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THE CHANGING FACE OF AEROSPACE

in

SOUTHERN CALIFORNIA

▲ THE FUTURE IS HERE



INSTITUTE FOR APPLIED ECONOMICS





- **The Future Has Arrived**
- **Recent Industry Activity**
- **Sizing Things Up**
- **Spreading the Wealth**
- **Work, Work, Work**
- **What the Industry Says**



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The **Future** Has Arrived.



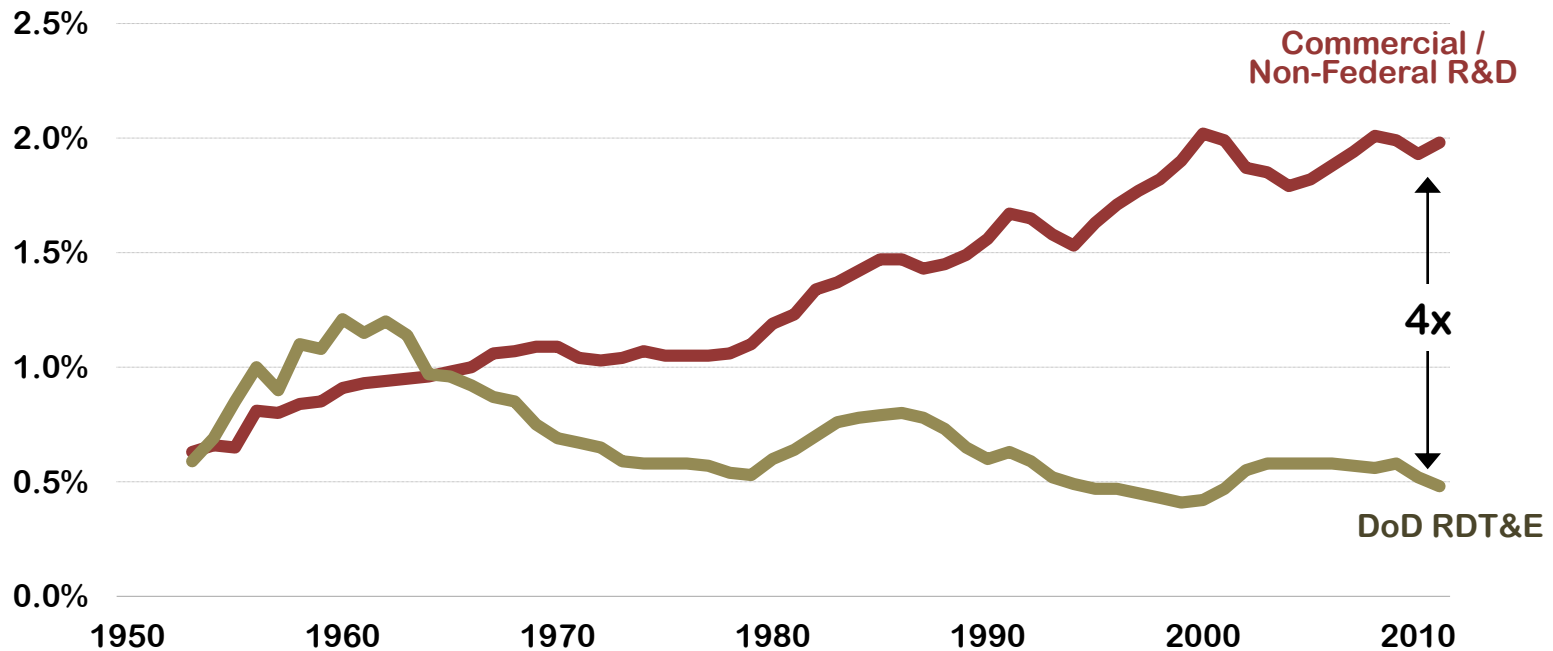


Aerospace is being
transformed by **exponential**
technologies from within and
from outside the industry.

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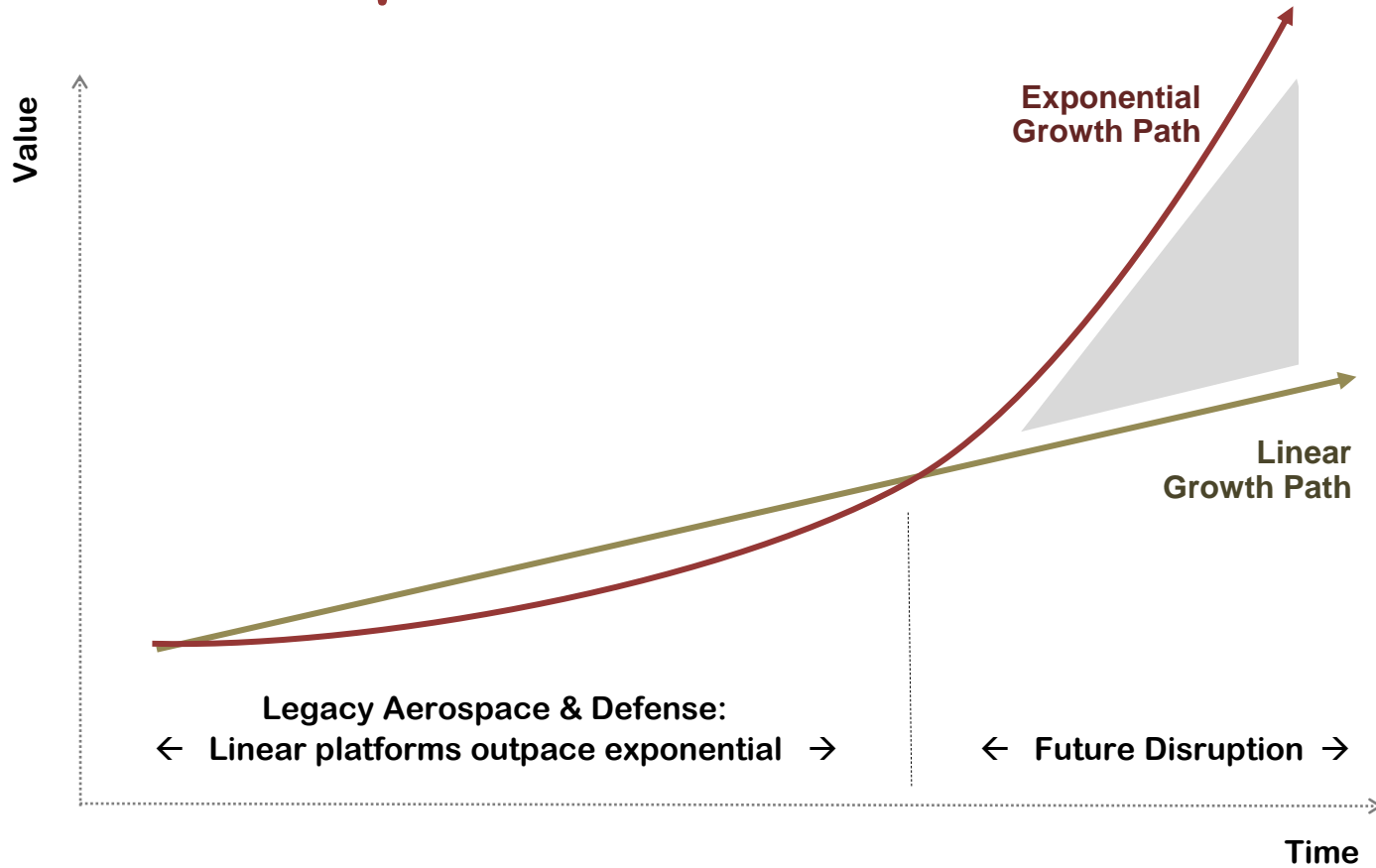


US R&D Spending as % of GDP By Funding Source





Linear vs. Exponential Growth





Southern California remains
one of the world's **most**
competitive regions for
aerospace **innovation.**

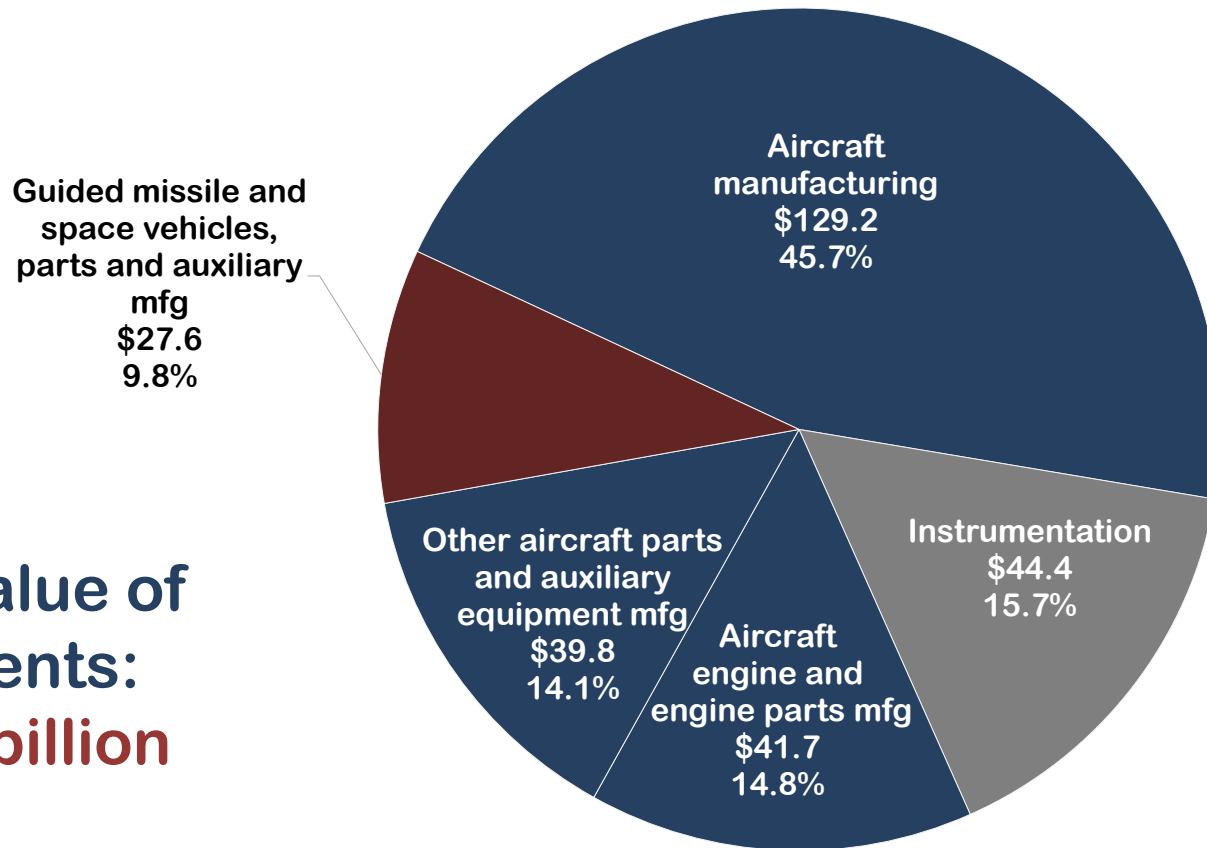


Recent Industry Activity.



