










# Automotive Collision Repair

## Labor Market Analysis for San Diego College of Continuing Education

September 2021

### Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED EDUCATION FOR MAJORITY OF OCCUPATIONS ANALYZED
 <b>Proceed with Caution</b>	 	 	<input type="checkbox"/> Bachelor's Degree+ <input type="checkbox"/> Associate Degree <input type="checkbox"/> Some College or Certificate
<b>SUPPORT FOR PROGRAM MODIFICATION?</b>  	<b>NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING</b> <div style="background-color: #4a7ebb; color: white; text-align: center; padding: 2px;">LOW</div> 	<b>NUMBER OF ANNUAL JOB OPENINGS</b> <div style="background-color: #4a7ebb; color: white; text-align: center; padding: 2px;">HIGH</div> 	<input checked="" type="checkbox"/> HS Diploma or Equivalent <input type="checkbox"/> Less than a HS Diploma <input type="checkbox"/> Apprenticeship

This report provides labor market information for occupations selected by San Diego College of Continuing Education for its *Automotive Collision Repair* program. These occupations include “Automotive Body and Related Repairers,” “Automotive Glass Installers and Repairers,” and “Coating, Painting, and Spraying Machine Setters, Operators, and Tenders.” According to available labor market information, *Automotive Collision Repair Occupations* in San Diego County have a labor market demand of 253 annual job openings (while average demand for a single occupation in San Diego County is 242 annual job openings). On average, one institution supplies four for-credit awards and one institution supplies 20 noncredit awards in San Diego County for these occupations. In short, the region supplies 24 for-credit and noncredit awards for 253 annual job openings, suggesting that there is a supply gap in the labor market. Entry-level wages for these occupations are below the living wage, but median earnings for all occupations except “Automotive Glass Installers and Repairers” are above the living wage. This brief recommends proceeding with caution when developing a new program but supports a program modification because 1) there is a supply gap; and 2) entry-level earnings are below the living wage, but median earnings are above the living wage for most occupations. The colleges should note that the percentage of students who complete a related program and earn a living wage is **below** the statewide percentage of students who complete Career Education programs in general.

## Introduction

This report provides labor market information in San Diego County for occupations related to the six-digit Taxonomy of Programs (TOP)<sup>1</sup> code, Automotive Collision Repair (TOP 0949.00). The purpose of this brief is to assist noncredit program providers in the region, such as San Diego College of Continuing Education (SDCCE), with program development and review. SDCCE identified the following occupational codes from the Standard Occupational Classification (SOC)<sup>2</sup> 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.
- **Coating, Painting, and Spraying Machine Setters, Operators, and Tenders** (SOC 51-9124): Set up, operate, or tend spraying or rolling machines to coat or paint any of a wide variety of products, including glassware, cloth, ceramics, metal, plastic, paper, or wood, with lacquer, silver, copper, rubber, varnish, glaze, enamel, oil, or rust-proofing materials. Includes painters of transportation vehicles such as painters in auto body repair facilities.

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

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<sup>1</sup> 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.

<sup>2</sup> 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).

## Projected Occupational Demand

Between 2020 and 2025, *Automotive Collision Repair Occupations* are projected to increase by 62 net jobs or two percent (Exhibit 1 a). Employers in San Diego County will need to hire 253 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

