

LONG-TERM AIR TRANSPORTATION STUDY (LATS)

Washington State Aviation Planning Council

MEETING SUMMARY

May 1, 2008

Present:

Council Members: Donald Garvett, David Field, John Townsley, Penelope Loomis, Paul Roberts, Carol Moser, Neal Sealock, James McNamara, John Sibold

Staff: John Shambaugh and Nisha Marvel

Consultant Team: Sonjia Murray (SH&E), John Yarnish (URS), Rita Brogan (PRR), and Kimbra Wellock (PRR)

Ex-Officio Member: Jill Satran (Governor's Office)

Chair Moser opened the meeting and reviewed the meeting objectives and agenda:

- Briefing on air cargo and general aviation trends
- Discuss draft guiding principles
- Develop draft policies to address future statewide air transportation needs

Public Comment

Chas Talbot (Regional Commission on Airport Affairs): Mr. Talbot stated that the PSRC report on air cargo seems to indicate that air cargo capacity constraints will not be an issue during the LATS planning horizon. Regarding military airports, representatives from McChord have been clear that the Department of Defense has no intention of letting go of its facilities in the area. Mr. Talbot noted that Ft Lewis, McChord, and the Yakima firing range are the most suitable bases given the kind of wars we are fighting. Mr. Talbot stated that he was disappointed that air capacity is not on the agenda. Air capacity for commercial airlines is the key issue the Council needs to address, not private jets or remote airports. According the Urban Land Institute Reality Check event, an additional 1.9 million people will be living in the Puget Sound area by 2040 people. The capacity crunch is upon us now and requires Council attention.

Brett Fish (Citizens Against Seatac Expansion): Mr. Fish noted that China is planning 100 new airports between now and 2012. This should not be dismissed because of the government there. They have a need and a vision for developing airport infrastructure

where it is needed. Mr. Fish feels that the state's aviation resources should not all be concentrated at SeaTac and encouraged the Council to look at the Pudong airport and its regional system as a possible model.

Approve April 3, 2008 Meeting Summary

Motion to adopt the April 3, 2008 Meeting Summary by Council Member Field.
Seconded by Council Member Sibold. Motion carried by unanimous vote.

Previous Meeting Follow Up

John Shambaugh, Council Staff (WSDOT) noted that the key issues list was revised.

Council Business

Vice Chair Roberts encouraged Council members to review a recent Brookings Institution study on air operations.

John Shambaugh, Council Staff (WSDOT) responded that staff will review the report and provide a summary at the next meeting.

General Aviation Briefing

Sonjia Murray, Consultant Team (SH&E) provided an overview of key issues in general aviation.

Summary of Key Issues (see PowerPoint slides 2-11 for additional detail):

- The Puget Sound region will continue to represent the highest concentration of general aviation activity within the State through the next 25 years (46.1% of based aircraft in 2030), experiencing airport congestion and traffic delay issues
- Strong growth in the business jet fleet will place additional demands in infrastructure, services, and design standards at GA airports across the State in the future
- Emerging technologies that may relieve safety and congestion problems and extend air service to currently under-utilized airports need to be further understood and invested in as appropriate (introduction of VLJs, NexGen instrument approach developments)

Questions / Discussion Relating to Presentation:

Why does the general aviation growth rate in Washington State outpace the US growth rate?

- Washington has a long history of being a pioneer in the aviation industry
- There is a misconception that general aviation is for recreation – people use aircraft as a mode of transportation to travel across Washington's diverse geography (mountains, islands, etc)

- Close proximity to Alaska, where aviation is an important travel mode
- The relatively higher income levels in Washington also play a role

We expect to see strong growth in the business jet portion of the general aviation fleet mix over the next 25 years:

- Not all users demand same type of service from the airport. Jet users require more services from airports, but their economic impact is greater
- New technology is driving the growth in jet travel
- Changing fleet mix has a big impact on decision-making about where to apply resources.

