



**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:

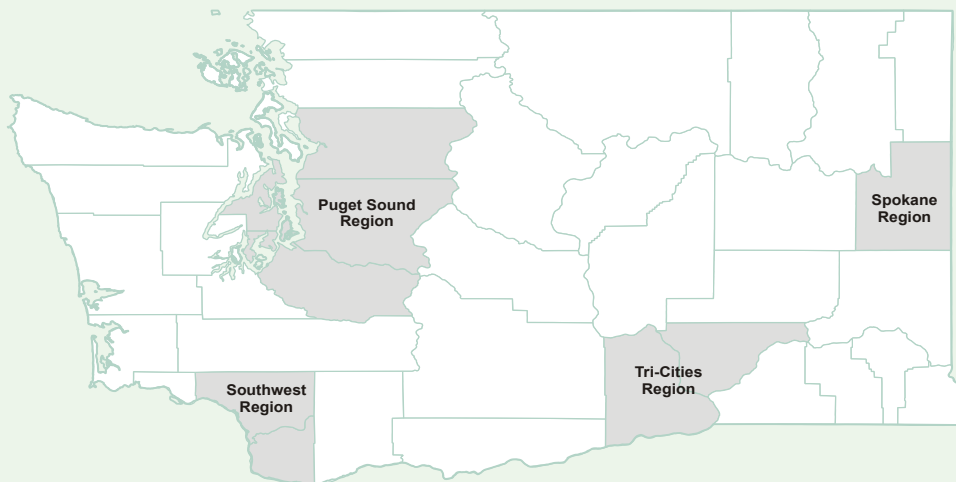
- Four airports within the **Puget Sound Special Emphasis Area** are expected to exceed 100 percent of their peak hour operation capacity by around 2030: Seattle-Tacoma International, King County International/Boeing Field, Harvey Field, and Kenmore Air Harbor, Inc. There is sufficient available capacity 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



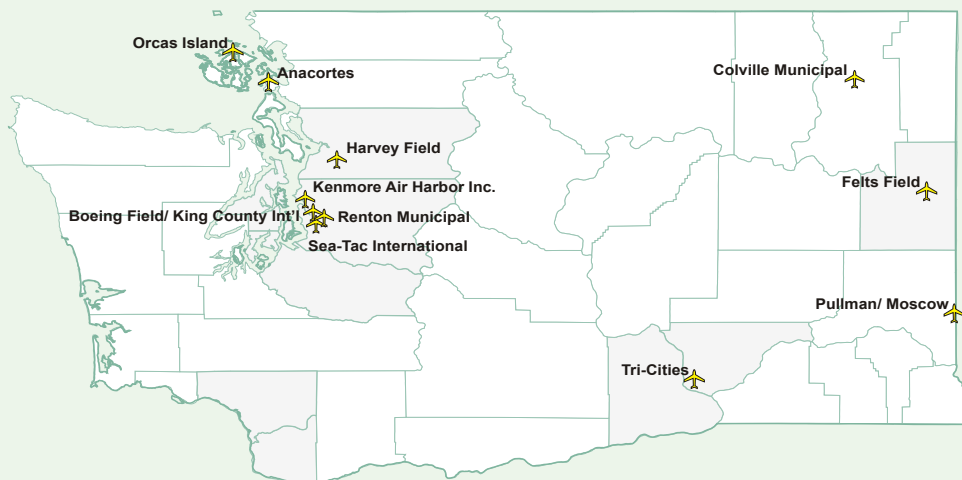
Where does the State need to plan for future commercial and general aviation airports?

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



Introduction

Washington's aviation system moves people and goods, supports business and commerce, and promotes quality of life for its people. Air cargo operations provide an essential service to Washington businesses, supporting shipment of manufacturing and agricultural products shipment, freight/express and mail service, and finished goods delivery. In today's business environment, characterized by just-in-time delivery, swift transportation has become increasingly important to local businesses, and aviation is a critical piece of this system.

