
LAEDC
LARC
#19STRONG. COMMUNITY & COLLEGES TRANSFORMING FUTURES.
C·O·E
AUTOMOTIVE TECHNOLOGY: ADVANCED TRASPORTATION REGIONAL PROGRAM ADVISORY
LOS ANGELES COMMUNITY COLLEGE PROGRAM LOOK BOOK
June 21, 2024
11:00am - 1:00pm

Contents

MEETING AGENDA

Date and Time	**June 21, 2024, from 11am - 1pm**
Occupation Focus	**Automotive Technology – Advanced Transportation**
Opening Remarks	Welcome and Introductions | Alicia Nyein, LAEDC Los Angeles Regional Consortium Overview | Dr. Narineh Makijan, LARC LAEDC Overview | Jermaine Hampton, LAEDC Automotive Technology Demand Data | Matthew Skyberg, LAEDC Automotive Technology Supply Data | Luke Meyer, COE
Discussion Topics Moderated by Jose Pelayo and Alicia Nyein	**State of the Industry** ○ What do community colleges need to know about the current state and emerging trends of advanced transportation/automotive technology in LA County? **Workforce Development** ○ What are your most important workforce needs and challenges at the moment? ○ What training, credentials, and certifications are in high demand? What soft skills are particularly important for success? ○ What challenges do you face in up-skilling your current workforce? What opportunities for professional development or ongoing education do your current employees need? ○ How will automotive technology affect your workforce needs and employee skill requirements? **Building Equitable Talent Pipelines** ○ How can community colleges help you address your workforce gaps and needs? What does the ideal automotive technology curriculum look like to you? ○ What hiring positions would best benefit from a short-term certificate program? Dual-enrollment programs? Internships? ○ How can our programs better address diversity and inclusion within the industry? ○ How can you work with community colleges to develop equitable talent pipelines? What would an ideal partnership look like for you?
Curriculum Review and Feedback Poll	Community College Representation Feedback Poll
Closing Remarks	Next Steps and Adjournment | Jermaine Hampton, LAEDC

LOS ANGELES COUNTY ECONOMIC DEVELOPMENT CORPORATION

The Los Angeles County Economic Development Corporation, a non-profit organization, champions equitable economic growth across the Los Angeles region.

LAEDC is committed to developing a competitive regional workforce because we know that a robust workforce and our economic growth as a region should not be separated from each other. We bring industry leaders and educational partners together within the economic development process. We want our education infrastructure to train the next generation of the workforce and ensure they receive relevant training and can join the industry of their choice. We know there needs to be an alignment between industry and our educational systems.

Vision

A reimagined Los Angeles regional economy – growing, equitable, sustainable, and resilient – that provides a healthy and high standard of living for all.

Mission

Reinventing our economy to collaboratively advance growth and prosperity for all.

Funded by the California Community Colleges Chancellor's Office under the Strong Workforce Program (SWP) as a Los Angeles Regional Project.

The Los Angeles County Economic Development Corporation (LAEDC) was founded in 1981 as a nonprofit,public-benefit organization to harness the power of private sector in collaboration with L.A. County, to guide economic development and create more widely shared prosperity. LAEDC collaborates with all stakeholders in the region including education, business, and government. Learn more at www.LAEDC.org.

Contact Information

Jermaine Hampton, Vice President of Workforce Development & Special Projects

Jermaine.Hampton@laedc.org

(213) 236-4828

Jose Pelayo, Director of Workforce Development

Jose.Pelayo@laedc.org

(213) 236-4837

Alicia Nyein, Assistant Program Manager

Alicia.Nyein@laedc.org

(213) 622-4300

Brandy Pacheco, Program Coordinator

Brandy.Pacheco@laedc.org

(213)236-4819

Matthew Skyberg, GIS Research Analyst

Mathew.Skyberg@laedc.org

(213) 236-4832

LOS ANGELES REGIONAL CONSORTIUM

Los Angeles Regional Consortium, as a consortium of LA's 19 community colleges, is working collectively to deliver on a promise that California community colleges are accessible and affordable to all who seek opportunities to realize a better future. LARC serves to coordinate, collaborate, organize, and facilitate interaction in the region to ensure workforce training is provided to all in a way that is accessible, efficient, responsive, data-driven and improves outcomes. We collaborate with K-12 partners, high-road employers, and priority industries to align impactful curriculum and workforce training programs, creating a seamless pathway for college and career readiness.

To learn more please visit www.losangelesrc.org

Mission

Our mission is to bridge the gap between LA's workforce and the employers fueling our cutting-edge economy. This will not only close the supply and demand gap, but also increase economic and social mobility for LA County residents.

Contact Information

Dr. Narineh Makijan, Chair/Assistant Vice President

nmakijan@pasadena.edu

(626) 585-7304

Gray Rakow, Grant Project Coordinator

grakow@pasadena.edu

(626) 585-7442

Sheila Xiao, Business Analyst

sxiao15@pasadena.edu

Judy Fox, Contractor Assisting with Program Management

jxfox@pasadena.edu

Randy Morales, Contractor Assisting with Program Management

rxmorales@pasadena.edu

Karlia Villalobos, Contractor Supporting Employer Engagement

kxvillalobos@pasadena.edu

Ruth Martinez, Contractor Supporting Employer Engagement

rxmartinez1@pasadena.edu

CENTER OF EXCELLENCE FOR LABOR MARKET RESEARCH

The Los Angeles Center of Excellence for Labor Market Research (COE) hosted at Mt. San Antonio College represents expertise in labor market analysis with a focus on research design, educational and training program mapping, and identifying skill sets for emerging occupations as well as geospatial analysis. The COE maintains strategic alliances with research organizations whose relationships and technical expertise enhance COE research efforts and with industry associations that assist in validating research findings, ensuring that the most recent industry and labor market conditions are captured. COE studies are used to inform policy discussions, industry-wide legislative efforts, and regional workforce and economic development strategies, as well as guide program and resource development efforts by the California Community Colleges. These reports can be accessed at www.coeccc.net.

Mission

The mission of the center is to research, analyze and present information on regional economic and workforce needs, customized for Community College decision making and curriculum planning.

Contact Information

C·O·E CENTERS OF EXCELLENCE FOR LABOR MARKET RESEARCH

Luke Meyer, Director

lmeyer7@mtsac.edu

(909) 274-6106

Industry Representation

Oliver Jen, START Instructor | Tesla

Oliver is one of 9 Tesla START instructors. They have a 16-week advanced training program that provides skills necessary for a successful career at Tesla and beyond. Prior to becoming an instructor, Oliver spent 15 years as a technician. Seven of those years he focused on battery powered electric vehicles. He held a state of California Smog Check Inspector license for 7 years as well. Oliver got into automotive to help people and the environment. He has been able to do both and is now teaching the next generation.

Arielle Fleisher, Transportation Strategist | Waymo

Arielle Fleisher is a transportation strategist with a unique combination of public health, design thinking, and planning expertise. In her current role as the Policy Development and Research Manager at Waymo, she develops policies on the transportation issues that matter to cities, such as congestion, transit integration, equity and data-sharing. This role builds on her previous experience at SPUR and the SFMTA, where she developed programs and policies to create a high-quality transportation system in the Bay Area. Most recently, she served as the Liaison to the Board of Supervisors at SFDPH where she spearheaded vaccination clinics and supported the city's economic reopening – the most rewarding work of her career.

Timothy Martino, Director of Operations | Rusnak Auto Group

As the Director of Fixed Operations of the Rusnak Auto Group and the former VP and Managing Partner for Bernie Moreno Companies, Timothy looks forward to using his skills and experience of managing luxury automobile dealerships to provide the best client, employee and manufacturer experience possible. He is excited to work with the exceptional team at Rusnak in a leadership role as part of the 800 committed professionals that make this Southern California dealership group so respected in the industry

Jeff Christoffel, President | Honda of Pasadena

With 33 years of experience, Jeff has held many positions in the automotive technology industry. Prior to this role, Jeff was president of Coo Bay Nissan and Champion Motors. Jeff currently serves as the President Honda of Pasadena since 2010, VP of Honda Marin since 2022, and SoCal Honda Ad Association President since 2018.

Advanced Transportation and Automotive Technology

The Advanced Transportation and Automotive Technology industry is undergoing significant transformation driven by advancements in electric vehicles (EVs) and emerging technologies. As the demand for sustainable transportation solutions increases, this sector faces rapid changes in job functions and required skills. The shift towards electric and hybrid vehicles necessitates new competencies in battery technology, electric drivetrains, and advanced diagnostics, affecting occupations traditionally focused on internal combustion engines. Additionally, increasing investments in EV infrastructure, such as charging stations, highlights the growing emphasis on sustainable mobility. Legislative measures and government incentives are also playing a crucial role in accelerating the adoption of EVs, further impacting employment trends within this industry. Consequently, the need for continuous upskilling and adaptation is paramount for professionals within the Advanced Transportation and Automotive Technology sector, ensuring they remain adept at managing and repairing modern automotive technologies. This evolving landscape not only creates new job opportunities but also demands a strategic focus on workforce development to align with the industry's future needs.

Occupational Overview

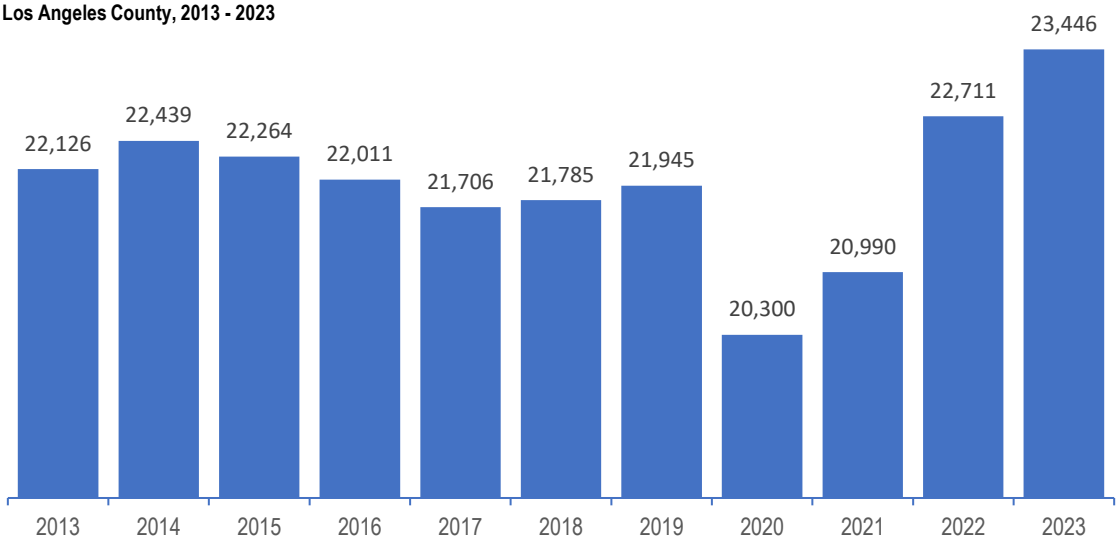
Advanced Transportation and Automotive Technology (comprised of occupational codes SOC 49-3021, 49-3022, 49-3023, 49-3031, and 49-3052)

The detailed occupations included, and their primary functions are:

- SOC 49-3021: Automotive Body and Related Repairers
  - Repair and refinish automotive vehicle bodies and straighten vehicle frames.
- SOC 49-3022: Automotive Glass Installers and Repairers
  - Replace or repair broken windshields and window glass in motor vehicles.
- SOC 49-3023: Automotive Service Technicians and Mechanics
  - Diagnose, adjust, repair, or overhaul automotive vehicles.
- SOC 49-3031: Bus and Truck Mechanics and Diesel Engine Specialists
  - Diagnose, adjust, repair, or overhaul trucks, buses, and all types of diesel engines.
- SOC 49-3052: Motorcycle Mechanics
  - Diagnose, adjust, repair, or overhaul motorcycles, scooters, mopeds, dirt bikes, or similar motorized vehicles.

