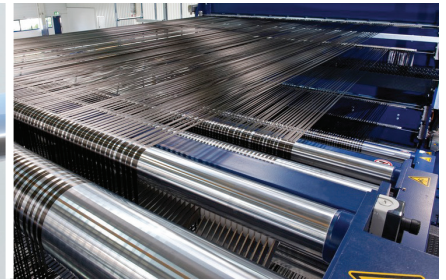




Office of Economic Development and Competitiveness

Aerospace Progress Report 2014



Governor Inslee's top priority is to create an economic climate where innovation and entrepreneurship can continue to thrive and create good-paying jobs in every corner of our state. Washington's aerospace industry fuels jobs for thousands of families and travel for billions of passengers each year. In addition to the world headquarters for Boeing Commercial Airplanes, Washington is home to 1,350+ aerospace-related business establishments that design and manufacture products ranging from tires to bolts to inflight entertainment systems. There is at least one aerospace-related company in 35 of Washington's 39 counties.

Our public research institutions and private firms are also leading the world in the advancement of new aerospace technologies, as well, including advanced materials, unmanned aerial vehicles (UAVs), aviation biofuels and space exploration.

In 2013, Governor Inslee released the first ever comprehensive strategy to protect and grow Washington's aerospace industry. This five-year plan laid out specific high priority action items for 2013-14. Here is what we have accomplished and what we are focusing on next.

Growing and Diversifying Washington's Aerospace Cluster

- Secure Boeing 777X work for Washington
- Establish Supplier Database
- Paris International Air Show
- Expand the supply chain
- Expand relationships with the United Arab Emirates
- Base Pegasus tankers in Washington
- Support MRO expansion

Fostering a Culture of Aerospace Innovation

- Support the Joint Center for Aerospace Technology Innovation
- UAS/UAV Test Site
- Aviation Biofuels Center of Excellence

Cultivating a Deep and Talented Aerospace Workforce

- Expand K-12 STEM education
- Career Readiness Certification
- Expand workforce training programs
- Assist students and jobseekers access the industry
- Create additional training facilities

Strengthening Washington's Aerospace Supply Chain

- Transportation Funding
- Ease FAA process burdens
- Measuring our progress
- Understand the economic impacts of the industry

GROWING AND DIVERSIFYING WASHINGTON'S AEROSPACE CLUSTER

SECURE BOEING 777X WORK FOR WASHINGTON. Work with The Boeing Company to anticipate what may be necessary and implement strategies to ensure that the 777X and as many of its components as possible are built in Washington State.

LEAD: Office of Aerospace

- Developed 777X Action Plan, appointed 777X Permit Streamlining Task Force, called Special Legislative Session and passed 777X incentive package. Received commitment from the Boeing Company that the 777X assembly and wing manufacturing will take place in the Puget Sound region.

MOVING FORWARD: Ensure smooth expansion of Boeing facilities to support 777X and composite wing final assembly.

ESTABLISH SUPPLIER DATABASE. Create an online database of Washington suppliers to assist original equipment manufacturers (OEMs) in identifying and partnering with capable supply chain partners.

LEAD: WA Dept. of Commerce

- Worked with Aerospace Vendors to create www.aerospacevendors.com, an online searchable database of Washington suppliers, with 1,000+ companies currently listed.

MOVING FORWARD: Work with Aerospace Vendors to expand the database and encourage its use.

PARIS INTERNATIONAL AIR SHOW. Expand Washington's presence at the 2013 Paris International Air Show.

LEADS: Washington Aerospace Partnership, WA Dept. of Commerce

- Largest delegation from Washington, with 51 members, representing 22 aerospace companies, 5 ADOs, 4 educational institutions, and 2 industry organizations.
- Partnered with the Seattle Metropolitan Chamber of Commerce and Trade Development Alliance of Greater Seattle, which had an additional delegation of more than 60 businesses and civic leaders and hosted combined events.
- Hosted largest ever booth and pre-show reception with Washington companies present.
- Delegates reported \$35+ million in actual sales booked since the show and forecast another \$60 million

MOVING FORWARD: Build on this momentum at the 2014 Farnborough International Air Show and other international aerospace industry events.

