

WSDOT Aviation

Aviation Economic Impact Study

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About the Aviation Economic Impact Study

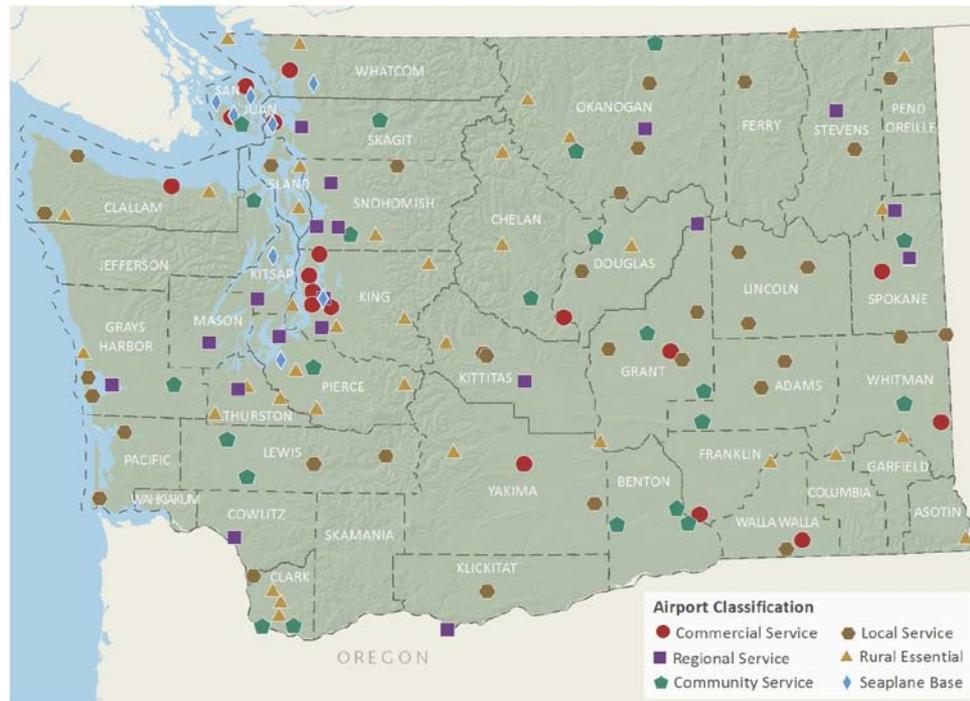
WSDOT Aviation Division is conducting a study on the role aviation plays in Washington's economy.

The Aviation Economic Impact Study is:

- Supported by a grant from the Federal Aviation Administration (FAA).
- An update to the 2001 Economic Impact Study.
- A collaborative effort with stakeholders.

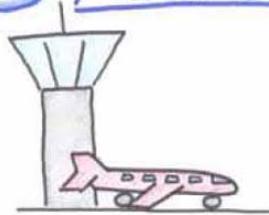
The State's Aviation System

This study examines the 135 public use airports located in 36 of the state's 39 counties. These airports are an economic engine for the state and integral to the transportation system.



Approach: Three Perspectives on Economic Contribution

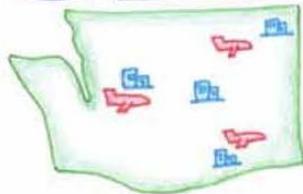
1 AIRPORT



An airport's economic impacts (jobs, wages, spending) from:

- ① Businesses at the airport
- ② Spending by visitors passing through the airport

2 INDUSTRY



The role of aviation in the broader economy and the relationship between aviation and selected industries

3 USERS



The value individuals derive from their use of aviation facilities and services

Final Products

Economic Assessment Report

- Describe and measure economic impacts.
- Describe the relationship between aviation and businesses, economies, and communities across the state.
- Address policy considerations.

135 Airport Profiles

- Summary of operational attributes and economic impacts by airport.
- Available online and designed to be updated automatically through the Aviation Information Database.

Online Economic Calculator

- Publicly available online decision-making tool to conduct what-if analyses about changes to an airport and its operations.

