



# Automotive Technology Occupations Labor Market Information Report Chabot College

Prepared by the San Francisco Bay Center of Excellence for Labor Market Research  
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## Recommendation

Based on all available data, there appears to be an “undersupply” of Automotive Technology workers compared to the demand for this cluster of occupations in the Bay region and in the East Bay sub-region (Alameda and Contra Costa counties). There is a projected annual gap of about 890 students in the Bay region and 426 students in the East Bay Sub-Region.

## Introduction

This report provides student outcomes data on employment and earnings for TOP 0948.00 - Automotive Technology programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Chabot College and in the region.

This report profiles Automotive Technology Occupations in the 12 county Bay region and in the East Bay sub-region for four (4) proposed new programs at Chabot College:

- 1) Automotive Technology
- 2) Automotive Engine Performance
- 3) Automotive Electrical and Body Electronics Technology
- 4) Automotive Powertrain Technology

This labor market report can be used for all four programs when each is submitted to the BACCC under the Program Recommendation process. This is the case, because the TOP code (TOP 0948.00) and the SOC code (49-3023.00) are the exact same for all four programs.

- **Automotive Service Technicians and Mechanics (49-3023):** Diagnose, adjust, repair, or overhaul automotive vehicles. Excludes “Automotive Body and Related Repairers” (49-3021), “Bus and Truck Mechanics and Diesel Engine Specialists” (49-3031), and “Electronic Equipment Installers and Repairers, Motor Vehicles” (49-2096).  
Entry-Level Educational Requirement: Postsecondary nondegree award  
Training Requirement: Short-term on-the-job training  
Percentage of Community College Award Holders or Some Postsecondary Coursework: 36%

## Occupational Demand

**Table 1. Employment Outlook for Automotive Technology Occupations in Bay Region**

Occupation	2019 Jobs	2024 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Automotive Service Technicians and Mechanics	18,328	18,054	-274	-1%	8,936	1,787	\$ 18.10	\$ 24.53
<b>Total</b>	<b>18,328</b>	<b>18,054</b>	<b>-274</b>	<b>-1%</b>	<b>8,936</b>	<b>1,787</b>	<b>\$18.10</b>	<b>\$24.53</b>

Source: EMSI 2020.4

**Bay Region includes:** Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

**Table 2. Employment Outlook for Automotive Technology Occupations in East Bay Sub-region**

Occupation	2019 Jobs	2024 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Automotive Service Technicians and Mechanics	6,001	6,019	18	0%	2,968	594	\$ 18.11	\$ 24.25
<b>Total</b>	<b>6,001</b>	<b>6,019</b>	<b>18</b>	<b>0%</b>	<b>2,968</b>	<b>594</b>	<b>\$18.11</b>	<b>\$24.25</b>

Source: EMSI 2020.4

**East Bay Sub-Region includes:** Alameda and Contra Costa counties

### Job Postings in Bay Region and East Bay Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (Mar 2020 - Feb 2021)**

Occupation	Bay Region	East Bay
Automotive Specialty Technicians	5,255	1,884
Automotive Master Mechanics	354	127

Source: Burning Glass

**Table 4a. Top Job Titles for Automotive Technology Occupations for latest 12 months (Mar 2020 - Feb 2021)**

#### Bay Region

Title	Bay	Title	Bay
Automotive Technician	366	General Service Technician	56
Service Technician	124	Car Detailer	48
Lube Technician	102	Vehicle Service Technician	45
Automotive Service Advisor	94	Technician	45
Automotive Lube Technician	85	Mechanic	35
Automotive Mechanic	82	Mechanic B	33
Self - Driving Vehicle Operator	66	Automotive Service Advisor/Writer	31
Automotive Technician/Mechanic	61		

Source: Burning Glass

**Table 4b. Top Job Titles for Automotive Technology Occupations for latest 12 months (Mar 2020 - Feb 2021)**

#### East Bay Sub-Region

Title	East Bay	Title	East Bay
Automotive Technician	135	Automotive Mechanic	29
Seasonal Personal Vehicle Package Driver	65	Self - Driving Vehicle Operator - San Fran	27
Service Technician	45	Automotive Assembler	17

Title	East Bay	Title	East Bay
Automotive Lube Technician	42	Mechanic	15
Automotive Service Advisor	37	Vehicle Condition Inspector	13
Lube Technician	32	Shop Technician	13
Automotive Technician/Mechanic	30		

Source: Burning Glass

## Industry Concentration

**Table 5. Industries hiring Automotive Technology Workers in Bay Region**

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2019)	Jobs in Industry (2024)	% Change (2019-24)	% Occupation Group in Industry (2019)
General Automotive Repair	6,401	6,068	-5%	35%
New Car Dealers	5,028	4,409	-12%	27%
Automotive Body, Paint, and Interior Repair and Maintenance	883	778	-12%	5%
Automotive Parts and Accessories Stores	632	553	-13%	3%
Other Automotive Mechanical and Electrical Repair and Maintenance	533	401	-25%	3%
Local Government, Excluding Education and Hospitals	457	430	-6%	3%
Car Washes	456	404	-11%	2%
Tire Dealers	397	380	-4%	2%
Used Car Dealers	348	364	4%	2%
All Other Automotive Repair and Maintenance	301	300	0%	2%

Source: EMSI 2020.4

**Table 6. Top Employers Posting Automotive Technology Occupations in Bay Region and East Bay Sub-Region (Mar 2020 - Feb 2021)**

