

AEROSPACE & DEFENSE REGIONAL PROGRAM ADVISORY MEETING

MARCH 14, 2023
11:00 AM – 1:00 PM

POWERED BY



AEROSPACE & DEFENSE REGIONAL PROGRAM ADVISORY

Jermaine Hampton

Sr. Director, Workforce Development and Special Projects
LAEDC

Jose Pelayo

Program Manager, Workforce Development
LAEDC

Mariana Hernandez

Asst. Program Manager, Workforce Development
LAEDC



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REGIONAL PROGRAM ADVISORY

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: www.CompetitiveWorkforce.LA



Dr. Narineh Makijan
Chair/Assistant Vice President
Los Angeles Regional Consortium

Dr. David Liaw

Director of Talent Acquisition for the
Strategic Space Systems Division
Northrop Grumman

Lisa Gussman -Zairi

Senior Contracts Manager
Marvin Engineering Co, Inc.

Angelina Benitez

Sr Business Development Strategist
Clark Construction

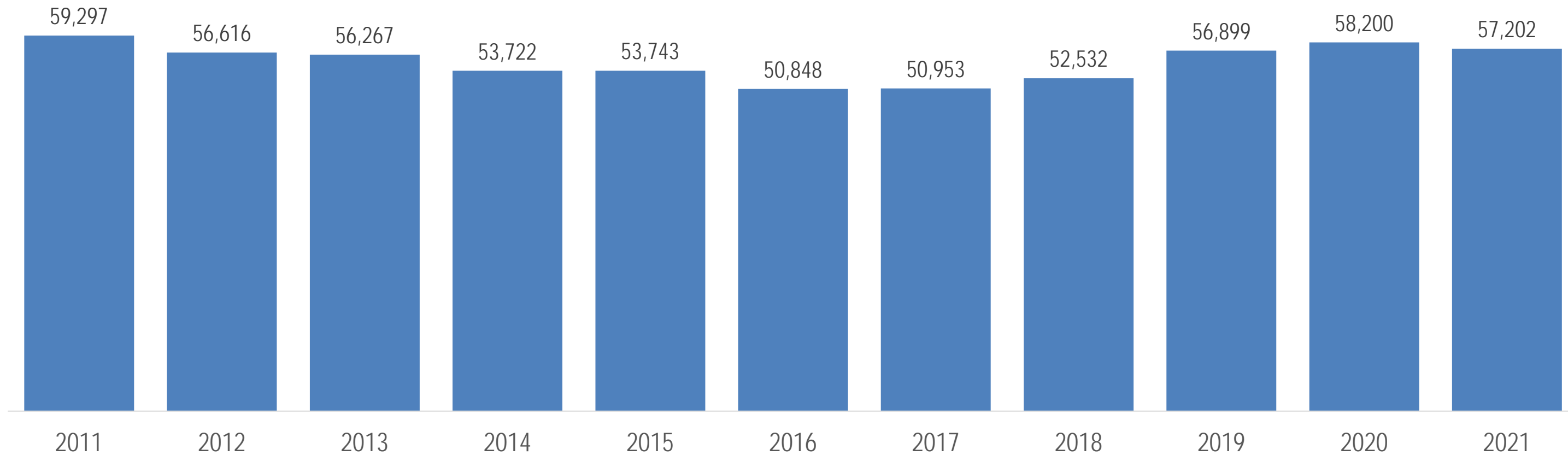
Dr. Kim A. Armstrong
Sr. HR Business Partner
The Boeing Company

Max Dunsker
Research Analyst,
Institute for Applied Economics
LAEDC

For Aerospace &
Defense, industrial
employment is
measured using 7
main NAICS codes

- Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing
- Aircraft Manufacturing
- Aircraft Engine and Engine Parts Manufacturing
- Other Aircraft Parts and Auxiliary Equipment Manufacturing
- Guided Missile and Space Vehicle Manufacturing
- Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing
- Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

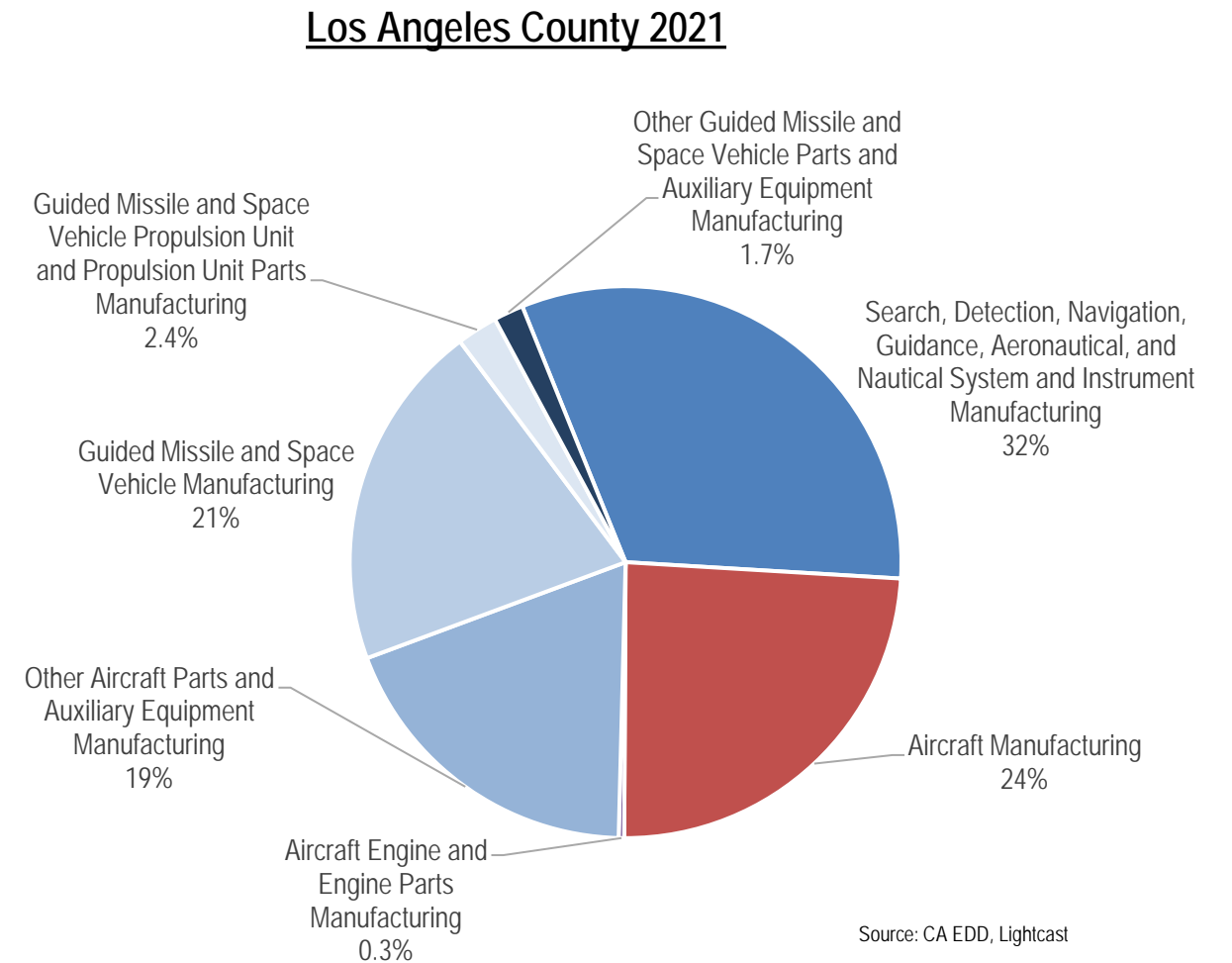
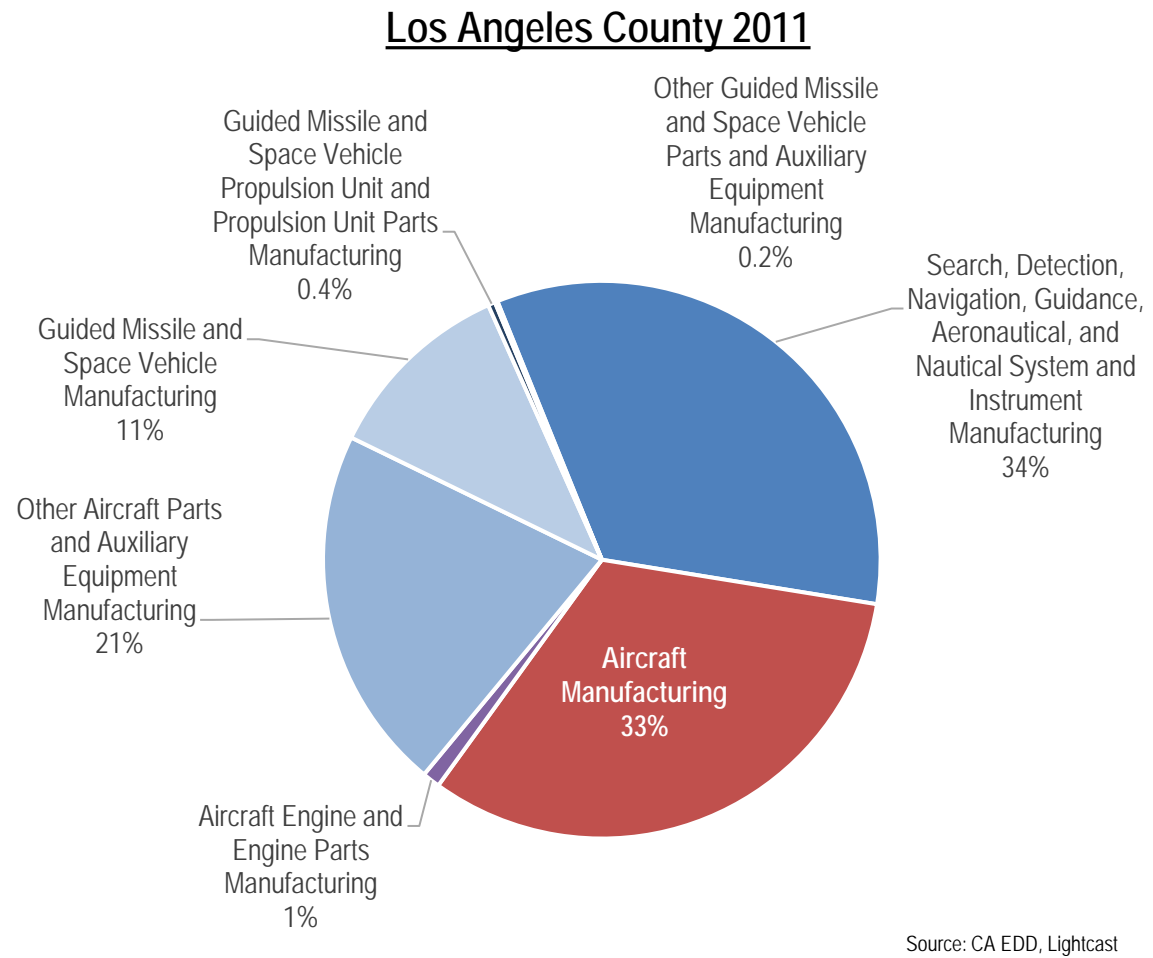
Aerospace Employment Los Angeles County, 2011 - 2021



Source: CA EDD, Lightcast

Aerospace employment has been stable for the last 10 years, ranging from about 50,000 to 60,000 employees. There was a dip in the early-2010s, but a resurgence in the mid-2010s led to more employees in the industry.