In 1998, through adoption of the Washington State Aviation Policy, Washington State defined its interest in protecting and sustaining its aviation system. Since that time, it has become ever more clear that the State needs a long range strategy for assuring the future health of our aviation system.

In 2005, the Governor signed into law Engrossed Substitute Senate Bill (ESSB) 5121, which authorized a long-term air transportation planning study for general aviation and commercial airports statewide. The legislation led to the Washington State Long-Term Air Transportation Study (LATS). The purpose of LATS is to understand what capacity currently exists in Washington's aviation facilities and what actions will be needed to meet future demand for air transportation.

LATS was developed in three phases. Each phase answers one of three basic questions fundamental to the development of a system-wide approach to managing Washington's aviation resources statewide.



Emergency operations for the Maple Fire, 2003

Three Phase Approach to LATS

Phase I: What do we have?	Phase II: What do we need?	Phase III: How will we get there?	<i>LATS has been developed in three phases. Each phase answers one of the three basic questions fundamental to the development of a systemwide approach to managing Washington's aviation resources.</i>
Performed a statewide airport facilities and capacity assessment, including an analysis of current utilization.	Developed 25-year market forecasts of each airport in Washington State, including forecast of aircraft operations, passengers, and air cargo. In addition, the role of high-speed passenger rail was assessed for its ability to relieve future constraints in aviation system capacity	The Washington State Aviation Planning Council considered the LATS Phases I and II findings as well as public input. This data and information was used to shape future aviation policy and recommend how best to meet the state's long-term commercial and general aviation airport needs consistent with ESSB 5121.	
September 2006	July 2007	July 2009	

As required in ESSB 5121, in 2007 the Governor appointed a Washington State Aviation Planning Council to develop recommendations by July 1, 2009, to support the Governor, Washington State Legislature, the Washington Transportation Commission, and Regional Transportation Planning Organizations (RTPOs) in their responsibility to make decisions related to the findings of the Long-Term Air Transportation Study (LATS). In accordance with ESSB 5121, the Council is required to:

- Make recommendations, based on the findings of the assessment and analysis completed under Phase I (RCW 47.68.390) and Phase II (RCW 47.68.400), regarding how best to meet the statewide commercial and general aviation capacity needs;

- Determine which regions of the state are in need of improvement regarding the matching of existing, or projected, airport facilities, and the long-range capacity needs at airports within the region expected to reach capacity before the year 2030;
- Make recommendations regarding the placement of future commercial and general aviation airport facilities designed to meet the need for an improved aviation system in the region; and
- Include public input in making final recommendations.

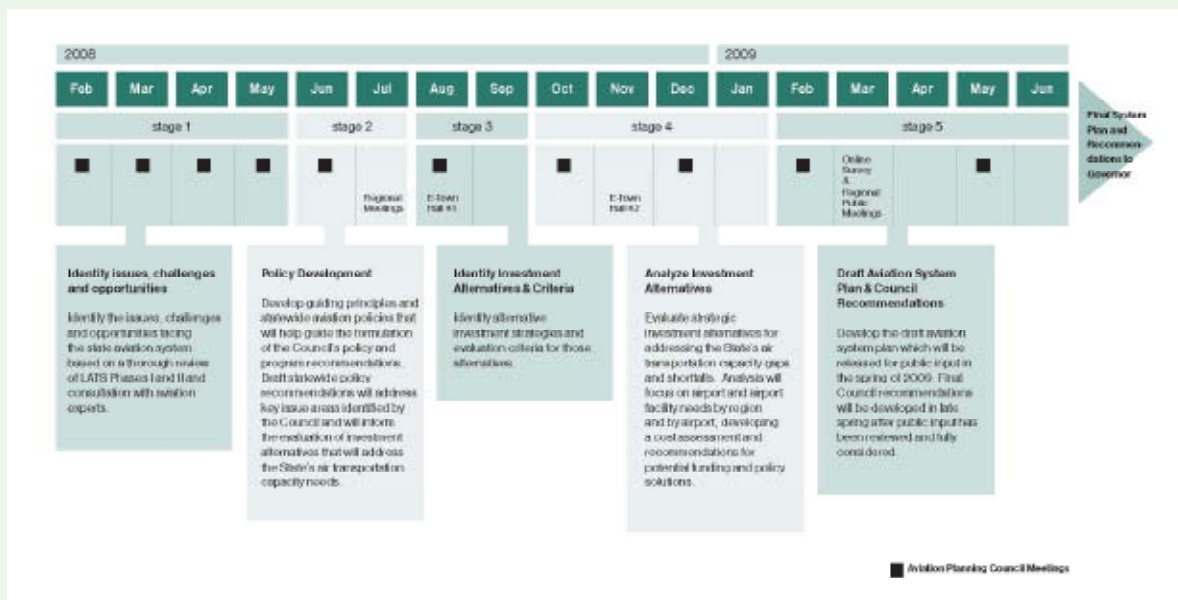
The Council has been extensively briefed on the LATS technical studies and by independent aviation experts as it developed its recommendations. Just as important to the Council has been quality, ongoing input from the public throughout its deliberations. As a result, public involvement and outreach has been a high priority throughout the LATS process.

