

Automotive Technology: Advanced Transportation

LA REGIONAL PROGRAM ADVISORY

June 21, 2024
11:00 AM – 1:00 PM

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California
Community
Colleges



LOS ANGELES COUNTY
ECONOMIC DEVELOPMENT CORPORATION
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The LA-19 is leading industry-education partnerships to collaboratively strengthen our region's talent development ecosystem

1. Data-driven research on the supply and demand for talent
2. Industry Councils and Regional Program Advisories
3. Developing work-based learning and employment opportunities

For more information, visit: <https://losangelesrc.org>



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OUR VISION

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

OUR MISSION

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



LAEDC'S 5 PILLAR STRATEGY FOR ECONOMIC DEVELOPMENT



Advance connections, programs and policies to increase business growth and hiring in the region.

Industry Clusters

Business attraction, retention and expansion for the entire region.

Business Assistance

Attracts investment into the region from foreign companies.

Foreign Direct Investment

Aligns education with evolving industry trends.

Workforce Development

Objective economic research and analysis.

Economic Research



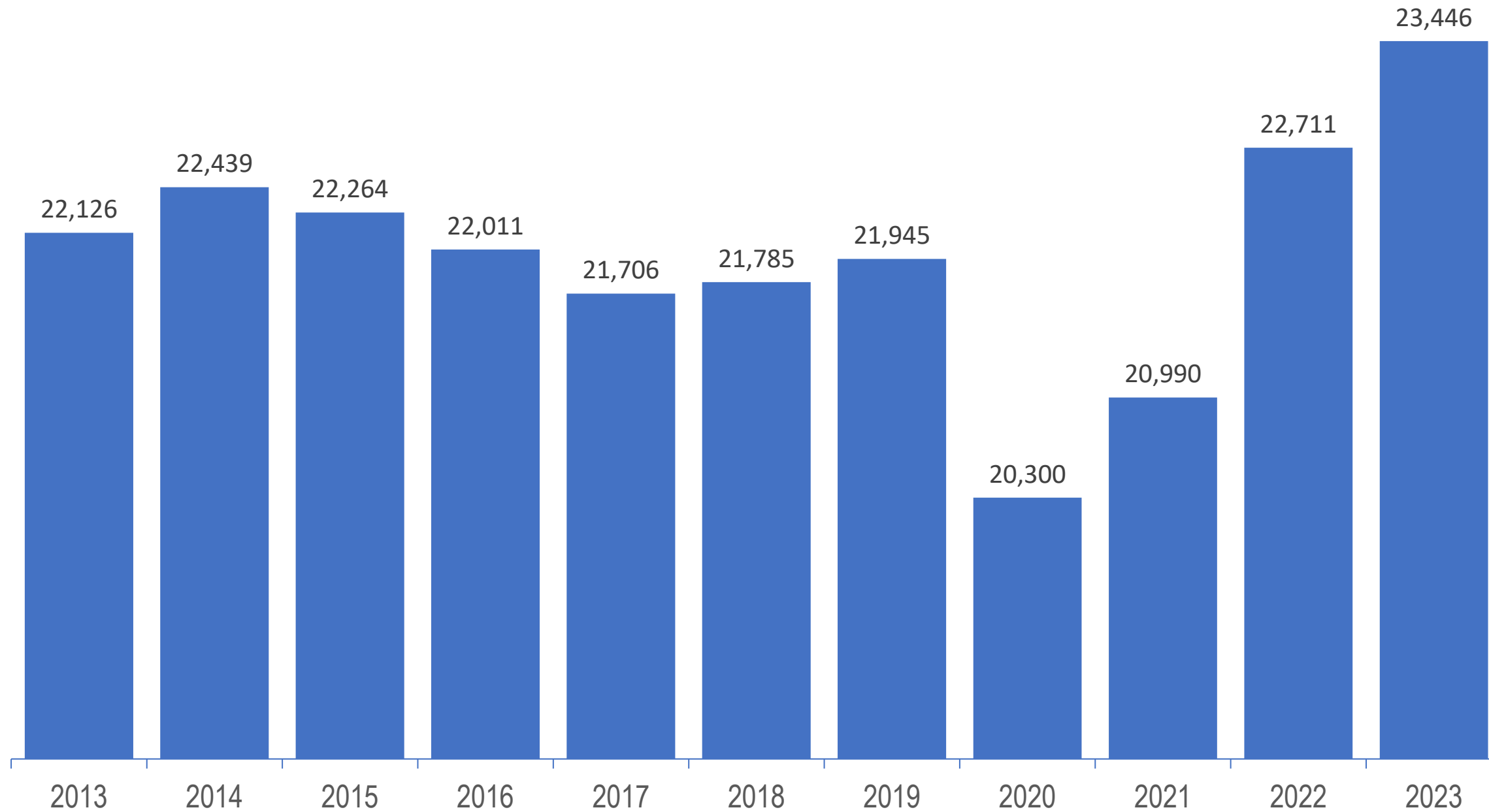
Matthew Skyberg

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For Advance
Transportation and
Automotive
Technology,
employment is
measured using 5
distinct SOC codes

- 49-3021: Automotive Body and Related Repairs
- 49-3022: Automotive Glass Installers and Repairers
- 49-3023: Automotive Service Technicians and Mechanics
- 49-3031: Bus and Truck Mechanics and Diesel Engine Specialist
- 49-3052: Motorcycle Mechanics

Advanced Transportation and Automotive Technology Employment in Los Angeles County, 2013-2023

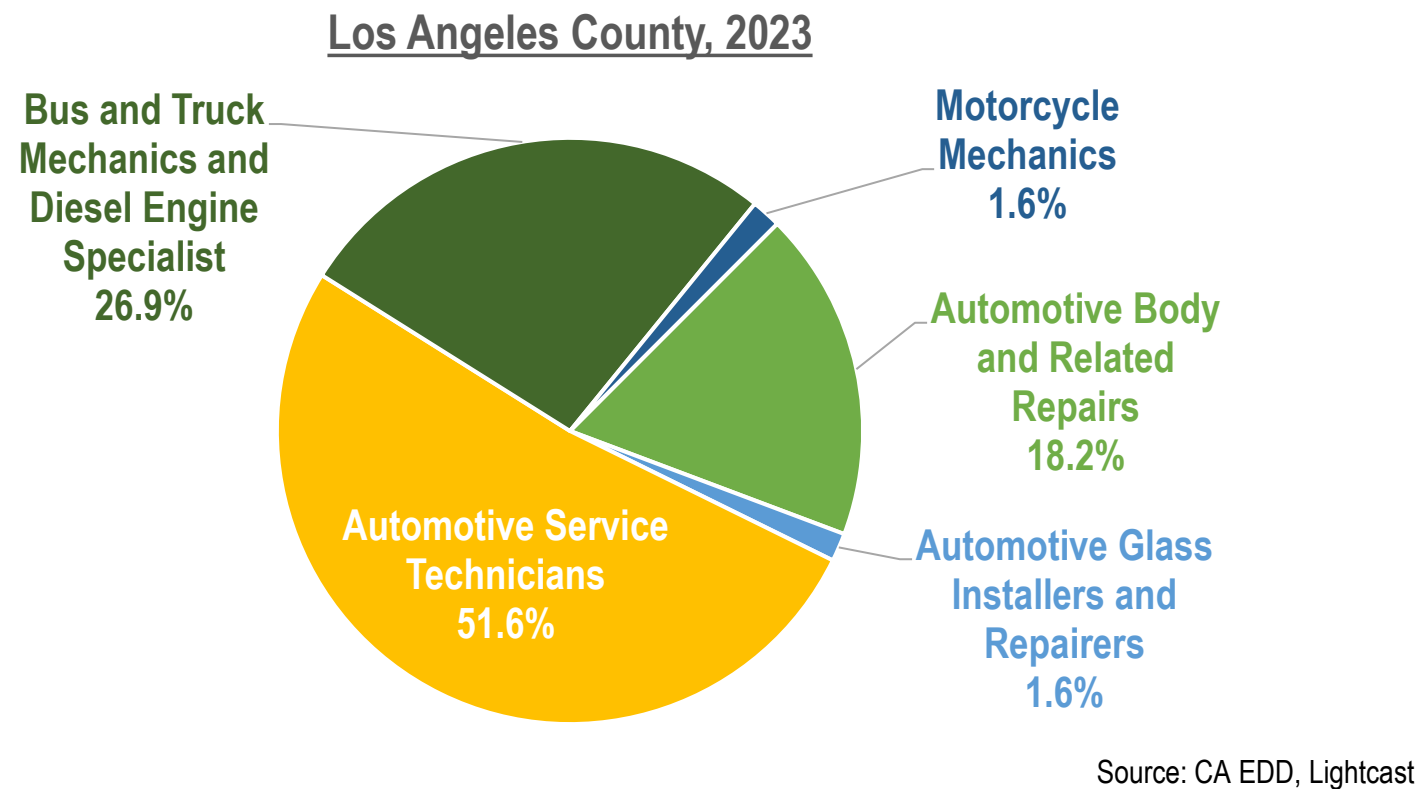
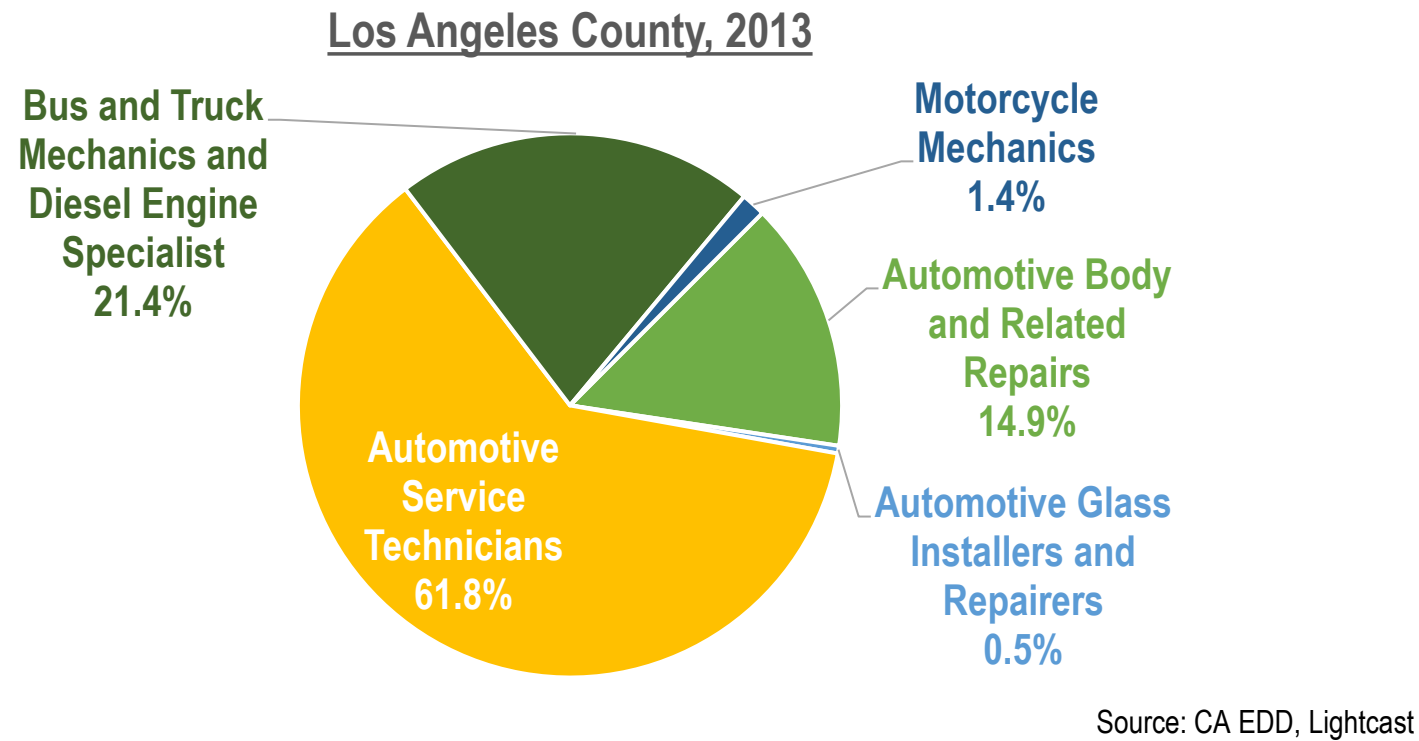


Source: CA EDD, Lightcast

- Industry has employed over 20,000 people during the period of 2012 to 2023
- Payroll employment fell by 7.5% between 2019 and 2020 due to the effects of the COVID-19 pandemic
- From 2020 through 2023 industry employment grew by 15.5%, adding nearly 3,150 net new jobs