Current Landscape

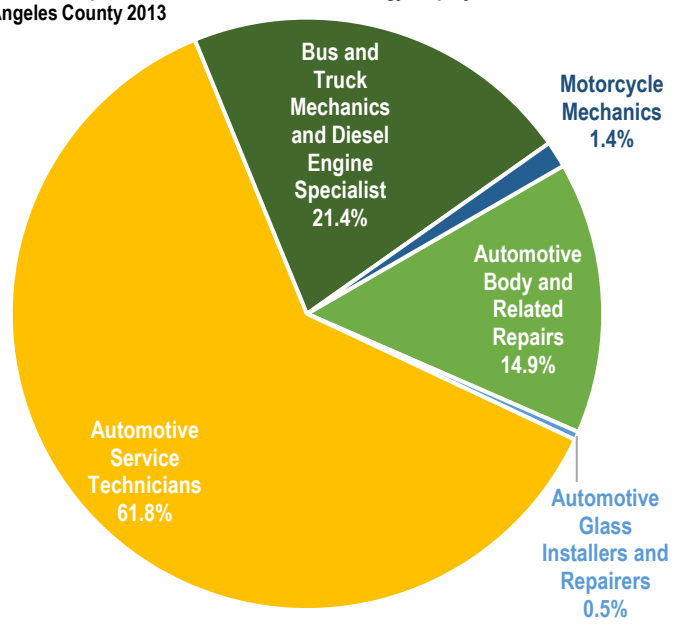
Exhibit 1-0
Advanced Transportation and Automotive Technology Employment
Los Angeles County, 2013 - 2023



Source: CA EDD, Lightcast

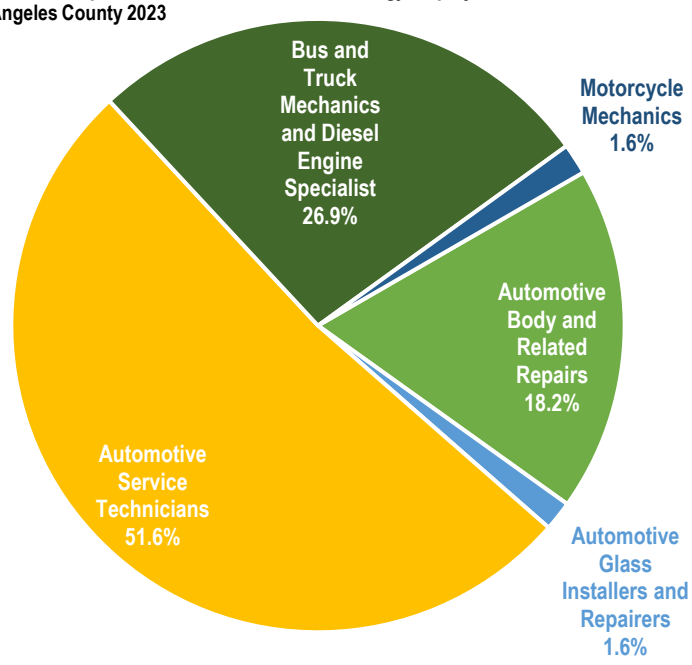
- Advanced Transportation and Automotive Technology occupations have employed over 20,000 people anually during the time period of 2012 to 2022. Payroll employment climbed to its highest in 2023, exceeding 23,400 jobs. Payroll fell to its lowest point during this period in 2020, dropping to 20,300 jobs. Since this low point, employment grew at 15.5 percent between 2020 and 2023, adding nearly 3,150 net new jobs in this three-year period.

Exhibit 1-2
Advanced Transportation and Automotive Technology Employment
Los Angeles County 2013



Source: CA EDD, Lightcast

Exhibit 1-3
Advanced Transportation and Automotive Technology Employment
Los Angeles County 2023

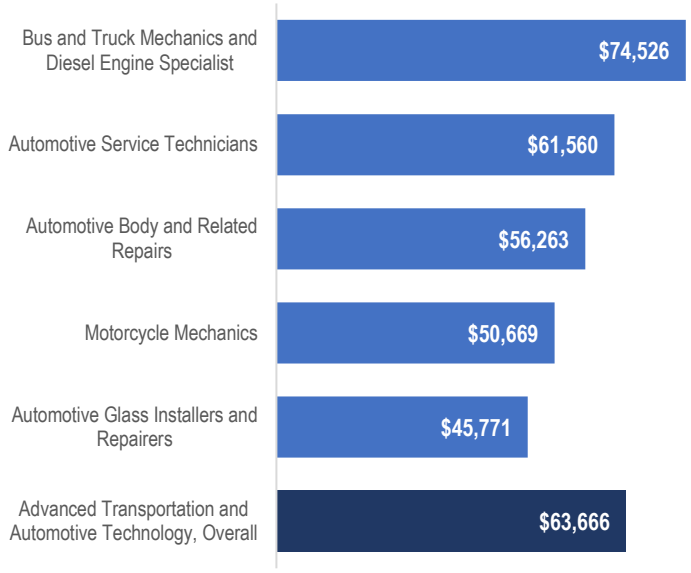


Source: CA EDD, Lightcast

Employment Distribution 2013-2023

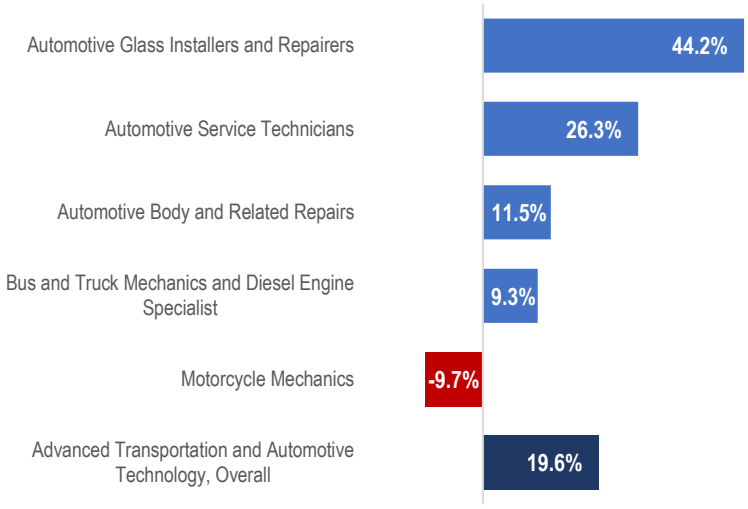
- Automotive Service Technicians and Mechanics has maintained the top occupation by employment share since 2013, however their share decreased by 10.2 percentage points between 2013 and 2023.
- Bus and Truck Mechanics and Diesel Engine Specialists has remained in the second by employment share since 2013. Its share grew 5.5 percentage points between 2013 and 2023.
- Automotive Body and Related Repairs has increased its employment share by 3.3 percentage points, maintaining the third position by employment share between 2013 and 2023.
- Motorcycle Mechanics grew modestly by 0.2 percentage points between 2013 and 2023.
- Automotive Glass Installers and Repairers grew by 1.1 percentage points to match the fourth position by employment share.
- Automotive Service Technicians and Mechanics was the only occupation to decrease its share of industry employment.

Exhibit 1-4
Median Annual Pay in Automotive Repair and Maintenance Occupations
Los Angeles County 2023



Source: Lightcast

Exhibit 1-5
Real Wage Growth in Automotive Repair and Maintenance Occupations
Los Angeles County 2013-2023



Source: Lightcast

Median Annual Pay

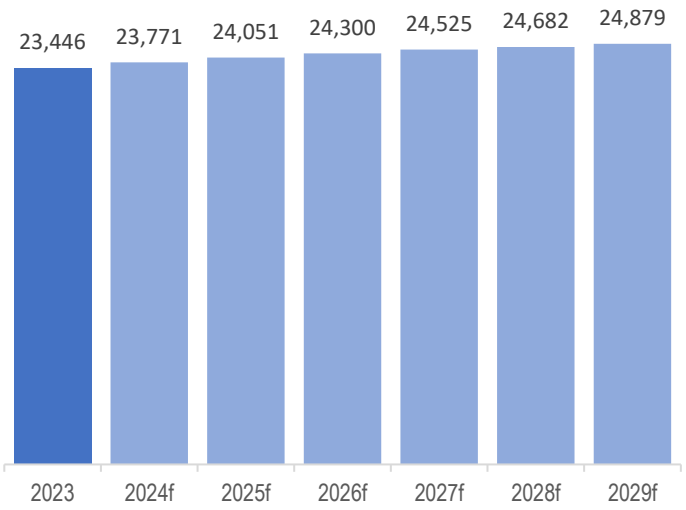
- Four of the five occupations in Advanced Transportation and Automotive Technology have an annual median wage exceeding the MIT living wage of $48,942 in Los Angeles County (single person in 2023).
- Across the industry, the occupation with the highest median annual wage is Bus and Truck Mechanics and Diesel Engine Specialist, at over $74,526 per year, more than 150 percent of the living wage threshold.
- The Advanced Transportation and Automotive Technology Industry as a whole had a median annual wage of $63,666 in 2023
- In 2023, the median annual wage in Los Angeles County was about $67,345 per year.

Real Wage Growth

- Over the last decade (2013 to 2023), real wages grew at varying rates across the industry.
- The largest increase occurred in the Automotive Glass Installers and Repairers occupation; real wages grew more than 44 percent since 2013.
- Automotive Service Technicians had the second highest growth at 26.3 percent since 2013.
- Automotive Body and Related Repairs and Bus and Truck Mechanics and Diesel Engine Specialist experienced slower growth at 11.5 percent and 9.3 percent growth, respectively.
- Motorcycle Mechanics was the only occupation to have declining wages since 2013, decreasing by 9.7 percentage points.
- Overall, real wages in Advanced Transportation and Automotive Technology grew by 19.6 percent.

Employment Forecast

Exhibit 1-6
Advanced Transportation and Automotive Technology Employment
Los Angeles County, 2023 - 2029

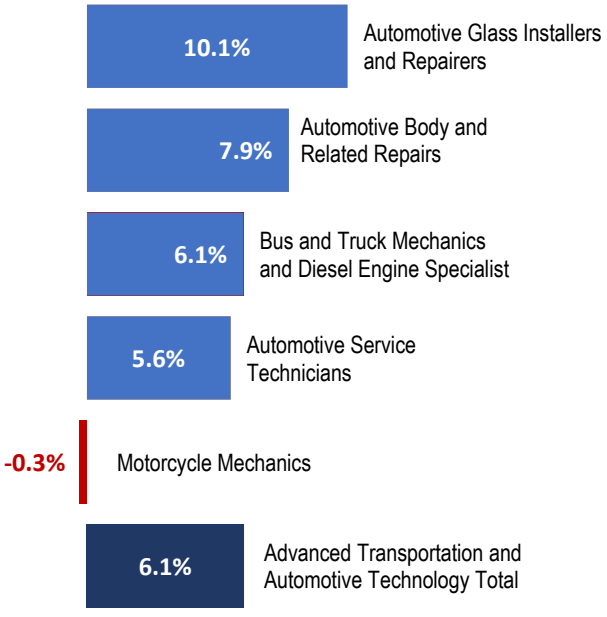


Source: CA EDD, Lightcast

Forecasted Employment

- From 2023 to 2029, payroll employment in the Advanced Transportation and Automotive Technology Industry overall is forecasted to grow by 6.1 percent, adding 1,433 net new jobs over the next 6 years at a rate of nearly 240 new jobs per year.
- Within the industry, the detailed occupations have varying growth projections.