Where Are We in the Process?

- **Completed outreach to 135 airports.** In the process of finalizing all inputs. Numbers presented today are still DRAFT as not all airport input has been incorporated.
- **Four advisory committee meetings held** to solicit feedback on approach, findings, and policy considerations.
- **First draft of report complete.** Final draft slated for completion in February 2012.
- **Online economic calculator still under development** with expected completion in April 2012.

Preliminary Findings

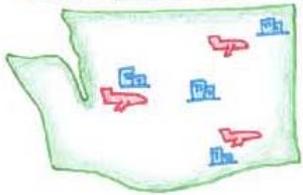
Findings By Perspective

1 AIRPORT



- Economic impacts are **significant** and **concentrated** at four large airports.
- Significant share of activity on through-the-fence connections (**aircraft manufacturing**).

2 INDUSTRY



- **97% of state Gross Business Income (GBI)** within 10 miles of an airport.
- Some industries concentrated near airports, some less so, but **many depend on aviation for critical business factors** (markets, inputs, labor).

3 USERS



- Immense value derived from other aviation services **not captured by traditional impact analysis**.
- User value **important for smaller communities** where airports provide a valuable link to services, commerce, and the broader aviation network.

Airport Perspective

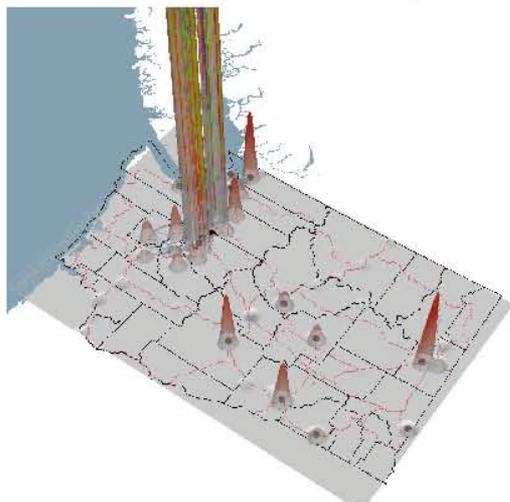
Why is this perspective important?

- This is traditional economic impact analysis under FAA guidelines.
- Direct, quantifiable estimate of jobs, wages, and economic activity associated with aviation facilities and services.
- Particularly important for airports with large amounts of on-site business activity or visitor traffic.



Airport Perspective: Overall Impacts and Comparisons to 2001

Economic Impacts of Airport Activity



Summary of Statewide Impacts

	Direct	Indirect/ Induced	Total
Jobs	132,400	97,350	229,750
Labor Income	\$ 9.3 B	\$ 4.9 B	\$ 14.2 B
Output	\$ 32.9 B	\$ 14.7 B	\$ 47.6 B

Impacts in 2001 Study

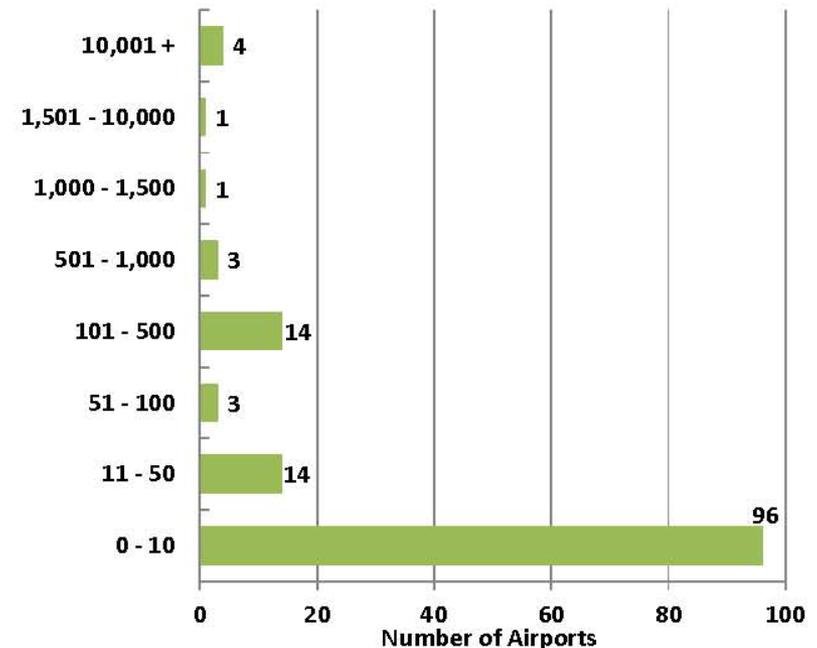
	Direct	Indirect/ Induced	Total
Jobs	98,100	73,211	171,311
Labor Income	\$ 1.9 B	\$ 2.2 B	\$ 4.1 B
Output	\$ 11.9 B	\$ 6.8 B	\$ 18.6 B