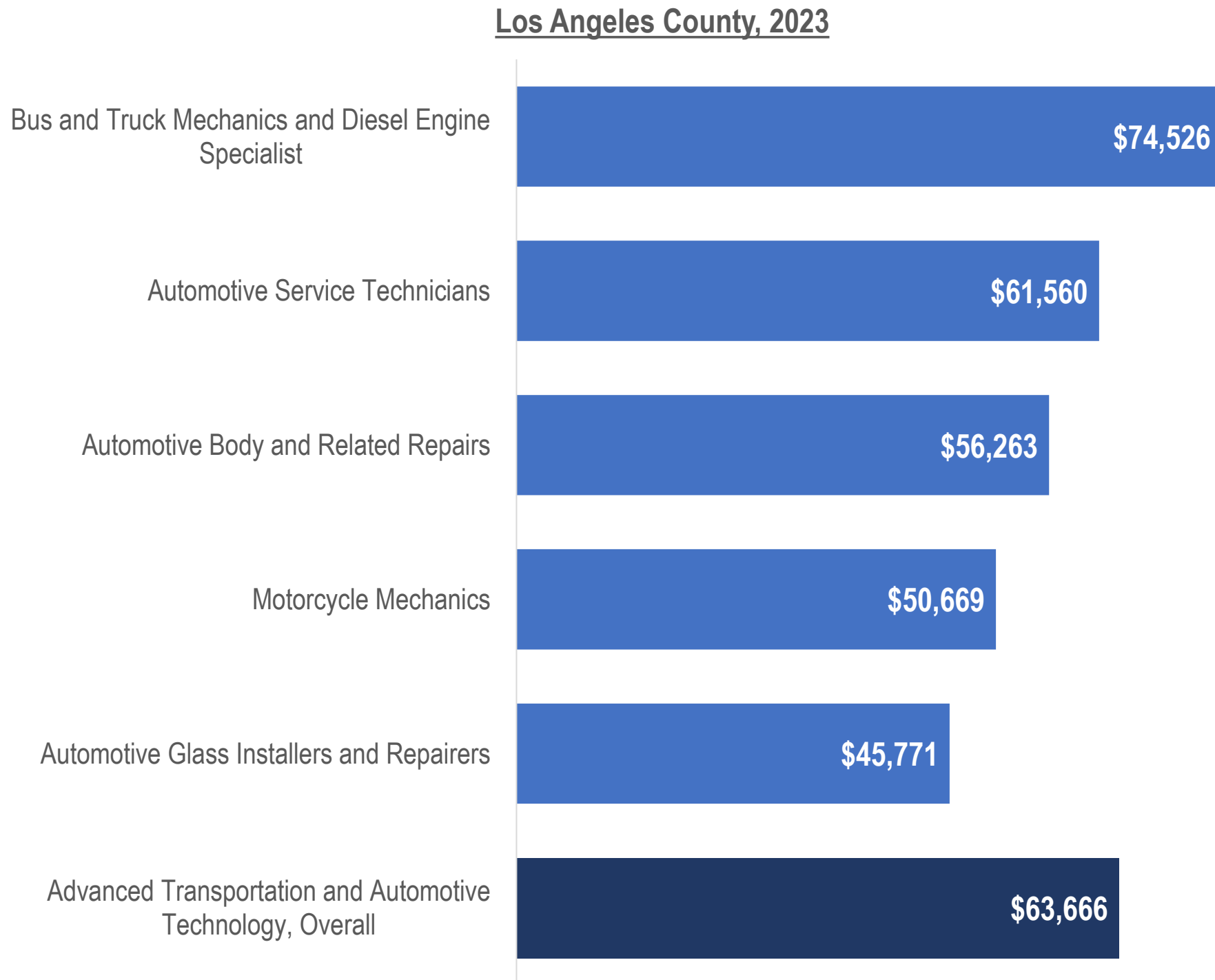


Change in Advanced Transportation and Automotive Technology Employment, Los Angeles County, 2012 - 2022



- Automotive Service Technicians remains the largest share of industry employment since 2013, however the share has dropped by over 10 percentage points between 2013-2023
- Bus and Truck Mechanics and Diesel Engine Specialist has grown by over 5 percentage points to nearly 27% of industry employment in 2023
- Automotive Body and Related Repairs has grown by over 3 percentage points to remain the third in share of industry employment
- Automotive Glass Installers and Repairers has grown by over 1 percentage point to match Motorcycle Mechanics with 1.6% share of industry employment

Median Annual Pay in Advanced Transportation and Automotive Technology Occupations

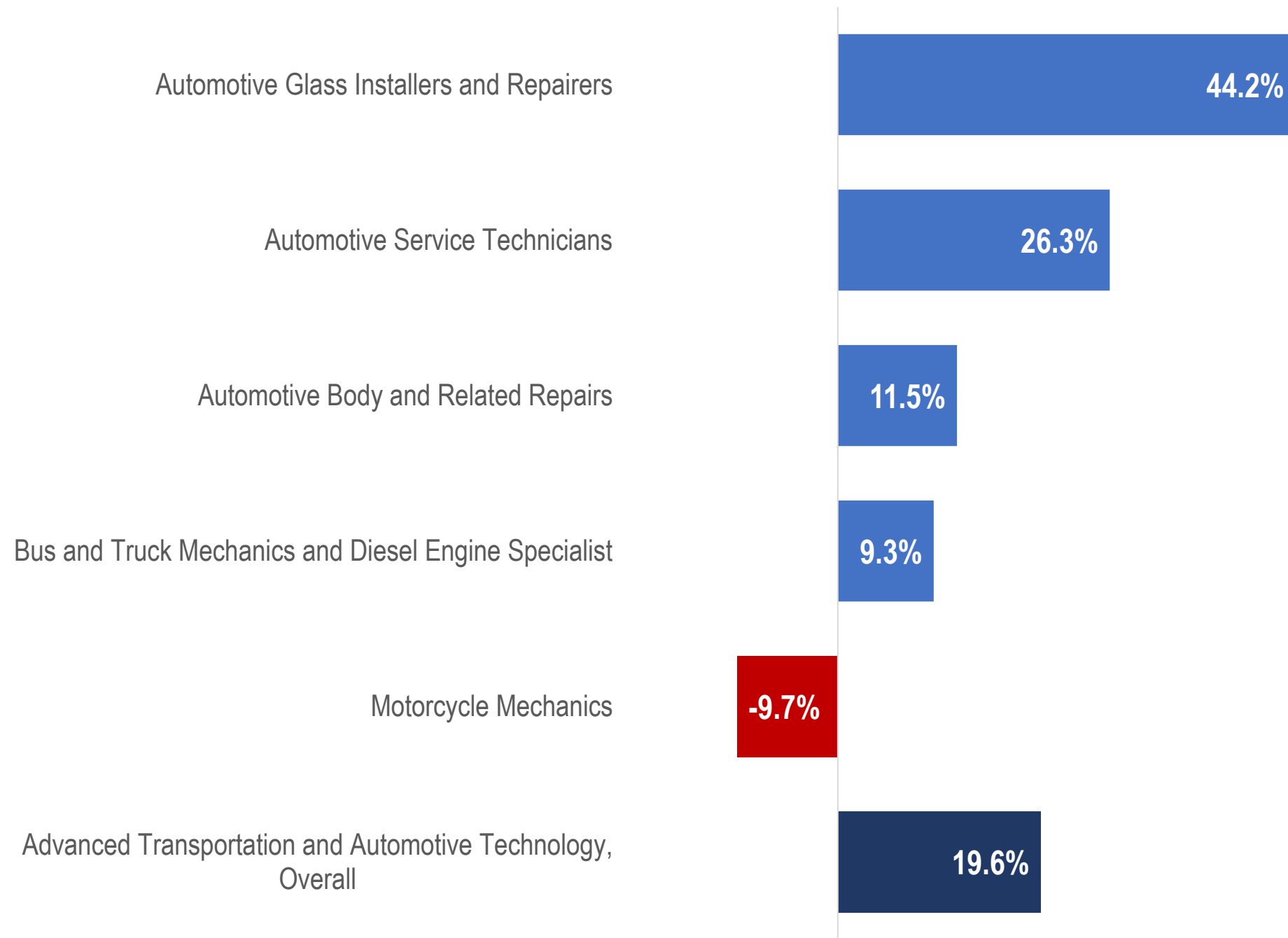


Source: Lightcast

- 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)
- Bus and Truck Mechanics and Diesel Engine Specialist is highest at \$74,526, over 150% of the living wage threshold
- Automotive Glass Installers and Repairers was only occupation below the living wage threshold in 2023
- In 2023, the median annual wage in Los Angeles County was \$67,345 for all occupations

Real Wage Growth in Advanced Transportation and Automotive Technology Occupations

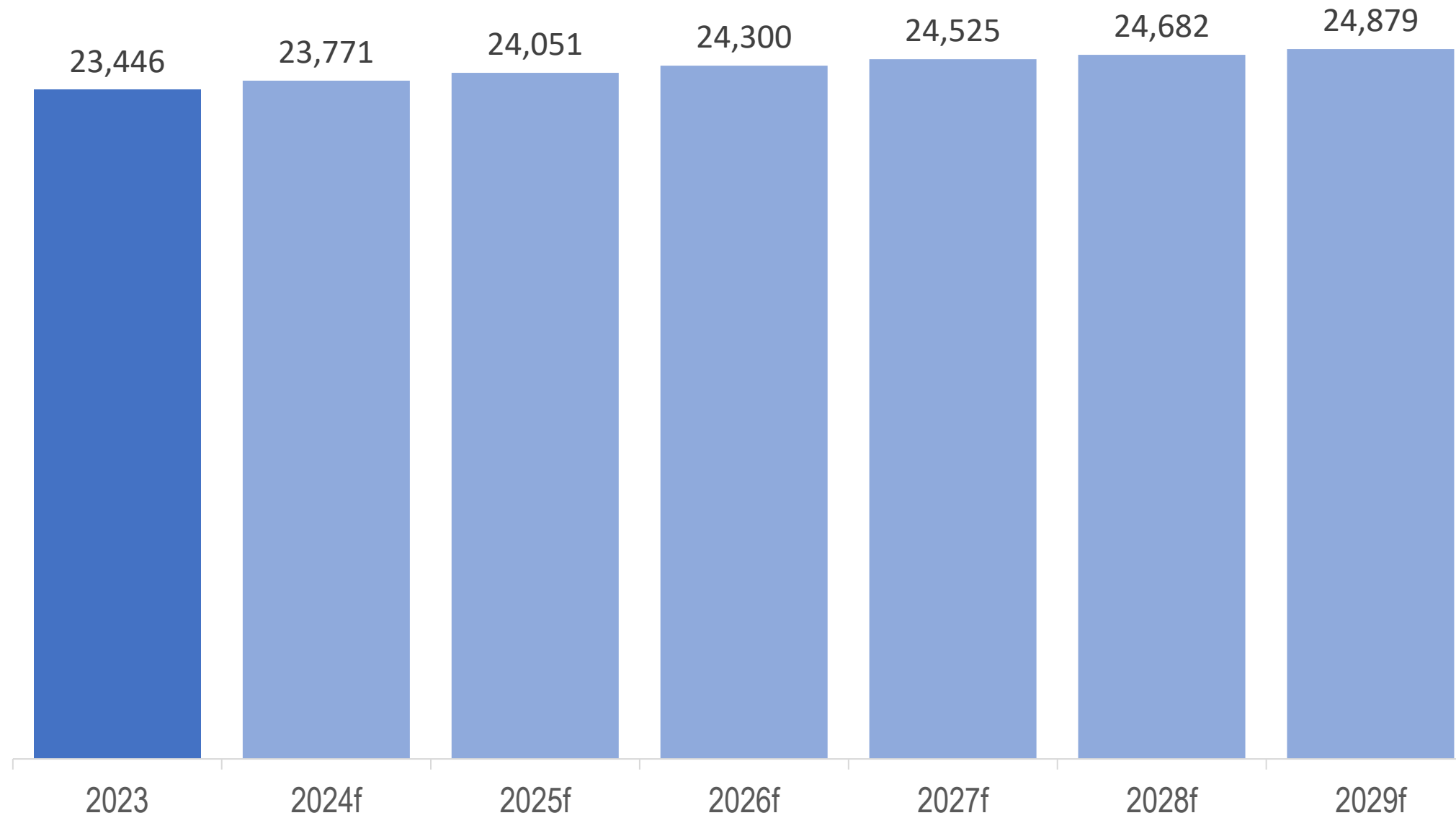
Los Angeles County, 2013 to 2023



Source: Lightcast

- The largest increase occurred in the Automotive Glass Installers and Repairers occupation; real wages grew over 44% from 2013-2023
- Automotive Service Technicians followed at 26.3%
- Automotive Body and Related Repairs grew at 11.5% and Bus and Truck Mechanics and Diesel Engine Specialist grew at 9.3%
- Motorcycle Mechanics was only occupation to have declining wages, dropping nearly 10% between 2013-2023
- Overall, real wages in Advanced Transportation and Automotive Technology grew by 19.6%

