# Here, innovation and tradition are on the same plane.

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# Uncommon Thinkers Welcome

BOEING

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## Home to the largest aerospace supply chain in the United States

Greater Seattle leads the way in commercial aerospace innovation with a rich ecosystem of companies and talent that has evolved over more than a century of research, development and manufacturing. This pioneering spirit nurtures an environment at the intersection of aerospace and technology unlike anywhere else on Earth.

\$28B

## **Strength in Numbers**

AEROSPACE Economic Impact 99,000 Direct Jobs



Economic Impact \$135B Direct Jobs 273,000



From Boeing to Blue Origin, our pioneering spirit has revolutionized commercial air travel, space exploration and satellite communications.

EVERETT

REDMOND

RENTON

LYNNWOOD

SEATTLE

**Greater Seattle** 

900+ aerospace-related companies employing 99,000+ people.

### **Washington State**

1,300+ aerospace-related companies employing 112,000+ people.

JOINT BASE

LEWIS MCCHORD

### Leading Aerospace Companies in Greater Seattle

Aerojet Rocketdyne Astronics Advanced Electronic Systems Aviation Technical Services, Inc. **Cobalt Enterprises Collins Aerospace Crane Aerospace & Electronics General Dynamics** magniX MTM Robotics **Onamac Industries** ZeroAvia

Aero-Plastics Inc. AeroTEC Air Informatics Alaska Airlines Amazon Web Services BlackSky Boeing **Boyd** Corporation Blue Origin, LLC. Cascade Gasket & Manufacturing Company, Inc. **Exotic Metals Forming Gladiator Technologies** Hexcel Corporation Honeywell Aerospace **Pioneer Industries Renton Coil Spring Company** Spaceflight, Inc. Stratolaunch Systems Corporation Taqtile **Tethers Unlimited** TLG Aerospace, LLC. Machinists, Inc. Microsoft **RBC** Signals

Boeing Cadence Aerospace - Precision Machine Works **Composite Solutions Corporation** General Plastics Manufacturing Company **GKN** Aerospace Heatcon Composite Systems Honeywell Aerospace LMI Aerospace, Inc. **Orion Industries** Saint-Gobain Performance Plastics Sekisui Aerospace Skills, Inc. **Steel Aerospace** P&J Machinina P.M. Testing Laboratory, Inc. Tool Gauge Toray Composite Materials America, Inc. Zeva Aero

In the Space Race, **Greater Seattle is** a Global Leader



## **Greater Seattle is Satellite Central**

More than half of all operational satellites in orbit are manufactured in Washington State.

There are more than 90 space companies in the Greater Seattle region.

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Aerojet Rocketdyne recently received a \$67 million contract award from Lockheed Martin to provide propulsion systems for the Orion spacecraft.

### Amazon's Project Kuiper has secured the largest commercial procurement of launch vehicles for its satellite constellation in history.

BlackSky revenues are up 92% over last year with a strong trend of multi-year contract wins valued up to \$1.3 billion.

## Microsoft Azure Space

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is the platform and ecosystem of choice for the mission needs of the space community and beyond.

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NASA has selected Blue Origin to develop a lunar lander to transport astronauts on Artemis missions. The value of the fixedprice award is \$3.4 billion.

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SpaceX Starlink has surpassed 4,000 satellites and 1.5 million subscribers.



Stoke Space has received repeated investments from the venture arm for the U.S. intelligence community.

## **Commercial Space Economy**

The Greater Seattle space economy has more than doubled in four years given longstanding activity in the aerospace sector, high-tech manufacturing resources, information technology assets, and a strong pool of talent.

This robust ecosystem supports the development of spacecraft and launch vehicles, propulsion systems, cloud computing and many other space-related products and services.

According to the Puget Sound Regional Council and the Washington State Space Coalition, the overall economic impact of the region's core space economy is

\$4.6 Billion annually supporting more than 13,000 jobs.



Image Credit: Blue Origin

Since its initial flights in 2012, the **Boeing ecoDemonstrator** program has tested more than 250 technologies to help decarbonize aviation, improve operational efficiency and enhance safety and the passenger experience. Approximately a third of tested technologies have progressed onto Boeing's products and services.

### **Sustainable Innovation for the Future**

ecoDemonstrator



BOEING

The new Research and Development **Center for Sustainable Aviation Fuels (SAF)** at Paine Field is the world's first facility of its kind to collect, sample, and distribute SAF at a scale needed for widespread use in planes, including the largest aircraft.



▲ Greater Seattle-based AeroTEC and magniX recently joined Universal Hydrogen and Plug Power in announcing the creation of a Hydrogen Aviation Test and Service Center in Washington State, cementing the region as a leader in decarbonizing aviation.