- Impacts are concentrated in the Central Puget Sound - four airports account for **93% of jobs and 96% of output**. The three airports with major aircraft manufacturing activity account for **52% of jobs and 73% of output**.
- Overall impacts are higher than 2001 study but several factors are at play. The largest influence is the addition of Boeing and through-the-fence connections in this study.

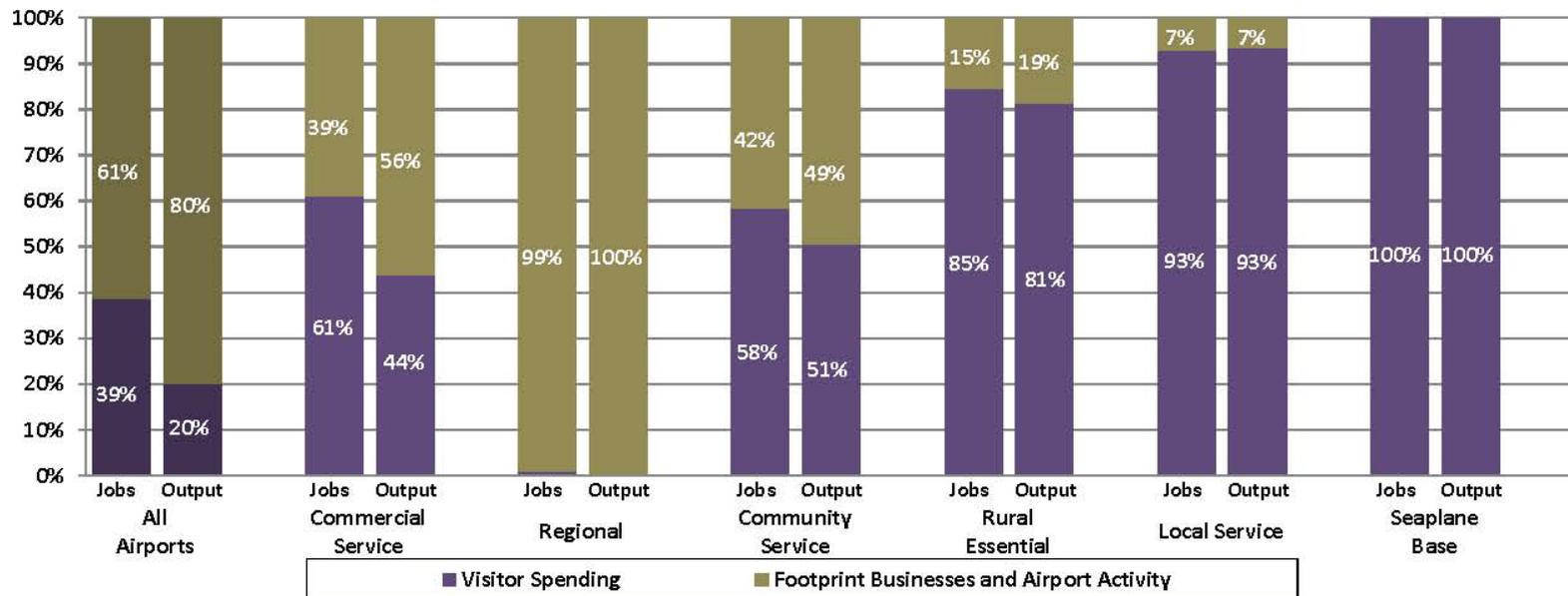
Airport Perspective: Impacts at Smaller Airports

- 96 airports have 10 or fewer jobs.
- The economic contribution of aviation services at these smaller airports is **not fully captured in traditional measures of jobs, wages, and output**. Different ways to look at economic contribution are presented in the Industry Perspective and User Perspective sections.