Advanced Transportation and Automotive Technology
Forecasted Employment
Los Angeles County, 2023-2029



- From 2023 to 2029, payroll employment in the Advanced Transportation and Automotive Technology industry overall is forecasted to grow by over 6%
- Adding just over 1,430 net new jobs over the next 6 years at a rate of nearly 240 new jobs per year

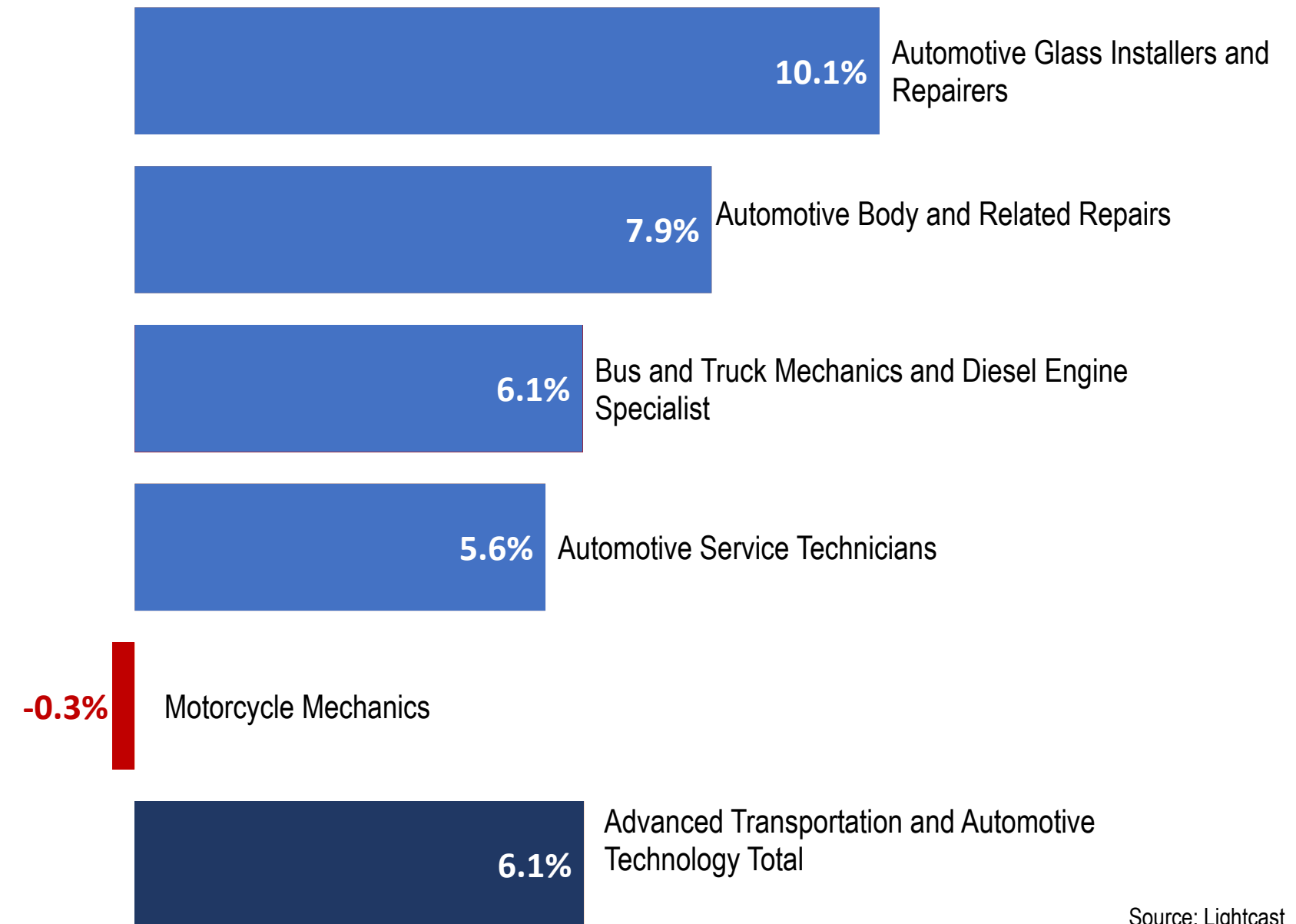
Source: CA EDD, Lightcast

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- Within the industry, the occupations have varying growth projections
- Overall, the Advanced Transportation and Automotive Technology industry is expected to grow 6.1% through 2029.
- The Automotive Glass Installers and Repairers occupation is forecasted to have the highest rate of job growth, increasing by 10.1%.
- Through 2029, all occupations are forecasted to have growth above 5% outside of Motorcycle Mechanics.

Looking Forward

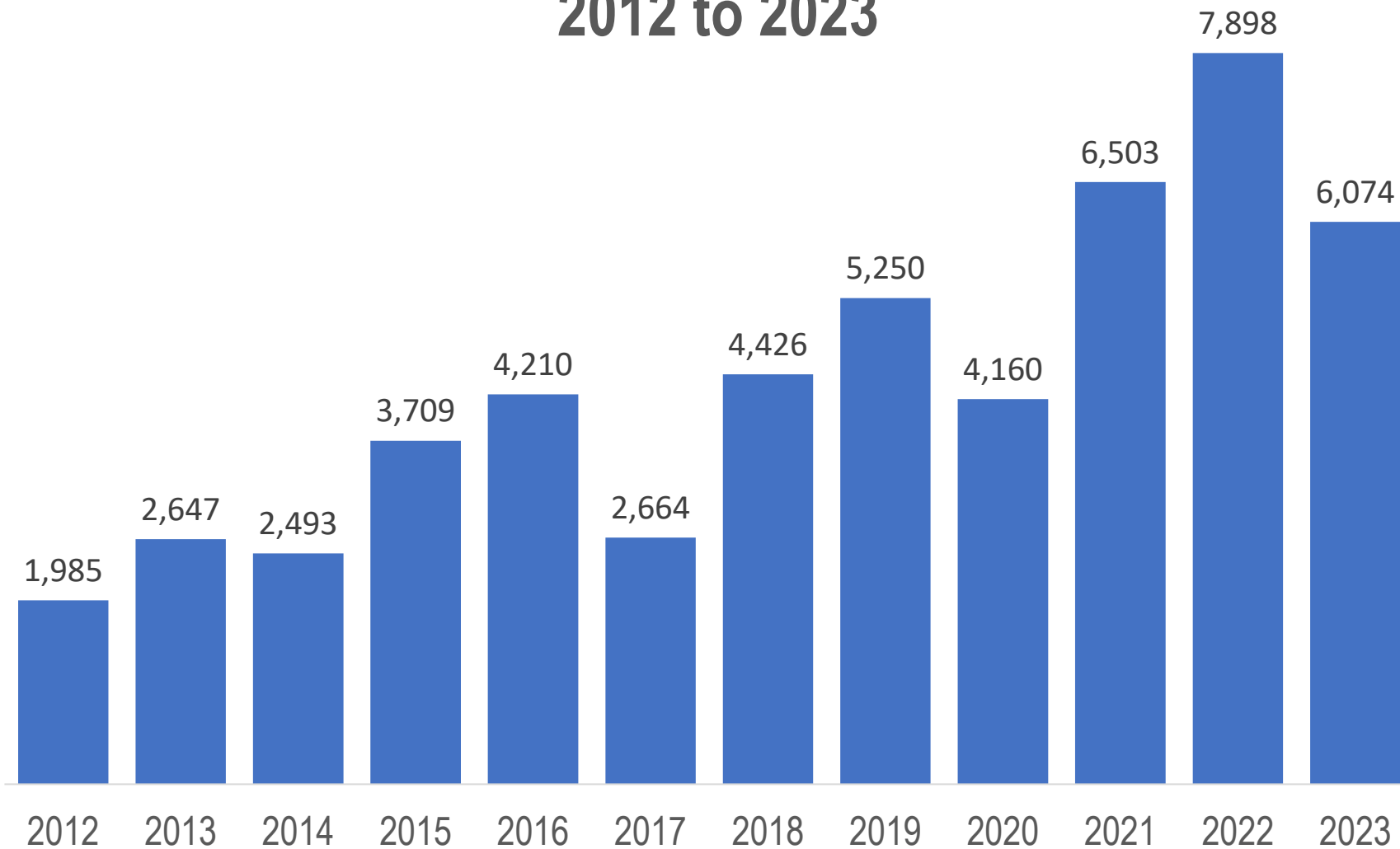
Forecasted Employment Growth in Advanced Transportation and Automotive Technology, Los Angeles County, 2023 to 2029



Source: Lightcast

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Total Advanced Transportation and Automotive Technology Job Postings, Los Angeles County, 2012 to 2023

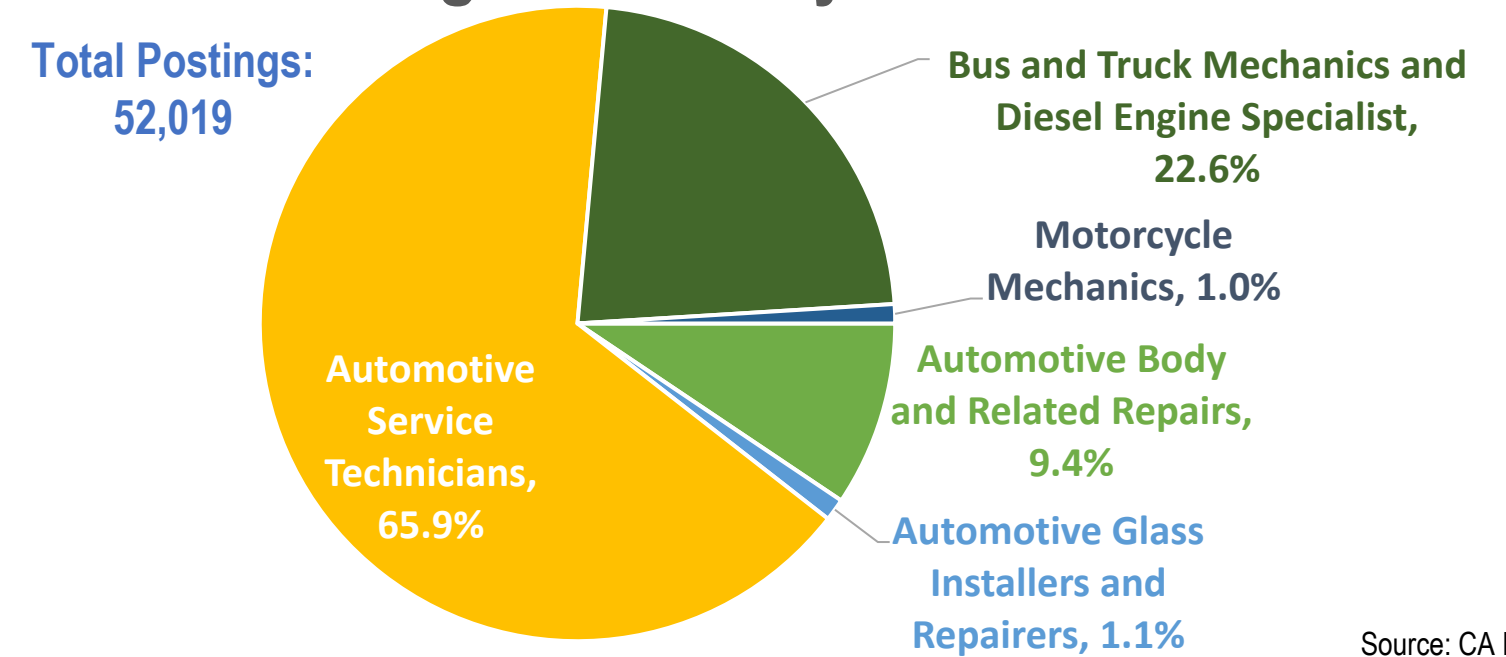


Source: Lightcast

- Job postings peaked in 2022, with nearly 7,900 unique job postings compared to just under 2,000 job postings in the subsector in 2012

Employer Job Postings

Distribution of Advanced Transportation and Automotive Technology Job Postings, Los Angeles County 2012 to 2023

