



Washington State
Department of Transportation

Long-Term Air Transportation Study

Recommendations of the Washington State Aviation Planning Council



July 2009

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July 1, 2009

Dear Governor Gregoire:

Thank you for the opportunity to present to you the Aviation Planning Council's recommendations to ESSB 5121, the Long-Term Air Transportation Study (LATS). The legislation driving LATS and these recommendations come at a time of great economic uncertainty in our state and country. Many commercial airlines are in financial crisis facing a global downdraft that is far worse than the post-September 11 turbulence. More than ever, government has an important role in facilitating efficiency and growth of the industry.

Washington's economic health depends, in no small part, on a healthy aviation industry, and a system of airports that keep our communities interconnected. Businesses, business travelers, tourists, tourism, general aviation, and emergency services require a reliable aviation system. Having a functional aviation system can be a matter of life and death for the heart attack victim, the community threatened by wildfires or search and rescue of lost planes and passengers.

This study reinforces the fact that Washington's aviation system is essential to Washington's economic viability, but it is a system that is being threatened by land use encroachment, limited resources, and a lack of clarity as to the state's role in helping it survive. It is in critical need of long range planning to support future demand and bold leadership to strengthen and protect existing infrastructure and maximize efficiency. In 2005 Washington State had 141 public use airports. Today that number is 138 and at least two airports are at risk of closing. Despite being in a cyclical downturn, over the next decade 12 Washington airports will either approach or exceed critical capacity thresholds. Additionally there will be insufficient terminal capacity at six airports and a need for additional hangar and tie-down facilities at 39 airports.

Our extensive public outreach indicated strong support for investing in advanced aviation technology, making more efficient use of existing airports, and prioritizing system investments and investments in safety improvements. The public was least supportive of building new airports, having the state purchase select airports in danger of closing, or maintaining commercial service to smaller communities.

LATS is not just another airport study. It is a strategic planning effort based on the first comprehensive review of the aviation system in Washington in over two decades. Through a thoughtful and extensive public process, the Aviation Planning Council arrived at set of realistic recommendations for your consideration to address the state's aviation needs. We appreciate the opportunity to play a role in planning the future of Washington's aviation system and hope that our work will elevate the importance of aviation planning in Washington State.

Sincerely,



Carol Moser
Chair, Washington State Aviation Planning Council

cc: Washington Transportation Commission, House Transportation Committee, Senate Transportation Committee, and Regional Transportation Planning Organizations

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Executive Summary

Washington's economy and quality of life are directly linked to a healthy and sustainable aviation system. **Everyone in Washington is touched by our aviation system. It is essential for freight and commerce, tourism, emergency services, access to the nation's airspace and our ability to move goods and people across the nation and world.**

Washington's aviation system is comprised of 138 public use airports. Its size and diversity make it one of the most dynamic aviation systems in the nation. Each year, the system serves over 34 million passengers arriving and leaving in planes with 3.7 million aircraft landings/departures, and more than 600,000 tons of air cargo. The system directly generates 171,000 jobs, \$4 billion in wages, and \$18.5 billion in annual sales output. In addition, the system generates many billions more in indirect benefits.¹

The Washington State Legislature and Governor Gregoire recognized the importance of the aviation system to the State's economy, as well as the absence of any comprehensive plan for the preservation and enhancement of the system. In 2005 the Legislature passed, and the Governor signed, Engrossed Substitute Senate Bill (ESSB) 5121, mandating a comprehensive study of Washington's aviation system in order to systematically identify statewide air transportation needs and solutions. This study is known as the Washington State Long-Term Air Transportation Study (LATS).

ESSB 5121 Mandated Public Involvement

Public involvement played a key role at each stage of the Aviation Planning Council's deliberations. Oral testimony, written comment, public workshops, meetings with stakeholder groups and electronic communications were all part of a program designed to engage a broad cross section of the public.

The Council invited and received public comment at each of its meetings, and conducted four regional open houses in various parts of Washington State. Consistent with previous phases of LATS, electronic communication played an important role in the public outreach program. The LATS website was a primary means of sharing project information with the public and provided ongoing updates about the project including links to project-related information. Outreach included two "electronic town halls," with a randomly selected panel of Washington residents and a statistically valid online survey of 1,322 Washington residents.

