

CALIFORNIA
BUSINESS AND ECONOMIC DEVELOPMENT

California's Space Economy

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California Space Economy



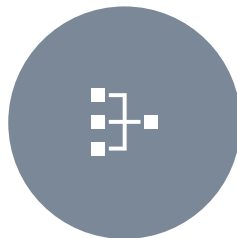
Spaceport, Launch

- Vandenberg SFB
- Mojave Spaceport
- Edwards AFB
- Western Range – U.S. Space Force
- Point Arguello Air Drop Zone
- Most Special Use Airspace allowing UNLTD access
- Paso Robles
- San Nicolas Island



Innovation, R&D

- NASA JPL
- NASA Ames
- NASA Armstrong
- NASA Goldstone
- Space Systems Command HQ
- 4 DOE National Labs
- UC, CSU, CCC
- Defense Innovation Unit HQ
- SPACEWERX
- Caltech, USC, Stanford



Support, Ecosystem

- 12 ports including two largest in U.S.
- Critical minerals
- Top Universities
- 14% of U.S. manufacturing GDP
- 11K aerospace engineers, most U.S.
- 70% of total U.S. VC funding to space tech
- #1 in military personnel, installations



Industry, Ecosystem

- 1/3 of all U.S. space companies
- NASA Research Park
- Space Beach
- Aerospace Valley
- Space Triangle
- Central Coast
- Berkeley Space Center
- #1 in U.S. defense industry spending over 10-year period



Testing, Tracking

- AFRL Rocket Test Complex (Mojave)
- Over 60 rocket engine test stands
- Most astronomical observatories in U.S.
- Only U.S. deep space communications complex
- Most ground stations and teleports in U.S.
- World's largest wind test tunnel



State of Firsts

Space and California

From Edwin Hubble's discovery of our universe on Mt. Wilson near Pasadena in 1923 - to the first human-object to enter interstellar space in 2012.



World's first permanent mountain observatory (Lick)



First scientific discovery of the universe (Hubble)



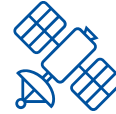
First university-based rocket research center (GALCIT, JPL)



Sound Barrier is broken (Edwards)



First U.S. missile test center (Point Mugu)



Launch of world's first polar, GPS, geosynchronous, and geostationary satellites (Vandenberg)



First human-piloted flights to space (X-15)



First successful U.S. mission to the moon (Ranger 7, JPL)



Launch world's first privately developed launch vehicle (Pegasus)



World's first commercial operating spaceport (Vandenberg)



First FAA commercial spaceport license (Mojave)



First government funded rocket research (GALCIT, JPL)



Made in California

Building Space is in California's DNA

Explorer, Pioneer, Atlas, Shuttle, Gemini, Saturn V, Skylab, Thor, Apollo, Agena, WAC Corporal, James Webb, Mariner, Viking, Voyager, Compton Gamma Ray, RS-25, F-1, Perseverance, IRAS, Polaris, Centaur, Discoverer, Vanguard, Ranger, Galileo, Surveyor, Pathfinder, Spitzer, Opportunity, Spirit, Curiosity, Webb, Delta, Falcon, Electron, Terran, Dragon, Haven....

And 33/50 X-planes + more. 😊



First U.S.
sounding rocket
to reach space
(WAC Corporal)



First U.S.
satellite to reach
space (Explorer)



World's first
ICBM (Atlas)



Most powerful
liquid rocket
engine (F-1)



Nearly the entire
Saturn V and
Apollo spacecraft



First reusable
spacecraft
(Space Shuttle)



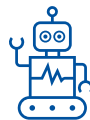
First U.S Space
Station (Skylab)



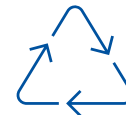
World's largest
refracting
telescope
(Multiple
decades)



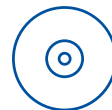
All four human
objects in
interstellar
space (Pioneer,
Voyager)



All U.S. Mars.
robots, objects,
and rovers(JPL)



First reusable
rocket system
(Falcon 9)