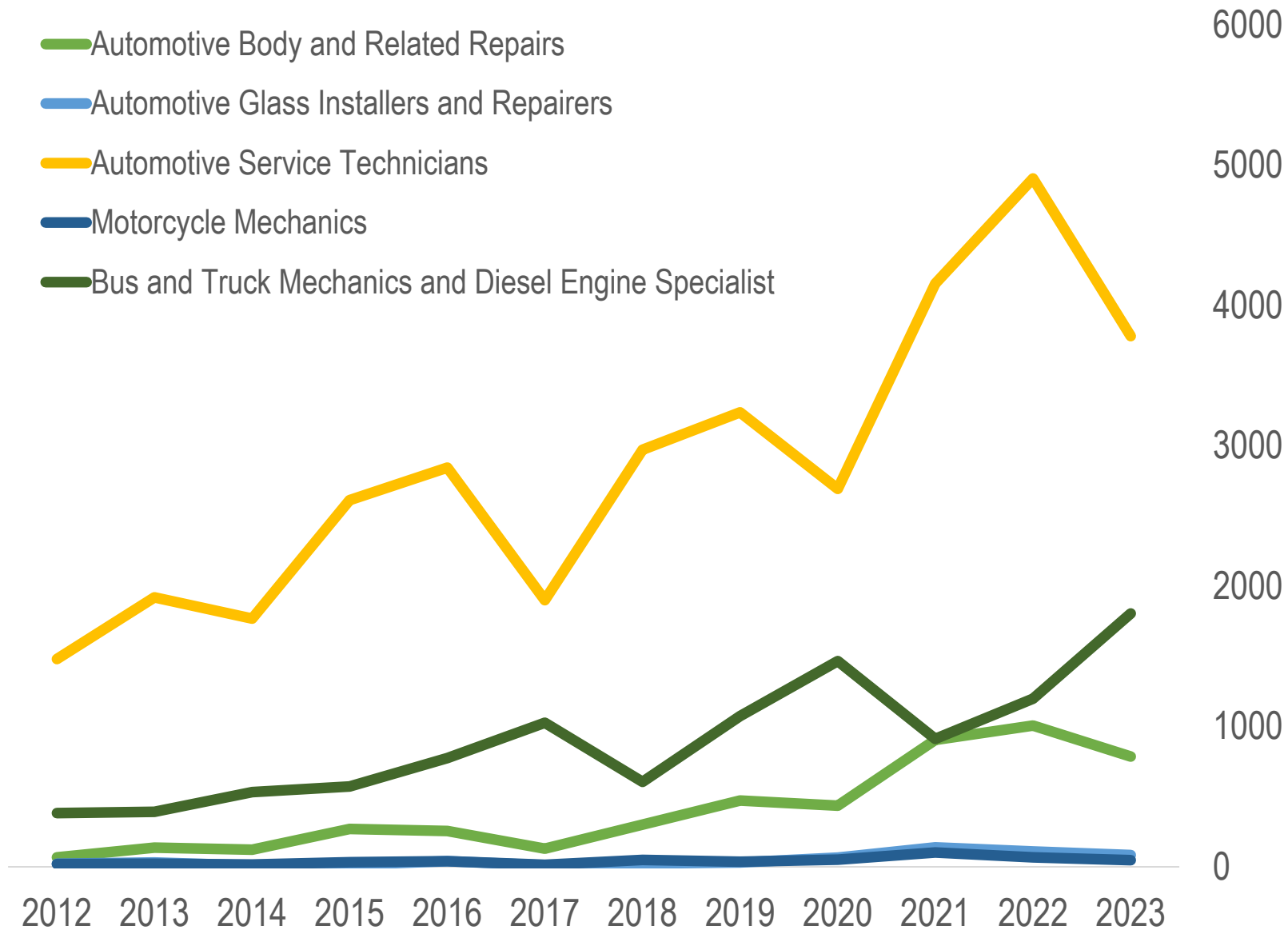


Source: CA EDD, Lightcast

- The Automotive Service Technicians occupation represents the largest share of job postings over the last decade, accounting for over 65% of total job postings during this period
- The Bus and Truck Mechanics and Diesel Engine Specialist occupation had the second largest share, accounting for 22.6% of all unique job postings during this period



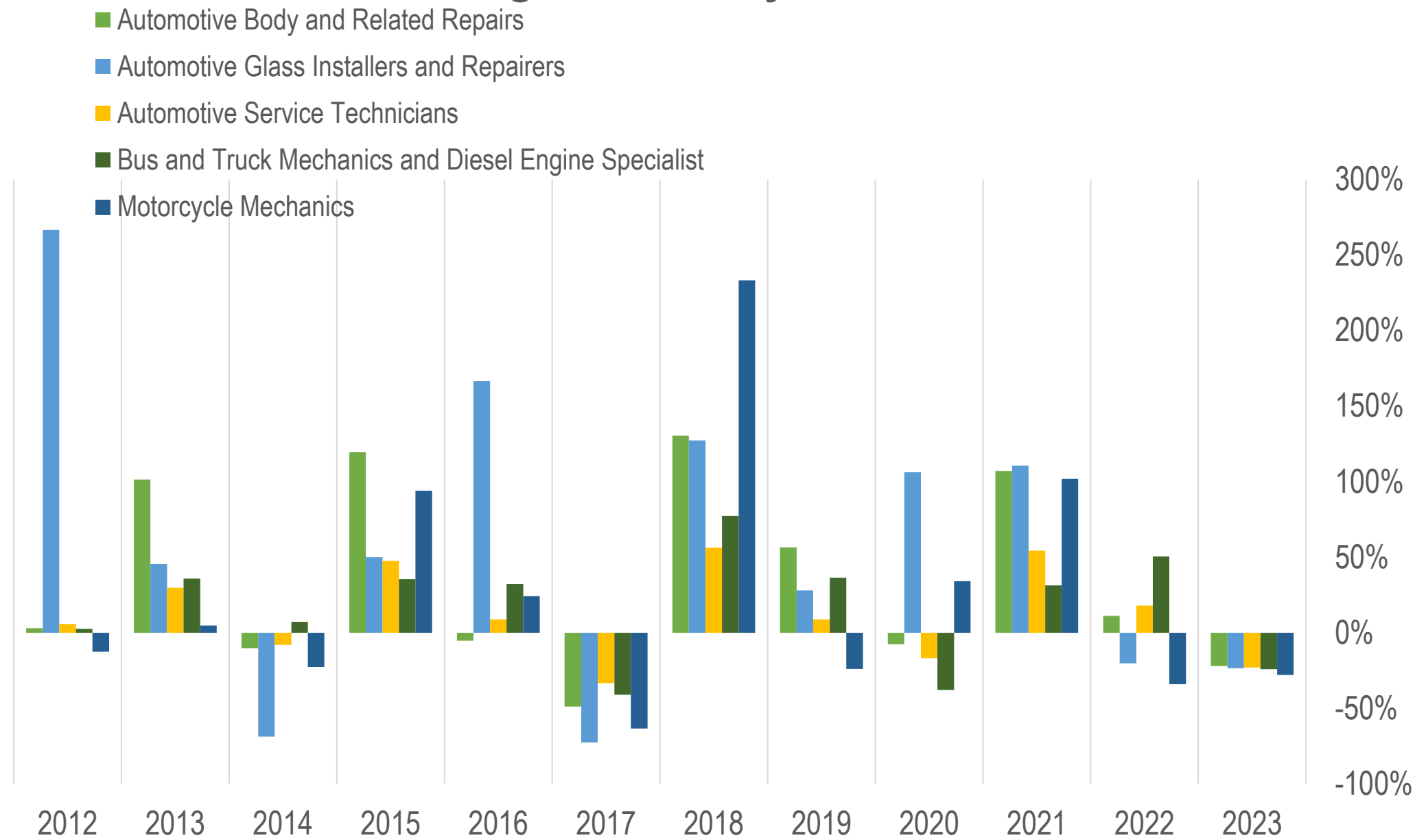
Advanced Transportation and Automotive Technology Job Postings by Occupation Los Angeles County, 2012-2023



Source: Lightcast

- Automotive Service Technicians has been the occupation with the most job postings from 2012 to 2023
- Bus and Truck Mechanics and Diesel Engine Specialist job postings have had steady growth since 2021 to maintain the second most job postings during this period
- Automotive Body and Related Repairs was the occupation with the third most job postings, nearly reaching the second spot in 2021
- Automotive Glass Installers and Repairers and Motorcycle Mechanics have continued to have the fewest job postings during this period

**Growth in Advanced Transportation and Automotive Technology Job Postings by Occupation
 Los Angeles County, 2012-2023**



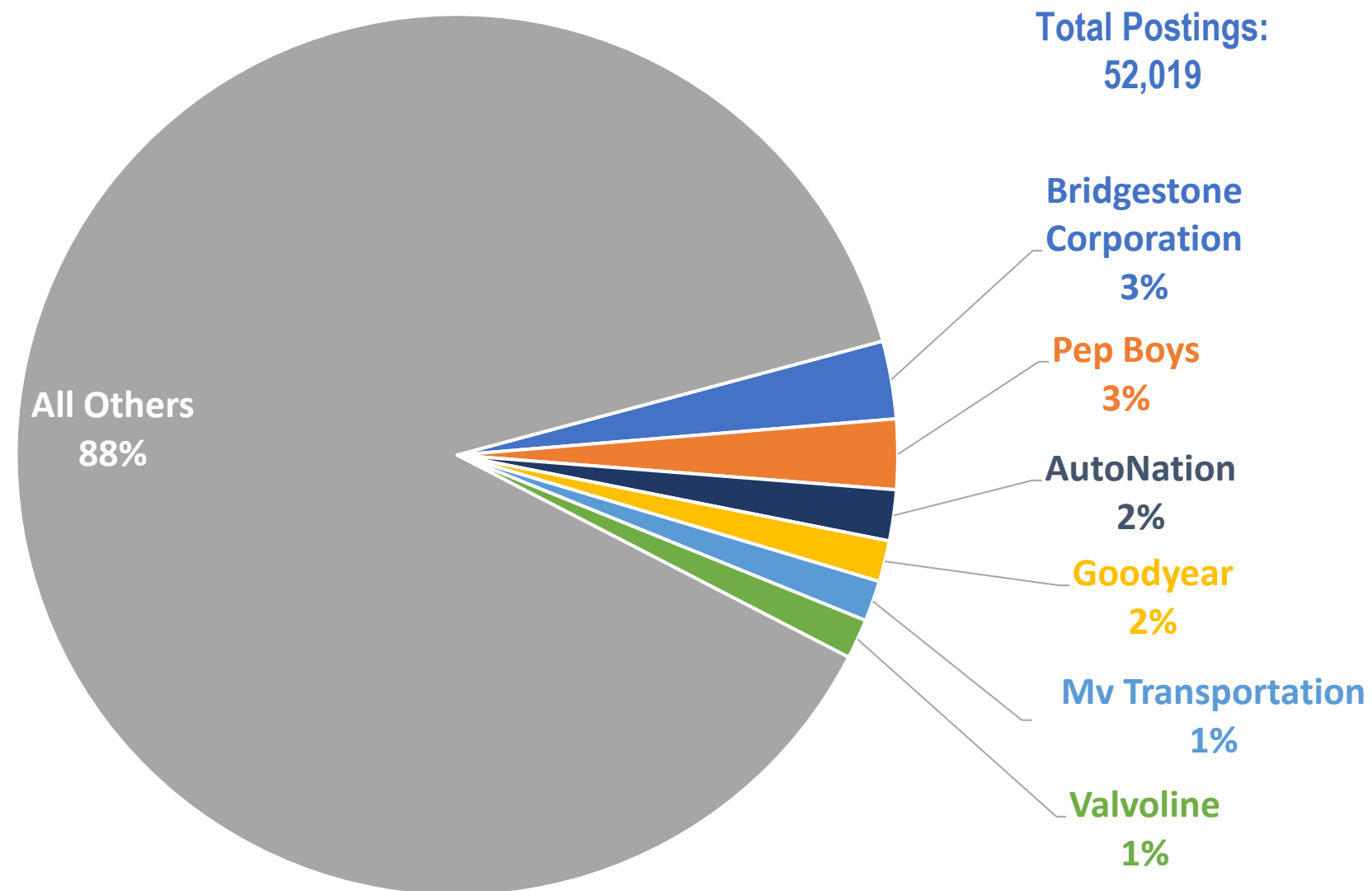
Source: Lightcast

- Automotive Glass Installers and Repairers and Motorcycle Mechanics have had the most year-to-year variability, experiencing years of over 230% growth and years of more than 60% decline
- Automotive Body and Related Repairs have experienced year-to-year growth of over 130% and decline of nearly 50%
- Automotive Service Technicians has been the most stable followed by Bus and Truck Mechanics and Diesel Engine Specialist, average year-to-year change of 12.4% and 17.2, respectively