Exhibit 1-7
Advanced Transportation and Automotive Technology Employment
Los Angeles County, 2023 - 2029



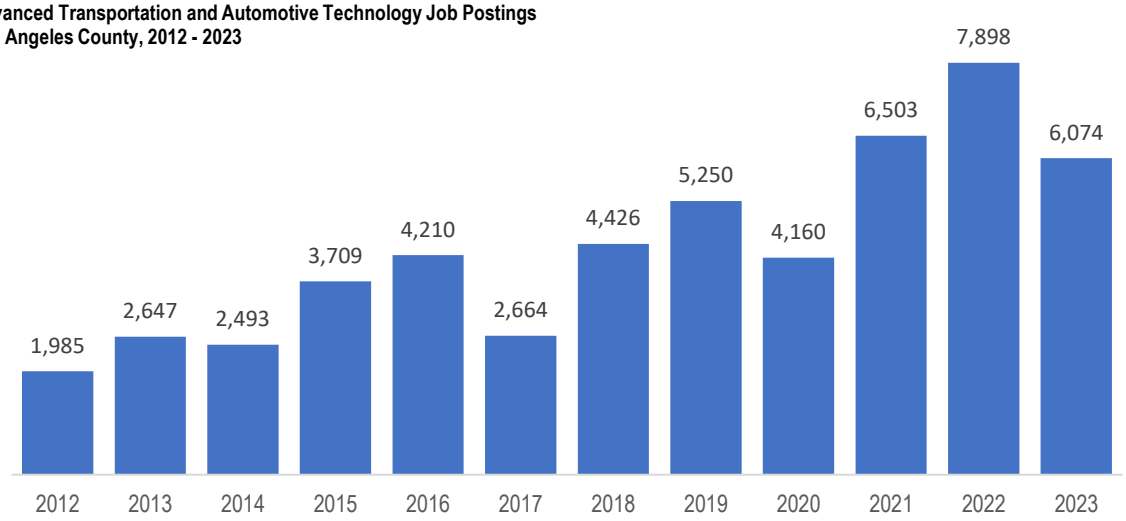
Source: Lightcast

Forecasted Employment Growth by Subindustry

- The Automotive Glass Installers and Repairers occupation is forecasted to have the highest rate of job growth, increasing by 10.1 percent. (37 jobs)
- Automotive Body and Related Repairs is expected to have the second highest rate of growth at 6.8 percent. (336 jobs)
- Bus and Truck Mechanics and Diesel Engine Specialist is forecasted to have growth at 6.1 percent (385 jobs), while Automotive Service Technicians is expected to have the most growth in actual jobs (677) with 5.6 percent growth.
- Motorcycle Mechanics is forecasted to stay relatively even with a decline of 0.3 percent. (-1 job)

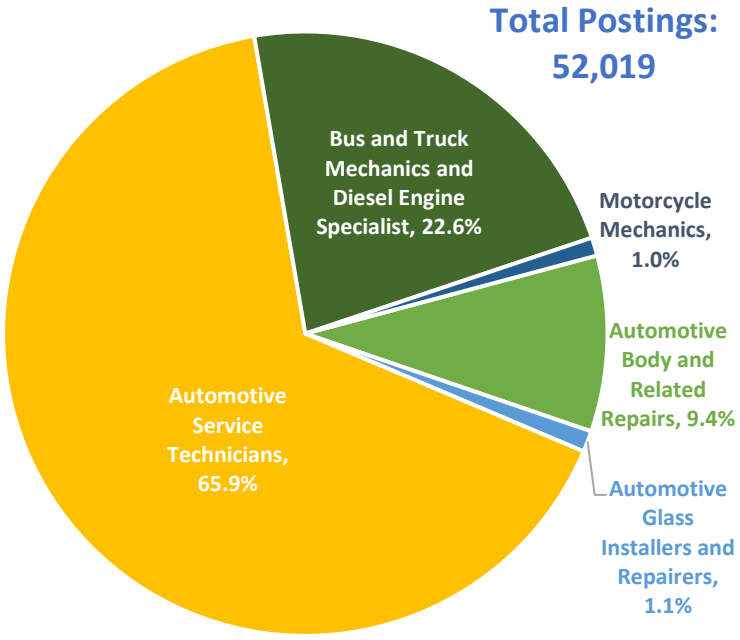
Job Postings

Exhibit 1-8
Advanced Transportation and Automotive Technology Job Postings
Los Angeles County, 2012 - 2023



Source: Lightcast

Exhibit 1-9
Distribution of Job Postings Advanced Transportation and Automotive Technology
Los Angeles County 2012-2023

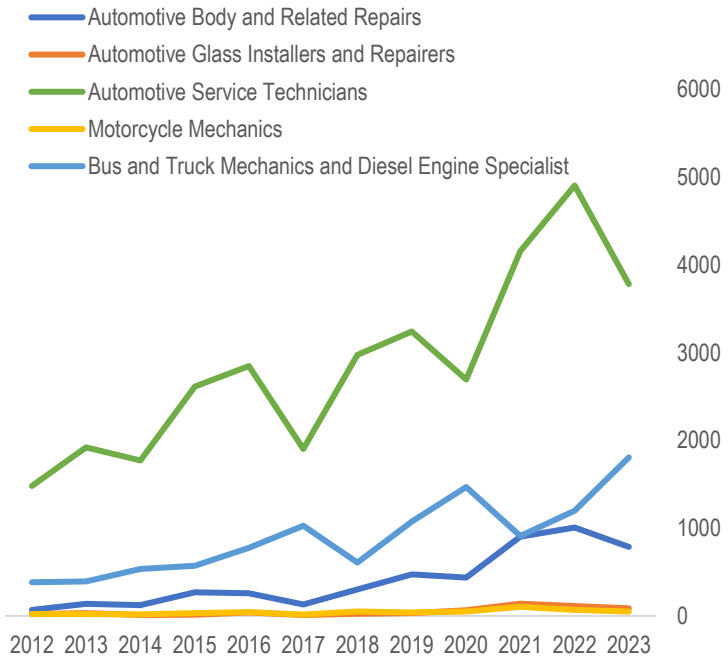


Source: CA EDD, Lightcast

Distribution of Job Postings

- Job postings peaked in 2022, with nearly 7,900 unique job postings compared to 1,985 job postings in the subsector in 2012.
- The Automotive Service Technicians occupation represents the largest share of job postings over the last decade (2012 to 2023), accounting for nearly 66 percent of total job postings over the period. The Bus and Truck mechanics and Diesel Engine Specialist occupation followed, accounting for 22.6 percent of all job postings over the period.
- Automotive Body and Related Repairs occupation accounted for 9.4 percent of all job postings in this period.

Exhibit 1-10
Advanced Transportation and Automotive Technology Job Postings by Occupation
Los Angeles County, 2012 - 2023

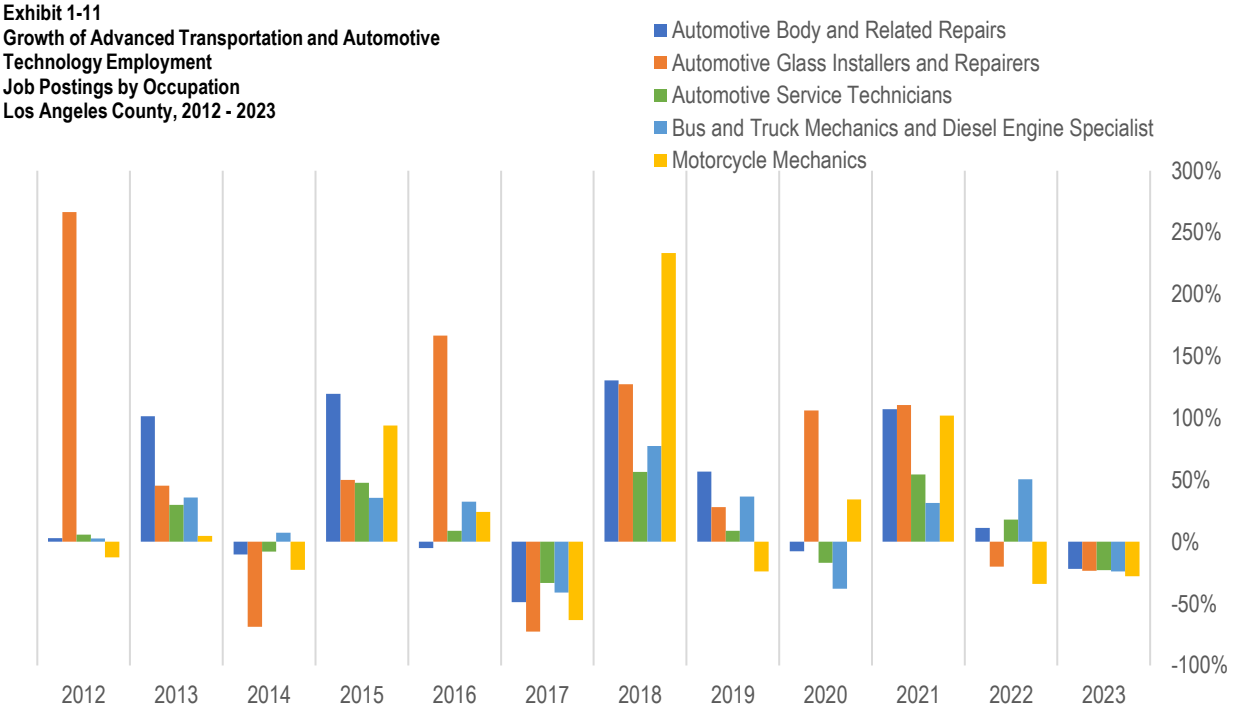


Source: Lightcast

Job Postings by Component Industry

- Automotive Service Technicians has been the occupation with the most job postings between 2012 and 2023, peaking in 2022 to over 4,150.
- Bus and Truck Mechanics and Diesel Engine Specialist was the second highest occupation in the period, but dipped in 2018 and 2021.
- Automotive Body and Related Repairs was the occupation with the third most, nearly reaching the second spot in 2021.
- Automotive Glass Installers and Repairers and Motorcycle Mechanics have continued to have the fewest job postings in this period.

Exhibit 1-11
Growth of Advanced Transportation and Automotive Technology Employment
Job Postings by Occupation
Los Angeles County, 2012 - 2023



Source: Lightcast

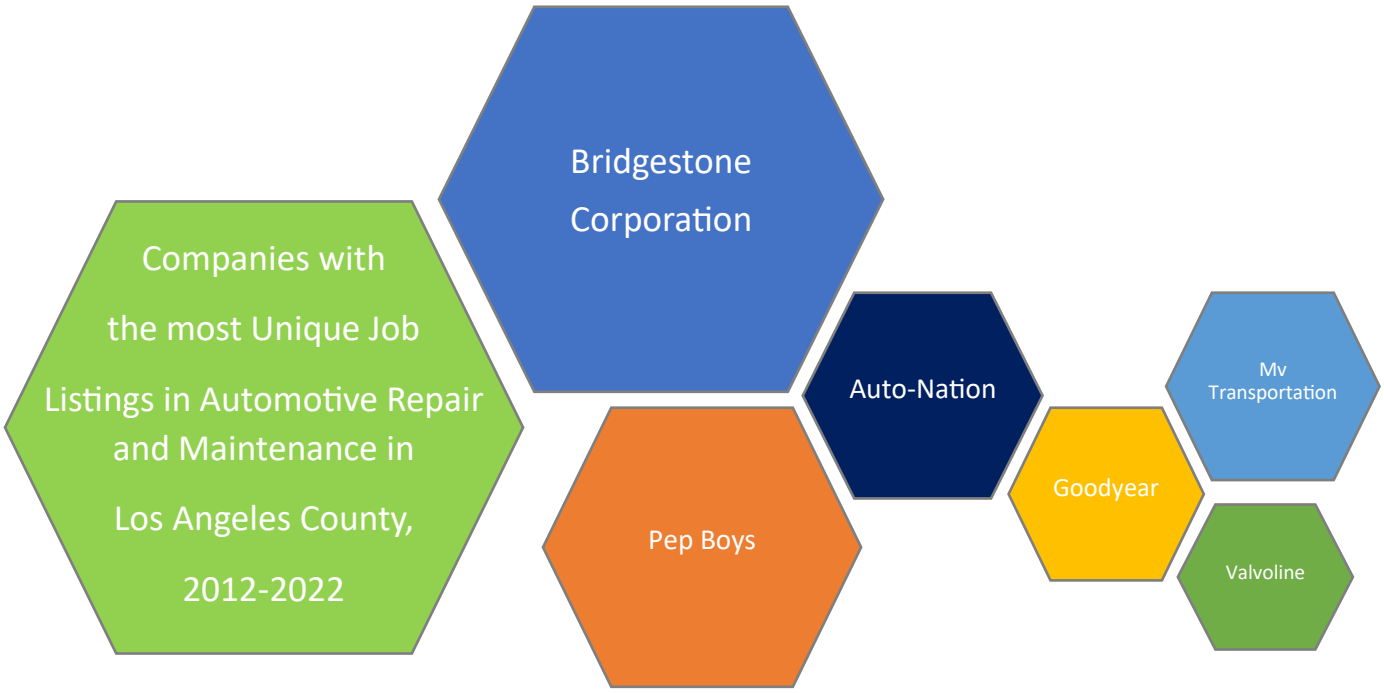
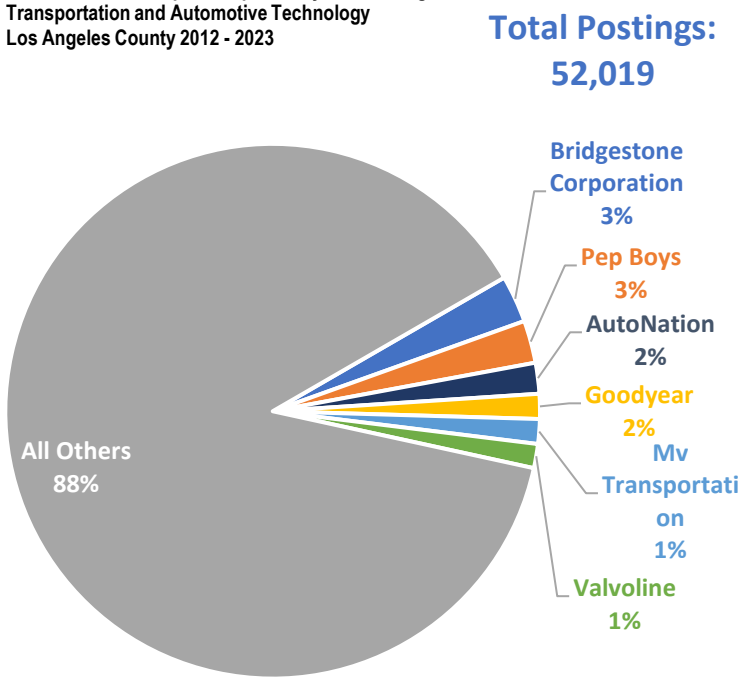


