

AGENDA

**AVIATION ADVISORY COMMITTEE MEETING
Des Moines City Hall
North Conference Room
21630 11th Avenue S, Suite C**

January 8, 2018 – 4:30-6:00 p.m.

1. Chair's Report:
 - a. Initial Meeting of the University of Washington Ultra Fine Particle Study Technical Advisory meeting.
 - b. Ongoing process of establishing formal collaboration with our partner cities regarding environmental review of the Sustainable Airport Master Plan (SAMP).
 - c. First meeting of the SeaTac Airport Stakeholder Committee, February 28, 2018.
2. Information on Air Cargo Washington State Study.
3. Information on issues provided by Committee members:
 - a. Resolution from City of Burien regarding Aviation Capacity Needs.
 - b. Sheila Brush regarding Aircraft Noise Complaint and Inquiry System.
 - c. Sheila Brush email regarding Proposal for Funding Jet Fuel Toxicologist
 - d. Other updates.
4. Next Report to Council.
 - a. January 18, 2018
5. Public Comment (10 minutes).
6. Next Meeting Date:
February 12, 2018, 4:30-6:00 p.m.
7. Adjourn.

*Materials provided to the Committee are available for review in the City Clerk's Office.



Washington State Air Cargo Movement Study

Stakeholder Panel

Boeing Field

December 8, 2017

CARGO



Agenda

- Introductions/Project Purpose
- Review Work Plan and Schedule
- Project Charter
- Air Cargo Background
- Initial Definition of Congestion
- Discussion: Future of air cargo in Washington
- Next Steps

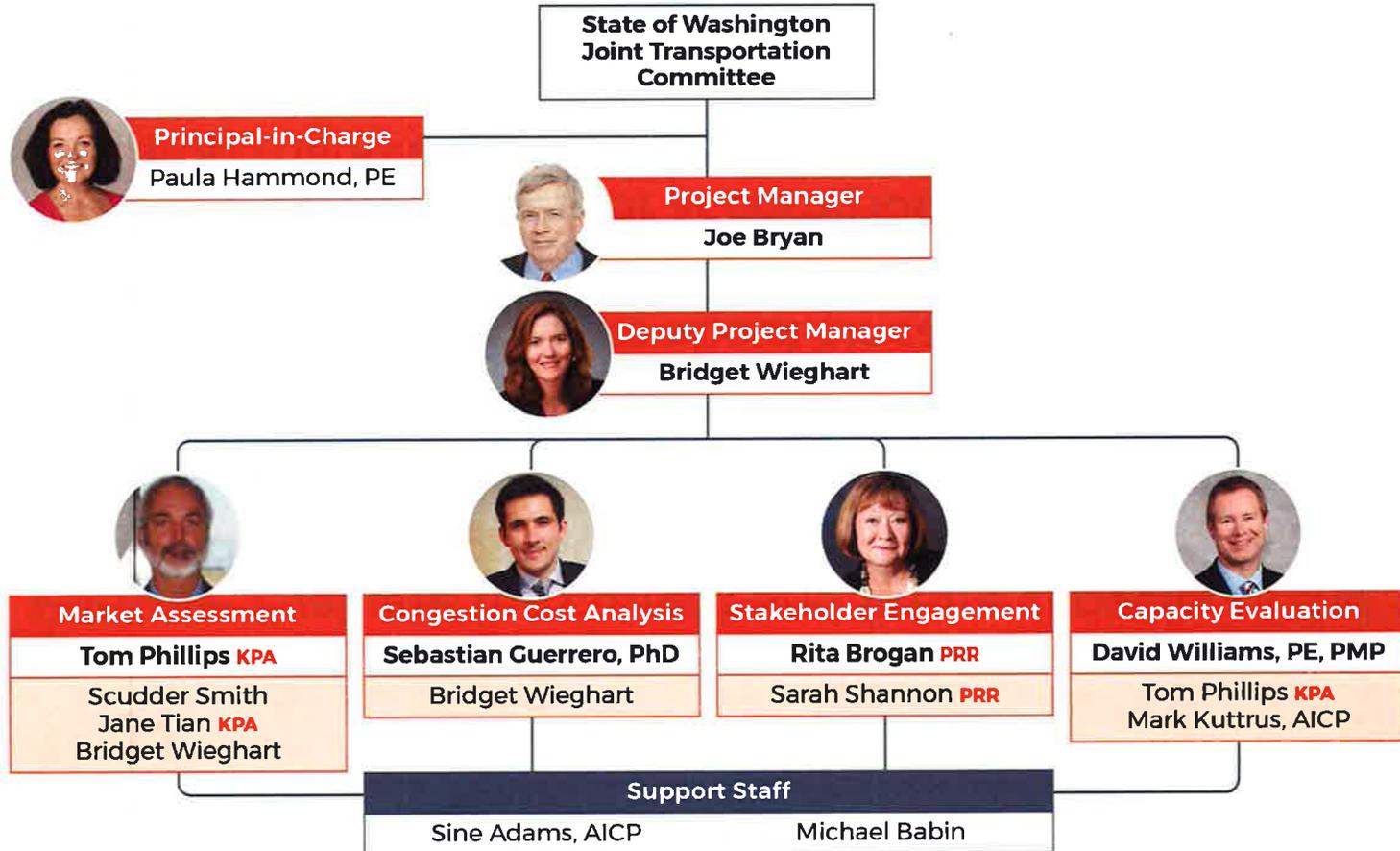
Project Purpose and Objectives

Purpose: Evaluate the current and future capacity of the statewide air cargo system

Objectives:

1. Educate policy makers about air cargo movement at Washington airports;
2. Explore possibilities for accommodating the growing air cargo market at more airports around the state; and,
3. Identify the State's interest and role in addressing issues arising from air cargo.

Organizational Chart



All staff are WSP unless noted. **KPA** Keiser Phillips Associates **PRR** PRR, Inc.

Work Plan and Schedule

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TASK 1: DESCRIBE THE AIR CARGO SYSTEM IN WASHINGTON STATE

Profile the air cargo market and air facilities that make up the air cargo system in Washington

Outcomes:

1. Overview of existing facilities and services
2. Interviews with existing Washington air cargo users
3. Review of global, national, regional and local air cargo flows and types of commodities being moved by air in Washington

TASK 2: AIR CARGO CONGESTION

- Air cargo congestion threatens the competitiveness of important economic sectors
- Washington's airports compete with other airports and modes
- Define and estimate the costs of air cargo congestion

TASK 3: EVALUATE HOW TO USE EXISTING CAPACITY ACROSS WASHINGTON STATE

Site Visits

Review Opportunities and Constraints

Develop criteria to:

- Compare competitive airports to Washington airports
- Evaluate the potential for Washington airports to attract:
 - *Non-integrated all-cargo carriers*
 - *Integrated all-cargo carriers*
 - *International air freighter operators (scheduled and charters)*
 - *Third-party logistics companies*

Evaluate the potential to market State airports to different carrier types based on strengths, weaknesses, opportunities and threats

TASK 4: RECOMMENDATIONS AND IMPLEMENTATION STRATEGIES

Create a vision and strategy for air cargo and logistics services development in Washington

- Provide a list of actions necessary to implement the vision
- Identify priorities and responsibility for each action
- Include performance measures and proposed budget

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The Washington State Air Cargo and Logistics Business Development Strategic Plan will include:

- Ways to provide capacity relief for Sea-Tac
- Role of other Washington airports in capacity relief
- Guidance to regional airports for expanding their markets

TASK 5: STAKEHOLDER PANEL AND STAFF WORKGROUP

Staff Workgroup

- Mostly legislative and agency staff members
- Guidance and input to technical methods and results
- Insight into the interests of their agencies/committees
- Review recommendations for the stakeholder panel

Stakeholder Panel

- Legislators, top agency officials and industry representatives
- Review the results and recommendations
- Represent interests of their organization, business or constituency
- Input on recommendations to JTC, the Legislature and the Governor, who will make final decisions

Stakeholder Panel Charter

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Stakeholder Panel Charter

- Study Purpose and Objectives
- Context
- Decision-making process
- Committee Roles and Principles

Air Cargo Background

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Air Cargo is Big Business

- Over \$67 billion worldwide air freight & express market¹
- Over 52 million metric tons of goods valued at USD 5.6 trillion transported worldwide in 2015
- Freight traffic growing 3-5% per year worldwide
- Market size has doubled every ten years²
- Integrator/express carriers control over 90% of the US domestic cargo market³
- Cargo share of total airline revenues:
 - *5% for US domestic majors*
 - *15% for European majors*
 - *20-50% for Asian majors*

Source: ¹ IATA ² Boeing ³ FAA

Air cargo forms a small portion of global tonnage...
...but a large part of global trade value



Air cargo is extremely valuable to world trade

Cargo Industry Stakeholders



Air Transportation/Logistics

- ◆ Shippers
- ◆ Forwarders (3PLs/4PLs)
- ◆ Customs brokers
- ◆ Consolidators
- ◆ Indirect carriers
- ◆ General Sales Agents
- ◆ Gov. postal authorities
- ◆ Motor carriers
- ◆ Air carriers
- ◆ Airports
- ◆ Cargo/Ground handlers
- ◆ Federal Inspection Agencies
- ◆ Consignees

Two Airline Cargo Business Models

Airport-to-Airport Model

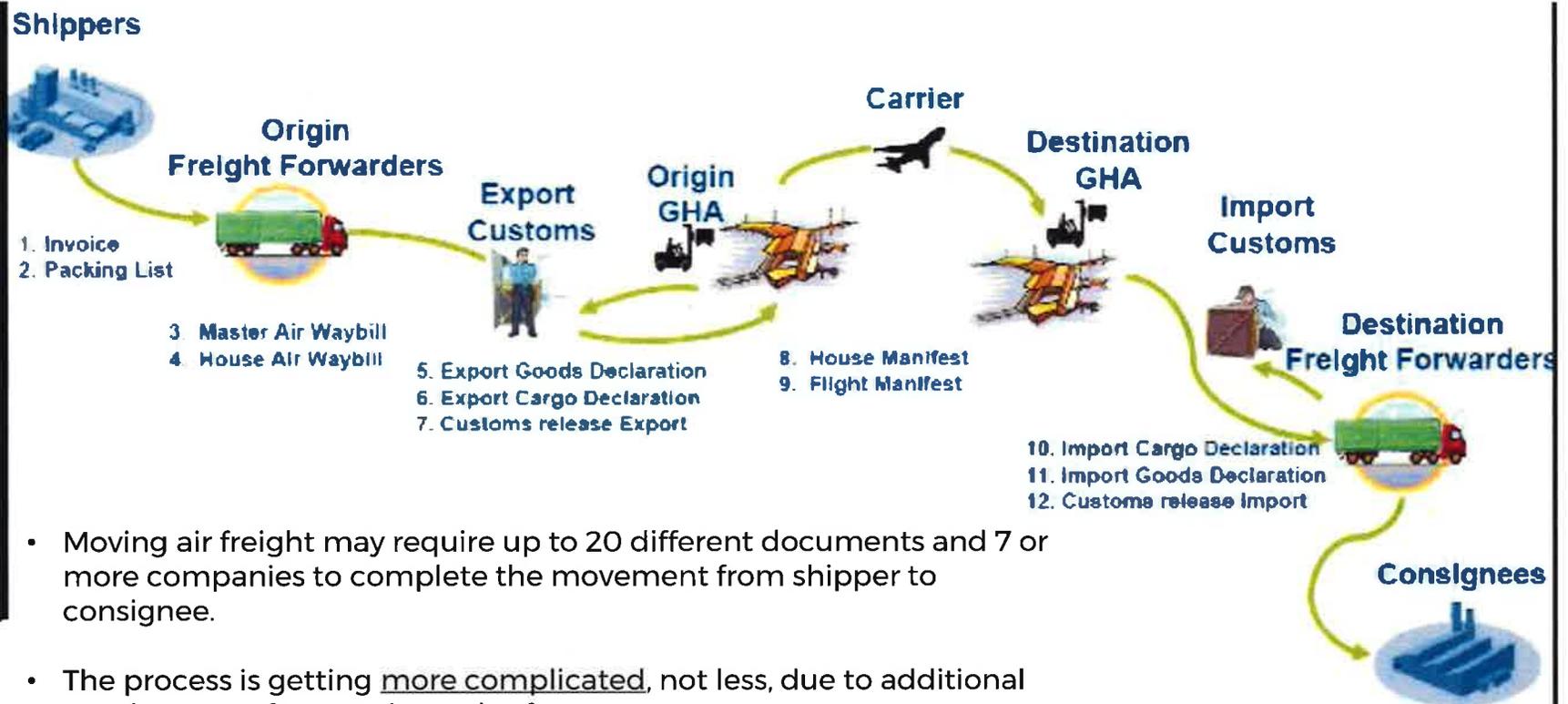
- Business Model Users: belly cargo carriers and line haul freighter operators
- Primary Airline Customer: Freight Forwarders
- Model characteristics: Airlines sell space wholesale to freight forwarders who sell aircraft space and services to shippers at retail price.
- Average shipment time: six days
- Level of custodial control: medium