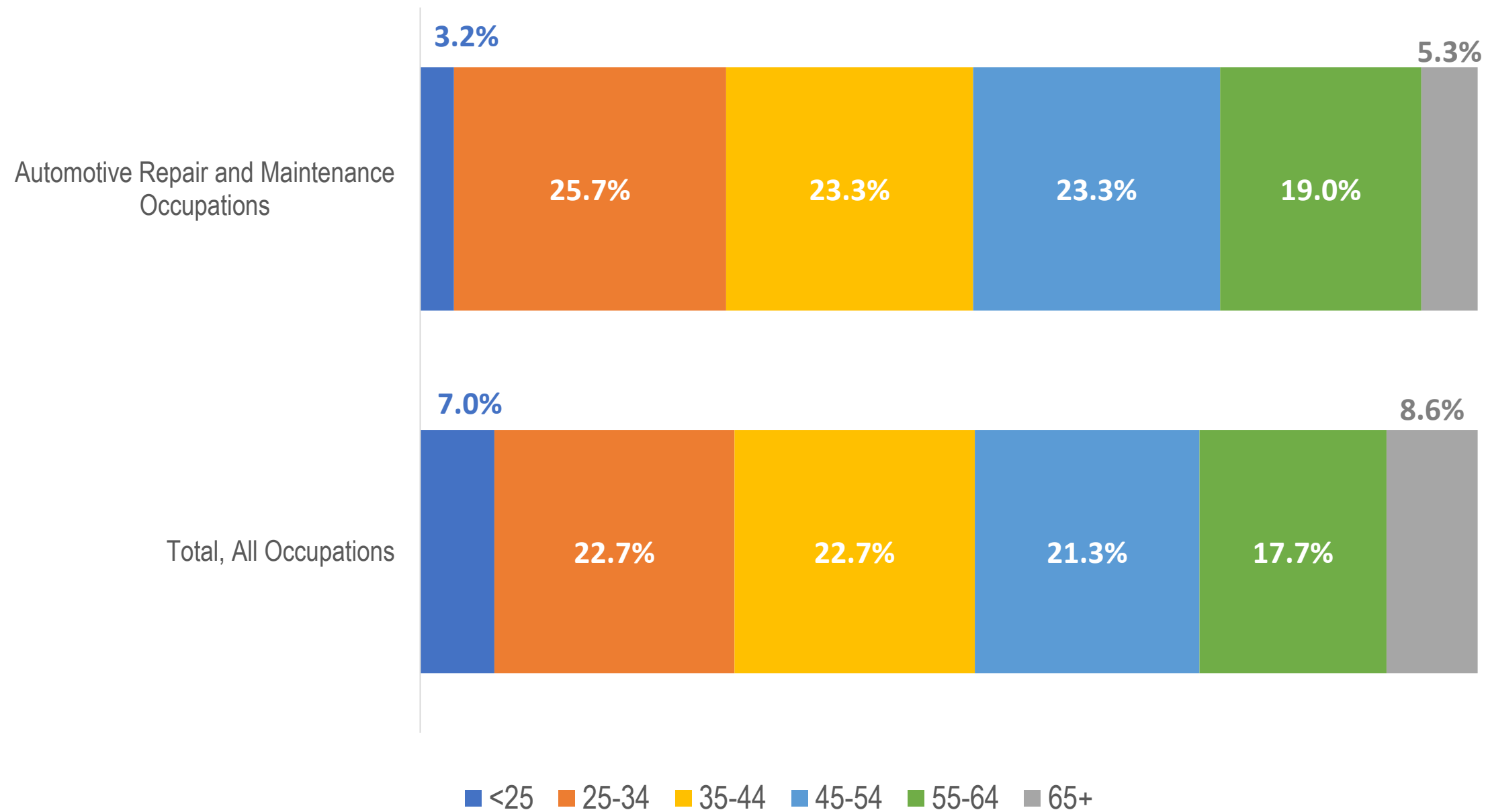
Top Companies by Job Postings in the Advanced Transportation and Automotive Technology Industry, Los Angeles County, 2012 to 2023



- Bridgestone Corporation and Pep Boys have had the largest share of job postings, with each representing 3% of posted opportunities
- The top 6 companies account for only 12% of posted opportunities
- Postings are not highly concentrated in these 6 companies, as 88% of the 52,019 total job postings during this period come from other companies

Source: Lightcast

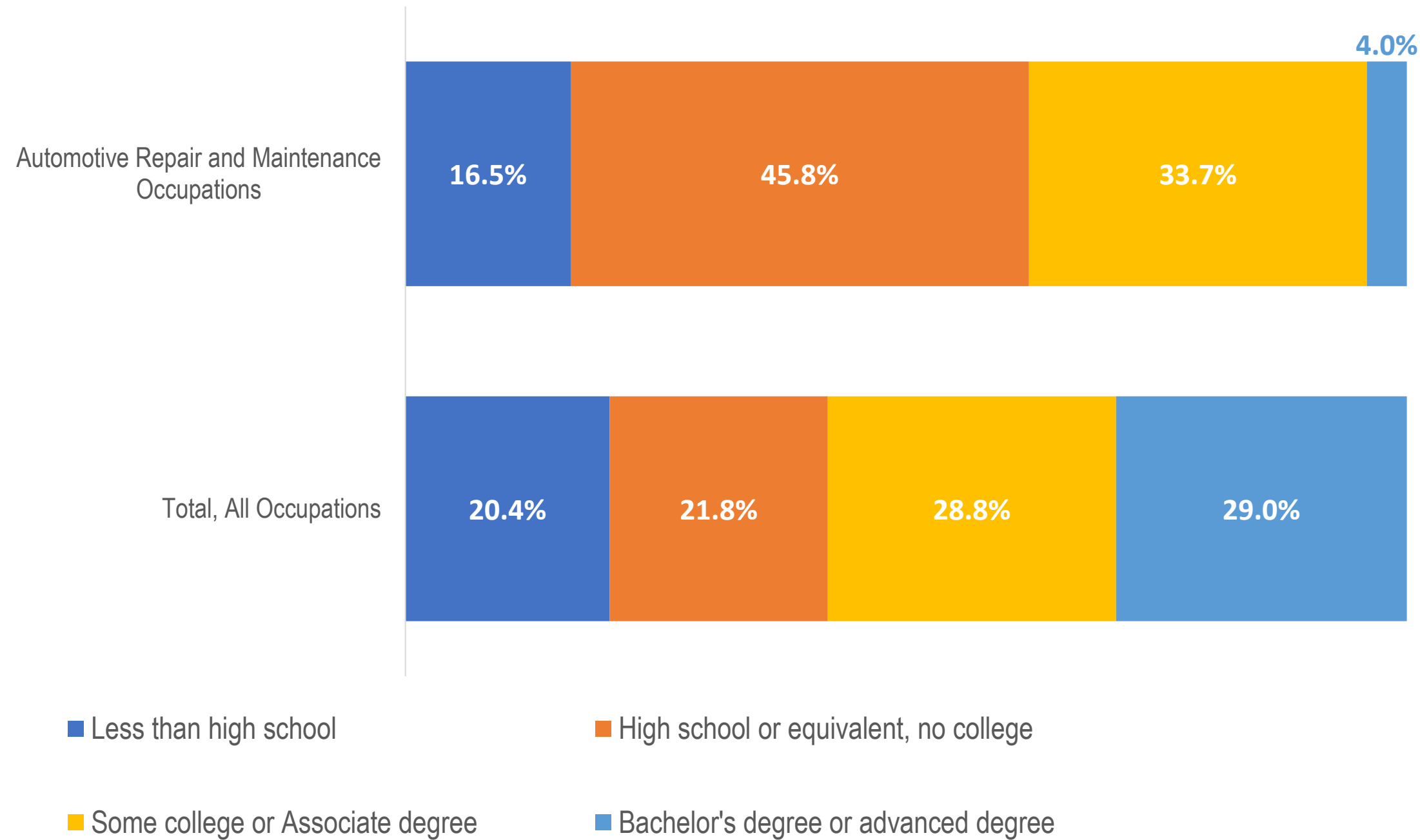
Age Distribution of Advanced Transportation and Automotive Technology Workers, 2023



Source: Lightcast

- Over 46% of employees in Advanced Transportation and Automotive Technology industry are between 25 and 44 years old, almost 4% more than in other occupations in Los Angeles County
- Workers that are 65 years or older are more than 3 percentage points lower compared to all occupations in LA County
- Workers between the ages of 45-64 are over 3 percentage points higher compared to all occupations in LA County

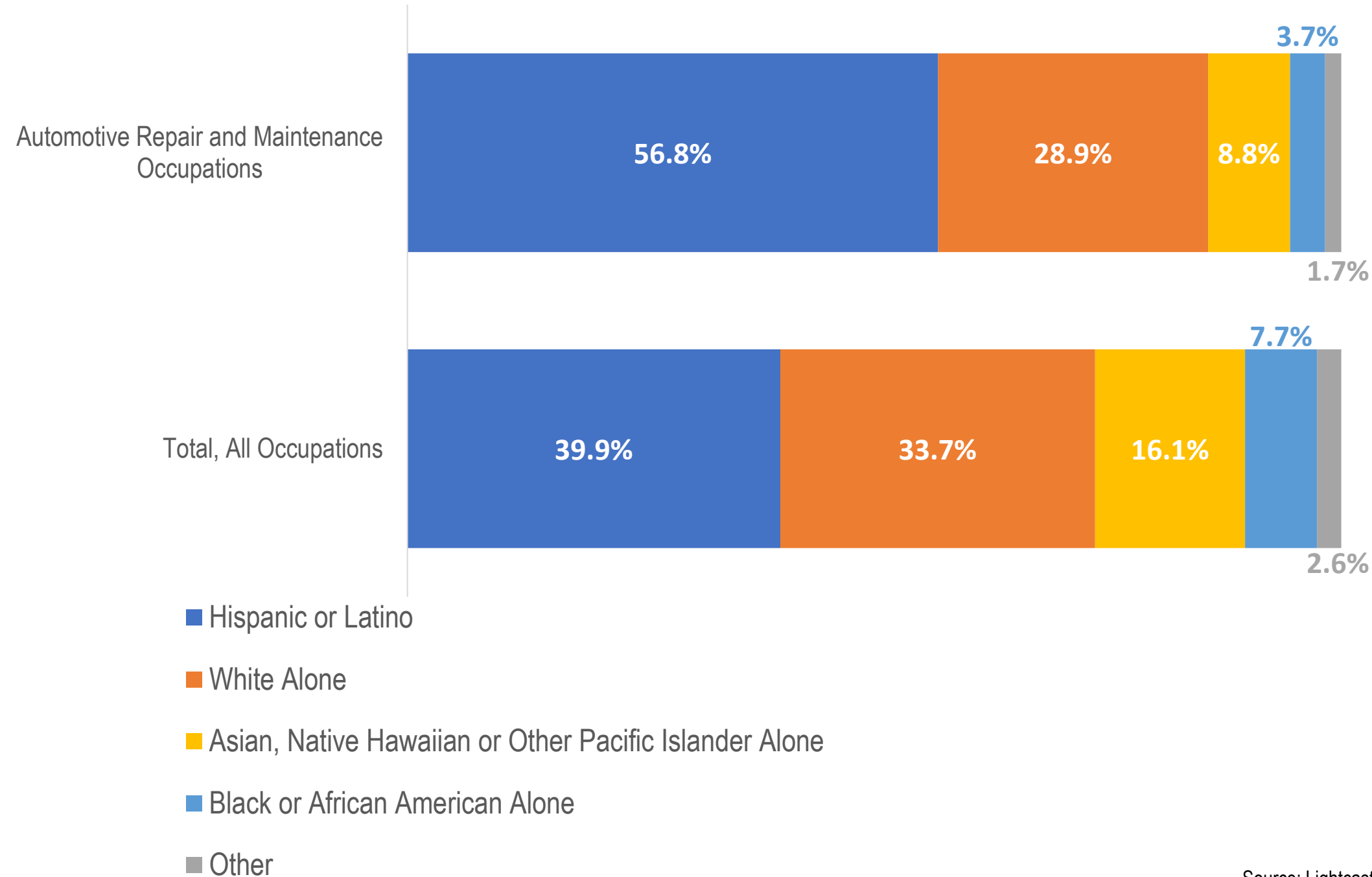
Educational Attainment of Advanced Transportation and Automotive Technology Workers, 2023