Exhibit 1-12
Concentration of Top 5 Companies by Job Postings for Advanced Transportation and Automotive Technology
Los Angeles County 2012 - 2023



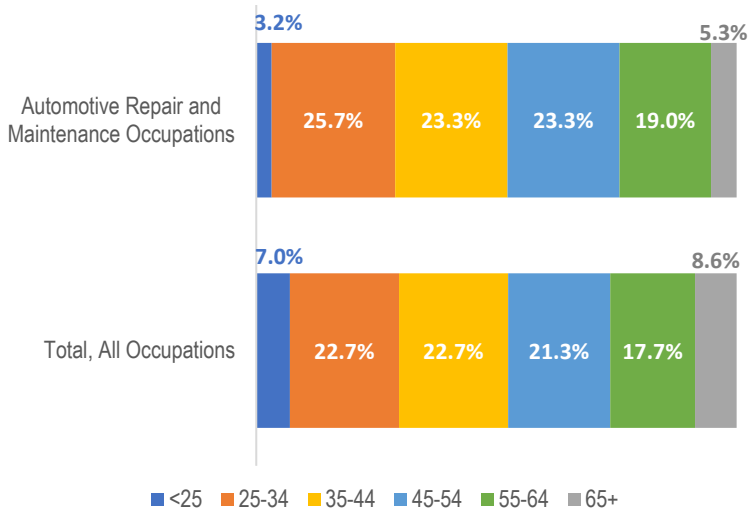
Source: Lightcast

Advanced Transportation and Automotive Technology Industry

- Top 6 companies in the Advanced Transportation and Automotive Technology industry and their share of job posts in 2012-2023.
- Postings in this industry are not concentrated in these 6 companies, with 88 percent coming from others outside the top 6 during this period.

Industry Demographics

Exhibit 1-17
Age of Workers 2023

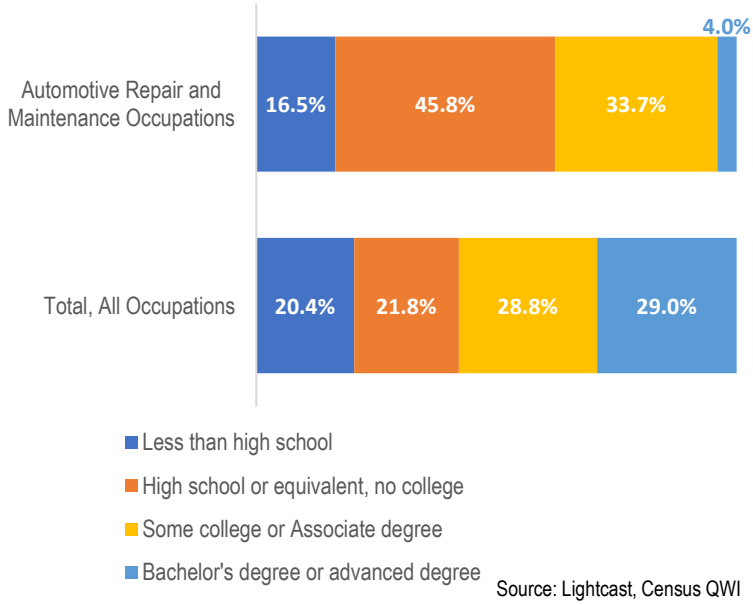


Source: Lightcast

Age of Workers

- Over 46 percent of employees in Advanced Transportation and Automotive Technology industries are between 25 and 44 years old, 3.6 percent more than across all industries in Los Angeles County.
- Workers that are 65 years or older are more than 3 percentage points lower in this industry compared to the all industry average in Los Angeles County.
- Workers between the ages of 45 and 64 are over 3 percentage points higher in this industry compared to across all industries in Los Angeles County.

Exhibit 1-18
Education Level of Workers 2023

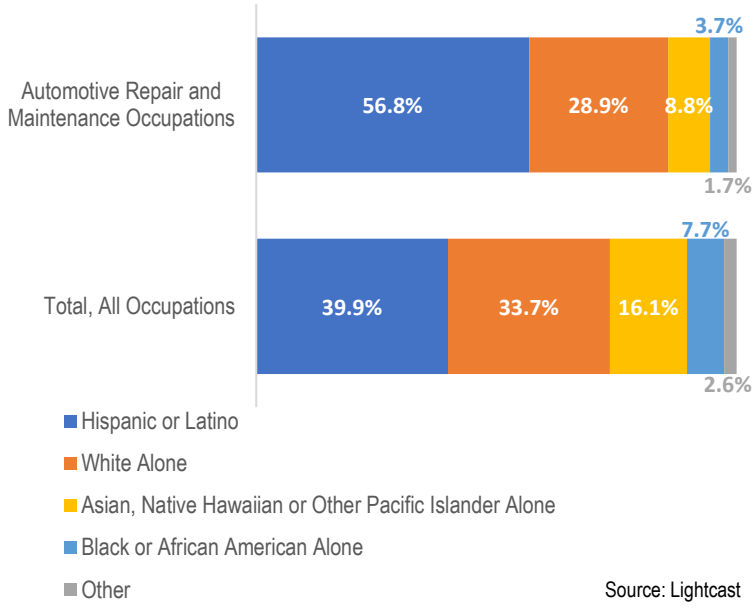


Source: Lightcast, Census QWI

Education Level of Workers

- Only 4 percent of employees in the Advanced Transportation and Automotive Technology industry have a bachelor's degree or higher, 25 percent less than the all industry average in Los Angeles County.
- Compared to other occupations, Advanced Transportation and Automotive Technology jobs have a higher proportion of employees with middle and lower levels of educational attainment.
- Workers with some college experience or an associate degree account for nearly 34 percent of employees, almost 9 percentage points higher compared to all occupations.
- Workers with a high school level education or less than high school account for more than 62 percent of workers in the industry compared to just over 42 percent across all occupations.

Exhibit 1-19
Race/Ethnicity of Workers 2023

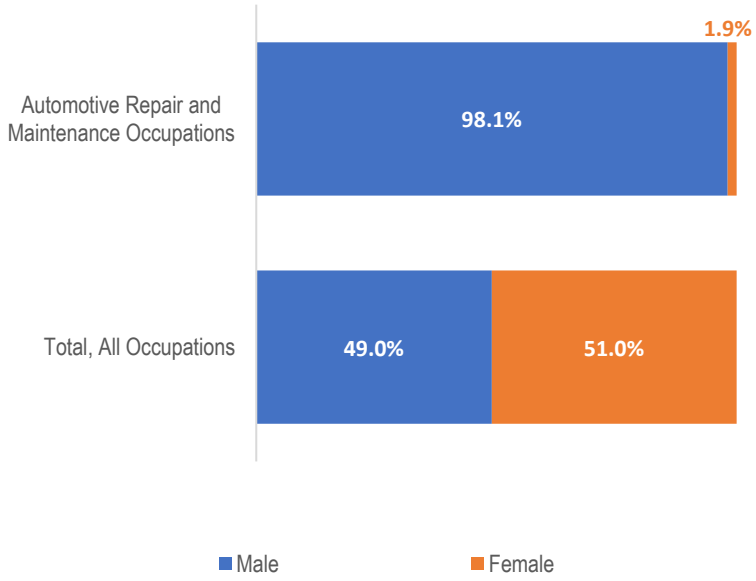


Source: Lightcast

Race/Ethnicity of Workers

- The workforce in the Advanced Transportation and Automotive Technology industry is diverse with over half of the workers reporting their ethnicity as Hispanic/Latino; this is nearly 17 percentage points higher than the all-occupation average in Los Angeles County.
- White workers are slightly under represented at 4.8 less compared to all occupations.
- Asian and Pacific Islander workers are also under represented at 7.3 percentage points less compared to all occupations.
- Black workers are also slightly underrepresented, with 4 percent fewer workers identifying as black compared to all occupations.

Exhibit 1-20
Gender of Workers 2023



Source: Lightcast

Gender of Workers

- The gender distribution in in the Advanced Transportation and Automotive Technology industry is extremely skewed male, those reporting as male accounting for over 98 percent of the workforce, more than 49 percent higher than all occupations in Los Angeles County.
- Across all occupations in Los Angeles County the distribution between genders is more even, skewing slightly female with 51 percent of workers reporting as female.

Occupational Profiles

Metric		Automotive Body and Related Repairers	Automotive Glass Installers and Repairers	Automotive Service Technicians and Mechanics	Bus and Truck Mechanics and Diesel Engine Specialists	Motorcycle Mechanics
Sex	Male	97.5%	95.1%	98.3%	98.4%	**98.7%**
	Female	2.5%	**4.9%**	1.7%	1.6%	1.3%
Education	Less than HS	**24.1%**	14.9%	15.9%	12.9%	11.6%
	High School	47.6%	**49.7%**	44.4%	47.2%	44.4%
	Some College / Associates	25.3%	32.0%	35.3%	36.3%	**38.6%**
	Bachelor's	2.3%	3.0%	3.8%	3.2%	**4.7%**
	Graduate School	**0.7%**	0.3%	**0.7%**	0.5%	**0.7%**
Age	<25	8.4%	**11.7%**	11.0%	7.7%	8.4%
	25-34	19.7%	**27.1%**	26.5%	22.1%	23.4%
	35-44	20.5%	**25.5%**	22.0%	22.0%	23.1%
	45-54	23.1%	19.8%	20.4%	**23.8%**	19.6%
	55-64	**21.1%**	12.5%	15.7%	19.9%	17.3%
	>65	7.1%	3.5%	4.4%	4.4%	**8.2%**
Race	Hispanic	**62.2%**	59.2%	58.0%	52.3%	34.0%
	White	27.1%	30.0%	26.4%	33.1%	**57.2%**
	Asian	6.5%	5.5%	**10.1%**	7.2%	3.3%
	Black	2.7%	2.7%	3.5%	**4.9%**	2.5%
	All Others	1.4%	2.6%	2.0%	2.6%	**3.0%**

Source: Lightcast

- The occupations identified in the table above are accessible to workers with a community college level education (i.e., some college/AA degree); about 63 to 72 percent of workers in these occupations are middle-skill workers with educational attainment of more than a high school diploma (or equivalent) but less than a bachelor's degree.
- Female workers are significantly underrepresented across all these occupations, accounting for only 1.3 percent of workers in Motorcycle Mechanics, 1.6 percent of Bus and Truck Mechanics and Diesel Engine Specialist, and 1.7 percent of workers in Automotive Service Technicians and Mechanics occupations.
- Hispanic workers are most overrepresented in the Automotive Body and Related Repairers occupations, accounting for 62.2 percent of workers in this occupation, compared to nearly 40 percent for all industries in LA County.
- White workers are overrepresented in the Motorcycle Mechanics occupations, accounting for 57.2 percent of workers in this occupation, compared to nearly 34 percent for all occupations in Los Angeles County.
- Motorcycle Mechanics have the highest concentration of workers 65 years and older at 8.2 percent, which is closest to the all-occupation average in LA County of 8.6 percent.

Community College Talent Supply

The California Community Colleges offer a variety of advanced transportation and automotive technology programs focused on diagnosis, maintenance, repair, hybrid and electrical vehicles, alternative fuels, diesel technology, motorcycle engines, and several manufacturer-specific training programs and partnership with Honda, Toyota, Telsa, General Motors, and more. The majority of these programs are located at ten of LA's nineteen community colleges listed in the table below.

These program offerings are housed within the California Community College Chancellor's Office designated Advanced Transportation priority industry sector. Regional employers having difficulty hiring for related work roles should proactively connect with the colleges listed below to establish a reliable talent pipeline to avoid current and future workforce shortages.