New technology:

- Many people in the aviation industry feel that Next Gen's delivery timeframe is overly ambitious and its full promise may not be realized. The Council should consider having an expert provide a briefing on this issue to get an understanding of the true promise and potential Next Gen will have for Washington's aviation system.
- Business jets create additional demand on already limited hangar capacity. This will become an even greater issue in the future.

John Shambaugh, Council Staff, (WSDOT) provided an overview of trends in general aviation (see PowerPoint slides 12-15 for additional detail):

World/Nationwide Statistics:

- Over 320,000 GA aircraft worldwide, ranging in size and purpose; 221,000 based in US.
- GA contributes more than \$150 billion to US economy and employs more than 1,265,000 people.
- In US, GA aircraft fly over 27 million hours and carry 166 million passengers annually.
- Nearly two-thirds of hours flown by GA aircraft are flown for business purposes.
- Primary training for most airline pilots.

2007 Statistics:

- Historic year for GA manufacturers - GA billings reached all-time high of \$21.9 billion, 16 percent increase over 2006.
- Business jet shipments reached all time high – 28.4 percent over last year.
- Piston engine market was stable – posted second best year in past two decades.
- Number of fatal GA accidents declined 6 percent.

Environmental Outlook (this is an emerging issue area, many studies are forthcoming):

- In US, greenhouse gas emissions from GA aircraft is less than two-tenths of one percent of overall emissions.
- Efficiency and emissions of GA turbine engines have improved by over 50 percent since early 1960s.

- UN Panel on Climate Change estimated more efficient air traffic management alone could bring about 12 percent reduction in aviation emissions.

Questions / Discussion Relating to Presentation:

What is the impact of Next Gen on air traffic management?

- Air space is limited as air space regulations are based on 1950s standards. It is an issue that needs to be addressed.
- There is increased demand for point to point flying, especially as it increases fuel efficiency.
- Today, pilots fly on fixed routes, from one fixed point to the next. The FAA keeps track of planes from land based satellites located at these fixed points.
- Satellite technology, which Next Gen helps promote, makes point to point flying possible, eliminating the need for fixed route travel, helping to change how we do business.

The number of new pilots is decreasing. How does that temper these projects?

- The shortage is for commercial pilots. There are actually more pilots than aircraft owners at the present time. However, there is concern about loss of pilots due to retirement and the ability to replace them.
- The pilot shortage occurs at the lowest levels of service (i.e. air taxis)
- There is not shortage of people who want to fly, as long as there are pilot job available.

We need to recognize the high percentage of operations that are generated by general aviation and that it is a healthy, growing industry.

- General aviation is at the front edge of technology
- Business jets can operate with greater flexibility

Rita Brogan, Consultant Team (PRR) led the Council in a discussion: What are the key issues relating to general aviation that should be addressed in the aviation system plan?

Council Member Field: What is the statistic that the jet portion of the general aviation fleet mix will grow from 2% of the fleet mix in 2005 to 9% of the fleet mix in 2030 based on? How was the growth in VLJs factored into that statistic, and do we have information on what it might mean for what it means for what the airport system might need to look like in the future?

Sonjia Murray, Consultant Team (SH&E) responded that the forecasted growth in jets as a percentage of the general aviation fleet mix is a conservative estimate. It does not factor in VLJs.

John Shambaugh, Council Staff, (WSDOT) added that we looked at various forecasts when studying trends. The estimates presented today are conservative as they relate to VLJs. The LATS technical papers contain information on standards required to allow multiple types of aircraft to take off and land (such as minimum runway lengths,

navigation system improvements, etc.). The performance standards are based on getting more aircraft to airports.

Rita Brogan, Consultant Team (PRR) asked Council Member Sibold to elaborate on his statement that we need to recognize the high percentage of operations that are generated by general aviation and that it is a healthy, growing industry.

Council Member Sibold responded that there are concerns about the future outlook of the commercial aviation industry given its financial difficulties. However, the general aviation outlook is strong and has the potential to account for a greater percentage of the aviation system in the future. We need to think about how we address the changing aviation system.