Door-to-Door Model

- Business Model Users: the integrator/express carriers and the integrator forwarders
- Primary Airline Customer: Shippers (business & consumers)
- Model characteristics: Airlines sell space and services direct to shippers at retail price. Occasionally sell space to forwarders at wholesale.
- Average shipment time: three days
- Level of custodial control: high

Each model requires different airport facility and support services needs

Air Cargo Supply Chain is Complex



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- Moving air freight may require up to 20 different documents and 7 or more companies to complete the movement from shipper to consignee.
- The process is getting more complicated, not less, due to additional requirements for security and safety.



Source: IATA e-freight fundamentals

GHA = Ground Handling Agent

Air Cargo Carriers

- Combination Carriers (airport to airport)

- ▶ Belly Cargo Carriers:
Alaska, Delta, United, American, Southwest, etc.
- ▶ Pax Belly Cargo & Freighter Operators:
Korean Air, China Airlines, Air China, EVA, etc.



- All-Cargo Carriers

- ▶ Integrator / Express (door to door)
FedEx, UPS, SF
- ▶ Traditional Line Haul (airport to airport)
Kalitta, Cargolux, Polar , Yangtze River Express, etc.

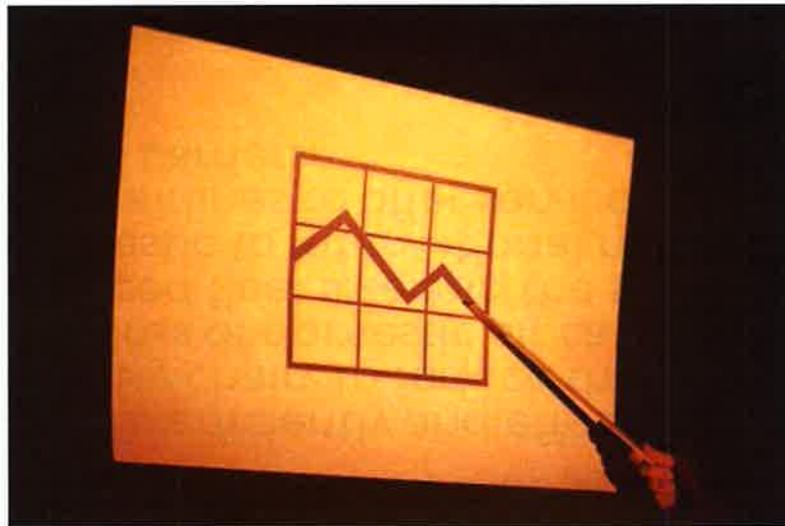


The other air cargo carriers: Road Feeder Service

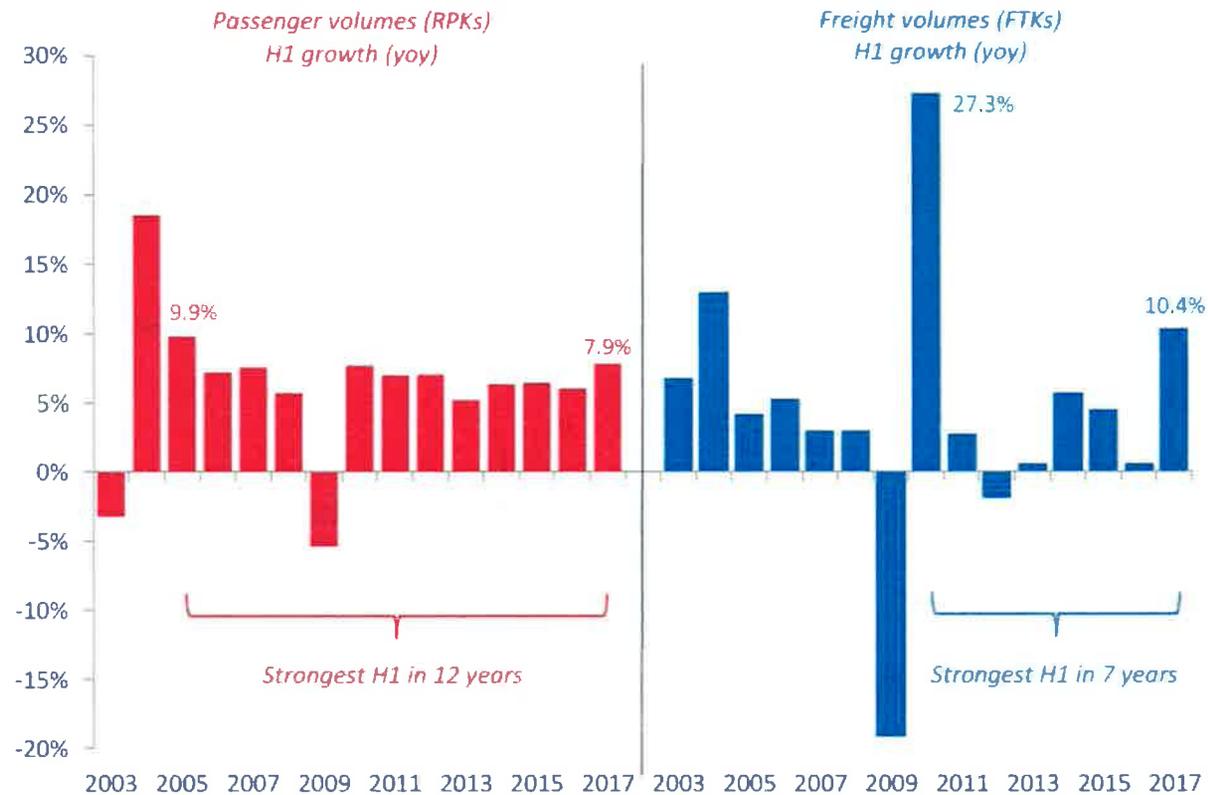
- What: Regularly scheduled airport-to-airport truck service between North American city pairs allowing airlines to offer service to a city to which it does not fly
- Purpose: To efficiently and effectively expand an airlines air cargo supply chain; to reduce the cost of air shipments; to offset the loss of domestic air capacity that has resulted from reduced fleet size and the shift of widebody airplanes from domestic to international markets; and allows passenger airlines to offer service comparable to that of pure cargo carriers.



Cargo Industry Status



Cargo growth more variable than passenger but recovering from the Great Recession



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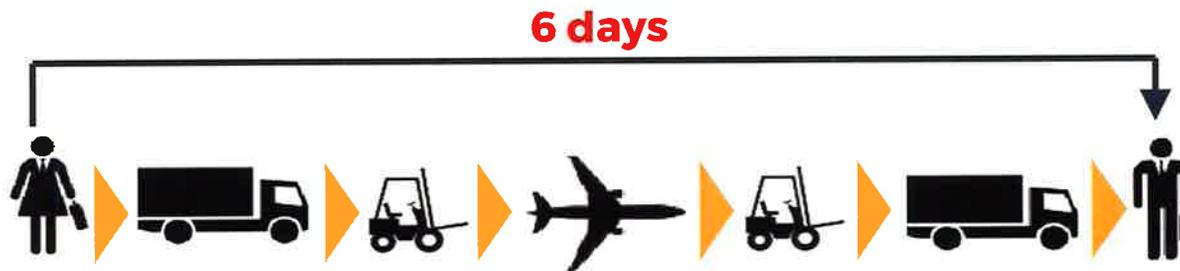


Source: IATA

Air Cargo Performance Has Not Improved Much in Recent Decades

Estimated average end-to-end transportation time since 1980's: ~ 6 days

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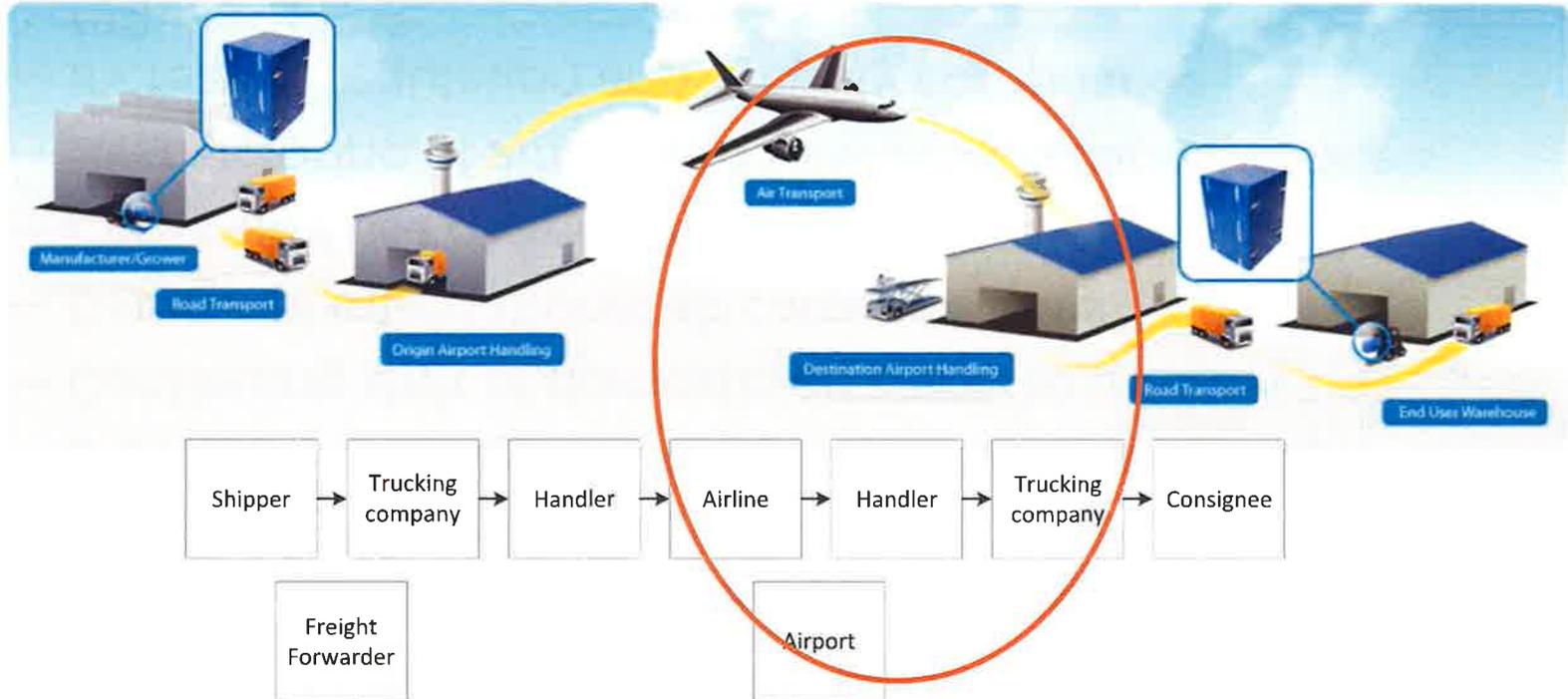


“Ninety per cent of the transit time for air cargo is spent not moving, but waiting to move!”