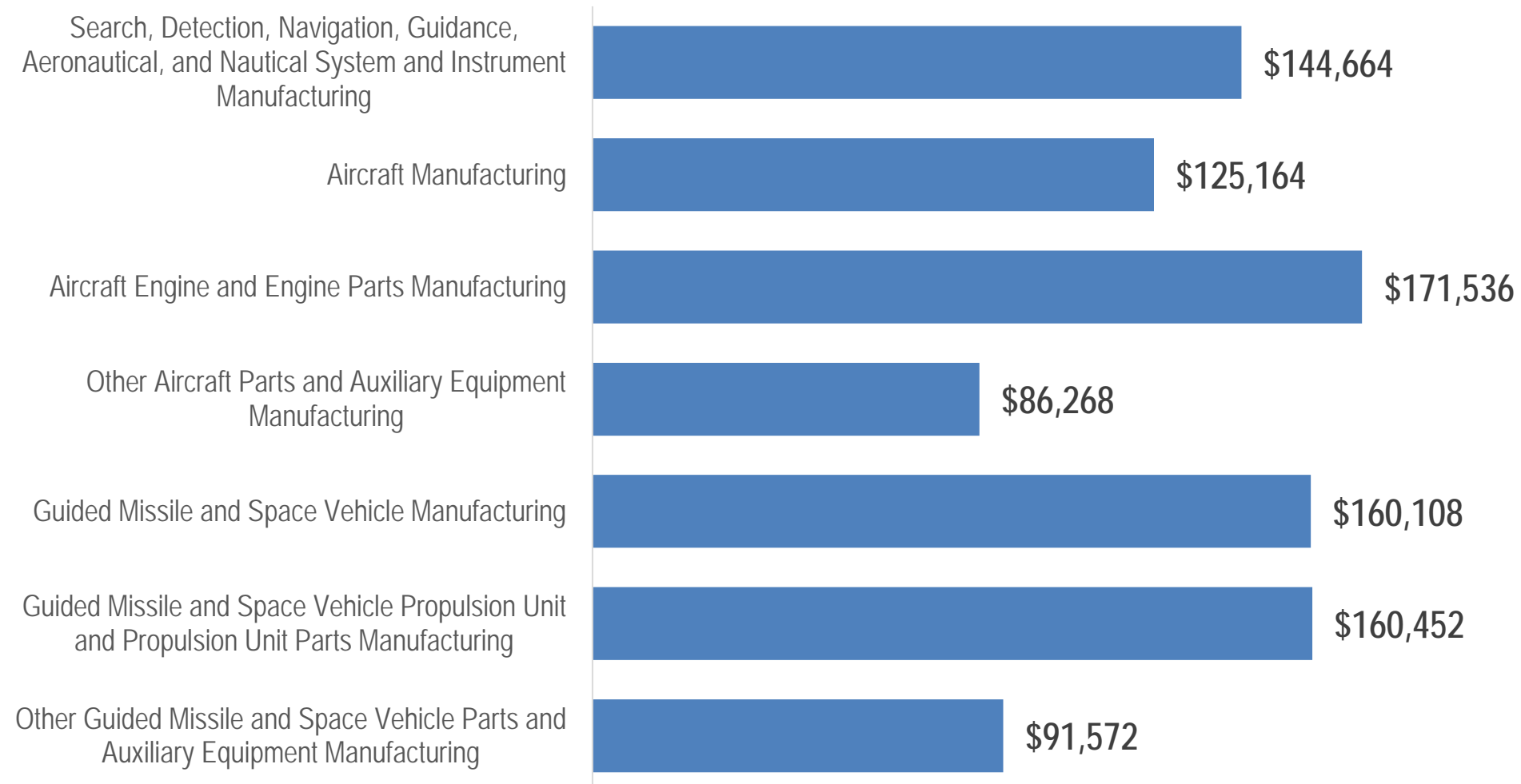
Change in Aerospace Subindustry Employment in Los Angeles County, 2011 - 2021



Since 2011, instrument manufacturing remains the largest subindustry. Aircraft Manufacturing's share of industry employment has decreased about 10 percent. Guided Missile and Space Vehicle (GMSV) Manufacturing-related subindustries increased their employment share to about 25 percent of the industry.

Average Annual Pay in Aerospace Industries

Los Angeles County 2021

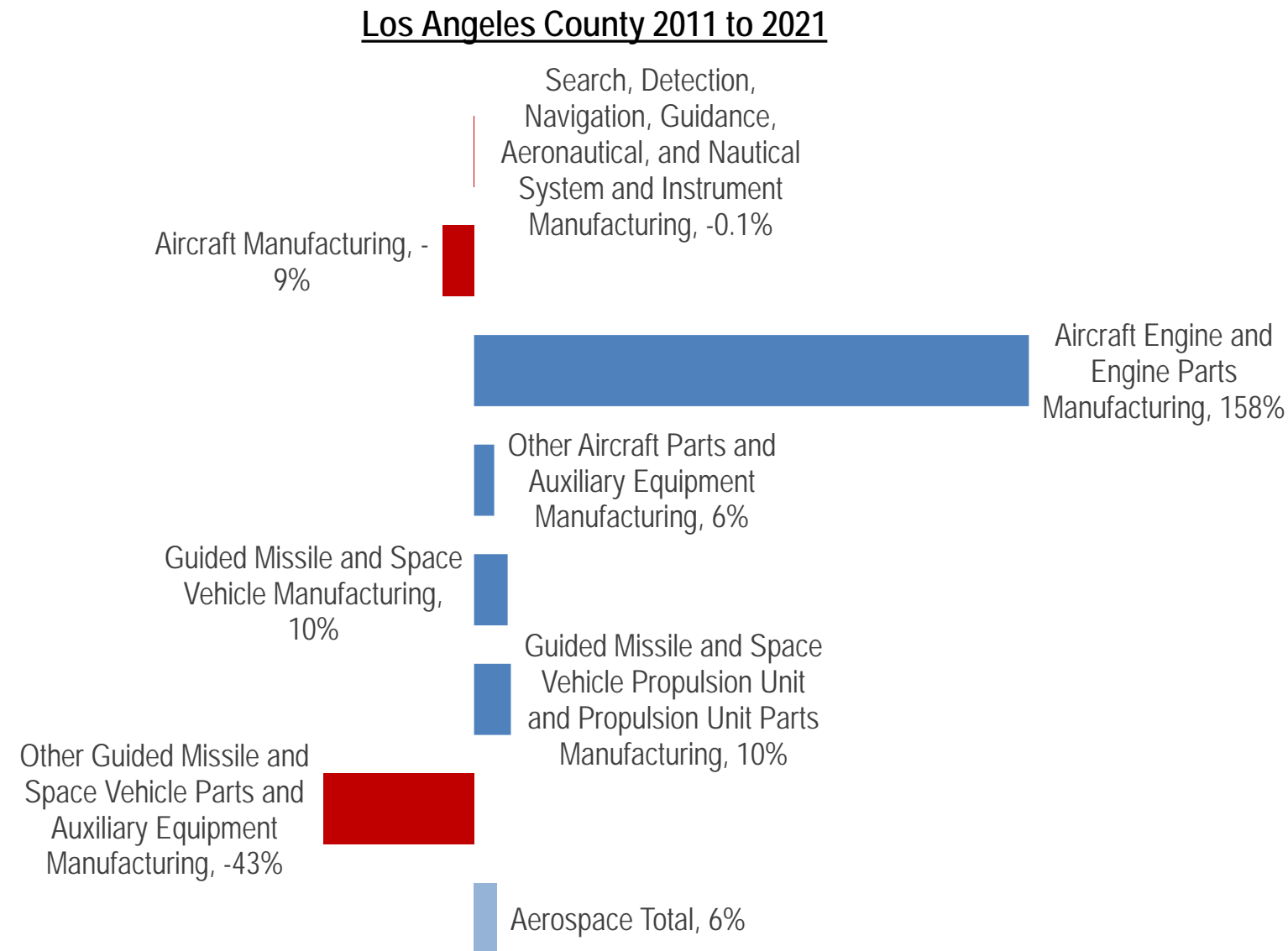


Source: CA EDD, Lightcast

Each subindustry pays a living wage in Los Angeles County, with none paying less than \$86,000 per year.

In May 2021, the average salary in Los Angeles County was about \$66,000 per year.

Real Wage Growth in Aerospace Subindustries



Source: CA EDD, Lightcast

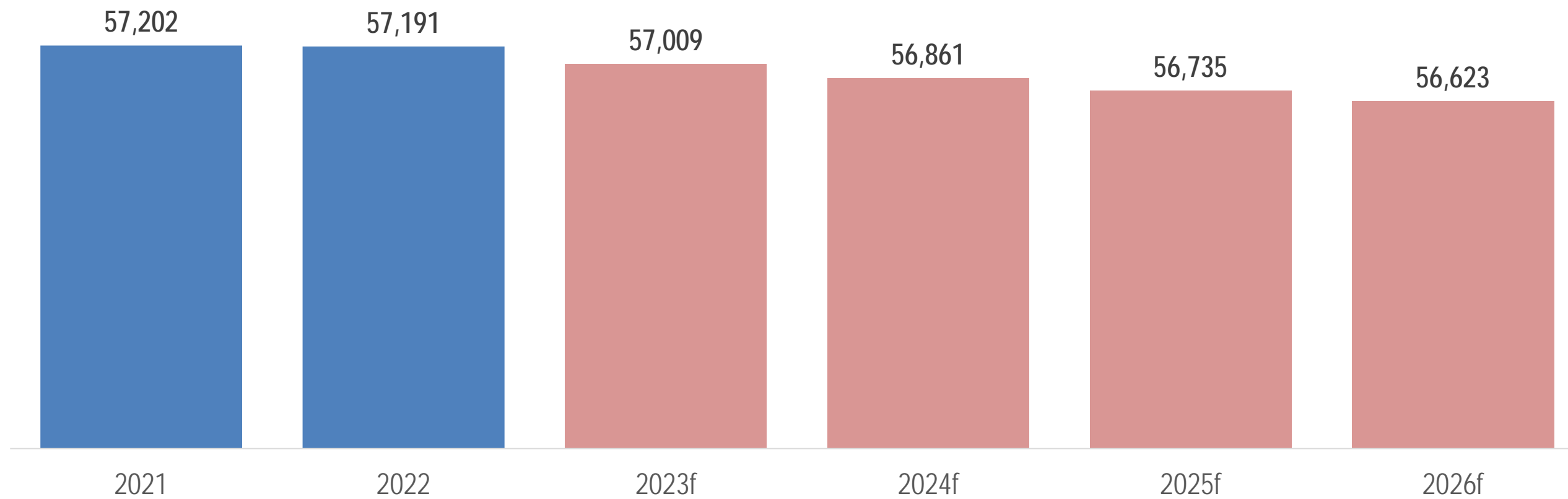
Over the last 10 years, real wage growth among the subindustries has varied.

The largest increase occurred in Aircraft Engine and Engine Parts Manufacturing, with 158 percent growth since 2011.

Overall, real wages in the Aerospace industry grew 6 percent.

Over the next 5 years, employment is forecasted to have a small contraction of 2 percent, a decrease of about 100 jobs per year.