Distribution of Job Impacts

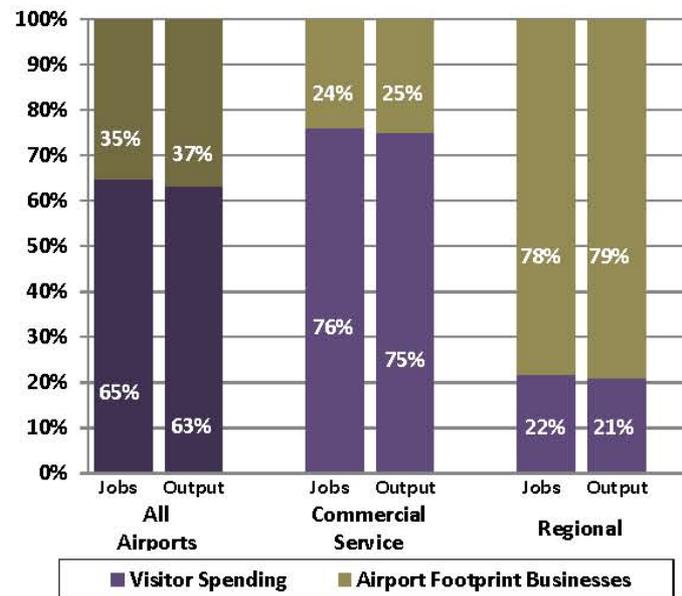


Airport Perspective: Impacts by Airport Classification



- Regional and commercial categories account for over 99% of total jobs and output.
- Footprint businesses account for 61% of jobs and 80% of output. On regional airports almost all impacts are from footprint businesses (Boeing).
- At Rural Essential, Local Service, and Seaplane Base airports, visitor spending generates the large majority of jobs and output.

Airport Perspective: What if you Exclude the Big Four?



- Statewide, businesses on airport footprints account for 35% of total jobs and 37% of total output.
- This is a **swing toward visitor spending** at the Commercial and Regional airports.
- Impacts at Regional airports are still primarily coming from on-site employment.

Airport Perspective: Fiscal Impact Analysis

Classification	Aircraft Excise Tax	Aviation Fuel Tax*	Sales and Use Tax**	Property Tax***	B&O Tax	Other	Total
Commercial	142,000	444,000	390,271,000	29,269,000	88,546,000	103,646,000	612,318,000
Regional	248,000	876,000	6,872,000	13,508,000	83,413,000	5,284,000	110,201,000
Rural Essential	52,000	123,000	1,200,000	1,634,000	129,000	316,000	3,454,000
Community Service	106,000	346,000	1,417,000	604,000	379,000	306,000	3,158,000
Local Service	20,000	58,000	274,000	222,000	31,000	71,000	676,000
Seaplane Base	1,000	0	22,000	53,000	2,000	4,000	82,000
Total	569,000	1,847,000	400,056,000	45,290,000	172,500,000	109,627,000	729,889,000
% of Total	0.1%	0.3%	54.8%	6.2%	23.6%	15.0%	

* Fuel used for commercial aviation is exempt from the state aviation fuel tax.