Council Member McNamara asked what future infrastructure needs will be given the changing nature of the fleet mix, what can the increase in the “other” category of the general aviation fleet mix be attributed to, and what it means for the type of user the system need to accommodate (question refers to the WA GA Fleet Mix pie chart on PowerPoint slide 8).

Sonjia Murray, Consultant Team (SH&E) responded that the “other” category places a relatively small demand on the general aviation airport system, and will have to do some research to define the composition of the “other” category.

Council Member Sibold responded that the “other” category most likely means sport aviation, what is typically thought of as being general aviation.

John Shambaugh, Council Staff, (WSDOT) added that sport aviation is a new class of aircraft instituted by the FAA a few years ago.

Council Member Garvett added that VLJs may well be operated by airlines in the future, stating that we need to determine if we are dealing with a category of operator or type of jet. It is important to understand if directing investments here is the best use of public funds, the cost and benefits, and impact on the public interest.

Council Member Field stated that it is important to understand what will the business jet segment will look like, not just the increase in prevalence, but where the demand for the service is. We need to understand how the change in technology, ownership, and users changes the demand on different types of airports throughout the state.

Chair Moser noted that the growth needs to be matched by growth in infrastructure on the ground, which has an impact on the local community. As a state, we need to be concerned about how we grow our economy. Citizens do not like being taxed for infrastructure development, so we need to figure out how to grow infrastructure without taxing citizens.

Vice Chair Roberts noted that while we may not know with certainty what the size of the aircraft will be in the future, or whether it is a commercial or general aviation aircraft. There is great fluidity in technology and in the aviation business model. While we may have difficulty predicting what will happen in a given timeframe, we do know that we need to preserve the land space for aviation.

Council Member Garvett added that in a situation where there are two airports located in close proximity, we should consider whether or not it makes sense to invest heavily in one of the airports to create a state of the art facility and decommission the other airport.

Air Cargo Briefing

Sonjia Murray, Consultant Team (SH&E) provided an overview of key issues in air cargo.

The air cargo industry is a significant contributor to the State's economy that is completely dependent on airports and airlines (see PowerPoint slides 17-24 for additional detail):

- Air cargo operations provide an essential service to local businesses, supporting manufacturing shipment, document exchange, and finished goods delivery
 - Typical shipments include high-tech, high-value goods such as computer chips, pharmaceuticals, and industrial machinery, or perishable commodities like fruit and fish
 - Need for swift transportation particularly important in today's business environment, which is characterized by instant communications and just-in-time delivery, globalization
- Airmail provides fast, dependable mail service for all
- Air cargo operations drive employment at local airports, as well as in related trucking and courier organizations across the State

Summary of Key Issues:

- Generally, ample cargo capacity exists statewide to meet current demand
- Air Cargo activity is highly concentrated, however, at a small number of Washington airports (Sea-Tac, Boeing Field, and Spokane International account for 98.3 percent of the State's air cargo activity)
- Concentration of air cargo activity in the Seattle and Spokane areas may continue to drive infrastructure requirements in these regions
- Availability of off-airport properties for cargo processing facilities, though, have so far been a way around limitations on developable land at airports such as Sea-Tac and Boeing Field

Questions / Discussion Relating to Presentation:

Council Member Sibold noted that measuring freight activity by weight may not show the real impact of freight activity on airports, as it does not differentiate between plane

sizes that would come into an airport. This is an important statistic to understand in order to fully understand how to plan to meet the infrastructure needs of the air cargo industry.

Sonjia Murray, Consultant Team (SH&E) responded that airlines will not share that kind of data on an individual level. The technical team had to gather macro level data. We can say with certainty that our economy depends on air cargo. We know it will grow, that it is concentrated, and the demand will affect a small number of airports in the state.

Chair Moser asked is SH&E has determined the elasticity of demand of fuel costs.