**Forecasted Aerospace Employment
Los Angeles County, 2021 - 2026**



Source: Lightcast

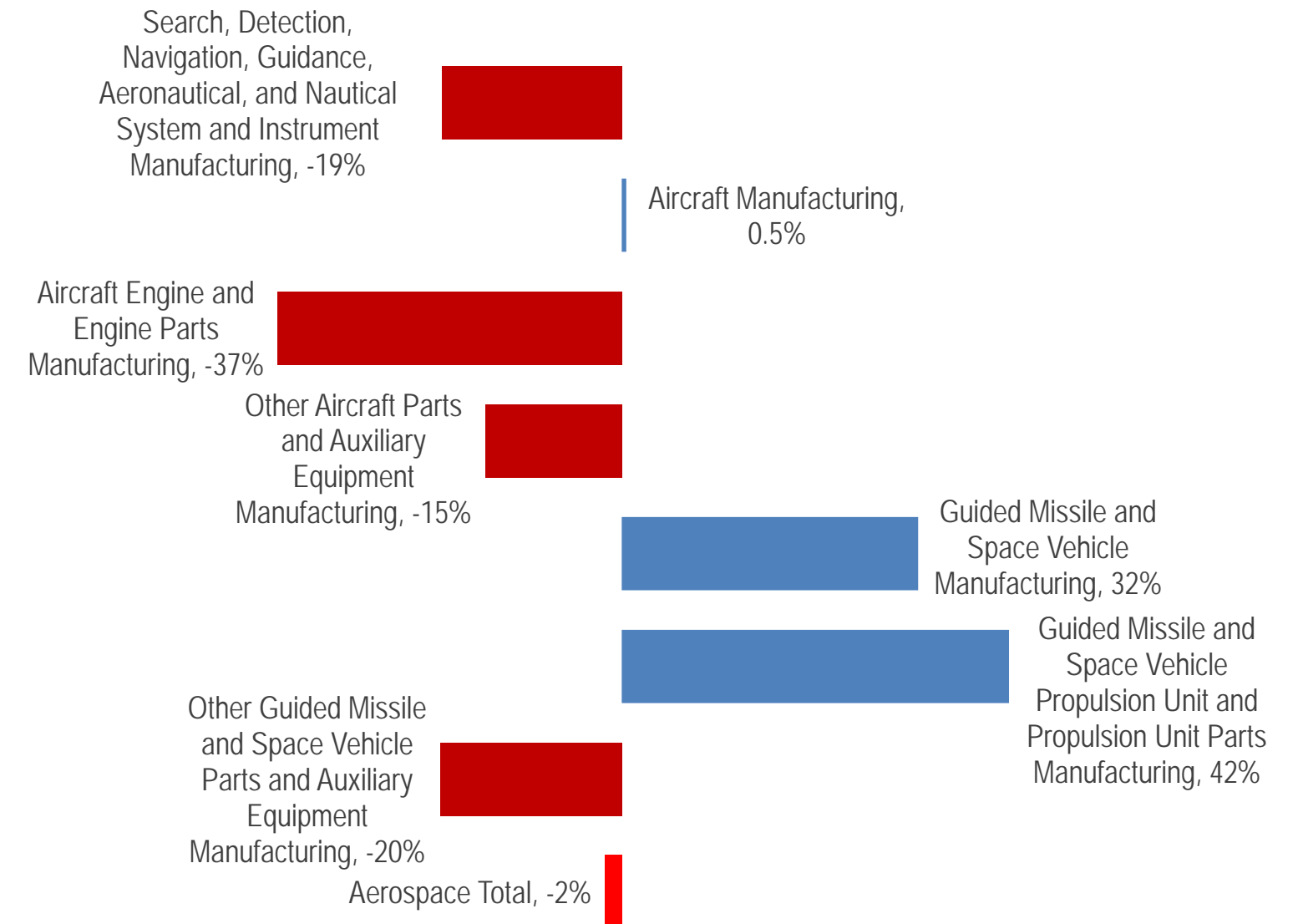
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However, the Aerospace industry is anticipated to grow in the Guided Missile and Space Vehicle (GMSV) Manufacturing and GMSV Propulsion Unit and Propulsion Unit Parts Manufacturing subindustries.

This largely offsets the contraction in forecasted employment in other subindustries.

Looking Forward

Forecasted Employment Growth in Aerospace Industries in Los Angeles County, 2021 - 2026



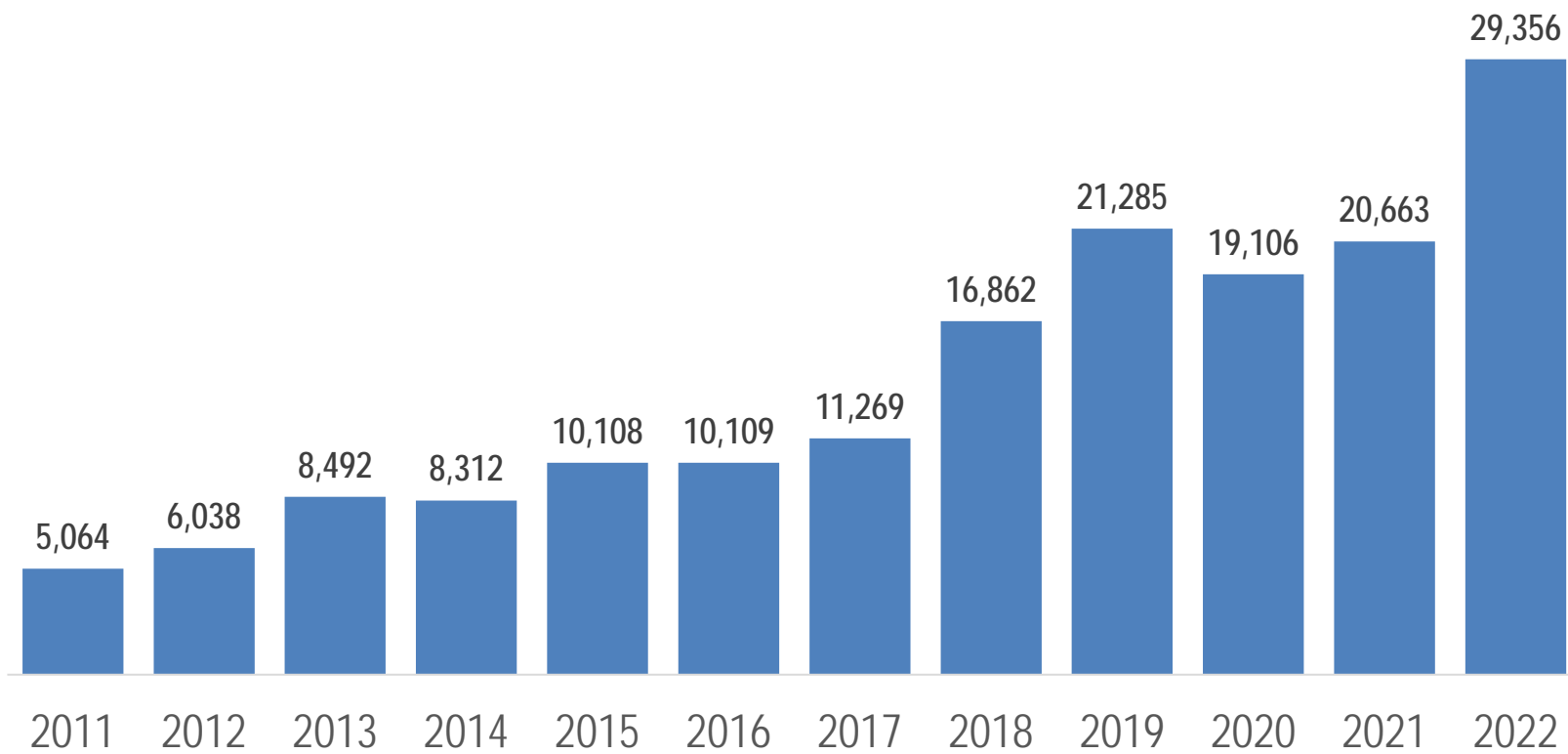
Source: Lightcast

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Employer Job Postings

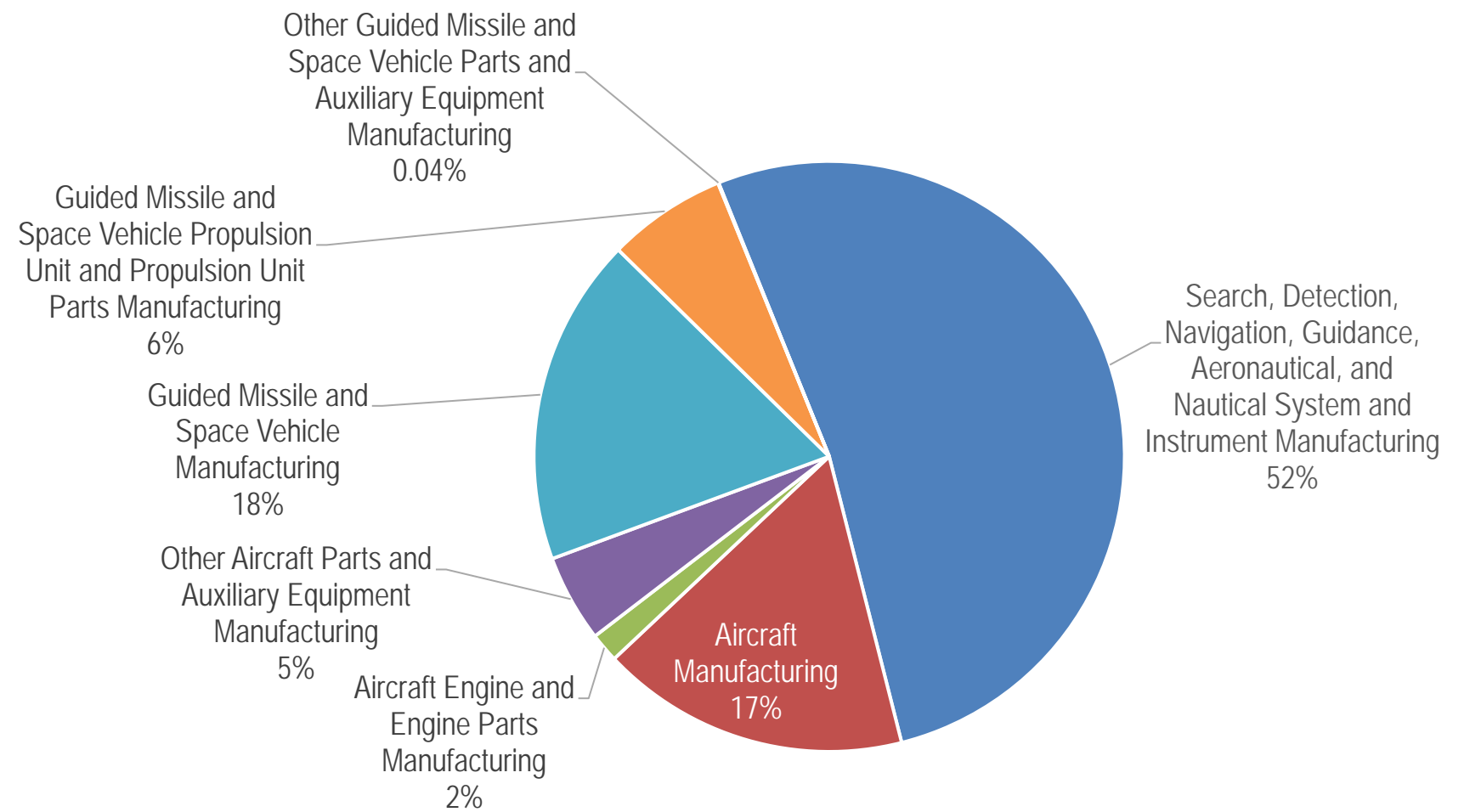
Job postings peaked in 2022, with almost 30,000 job postings compared to about 5,000 in 2011. Instrument manufacturing represents the largest subindustry over the last 10 years, with 52 percent of posts.

Total Aerospace Job Postings Los Angeles County, 2011 - 2022



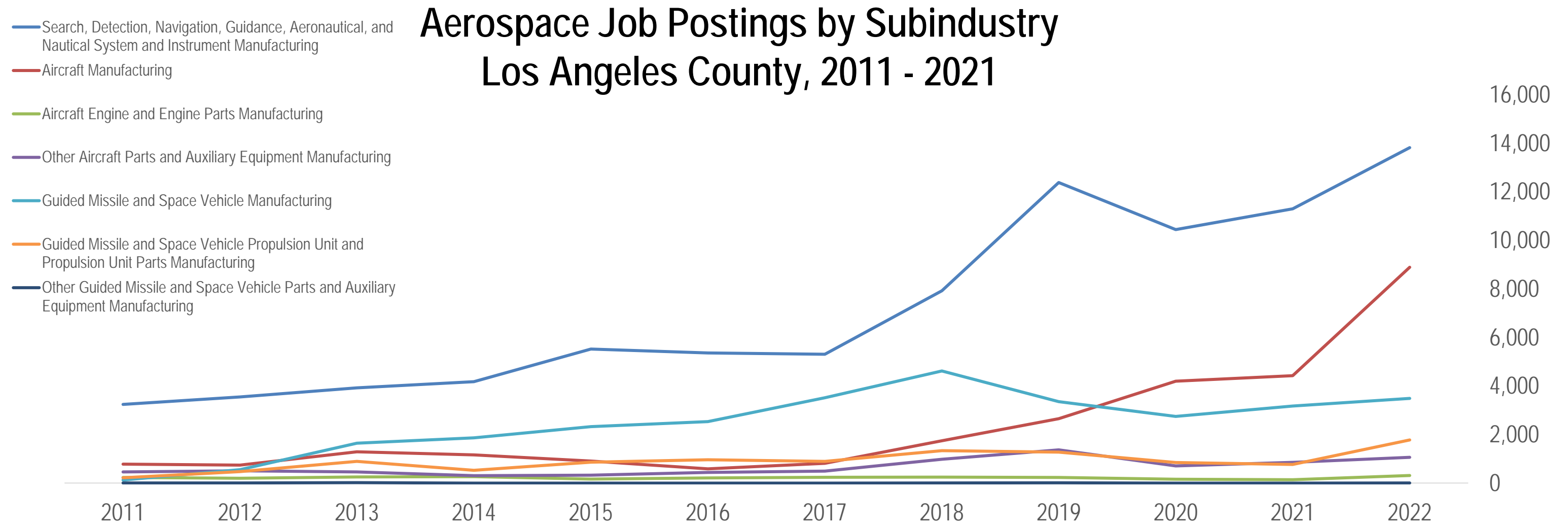
Source: Lightcast

Distribution of Aerospace Job Postings Los Angeles County, 2011 - 2022



Source: Lightcast

In 2020, Aircraft Manufacturing companies began posting for more positions than those in GMSV Manufacturing.