Total Value of Shipments in 2014

\$ billions

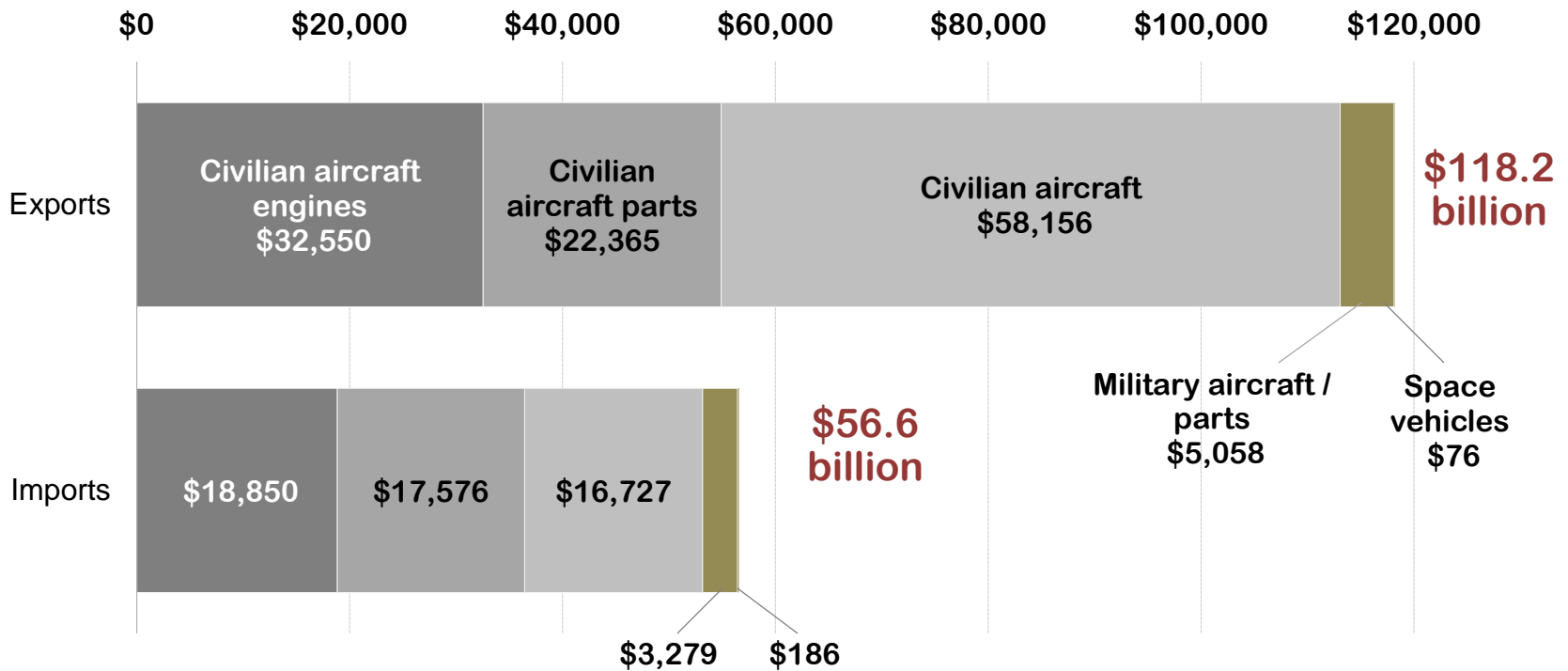


Total Value of Shipments:
\$282.7 billion



Composition of US Aerospace Exports 2014

\$ millions



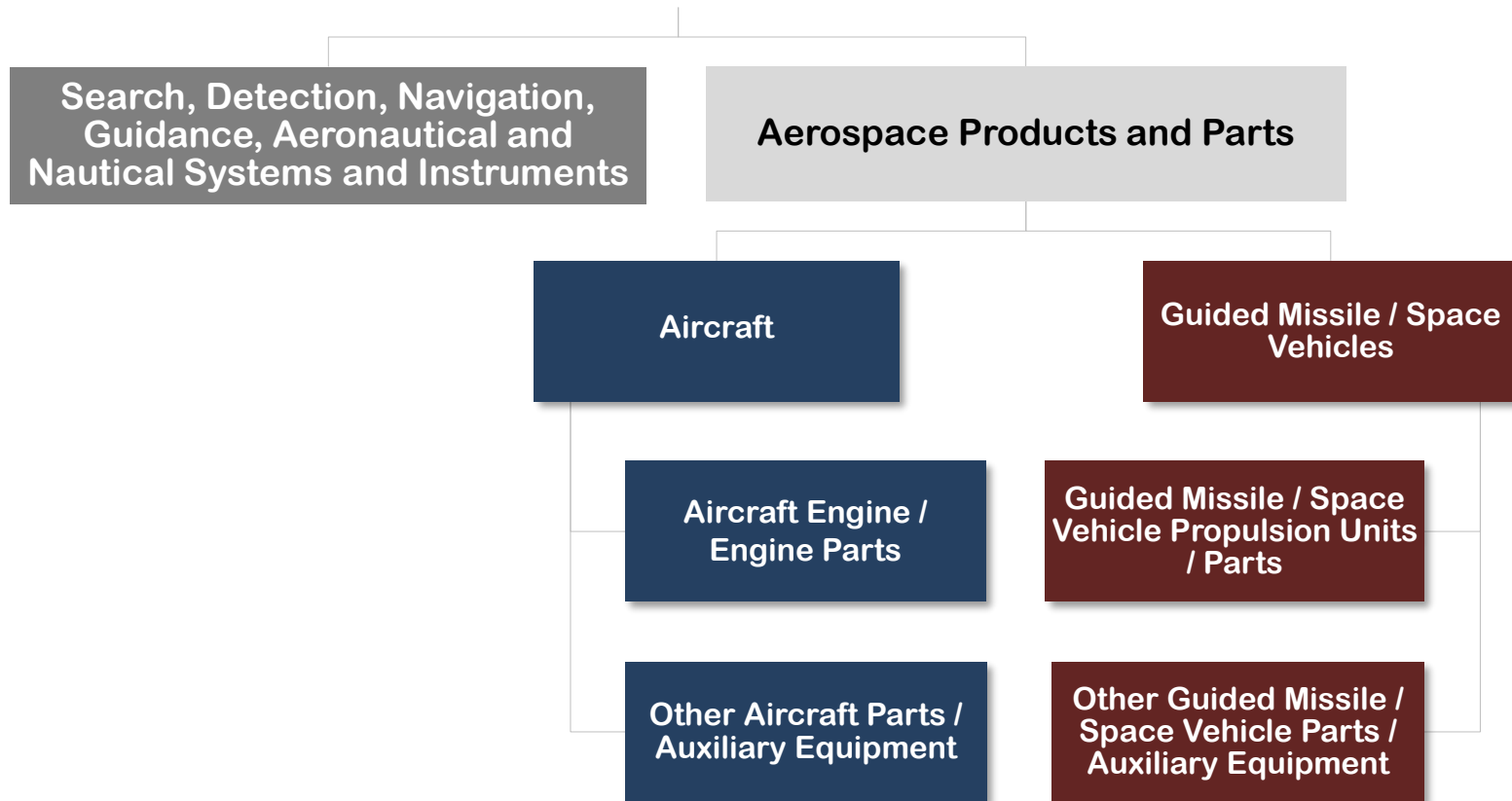
Source: BEA



Sizing Things Up.