(Air Cargo News 11.03.2013)

IATA: Reduce the Supply Chain by 48 hours

Improvements must be made in the handling and Customs processes



Some Trends of Significance

- Manufacturing moving away from traditional passenger hubs
- E-commerce freight demand growing significantly
- Continuing shift of domestic air cargo to trucks
- Growth of international air cargo volumes
- Continued use of freighters
- Restructuring of airline and forwarder business models
- Increased regulation and security compliance requirements

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Freighters will remain the main players

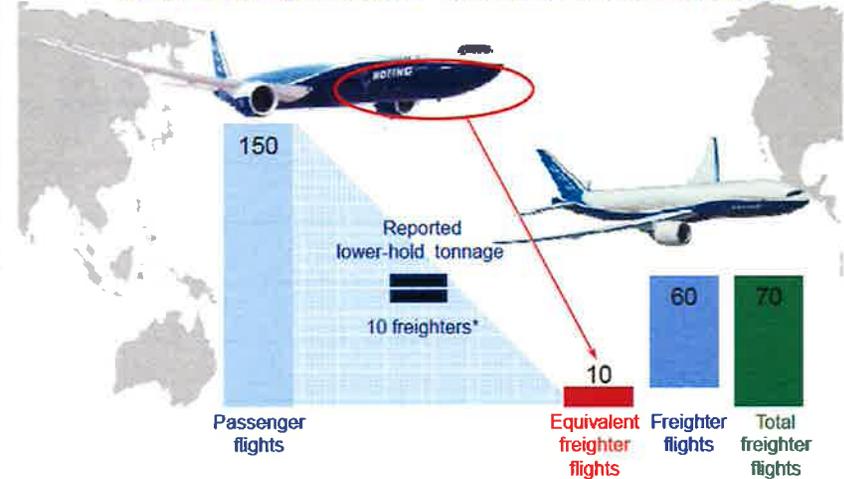
Total air cargo traffic carried by freighters by percentage



60% of air cargo traffic carried on freighters

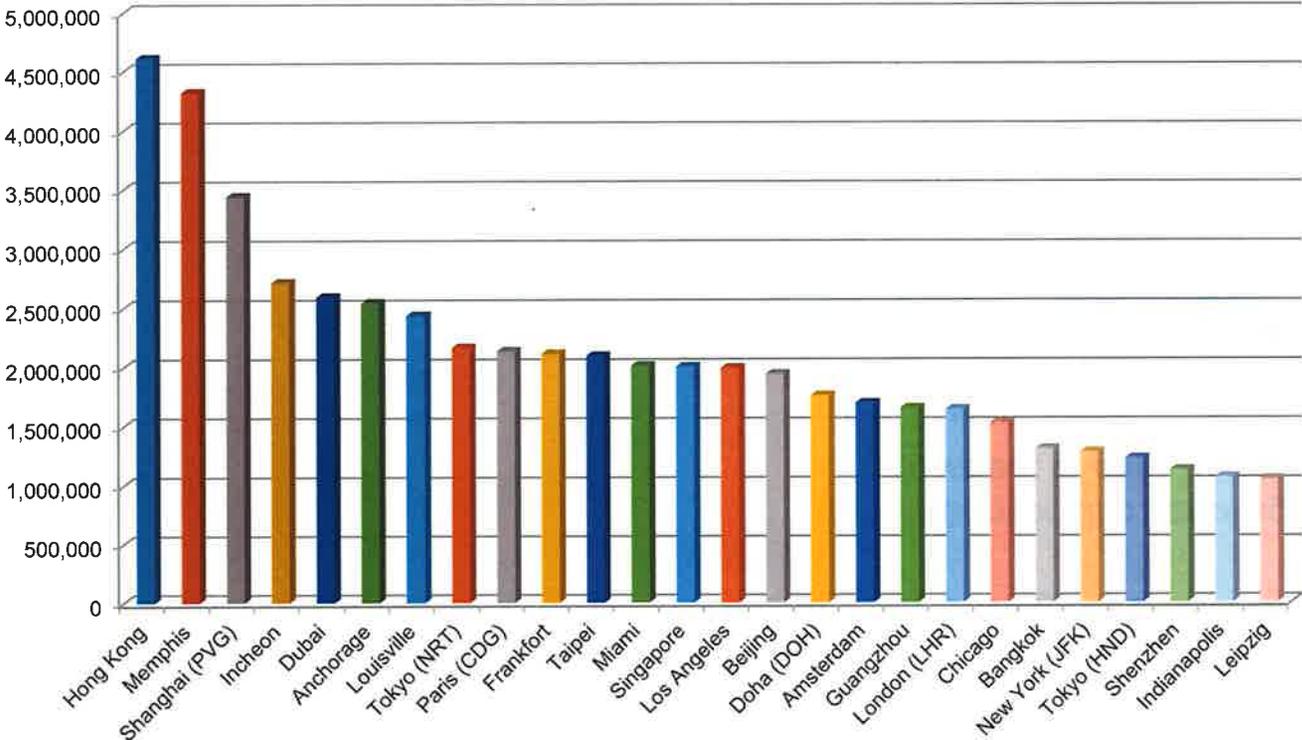
150 transpacific passenger flights carry the equivalent of only 10 freighter flights

Analysis of average daily flights from Asia to North America, year 2013



*Conversion takes into account destination, range, and load factor.

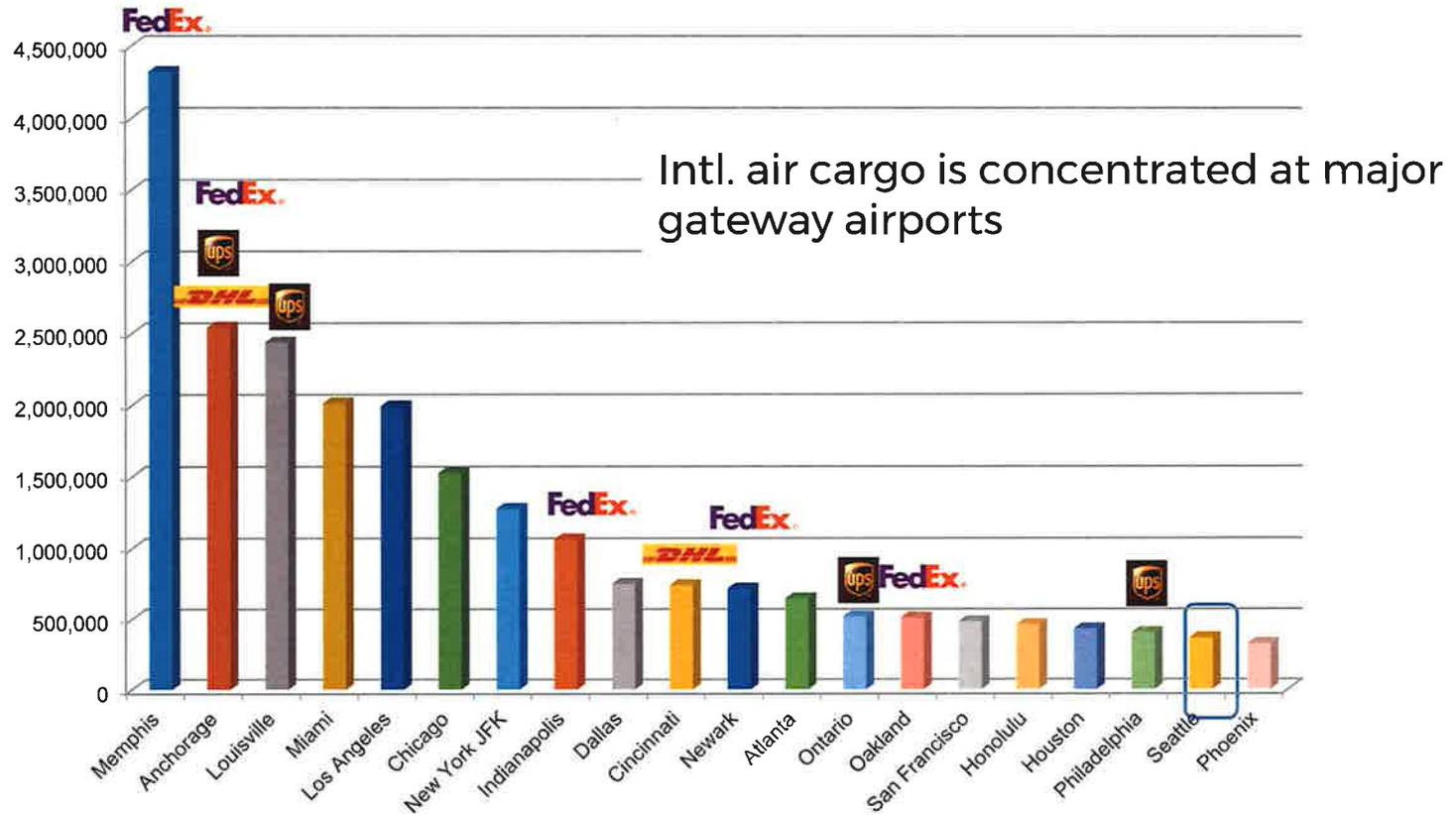
Top World Air Cargo Airports 2016 by weight