Automotive Technology	Alternative Fuels and Advanced Transportation Technology	Automotive Collision Repair	Diesel Technology	Motorcycle, Outboard and Small Engine Repair
• Cerritos • Citrus • Compton • East L.A. • El Camino • L.A. Pierce • L.A. Trade-Tech • Long Beach City • Pasadena City • Rio Hondo	• Cerritos • El Camino • L.A. Pierce • L.A. Trade-Tech • Long Beach City • Rio Hondo	• Cerritos • Compton • El Camino • L.A. Trade-Tech	• Citrus • L.A. Trade-Tech	• L.A. Trade-Tech
Other Automotive Technology program codes with no current programs in Los Angeles County: Recreational Vehicle Service; Upholstery Repair-Automotive				

Source: California Community Colleges Chancellor's Office Management Information Systems Data Mart & The California Community Colleges Chancellor's Office Curriculum Inventory System (COCI)

To provide a clearer picture of the variety of automotive technology programs offered by the colleges listed above, the table below provide unique program titles and award types for the ten community colleges with programs coded under Automotive Technology (TOP 0948.00).

College	Local Program Name	Award Type
Cerritos	Alternative Fuels Service Technician	Certificate
	Automotive Drivetrain & Air Conditioning	Certificate
	Automotive Electrical & Engine Performance Technician	Certificate
	Automotive Heavy Line and Chassis Technician	Certificate
	Automotive Management	A.A. Degree
		Certificate

College	Local Program Name	Award Type
	Emissions Essentials Service Technician	A.S. Degree
	Engine Machining Technology	Certificate
		A.S. Degree
	Engine Performance & Electrical Diagnosis	Certificate
		Certificate
	Entry Level Quick Service Technician	Certificate
	Fleet Technician	A.S. Degree
	General Motors Advanced	Certificate
	General Motors Automotive Service Educational Program (GM ASEP)	A.S. Degree
	General Motors Essentials	Certificate
	General Technician	A.S. Degree
		Certificate
	Industrial Vehicle Technician	Certificate
	Intermediate Level Technician	Certificate
	Manufacture Specialty	Certificate
Citrus	Automotive Maintenance and Light Repair	Certificate
	Automotive Research and Development	Certificate
	Automotive Service, Diagnosis & Repair-Underhood Specialist	Certificate
	Automotive Service, Diagnosis and Repair - Toyota/Lexus/Scion Technician	Certificate
	Automotive Service, Diagnosis and Repair-Master Technician	Certificate
	Automotive Service, Diagnosis, And Repair - Undercar/Drivetrain Specialist	Certificate
	Automotive Technology	A.S. Degree
	Clean Energy and Vehicle Electrification Technology	Certificate
	Introduction To Automotive Service	Noncredit
Compton	Automotive Brakes/Suspension, Transmission/Drive Train Technician	Certificate
	Automotive Engine Rebuilding and Repair Technician	Certificate
	Automotive Technician I	Certificate
	Automotive Technician II	Certificate
	Automotive Technology	A.S. Degree
	Automotive Tune-Up Technician	Certificate
East L.A.	Automobile Technology	A.S. Degree
	Automotive Fundamentals	Noncredit
	Automotive Technology	Certificate
	Cooling System and Climate Control Specialist	Certificate
	Drivetrain Specialist	Certificate
	Engine Performance and Drivability	Certificate
El Camino	Automotive Technician II	Certificate
	Automotive Technology	A.S. Degree
	Automotive Brakes/Suspension, Transmission/Drive Train Technician	Certificate

College	Local Program Name	Award Type
	Automotive Engine Rebuilding/Repair Technician	Certificate
	Tune-Up Technician	Certificate
L.A. Pierce	Automotive Emission Specialist	Certificate
	Automotive Light Service Technician	Certificate
	Automotive Performance Applications	Certificate
	Automotive Powertrain Specialist	Certificate
	Automotive Service Technology	A.S. Degree
		Certificate
L.A. Trade-Tech	AC Technician (ASE A6 & A7 Test Prep)	Noncredit
	Advanced Engine Performance (ASE A6, A8 & L1 Test Prep)	Noncredit
	Advanced Master Auto Technician (ASE A1-8 & L1 Test Prep)	Noncredit
	Auto & Related Technology: Transmission Repair	Certificate
	Auto & Related Technology: Tune-Up	Certificate
	Auto Technician (ASE A1 & A8 Test Prep)	Noncredit
	Automotive And Related Technology	A.S. Degree
		Certificate
	Basic Automotive Chassis Tech	Noncredit
	Chassis Technician (ASE A4 & A5 Test Prep)	Noncredit
	Drive Train Technician (ASE A2 & A3 Test Prep)	Noncredit
	Lube Technician	Noncredit
	Master Auto Technician (ASE 1-8 Test Prep)	Noncredit
Long Beach City	Automotive Engine and Transmission Service	Certificate
	Automotive Engine Performance Service	Certificate
	Automotive Maintenance Service	Certificate
	Automotive Quick Service	Noncredit
	Automotive Technology	A.S. Degree
		Certificate
	Light-Duty Diesel Generator Engine Maintenance	Noncredit
Pasadena City	All Automotive Systems	A.S. Degree
		Certificate
	Automotive Electrical Systems Technician	Certificate
	Engine Performance Technician	A.S. Degree
		Certificate
	Honda PACT	A.S. Degree
	Powertrain Technician	Certificate
		A.S. Degree
	Undercar Technician	Certificate
		Certificate
Rio Hondo	Advanced Engine Performance	A.S. Degree
		Certificate

College	Local Program Name	Award Type
	Advanced Engine Performance-Technician	Certificate
	Automotive Technology	A.S. Degree
		Bachelor of Science, B.S. Degree
	Automotive Technology: General Service Technician	Certificate
	Brake And Suspension Service	Certificate
	Diesel Fuel and Emission Systems	Certificate
	Engine Repair	Certificate
	Fuel Injection Systems	Certificate
	General Automotive Service	Certificate
	Honda Professional Career Training Program Specialization (PACT)	A.S. Degree
	Honda/Acura Brakes, Suspension, And Chassis Electrical Systems	Certificate
	Honda/Acura Engine Repair and Engine Electrical Systems	Certificate
	Honda/Acura Heating and Air Conditioning Systems	Certificate
	Honda/Acura Powertrain and Transmission Systems	Certificate
	Safety, Comfort, And Convenience Systems	Certificate
	Transmission Service	Certificate

Source: The California Community Colleges Chancellor's Office Curriculum Inventory System (COCI)

The remaining advanced transportation programs are included in the table below, detailing the TOP code, college, local program and, and awards type offered for each.

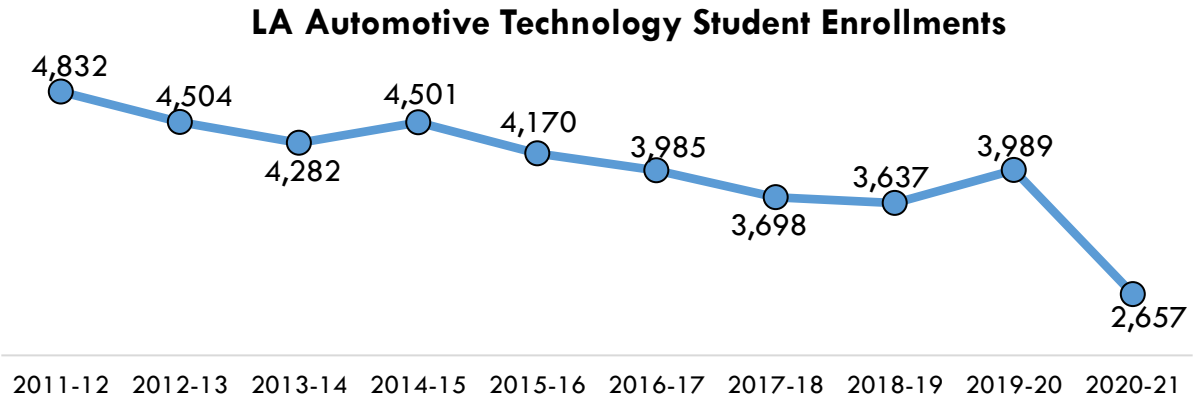
TOP Code	College	Local Program Name	Award Type
Diesel Technology (0947.00)	Citrus	Diesel Engine Service, Diagnosis and Repair Technician	Certificate
		Medium and Heavy-Duty Diesel Truck Technology	A.S. Degree
		Medium and Heavy-Duty Truck Service, Diagnosis and Repair Master Technician	Certificate
		Stationary Power Generation Service, Diagnosis and Repair Technician	Certificate
	L.A. Trade-Tech	Heavy Truck, Transit, and Equipment Technology	Certificate
			A.S. Degree
		Truck and Transit Preventa tive Maintenance	Certificate
Motorcycle, Outboard and Small Engine Repair (0948.30)	L.A. Trade-Tech	Motorcycle Repair Mechanics	Certificate
Alternative Fuels and Advanced Transportation	Cerritos	Automotive Technology: Alternative Fuels Service Technician	A.S. Degree
	El Camino	Hybrid, Electric, and Alternative Fuels	A.S. Degree
			Certificate

TOP Code	College	Local Program Name	Award Type
Technology (0948.40)	L.A. Pierce	Electric Vehicle Services for Light-Duty Zero-Emission Vehicles	Noncredit
	L.A. Trade-Tech	Hybrid & Electric Vehicle Technology	Certificate
	Long Beach City	Advanced Transportation Technology	A.S. Degree
			Certificate
		Advanced Transportation Technology--Alternative Fuels	Certificate
			A.S. Degree
		Advanced Transportation Technology--Electric Vehicles	A.S. Degree
			Certificate
		Alternative Fuel Vehicles	Certificate
		Electric & Hybrid Vehicles	Certificate
	Rio Hondo	Alternative Fuels & Advanced Transportation Technology	A.S. Degree
			Certificate
		Automotive EV Specialist	Certificate
		Electric Vehicle and Fuel Cell Technology Technician	Certificate
			A.S. Degree
		Tesla Student Automotive Technician (START) Program	Certificate
Automotive Collision Repair (0949.00)	Cerritos	Automotive Collision Repair Structural Damage	Certificate
		Automotive Multi-Coat and Custom Paint	Certificate
		Automotive Tools and Equipment	Noncredit
		General Automotive Collision Repair	A.A. Degree
			Certificate
		General Automotive Collision Repair: Automotive Damage Appraisal and Management	Certificate
		General Automotive Collision Repair: Automotive Refinishing	Certificate
	Compton	Automotive Collision Repair	Certificate
		Automotive Collision Repair/Painting	A.S. Degree
		Automotive Painting and Refinishing	Certificate
	El Camino	Automotive Collision Repair/Painting	A.S. Degree
			Certificate
	L.A. Trade-Tech	Automotive Collision Repair	Certificate
			A.S. Degree

Source: *The California Community Colleges Chancellor's Office Curriculum Inventory System (COCI)*

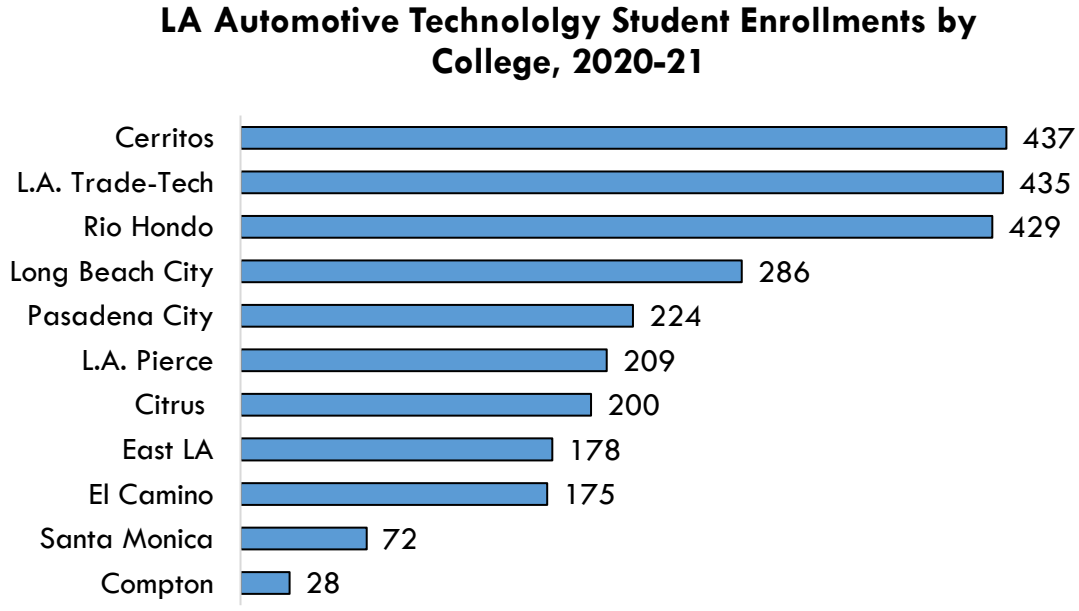
Automotive Technology Student Enrollments

Since the 2011-12 academic year, student enrollments in automotive technology courses have declined by 2,175 or 45%, to 2,657 enrollments in the 2020-21 academic year. While all CTE program enrollments in Los Angeles also declined during this period (-16%), automotive technology enrollments declined by nearly three times the rate as all CTE programs (-45%). If the COVID-19 drop in enrollments in 2020-21 is ignored, the enrollment decline in automotive technology programs largely mirrors the broader CTE enrollment trends. The exhibit below displays automotive technology student enrollments by academic year over the last decade.