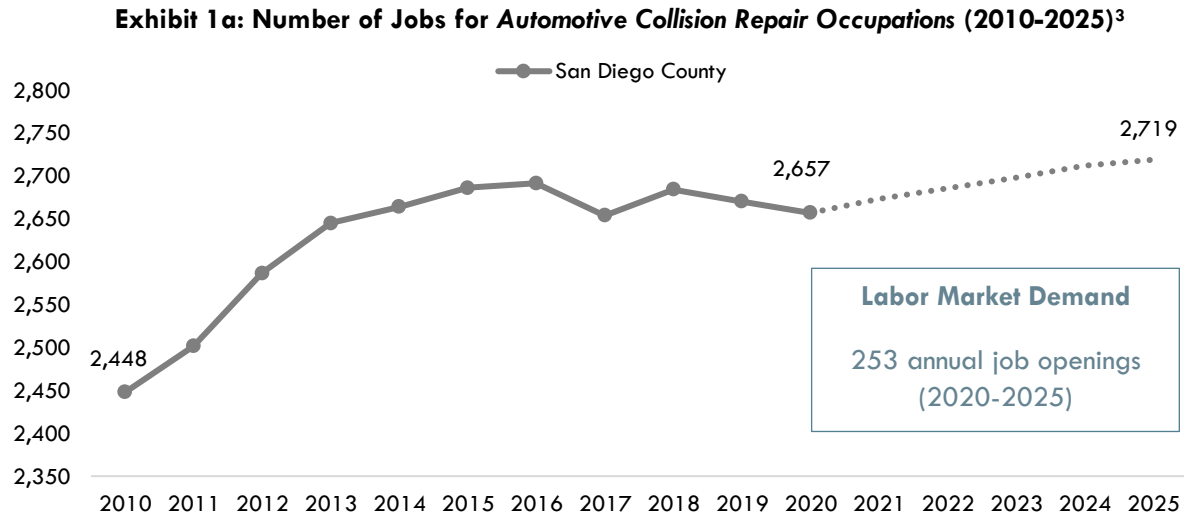


Exhibit 1b disaggregates the projected number of jobs change by occupation. “Coating, Painting, and Spraying Machine Setters, Operators, and Tenders” are projected to have the most labor market demand between 2020 and 2025, with 139 annual job openings.

**Exhibit 1b: Number of Jobs for Automotive Collision Repair Occupations in San Diego County (2020-2025)<sup>4</sup>**

Occupational Title	2020 Jobs	2025 Jobs	2020 - 2025 Net Jobs Change	2020-2025 % Net Jobs Change	Annual Job Openings (Demand)
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	1,387	1,423	36	3%	139
Automotive Body and Related Repairers	1,224	1,247	23	2%	109
Automotive Glass Installers and Repairers	46	49	3	6%	5
<b>Total</b>	<b>2,657</b>	<b>2,719</b>	<b>62</b>	<b>2%</b>	<b>253</b>

<sup>3</sup> EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

<sup>4</sup> EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

## Earnings

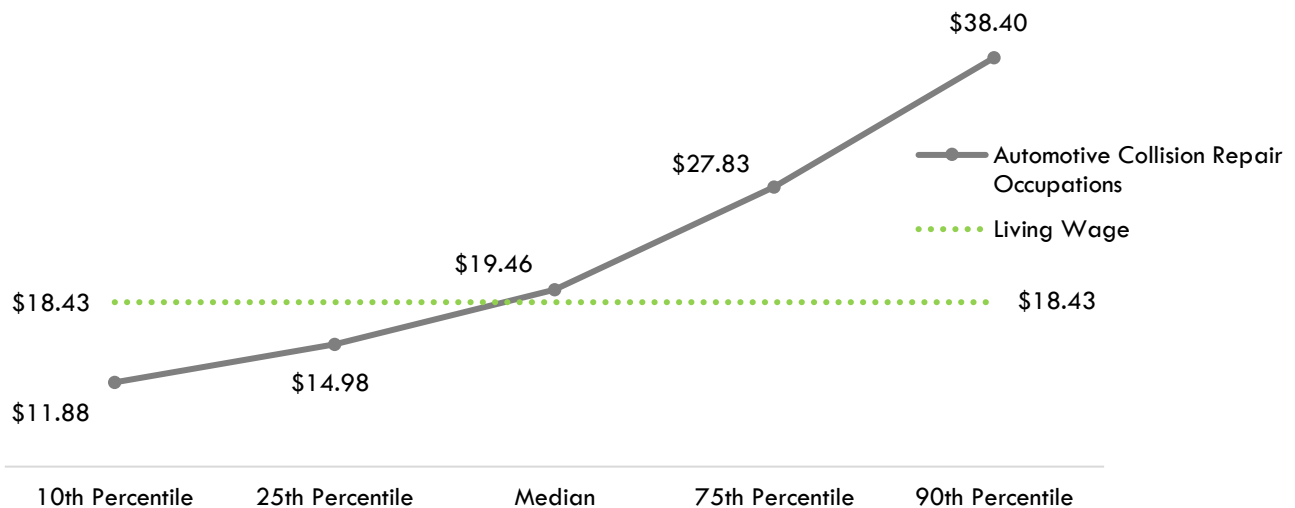
Exhibit 2a disaggregates hourly earnings by occupation. The entry-level hourly earnings for *Automotive Collision Repair Occupations* range from \$11.85 to \$17.05.