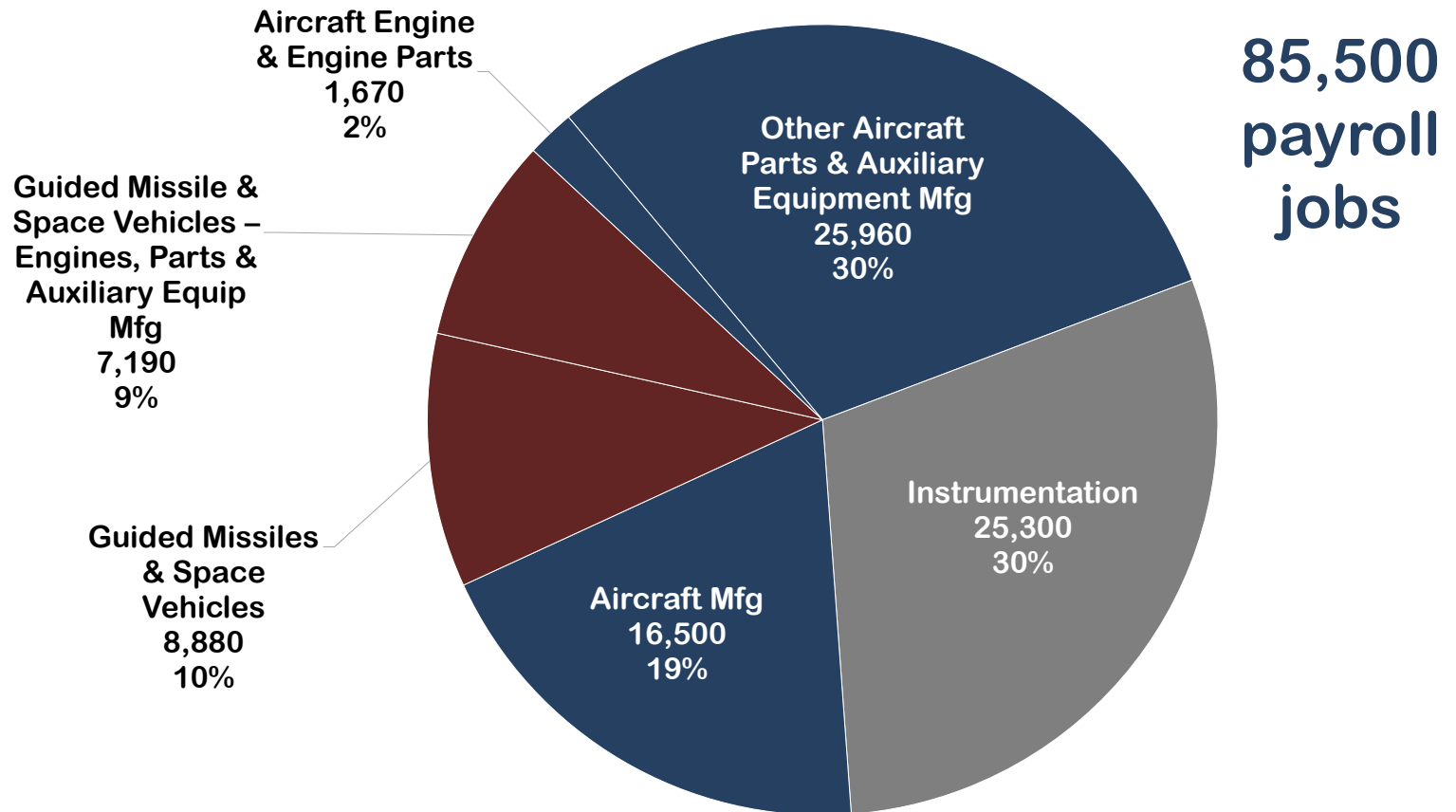


Aerospace Industry



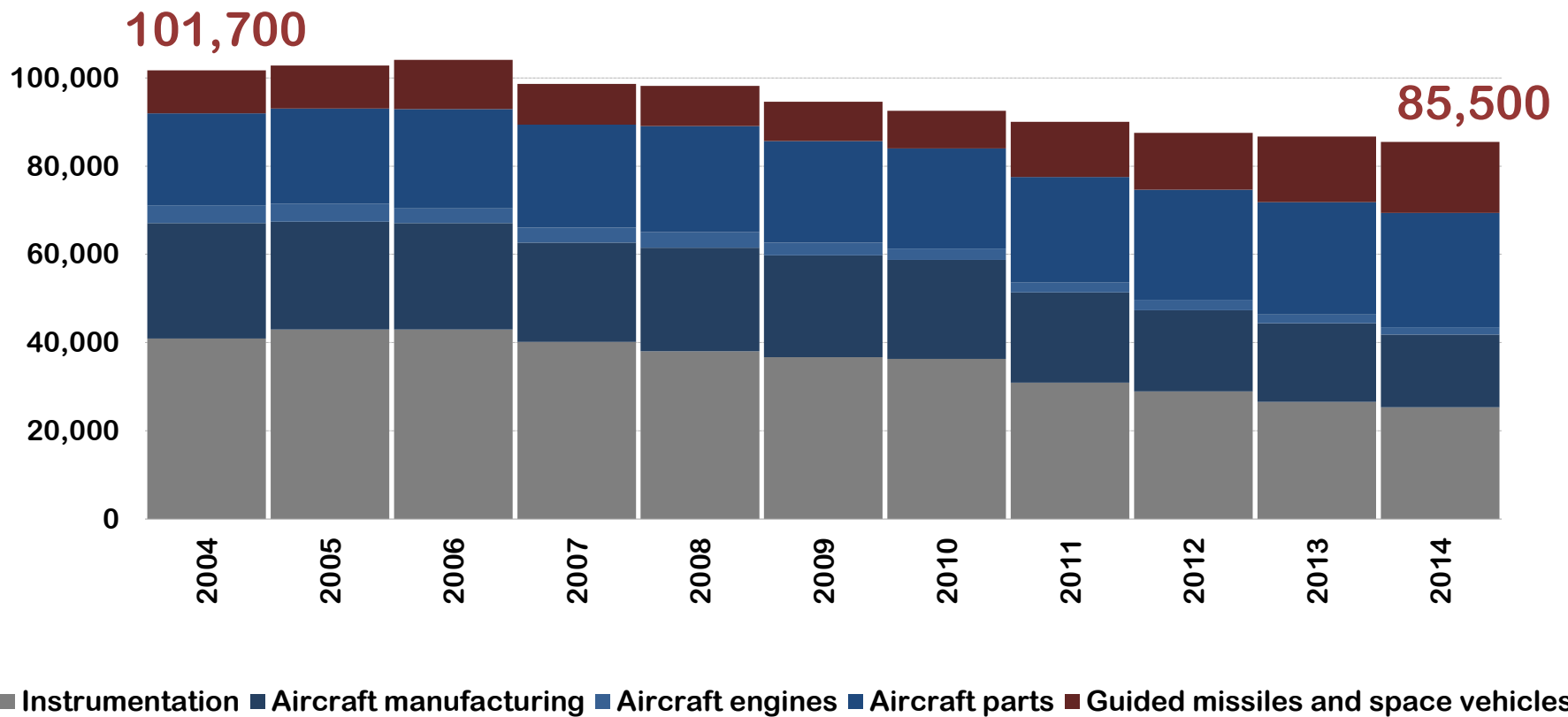


Aerospace Payroll Employment 2014





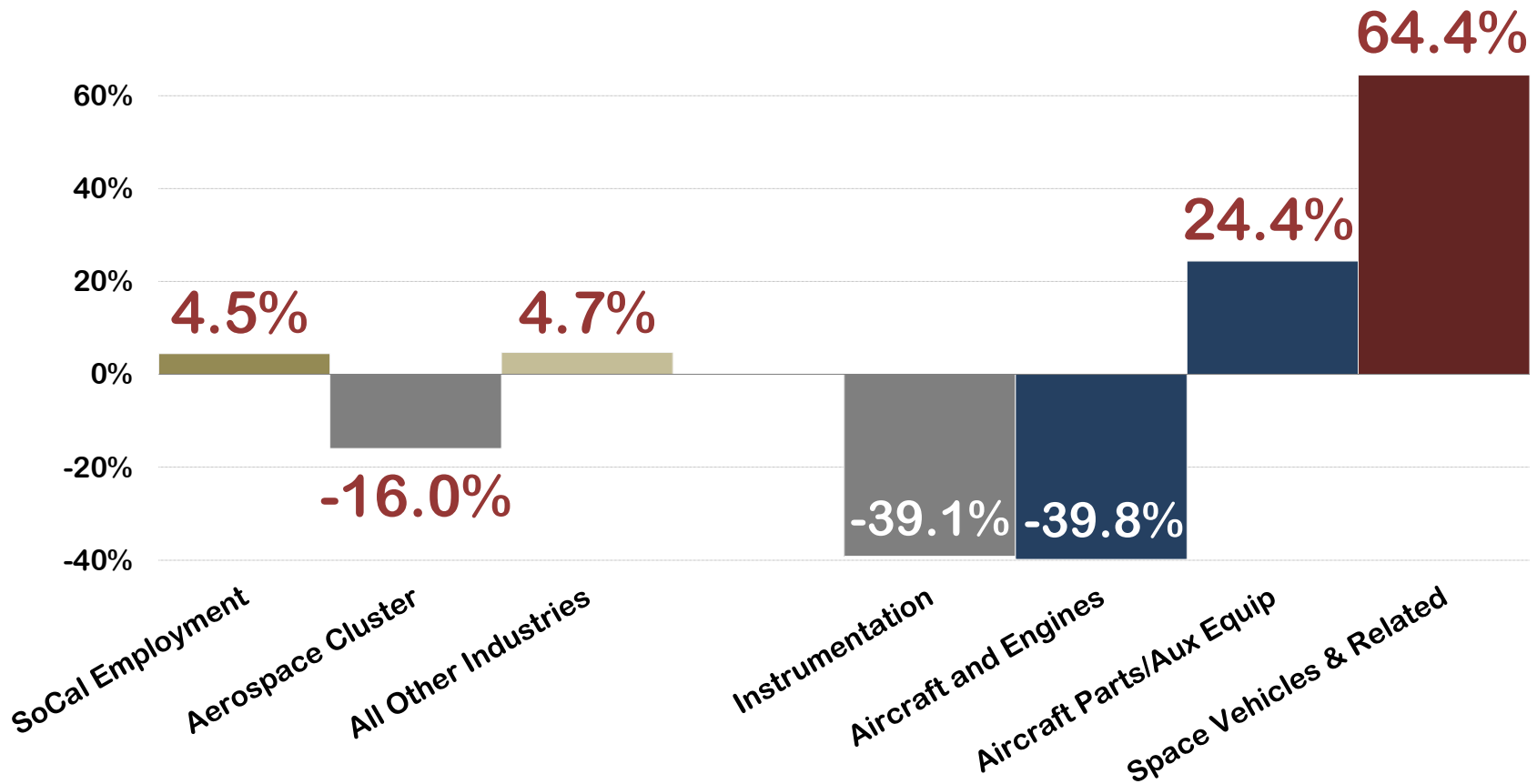
Southern California Aerospace Employment



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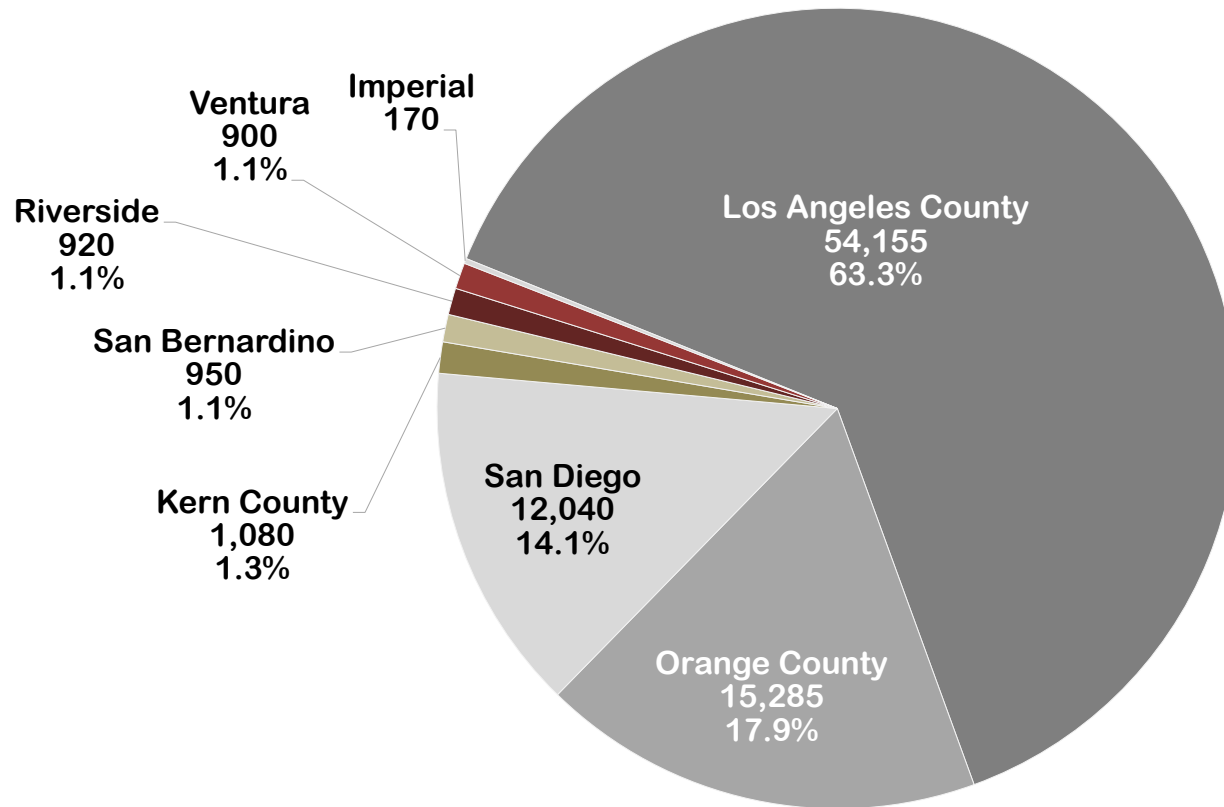