A complete summary of public involvement activities is available in Appendix B.

1. 2001 Aviation Forecast and Economic Analysis Study (WSDOT Aviation, 2001)

Pursuant to ESSB 5121, the Washington State Aviation Planning Council was appointed to review the LATS technical studies, solicit public and stakeholder input, and develop recommendations for meeting Washington's long term aviation needs. A complete documentation of the LATS process, technical materials, and the Washington State Aviation System Plan are available on-line at <http://www.wsdot.wa.gov/aviation/lats>.

The Aviation Planning Council's recommendations are based on almost two years of careful review of the LATS technical data, extensive dialogue with aviation system stakeholders and a thorough and transparent public involvement process. The LATS studies clearly indicate that Washington's current system needs are significant. Many public use airports do not meet performance objectives that are appropriate for their system role in areas such as pavement preservation, safety standards, up-to-date planning documents, land use compatibility and protection, minimum airfield facilities, and services for aircraft performance standards. Currently, only only a small fraction of the funds needed to meet performance objectives are available.

In spite of the current economic downturn, the Aviation Planning Council believes that the need for safe and reliable access to the aviation system will only grow over time. Washington's population has doubled in the last 30 years and an additional 1.8 million people are expected by 2030. This growth means that Washington's general aviation activity will grow by 45 percent, and our commercial passenger enplanements will grow by 90 percent and commercial operations by 66 percent over the next 25 years.

The Aviation Planning Council recognized that airports and aviation capacity represent a significant economic resource that is inadequately protected under state laws and threatened by encroachment and insufficient funding. The Council further recognized that neither existing legal protections nor existing funding are adequate to successfully address aviation needs. With this recognition, the Council organized this report and recommendations to:

1. Treat aviation capacity as a resource and preserve, protect and enhance such capacity through strategies focusing on airport operations, technology, safety and land use; and
2. Address additional growth needs with a special focus on the unique characteristics of four identified regional "Special Emphasis Areas": Puget Sound, Southwest Washington, Spokane and Tri-Cities.

Some of the key findings are:

- No immediate capacity constraint exists at any airport in Washington State today.
- Airport forecasts generated in 2006 showed that Sea-Tac International Airport was expected to reach capacity by 2024. However, recent trends including higher passenger load factors and an "upgauging" of aircraft size indicate that the airport may now reach its capacity limits by 2030 or beyond.
- Future capacity constraints will occur within the time frame of this study (2030), primarily in the Puget Sound Region: Sea-Tac, King County International/Boeing Field, Harvey Field, Kenmore Air Harbor. ²

2. *Advances in technology, regulatory changes, and other unforeseen events could delay or advance the timeframe in which capacity limits are reached.*

- Airside capacity expansion at Seattle-Tacoma International is limited due to physical constraints and no new runways are anticipated.
- Airside and landside capacity for scheduled commercial service is available at other airports in the Puget Sound Area: Snohomish County/Paine Field, Olympia Regional, King County International/Boeing Field and Bremerton National airports, depending on the interest of major airlines.
- Aviation capacity must be preserved, protected and, where possible, enhanced through a number of actions designed to improve operations, technology, safety and integration with the State's transportation system and transportation plans.
- Funding to address critical aviation needs is inadequate to meet these needs.
- Washington's aviation system is threatened by encroachment from land uses that are incompatible with aviation operations. Furthermore, existing land use laws designed to provide protection for essential public facilities such as airports are not providing adequate protections.
- The Council's recommendations provide an overarching framework and recommend actions to protect, preserve and enhance air transportation statewide, by region and by airport. However, airport sponsors and local jurisdictions are responsible for addressing airport specific operations and the necessary airport capital facility improvements to address statewide system needs.
- The State must continue to monitor air transportation capacity utilization and market conditions through the periodic update of the Aviation System Plan, Aviation Forecast, and Airport Facility Performance Objectives.
- The State should continue to update the aviation system plan on a five year schedule and an annual update of the airport capital improvement program.
- A report to the Governor and Legislature should be prepared every five years that demonstrates progress toward meeting performance objectives and recommendations of the Aviation Planning Council.

