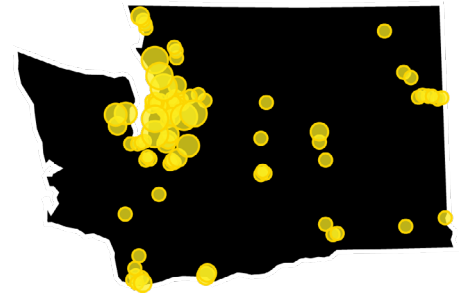
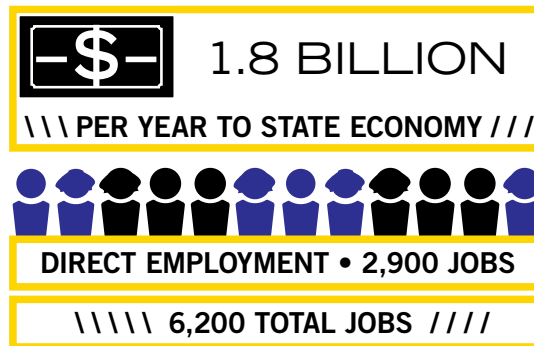


The Space Economy in Washington State

A study by the Puget Sound Regional Council analyzes the space economy in Washington state, identifying the region's competitive strengths and the actions needed to help grow the space sector.

Economic Impact

The space economy of Washington state is largely concentrated in the Puget Sound region. However, small and large companies are based elsewhere, such as Vancouver and Spokane.



Washington State's Competitive Position



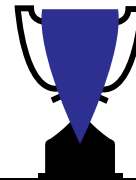
STRENGTHS

- Long-term investment
- Historic local supply chains
- Strong representation of private firms
- Support from universities
- Large, skilled labor pool



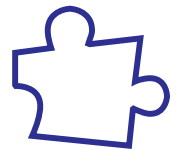
WEAKNESSES

- Restrictions on available labor
- Limited state tax incentives
- Strong competition from other sectors for labor
- No launch facilities in the state



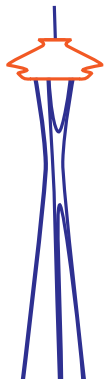
OPPORTUNITIES

- Growing industry
- High value add activities
- High quality of life in state
- Collaboration with tech firms
- Space sector supports economic diversity



CHALLENGES

- Few opportunities for lower-skilled workers
- National and international competition
- Vertical integration creates supply chain issues



Actions Needed to Support the Local Space Economy

- Assist with venture capital for smaller space companies
- Support space-related startups with business incubators and other services
- Expand supplier relationships between companies within the region
- Grow local talent to fill workforce including boosting number of students in STEM programs
- Support state tax credits for space craft and satellite manufacturing

Read the report: **Washington State Space Economy** • www.psrc.org/space-study



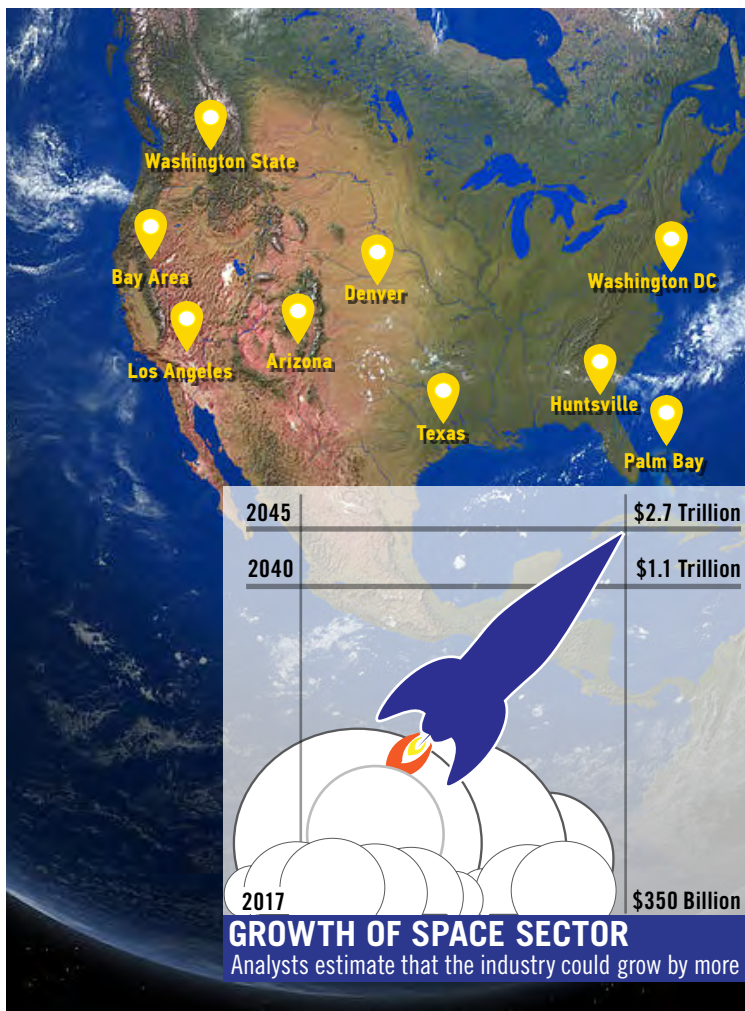
National Competition

In addition to Washington state, the space economy is expanding across the US. Eight other regions each with their own characteristics, compete with Washington for space sector jobs.

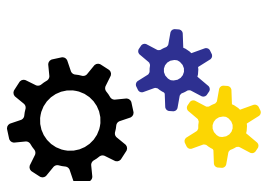
Growing Commercialization of Space

The space economy has typically been the domain of governments. However, technological and policy advancements have opened the door to increased commercialization.

- Lower production costs
- Fewer barriers to entry
- Greater range of applications
- Increasing private investment
- Exploration and colonization



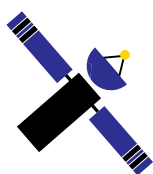
Modern Space Economy



LOWER-TIER SUPPLIERS

Provide key raw materials, parts and services used for space-related applications.

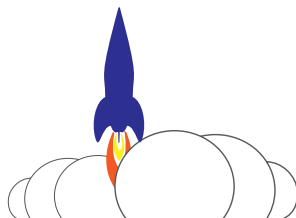
- Power systems
- Communication systems
- Structural components
- Machined parts
- Support services



UPPER-TIER SUPPLIERS

Create the major components for spacecraft launch vehicles and satellites.

- Launch vehicle engine manufacturing
- Structural assemblies
- Spacecraft manufacturing
- Satellite manufacturing



SPACE LAUNCH SERVICE PROVIDERS

Provide for the launch of spacecraft and satellites, and their ongoing management and operation.

- Launch facilities
- Private launch services
- Spacecraft and satellite mission management



SPACE-RELATED GOODS AND SERVICES

Provided directly by firms via operating spacecraft, satellites, and other space-based equipment.

- Global Positioning Systems (GPS)
- Satellite telecommunications
- Earth observation
- Space exploration and colonization
- Asteroid mining



SPACE-SUPPORTED BUSINESSES

Incorporate the output of satellites and spacecrafts into a range of goods and services.

- Satellite TV
- Weather forecasting
- Vehicle fleet management
- Space-supported research
- Defense applications