** Includes sales and use tax paid on general and commercial aviation fuel.

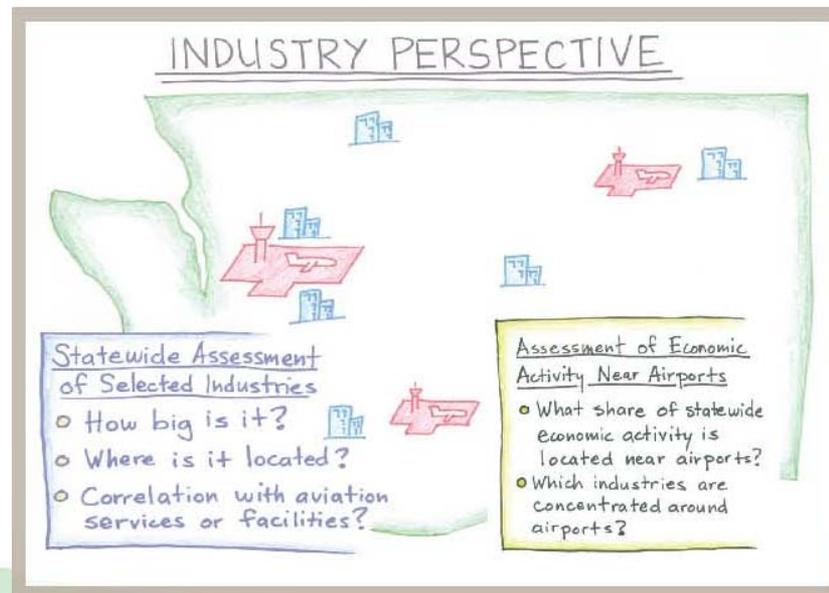
*** Includes taxes paid on airline service providers' personal property.

- Public-use airports generated about \$730M in tax revenue in 2009.
- 99% of impacts are from commercial (84%) and regional airports (15%)
 - Sales tax accounts for 55% of total, B&O tax accounts for 24%
 - About \$493M of this revenue goes to the state. The rest is split fairly evenly amongst cities, counties, and special purpose districts.

Industry Perspective

Why is this perspective important?

- Looks at relationships between aviation and businesses beyond the limited airport footprint.
- Important to capture the ways in which aviation affects business factors of production and location decisions.
- This is something that has not been done before.



Industry Perspective: Economic Activity Near Airports

- Economic activity and aviation are **intrinsically linked**.
- Airports play an important role for many industries core business needs: **access to markets, access to inputs of production, and access to labor**.
- GBI appears to be **equally concentrated** around commercial and non-commercial airports.
 - 36% near commercial airports
 - 34% near non-commercial airports



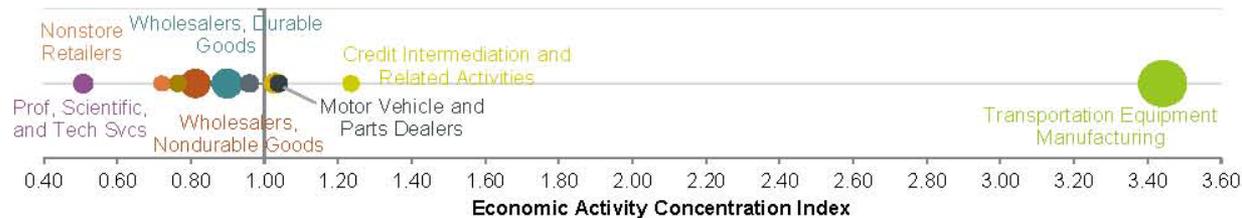
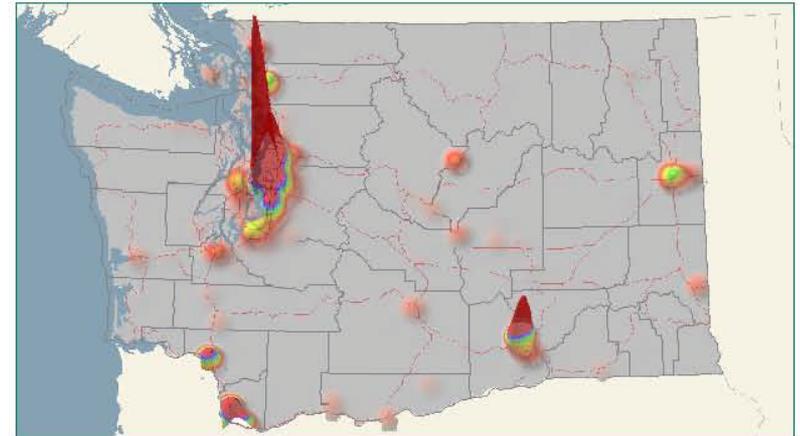
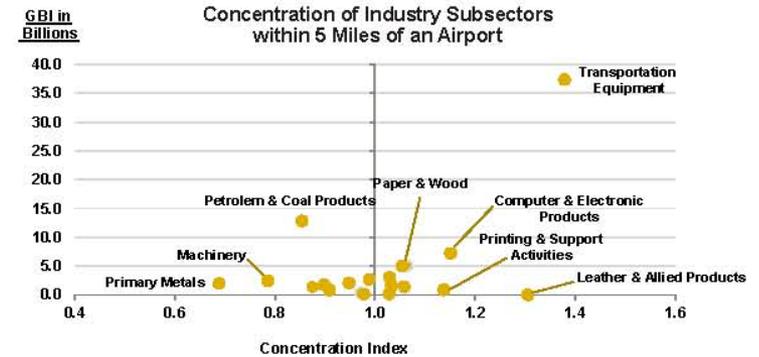
Share of State GBI

