

Economic Impact of California Space Enterprise

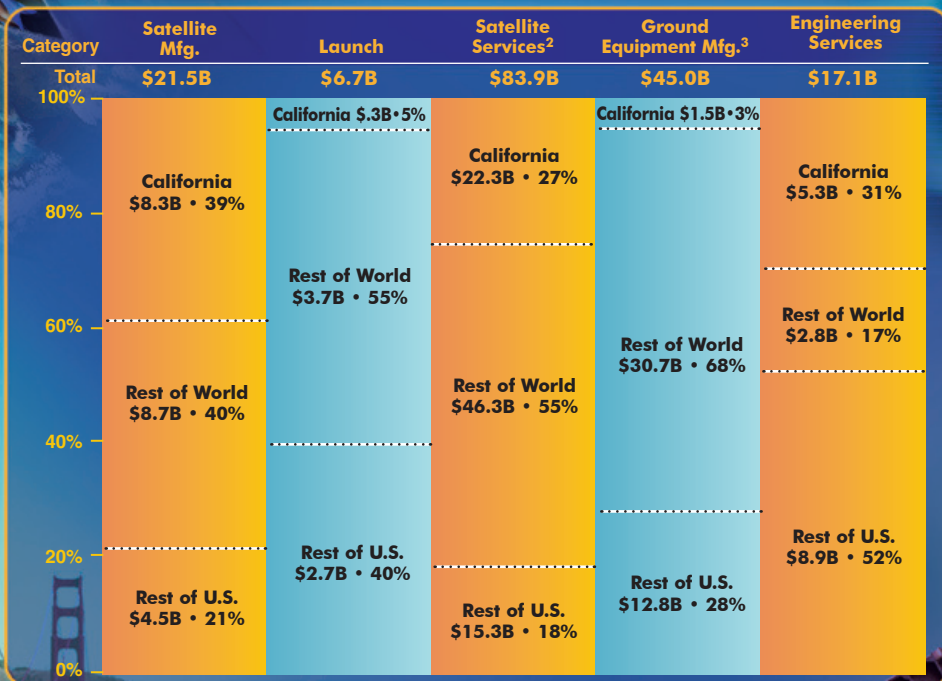
California has been at the forefront of the space enterprise since the Space Age began a half-century ago. Businesses and government organizations based in the state play critical roles in commercial, civil, and national security space programs. California space enterprise generated \$37.7 billion in direct revenue in 2009, giving the state a leading role in the national and global space economy.



Space enterprise also plays an essential role in California's overall economy. California space enterprise had a total impact of \$93 billion in 2009, and accounted for over 450,000 jobs in the state in a wide range of fields, from information technology and finance to manufacturing and health care. The continued growth of this industry is pivotal to the state's future prosperity.

Economic Impact of California Space Enterprise

- ☀️ Totals \$93 Billion¹
- ☀️ Supports 450,000 Jobs
- ☀️ Provides \$23 Billion in Wages
- ☀️ Represents 46% of the \$81.9 Billion U.S. Space Market, and
- ☀️ Constitutes a Direct Impact of \$38 Billion Representing 22% of the \$174 Billion Global Space Market



¹ California Space Enterprise represents \$93B of total economic activity, including induced demand.

² Satellite services includes direct-to-home television, mobile satellite phone, mobile satellite data, VSAT, direct internet, direct satellite radio, remote sensing (raw imagery and first order processing only), and transponder agreements.

³ Ground equipment includes gateways, control stations, mobile terminals, VSATs, DBS dishes, handheld satellite phones, and satellite radio equipment.

California Space Enterprise Supports a Wealth of Space Services

Business/Telephony

- Digital voice, fax & paging
- High-speed data transfers
- Satellite internet
- Videoconferencing



Medicine

- Distance diagnosis
- Rural medicine
- Teaching & professional development
- Telemedicine



Entertainment

- Satellite digital audio radio
- Satellite direct-to-home television
- In-flight entertainment
- News
- Sports



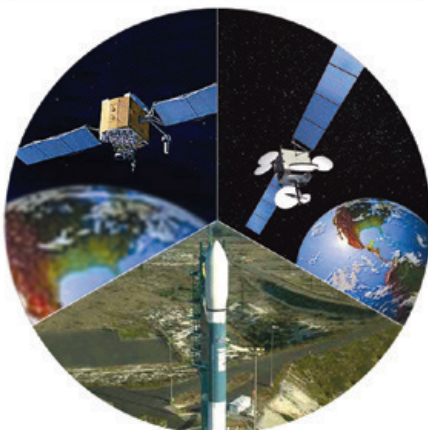
Agriculture

- Soil analysis
- Crop moisture sensing
- Pest infestation monitoring
- Herd management



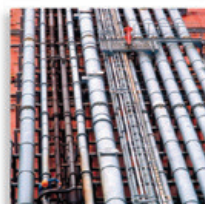
Environmental Monitoring

- Reforestation
- Watershed & vegetation management
- River & stream control
- Air pollution management
- Weather/climate



Energy Management

- Oil pipeline monitoring
- Remote meter reading
- Infrastructure management
- Resource prospecting



Transportation

- Marine & land navigational services
- Rail management
- Infrastructure planning
- Logistics management
- Freight security



Education

- Distance learning
- Satellite-linked classrooms and schools
- Participatory "real-time science"

Navigation

- Land, sea, air and space navigational services



Local Government

- Flood & storm watches
- Forest fire prevention
- Disaster management
- Public safety
- Crime control
- Urban planning

National/Homeland Security

- Intelligence data delivery & collection systems
- Diverse database linkage

Space Exploration

- Robotic missions
- Planetary missions
- Future manned missions
- Astrobiology
- Flight testing

Designated as the state's official Spaceport Authority, CSA is governed by a statewide Board of Directors that works closely with industry, government, workforce entities, and academia in representing the interests of California's diverse space enterprise community throughout the commercial, civil, and national security space domains.

California Space Authority



www.californiaspaceauthority.org