**Exhibit 2a: Hourly Earnings for Automotive Collision Repair Occupations in San Diego County<sup>5</sup>**

Occupational Title	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Automotive Body and Related Repairers	\$17.05	\$22.57	\$33.75
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	\$16.03	\$20.67	\$27.64
Automotive Glass Installers and Repairers	\$11.85	\$15.15	\$22.09

On average, the entry-level hourly earnings for *Automotive Collision Repair Occupations* are \$14.98; this is less than the living wage for a single adult in San Diego County, which is \$18.43 per hour (Exhibit 2b).<sup>6</sup>

**Exhibit 2b: Average Hourly Earnings<sup>7</sup> for Automotive Collision Repair Occupations in San Diego County<sup>8</sup>**



<sup>5</sup> EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

<sup>6</sup> "Family Needs Calculator (formerly the California Family Needs Calculator)," Insight: Center for Community Economic Development, last updated 2021. [insightccd.org/family-needs-calculator/](https://insightccd.org/family-needs-calculator/).

<sup>7</sup> 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.

<sup>8</sup> EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

## Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.<sup>9</sup> According to TOP and CIP<sup>10</sup> data, **one** community college supplies the region with for-credit awards for Automotive Collision Repair (TOP 0949.00): **Palomar College** (Exhibit 3a).

**Exhibit 3a: Number of For-Credit Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Years 2017-18 through 2019-20)**

College	Award Type	PY 17-18	PY 18-19	PY 19-20	3-Yr Total Average
Palomar	Associate Degree	1	2	0	1
	Certificate 18 to < 30 units	4	4	0	3
<b>Total</b>		<b>5</b>	<b>6</b>	<b>0</b>	<b>4</b>

*Note: The numbers may not add up due to rounding.*

By for-credit award type, the college supplied the most awards for **certificates 18 to < 30 units** based on the three-year average (program years 2017-18 through 2019-20) (Exhibit 3b).

**Exhibit 3b: Total Number of For-credit Awards by Type for Automotive Collision Repair (TOP 0949.00) in San Diego County (3-Yr Average)**



<sup>9</sup> TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart ([datamart.cccco.edu](http://datamart.cccco.edu)) and CIP data comes from the Integrated Postsecondary Education Data System ([nces.ed.gov/ipeds/use-the-data](http://nces.ed.gov/ipeds/use-the-data)).

<sup>10</sup> There is one CIP code related to Automotive Collision Repair (TOP 0949.00): Autobody/Collision and Repair Technology/Technician (CIP 47.0603).

In terms of noncredit awards, only San Diego College of Continuing Education provides noncredit awards for Automotive Collision Repair (TOP 0949.00), with a three-year average of 20 noncredit awards (program years 2017-18 through 2019-20) (Exhibit 4).

**Exhibit 4: Number of Noncredit Awards Conferred by SDCCE  
(Program Years 2017-18 through 2019-20)**

Program Title	Award Type	PY 17-18	PY 18-19	PY 19-20	3-Yr Total Average
Auto Body and Paint Technician	Noncredit	35	9	15	20

## Demand vs. Supply

Comparing labor demand (annual openings) with labor supply<sup>11</sup> suggests that there is a supply gap in San Diego County, with 253 annual openings and 24 for-credit and noncredit awards supplied by the region (Exhibit 5).

**Exhibit 5: 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 (TOP 0949.00)	253	20	4	229

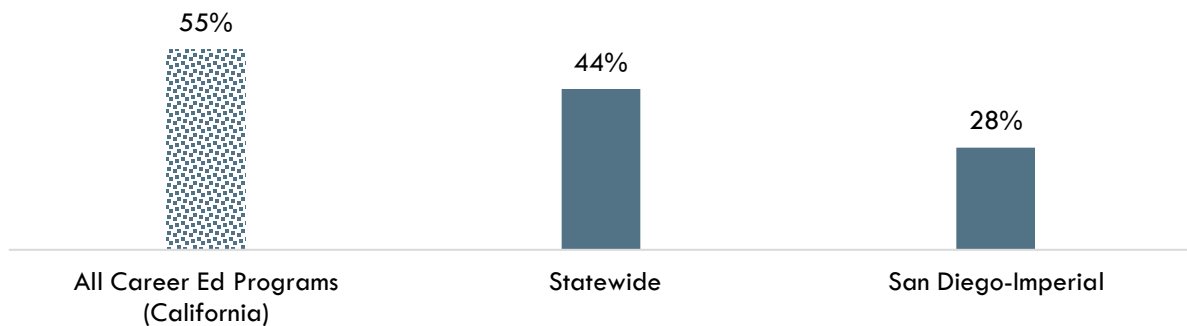
**Please note:** This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers;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