Within 5 miles: 70%

Within 10 miles: 97%

Industry Perspective: Selected Industry Analysis

- Analysis of industry concentrations around specific airport types.
- Assessment of five industry clusters and their relationship to aviation services.
- Found a variety of ways in which businesses use aviation.



Industry Perspective: Impact Numbers Don't Tell the Full Story

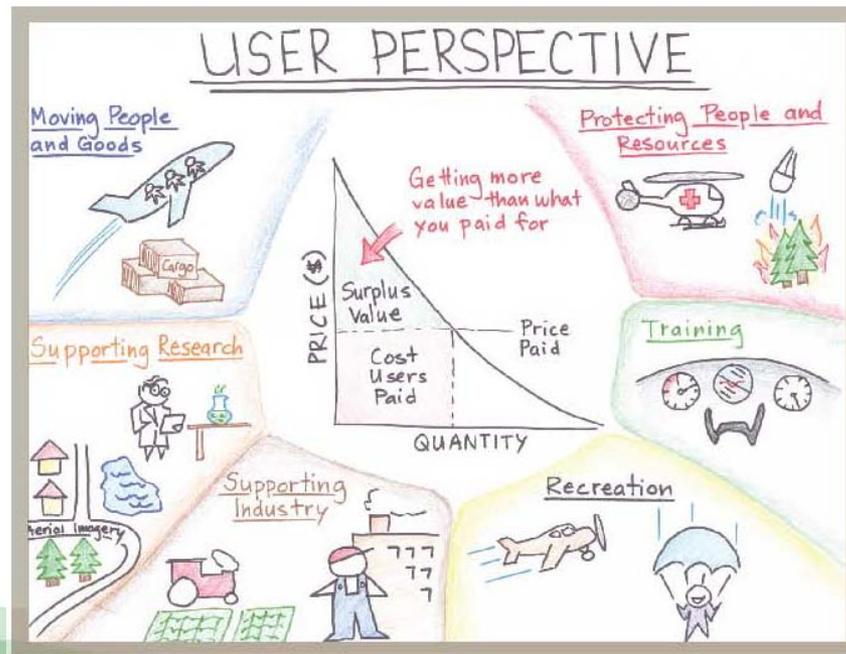
Examples of Off-Airport Businesses that Use Aviation

- **PETNET Solutions.** Radiopharmacy network in Mountain West region. Uses isotope with **eight-hour half-life**.
- **Pacific Cataract and Laser Institute.** Network of eye clinics. Business model based on **flying specialized surgeons** throughout clinic network to maximize efficiency.
- **Tek Construction.** Construction and engineering firm that uses small aircraft to **transport workers to remote work sites** throughout state.
- **Cherry Farmers.** Use **helicopters to dry cherries** and prevent cracking of fruit.