Public outreach has included development of a communication plan outlining the overall public outreach efforts that was posted for a 30-day public comment period. The plan provided for an intensive awareness and active public information program, regional public meetings, statewide electronic town hall meetings, meetings with stakeholder groups throughout Washington State, and statistically valid survey research. Public outreach efforts included opportunities for various interest groups to express their preferences and opinions and obtaining input from a representative cross-section of Washington residents. A detailed summary of the public outreach and involvement process is presented in Appendix B.

The 10-member Council met 11 times during Phase III. Its recommendations are based upon current State transportation policy goals set forth in RCW 47.04.240, the analyses from the Long-Term Air Transportation study (LATS), public input, and additional technical research.

During this process the Council:

- Identified the issues, challenges and opportunities facing the state aviation system based on a thorough review of LATS Phases I and II technical analysis and consultation with the study team experts and other aviation specialists.
- Developed guiding principles to frame the formulation of the Council's policy and program recommendations to address key issue areas.
- Identified evaluation criteria for alternatives strategies.
- Evaluated alternatives for addressing the State's air transportation capacity gaps focusing on airport and airport facility needs by region and by airport, developing a cost assessment and recommending potential funding and policy solutions.
- Developed recommendations that will be the foundation for Washington's Aviation System Plan.



Aviation is Critical to Washington's Economy

The Washington State Aviation Planning Council recognizes that the importance of Washington's aviation system is even greater than the revenue, employment and sales data suggest. The State's aviation system is an essential function of its overall transportation system, which is the backbone of a vibrant and healthy economy.

Airports contribute significantly to Washington's economy. Washington's airports currently accommodate 3.7 million takeoffs and landings, carrying approximately 34 million passengers and over 600,000 tons of air cargo annually. According to a 2001 economic impact study, Washington's airports generate 171,000 jobs, \$4 billion in wages, and \$18.5 billion in sales output.

Airports play an important role in rural economic development as well, providing a wide range of support for local businesses including agriculture and forest products businesses. Access to an airport is an important factor in a rural community's efforts to attract businesses. A 2002 study conducted by Washington State University concludes,

"The individual benefits of rural airports range from improving the quality of health care, to supporting local businesses, providing critical emergency and disaster response, strengthening community, providing opportunities for recreation, military training, economic development, and much more. Airports are in several cases a symbol of hope for rural communities fighting for their economic life."³

As can be seen in the table below, tax revenues from aviation-related activities in Washington State are estimated to amount to nearly \$32 million per biennium. Only \$6 million (19 percent) of that revenue is allocated to the Aeronautics Account, and \$26 million (81 percent) goes into the State's general fund.