EXPAND THE SUPPLY CHAIN. Identify, assist and attract Boeing suppliers, particularly in new programs such as the 737 MAX, KC-46A tanker, and 777X, in expansion and/or establishment of facilities in Washington.

LEADS: WA Dept. of Commerce, Associate Development Organizations (ADOs)

- Supported 5 corporate expansions and 1 new recruitment anticipated to result in \$11.7 million in capital investment and 240 additional jobs.
- Identified 32 business recruitment leads and an additional 20 Washington companies considering expansion.

MOVING FORWARD: Continue this effort, particularly focused on the 777X supply chain.

EXPAND RELATIONSHIPS WITH THE UNITED ARAB EMIRATES.

Develop economic, educational, and cultural initiatives with the United Arab Emirates

LEADS: Office of Aerospace, Trade Development Alliance of Greater Seattle

- Participated in Aerospace Business Development Mission in March with Trade Development Alliance and Dubai Air Show in November.
- Working with University of Washington and Port of Seattle to establish formal collaborations with UAE partners.

- Working to recruit Strata and other UAE-based aerospace companies to establish Washington facilities.

MOVING FORWARD: Continue work with the Trade Development Alliance of Greater Seattle to consummate these and identify additional opportunities.

BASE PEGASUS TANKERS IN WASHINGTON. Ensure initial KC-46A aerial refueling tankers are stationed at Fairchild Air Force Base.

LEADS: Forward Fairchild, WAP

- Despite significant efforts, the Air Force preliminarily selected bases in Kansas, Oklahoma and New Hampshire

MOVING FORWARD: Working with federal delegation, Greater Spokane, Inc., and Forward Fairchild to position Fairchild to receive tankers if one of these sites should fall off during the environmental analysis or in future basing decisions.

SUPPORT MRO EXPANSION. Support amendments to Washington State tax policy to remove barriers to the maintenance, repair, and overhaul (MRO), completion and storage of non-resident-owned private aircraft.

LEAD: Aerospace Futures Alliance (AFA)

- 2013 Legislature approved ESSB 5882 which exempts non-resident owned aircraft weighing more than 41,000 pounds (Boeing 737s and larger) from sales and use tax and exempts large aircraft in long-term storage from property tax.
- Aviation Technical Services expanded Grant County International Airport and Greenpoint Technologies now bringing several VIP 787 aircraft and additional work to Moses Lake for completion.

MOVING FORWARD: Encourage large international MROs to consider locating operations in Washington.

FOSTERING A CULTURE OF AEROSPACE INNOVATION

SUPPORT THE JOINT CENTER FOR AEROSPACE TECHNOLOGY

INNOVATION. Support the Joint Center for Aerospace Technology Innovation (JCATI) in its efforts to connect industry problems with technological advances developed by research university brain power and facilities.

LEADS: Joint Center for Aerospace Technology Innovation (JCATI)

- In its first year of operations, the JCATI has awarded 34 grants with a total value of \$2.64 million.
- 2013 Legislature extended the sunset date for the JCATI from 2016 to 2021 and funded the program at \$3 million for the 2013/15 biennium.

MOVING FORWARD: Continue to support the JCATI in future rounds of grant funding and increase awareness of the Center across the industry.

UAS/UAV TEST SITE. Pursue Federal Aviation Administration (FAA) designation as a national test site for unmanned aerial systems/vehicles.

LEADS: Innovate Washington, Pacific Northwest National Laboratory (PNNL), University of Washington (UW), WSU

- Worked with a statewide consortium led by Innovate Washington, PNNL, and the Port of Moses Lake to develop a proposal for the Pacific Northwest Unmanned Aerial Systems Flight Center (PNUASFC) and submitted to the FAA for consideration.
- FAA did not select Washington as one of the six test sites.

MOVING FORWARD: PNUASFC parties will regroup in early 2014 to explore opportunities to proceed in establishing the center without FAA designation

AVIATION BIOFUELS CENTER OF EXCELLENCE. Pursue establishment of an FAA Center of Excellence for Alternative Jet Fuels and Environment at WSU.

LEAD: WSU

- WSU and MIT selected to lead 16-university consortium in new FAA Center of Excellence for Alternative Jet Fuels and the Environment

MOVING FORWARD: Support efforts at WSU to organize the COE.