Sonjia Murray, Consultant Team (SH&E) responded no, that it would be hard to determine. Looking in the short term, we might see a price decrease, but in the long term, we will see a continuing increase. We still expect to see growth in aviation, both statewide and nationwide. Until there is something new to replace it, we will see this growth.

Elizabeth Stratton, Freight Policy and Project Manager, WSDOT provided an overview of trends in air cargo (see PowerPoint slides 25-50 for additional detail).

Rita Brogan, Consultant Team (PRR) led the Council in a discussion: What are the key issues relating to air cargo that should be addressed in the aviation system plan?

Council Member Sibold noted that the highway system is a key concern for shippers and questioned whether we really understand the interaction between the highway and air cargo systems. It is important to understand as it will drive our investment decisions. Council Member Sibold asked that given that international freight shipping into the west coast is very competitive, if the lack of highway infrastructure will create more demand for air cargo.

Sonjia Murray, Consultant Team (SH&E) responded that it is a cost driven, commodity-based decision. If goods need to arrive quickly and people will pay, it will be shipped by air.

Council Member Sibold noted that there is a direct relationship between the I-5 corridor and air cargo. We have major gaps in information that would be helpful for Council to have.

Council Member Garvett added that the supporting facilities such as warehouses and cold facilities are key issues, as are inter-modal connections. As a policy issue, we have discussed investment in concrete, etc, but air cargo has unique infrastructure needs.

Elizabeth Stratton, WSDOT added that off-airport facilities are important to consider as well. The further off-airport facilities are located from the airport, the greater travel time becomes.

John Shambaugh, Council Staff, (WSDOT) noted that air cargo is set up differently at different airports. For example, everything at Sea-Tac is on airport, but everything at Boeing Field is off airport.

Council Member Garvett noted that the northwest Arkansas airport (built to serve Tyson Foods and Wal-Mart) might be a good case study for the Council to learn from.

Sonjia Murray, Consultant Team (SH&E) noted that the fact that air cargo has a tremendous impact on the State's economy. We should include a focus on air cargo because its economic impact is almost greater than that of passenger travel.

Chair Moser asked how we will know when we reach the air cargo capacity limit.

Sonjia Murray, Consultant Team (SH&E) responded that we will see delays in operations figure (which includes both air cargo and passenger aviation). We will need to look at the data to understand the air capacity limit.

Chair Moser asked Council Member Garvett what impact of increasing fuel prices will be on passenger travel and if it will cause a shift from passenger travel to movement of higher value goods.

Council Member Garvett responded that different airports in different parts of world look at the issue differently. There will be a demand, regardless of fuel, whether it is in passenger or another kind of air travel. His personal view is that in Seattle it will be a far more important issue in the future than it has been in the past. We are seeing the impact in the growth in demand for wide body planes. This will fuel expansion at Seatac. The issue to resolve is how to promote airports like Wenatchee and Spokane as well.

Sonjia Murray, Consultant Team (SH&E) noted that passenger planes also carry air cargo, which can help make a flight profitable. Some states are looking at developing all cargo airports, but that is dependent upon the existence of sufficient demand for air cargo.

Council Member Garvett noted that a typical US-based airline might derive 4-5% of its revenue from cargo. As an airline would be very happy to have a 4% profit margin, one could argue that air cargo contributes tremendously to its profitability.

Policy Development Process Overview

Rita Brogan, Consultant Team (PRR) reviewed the proposed policy development process (see slides 52-60 for detail).

Ms. Brogan presented draft guiding principles to the Council which were developed by council staff and the consultant team, based on the discussions and work of the Council to date. The guiding principles are designed to be the basis on which the Council will develop its recommendations.

Draft guiding principles follow. Council comments follow each principle in italics. Council suggestions for text edits are also indicated, with proposed deletions indicated as strikeouts and proposed text additions underlined.

- Washington’s communities depend on their ability to access Washington State’s aviation system to move people and goods safely, securely and efficiently. Washington’s aviation system is an essential and integral component of local, state and national economies and must be sustained and effectively operated.