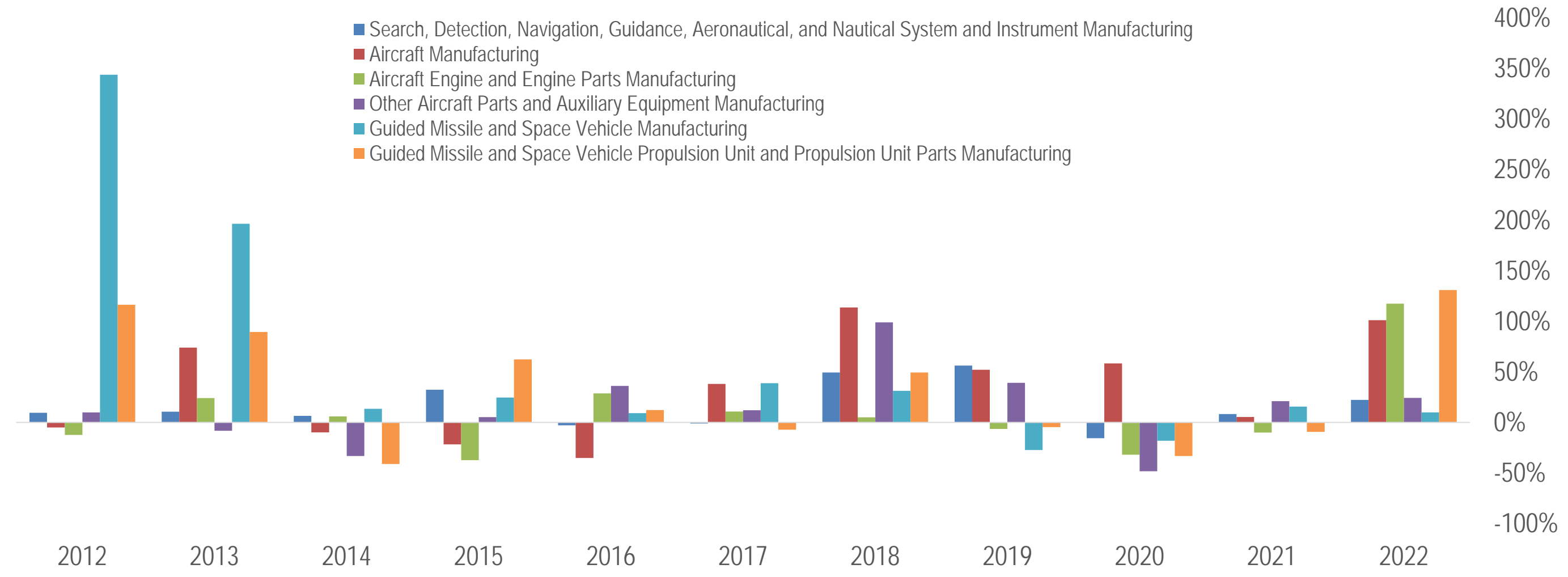


Source: Lightcast



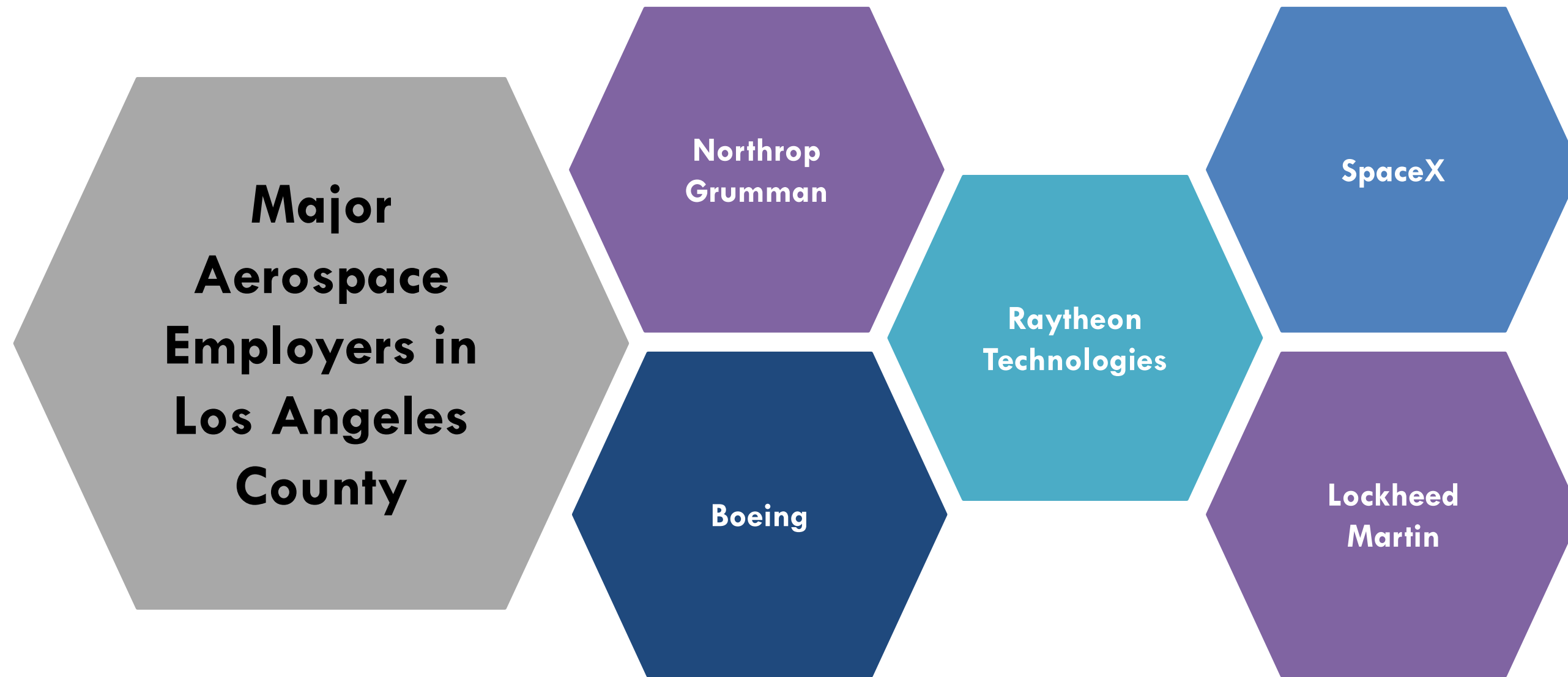
Job postings jumped in 2022 across all subindustries, recovering from the pandemic-related contraction in 2020.

Growth in Aerospace Job Postings
Los Angeles County, 2012 - 2021



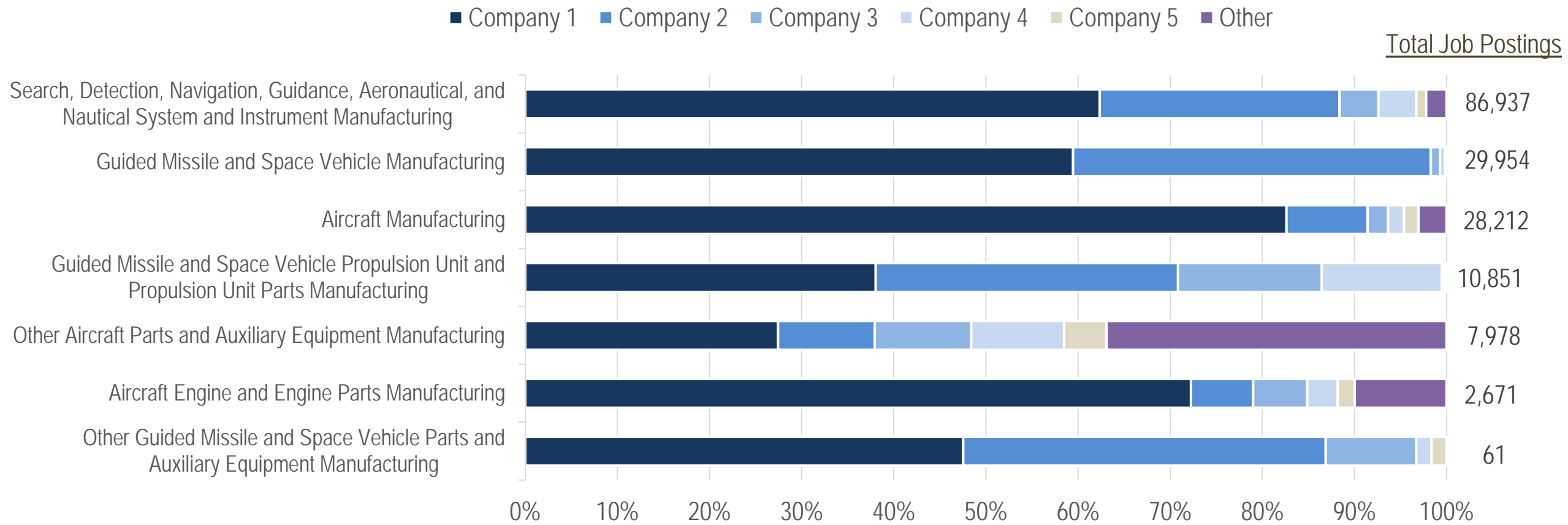
Source: Lightcast





Most subindustries have a high concentration of their job postings within their top 5 respective companies. Only Other Aircraft Parts and Auxiliary Equipment Manufacturing is not heavily concentrated.

Concentration of Hiring Among the Top 5 Companies by Job Postings in the Aerospace Industry of Los Angeles County, 2011 - 2022