Selected Taxes and Fees Paid to the State by the Aviation Industry: 2007 - 2009

Aeronautics Account	Forecast 2007-2009
Aviation Fuel Tax (11 cents per gallon)	\$5,800,000
Aircraft Registration/Excise/Dealer Fees	\$242,000
Total – Aeronautics Account	\$6,042,000
State General Fund (estimated)	
Annual Aircraft Registration Excise Tax- State	\$518,411
General Aviation Sales Tax from Aviation Fuel	\$9,928,650
Commercial Air Transport Sales Tax from Fuel	\$15,382,000
Total – General Fund	\$25,829,061
Total Revenues Received from Aviation Sources	\$31,871,061

Source: Air Transportation Revenue and Expenditure Report (WSDOT Aviation, 2009)

3. *Determining Infrastructure Needs for Rural Mobility: Functions and Benefits of Rural Airports in Washington*, Jon Newkirk and Ken Casavant, prepared 2002 for WSDOT Aviation

The Council also recognizes the importance of the aerospace industry to the state economy. Washington is home to industry leaders in aerospace manufacturing. In 2007, 63 percent (\$41.8 billion) of the state's total exports were from aircraft and related parts. This marks a 27 percent increase from 2006.⁴ The Council believes that the continued growth and competitiveness of the aerospace industry in Washington State depends upon the availability of a skilled workforce that can support the next generation of aerospace development.

Key Issues

Prior to developing its recommendations, the Council reviewed the LATS I and II findings and consulted with subject matter experts, public agency representatives, key stakeholders and the general public. Its recommendations are formed in response to the following key issues:

Projected Capacity and Service Shortages

Between 2005 and 2030, passenger enplanements at Washington state commercial airports are projected to increase by nearly 90 percent overall, or at 2.6 percent per year. Local demand is also projected to increase over the long term at all airports through 2030. Significant capacity and service constraints are anticipated at key airports throughout Washington's aviation system by 2030. These constraints will be in both airside facilities (runways and taxiways) and landside (terminal facilities and hangars). Excess capacity that may exist elsewhere in the system may not be appropriate to address the future needs at individual airports in the system.

Airfield capacity constraints (or the inability of an airport's runway system to accommodate forecast flight activity) are expected at 12 Washington airports. These constrained airports are among the state's busiest airports including Sea-Tac, Boeing Field, and Harvey Field.

Recent trends at Sea-Tac, including higher average passenger loads and an increase in aircraft arrival rates, indicate that the airport may have capacity to accommodate continued growth beyond the study's 2030 forecast horizon. In addition, current economic conditions and a nationwide decline in both commercial and general aviation activity suggest the need for close and ongoing monitoring of actual aviation activity levels so that the expectations of State and regional planners are continually aligned with the most recent trends in actual aviation activity levels.

Airfield capacity constraints are projected at 12 Washington airports. At the same time, smaller communities are in danger of losing service because of changing economic conditions. (Source: LATS Phases I and II)

4. *State of Washington Community, Trade, and Economic Development*, www.cted.wa.gov/portal/alias_cted/lang_en/tabID_159/DesktopDefault.aspx

Because many of the small commercial service airports are serviced by a single airline, any continued downtrend in the economy or increases in aviation industry costs could make it increasingly difficult to serve these smaller markets. Trends contributing to the loss of scheduled passenger airline services at smaller Washington State commercial airports are expected to continue. Small communities such as Pullman/Moscow, Walla Walla, Port Angeles, Yakima, and Wenatchee remain at risk of losing scheduled commercial service.

In addition, several commercial service airports in the state may require increased terminal capacity to accommodate the expected future passenger demand expected, including Sea-Tac, Tri-Cities, Anacortes, Orcas Island, and Kenmore Air Harbor, Inc.

A significant number of Washington's general aviation airports are also expected to have aircraft storage capacity shortfalls by 2030, including Boeing Field, Sanderson Field, Felts Field, Crest Airpark, and others.