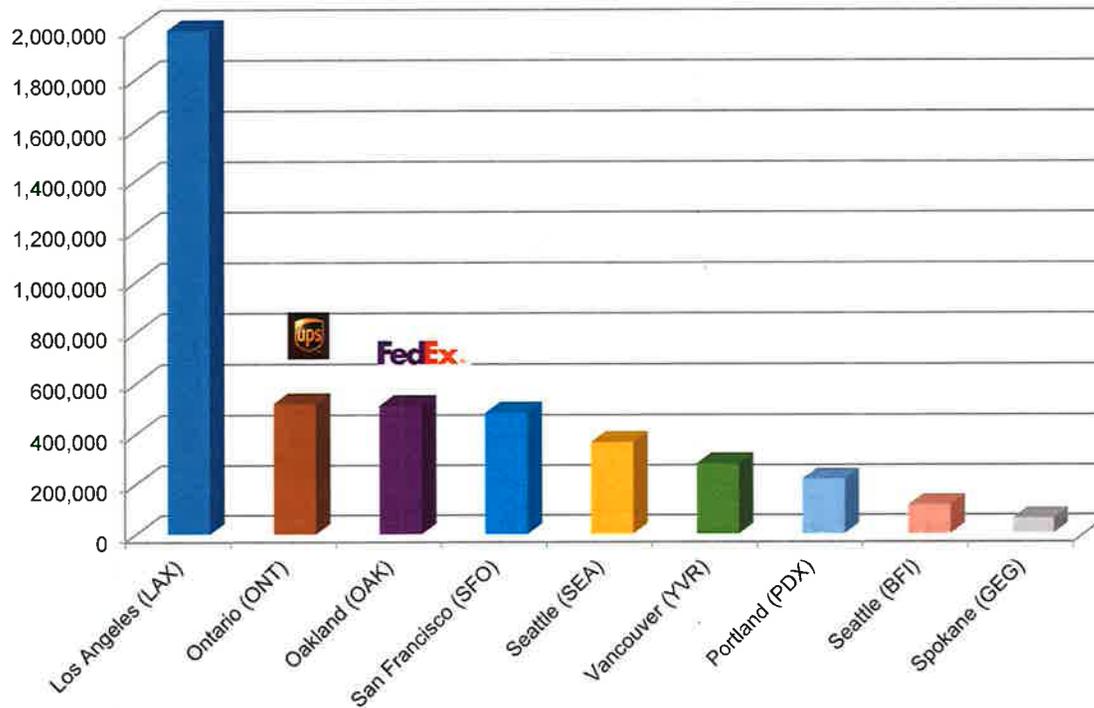
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Top20 US Air Cargo Airports 2016



Top West Coast Air Cargo Airports 2016

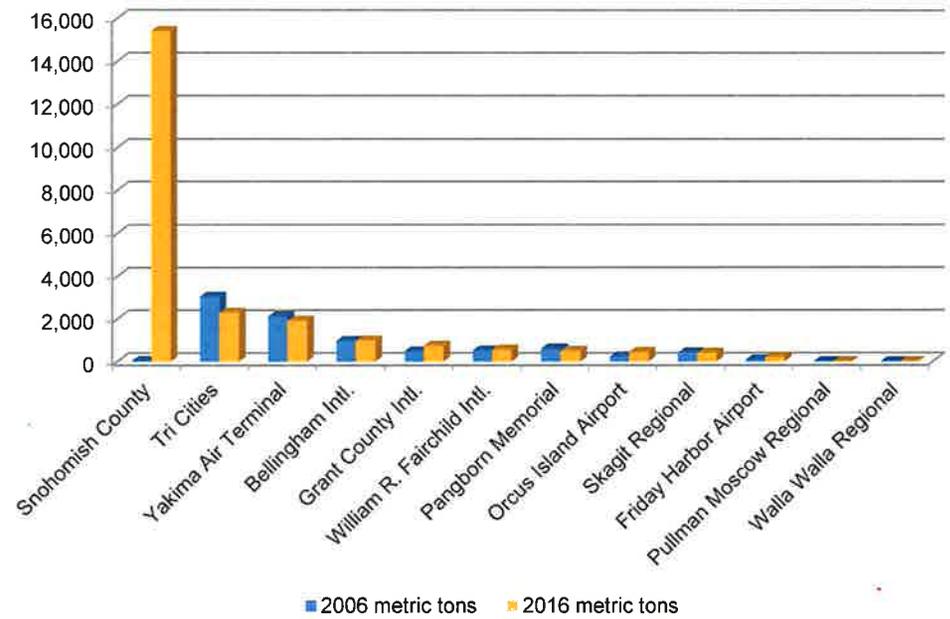
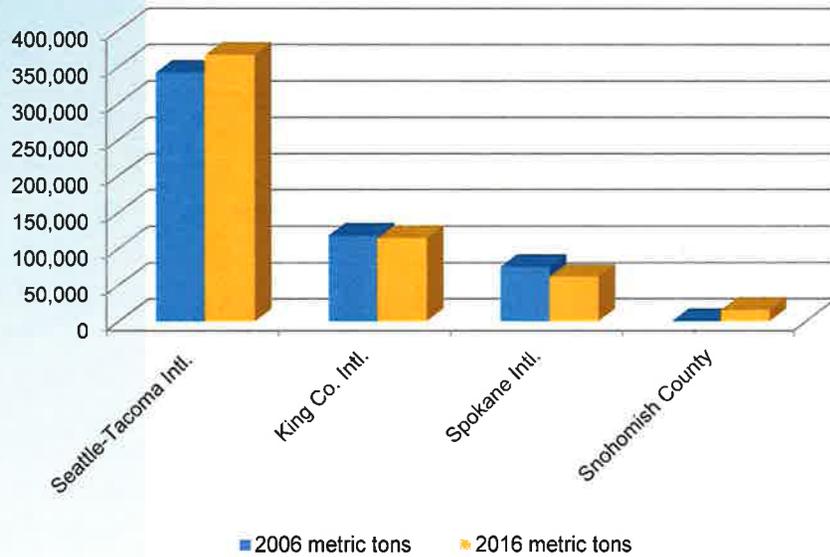


LAX dominates the West Coast in air cargo due to the number of wide-body aircraft, variety of destinations, frequencies and the large network of air freight forwarders

Source: Airports Council International except BFI; BFI data from DOT T-100 market forms

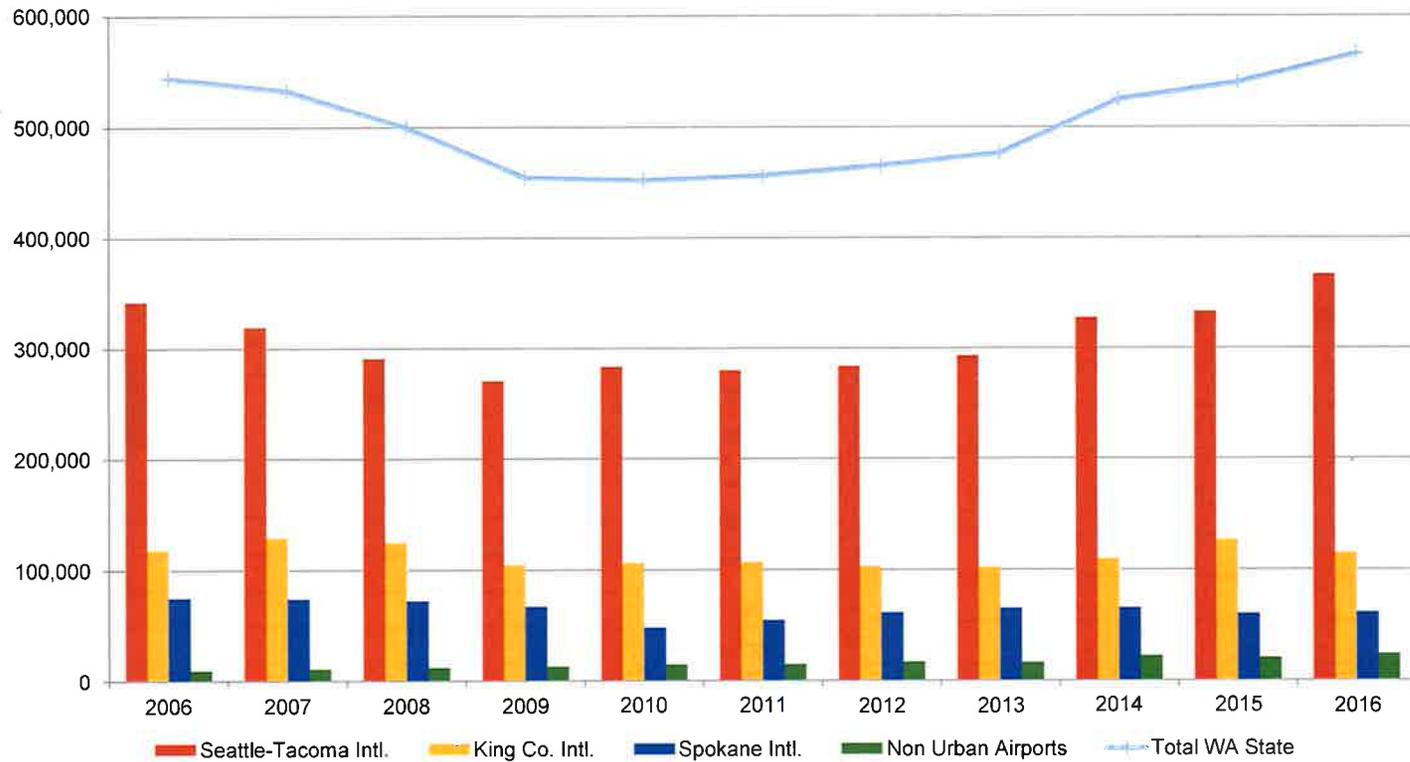
Top WA State Air Cargo Airports 2016

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Source: ACI and KPA analysis

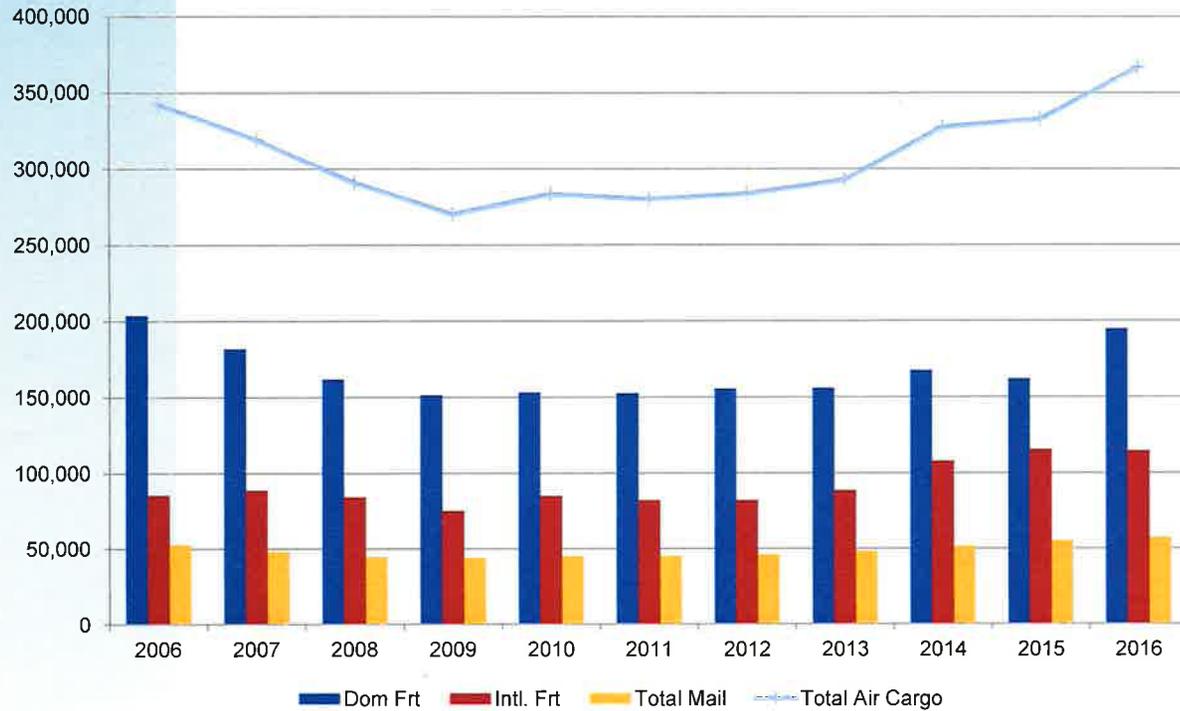
Ten Year Trend of Air Cargo in WA State



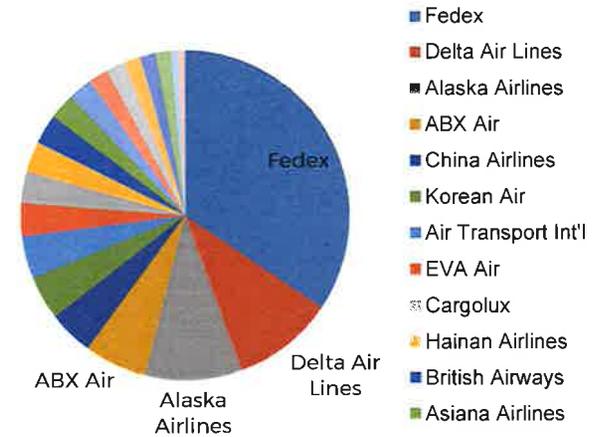
Over the past five years air cargo the air cargo growth rate for WA State has averaged approx. 5% per year. Seattle-Tacoma International Airport and King County International Airport accommodate 85% of the air cargo in WA State.