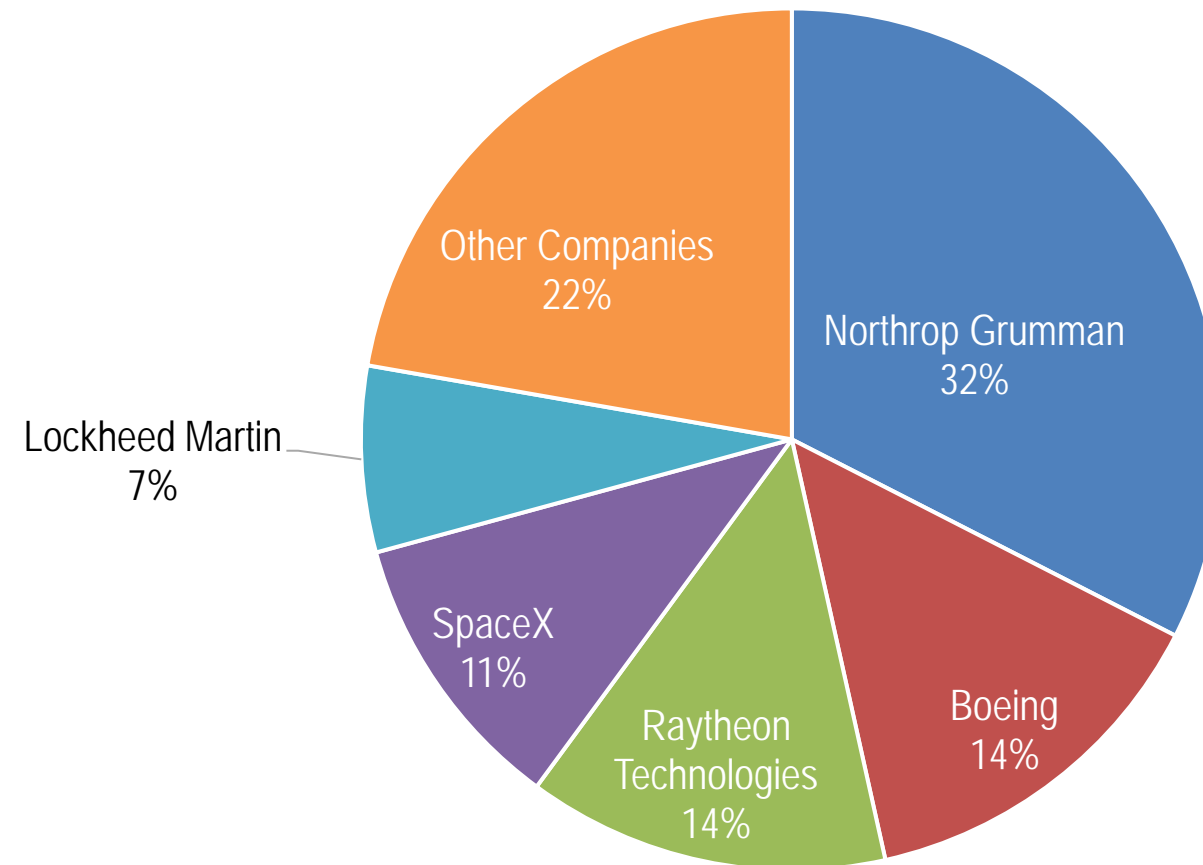


Source: Lightcast



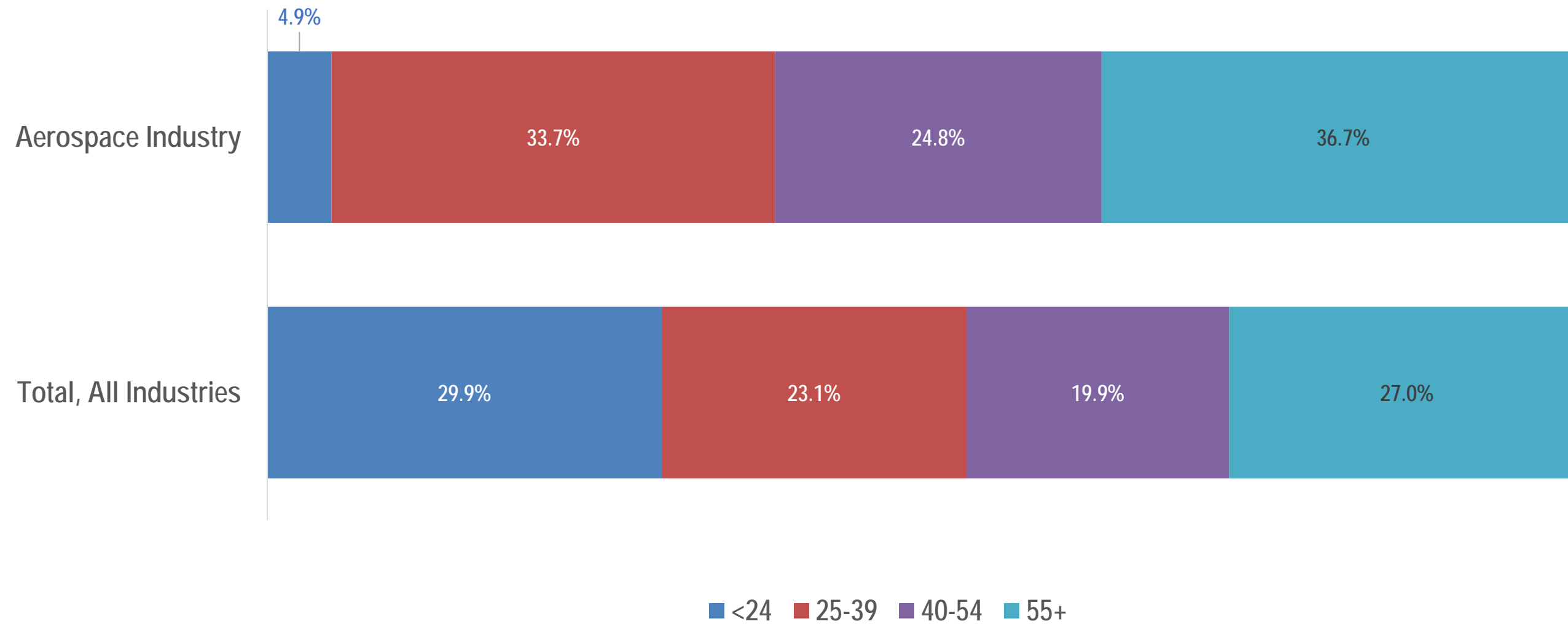
Northrop Grumman has the largest share of job postings, representing 32 percent of posted opportunities.

**Top Companies by Job Postings in the Aerospace Industry
Los Angeles County, 2011 - 2022**



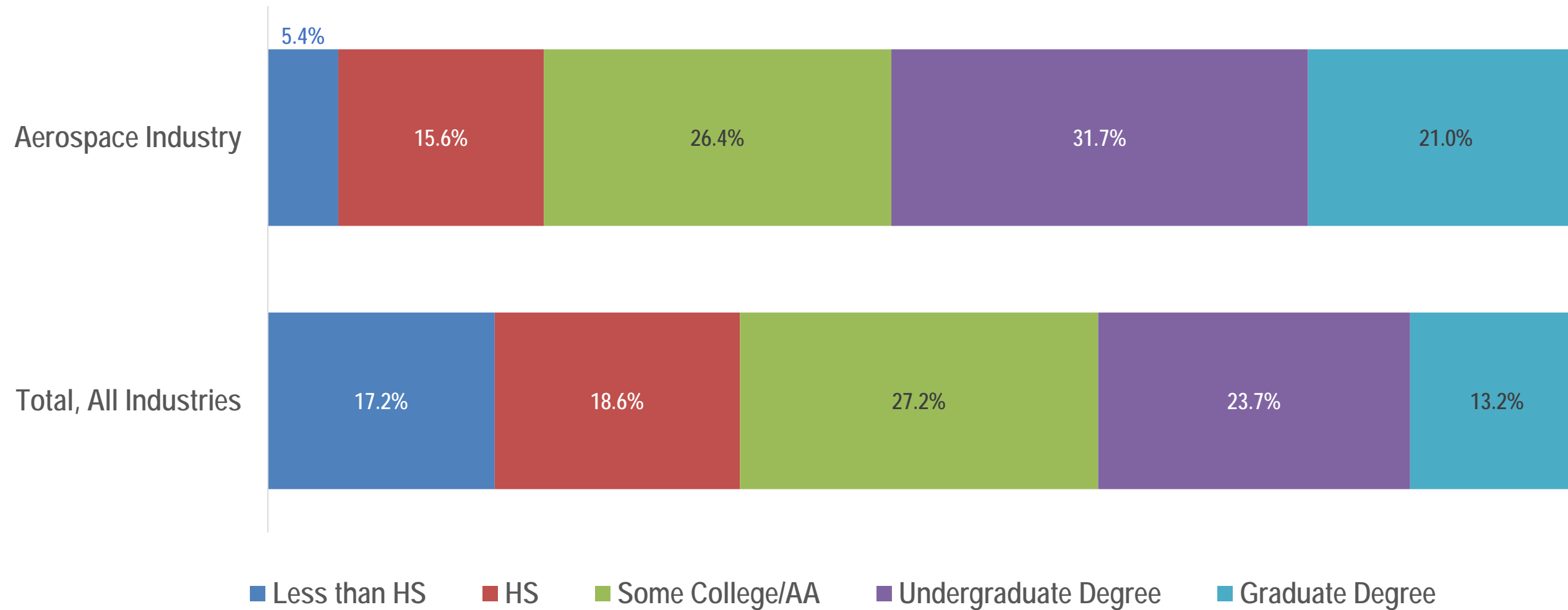
Source: Lightcast

Age Distribution of Aerospace Workers, 2021



The Aerospace industry is older than most other industries in Los Angeles County, with more than 60 percent of workers older than 40.

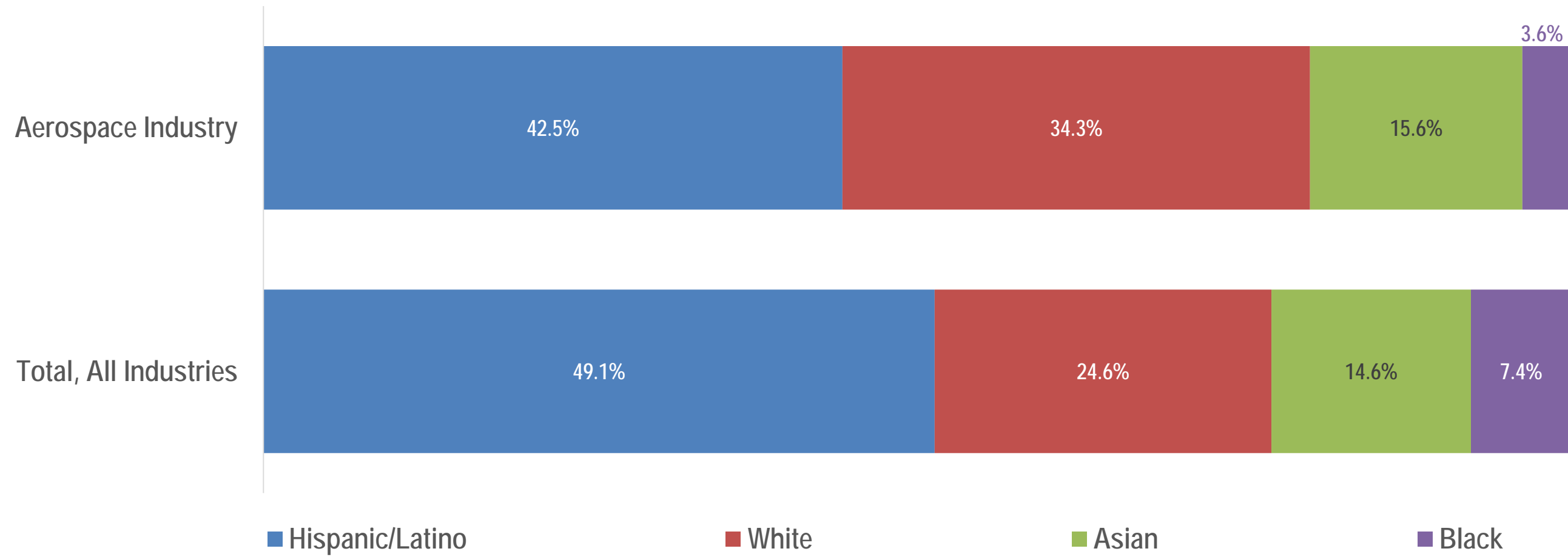
Educational Attainment Distribution of Aerospace Workers, 2021



Source: PUMS

Aerospace industry workers are also more educated than those in other industries, with over 75 percent of workers having at least some college or an Associate’s degree.

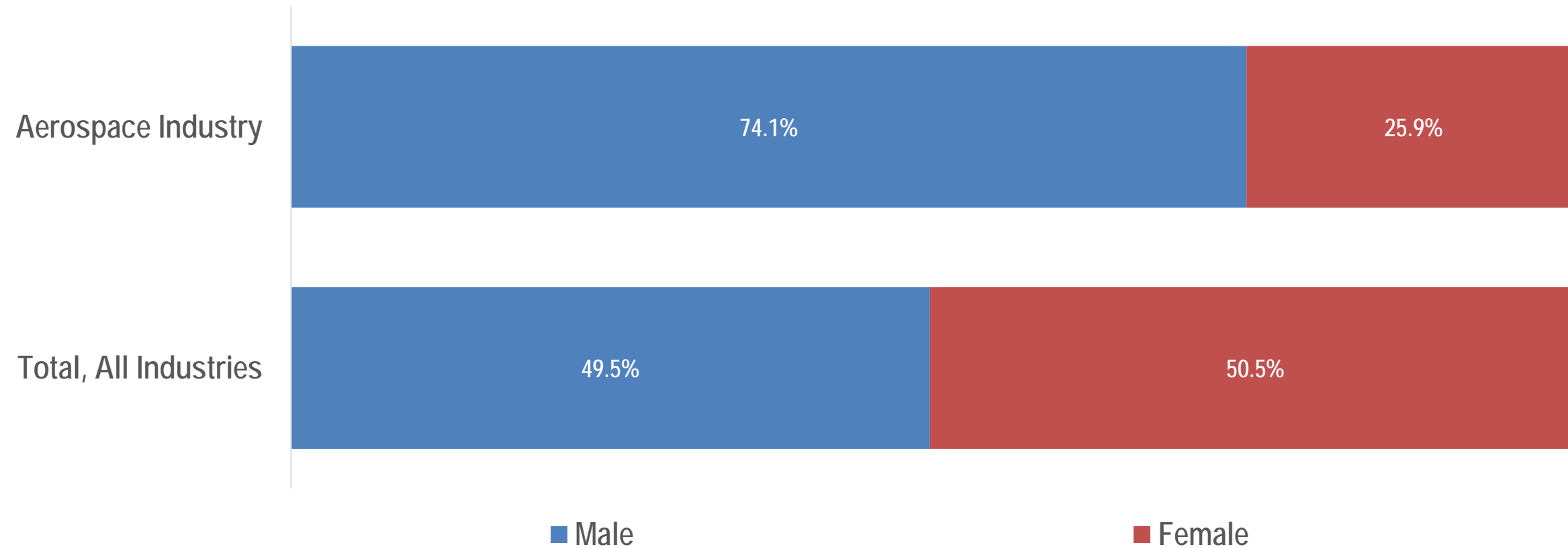
Racial/Ethnic Distribution of Aerospace Workers, 2021



Source: PUMS

Compared to other industries, Hispanic/Latino and Black workers are underrepresented.