Source: California Community Colleges LaunchBoard

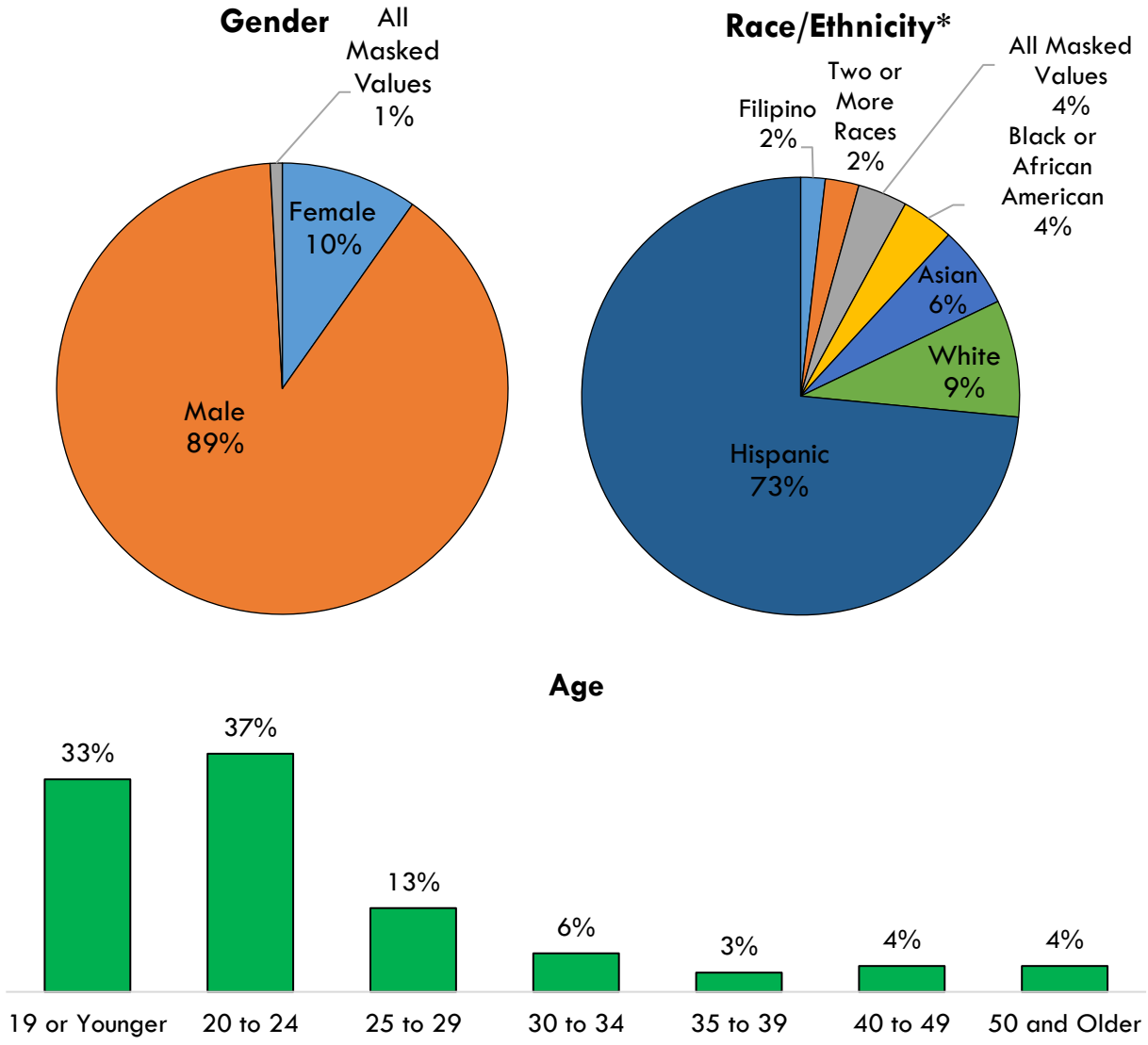
Looking more closely at the 2,657 student enrollments from the 2020-21 academic year, the exhibit below displays the number of students taking courses in automotive technology, with Cerritos, L.A. Trade-Tech, and Rio Hondo colleges each enrolling more than 400 students.



Source: California Community Colleges LaunchBoard

Automotive Technology Student Demographics

Approximately nine out of every ten automotive technology students at the LA community colleges are male, nearly three-quarters identify as Hispanic, and 70% are 24 years old or younger. This young population of LA students in automotive technology programs is an asset for regional employers seeking to strengthen their workforce. The exhibits below display LA automotive technology student demographics of the 2,657 students enrolled in the 2020-21 academic year.



Source: California Community Colleges LaunchBoard

**Not pictured: American Indian/Alaska Native, Pacific Islander or Hawaiian Native, Multiple Values Reported, and Unknown/Non-Respondent, all suppressed values*

Automotive Technology Programs at-a-glance

To demonstrate the size and breadth of automotive technology programs offered by LA's community colleges, the table below displays the number of awards issued (certificates and degrees) from LA's automotive technology programs over the most recent three academic years. Automotive Technology has issued the greatest number of awards, averaging more than 600 during the last three years. Diesel Technology and Alternative Fuels and Advanced Transportation Technology programs have both issued more than 50 awards annual during this time period. Over the past three years, no colleges in the LA region have conferred awards for Recreational Vehicle Service (0948.50) or Upholstery Repair-Automotive (0949.10).

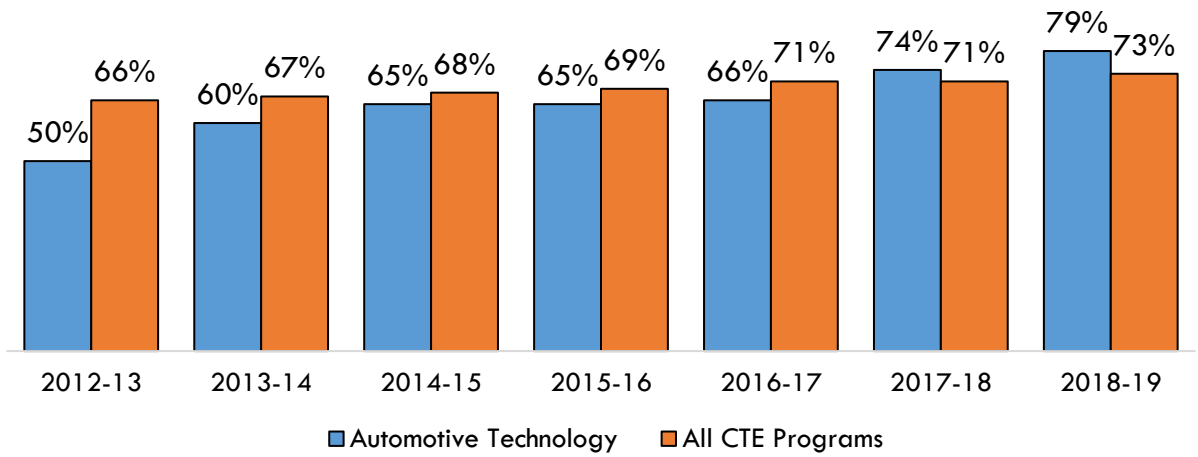
TOP6 - Program Title	2020-21	2021-22	2022-23	Latest 3 Yr Avg
0948.00 - Automotive Technology	344	663	810	**606**
0947.00 - Diesel Technology	63	71	82	**72**
0948.40 - Alternative Fuels and Advanced Transportation Technology	48	59	45	**51**
0949.00 - Automotive Collision Repair	22	47	63	**44**
0948.30 - Motorcycle, Outboard and Small Engine Repair	8	6	4	**6**
Total	**485**	**846**	**1,004**	**778**

Source: *California Community Colleges Chancellor's Office Management Information Systems Data Mart*

Automotive Technology Student Employment Outcomes

According to LaunchBoard data, an average of 66% of exiting students from LA's automotive programs reported working in a job closely related to their field of study between 2013 and 2019. Compared with all CTE exiting students, LA automotive students have consistently reported working in a job closely related to their field of study at a slightly lower rate than the average across all CTE programs during this time period (69%).

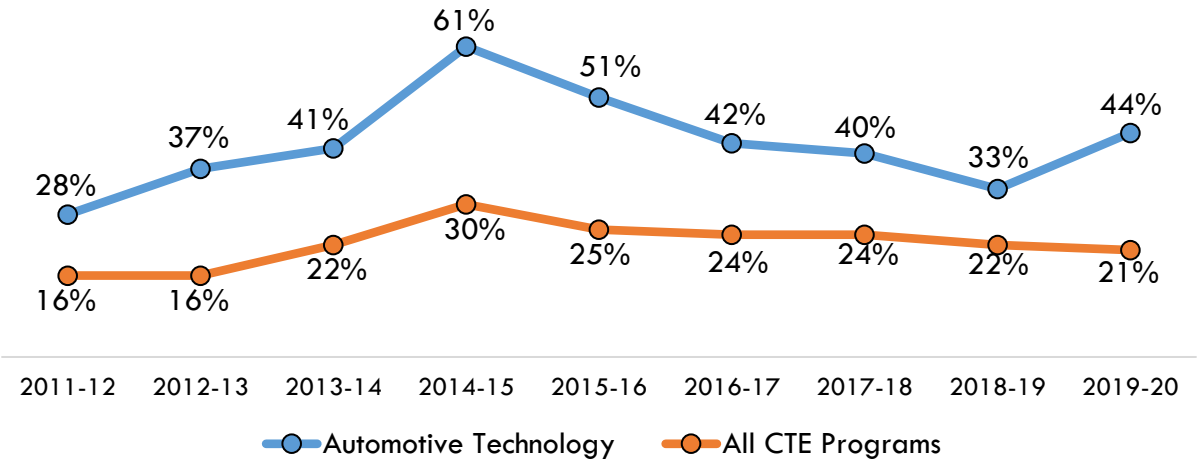
Students with a Job Closely Related to Their Field of Study



Source: *California Community Colleges Chancellor's Office LaunchBoard*

LA automotive technology students increased their annual earnings by 44% in the latest year that this data is available (2019-20). Since 2012, this rate of increase for exiting automotive technology students has been between 28% and 61% and consistently higher than the average across all CTE programs. The median change in earnings compares how much money students made prior to beginning their program with how much they earn after leaving their program, with higher numbers indicating a larger increase in earnings.

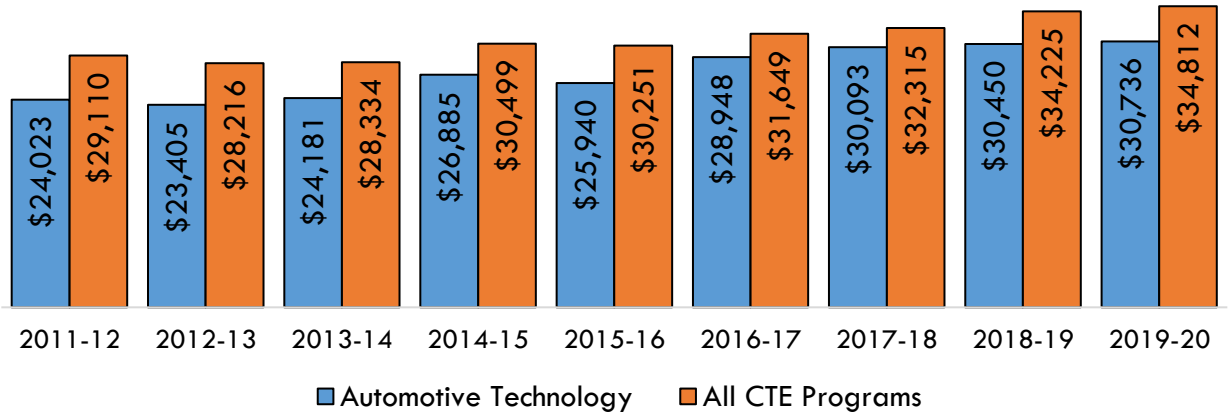
Median Change in Earnings for Exiting Students



Source: [California Community Colleges Chancellor's Office LaunchBoard]

Median annual earnings for exiting automotive technology students in the latest available data (2019-20) were $30,736, approximately $4,000 less than the median across all CTE programs. Over the past decade, exiting automotive technology students have consistently earned between $2,000 and $5,000 less than the median across all CTE programs.

