	35	18

Demand vs. Supply

In short, the region supplies 24 for-credit and noncredit awards for 244 annual job openings, suggesting that there is a labor market supply gap (Exhibit 6).

Exhibit 6: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

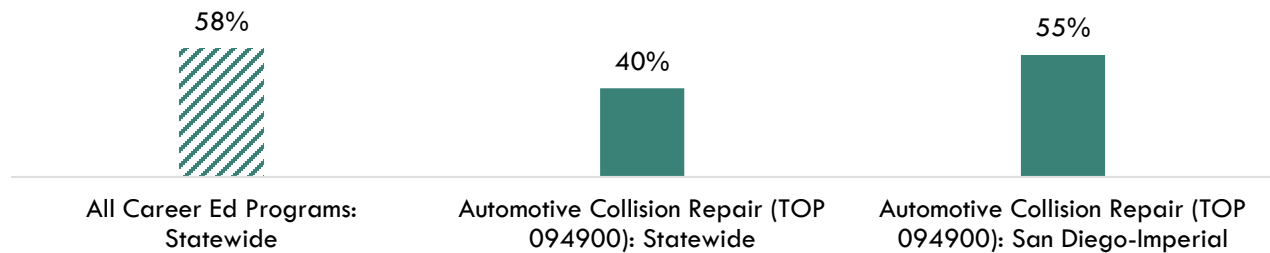
TOP6 Program	Demand (Annual Openings)	Supply (Total Annual Average Supply)		Supply Gap or Oversupply
		Noncredit	For-Credit	
Automotive Collision Repair (094900)	244	18	6	220

Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

Student Outcomes and Regional Comparisons

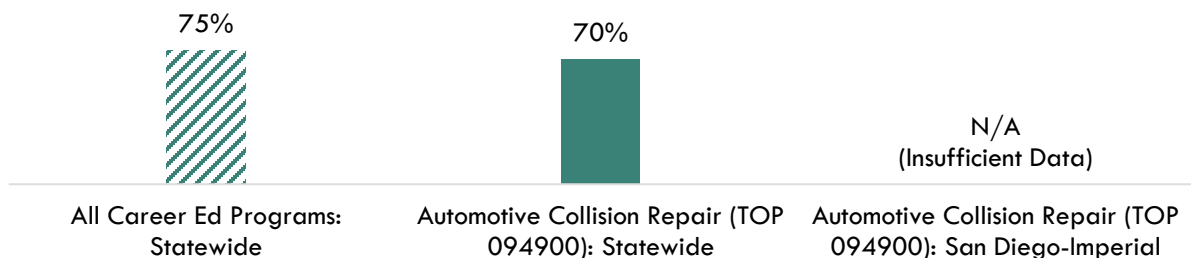
According to the California Community Colleges LaunchBoard, 55 percent of students in the San Diego-Imperial region earned a living wage after completing an Automotive Collision Repair (TOP 094900) program, compared to 40 percent statewide and 58 percent of students in Career Education programs in general across the state (Exhibit 7a).

Exhibit 7a: Proportion of Students Who Earned a Living Wage, PY2015-16¹⁰



According to the California Community Colleges LaunchBoard, 0 percent of students (due to insufficient data) in the San Diego-Imperial region obtained a job closely related to their field of study after completing an Automotive Collision Repair (TOP 094900) program, compared to 70 percent statewide and 75 percent of students in Career Education programs in general across the state (Exhibit 7b).

Exhibit 7b: Percentage of Students in a Job Closely Related to Field of Study, PY2014-15¹¹



¹⁰ Among completers and skills builders who exited, the proportion of students who attained a living wage.

¹¹ Most recent year with available data is Program Year 2014-15. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

Top Employers and Work Locations

Between January 1, 2016 and December 31, 2018, the top five employers in San Diego County for these occupations were [Nissan North America Incorporated](#), [Caliber Collision](#), [Penske Automotive Group](#), [Enterprise Rent-A-Car](#), and [Chevrolet](#) (Exhibit 8).

Exhibit 8: Top Employers in San Diego County for Automotive Collision Repair Occupations¹²

Top Employers	
<ul style="list-style-type: none"> • Nissan North American Incorporated • Caliber Collision • Penske Automotive Group • Enterprise Rent-A-Car • Chevrolet 	<ul style="list-style-type: none"> • AutoNation • U.S. Navy • Naval Air Systems Command • Group 1 Automotive • Toyota Automotive

Skills, Education, and Certifications

Automotive Collision Repair Occupations have educational requirements of a high school diploma or equivalent (Exhibit 9). This is similar to what is seen in online job postings. Based on online job postings between January 1, 2016 and December 31, 2018, the top listed educational requirement for *Automotive Collision Repair Occupations* was also a [high school or vocational training](#).¹³

Exhibit 9: National Educational Requirements for Automotive Collision Repair Occupations¹⁴

Occupational Title	Typical Entry-Level Education
Automotive Glass Installers and Repairers	High school diploma or equivalent
Automotive Body and Related Repairers	High school diploma or equivalent
Painters, Transportation Equipment	High school diploma or equivalent

¹² Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2016-2018.

¹³ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2016-2018.

¹⁴ Emsi 2019.03; QCEW, Non-QCEW, Self-Employed.

Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2016 and December 31, 2018.

Exhibit 10: Top Skills for Automotive Collision Repair Occupations in San Diego County¹⁵

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Repair • Auto Repair • Painting • Welding • Customer Contact 	<ul style="list-style-type: none"> • Organizational Skills • Physical Abilities • Computer Literacy • English • Writing 	<ul style="list-style-type: none"> • Paint Shop Pro • Active Server Pages • Microsoft Excel • Microsoft Word • Microsoft PowerPoint

Prepared by:

Tina Ngo Bartel, Director

John Edwards, Research Analyst

San Diego-Imperial Center of Excellence for Labor Market Research

tngobartel@miracosta.edu

jedwards@miracosta.edu



Important Disclaimers

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor’s Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

¹⁵ Burning Glass Technologies, “Labor Insight Real-Time Labor Market Information Tool.” 2016-2018.