Employer	Bay	Employer	East Bay
United Parcel Service Incorporated	293	United Parcel Service Incorporated	132
Bridgestone / Firestone	124	Carmax	47
Transdev Inc	106	Transdev Inc	44
Big O Tires	94	Bridgestone / Firestone	40
Carmax	93	Lucid Motors Inc	39
Goodyear	92	Big O Tires	34
Chrysler	79	Goodyear	32
Tesla	77	Jiffy Lube	31
Jiffy Lube	67	Chrysler	30
Climb Hire	63	Tesla	28

Source: Burning Glass

## Educational Supply

There are 14 community colleges in the Bay Region issuing 897 awards on average annually (last 3 years ending 2018-19) on TOP 0948.00 - Automotive Technology. In the East Bay Sub-Region, there are five (5) community colleges that issued 168 awards on average annually (last 3 years) on this TOP code.

**Table 7. Community College Awards on TOP 0948.00 - Automotive Technology in Bay Region**

College	Subregion	Associate	Certificate 18+ Units	Certificate Low	Noncredit	Total
Alameda	East Bay	9	0	21	0	30
Chabot	East Bay	15	0	36	0	51
Contra Costa	East Bay	4	0	19	0	23
De Anza	Silicon Valley	38	0	113	0	151
Evergreen Valley	Silicon Valley	8	0	29	0	37
Hartnell	SC-Monterey	10	0	5	0	15
Las Positas	East Bay	4	0	3	0	7
Los Medanos	East Bay	11	0	46	0	57
Marin	North Bay	2	6	17	0	25
Monterey	SC-Monterey	3	0	19	0	22
San Francisco	Mid-Peninsula	6	0	87	0	93
Santa Rosa	North Bay	7	0	132	76	215
Skyline	Mid-Peninsula	6	0	149	0	155
Solano	North Bay	2	0	14	0	16
<b>Total</b>		<b>125</b>	<b>6</b>	<b>690</b>	<b>76</b>	<b>897</b>

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

## Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 1,787 annual openings for the Automotive Technology occupational cluster and 897 annual (3-year average) awards for an annual undersupply of 890 students. In the East Bay Sub-Region, there is also a gap with 594 annual openings and 168 annual (3-year average) awards for an annual undersupply of 426 students.

## Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0948.00 - Automotive Tech**

Metric Outcomes	Bay All CTE Programs	Chabot All CTE Programs	State 0948.00	Bay 0948.00	East Bay 0948.00	Chabot 0948.00
Students with a Job Closely Related to Their Field of Study*	75%	75%	68%	75%	77%	88%
Median Annual Earnings for SWP Exiting Students	\$45,864	\$41,556	\$28,488	\$38,482	\$36,078	\$39,666
Median Change in Earnings for SWP Exiting Students	31%	35%	45%	52%	73%	64%
Exiting Students Who Attained the Living Wage	53%	50%	44%	41%	37%	43%

Source: Launchboard Strong Workforce Program from version 2018-19). \* Data from version 2017-18

## Skills, Certifications and Education

**Table 9. Top Skills for Automotive Technology Occupations in Bay Region (Mar 2020 - Feb 2021)**

Skill	Posting	Skill	Posting
Repair	2,940	Vehicle Inspection	269
Auto Repair	1,535	Predictive / Preventative Maintenance	262

Skill	Posting	Skill	Posting
Customer Service	1,052	Personal Protective Equipment (PPE)	255
Automotive Services Industry Knowledge	997	Occupational Health and Safety	241
Oil Changes	591	Sales	235
Hand Tools	419	Welding	235
Scheduling	417	Commercial Driving	232
Cleaning	390	Lifting Ability	232
Motor Vehicle Operation	375	Engine Repair	197
Vehicle Maintenance	367	Brake Work	185
Automotive Industry Knowledge	337	Power Tools	183
Customer Contact	303	Manual Dexterity	169
Electrical Systems	281	Quality Assurance and Control	157
Tire Repairs	273	Diagnosis of Drivability	153

Source: Burning Glass

**Table 10. Certifications for Automotive Technology Occupations in Bay Region (Mar 2020 - Feb 2021)**

Certification	Posting	Certification	Posting
Driver's License	2,914	MECP Basic Installation	25
Automotive Service Excellence (ASE) Certification	869	CDL Class B	23
Air Brake Certified	66	Occupational Safety and Health Administration Certification	22
EPA 609	61	Good Conduct	21
CDL Class A	36	OSHA Forklift Certification	19
Environmental Protection Agency Certification	33	Security Clearance	14
Mobile Electronics Certified Professional (MECP)	30	First Aid Cpr Aed	14
Chrysler Certified	26	Project Management Certification	12
CDL Class C	26	Certified Financial Planner (CFP)	12

Source: Burning Glass

Note: 42% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

**Table 11. Education Requirements for Automotive Technology Occupations in Bay Region**

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	2,051	97%
Associate's degree	55	3%

Source: Burning Glass

Note: 62% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

## Methodology

Occupations for this report were identified by use of skills listed in O\*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and

Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCCO Data Mart.

## Sources

O\*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

CTE LaunchBoard [www.calpassplus.org/Launchboard/](http://www.calpassplus.org/Launchboard/)

Statewide CTE Outcomes Survey

Employment Development Department Unemployment Insurance Dataset

Living Insight Center for Community Economic Development

Chancellor's Office MIS system

## Contacts

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