CULTIVATING A DEEP AND TALENTED AEROSPACE WORKFORCE

EXPAND K-12 STEM EDUCATION. Build capacity for STEM education in preschool through 12th grade.

LEADS: Office of the Superintendent of Public Instruction (OSPI), Washington STEM

- Legislation passed in 2013 (ESSHB 1872) creates better coordination, innovation and accountability around STEM education in the K-12 system, while spreading best practices across the state.
- Adopted Next Generation Science Standards, making Washington only the 8th state in the nation to embrace these more rigorous requirements for instruction of science related coursework.

MOVING FORWARD: Continue to look for opportunities to build capacity for STEM education.

CAREER READINESS CERTIFICATION. Establish National Career Readiness Certification (NCRC) testing for high school graduates with an interest in pursuing careers in aerospace.

LEADS: OSPI, Center of Excellence for Aerospace & Advanced Manufacturing (COE)

- The Center of Excellence for Aerospace & Advanced Manufacturing is working with a statewide consortium and ACT, the developer of the NCRC, to designate Washington as an ACT WorkReady Community.

MOVING FORWARD: Support this consortium's effort to expand access to NCRC testing throughout Washington

EXPAND WORKFORCE TRAINING PROGRAMS. Support the strategic and targeted expansion of workforce training provided by community and technical colleges, as well as apprenticeship and short-term industry programs, in high demand fields.

LEADS: Pipeline Committee, SBCTC

- 2013 Legislature provided funding for 1,000 FTE in high-demand aerospace field and to develop a specialized carbon fiber wing fabrication training program associated with the 777X.

MOVING FORWARD: Work through the Pipeline Committee and the SBCTC to ensure additional student slots are directed to programs most in need by the industry. Assist the Washington Aerospace Training & Research (WATR) Center to establish its carbon fiber wing training program.

ASSIST STUDENTS AND JOBSEEKERS ACCESS THE INDUSTRY.

Establish and promote a clear point of entry for students and jobseekers to navigate their way through training programs to careers in aerospace.

LEADS: Center of Excellence for Aerospace & Advanced Manufacturing (COE)

- 2013 Legislature provided \$200,000 to the Center of Excellence for Aerospace & Advanced Manufacturing to increase staffing and update website.

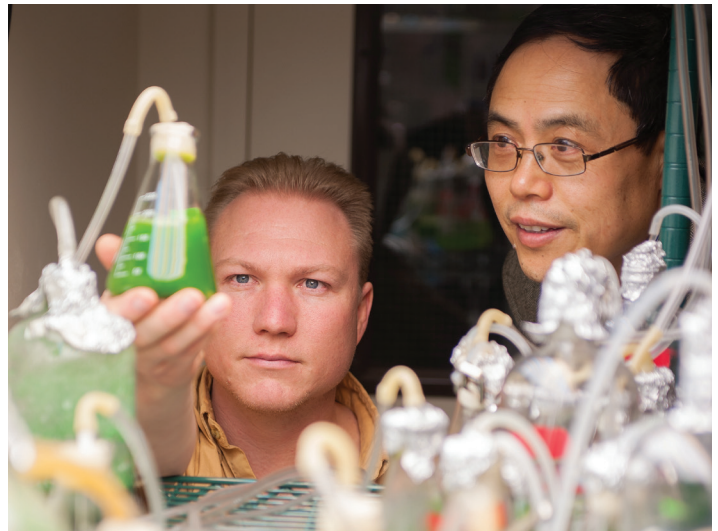
MOVING FORWARD: Support the COE's efforts to expand and collect data on its successes.

CREATE ADDITIONAL TRAINING FACILITIES. Develop a multi-institutional, multi-level aerospace training center located in the central Puget Sound region.

LEADS: City of Renton, Renton Technical College

- Secured additional \$10 million from 2013 Legislature to allow design and construction of the Central Sound Aerospace Training (CSAT) Facility in Renton to the Washington State Department of Commerce.

MOVING FORWARD: Work with the City, Aerospace Futures Alliance and other partners to develop a business plan for operations of the CSAT.



STRENGTHENING WASHINGTON'S AEROSPACE SUPPLY CHAIN

TRANSPORTATION FUNDING. Prioritize funding for key transportation improvements that enable the efficient movement of employees, parts, and finished products to and from aerospace manufacturing sites.