ESSB 5121 directed the Aviation Planning Council to address the following questions:

How can we best meet state-wide commercial and general aviation capacity needs?

Washington's aviation system is complex and diverse. Our aviation needs are driven by the wide variety of roles played by different airports, from international gateway facilities like the Seattle Tacoma International Airport (SeaTac Airport) to small airfields that serve rural agricultural communities. Each airport type plays a different role, but each role is necessary for the state aviation system to meet its interest in preserving access, safety, capacity and environment protection.

Because the State's role in meeting aviation needs has been largely undefined, the Council recommended policies that **clarify Washington's position and responsibility** in relation to its local, regional, and federal aviation partners **as the primary steward and advocate for protecting Washington State's aviation system interests.**

The State's role as a steward of the aviation system includes providing adequate land use protections, recommending system improvements, as well as strategic investments to support and maintain critical aviation facilities throughout the state. It should also be an advocate, working in partnership with local governments, airport operators, FAA and other public and private stakeholders to meet the public's interest in having a healthy, efficient, and effective aviation system.

The Aviation Planning Council recommends the State place a priority on **protecting and maximizing the efficiency of the airport system we already have in place before we consider the development of new airports.** **Performance objectives** are recommended for each type of airport, and policy recommendations have been developed to help target and prioritize investments.

The Council finds there are insufficient funds in place to meet the basic maintenance needs of our system, and **additional funding is required** if we are to maintain current capacity levels. The Council has recommended a course of action for exploring the funding mechanisms and sources necessary to ensure our airport systems are able to meet the long term needs of Washington residents, visitors, and businesses.

Small communities have particular challenges when it comes to the air service access they need to sustain their economic vitality and the mobility of their residents. Over the past 10-15 years, five small commercial airports have lost all scheduled airline service and many more have lost a substantial portion of their scheduled passenger airline service. This trend can be expected to continue. The Council has therefore recommended a policy that promotes adequate access to the national air transportation system for all Washington State residents.

On a regional basis, what are Washington's long-term (2030) aviation capacity needs?

The Aviation Planning Council has considered **airside, landside, and airspace** capacity needs, for both commercial and general aviation activities within the 2030 planning horizon. Landside needs include investments such as hangar space or terminal needs, while airside improvements could include adding runways or making technology investments to accommodate a larger number of flights. No immediate action is needed to address airspace issues, over which the FAA has jurisdiction.

ESSB 5121 designated four "special emphasis areas" because they are key centers of population, employment and economic activity. These areas are Puget Sound, Southwest Washington, Tri-Cities, and Spokane. The needs identified for each of these areas are as follows:

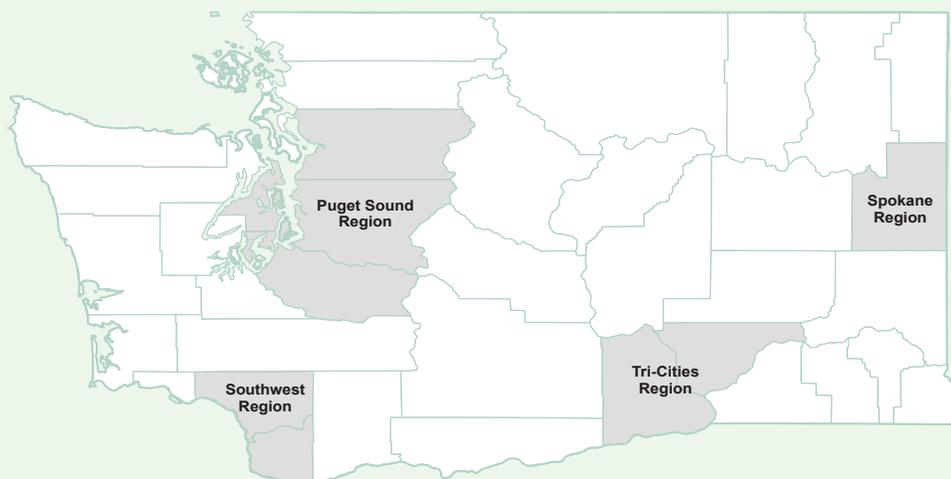
- Four airports within the **Puget Sound Special Emphasis Area** are expected to exceed 100 percent of their peak hour operation capacity by around 2030: Seattle-Tacoma International, King County International/Boeing Field, Harvey Field, and Kenmore Air Harbor, Inc. There is sufficient available capacity at other Puget Sound airports to accommodate demand for commercial service within this timeframe without building a new airport. Depending on the interest of airlines, these airports include King County International/Boeing Field, Snohomish County/Paine Field, Bremerton and Olympia.