- Only 4% of workers in the Advanced Transportation and Automotive Technology industry have a Bachelor's degree or higher, 25 percentage points less than all occupations in LA County
- Workers with some college or an Associate degree are nearly 9 percentage points higher compared to all occupations
- Workers with high school diploma or less are 20 percentage points higher compared to all occupations

Source: Lightcast, Census QWI

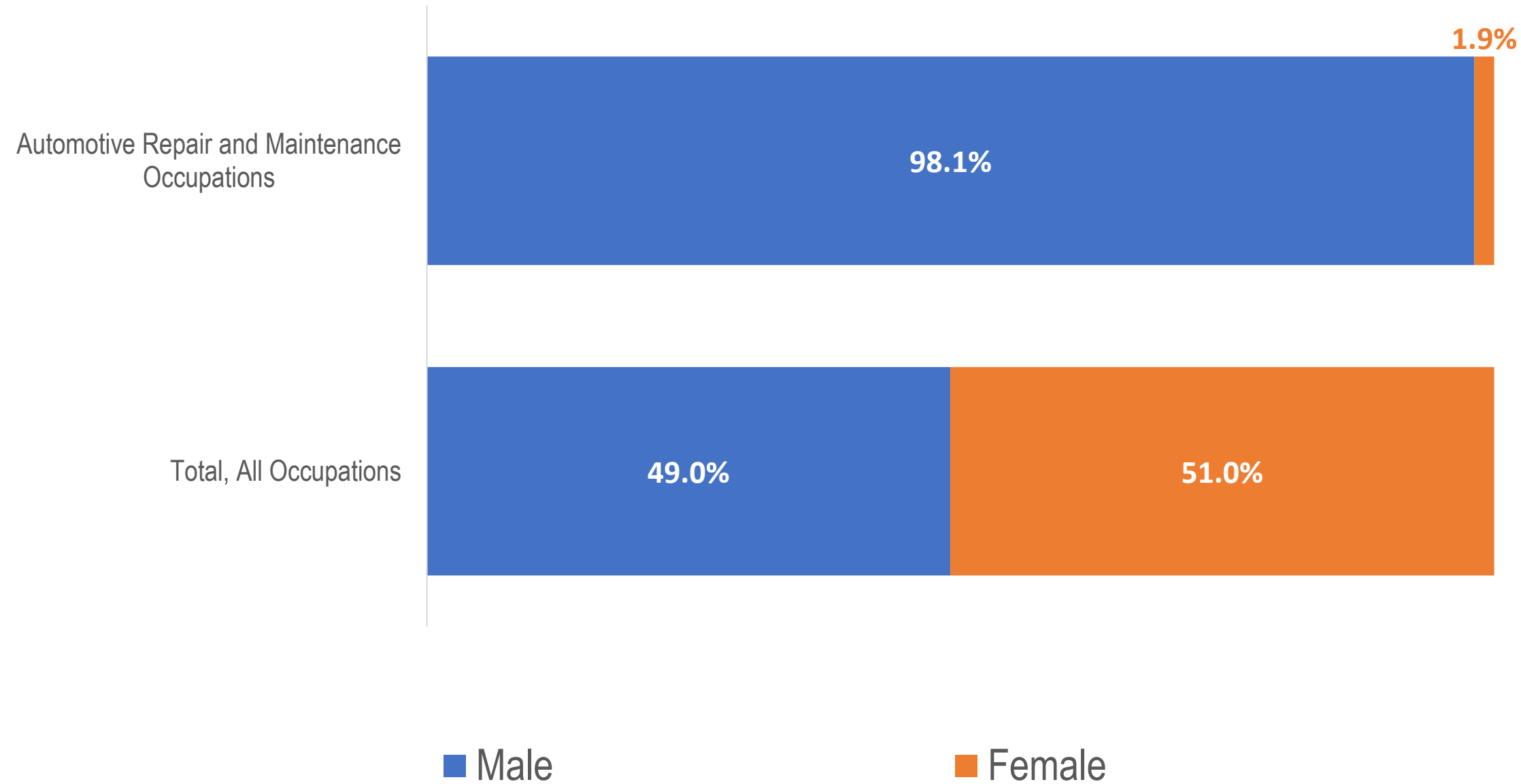
Race / Ethnicity of Advanced Transportation and Automotive Technology Workers, 2023



- Over half of its worker reporting their ethnicity as Hispanic/Latino
 - Nearly 17 percentage points higher than the all-occupation average in Los Angeles County
- Asian and Pacific Islander workers are underrepresented at 7.3 percentage points less compared to all occupations in LA County
- Black workers are also underrepresented, at 4 percentage points less than all occupations in LA County

Source: Lightcast

Gender of Advanced Transportation and Automotive Technology Workers, 2023



- The gender distribution in Advanced Transportation and Automotive Technology is extremely skewed male, those reporting as male accounting for over 98% of the workforce
- Across all industries in Los Angeles County the distribution between genders is more even, with 51% of workers reporting as female

Source: Lightcast

Source: Lightcast		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
Metric						
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%

- These occupations are accessible to workers with a community college education, with 63% to 72% of workers in these occupations having some college or an Associates degree

- Female workers are significantly underrepresented across these occupations, accounting for only 1.3% of Motorcycle Mechanics, 1.6% of Bus and Truck Mechanics and Diesel Engine Specialist, and 1.7% of Automotive Service Technicians and Mechanics
- Hispanic workers are also most overrepresented in Automotive Body and Related Repairers occupations, accounting for 62.2% of workers
- White workers are overrepresented in the Motorcycle Mechanics occupations by over 23 percentage points compared to all occupations in LA County

- Real wages have grown nearly 20% in the Advanced Transportation and Automotive Technology occupations between 2013 to 2023
- Four of the five occupations pay a wage exceeding the living wage threshold in Los Angeles County in 2023
- Automotive Glass Installers and Repairers is forecasted to grow the most through 2029, with growth over 10% percent
- The Advanced Transportation and Automotive Technology industry is expected to grow more than 6% through 2029, adding more than 1,430 net new jobs

CONTACT INFORMATION

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**Los Angeles Center of Excellence for
Labor Market Research**

hosted at MT. SAN ANTONIO COLLEGE

Automotive Technology	Alternative Fuels and Advanced Transportation Technology	Automotive Collision Repair	Diesel Technology	Motorcycle, Outboard and Small Engine Repair
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- Cerritos
- Citrus
- Compton
- East L.A.
- El Camino
- L.A. Pierce
- L.A. Trade-Tech
- Long Beach City
- Pasadena City
- Rio Hondo

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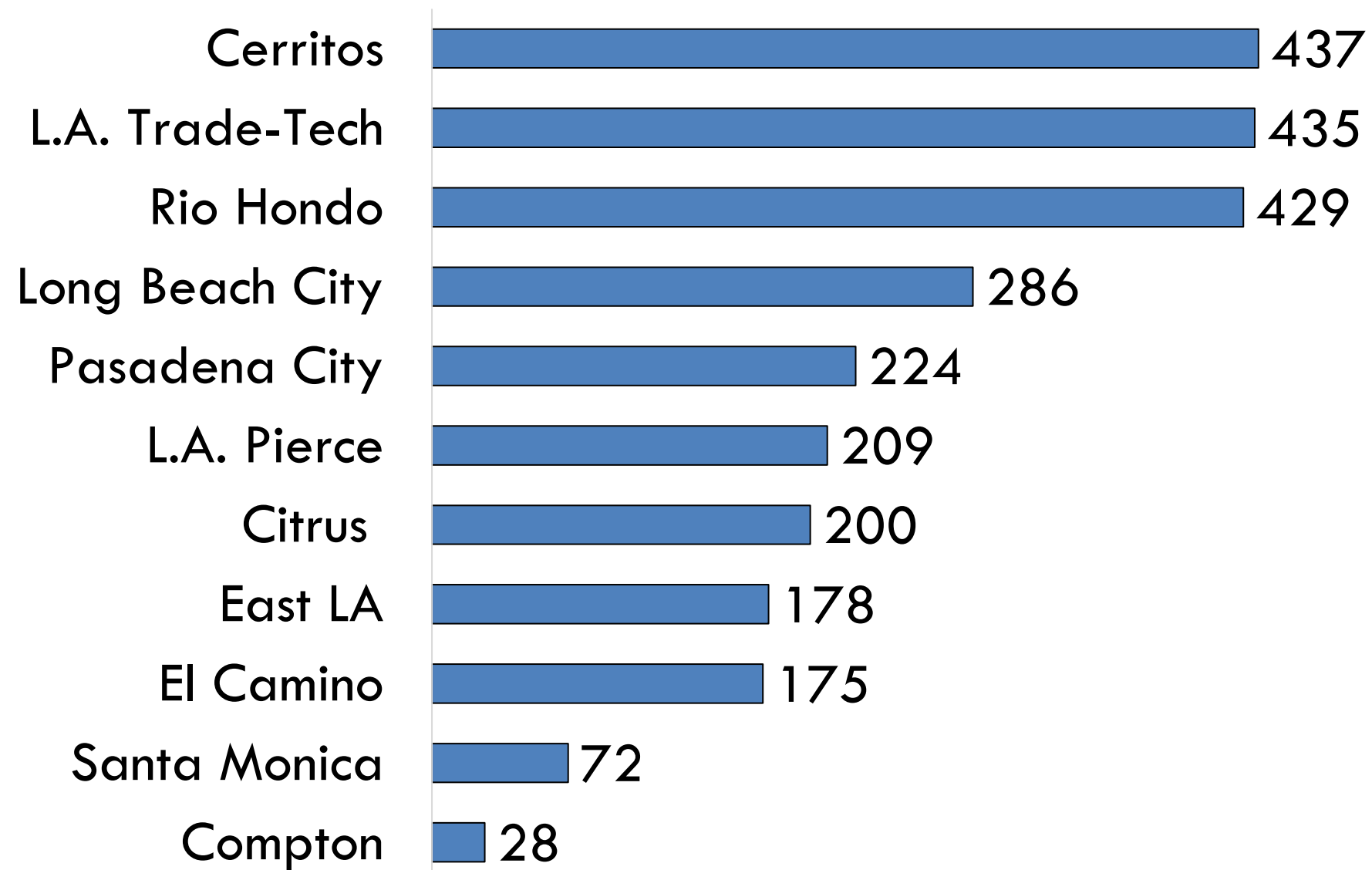
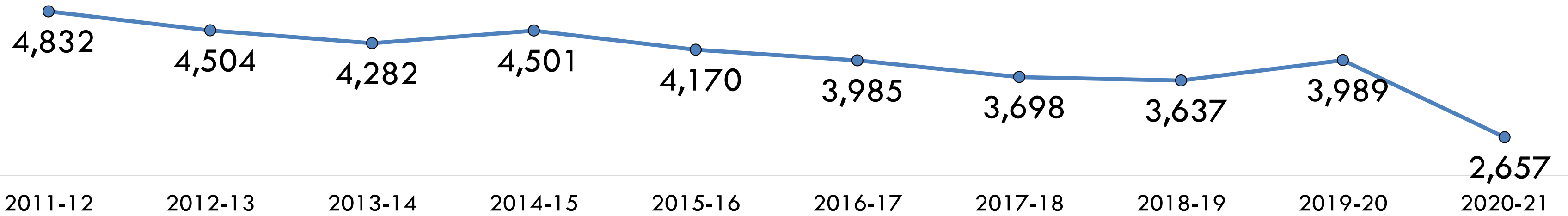
- Citrus
- L.A. Trade-Tech

