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.

**DIRECT EMPLOYMENT** • 2,900 JOBS

**6,200 TOTAL JOBS**

**1.8 BILLION** PER YEAR TO STATE ECONOMY

**Washington State’s Competitive Position**

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>OPPORTUNITIES</th>
<th>CHALLENGES</th>
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<tbody>
<tr>
<td>• Long-term investment</td>
<td>• Restrictions on available labor</td>
<td>• Growing industry</td>
<td>• Few opportunities for lower-skilled workers</td>
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<td>• Historic local supply chains</td>
<td>• Limited state tax incentives</td>
<td>• High value add activities</td>
<td>• National and international competition</td>
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<tr>
<td>• Strong representation of private firms</td>
<td>• Strong competition from other sectors for labor</td>
<td>• High quality of life in state</td>
<td>• Vertical integration creates supply chain issues</td>
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<td>• Support from universities</td>
<td>• No launch facilities in the state</td>
<td>• Space sector supports economic diversity</td>
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<td>• Large, skilled labor pool</td>
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**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](http://www.psrc.org/space-study)
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

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**GROWTH OF SPACE SECTOR**
Analysts estimate that the industry could grow by more than seven times by 2045

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**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

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Read the report: Washington State Space Economy • www.psrc.org/space-study • Sept 2018