Gender Distribution of Aerospace Workers, 2021



Source: PUMS

The Aerospace industry is a long way from gender parity, with a skew towards male employment.

Metric		Aircraft Mechanics And Service Technicians	Avionics Technicians	Other Assemblers and Fabricators	Other Engineering Technologists And Technicians, Except Drafters
Sex	Male	94%	100%	62%	75%
	Female	6%	0%	38%	25%
Education	Less than HS	2%	12%	27%	8%
	High School	27%	26%	36%	20%
	Some College/Associate's	55%	55%	27%	44%
	Bachelors	7%	8%	8%	23%
	Masters or Higher	8%	0%	2%	6%
Age	<25	13%	0%	8%	12%
	25-39	41%	38%	25%	26%
	40-54	26%	6%	36%	32%
	>54	20%	56%	30%	31%
Race	Hispanic	64%	83%	73%	34%
	White	27%	10%	3%	30%
	Asian	8%	6%	18%	25%
	Black	0%	0%	5%	8%

Source: PUMS

Female workers and Black workers are underrepresented in most of the selected occupations. These aerospace occupations are accessible, with younger people and those with less educational attainment able to find employment.

CONTACT INFORMATION

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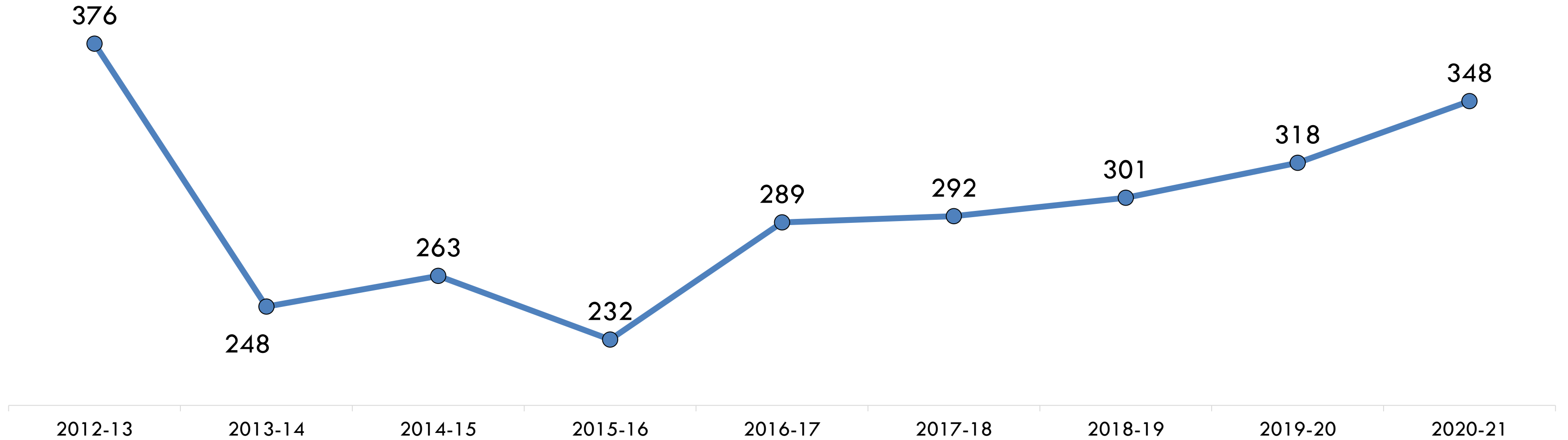
hosted at Mt. San Antonio College

Five community college program areas have historically prepared students for today's target careers in Aerospace:

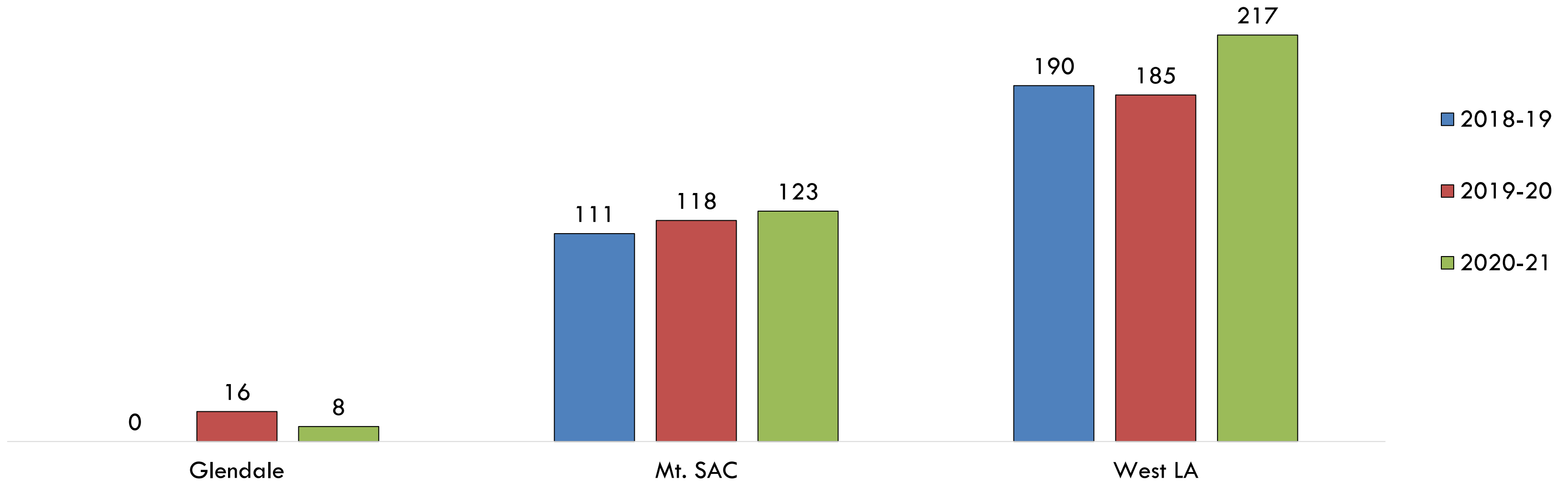
- **Aeronautical and Aviation Technology**
- **Aviation Airframe Mechanics**
- **Aviation Powerplant Mechanics**
- Engineering, General (requires Calculus) (Transfer)
- Engineering Technology, General (requires Trigonometry)

The number of enrollments for aerospace students at LA community colleges has steadily increased since 2015-16, growing to 348 students in the 2020-21 academic year.

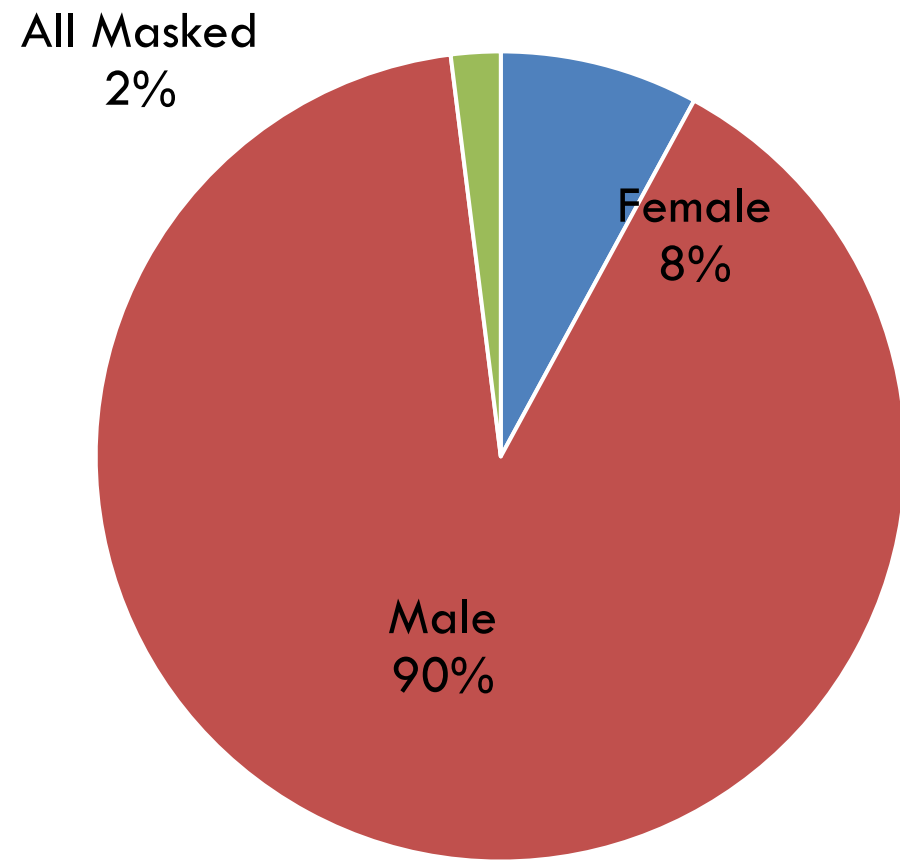
**LA Aeronautical and Aviation Technology (0950)
Student Enrollments, 2012-13 to 2020-21**