- L.A. Trade-Tech

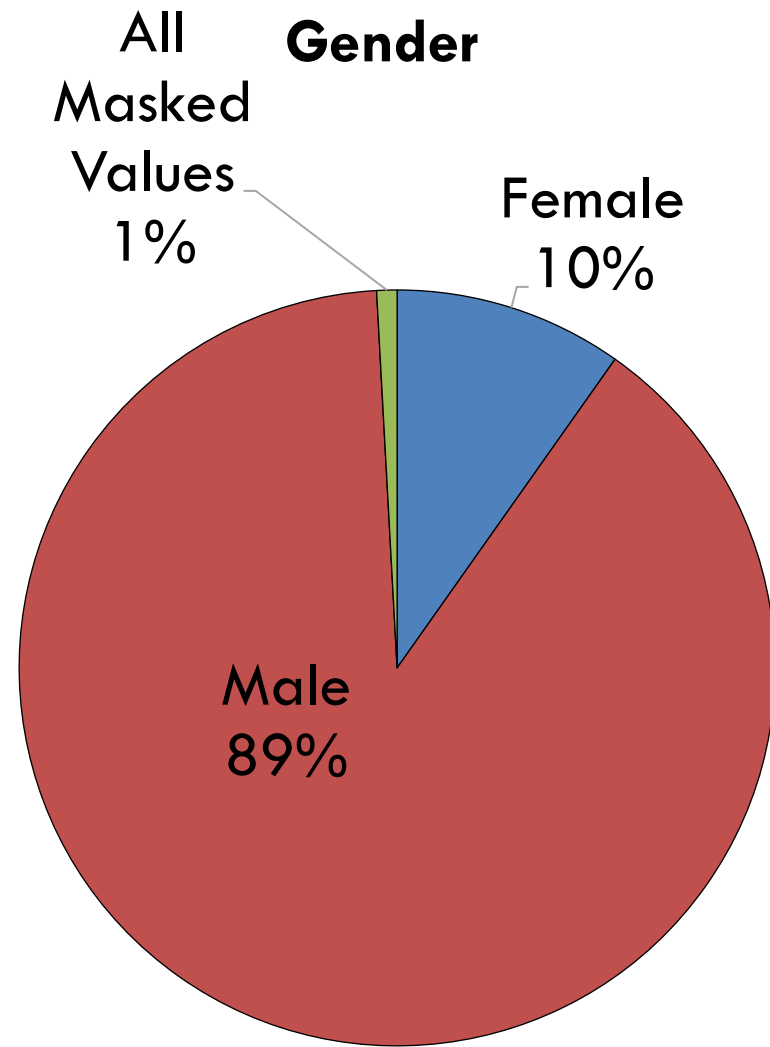
TOP6 - Program Title	2020-21	2021-22	2022-23	Latest 3 Yr Avg
0948.00 - Automotive Technology	344	663	810	606
0947.00 - Diesel Technology	63	71	82	72
0948.40 - Alternative Fuels and Advanced Transportation Technology	48	59	45	51
0949.00 - Automotive Collision Repair	22	47	63	44
0948.30 - Motorcycle, Outboard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

Automotive Technology: Advanced Transportation REGIONAL PROGRAM ADVISORY

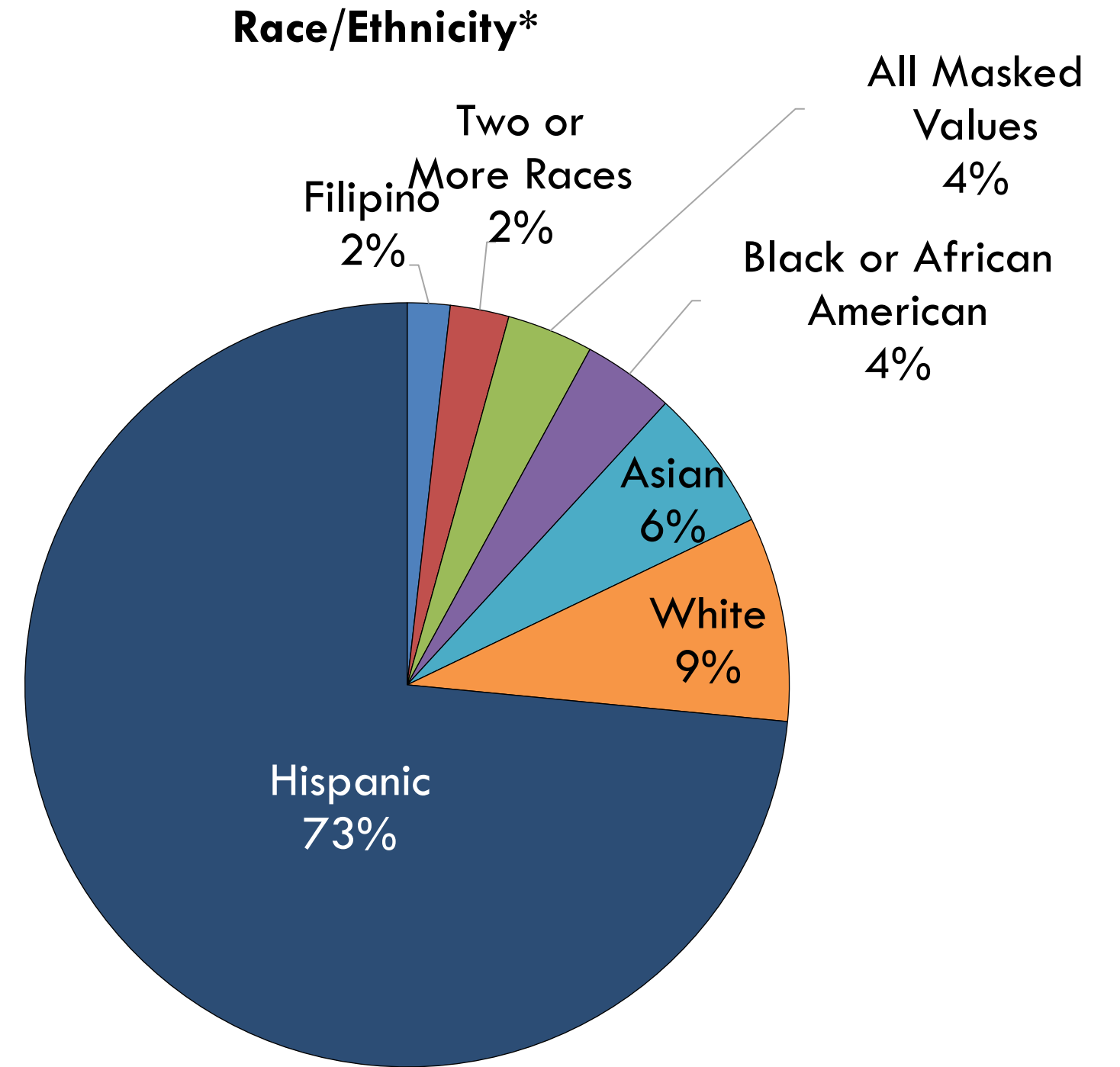
LA Student Enrollments



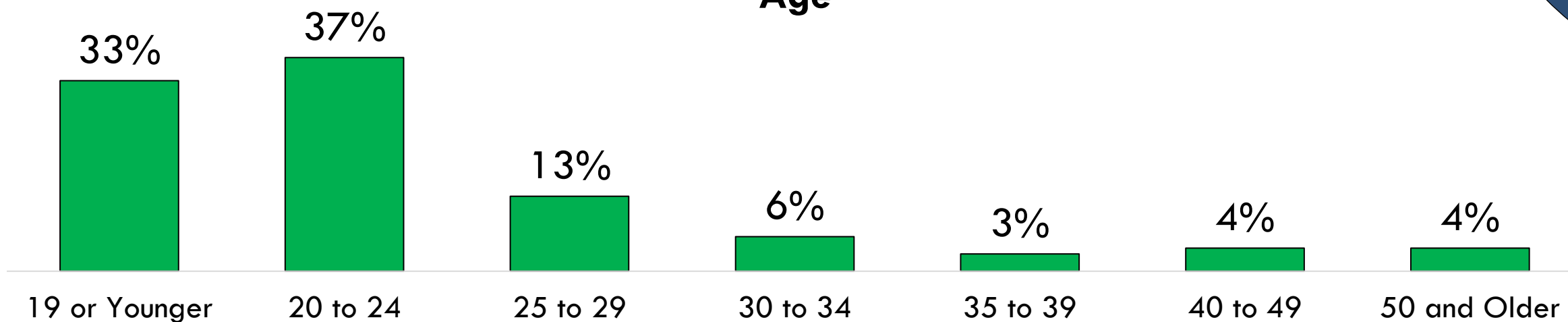
Since the 2011-12 academic year, student enrollments in automotive technology courses have declined by 2,175 or 45%, to 2,657 enrollments in the 2020-21 academic year. While all CTE program enrollments in Los Angeles also declined during this period (-16%), automotive technology enrollments declined 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.



Nine of ten automotive technology students are male, nearly three-quarters identify as Hispanic, and 70% are 24-years-old or younger.



Age

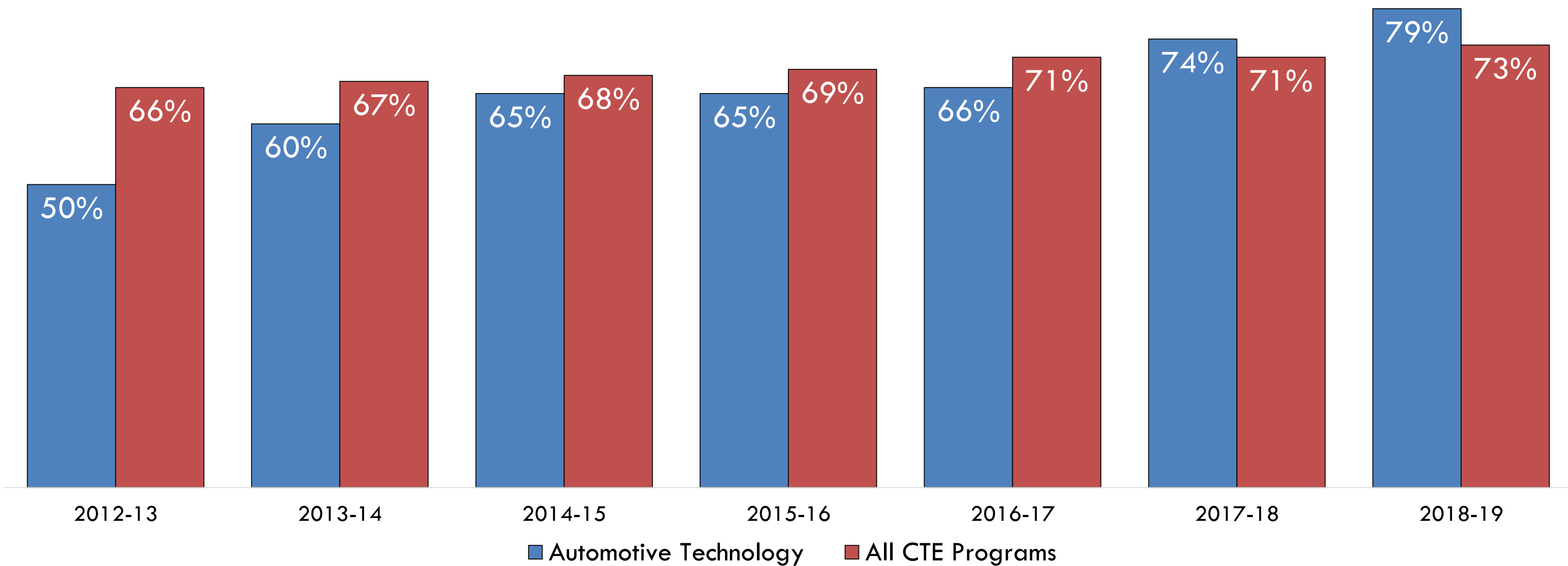


Source: [California Community Colleges LaunchBoard](#)