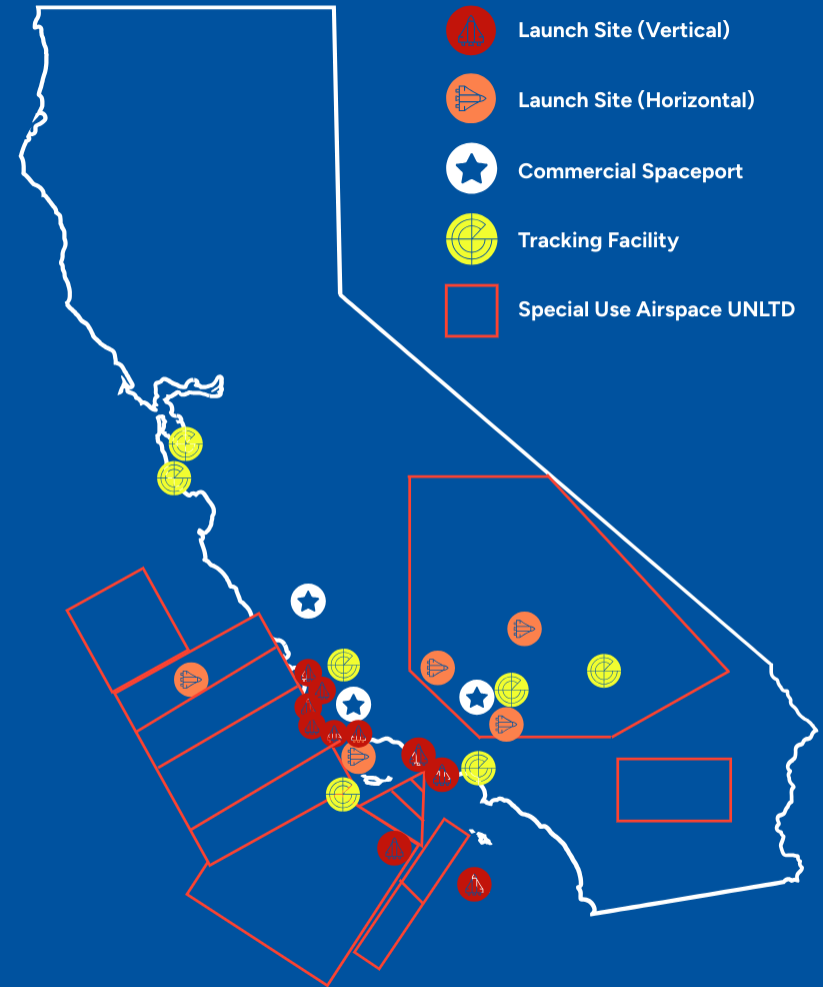
First commercial
space station
(Pending – Vast)



Building the Future of Spaceflight

California's launch capabilities are unmatched, with **over 2,000 launches** conducted to date, including more than **1,000 to orbit**.

Along the coast, the state is home to the **U.S. Space Force's Western Range**, headquartered at Vandenberg, which has supported space and missile launches since the 1950s.



State Economic Blueprint



New - Released Winter 2025

- Statewide data-driven business and workforce strategy for California
- Regional investment and sector development across State
- Space is included pilot sector

California's State Economic Blueprint

Now available at jobsfirst.ca.gov



California's Diverse and Dynamic Economy is Reflected in its Strategic Sectors



1. High-value advanced and precision manufacturing play a major role in many of the sectors and subsectors within the 'Accelerate' category

Source: Lightcast, Moody's Analytics, MIT Living Wage, Pitchbook, US Cluster Mapping Project, California Jobs First Regional Plans Part 2, meetings with California Jobs First Regional Collaboratives conveners



Trelynd Bradley
Deputy Director, Innovation & Emerging
Technologies

Sector Pilots



**Agtech & Farm
Equipment**



**Space, Defense,
& Satellites**



Life Sciences



**Semiconductors
& Microelectronics**



Advanced & Precision Manufacturing



Sector Coordination

Sector-based working groups, state staffing to support sectors



Workforce Development

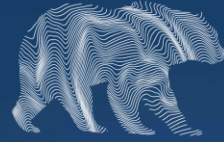
Skills mapping with Master Plan for Career Education + Industry, workforce programming with 3 university systems



Resources Alignment

Alignment of state business incentives, new regional investment funds, mobilization of agency resources for pilots





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Thank you!

business.ca.gov