**LA Aeronautical and Aviation Technology Student Enrollments
by College, 2018-2021**

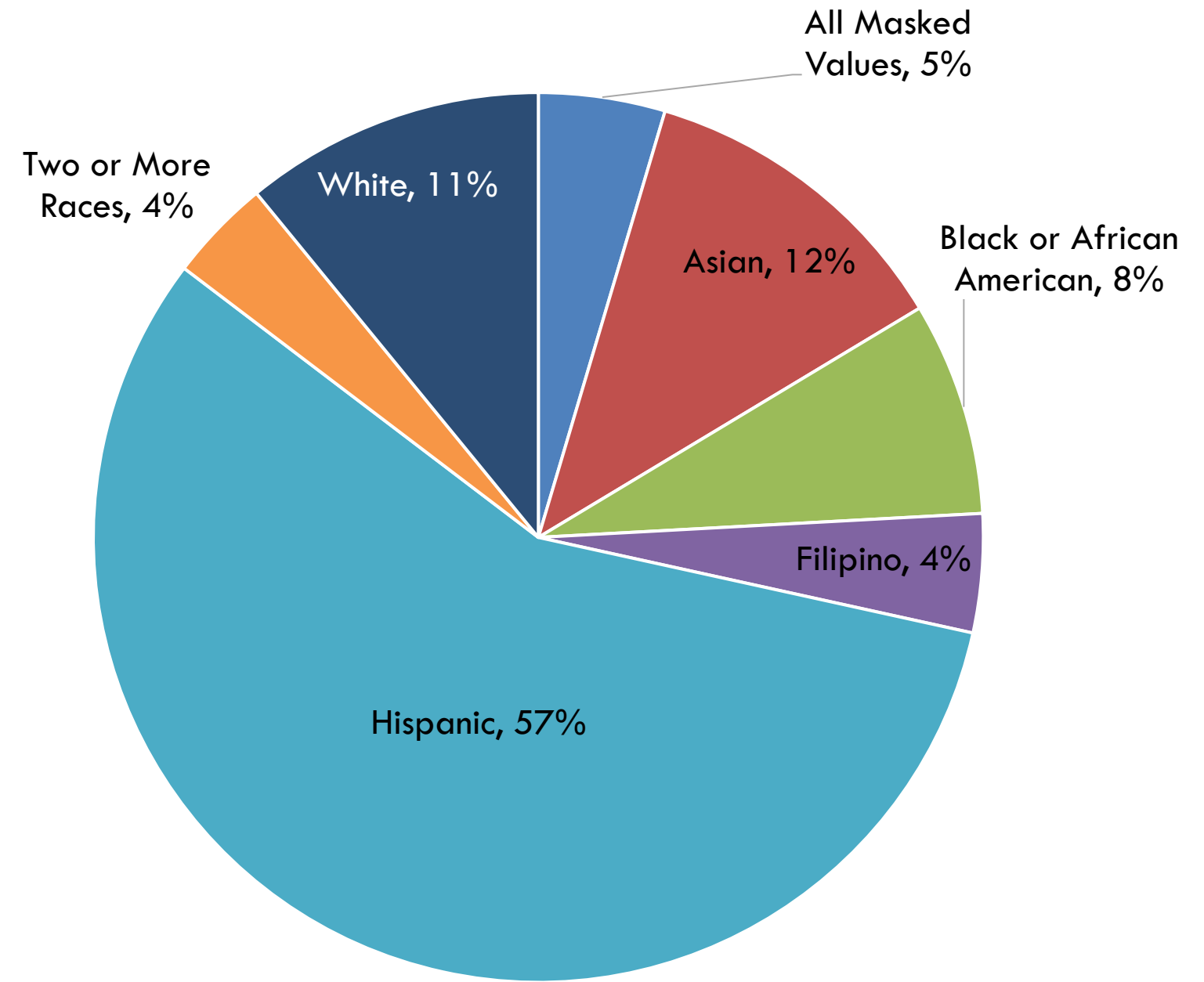


Gender

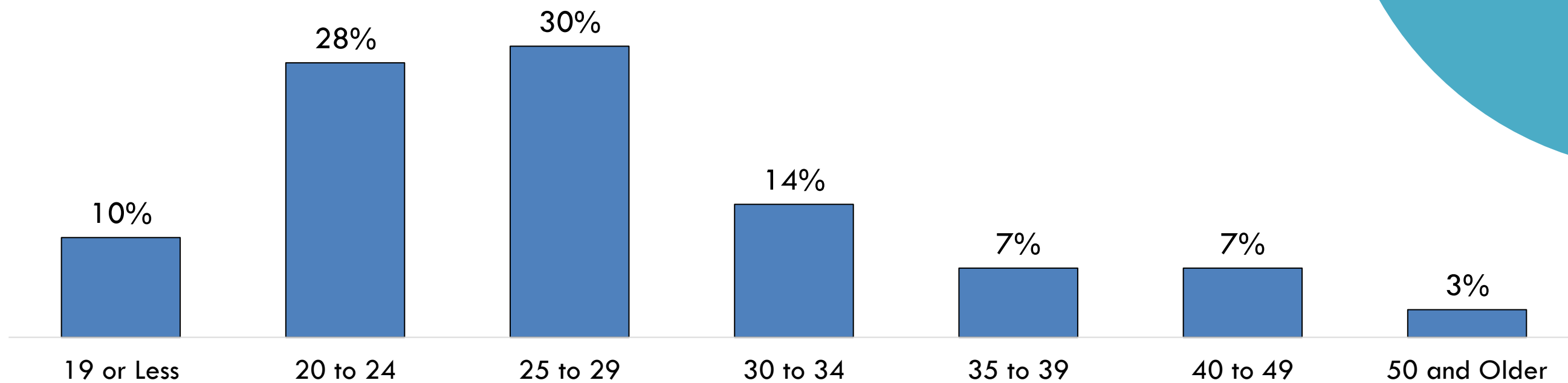


Nine of every 10 aerospace students at the LA community colleges are male, more than half identify as Hispanic, and more than two-thirds are 29-years-old or younger.

Race/Ethnicity



Age

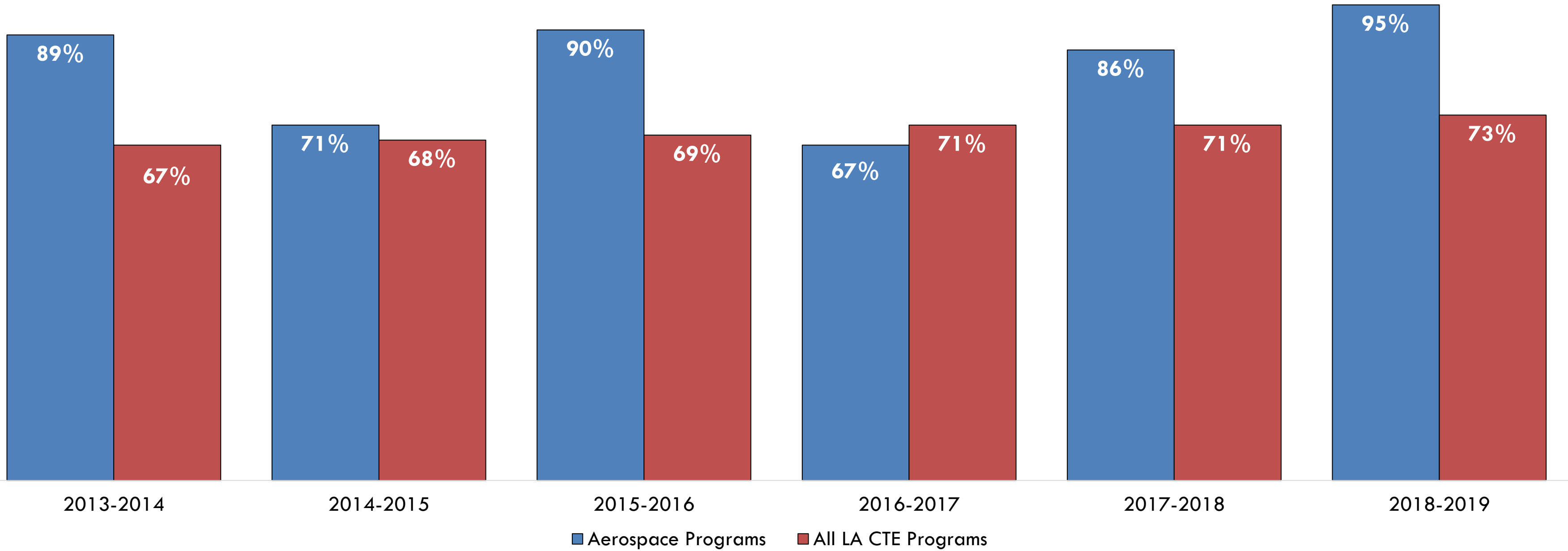


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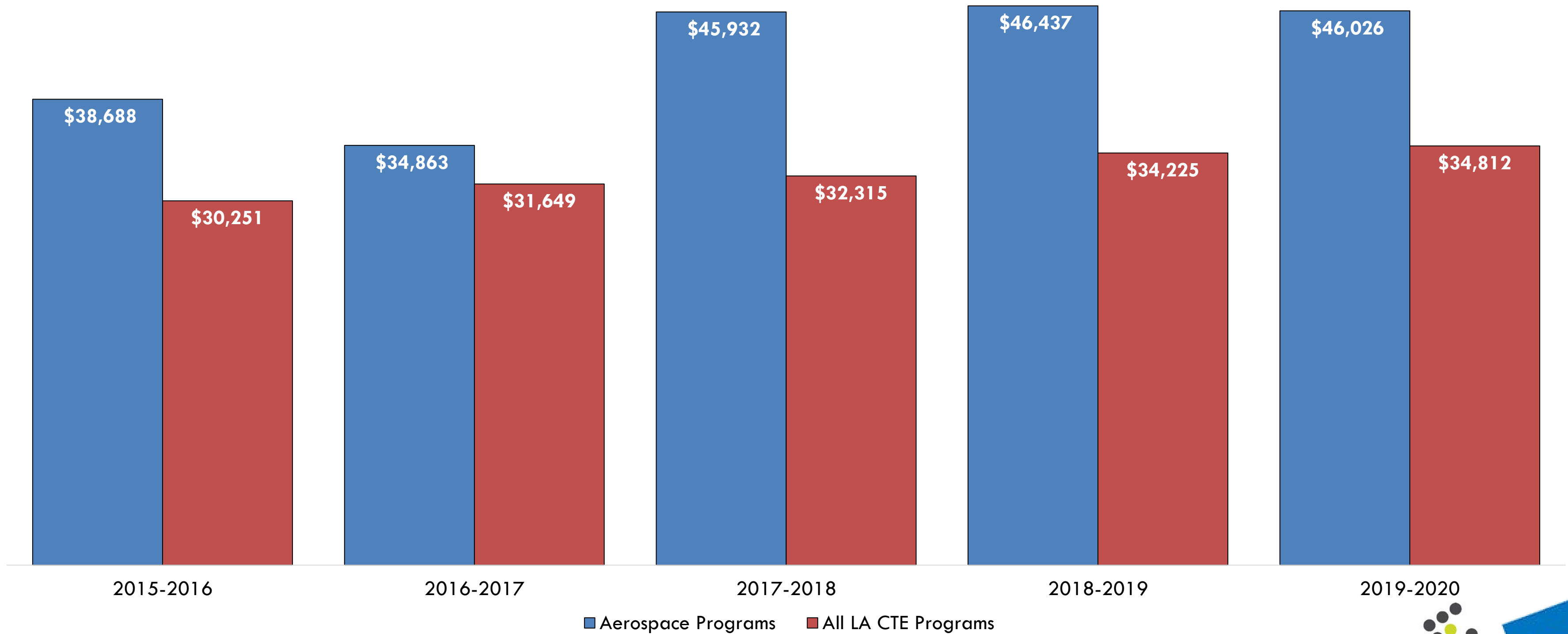
Aerospace Programs At-a-Glance

TOP6 - Program Title	2018-19	2019-20	2020-21	Latest 3 Yr Avg
0901.00 – Engineering, General (requires Calculus) (Transfer)	96	115	126	112
0924.00 – Engineering Technology, General (requires Trigonometry)	216	241	259	239
0950.00 – Aeronautical and Aviation Technology	21	11	21	18
0950.10 – Aviation Airframe Mechanics	105	47	63	72
0950.20 – Aviation Powerplant Mechanics	78	44	54	59
Total	516	458	523	500

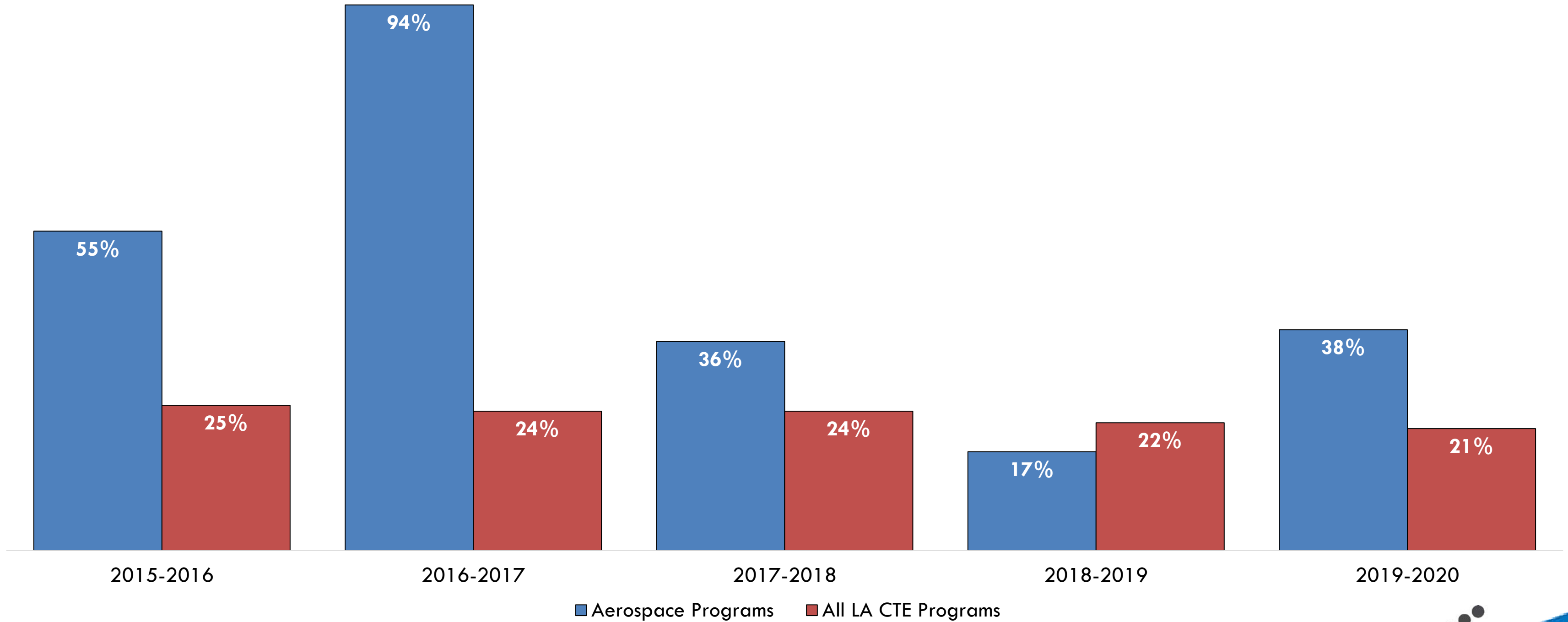
Students with a Job Closely Related to Their Field of Study