With the exception of Seattle-Tacoma International, the passenger terminal expansions required are not significant and may be accommodated within the existing airport footprint.

While the Puget Sound Region as a whole is not expected to exceed aircraft storage capacity by the year 2030, there are ten airports (36 percent of the total airports) in the region that are expected to be at capacity or exceeding capacity for aircraft storage by the year 2030.

- The **Southwest Washington Special Emphasis Area** (Clark and Cowlitz Counties) is one of the fastest growing regions in the state in terms of based aircraft and general aviation operations. Four of the eight airports in this region are privately owned and face significant land use encroachment issues. Assessment of capacity and demand for the Southwest Region is complicated by the fact that the dominant airport for the region (PDX) and three active general aviation facilities are located within a close proximity, but across the state line in Oregon and controlled by the Port of Portland.
- The **Spokane Special Emphasis Area** (Spokane County) accounts for the second largest concentration of commercial and general aviation activity in the state after the Puget Sound Region. In 2005, Spokane accounted for 7.1 percent of statewide based aircraft, 9.4 percent of statewide enplanements, and 16 percent of the state's air cargo tonnage. Three airports in the Spokane Region are expected to be at or exceed aircraft storage capacity by 2030.
- The **Tri-Cities Special Emphasis Area** (Benton and Franklin Counties) has four public use airports. Tri-Cities is the fourth busiest commercial airport in the state after Sea-Tac and Spokane. Three airports, Pasco, Richland and Vista Field, are located within 20 miles of each other. Airports in this area have become vulnerable to closure because of land use encroachment and incompatible land use. Vista Field may close in the future for conversion to alternative land use, which will impact existing businesses and the regional airport system. If that happens, regional coordination will be important to ensure that plans are in place at existing airports such as Richland and TriCities to accommodate additional aviation activity through increased airfield and landside capital investments.

Special Emphasis Areas Designated in ESSB 5121



Where does the State need to plan for future commercial and general aviation airports?

As discussed above, the most critical commercial capacity needs are in the Puget Sound region, but each of the special emphases regions has commercial and general aviation needs that must be addressed in partnership with local communities, the aviation and aerospace sectors, and regional government. All of the airports have a need for additional tools to preserve, protect and enhance existing capacity including protection from encroachment. Additionally, all airports except SeaTac require new sources of financial assistance to meet their operation, maintenance and safety requirements.

The Council recommends that the **State's role should be to advocate for capacity needs to be addressed from a state system-wide and regional perspective.** Additionally, the State should plan for and fund those projects that maximize the efficiency and utility of the system. Where feasible, advanced aviation technologies and other management strategies should be used to make facilities safer and more efficient.

Decisions about the placement or expansion of airports must be primarily a regional and market-driven decision. The benefits, costs and impacts of airport development are driven by local decisions. Within the current planning horizon, passenger and freight capacity needs can be accommodated by existing airports within each Special Emphasis Area. Furthermore, the Council believes there are neither the funds nor the political will that would be required to site a new airport. (For example, plans have yet to move forward for a new regional airport in Northeast Washington despite widespread recognition that the existing Colville Airport is constrained and unable to expand to meet capacity demands.) If it is determined, at some time in the future, that future demand cannot be met at nearby airports and there is no interested sponsor to undertake such a study effort, the State should undertake siting studies for new airports. If the State assumes this role, it will be necessary to reevaluate the current funding structure for aviation so that mandated activities are appropriately funded.

Eleven Commercial/Regional Service Airports Will Exceed Capacity Constraints by 2030