Air Cargo Trends for Seattle-Tacoma International Airport (SEA)

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Top 15 Air Cargo Airlines at SEA - 2016

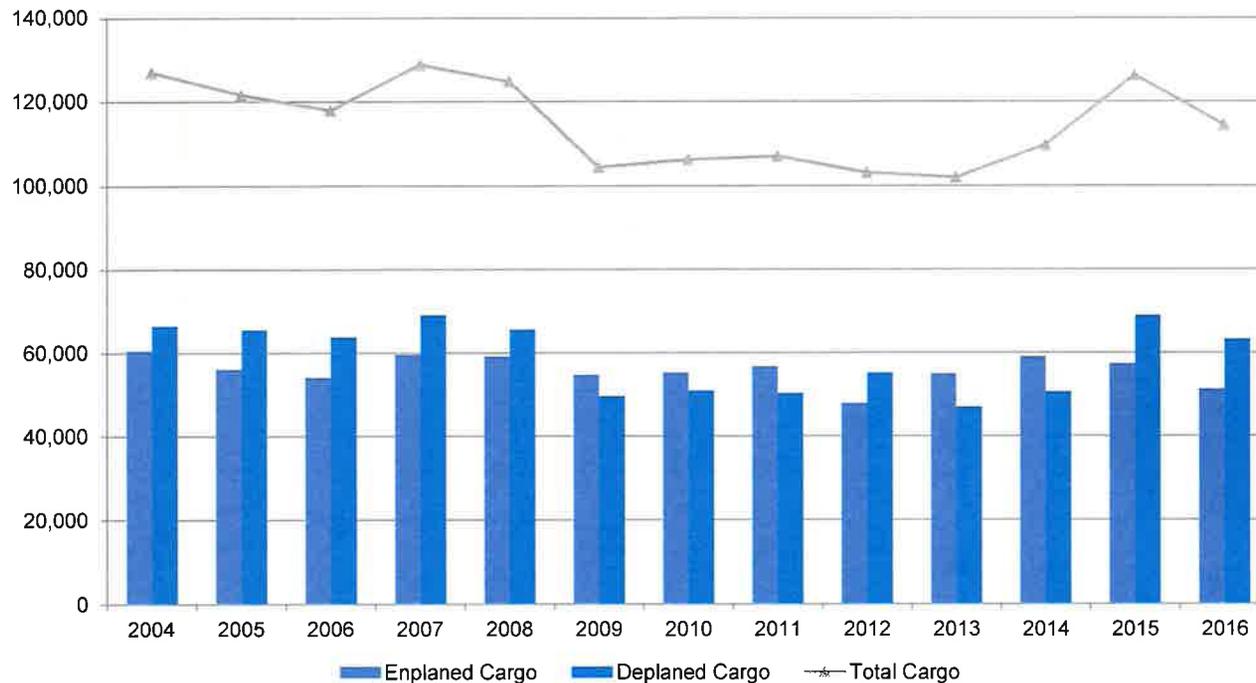


	Freighter Cargo	Pax Lower Deck Cargo	Percent Freighter
2014	182,599	144,640	55.8%
2015	180,954	151,682	54.4%
2016	220,591	145,839	60.2%



Data source: Port of Seattle statistics

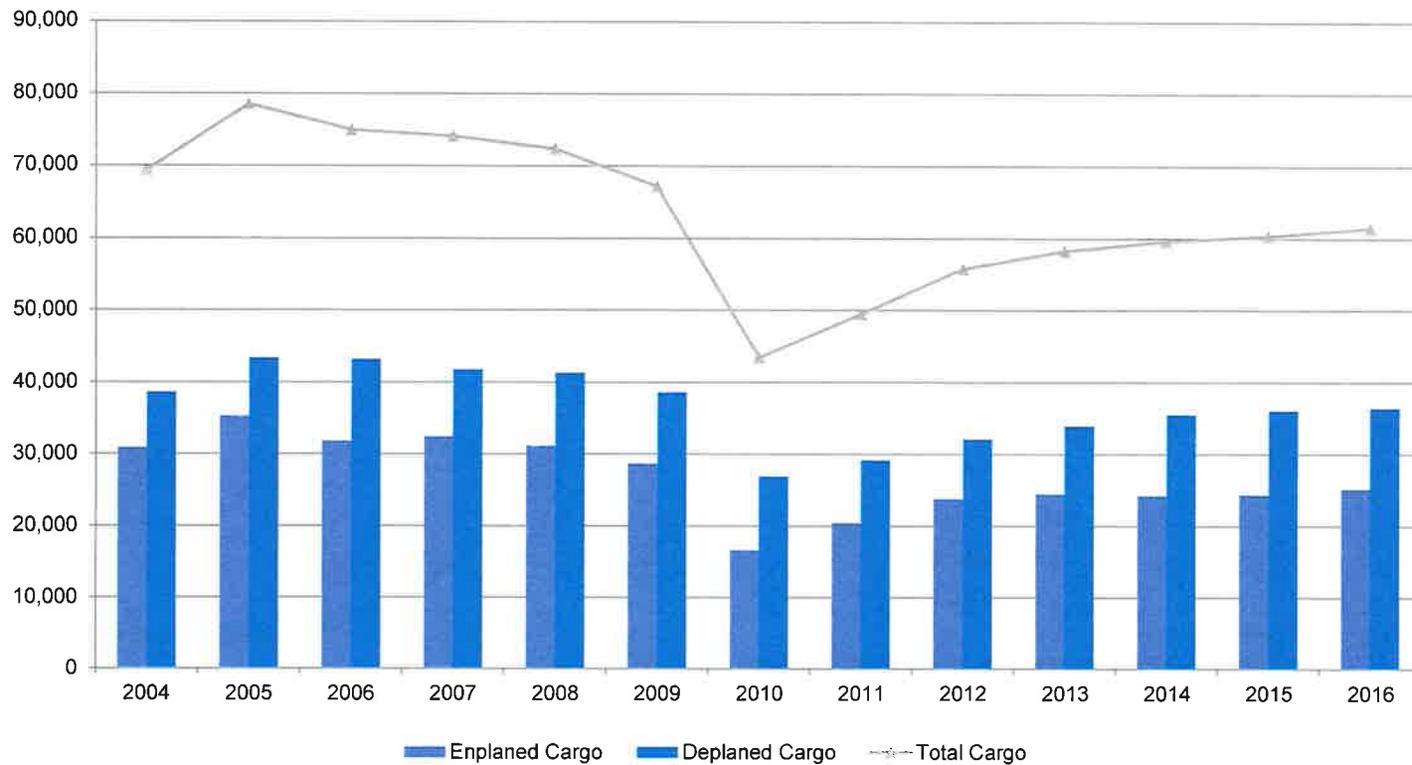
Air Cargo Trends for King County International Airport (BFI)



In 2016 UPS accounted for 90% of the air cargo tonnage at King County International and is expected to generate 99 to 100% of the air cargo in 2017

Data source: USDOT T-100 market reports

Air Cargo Trends for Spokane International Airport (GEG)



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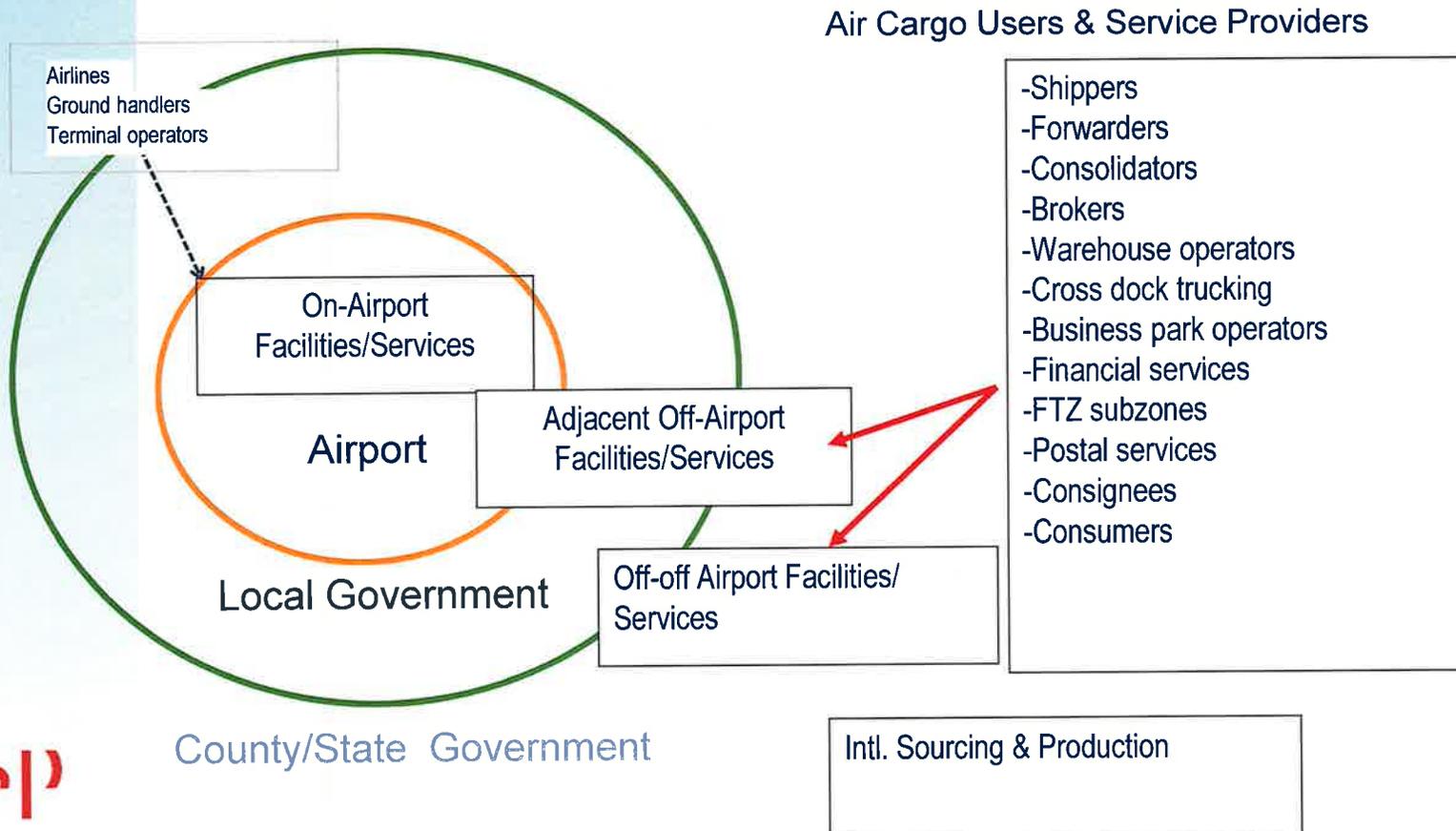