Comments:

Council Member Seacock: This guiding principle needs to reflect the importance of aviation to local economic development – without air service, there will not be economic development, as businesses will not locate in an area lacking adequate air service.

Council Member Townsley: The state’s reliance on the aviation system for emergency response needs to be more strongly reflected in the principles.

- It will take strong partnerships to effectively address the challenges facing Washington’s aviation system between airports, the aviation industry, local and regional government, educational institutions, Washington State, and the Federal Aviation Administration, system users and local communities.

Comments:

Council Member Sibold: Add communities to the list.

Council Member Townsley: Strengthen to address regulatory issues such as taxes.

- To safeguard Washington State’s aviation system for future generations, the Long-term Air Transportation Plan must address multiple challenges in a timely manner including: capacity exacerbated by growing demand, delayed maintenance, incompatible land use, and the special needs of small communities.

Comments: None.

- Washington’s aviation system currently suffers from a significant funding shortfall that is leading to deferred maintenance that will cost even more to address over the long run. Without adequate maintenance, Washington’s aviation system will crumble. Needed revenue for maintenance and preservation of airports should be collected and distributed in an equitable manner.

Comments: None.

- To maximize value and impact of public investment in the aviation system statewide will require strategic and targeted investment that looks first to making the best use of our current assets. We must preserve the system we have in place, and then enhance the capacity of existing facilities with technological innovation and system management best practices. In doing so, we must take into account different roles of airports, serving Washington’s diverse communities.

Comments:

Sonjia Murray, Consultant Team (SH&E): *This principle should read more clearly that we are talking about preparing for the future.*

- Washington’s aviation system should be planned to coordinate with other transportation modes to assure cost effective transportation options for people and goods.

Comments:

Council Member Seacock: *As written, this principle implies that actual coordination exists today. There isn’t a lot of connectivity with rail, for example. There may be co-location, but not necessarily coordination.*

- Capacity investments must be considered in the context of environmental and social impacts such as noise, air quality, water quality, impacts on adjacent communities, and climate change.

Council Member Field: *Add something about environmental sustainability to this principle.*

Council Member Garvett: *There may be other categories to consider, such as reducing emissions. Capacity might mean something different, such as investments that improve environmental efficiency of airports, not just expanding space capacity.*

- The decision-making about the expansion or siting of airports should be made through an open and public process, taking into account the ultimate need to serve the broadest long term interest of the residents of Washington State and our national security.

Council Member Garvett: *This written, this principle suggests that everything will increase in size.*

General comments on guiding principles:

Council Member Field: Safety is mentioned in the first principle, but it is subtle. The importance of safety and accommodating growth in demand both need to be clearer.

Council Member Roberts: The question of change, regardless of whether it is more capacity or less capacity should be reflected somewhere.

Council Member Townsley: The business climate factor needs to be reflected, something to the effect of “create or enhance the business climate within the state to encourage private investment in aviation infrastructure and transportation facilities.”

Chair Moser reviewed the subcommittee structure:

- Each subcommittee will be led by a chair
- Chair to be selected by the subcommittee during this afternoon’s work session
- Staff support provided by WSDOT Aviation and other public agencies as needed

Land Use and Environment Subcommittee

- Juli Wilkerson
- Paul Roberts
- John Townsley
- Jim McNamara
- Carol Moser

Capacity and Technology Subcommittee

- Neal Sealock
- Penni Loomis
- Don Garvett
- Dave Field
- John Sibold

Subcommittee Report Out

Council Member Sealock, subcommittee chair, provided the following a report on the capacity and technology subcommittee works session.

- The subcommittee will meet by phone prior to the June 5th Council meeting in Spokane and will hold an in person work session in Spokane on June 4th.
- The capacity and technology subcommittee wants to discuss capacity and technology issues at the regional public meetings. It is important to get this information into the public’s hands and gather feedback on region-specific issues.
- Key findings and questions discussed thus far:
 - The state has a role to play as it relates to aviation capacity – how do we reshape this role in the future (advocacy, leadership, funding)
 - The state has a role to play in promoting technology (to increase capacity)
 - The state has an interest in protecting airports – how do we preserve/protect essential public facilities?
- Outside expertise will be needed to address regional capacity issues.