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

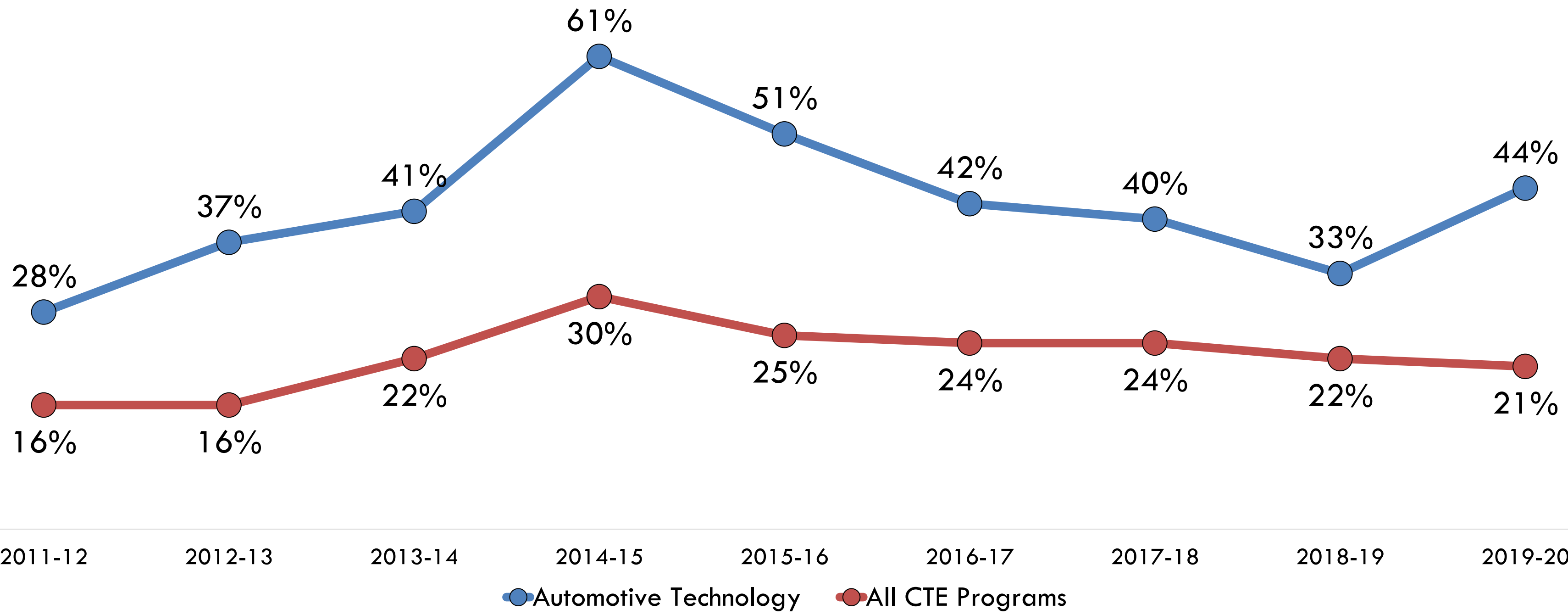


Students with a Job Closely Related to Their Field of Study



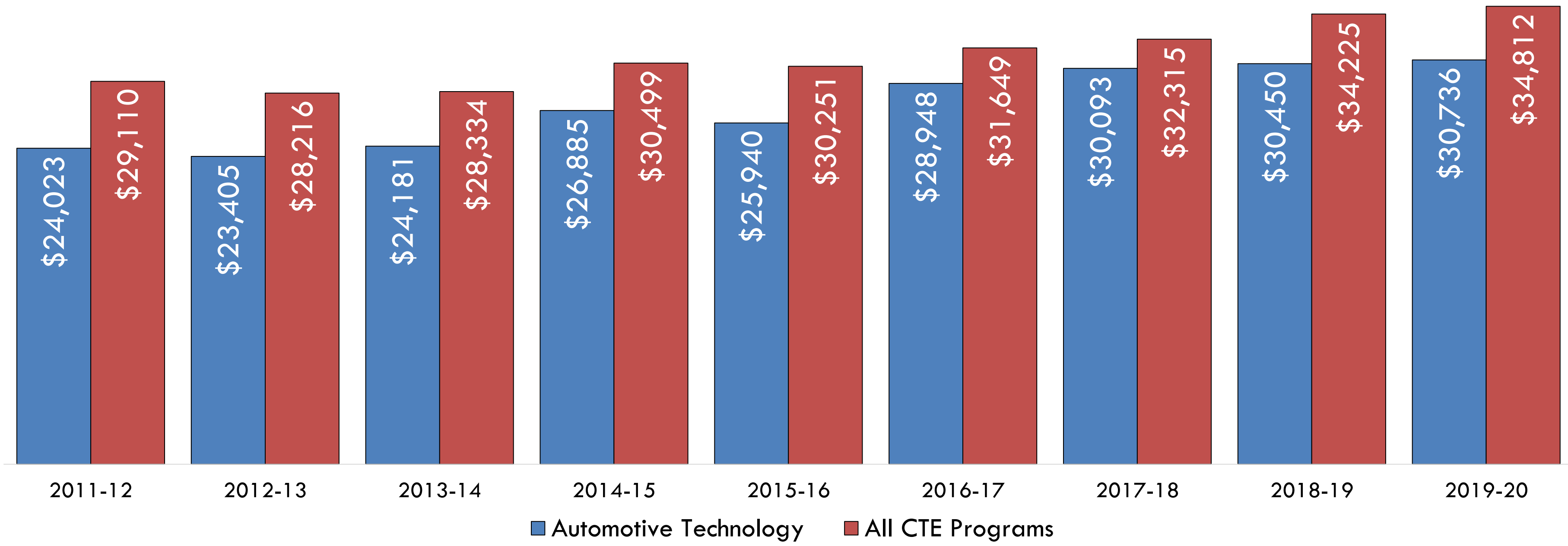
Source: [California Community Colleges Chancellor's Office LaunchBoard](#)

Median Change in Earnings for Exiting Students



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

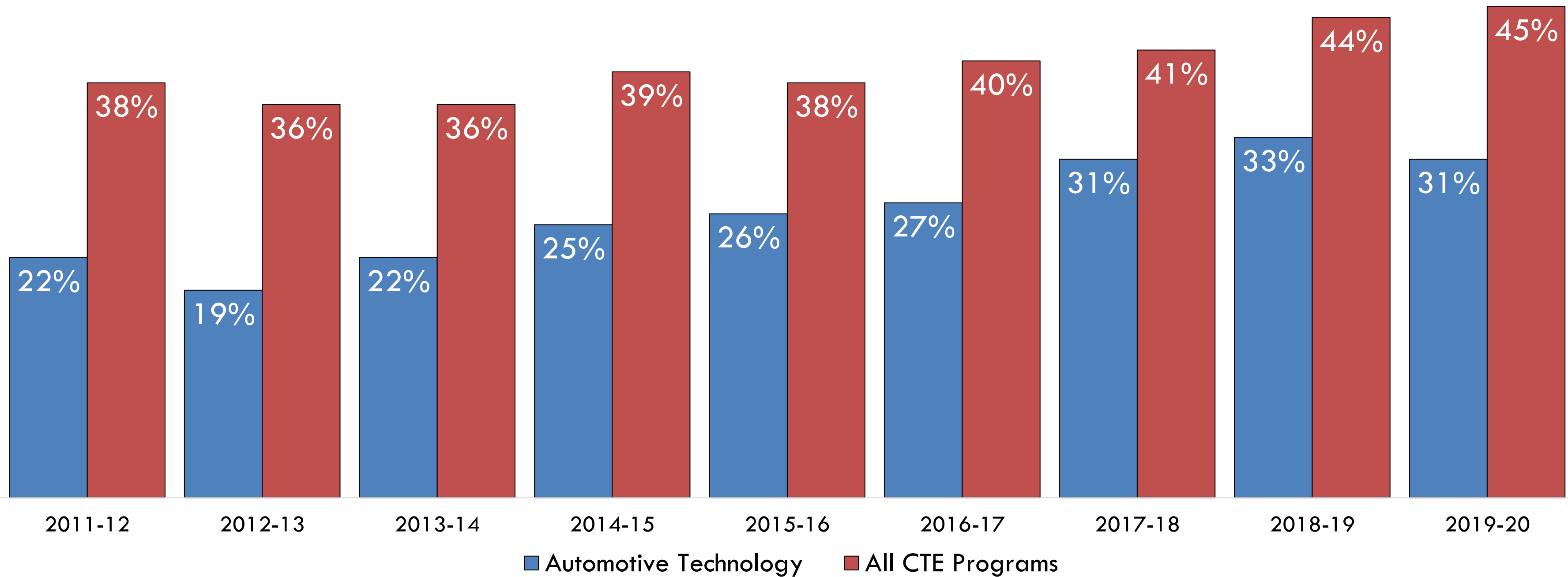
Median Annual Earnings after Exiting



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



Exiting Students Who Attained the Living Wage



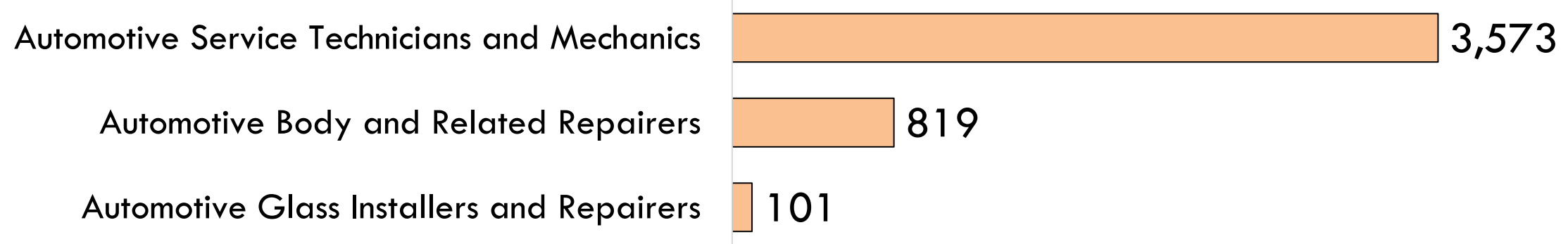
Source: [California Community Colleges Chancellor's Office LaunchBoard](#)

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

Source: [Lightcast, datarun 2024.2](#)

*Rounded to the nearest \$100

Number of Job Postings by Occupation

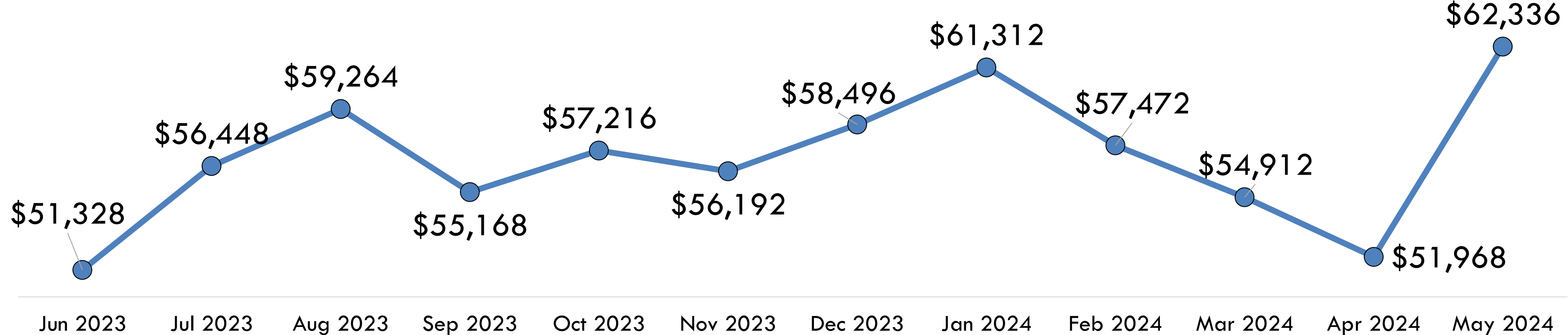


Job Title	Job Ads	Employer	Job Ads
Automotive Technicians	449	Crash Champions	188
Automotive Mechanics	362	MV Transportation	149
Auto Body Technicians	258	Pep Boys	141
Automotive Service Advisors	173	American Tire Depot	128
Automotive Technicians/Mechanics	145	AutoNation	121
Mechanics	138	Caliber Collision	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

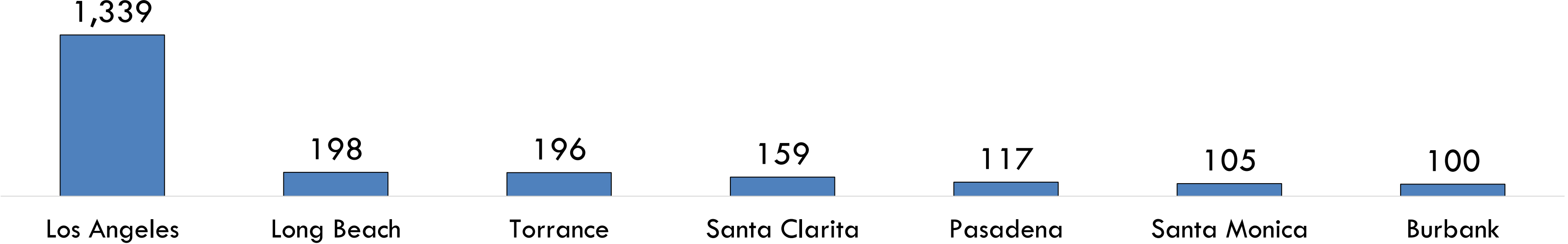
Source: Lightcast, Job Postings data



Advertised Wage Trend Over Last 12 Months



Number of Job Postings by City



Source: Lightcast, Job Postings data



CONTACT INFORMATION

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ROUNDTABLE DISCUSSION

- **Mute yourself throughout discussion**
- **Submit questions through the chat box**
- **15-20 minutes of discussion per topic**
- **Discussion will be followed by Q&A**

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START Instructor

Tesla

Arielle Fleisher

Transportation Strategist

Waymo

Timothy Martino

Director of Operations

Rusnak Auto Group

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President

Honda of Pasadena

FEEDBACK POLL AND NEXT STEPS

THANK YOU!

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