FedEx and UPS account for over 90% of the air cargo volumes at GEG

Data source: Spokane International Airport statistics

The Airport Air Cargo Ecosystem

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Factors Influencing Airline/Airport Choice

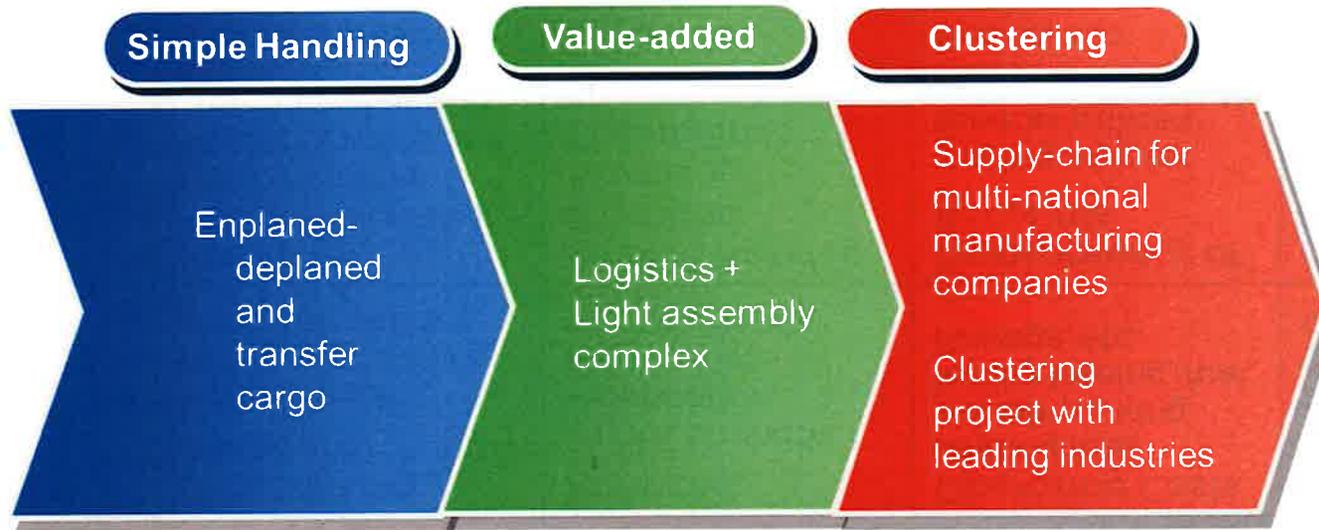
Market Area	Location	Infrastructure	Financial Environment	Operational Freedom
<i>Primary</i> - up to 100 mi <i>Secondary</i> - within 400 mi <i>Tertiary</i> - >400 mi	<i>Fits Existing Network</i> different for integrator, belly & freighter airlines	<i>Runways</i> length, strength, redundancy, approaches, minimums, etc.	<i>Operating Costs</i> landing fees, aircraft parking, facility leasing, fuel flowage, etc.	<i>Permissions</i> related to routes, frequencies, pricing, slot controls, curfews
<i>Connectivity/ Interlining</i> airline, RFS, regional PUD	<i>Close to Customers</i> - % of pop (markets) within X miles or Y minutes of airport	<i>Aircraft Parking & Ground Handling Capabilities</i>	<i>Transparency of Accounts</i> paying only for services utilized	<i>Operational Flexibility</i> aircraft change of gauge, self-handling or ability
<i>Freight Forwarders</i> multinational, local, specialty, etc.	<i>Local Surface Access</i>	<i>Landside Facilities & Services</i> terminals, FIS, customs brokers, temp. control, etc.	<i>Economic Incentive Packages</i>	to select among competing agents, ability to transfer between aircraft, 24/7 operations, etc.
<i>Distribution Services</i> warehouses/DCs, cool chain, FTZs	<i>Interstate Highway Connectivity</i>	<i>Interstate Highway Access</i>	<i>Residual vs Compensatory</i>	<i>Ability to Use Intermodal Services</i>

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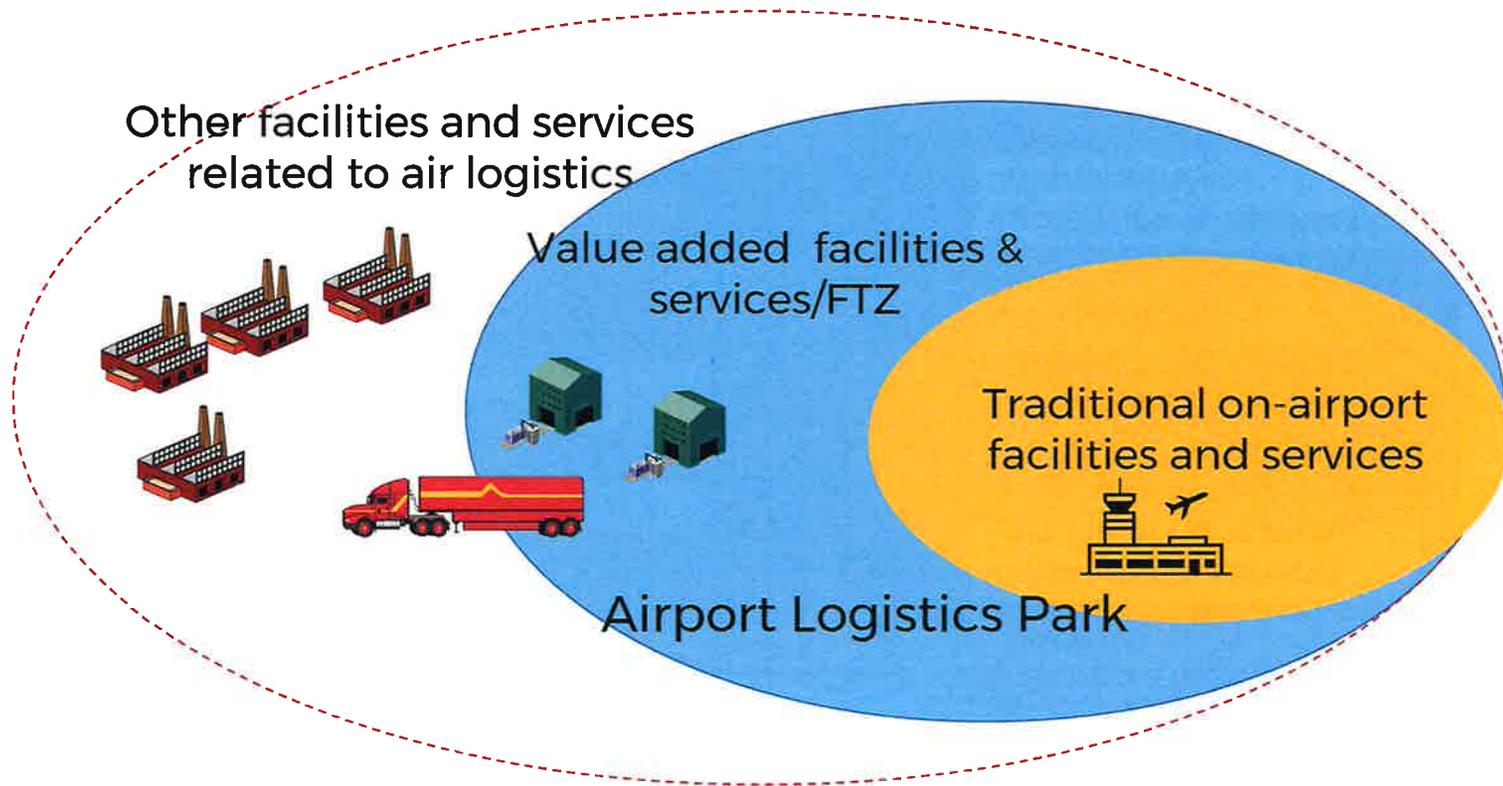
The Airport Logistics Park

Goal: to move your airport up the value chain



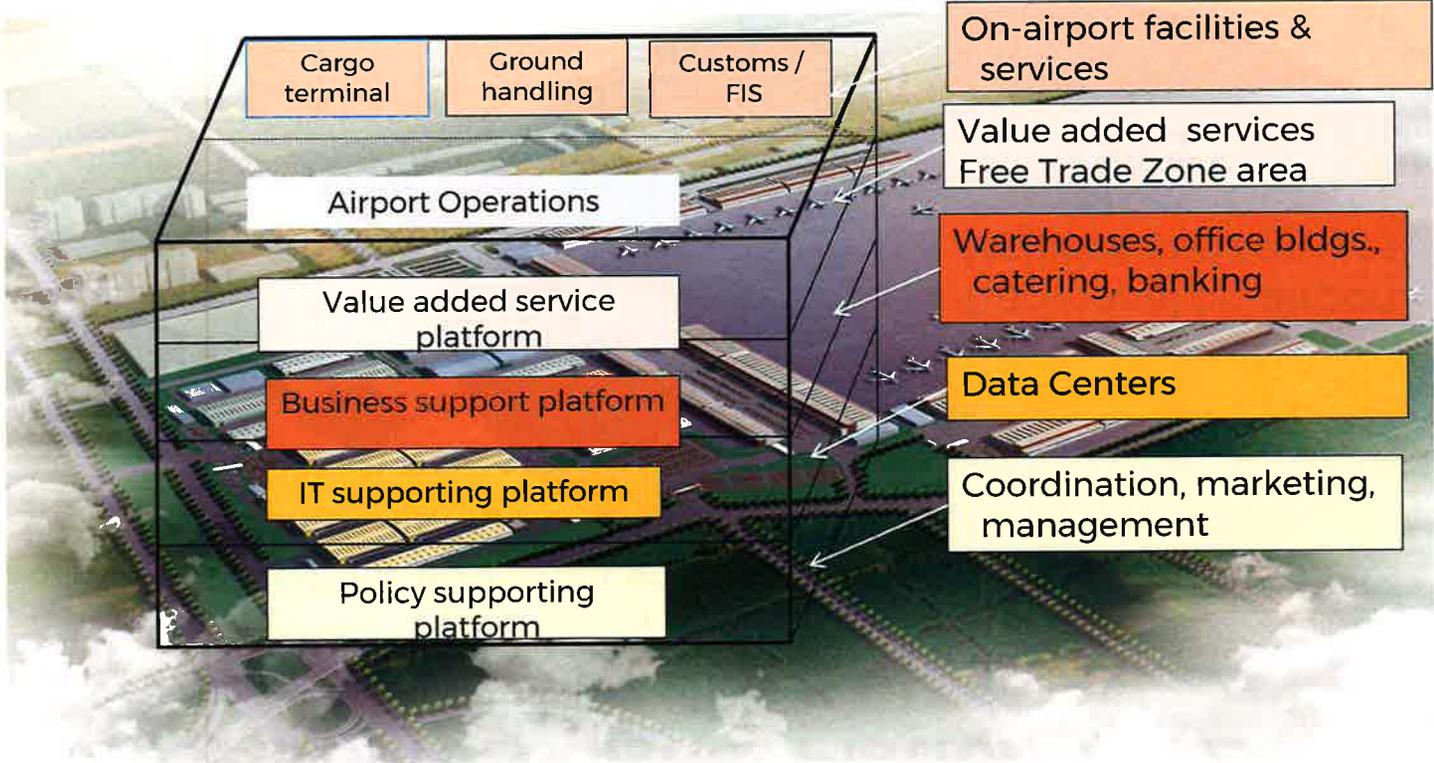
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Airport Logistics Platform/FTZ