<sup>11</sup> Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

## Student Outcomes and Regional Comparisons

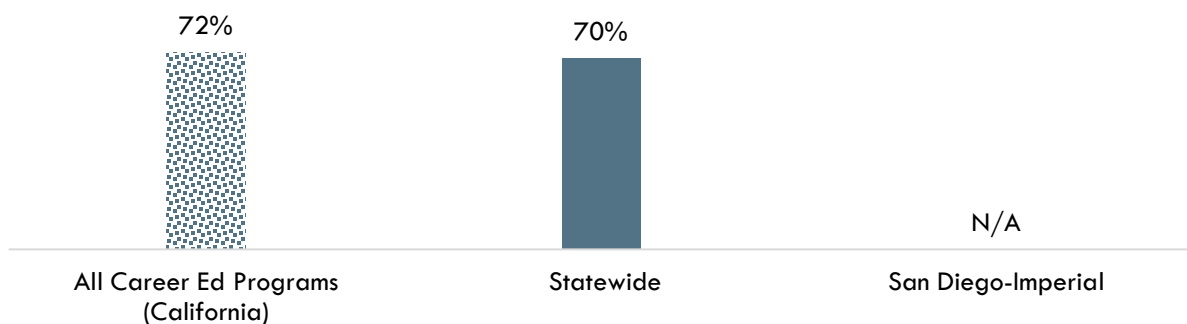
According to the California Community Colleges LaunchBoard, 28 percent of students in the San Diego-Imperial region earned a living wage after completing an Automotive Collision Repair (TOP 0949.00) program, compared to 44 percent statewide and 55 percent of students in Career Education programs in general across the state (Exhibit 6a).<sup>12</sup>

**Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program  
(Automotive Collision Repair, PY 2017-18)<sup>13</sup>**



According to the California Community Colleges LaunchBoard, 70 percent of students statewide obtained a job closely related to their field of study after completing an Automotive Collision Repair (TOP 0949.00) program, compared to 72 percent of students in Career Education programs in general across the state (Exhibit 6b).<sup>14</sup>

**Exhibit 6b: Percentage of Students in a Job Closely Related to Field of Study by Program  
(Automotive Collision Repair, PY 2016-17)<sup>15</sup>**



"N/A" indicates insufficient data

<sup>12</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx).

<sup>13</sup> Among completers and skills builders who exited, the proportion of students who attained a living wage.

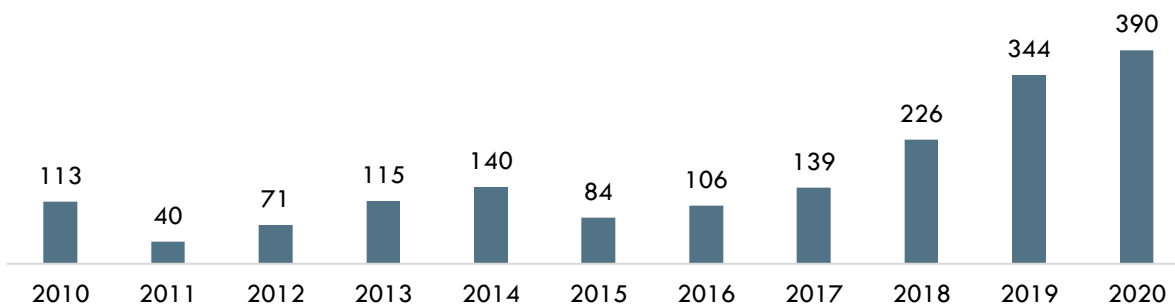
<sup>14</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx).

<sup>15</sup> Most recent year with available data is Program Year 2016-17. 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.

## 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 the labor market that are not captured by historical data. Between 2010 and 2020, there was an average of 161 online job postings per year for *Automotive Collision Repair Occupations* in San Diego County (Exhibit 7). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (see Exhibit 1b). Employers may post a position multiple times for various reasons, such as increasing the pool of applicants, for example.

**Exhibit 7: Number of Online Job Postings for Automotive Collision Repair Occupations in San Diego County (2010-2020)<sup>16</sup>**



## Top Employers

Between January 1, 2018 and December 31, 2020, the top five employers in San Diego County for *Automotive Collision Repair Occupations* were Caliber Collision, Service King, Chevrolet, Penske Automotive Group, and Tyonek Native Corporation based on online job postings (Exhibit 8).

**Exhibit 8: Top Employers for Automotive Collision Repair Occupations in San Diego County<sup>17</sup>**

Top Employers	
<ul style="list-style-type: none"> <li>• Caliber Collision</li> <li>• Service King</li> <li>• Chevrolet</li> <li>• Penske Automotive Group</li> <li>• Tyonek Native Corporation</li> </ul>	<ul style="list-style-type: none"> <li>• City of San Diego</li> <li>• Safelite Autoglass</li> <li>• KAR Auction Services</li> <li>• Nissan North America, Inc.</li> <li>• Toyota Motors</li> </ul>

<sup>16</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2020.