User Perspective

Why is this perspective important?

- Looks at the value users derive from all types of aviation services.
- Includes benefits not captured in traditional economic impact analysis of jobs, wages, and output.
- This perspective particularly demonstrates the importance airports have in smaller communities.



User Perspective: 17 Activities Users Derive Benefits From

- **Moving people and goods.** Commercial passenger service; corporate travel; personal travel; pilot training; air cargo; and blood, tissue, and organ transportation.
- **Supporting industry.** Analysis considered two examples: Aircraft manufacturing and agriculture.
- **Protecting people and resources.** Medical air transport, search and rescue, firefighting, national security, and emergency response.
- **Supporting research.** Scientific research and aerial photography.
- **Flying for recreation.** Aerial sightseeing and skydiving.

User Perspective:

Impact Numbers Don't Tell the Full Story

Value of Medical Air Transport

- For traumatic injuries, access to treatment during the first hour can save lives and prevent long-term disability.
- Air transport grants access to medical facilities to people who do not live near them.
- Air transport saves 5.6 more lives per 100 patients than ground transport.
- The value to users (a life saved) is far in excess of the jobs and wages associated with this activity.

Omak Municipal: Value of an Airport to a Smaller Community

- Medical air transport, cargo, agricultural spraying, law enforcement.
- Spotlight on wildland firefighting.
- The airport supports seven jobs and limited GBI but the value to the community is much higher because of the services the airport gives them access to.

Policy Implications

The report will not include recommendations but findings will inform a variety of policy discussions:

- New messages/themes about the benefits of aviation:
 - **Diversity** of users, services, and benefits
 - Strength as an interconnected **system**
- Economic benefits are significant. Unique in Washington is the importance of aircraft manufacturing.
- Understanding the value of airports in rural communities.
- Cost issues must also be considered.

Sample Airport Profile

Renton Municipal

616 West Perimeter Road, Unit A, Renton, WA, 98057



Text about your airport here . . .

NOTE: Data on this page comes from the WA Airport Information System Database (AIS).

AIRPORT CHARACTERISTICS

Location	Service Classification	
Legislative Dist: 37	Federal: Reliever Airport	
Associated City: Renton	State: Regional	
County: King	Definition from of State Classification	
Organizational Structure	Runway(s)	Type of Airport
Ownership Type: City Govt.	Number: 1	FAA:
Owner:	Type(s): Asphalt	Description:

AIRPORT ACTIVITY

Activities (Based/Transient)	Based Aircraft	Number of Carriers
B	AIS Last Updated: 12/21/2010	AIS Last Updated:
Agricultural Spraying	Jet 2	Commercial
Air Ambulance	Multi-Engine 12	
Medical Transport	Single-Engine 257	
Airplane Parts Manufacturing	Rotor Based 4	Ground Transportation
Aerial Surveying	Copter 0	AIS Last Updated: 12/21/2010
Wildland Firefighting	Helicopter 0	Bus Service
Skydiving/Parachute Drops	Seaplane 25	Taxi Service
Aerial Tows	Total 300	Marine Service
Civil Air Patrol	Fixed Based Operators	Rail Service
Cargo Activity	AIS Last Updated: 12/21/2010	Shuttle Service
Flight Training	No. of FBOs 2	Limo/Town Car
Commercial Air Carrier Activity		Other Ground Transportation

Airport Rankings

Take Offs and Landings (Operations)

Based Aircraft Operations	Rank
Number of Carriers	Rank

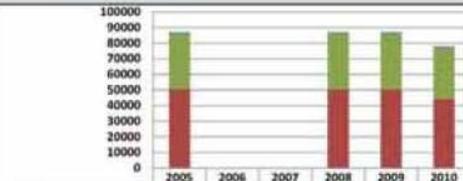
Commercial Enplanements*

2010	0
2009	0
2008	0

*Commercial enplanements are passengers boarding a commercial aircraft. Does not include disembarking passengers.