Employment Growth Since 2004





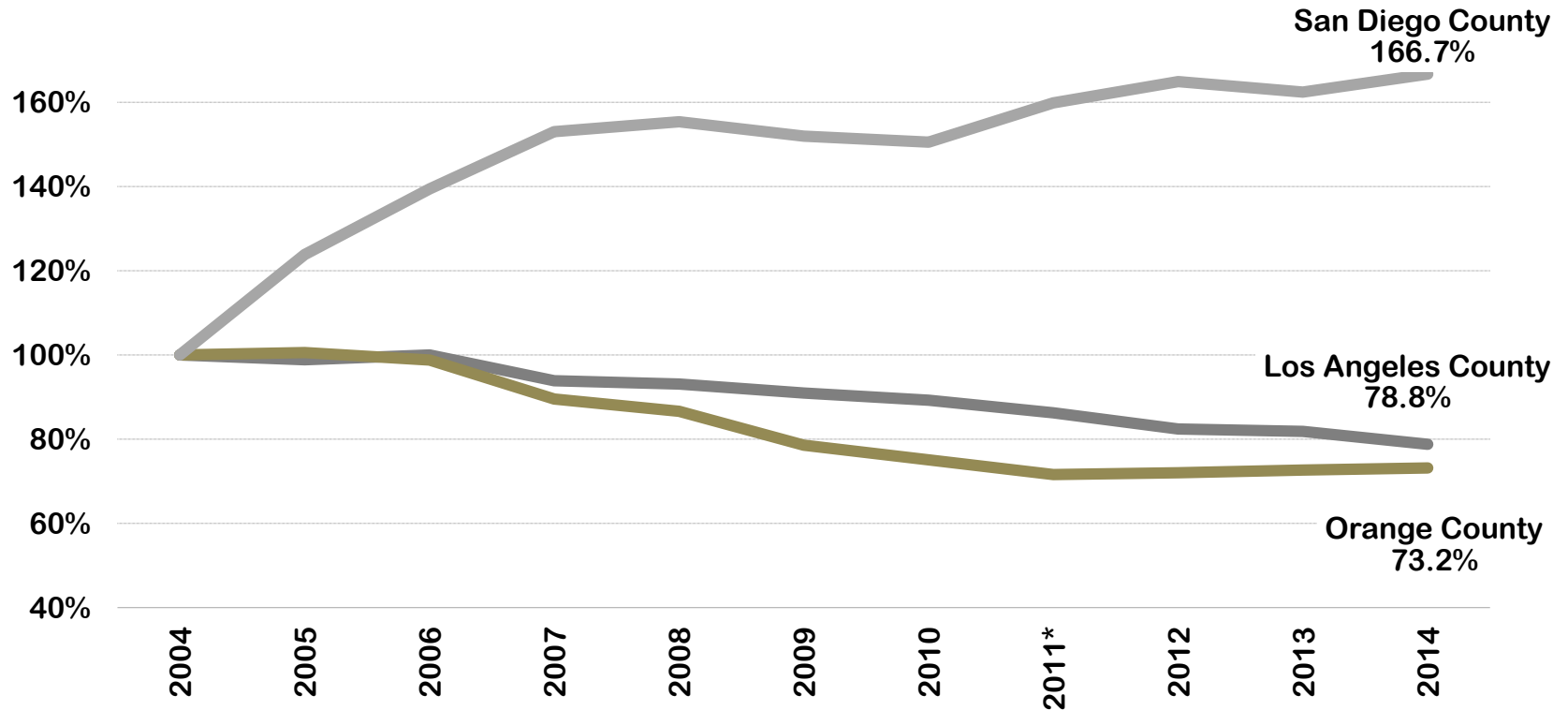
Employment by County 2014



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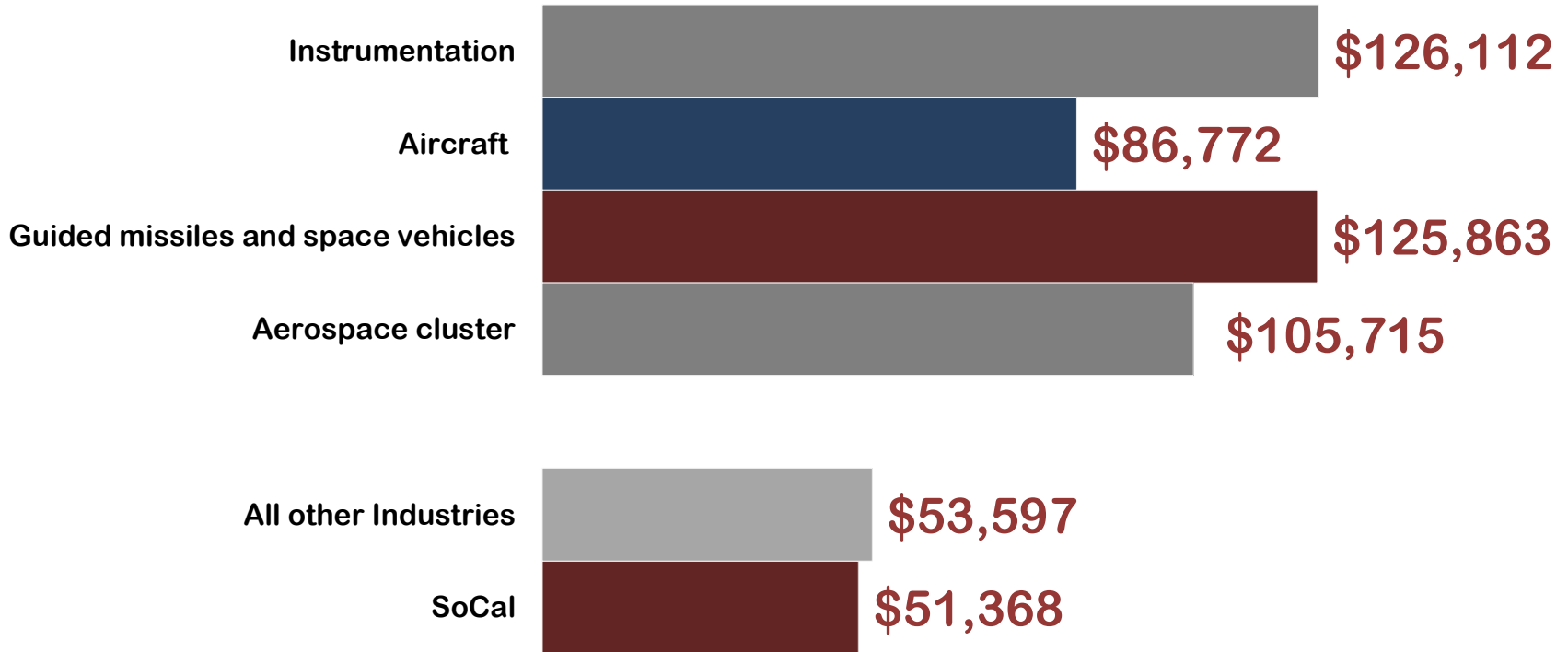


Employment Growth by County





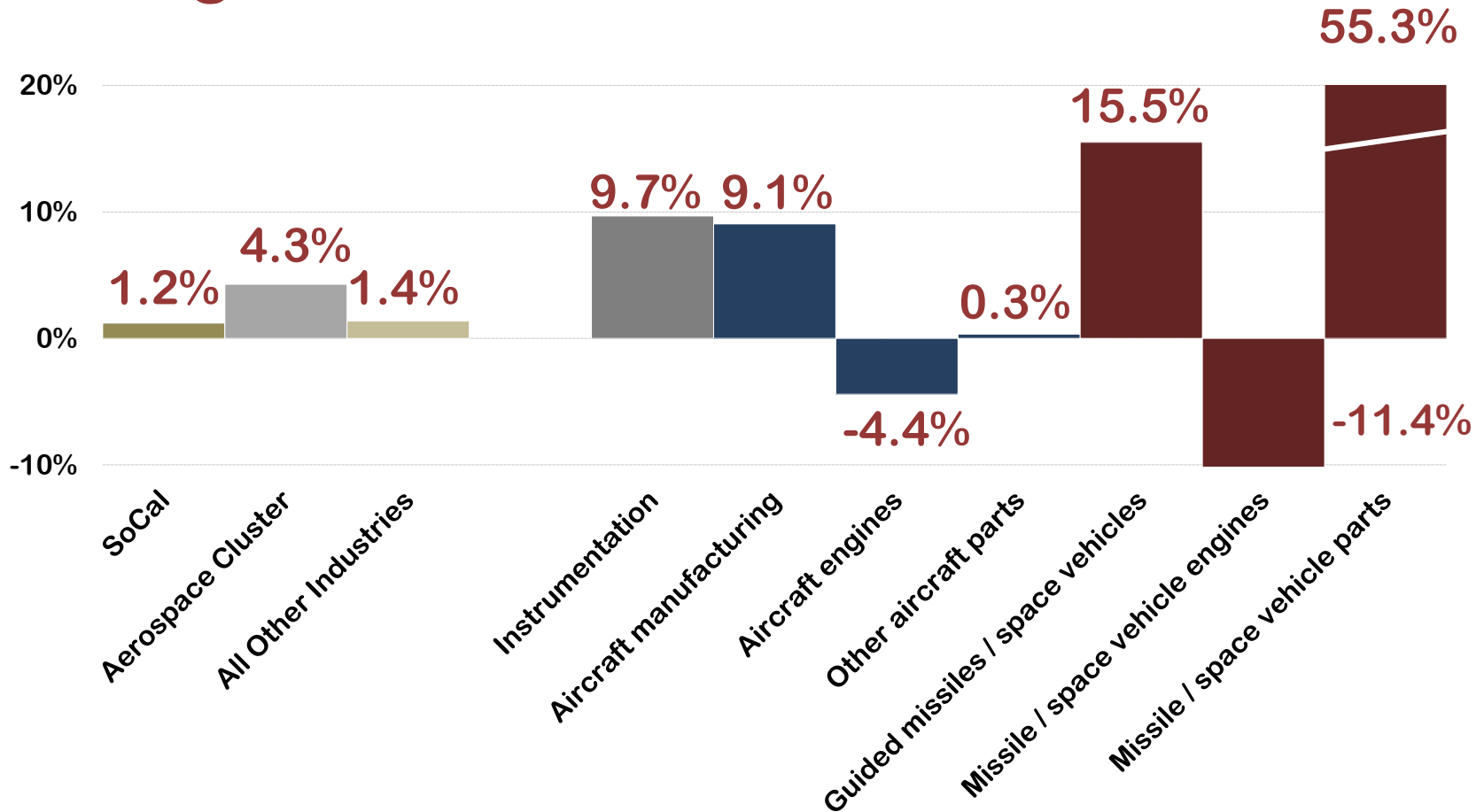
Average Annual Earnings in 2014



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Real Wage Growth Since 2004



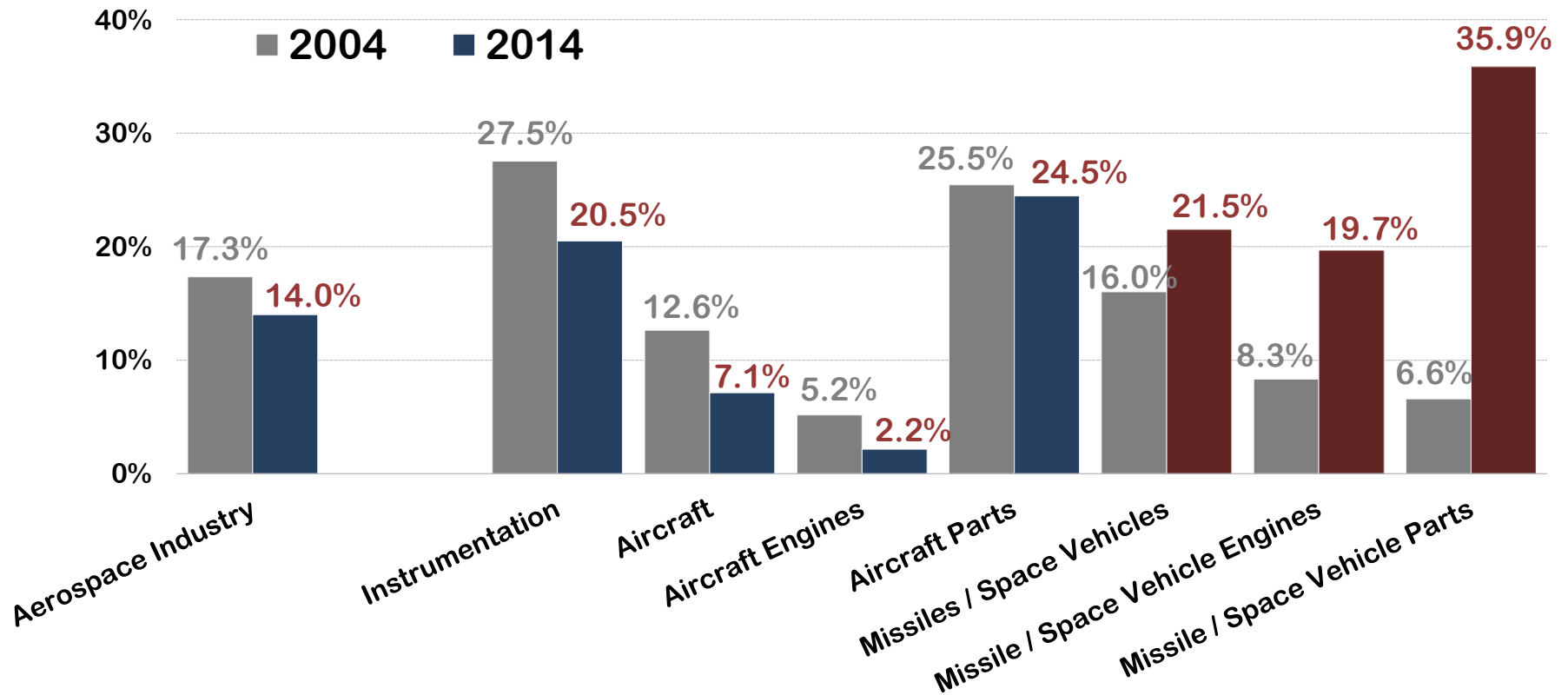


Employment Location Quotients

	Location Quotient 2014	Change Since 2004
<u>Instrumentation:</u>	3.13	↓
<u>Aircraft:</u>		
Aircraft manufacturing	1.09	↓
Aircraft engine and engine parts manufacturing	0.33	↓
Other aircraft parts and auxiliary equipment manufacturing	3.74	↓
<i>Subcluster</i>	1.62	↓
<u>Guided missiles and space vehicles:</u>		
Guided missile and space vehicle manufacturing	2.47	↑↑
Guided missile /space vehicle propulsion units /propulsion unit parts	7.58	↑↑
Other guided missile /space vehicle parts /auxiliary equipment	5.49	↑↑
<i>Subcluster</i>	3.45	↑
TOTAL	2.14	↓