Vice Chair Roberts, subcommittee chair, provided a report on the land use and environment subcommittee work session.

- The subcommittee will meet via conference call prior to June 4th and in person on June 4th in Spokane, prior to the June 5th full Council meeting.
- The subcommittee identified the following policy gaps relating to the environment:
 - Environmental policy needs to expand to other factors beyond noise and wetlands to encompass issues such as climate change, greenhouse gases, air and water quality.
 - Noise issues are addressed by previous policy, but may need to be revised.
 - How existing laws and regulations such as the Clean Air Act and Clean Water Act apply.
- The subcommittee identified the following policy gaps relating to the land use:
 - Enforcement of existing laws and statues (such as the Growth Management Act) is lacking
 - Transportation funding should be tied to protection of aviation capacity
 - Need for education about the value of airport facilities
 - Aviation is part of the state's transportation system – the policies needs to make this connection.
 - Siting of educational facilities is an issue (avigation easements)
 - Coordinate essential public facilities in the broadest sense (in laws and in practice)

Work Program Update

John Shambaugh, Council Staff, (WSDOT) highlighted proposed changes to the Council work program, which included adding a column to track actions taken by the Council at each meeting.

The Council agreed to the proposal to use the morning of the August 7th Council meeting as a subcommittee work session to revise draft policies and postpone policy adoption until the September 4th meeting.

Military Assessment Update

Council Member Sealock updated the Council about the status of the assessment of the military airfields within the State. In accordance with the project objectives and the proposed Work Plan for the Aviation Planning Council, and recommendations from the Technical team, a subcommittee was formed to determine whether military airfields would be available to address aviation capacity demand over the planning period (through 2030).

The subcommittee first conducted a document search including, but not limited to the following:

- LATS Reports

- Puget Sound Regional Council Strategic Plan for Aviation, 2002 (p. 19)
- CRF Title 32, Volume 6, Part 800
- *Converting Military Airfields to Civil Airports*, Office of Economic Adjustment, DoD, 2005
- AF Instruction 10-1002

The subcommittee explored whether or not there is there an opportunity to take advantage of any excess capacity at a military airfield in Washington. The investigation revealed the existence of a very regulated and formalized process for serious consideration of joint use of military airfields. Materials reviewed indicate that joint use of a military airfield will be considered only if there is no associated cost to the military and no compromise of mission capability, security, readiness, safety, or quality of life.

The conditions stated in the Puget Sound Regional Council's Strategic Plan for Aviation have not changed appreciably. Both Fort Lewis (Gray Army Airfield) and McChord AFB have experienced growth levels of activity, number of personnel, number of aircraft, and requisite support to fulfill military missions. These facilities retain their critical roles and missions in national defense.

There are no indications that the mission profiles for either Fort Lewis or McChord AFB will decrease within the planning period being considered by LATS. Further, as two of the remaining military mobilization centers and power project assets on the west coast of the United States, the Department of Defense continues to invest in infrastructure necessary to meet potential military requirements.

Most serious adaptations of military facilities involve the conversion of previous military airfields to civil use. There are no indications that such conditions would exist either during the planning period or thereafter.

The subcommittee respectfully recommends that the option of joint use of military airfields not be seriously considered unless the circumstances described change substantially. While the regulations indicate that only formalized requests will be considered, this might provide the opportunity for the State of Washington to indicate a willingness to entertain an opportunity for joint use should any military service see benefit in doing so.

Council Member Sealock moved that the Council recommend that issue of joint use of military airfields not be seriously considered unless the circumstances described change substantially. Motion seconded by Council Member Loomis. Motion carried by unanimous vote.

Chair Moser reviewed the upcoming meeting schedule and adjourned the meeting.