Fuel Service

80 LL	<input type="checkbox"/>
100 LL	<input checked="" type="checkbox"/>
MoGas	<input checked="" type="checkbox"/>
Jet A	<input checked="" type="checkbox"/>
Helicopter Fuel	<input type="checkbox"/>



■ Military Itinerant	40			40	0	132
■ Military Local	0			40	40	253
■ Commercial Air Taxi	939			939	939	1018
■ Commercial Air Carrier	203			203	203	402
■ General Itinerant	35453			35669	35669	32164
■ General Local	50591			50375	50375	44253

Renton Municipal

616 West Perimeter Road, Unit A, Renton, WA, 98057

Airport Businesses and Visitors

Economic and Fiscal impacts calculated for each airport start with activity that can be directly associated with the airport, namely the businesses operating at the airport and the visitors traveling through the airport. From this initial activity, multiplier effects are estimated as wages and other spending are re-spent in the local economy. Impacts of airport businesses are analyzed within the defined economic impact region, visitor spending is analyzed statewide.



ECONOMIC IMPACTS

AIRPORT BUSINESSES

Counties in Impact Region: King	
Total Gross Business Income:	Estimated annual revenue received by all businesses located on the airport footprint.
Direct Jobs:	Estimated jobs supported by the total Gross Business Income on the airport footprint.
Direct Labor Income:	Estimated income paid to the Direct Jobs located on the airport footprint.
Direct Total Output:	Estimated portion of total Gross Business Income that will cycle through the economic impact region.
Indirect/Induced Impacts:	Increases in regional impacts from the local re-spending of direct dollars.
Total Impacts:	The sum of Direct, Indirect, and Induced Impacts, for a total regional impact.

Estimated Regional Impact from Airport Businesses

Total Estimated Gross Business Income:	\$ 36,018,612,723		
Estimated Economic Impact	Direct	Indirect/Induced	Total Impact
Jobs	10,298	8,483	18,789
Labor Income	\$ 1,298,207,162	\$ 452,216,130	\$ 1,748,423,292
Total Output	\$ 2,877,749,810	\$ 774,506,424	\$ 3,652,256,234

VISITOR SPENDING

Impact Region: Washington State	
Total Visitor Spending:	Estimated total annual average spending by visitors traveling through this airport.
Direct Jobs:	Estimated jobs supported by the total estimated visitor expenditures.
Direct Labor Income:	Estimated income paid to the Direct Jobs supported by visitor expenditures.
Direct Total Output:	Estimated total visitor expenditures, which are all assumed to occur within the economic impact region.
Indirect/Induced Impacts:	Increases in regional impacts from the local re-spending of direct dollars.
Total Impacts:	The sum of Direct, Indirect, and Induced Impacts, for a total regional impact.

Estimated Regional Impacts from Visitor Spending

Total Estimated Visitor Spending:	\$ 4,185,400		
Estimated Economic Impact	Direct	Indirect/Induced	Total Impact
Jobs	41	22	63
Labor Income	\$ 1,193,999	\$ 1,037,785	\$ 2,231,784
Total Output	\$ 3,658,136	\$ 3,198,381	\$ 6,856,517
			Statewide Impact
			XX
			XX
			XX

FISCAL IMPACTS

Estimated Taxes Paid to Each Jurisdiction

	Cities	County	SP Dist	State	Total Taxes
Airport Businesses	\$ 1,737,600	\$ 279,600	\$ 1,153,800	\$ 24,594,000	\$ 27,768,000
Visitors	\$ 39,800	\$ 40,400	\$ 41,600	\$ 209,900	\$ 331,700
Total	\$ 1,777,400	\$ 320,000	\$ 1,195,400	\$ 24,803,900	\$ 28,096,700

NOTE: The tax estimates include Aircraft Excise Tax, Property Tax, Business & Occupation Tax, Sales Tax, Aviation Fuel Tax, State and Local Utility Taxes, Rental Car Tax, and Lodging Tax.

Next Steps

- Finalize report and airport profiles
- Complete the online calculator tool

Questions?

For more information on the Aviation Economic Impact Study,
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