<sup>17</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.



## Education, Skills, and Certifications

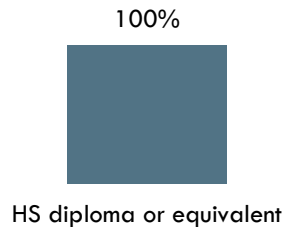
*Automotive Collision Repair Occupations* have a national educational attainment of a [high school diploma or equivalent](#) (Exhibit 9a).

**Exhibit 9a: National Educational Attainment for *Automotive Collision Repair Occupations*<sup>18</sup>**

Occupational Title	Typical Entry-Level Education
Automotive Body and Related Repairers	High school diploma or equivalent
Automotive Glass Installers and Repairers	High school diploma or equivalent
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	High school diploma or equivalent

Based on online job postings between January 1, 2018 and December 31, 2020 in San Diego County, employers posted a [high school diploma or equivalent](#) as the educational requirement for *Automotive Collision Repair Occupations* (Exhibit 9b).<sup>19</sup>

**Exhibit 9b: Educational Requirements for *Automotive Collision Repair Occupations* in San Diego County<sup>20</sup>**



<sup>18</sup> EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

<sup>19</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

<sup>20</sup> "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified April 9, 2021. [bls.gov/emp/tables/educational-attainment.htm](https://bls.gov/emp/tables/educational-attainment.htm).

Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2018 and December 31, 2020.

**Exhibit 10: Top Skills for Automotive Collision Repair Occupations in San Diego County<sup>21</sup>**

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> <li>• Repair</li> <li>• Auto Repair</li> <li>• Welding</li> <li>• Power Tools</li> <li>• Automotive Painting</li> <li>• Painting</li> <li>• Soldering</li> <li>• Hammering</li> <li>• Customer Service</li> <li>• Cleaning</li> <li>• Hand Tools</li> <li>• Customer Contact</li> <li>• Personal Protective Equipment</li> <li>• Estimating</li> <li>• Scheduling</li> </ul>	<ul style="list-style-type: none"> <li>• Physical Abilities</li> <li>• Communication Skills</li> <li>• Organizational Skills</li> <li>• Detail-Oriented</li> <li>• Multi-Tasking</li> <li>• Computer Literacy</li> <li>• Work Area Maintenance</li> <li>• Teamwork / Collaboration</li> <li>• English</li> <li>• Time Management</li> <li>• Writing</li> <li>• Positive Disposition</li> <li>• Troubleshooting</li> <li>• Problem Solving</li> <li>• Written Communication</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Excel</li> <li>• Paint Shop Pro</li> <li>• Microsoft Word</li> <li>• Python</li> <li>• Active Server Pages</li> <li>• Bash</li> <li>• Java</li> <li>• Microsoft PowerPoint</li> <li>• Oracle</li> <li>• CATIA</li> <li>• SolidWorks</li> <li>• Unigraphics</li> <li>• Microsoft Outlook</li> <li>• SAP</li> <li>• C++</li> </ul>

<sup>21</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Exhibit 11 lists the top certifications that appeared in online job postings between January 1, 2018 and December 31, 2020.

**Exhibit 11: Top Certifications for Automotive Collision Repair Occupations in San Diego County<sup>22</sup>**

Top Certifications in Online Job Postings

1. Automotive Service Excellence (ASE) Certification
  2. I-Car
  3. Body Shop
  4. Air Brake Certified
  5. CDL Class C
  6. Certified Animal Laboratory Technician
  7. Certified Body Technician
  8. Security Clearance
  9. Welding Certification
  10. Certified Pest Control
  11. Department of Transportation (DOT) Medical Certification
  12. North American Board of Energy Practitioners (NABCEP)
  13. Adjuster License
  14. CDL Class A
  15. Certified Medical Laboratory Technician
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<sup>22</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Prepared by:

Tina Ngo Bartel, Director ([tngobartel@miracosta.edu](mailto:tngobartel@miracosta.edu))

John Edwards, Research Analyst ([jedwards@miracosta.edu](mailto:jedwards@miracosta.edu))

Priscilla Fernandez, Research Analyst ([pfernandez@miracosta.edu](mailto:pfernandez@miracosta.edu))

San Diego-Imperial Center of Excellence for Labor Market Research



### **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.

This workforce demand report uses state and federal job projection data that was developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.