SoCal Share of National Aerospace Employment



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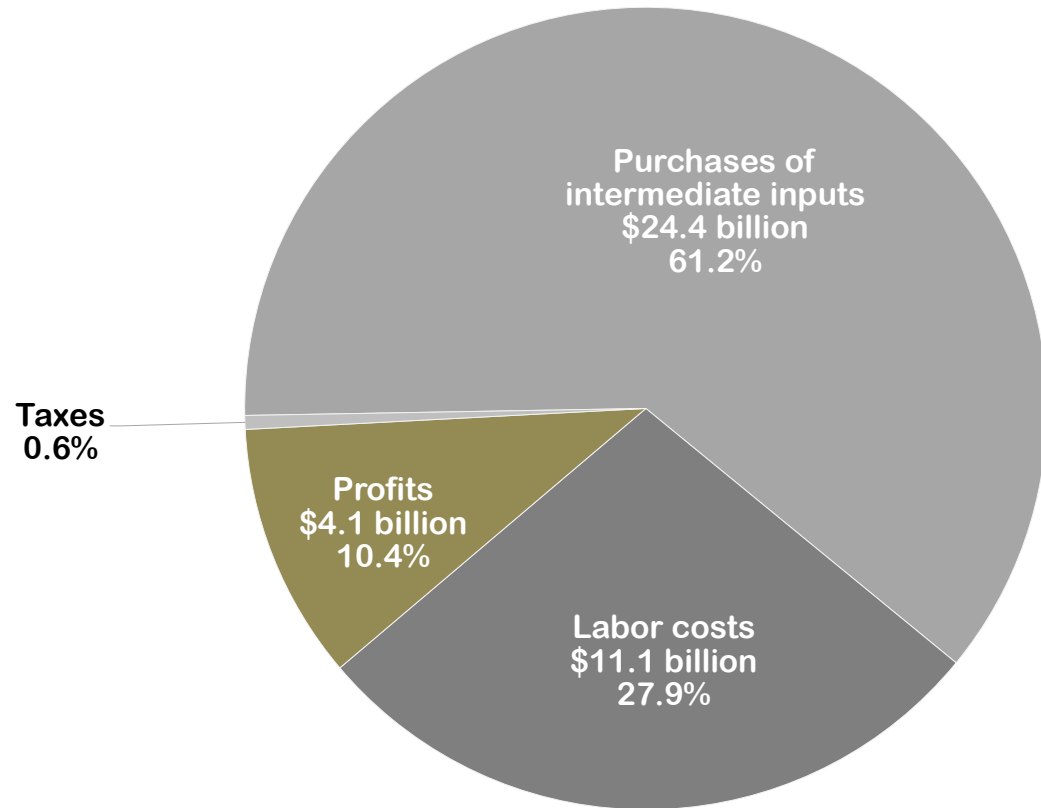


Spreading the Wealth.





Composition of Outlays 2014



Total Outlays:
\$39.9 billion



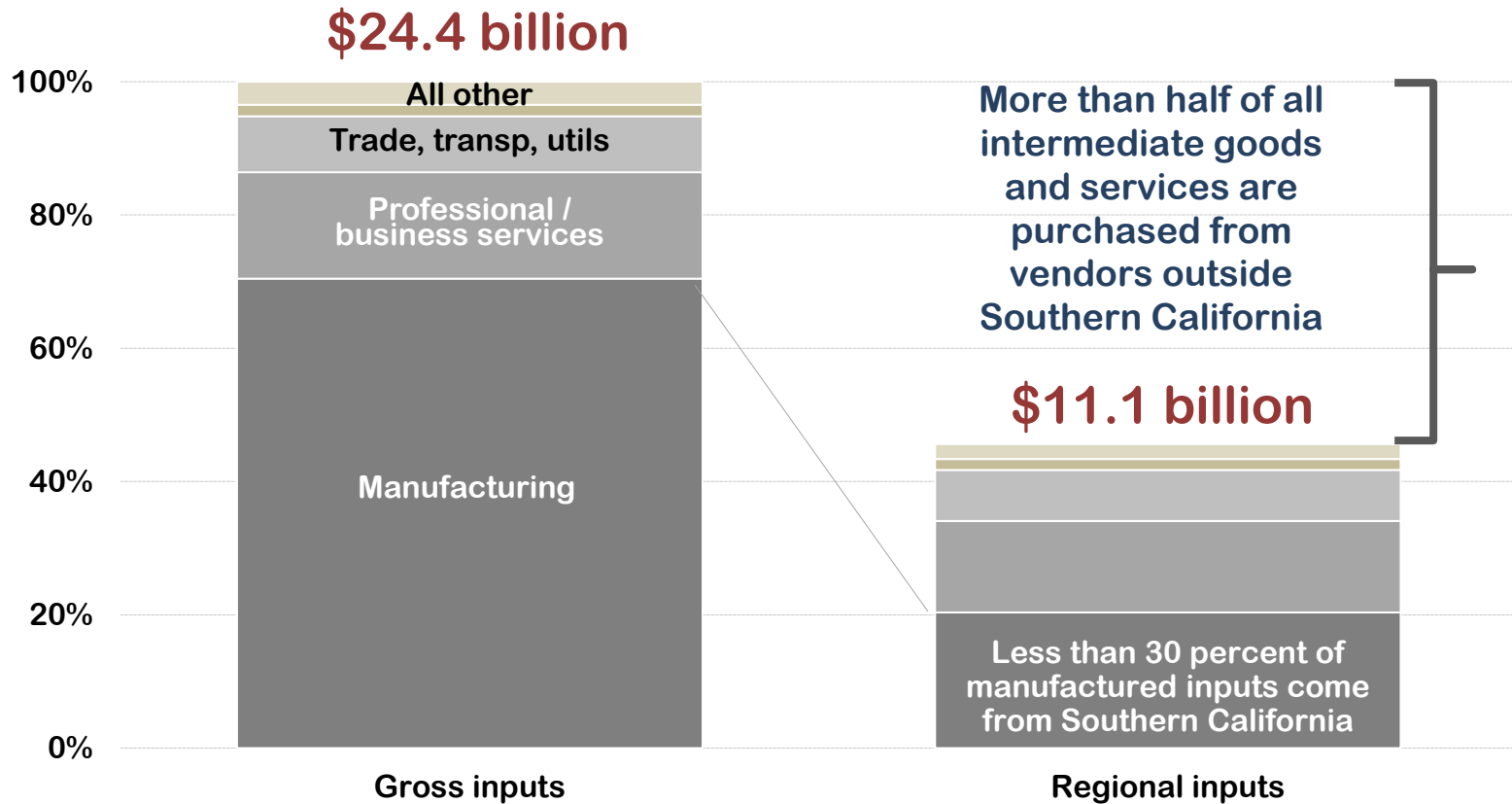
Aerospace Industry Economic Contribution

✓ 85,500 payroll jobs

- 245,770 total jobs
- \$20.3 billion labor income
- 2.4 percent of SoCal GDP
- \$7 billion S/L taxes