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Airport Logistic Park Functions



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Summary

- Air cargo growth has seen robust growth in 2016/17 but could be nearing a peak
- There are two major business models for air cargo carriers
 - *integrator/express model*
 - *airport-to-airport model*
- Trucking is of great importance to air cargo
- Airports should think beyond their boundaries in planning
- Airport cargo strategies are reliant on knowing your market and key airport and community objectives
- Partnering is a key to creating new airport business models

Air Cargo Congestion

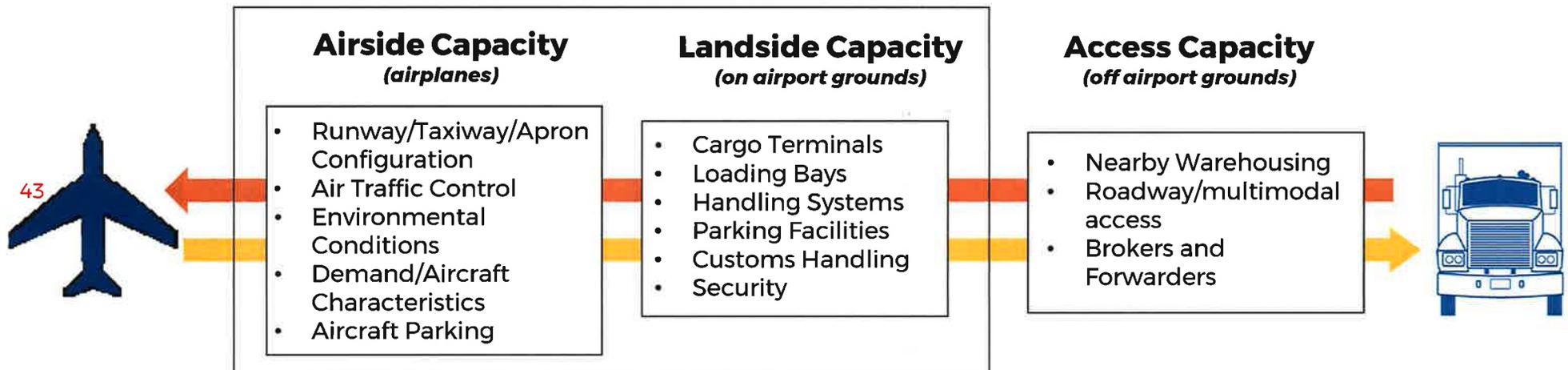
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Air Cargo Capacity

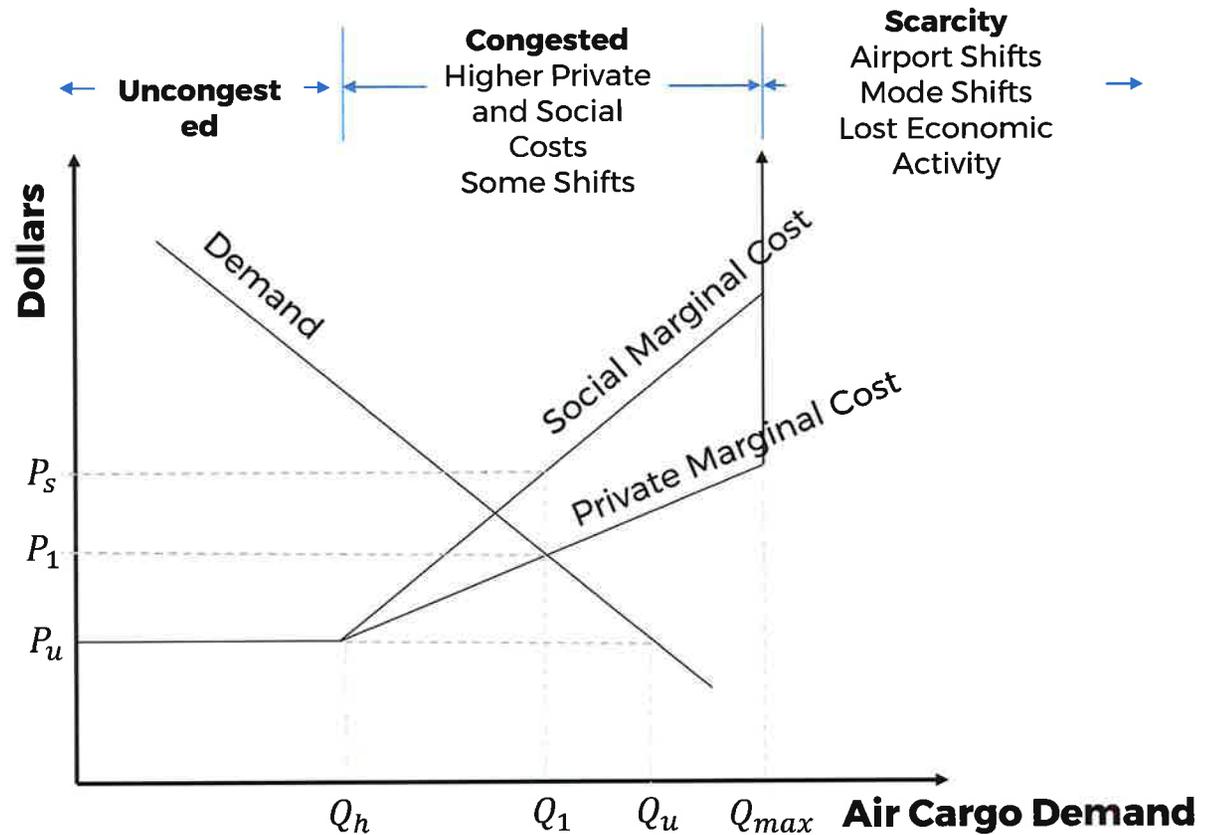
AIRPORT CAPACITY



Air Cargo Congestion

In congested conditions, each additional unit of cargo increases costs for everyone - higher rates, longer queues, more unreliability. Shippers must consider alternatives or become less competitive.

- Operators use more resources to maintain service
- Shippers absorb more cost unless viable alternatives available



Proposed Definitions

Air Cargo Capacity: The maximum cargo volume that can be handled by airside, landside and access system components.

Air Cargo Congestion: Increase in costs to shippers as cargo volumes approach capacity, stressing one or many system components.

- Costs reflect increases in time
- Disrupts regional market functions
- Erodes competitive advantage

Proposed Air Cargo Congestion Extent

Two complementary approaches:

- 1. Capacity Analysis:** Inventory airside, landside, and access system components. Identify system weaknesses and use metrics to assess facility utilization. Compare with industry standards and reference airports.
- 2. Congestion Delay Analysis:** Analyze FAA's Aviation System Performance Management database to characterize air cargo delay.

DISCUSSION



Next Steps

- Define Air Cargo Congestion
- Conduct Regional Market Analysis
- Review and Update Air Cargo Forecasts
- Inventory Existing Facilities
- Future meetings
 - late March/early April 2018*
 - mid/late June 2018*
 - early/mid September 2018*

CITY OF BURIEN, WASHINGTON

RESOLUTION NO. 396

A RESOLUTION OF THE CITY OF BURIEN, WASHINGTON, REQUESTING THE KING COUNTY COUNCIL, THE PUGET SOUND REGIONAL COUNCIL, THE STATE LEGISLATURE, AND THE GOVERNOR'S OFFICE TO TAKE ACTION TO ADDRESS LONG-TERM AVIATION CAPACITY NEEDS IN WESTERN WASHINGTON.

WHEREAS, the City of Burien ("City") is a community adjacent to Sea-Tac Airport; and

WHEREAS, the City has experienced considerable and disproportionate health and environmental impacts due to proximity to Sea-Tac Airport ("Sea-Tac"); and

WHEREAS, the City recognizes that Sea-Tac is an engine for economic growth for the region; and

WHEREAS, the City has formed the Burien Airport Committee ("BAC") to examine potential opportunities and impacts associated with Sea-Tac; and

WHEREAS, the BAC has examined Sea-Tac growth (average 9% annual rate from 2013-2016) and believes that the expected timeframe for Sea-Tac to exceed capacity is likely to be by 2025 and not 2034 as outlined in the Sea-Tac Sustainable Airport Master Plan (SAMP); and

WHEREAS, since 1989, various governmental agencies tasked by state statute with planning and decision-making related to ensuring future aviation and airspace capacity have failed to identify or promote any alternatives;¹ and

WHEREAS, the financial costs and environmental impacts of continued expansion at Sea-Tac are not sustainable; and

WHEREAS, the SeaTac footprint, transportation infrastructure, and air space capacity will constrain future growth and compromise safety; and

¹ Puget Sound Air Transportation Committee, "Flight Plan," June 17, 1992 (see: <http://www.historylink.org/File/4201>); Puget Sound Regional Council, "PSRC Supplemental Airport Site Search," October 27, 1994 (see: <http://www.historylink.org/File/4204>); Washington State Department of Transportation, "Washington State Long-Term Air Transportation Study" (LATS), July 1, 2009 (see: <http://www.wsdot.wa.gov/aviation/LATS.htm>); Washington Department of Transportation, Washington Aviation Strategic Plan (WASP), July 2017 (see: <https://www.wsdot.wa.gov/aviation/Planning/>)

WHEREAS, various other airports exist within the greater Puget Sound and Western Washington region that could potentially accommodate some aviation growth, and that coordination among these facilities is limited; and

WHEREAS, the BAC believes that immediate action is needed to coordinate plans for long-term aviation capacity for the greater Puget Sound and Western Washington region to ensure the ability to accommodate anticipated growth and to minimize further impacts on Burien and adjacent communities.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BURIEN, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. Action Requested. The City Council of the City of Burien herein requests that the King County Council, the Puget Sound Regional Council, the State Legislature, and the Governor's Office take deliberate action to fund and implement the means to cooperatively update an existing or, as needed, develop a new plan that will address the region's long-term aviation capacity needs. This effort will serve the purposes of both future economic development and reduction of health-related impacts for communities proximate to airport facilities. To address capacity needs, this effort must be launched as soon as possible.

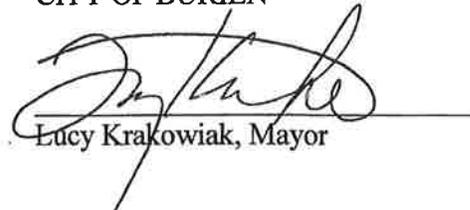
Section 2. Burien's Cooperation. The Burien City Council is willing to assist or participate with the effort outlined in Section 1 as necessary.