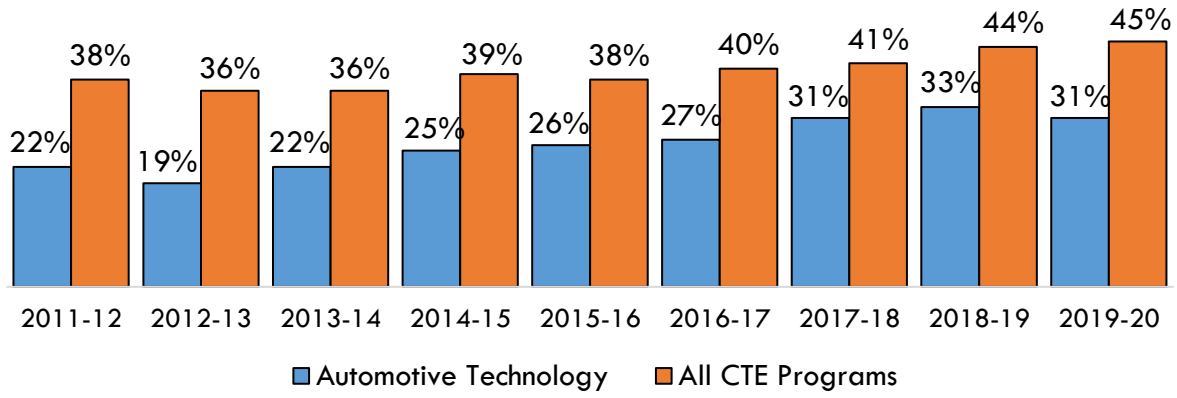
Median Annual Earnings after Exiting



Source: [California Community Colleges Chancellor's Office LaunchBoard]

Out of all LA students who exited automotive technology programs in the 2019-20 academic year, 31% attained the living wage or greater, which was $38,217 at the time these calculations were made. Since 2013-14, the percentage of exiting automotive technology students who attained the living wage has grown steadily, peaking in the 2018-19 year at 33%. However, there has consistently been a smaller percentage of exiting automotive technology students who have attained the living wage as compared to all exiting CTE students. With the rising rate of inflation coupled with increasing living costs places a premium on our students landing jobs that pay above a living wage to adequately support themselves and in many cases, their families.

Exiting Students Who Attained the Living Wage



Source: California Community Colleges Chancellor's Office LaunchBoard

Target Automotive Technology Occupations for Regional Training Programs

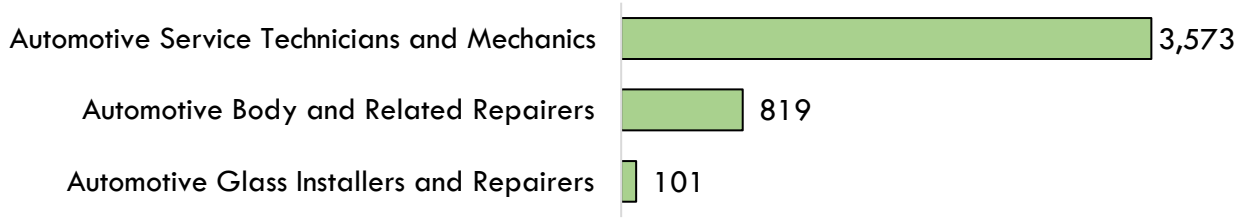
Occupation	2022 Jobs	2027 Jobs	2022 - 2027 % Change	Avg. Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Median Annual Earnings*
Automotive Service Technicians and Mechanics	17,020	16,656	(2%)	1,496	$16.75	$26.39	$54,900
Automotive Body and Related Repairers	4,584	5,083	11%	533	$19.93	$26.53	$55,200
Automotive Glass Installers and Repairers	479	512	7%	47	$17.41	$21.56	$44,800

**Rounded to the nearest $100*
Source: Lightcast, datarun 2024.2

Employer Job Postings

Over the past 12 months (June 2023 through May 2024), there were 4,493 unique online job postings for the three occupations of interest. The majority of job postings (80%) were for *automotive service technicians and mechanics,* followed by *automotive body and related repairers* (18%), and *automotive glass installers and repairers* (2%).

Number of Job Postings by Occupation



Source: Lightcast, Job Postings data

The highest number of job postings by job title were for automotive technicians, automotive mechanics, and auto body technicians. The top employers, by number of job postings, in Los Angeles County were Crash Champions, MV Transportation, Pep Boys, American Tire Depot, and AutoNation. The top skills desired by employers for potential job candidates were automotive services, changing oil, brakes, vehicle suspension, transmission, vehicle maintenance, and tire repairs.

Top Job Titles and Employers from Job Postings

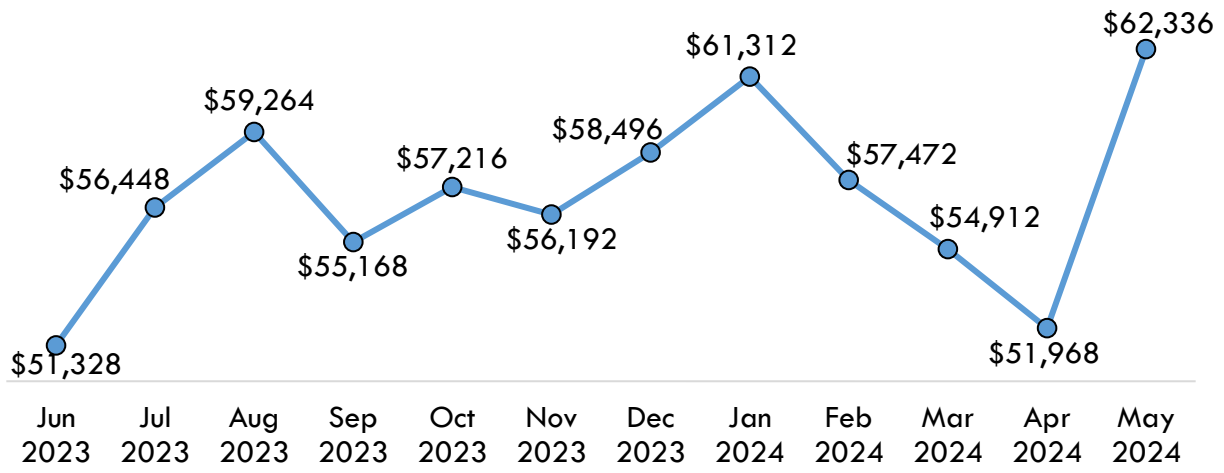
Job Title	Job Ads	Employer	Job Ads
Automotive Technicians	449	Crash Champions	188
Automotive Mechanics	362	MV Transportation	149
Auto Body Technicians	258	Pep Boys	141
Automotive Service Advisors	173	American Tire Depot	128
Automotive Technicians/Mechanics	145	AutoNation	121
Mechanics	138	Caliber Collision	91
Lube Technicians	122	Walmart	85
Smog Technicians	103	Valvoline	51
Automotive Service Technicians	94	Toyota Motors	48
Automotive Tire and Lube Technicians	80	Honda	45

Source: Lightcast, Job Postings data

Since June 2023, advertised wages from job postings for these three automotive technology occupations have fluctuated between $51,000 and $62,000. May 2024 had the highest advertised wages in the past 12 months, with job postings averaging an annual salary of $62,336. Of the job postings that listed minimum experience criteria, most employers were seeking two to three years of experience (17% of postings) or zero to one year of experience

(9%), signaling that there are entry-level jobs available in the region. 11% of job ads were seeking a candidate with 4 or more years of experience.

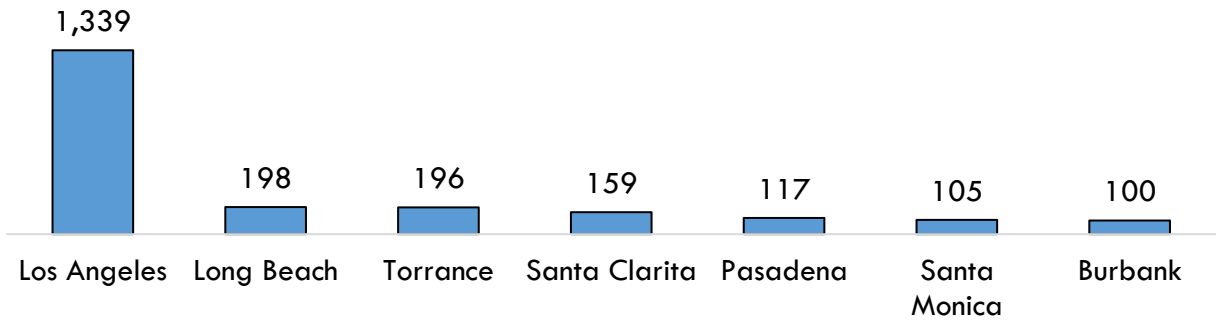
Advertised Wage Trend Over Last 12 Months



Source: Lightcast, Job Postings data

Within Los Angeles County, the top cities for these automotive technology jobs were Los Angeles, Long Beach, Torrance, Santa Clarita, and Pasadena. Some of the top certifications sought after by employers were Automotive Service Excellence (ASE) certification, commercial driver's license, ASE Advanced Engine Performance Certification, and Hazmat endorsement.

Number of Job Postings by City



Source: Lightcast, Job Postings data

COMMUNITY COLLEGE REPRESENTATION

Cerritos College

Program Name A.S. in Automotive Technology

Website https://www.cerritos.edu/auto/about.htm

Overview The goal of the Automotive Technology department is to train the next generation of automotive technicians in bumper-to-bumper repair. Our college has partnerships with General Motors (GM ASEP) and Ford Motor Company (Ford ASSET) to offer cohort-based brand specific technician training. We also have a General Technician program that includes a broader look into several import brands. They include Subaru (Subaru U), Nissan (Nissan Technician Training Academy), Stellantis (Mopar CAP), Audi (Audi Education Partnership), and now Mercedes-Benz (MB Campus). We partner with the Greater Los Angeles Motor Car dealers Association (GLANCDA) locally. All program options prepare students for the workforce by providing classroom and hands-on instruction as well as an opportunity for paid on-the-job training.

Cerritos College offers dual enrollment with Artesia High School and Downey High School. With dual enrollment, high school students can take college classes where they receive both college units and high school credit.

The Advanced Transportation and Logistics program (ATL) was created as a means for keeping California competitive as a national leader in advanced transportation and energy technologies. Cerritos College is the host site for Advanced Transportation and Logistics.

For more information, contact:

Joe Mulleary, Automotive Technology, Department Co-Chair, jmulleary@cerritos.edu

Citrus College

Program Name A.S. in Automotive Technology

Website https://catalog.citruscollege.edu/disciplines/automotive-technology/

Overview	Automotive Technology, a career technical program, provides the theoretical background and practical experience necessary to gain entry-level employment or advancement in the automotive technology industry as career-ready practitioners. The program has a contract with Toyota Motor North America that provides students with vehicles & training aides, diagnostic equipment, and a dealer network that helps with job placement. The program offers courses that lead to an associate degree in Automotive Technology as well as to certificates of achievement in Automotive Service, Diagnosis, and Repair—Master Technician; Automotive Service, Diagnosis, and Repair—Toyota/Lexus/Scion Technician; Automotive Service, Diagnosis, and Repair—Undercar/Drivetrain Specialist; Automotive Service, Diagnosis, and Repair—Underhood Specialist; Clean Energy and Vehicle Electrification Technology; and Maintenance and Light Repair.