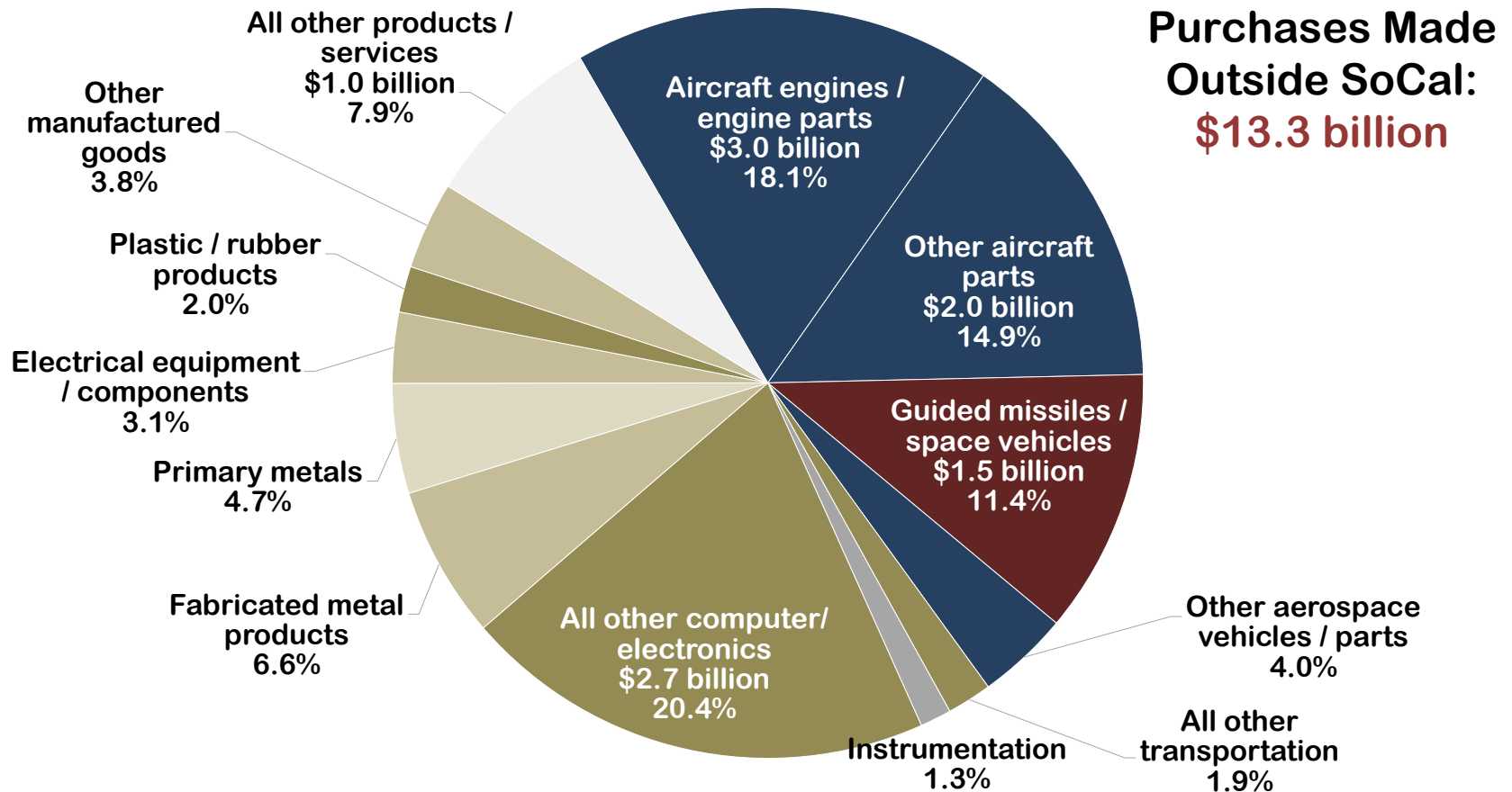


Regional Provision of Intermediate Inputs





Regional Purchase Gap by Input



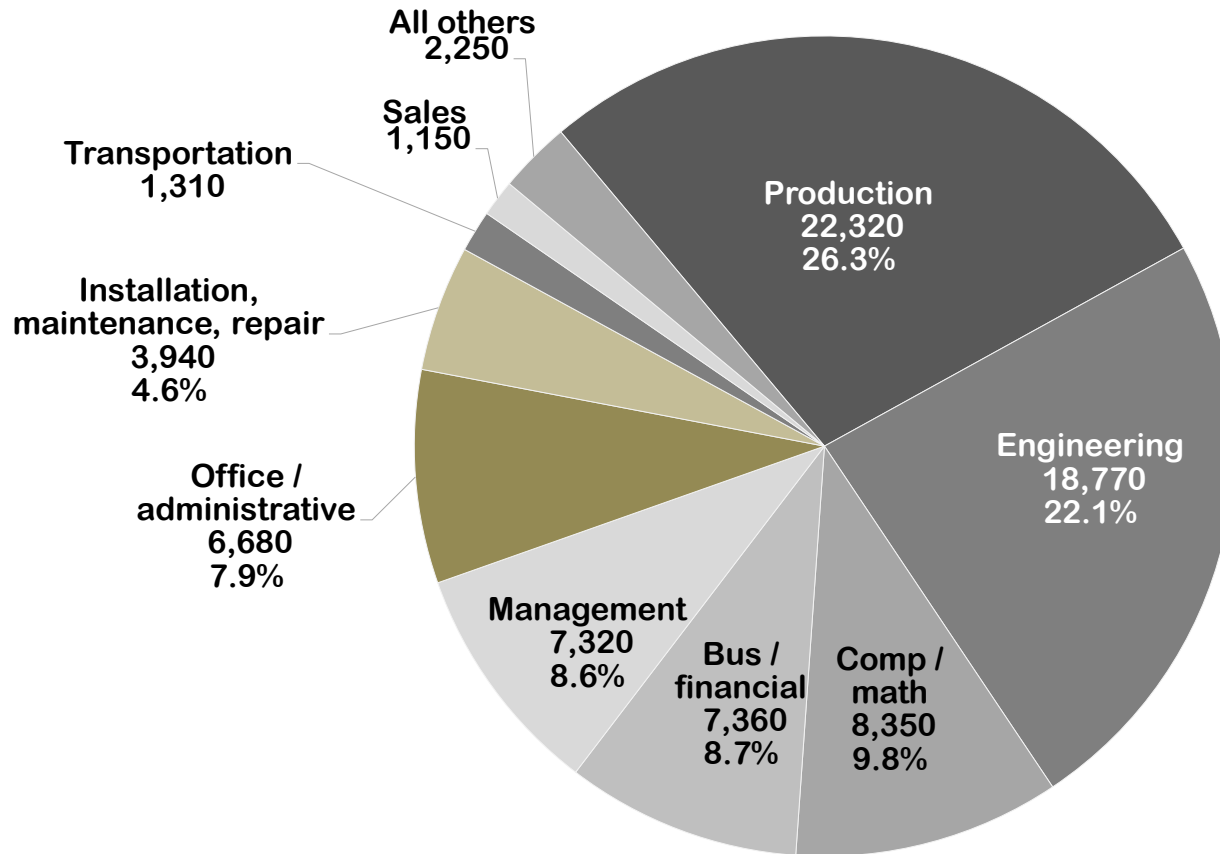
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Work, Work, Work.

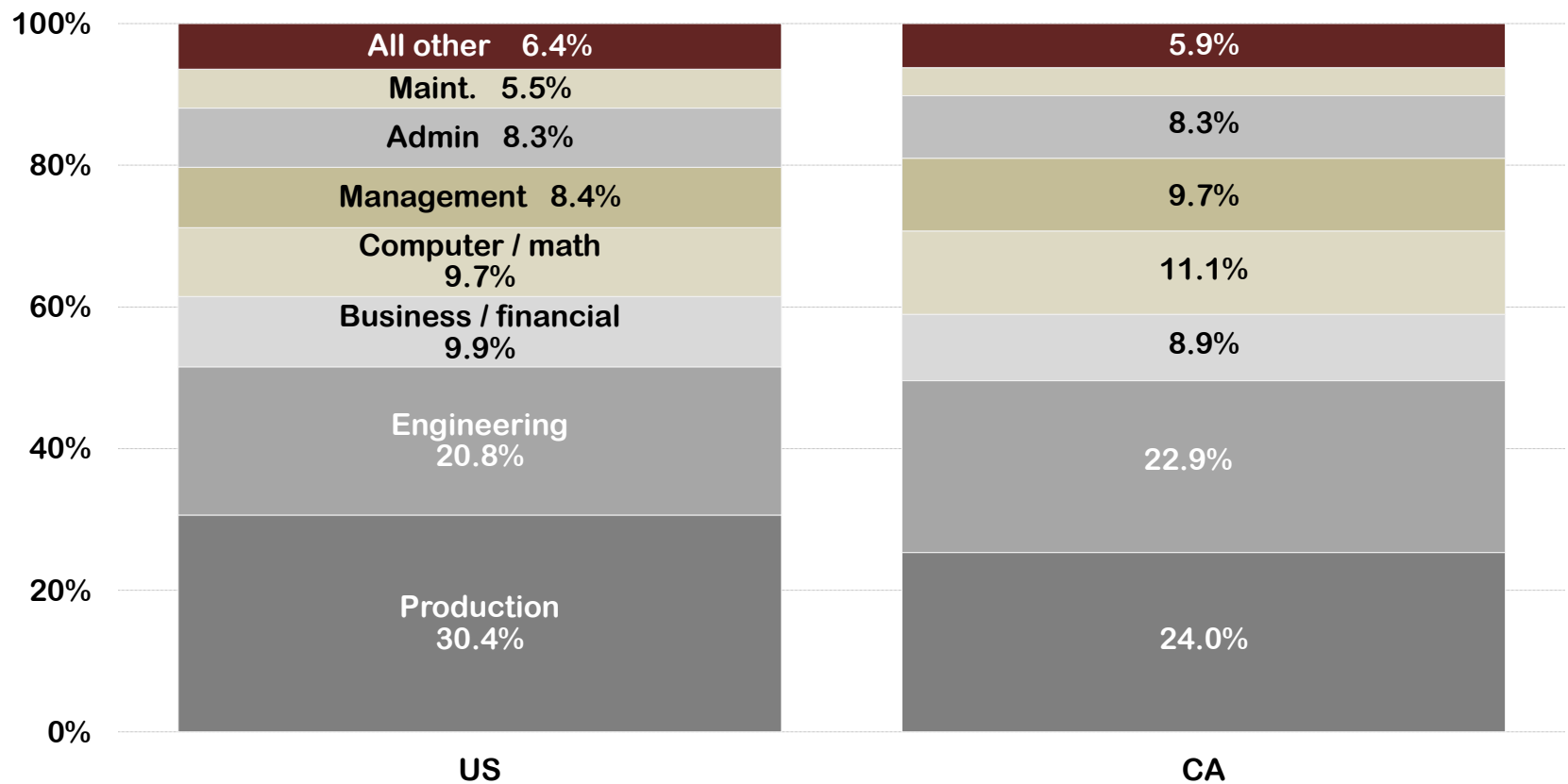


Industry Occupations



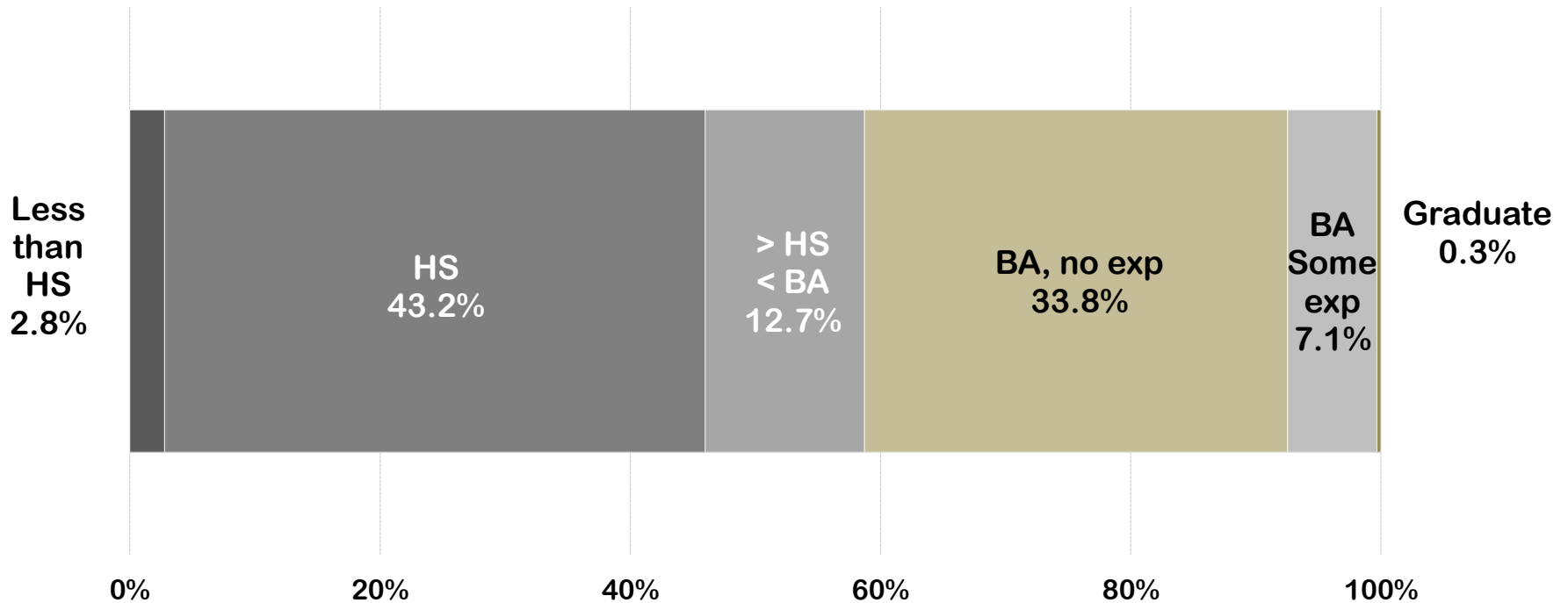


Occupational Distribution USA vs CA 2014





Entry Level Requirement (next 5 years)