Section 3: Responses Requested. The Burien City Council requests that the entities named in Section 1 respond to the Council of their intended actions no later than sixty days from receipt of this resolution.

Section 4. Effective Date. This resolution shall take effect immediately upon passage by the Burien City Council.

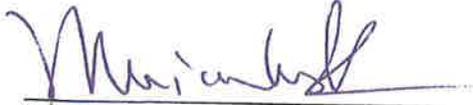
ADOPTED BY THE CITY COUNCIL OF THE CITY OF BURIEN, WASHINGTON, AT A REGULAR MEETING THEREOF THIS 4TH DAY OF DECEMBER, 2017.

CITY OF BURIEN



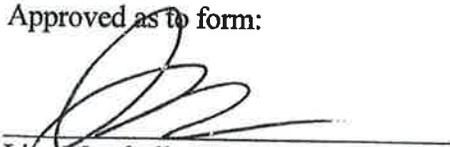
Lucy Krakowiak, Mayor

ATTEST/AUTHENTICATED:



Monica Lusk, City Clerk

Approved as to form:



Lisa Marshall, City Attorney

Filed with the City Clerk: **DECEMBER 4, 2017**
Passed by the City Council: **December 4, 2017**
Resolution No. 396

Copies to be distributed to:

- The Honorable Joe McDermott, Chair, King County Council
- Josh Brown, Executive Director, Puget Sound Regional Council
- The Honorable Joe Fitzgibbon, Washington State Legislature
- The Honorable Tina Orwell, Washington State Legislature
- The Honorable Mia Gregerson, Washington State Legislature
- The Honorable Karen Keiser, Washington State Legislature
- The Honorable Jay Inslee, Washington Governor

Bonnie Wilkins

From: Halse, Katie <Halse.K@portseattle.org>
Sent: Thursday, December 28, 2017 9:43 AM
To: Michael Matthias
Cc: Schinfeld, Eric; Bonnie Wilkins
Subject: FW: Comment Letter: FAA Aircraft Noise Complaint and Inquiry System (FAA Noise Portal)
Attachments: PoS Letter_FAA Noise Portal.pdf

Michael -

For your knowledge, I'm forwarding you a formal comment letter submitted yesterday by the Port of Seattle to the FAA in response to a request for comment in the Federal Register regarding a proposed aircraft noise complaint and inquiry system. According to the Federal Register, the system is part of FAA's goal to more effectively and efficiently address noise complaints or inquiries it receives. Additional background can be found in the link provided below.

Public comments are due by January 2, 2018.

If you should have additional questions while I'm on PTO, please feel free to contact Eric. I'll try my best to monitor email.

Katie Kuciemba Halse

Local Government Relations Manager

P: 206-787-4411

C: 206-639-5671



From: Schinfeld, Eric
Sent: Wednesday, December 27, 2017 11:49 AM
To: 'Barbara.L.Hall@faa.gov'
Subject: Comment Letter: FAA Aircraft Noise Complaint and Inquiry System (FAA Noise Portal)

Ms. Hall,

Please find attached a comment letter from the Port of Seattle, the operator of Seattle-Tacoma International Airport, in response to the request for comment in the Federal Register (<https://www.federalregister.gov/documents/2017/11/02/2017-23890/agency-information-collection-activities-requests-for-comments-clearance-of-a-new-information>).

A hard copy is in the mail to your attention as well. Please let me know if you have additional questions, and best wishes.

Yours,
Eric Schinfeld
Sr. Manager, Federal & International Government Relations
Port of Seattle
PO Box 1209

Seattle, WA 98111

P: 206-787-5031

C: 206-214-8809

E: schinfeld.e@portseattle.org



December 5, 2017



Ms. Barbara Hall
Paperwork Reduction Act Compliance Lead
Performance, Policy, and Records Management Branch, ASP-110
Federal Aviation Administration
10101 Hillwood Parkway
Fort Worth, TX 76177

Re: FAA Aircraft Noise Complaint and Inquiry System (FAA Noise Portal)

Dear Ms. Hall:

Thank you for the opportunity to submit comments regarding the Federal Aviation Administration's (FAA) proposed aircraft noise complaint and inquiry system. We are pleased to see the FAA propose a more active response to noise complaints and inquiries, and we want to ensure that this system is as responsive, transparent and productive as possible.

The Port of Seattle is a special purpose government representing the people of King County, Washington. Among our responsibilities is oversight and management of Seattle-Tacoma International Airport (Sea-Tac), which has grown quickly to the ninth busiest passenger airport in the country. **As we grow, we are committed to ensuring that Sea-Tac benefits our region and neighbors, which includes being responsive to community concerns about aircraft impact; that is why the Port's Noise Program is one of the most comprehensive in the country, and why we have invested over \$400 million in noise mitigation programs over the past thirty years.** In particular, the airport has both a noise hotline and an online comment form, and we also provide an online flight tracking tool for the public to use, called PublicVue, which also allows users to submit comments utilizing a username and password.

The Port is acutely aware, however, that many of the airplane noise issues we respond to are not directly in our control – from the location of flight paths to individual homes' eligibility for noise insulation programs – and that is why we wholeheartedly welcome the FAA taking a more direct and systematic approach to collecting and responding to these community concerns. Your agency is the appropriate respondent to many of these inquiries, and the creation of a noise portal will go far to address long-standing frustration from local residents about their inability to communicate directly with FAA staff on these issues.

Given our experience operating an aircraft noise complaint and inquiry system, we offer the following three additional comments for your consideration as you finalize and implement your new portal:

- 1) Responsiveness:** One of the most important performance metrics for the success of your noise portal will be responsiveness – both ensuring that every comment received gets answered, and also setting a reasonable maximum turn-around time for that outreach. The Port's commitment has long been that one of our employees will personally respond to public comments that arrive through our noise portals. Whether individuals are reaching out with basic questions or to express deep frustration, everyone needs and deserves a timely response. For the FAA, this will often require more than just a form letter or the sharing of canned information, but instead a nuanced and personal response from a real person. Of course, to achieve such responsiveness requires the appropriate level of staffing and dedicated hours, and so ensuring that a realistic level of resources is dedicated to this new program will be essential. It would be a shame to create new expectations from the

December 5, 2017



community about the FAA listening to noise concerns only to generate new levels of frustration by failing to deliver in a timely and substantive manner.

- 2) **Solution-Oriented Answers:** As with almost any customer service effort, we know that it is not enough to tell people that “we’re sorry but there’s nothing we can do.” As an airport located near some of the most famous customer-focused brands in the world (from Nordstrom to Amazon.com), we have learned that people want real answers to their questions and want to feel like their concerns are being addressed. In our program, Port staff spend significant time helping residents understand the causes of airplane noise near their homes, as well as what programs may be available to address their concerns. While the actual avenues for redress are limited, it is essential that the FAA put significant thought up-front into the kind of productive responses it will offer to people related to the various kinds of calls you might receive.
- 3) **Transparency:** While local residents may direct their noise inquiries to through the FAA portal, they will likely also maintain their expectations of responsiveness from their local airports. Therefore, the best practice should be for the FAA to share information with the relevant airport in a convenient and systematic way. This clear communication about noise complaints could take place via an online system that would be visible to both local residents and airports – bringing transparency to the number, nature and timing of such inquiries; in the best case scenario, it might also include what the FAA’s response entailed, and any potential follow up or next steps. Alternatively, the FAA should design a regular reporting mechanism to share this information directly with relevant airports, including any necessary outreach by the airport to the individual.

Thank you again for the chance to comment, and please do not hesitate to contact us if you would like additional information. We look forward to continuing to work with on this issue and others.

Sincerely,

A handwritten signature in blue ink that reads "Dave Soike".

Dave Soike

Interim Executive Director

CC:

US Senator Patty Murray

US Senator Maria Cantwell

US Representative Rick Larsen

US Representative Adam Smith

US Representative Pramila Jayapal

FAA Regional Administrator Dave Suomi

Bonnie Wilkins

From: Sheila Brush <shebrush@gmail.com>
Sent: Monday, January 01, 2018 5:31 PM
To: Michael Matthias; Mark Proulx; David Clark; Steve Edmiston; Wendy Ghiora; Tim George; Bonnie Wilkins
Subject: Fwd: Proposal for Funding Jet Fuel Toxicologist
Attachments: Witten Curriculum Vitae.pdf; Chicago Proposal (1) (2).pdf

Hello All~

I am sending the below letter and attachments in hopes that we all consider joint funding for this proposal. This study is completely different from the current Representative Orwall/UW Ultrafine, in both science and timeline. This funding would come from each surrounding city and we do know that the City of Des Moines has set aside special funds for the upcoming SAMP.

We need this crucial science performed by Dr. Witten's team in order to truly understand the health impacts that come from living in the shadow of one of the busiest airports in our nation. The projected growth plan outlined by the Port of Seattle is on par with Shanghai Pudong International Airport, which served 66 million passengers in 2016, but is doing so with 4 runways and 10,000 acres, Sea-Tac is operating on just 2,500 acres with 3 runways but the older runways are 800 ft apart, too close to allow use of both in low visibility.

Couple this with an aggressive cargo plan of tripling current year end of 425 metric ton, we can expect to have 1.257 million metric tons of cargo flying over our heads 24/7 which puts us on par with Tokyo Haneda Airport, Shenzhen Bao'an International Airport and John F. Kennedy International Airport. Lastly take in consideration that Sea-Tac airport is the largest generator of vehicle trips in the state, and its 13,000-car parking garage is North America's largest parking structure under one roof.

The impacts to the citizens will be severe, our quality of life is being taken from us with no consideration to what dangers lie ahead.

This study is a step towards meaningful science based information that can and will be useful. This data set has been successfully used elsewhere and we here in the south sound deserve the same.

I look forward to discussing this further with all of you at our next meeting.

Thank you for the ongoing support in protecting our South Sound Region!

Sheila Brush

1/1/2018

Proposal Our respective groups, Quiet Skies Coalition of Burien, Quiet Skies Puget Sound, Flight Pattern Kids representing several thousand citizens and members of the Mega Group comprised of residents of Shoreline, Beacon Hill, Lake Forest Park, Burien, City of SeaTac, Des Moines, Normandy Park, Federal Way, West Seattle are making the request as follows. Dr. Mark Witten, world's leading jet fuel toxicologist proposes to collect samples from the outdoor environment around Sea-Tac Airport.

His proposal seeks to define an area and timeline of impact through environmental testing. From tree core samples he and his team can determine when source and trace chemicals unique to both raw jet fuel and combusted jet fuel and jet engine operation began to be deposited in the environment and when those impacts increased and decreased.

The cost of this project ranges from \$30,000 to \$60,000 thousand dollars depending on scope of defining the areas of impact. These costs include travel and accommodation.

Included is Dr. Witten's Curriculum Vitae and a sample of a very similar proposal he wrote recently for Chicago O'Hare residents.

We are requesting that the cities of Burien, Des Moines, Federal Way and SeaTac each pay a share of the cost of this project. At a fraction of the normal cost of discovery, we have a great opportunity to be aided by interested top scientists to increase our knowledge and understanding of areas and types of impact that has been uniquely developed to inform what type and scope of mitigation might be needed in an airport effected area.

Please call me if you have any questions/corrections. (206) 387-6060 cell (206) 241-1553 home Thank you,
Debi Wagner