LEADS: Office of Aerospace, WAP, Department of Transportation

- Transportation Revenue Package considered by the Legislature contained significant funding for projects that will benefit the aerospace industry across the state.

MOVING FORWARD: Continue to educate the Legislature and the general public about the need for transportation improvements across the state.

EASE FAA PROCESS BURDENS. Work with Washington's federal delegation to encourage reforms at the FAA to ease burdens and allow Washington companies to be more competitive.

LEAD: Office of Aerospace

- Worked with US Representative Rick Larsen to support inquiries and congressional hearings exploring FAA certification practices and procedures.
- Supported efforts by Impact Washington and the Aerospace Futures Alliance to normalize FAA certification practices.

MOVING FORWARD: Continue these efforts.

MEASURING OUR PROGRESS. Develop a set of outcomes-based metrics to measure the effectiveness and impact of investments in aerospace-related economic development and the programs they support.

LEAD: Office of Aerospace

- Defined "aerospace" and "aerospace-related" industries in Washington using NAICS codes to allow tracking of industry growth over time.
- Established metrics and developing goals for industry growth through Results Washington

MOVING FORWARD: Work with the Dept. of Commerce to establish metrics and measure progress through Results Commerce and Results Washington.

UNDERSTAND THE ECONOMIC IMPACTS OF THE INDUSTRY. Analyze the economic impact of the aerospace industry in Washington State.

LEAD: Office of Aerospace

- Completed - Study found \$76 billion economic activity generated by the aerospace industry in Washington in 2012.

2014-15 ACTION ITEMS

The following efforts are considered high priority for action over the next two years.

STRATEGY	LEAD(S)
Growing and Diversifying Washington's Aerospace Cluster	
Work with The Boeing Company and local jurisdictions to ensure the smooth ramp up to the 737MAX and 777X programs.	Office of Aerospace
Develop and execute a targeted marketing campaign to build on the 777X siting decision by identifying and recruiting international companies to Washington state and assisting existing companies secure work in the Boeing supply chain.	Office of Aerospace, Dept. of Commerce, WAP, ADOs
Build on efforts to coalesce companies in Washington engaged in space exploration.	Office of Aerospace, WAP
Identify and recruit international maintenance, repair and overhaul (MRO) companies to Washington.	Office of Aerospace, Dept. of Commerce
Assist Greater Spokane Inc.(GSI), Spokane International Airport (SIA), and the city and county of Spokane to position the West Plains for large scale aerospace manufacturing.	Office of Aerospace, Dept. of Commerce, GSI, SIA
Fostering a Culture of Aerospace Innovation	
Secure designation and funding for a center for advanced materials innovation.	Dept. of Commerce, Advanced Composites Consortium
Secure re-designation of the UW's FAA Center of Excellence for Advanced Materials in Transportation Aircraft Structures.	UW
Develop a strategy to leverage existing facilities and capabilities of Grant County International Airport to provide training, testing, certification, and research operations for a variety of aircraft types (fixed wing, rotorcraft, and unmanned aircraft), including pursuit of FAA designation as a Center of Excellence for UAV/UAS.	Port of Moses Lake, Office of Aerospace, UW, WSU
Cultivating a Deep and Talented Aerospace Workforce	
Develop a curriculum and facilities to support a carbon fiber wing training program for the 777X.	WATR Center
Ensure that additional investments in community and technology college aerospace training programs are directed to programs most in need by the industry.	Pipeline Committee, SBCTC
Develop an operations plan and organizational structure for the Central Sound Aerospace Training Center in Renton.	City of Renton, AFA, COE
Design and establish the School of Advanced Manufacturing & Aerospace at WSU Everett	WSU
Strengthening Washington's Aerospace Supply Chain	
Continue to push the Washington State Legislature to pass a significant funding package for key transportation improvements that enable the efficient movement of employees, parts, and finished products to and from aerospace manufacturing sites.	WAP
Pursue expansion of the aerospace product development business and occupation tax credit currently available to companies engaged in commercial airplane activities to all sectors of the aerospace industry.	WAP



Department of Commerce
Innovation is in our nature.



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