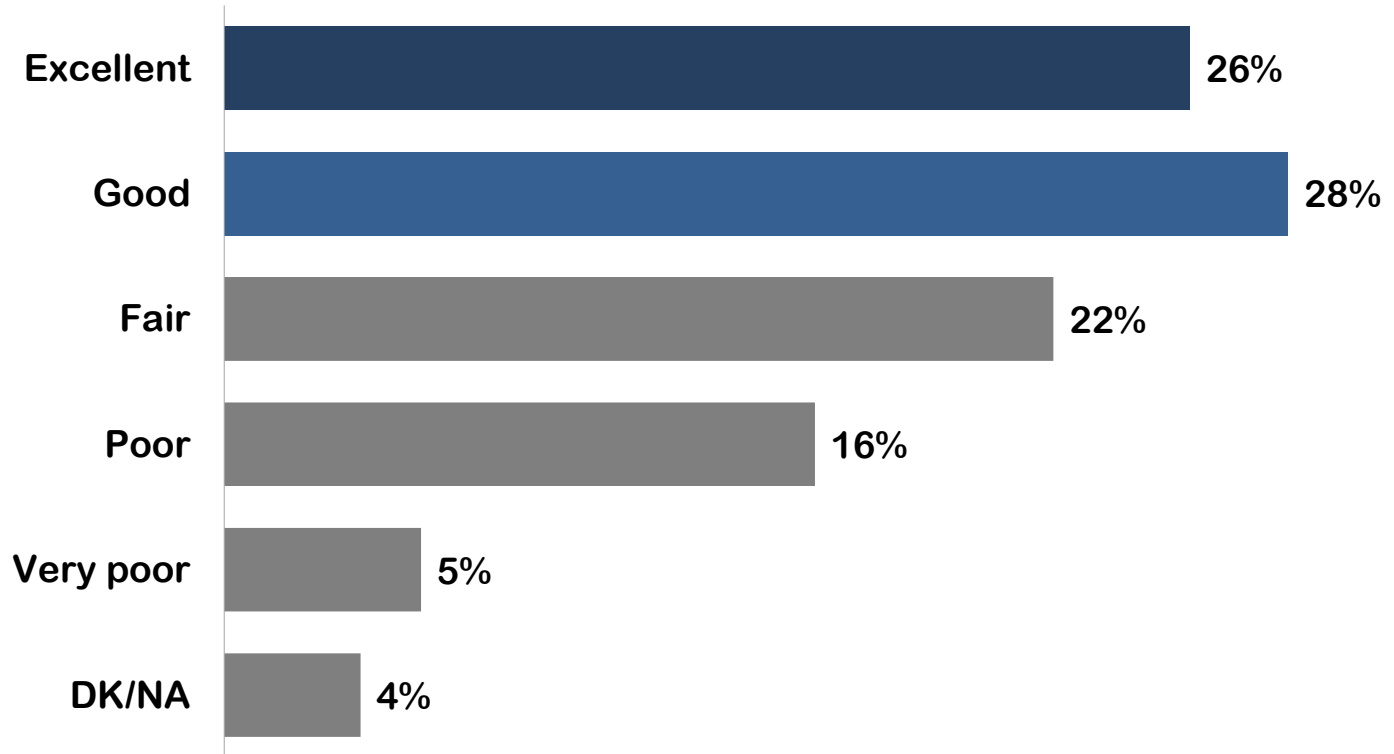




What the Industry Says.

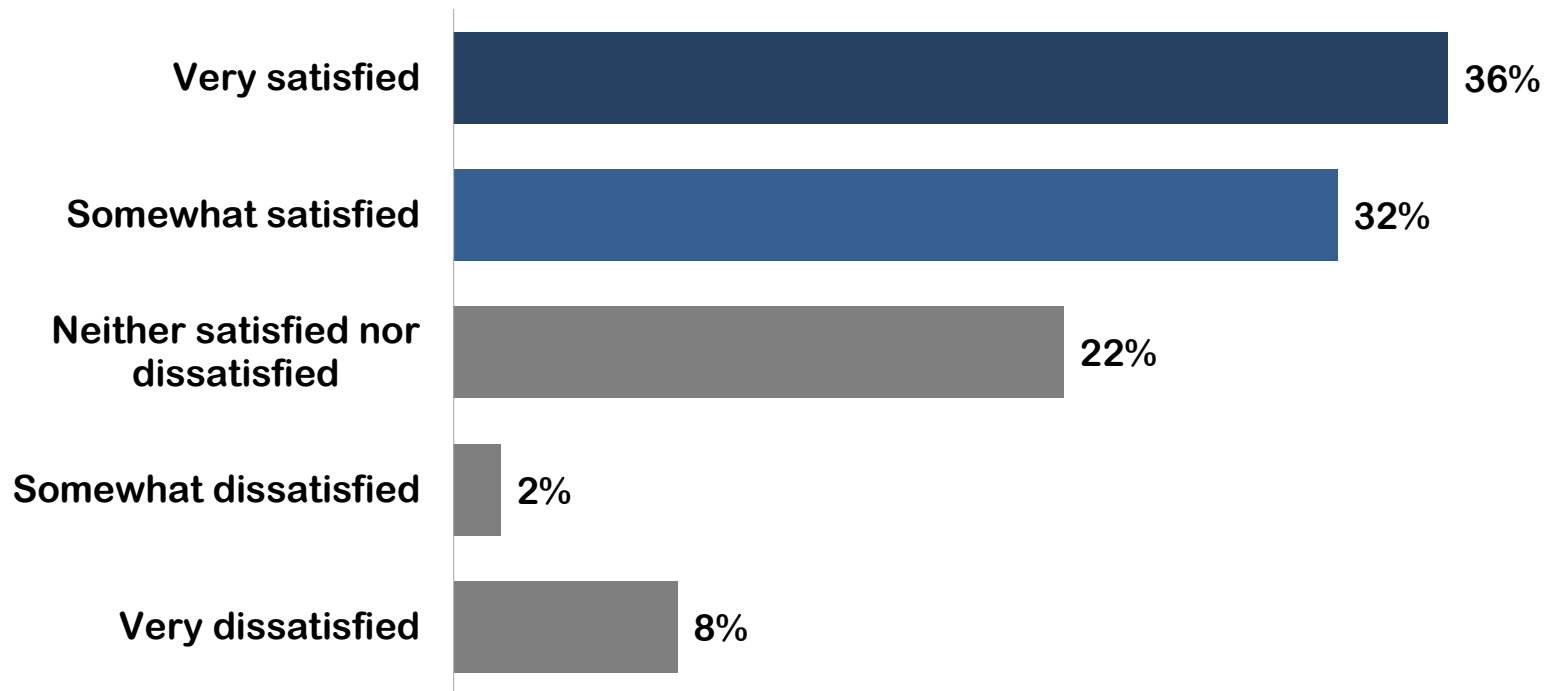


“How would you rate Southern California as a place for aerospace firms to do business?”





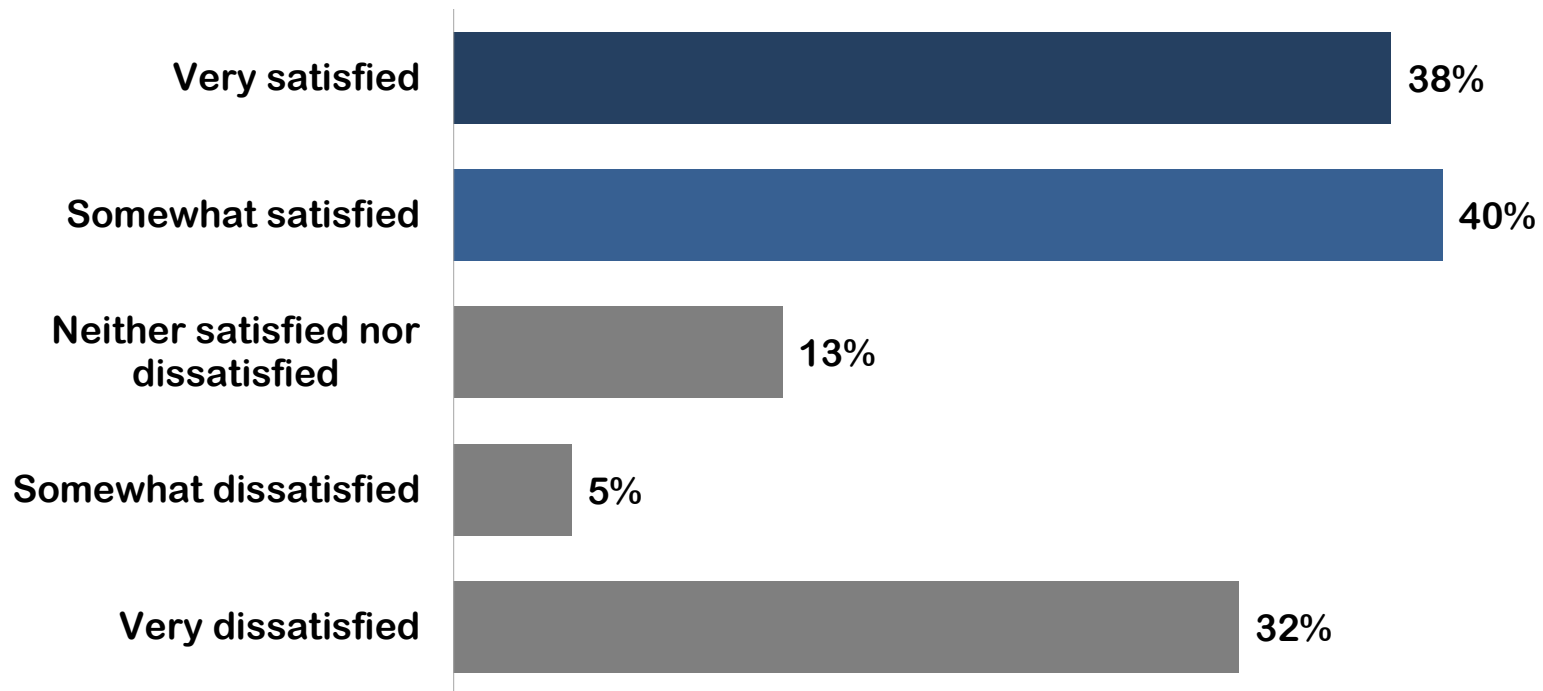
“How satisfied is your firm with your access to capital in Southern California?”



Of those stating an opinion



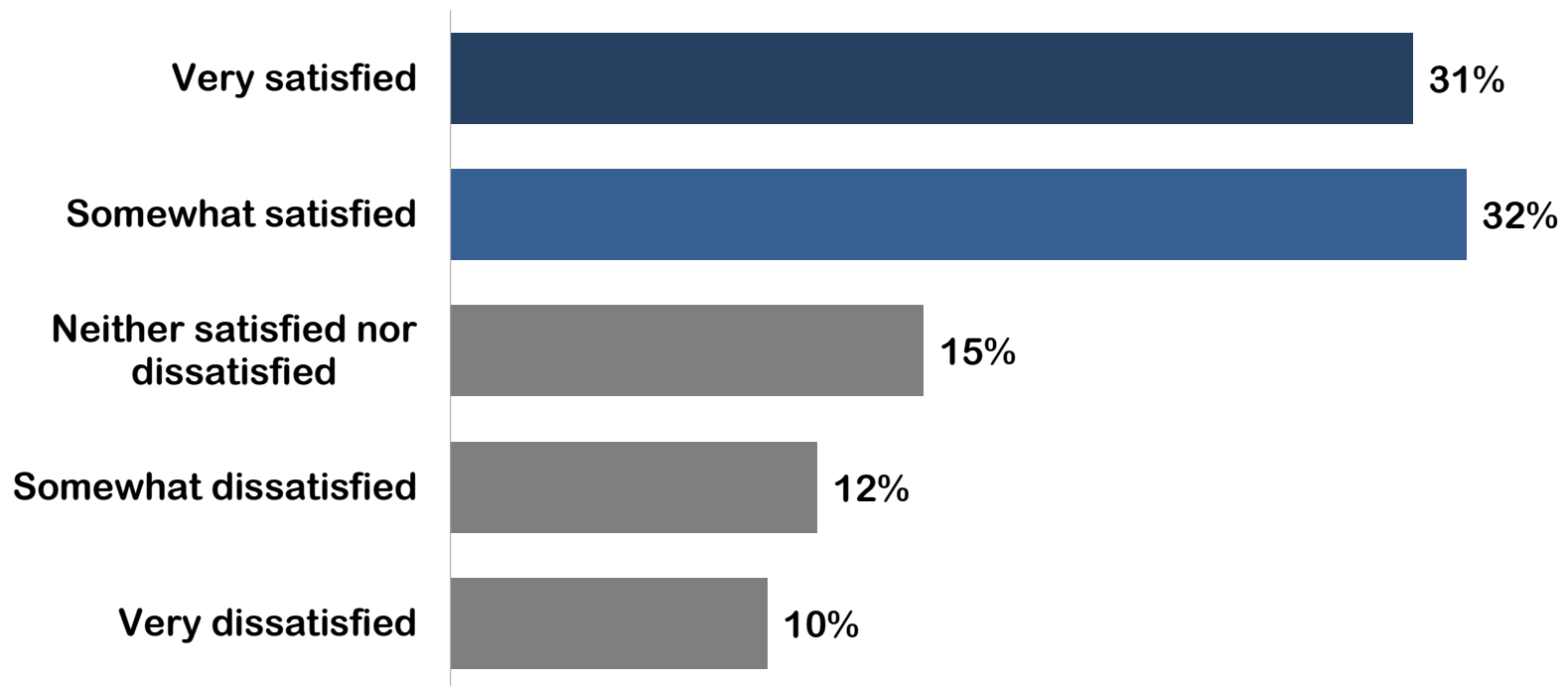
“How satisfied is your firm with your access to customers in Southern California?”