Co-led by Washington State University and the Massachusetts Institute of Technology, ASCENT - the Aviation Sustainability Center – is a cooperative aviation research organization funded by the FAA, NASA, the Department of Defense, Transport Canada, and the Environmental Protection Agency. ASCENT works to create science-based solutions for the aviation industry's biggest challenges.

Washington passed a new law that creates **a per-gallon incentive** for SAF with lifecycle greenhouse gas emissions that are at least 50 percent lower than traditional jet fuel. The incentive increases for each one percent reduction in lifecycle greenhouse gas beyond 50 percent, up to a potential incentive of \$2 per gallon.

> The Boeing "Cascade" Climate Impact Model is a tool that identifies the effects of a range of sustainability solutions to reduce aviation's carbon emissions.

**SkyNRG** has chosen Washington state for a new \$800M sustainable aviation fuel plant to produce about 30 million gallons of SAF per year.

The largest hydrogen-powered commercial aircraft is being developed in Greater Seattle. Alaska Airlines recently presented a Bombardier Q400 regional turboprop to ZeroAvia in Everett, WA that will be retrofitted with a hydrogen-electric propulsion system in an effort to expand the reach and applicability of zero emissions flight technology.



Eviation Alice successfully completed its first flight of its electric aircraft in Washington State. It is a nine-passenger electric aircraft – the only flight-proven all-electric commuter aircraft of its size. It is built around magniX's industry-leading electric propulsion system, which is also based in Greater Seattle in Arlington, WA.



## The Talent to Take Flight

The metropolitan area of Greater Seattle has the second highest employment level in Aerospace Engineers in the nation, according to the Bureau of Labor Statistics (May, 2022). Several key programs continue to bolster the talent pipeline.





The William D. Ruckelshaus Center, a collaboration between the University of Washington and Washington State University, is working on aviation biofuels, and the development of

sustainable aviation.

### The Aerospace Joint Apprenticeship

**Committee (AJAC)** provides apprenticeships and cutting-edge curriculum for the aerospace and advanced manufacturing workforce.

### The Center of Excellence for Aerospace and Advanced Manufacturing is a

statewide resource representing the interests of the aerospace and advanced manufacturing industry, and labor partners, within the Washington State Community and Technical College system.





**The Paul G. Allen School of Computer Science & Engineering** is consistently ranked among the top computer science programs in the nation.

The University of Washington's William E. Boeing Department of Aeronautics & Astronautics offers the only aerospace degree program in the Pacific Northwest.

The University of Washington's College of Engineering is a national leader in educating engineers and each year turns out new discoveries, inventions and top-flight graduates.

Located in Everett, the **Washington** Aerospace Training & Research (WATR) Center offers five specialty programs that meet the demands of the fast-paced aerospace industry.







## If you're driven by big ideas like Boeing, come join us.

• Washington has been at the center of aviation since 1916, when Bill Boeing founded the airplane company in a shipyard in Seattle.

Today, Boeing works with more than 1,000 suppliers across Greater Seattle and Washington State and contributes to an estimated 205,000 direct and indirect jobs.

Boeing has major facilities located in Auburn, Everett, Frederickson, Kent, Renton and beyond.

• The Boeing Everett Factory is the largest building in the world by volume.

 The Composite Wing Center (CWC) encompasses more than 27 acres under one roof
the equivalent to 25 football fields – and contains three of the world's largest autoclaves.





▲ The new, expanded International Arrivals Facility (IAF) at Seattle-Tacoma International Airport is the most complex capital development program in the history of the airport. It significantly enhances the international passenger experience, advances the Puget Sound region as a leading tourism and business gateway, and serves the traveling public well into the future.



The all-new Passenger Terminal at Paine Field in Everett (PAE) offers travelers from Seattle and Northwest Washington a time-saving choice for commercial air flights throughout the western U.S. The terminal's ease of use and close proximity to the Port of Everett, the I-5 interstate and available industrial land makes it an ideal choice for leading aerospace companies.

# We have deep draft ports with a few local krakens.

Port of EVERETT



HELSE SUBJECT

Where every flight is a breath of fresh care.

Image Credit: Alaska Airlines

Image Credit: Port of Seattle

### **Deliver to the World**



## **\$84 Billion** In Aerospace Exports

Greater Seattle is home to three deep water ports, and the fifth-largest container gateway in North America. This robust supply chain helped to deliver more than \$84 billion in aerospace exports around the world over the last five years. (WiserTrade, 2023)



### Washington-built P-8A Poseidon Aircraft





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Greater Seattle Partners (GSP) is a public-private partnership that leads regional economic development through global business attraction, site selection and investment and trade opportunities.

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