For more information, contact:

Kimberly Mathews, Dean of Career, technical and Continuing Education, automotive@citruscollege.edu

Compton College

Program Name	Certificate of Achievement
Website	https://www.compton.edu/academics/business-industrial-studies/automotive-technology/index.aspx
Overview	The automotive technology program prepares students for employment in the field and provides upgrade opportunities for currently employed personnel. By completing the degree and/or certificate requirements, the student will gain proficiency in safety practices, automotive service, testing, troubleshooting, brakes, suspension, wheel alignment, engine tune-up, electrical systems, fuel systems (carburetion and fuel injection), emission systems, transmissions, drive trains, engine repair, engine rebuilding, automotive machining, or air conditioning. Competencies will be assessed regularly in accordance with Automotive Service Excellence (ASE) standards. A student completing degree requirements may expect to enter industry as a technician in automotive service, repair, tune-up, smog certification, or automotive air conditioning.

For more information, contact:

Janette Morales, BIS Guided Pathways Counselor, jmorales13@compton.edu

East Los Angeles College

Program Name	Automotive Technology, Certificate of Achievement
Website	https://www.elac.edu/academics/aos/accounting
Overview	Computerization has revolutionized automobile design and mechanics need a comprehensive knowledge f all the systems of a vehicle to be successful in industry. Students may enter the program with no prior experience and build their skills so they are able to diagnose and repair today's sophisticated automobiles. Faculty members are licensed Master mechanics and have years of experience in private industry. The automobile technology facilities are second to none. Students use state-of-the-art tools and equipment. Hands-on laboratories combined with lectures that describe all the mechanical systems of modern cars and the latest computer assisted repair and testing equipment prepare students to transition easily into automotive dealerships or independent repair shops.

For more information, contact:

Adrian Banuelos, Chairperson, Automotive Technology Department, banuelam@elac.edu

El Camino College

Program Name	A.S. Automotive Technology
Website	http://catalog.elcamino.edu/preview_program.php?catoid=11&poid=2466&returnto=612
Overview	The automotive technology program prepares students for employment in the field and provides upgrade opportunities for currently employed personnel. By completing the degree or certificate requirements, the student will gain proficiency in safety practices, automotive service, testing, troubleshooting, brakes, suspension, wheel alignment, engine tune-up, electrical systems, fuel systems (carburetion and fuel injection), emission systems, transmissions, drive trains, engine repair, engine rebuilding, automotive machining, or air conditioning. Competencies will be assessed regularly in accordance with Automotive Service Excellence (ASE) standards. A student completing degree or certificate requirements may expect to enter industry as a technician in automotive service, repair, tune-up, smog certification, or automotive air conditioning.

For more information contact:

David Gonzales, Dean of Industry & Technology, Dgonzales@elcamino.edu

Glendale College

Program Name	Associate in Science
Website	https://www.glendale.edu/academics/degree-certificate-programs/graduation-requirements/associate-in-arts-major-requirements/engineering-mechanical-engineering
Overview	Students completing an AS degree in Mechanical Engineering develop abilities in mathematics, basic sciences, engineering topics such as mechanics, as well as general education subjects that complement technical content. Students must complete all required courses for a total 37 units. The AS degree in Mechanical Engineering prepares students for transfer to a 4-year mechanical engineering university program. **Program Learning Outcomes**: Upon completion of this program, students will identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics; apply the engineering design process to create engineering solutions that meet specified needs that integrates consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors; communicate technical information effectively with a range of audiences; function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet technical objectives; and transfer to a bachelor's degree program in order to finish preparing for a career in a specific discipline of mechanical engineering.

For more information contact:

Akila Bacha, Instructor of Aviation, Abacha@glendale.edu

Long Beach City College

Program Name	Associate in Science, Advanced Transportation Technology
Website	https://www.lbcc.edu/att
Overview	Do you love motorsports or want to learn more about your car? Are you into reducing our environmental impact or are you looking for a career in the growing field of Electric Vehicles, Hybrid Vehicles, or Alternative Fueled Vehicles? We've got it all from passenger cars to heavy-duty Compressed Natural Gas engines, learn about the latest technology, and get the experience needed for this exciting field.

For more information contact:

Danny Tan, Professor, Automotive Technology, dtan@lbcc.edu

Los Angeles City College

Program Name	Associate in Science
Website	https://www.lacc.edu/academics/pathways/stem
Overview	This pathway is for students interested in a STEM career. Students learn the skills necessary to start careers in science (biology, chemistry, geology, geography, natural sciences, physics), technology (computer programming and applications, computer information systems, computer science, computer technology, cybersecurity), engineering, and mathematics.

For more information contact:

JayeshaBhakta, Department Chair, bhaktaj@piercecollege.edu

Los Angeles Harbor College

Program Name	Associates in science
Website	https://www.lahc.edu/academics/cte
Overview	Los Angeles Harbor College's CTE programs provide educational, work-related, and technical training that will lead to employment, career advancement or transfer to a university Our programs offer comprehensive classroom and practical instruction delivered by experienced, highly qualified faculty and/or industry professionals. Designed with the advice and counseling of industry advisors and LAHC Faculty working in the field, our CTE programs are relevant and current with industry needs, tends and technological advancements.

For more information contact:

Tigran Alikhanyan, Instructor, alikhat@lahc.edu

Los Angeles Mission College

Program Name	Associates in science
Website	https://www.lamission.edu/academics/pathways/shf/stem-dept
Overview	The mission of the Los Angeles Mission College STEM program is to provide students majoring in science, technology, engineering, and math with support to help achieve their goals to graduate with an associate degree, transfer to a four-year university, or prepare for fraduate school. Through support services, activites, and presentations from professionals in the field, the STEM office aims

to promote the development of academic mastery and enhance a student's career success.

For more information contact:

Angela Pan, STEM Counselor, panaj@laccd.edu

Los Angeles Pierce College

Program Name Associates degree in Science

Website https://www.lapc.edu/academics/pathways/iat/edt

Overview The following associate degree is offered to prepare the student to work in the automotive service and repair field. In collaboration with industry, the college faculty have developed the program shown below which leads to an Associate of Science Degree in Automotive Service Technology. An Advisory Committee composed of industry professionals meets regularly to discuss the training and skills required of an automotive technician. Updates to the curriculum are made in order to meet the current and projected future needs for technologically skilled automotive technicians, Smog Check technicians, service writers and shop managers.

For more information contact:

Judy Lam, Guided Pathways Coordinators, lamj2@piercecollege.edu

Los Angeles Trade Technical College

Program Name Associate in Science, Automotive and Related Technology

Website https://www.lattc.edu/academics/aos/automotive-and-related-technology

Overview

Los Angeles' long-time infatuation with the motorcar has made it a leading center in automotive design. Employment opportunities continue to thrive, and the demand for trained automotive technicians in the field continues to increase. The Automotive and Related Technology program trains students to work as professionals in this field, offering instruction in maintenance, diagnosis, and overhaul procedures of electrical and fuel injection systems.

By fulfilling the program requirements, students will have gained the skills necessary to maintain, repair, and diagnose electrical, fuel injection systems, and overhaul procedures, as well as basic shop practices needed to meet industry standards.

For more information contact:

Jess Guerra, Pathway Chairperson, ATMPathway@lattc.edu

Los Angeles Southwest College

Program Name	Associates in Science
Website	https://www.lasc.edu/academics/aos/electronics-technology
Overview	Circuits, electrons, operating systems, and lab testing are all components of electronics technology. A career in this industry will keep you busy, challenged, and fulfilled as you work individually or with teams to create computer operating systems, integrate them with the circuit system necessary for operations, then test and confirm that all circuits are working properly. You will be the hub of the company and keep the energy flowing as you help your colleagues solve problems that are impacting operations. Your desire to understand how things work combined with electronics will serve you well in this dynamic business sector. Jobs and services are also in demand in commercial and residential careers in this industry. You will be on the cutting-edge of new electronic equipment that drives modern life as you adapt it to your company to increase business operations and efficiencies.

For more information contact:

Dr. Allison Moore, Dean/Chair Person, mooreap@lasc.edu

Los Angeles Valley College

Program Name	Associates in Science
Website	https://www.lavc.edu/academics/pathways/mec/technology-dept
Overview	Welcome to the Applied Technology Department, where we provide you with the knowledge and skills to succeed in the Hi-Tech world of the twenty-first century. Offering certificates and associate degrees, the Applied Technology Department offers education and hands-on training in a wide variety of programs in the areas of architecture, electronics, engineering, and manufacturing.

For more information contact:

Lucas Haley, Chairperson, haleyll@lavc.edu

Mt. San Antonio College

Program Name	Automotive welding, cutting, and Modification
Website	https://catalog.mtsac.edu/programs/noncredit-programs/programsaz/vocational-programs/voc-welding/automotive-welding/
Overview	Prepares students for entry-level employment as a licensed welder with additional skills development and theory in automotive welding, cutting and modification. Coursework prepares students for industry licensing with emphasis on competencies required for certification in structural steel welding and specialty skills in automotive welding.

For more information contact:

Will Daland, Program Counselor, wdaland@mtsac.edu

Pasadena City College

Program Name	Certificate of Achievement, All Automotive Systems
Website	https://pasadena.edu/academics/divisions/career-technical-education/automotive.php
Overview	The All Automotive Systems Certificate of Achievement is the broadest of our certificates, offering a strong foundation in the major concepts and skills of automotive technology. Upon successful completion of the curriculum you receive one year of industry credit towards your ASE credential. The program has NATEF Student Certification Exams that are part of the curricula, which helps with the mastery of the National ASE test. With a strong Automotive Advisory Board & ASCCA (Automotive Service Council of CA) membership we offer an excellent opportunity for career placement. Our program and instructors meet strict industry standards and are NATEF/ASE certified in MAST (Master Automotive Service Technician) & MLR (Maintenance & Light Repair – Summer 2016)

For more information contact:

Dr. Armine Derdiarian, Division Dean, aderdiarian@pasadena.edu

Rio Hondo College

Program Name	Automotive technology, Bachelors of Science
Website	https://pathways.riohondo.edu/program/automotive-technology-bs/

Overview	The *Bachelor of Science Degree in Automotive Technology* is designed to prepare an individual for a wide variety of technology-based careers within the Transportation Industry Sector. This innovated career designation means that the overall knowledge and skills attained by students within the program center on persistent enhancement in post-production support within today's high-tech Automotive Technology environment, specializing in after-sales Automotive Technical Service, Business Management and Support. The Bachelor of Science in Automotive Technology builds on the college's existing Automotive Technology Program. Our current program—which is well aligned with the automotive industry both regionally and nationally—provides a solid foundation for the development of the new bachelor's program. Successful candidates for employment within organizations requiring a baccalaureate degree in this field need high level advanced Automotive Technology skills and knowledge. Graduates need to be technically competent and possess strong interpersonal skills, such as the ability to communicate effectively, solve problems, work in teams, and pursue continued professional development. The primary goal of the proposed Bachelor of Science in Automotive Technology Degree (ATD) is to provide the automotive industry with employees with these skills. Students will receive training in various business, management and technical courses such as Managerial Accounting, Leadership, Marketing, Advanced Vehicle Systems Design and Performance. Other courses will emphasize soft skills, such as communication, business and technical writing, and human relations.

For more information contact:

Mike Slavich, Dean of Career and Technical Education, Mslavich@riohondo.edu

Santa Monica College

Program Name	Automotive Technology Certificate of Achievement
Website	https://www.smc.edu/academics/areas-of-interest/stem/automotive-technology/
Overview	Get hands-on training and high-tech skills on the latest vehicles and technologies at Santa Monica College. Apply basic diagnostic techniques, maintenance procedures, and repair skills to automotive, electrical, braking and suspension, and steering systems. Learn how to troubleshoot and repair electronic, mechanical, and hybrid-electric vehicles. Gain an understanding of alternative fuels and other emerging technologies, as well as learn how each performs as potential solutions to transportation-related energy and air pollution problems.

Employees in these essential positions in today's automotive maintenance shop operate sophisticated tools and equipment, and practice safe work procedures under the guidance of more experienced technicians.

For more information contact:

Paulette Gomez, Program Specialist, gomez_paulette@smc.edu

West Los Angeles College

Program Name	Associates of Science
Website	https://www.wlac.edu/academics/aos/general-engineering
Overview	Engineering Plus includes five paths: BioEngineering, Civil Engineering, Computer/Software Engineering, Electrical Engineering, and Mechanical Engineering. Our goal is to increase the number of community college students who obtain technician work and/or transfer to four-year universities and successfully attain math and science-based degrees. The program includes internships and other opportunities to gain industry experience.

For more information contact:

Anna Chiang, Division Chair, ChiangAs@laccd.edu