Of those stating an opinion



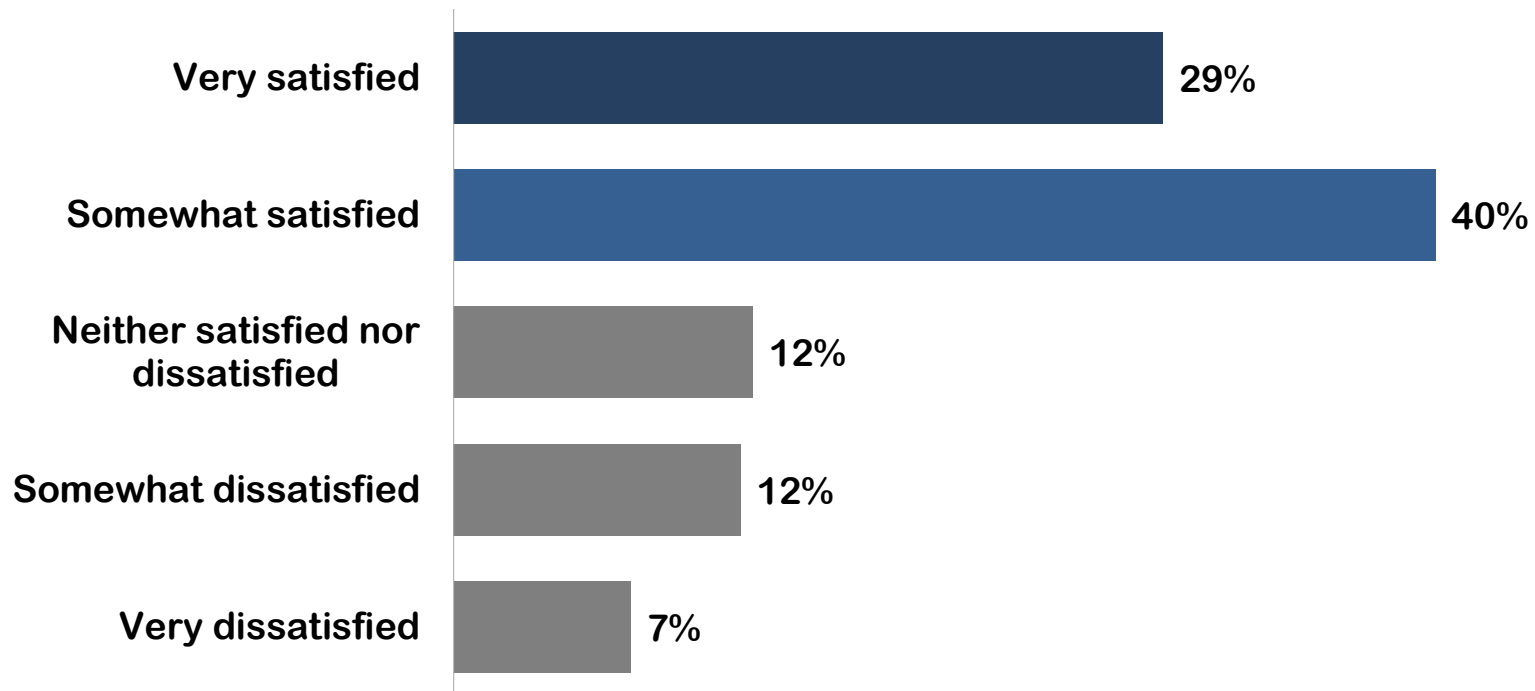
“How satisfied is your firm with your ability to recruit highly-skilled talent in Southern California?”



Of those stating an opinion



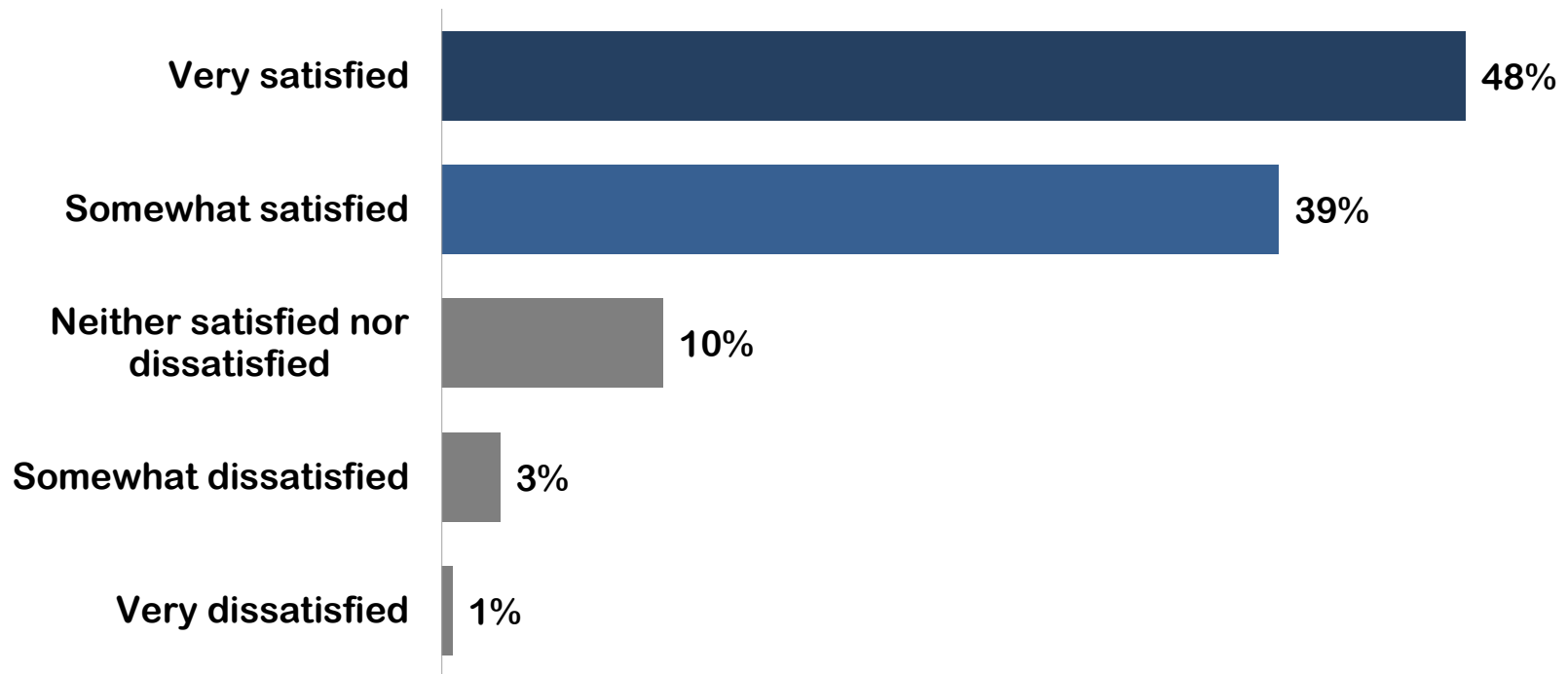
“How satisfied is your firm with your ability to find qualified entry / mid-level talent in Southern California?”



Of those stating an opinion



“How satisfied is your firm with your access to suppliers in Southern California?”

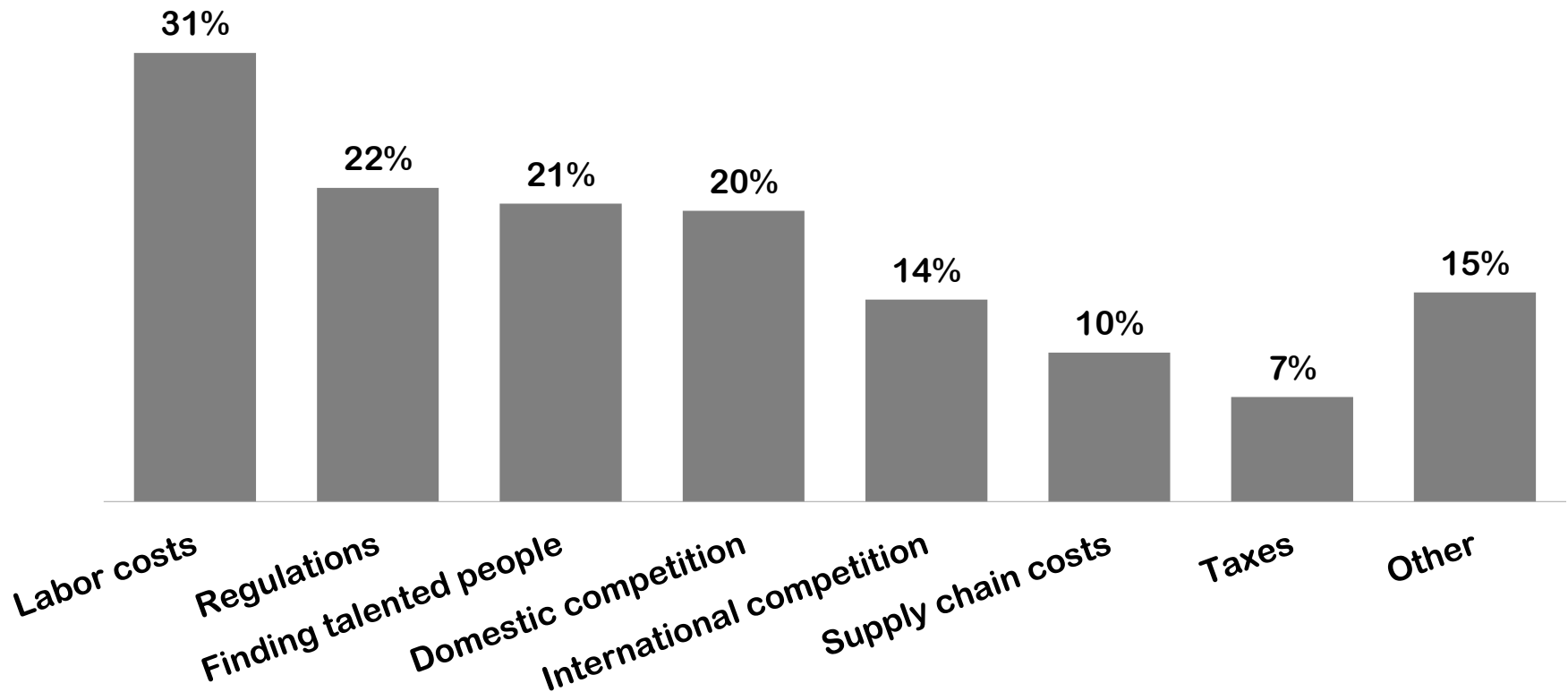


Of those stating an opinion

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“What are the biggest challenges to being located in Southern California?”



Multiple responses allowed. Percentages may sum to more than 100%.



Strengths of Southern California:

“Diverse and professional **ecosystem**”

“Higher education resources”

“Quality of life”

“Spirit of **risk-taking** and **innovation**”

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Take-Aways?



The industry's **deep roots**,
established infrastructure and
forward-thinking new **pioneers** will
ensure a **vibrant** and **robust future** for
aerospace in **Southern California**.

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