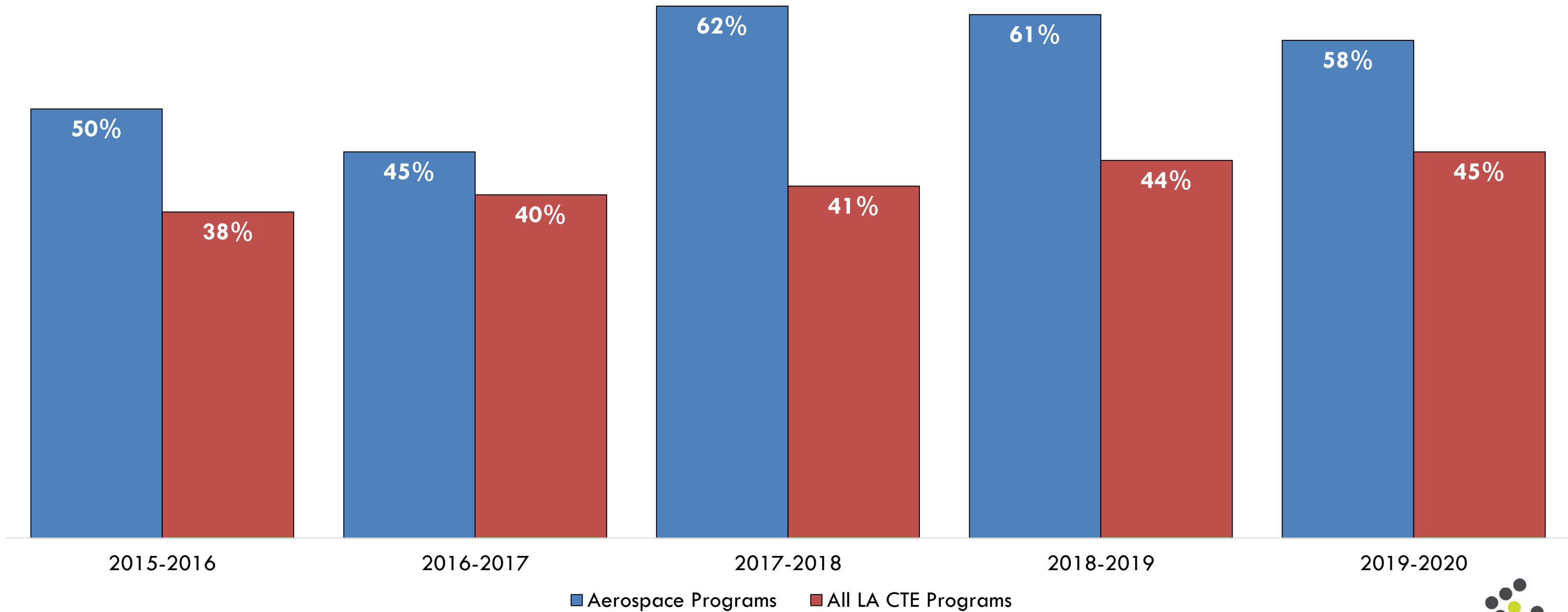
Median Annual Earnings for Exiting Students



Median Change in Annual Earnings for Exiting Students



Students Who Attained the Living Wage (\$38,217/year)



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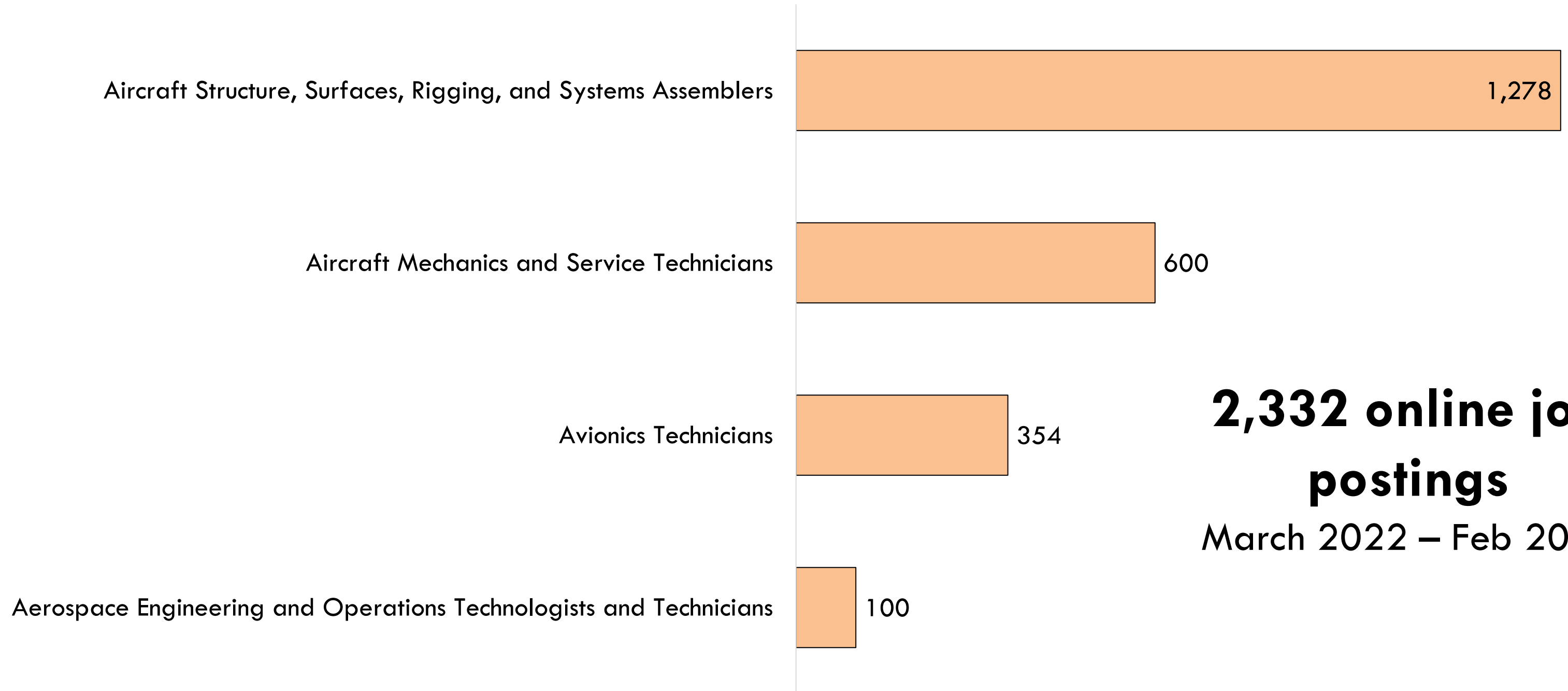
Target Aerospace Occupations

Source: Lightcast, datarun 2023.1

Occupation	2021 Jobs	2026 Jobs	5-Year % Change	Annual Job Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Aircraft Mechanics and Service Technicians	4,842	5,449	13%	531	\$29.62	\$37.21	\$46.40
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	943	955	1%	120	\$18.50	\$22.95	\$29.23
Avionics Technicians	565	635	12%	59	\$36.10	\$38.40	\$46.95
Aerospace Engineering and Operations Technologists and Technicians	420	450	7%	49	\$36.30	\$38.23	\$46.54
TOTAL	6,769	7,489	11%	759	-	-	-

LA County Self-Sufficiency Standard Wage: \$18.10/hour

Number of Job Postings by Occupation



2,332 online job postings
March 2022 – Feb 2023

Source: Lightcast Job Postings, datarun 2023.1



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Employer Job Postings

Job Title	Job Ads	Employer	Job Ads
Assemblers	518	Aerotek*	256
Avionics Technicians	125	Northrop Grumman	134
Airframe and Powerplant Mechanics	103	Flowserve	91
Aircraft Maintenance Technicians	86	Boeing	73
Aircraft Mechanics	74	Randstad*	60
Composite Technicians	70	SpaceX	49
Aircraft Technicians	66	Gulfstream Aerospace	44
Aerospace Technicians	54	General Atomics	39
Precision Assemblers	53	Total Aviation Staffing*	35

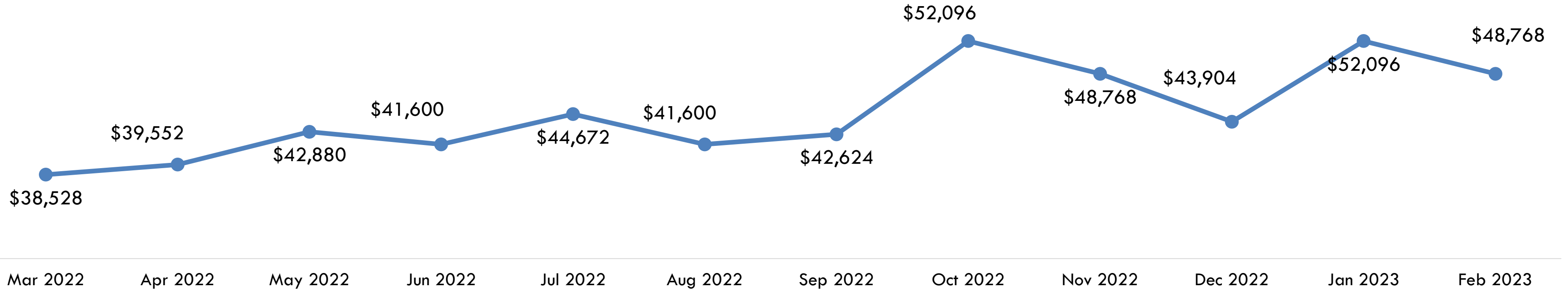
*Staffing company



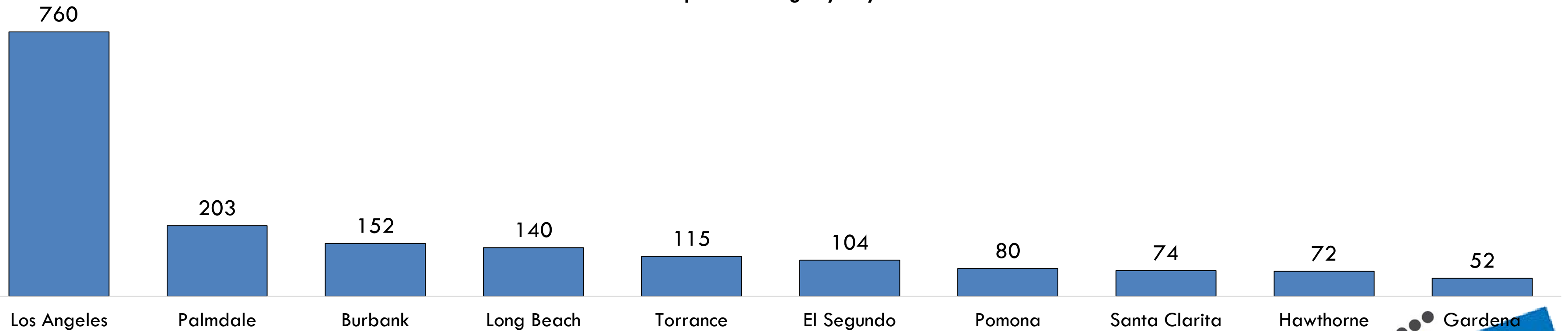
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Employer Job Postings

Advertised Wage Trend Over Last 12 Months



Top Job Postings by City



Source: Lightcast Job Postings, datarun 2023.1



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

FEEDBACK POLL AND NEXT STEPS

THANK YOU!

WWW.COMPETITIVETWORKFORCE.LA

For more information contact:

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