A number of airport closures, of both publicly owned and privately owned public use airports, have occurred in the state in recent years. Private airports contribute to capacity in key regions in the state. The loss of these valuable airports could further reduce available capacity in high-growth regions and impact key airport facilities in these areas.

The Council has developed a number of policy recommendations to address Washington's aviation capacity shortfall, as well as specific recommendations for system improvements that will support the state's ability to meet its long term capacity needs.

Maintaining and Preserving the System

Washington's airports range in size from international commercial airports to small seaplane bases. Each has a different role in the aviation system, shaped by market demand and local circumstance. Because the airports serve various types of aircraft and aircraft demand, they need to have different standards to assure safe landings and takeoffs and meet service needs. Consequently, each airport has different capital needs. Airport owners vary widely in their ability to fund improvement needs.

The Council endorsed the adoption of a State Aviation Classification System that identifies performance objectives that are appropriate to the types of aircraft and services the individual airports support. The Council recognizes that some airports may not be able to meet all performance objectives because of physical factors such as topography or because of existing development.

Several commercial and general aviation airports are also projected to experience terminal and aircraft storage capacity shortfalls by 2030. (Source: LATS Phases I and II)

Many Washington airports will need upgrades to satisfy their proposed role within the State's aviation system and meet recommended airport performance standards. (Source: LATS Phases I and II)

The Aviation Classification System can help prioritize expenditure of state funds in a way that supports the functionality of a statewide system. The performance objectives can also help to identify the types of safety and operational improvements that need to be made if a community decides to upgrade an airport to provide additional capacity.

Currently there are insufficient resources to fund the capital needs of most airports in Washington State. WSDOT Aviation estimates that bringing all public use airports into compliance with the performance objectives would cost approximately \$600 million.

Incompatible Land Uses

Airports need to be reasonably close to population centers in order to effectively serve the needs of growing communities and economies. However, when communities expand into areas immediately around airports, a plethora of environmental and land use conflicts can arise. Some land uses such as industrial and warehousing facilities work well around airports, but residential development, schools and hospitals are examples of development that are negatively impacted by the noise, air traffic, and other factors commonly associated with airports.

These concerns have made it difficult for airports to expand to accommodate future demand. Furthermore, as land prices increase near airports, there is no economic incentive for owners of privately owned airports to maintain the aviation use of their property and some public entities see airports as land that could generate greater tax revenue if developed for other purposes.

Currently, fewer than half of Washington's airports are adequately protected in local land use plans. Inconsistent application of land use regulations have in many instances eroded protections for airports as essential public facilities provided in state law. The Council has developed a number of recommendations intended to strengthen an airport's ability to protect itself from incompatible land use recognizing that when airports are forced to close, aviation capacity is lost forever.

Today only 35% of airports are protected by comprehensive plan policies. Only 22% of airports are protected by zoning ordinances. (Source: LATS Phases I and II)

Washington State Must Redefine its Role in Aviation

Aviation and the aerospace industry provide significant benefits to Washington's economy and to the quality of life of Washington State residents. According to a 2001 economic impact study, airports generate 171,000 jobs, \$4 billion in wages, and \$18.5 billion in sales output. Aviation provides the critical link with the state, national, and international air transportation systems. It moves mail and freight, supports public safety and provides access that is essential to Washington's small and remote communities.

Today the system is threatened because of the combined impacts of local airport closures, insufficient maintenance, and competing land uses that limit airport operations. With decentralized airport control the State's role has been undefined, minimized and underfinanced. Washington's aviation needs are growing but the entire system is threatened because of insufficient policy guidance and resources to fill the gap between existing capacity levels and long-term system activity.



Ranger Creek State Airport

With decentralized airport control the State's role has been undefined, minimized and underfinanced. Washington's aviation needs are growing but the entire system is being threatened because there has not been sufficient policy guidance or resources to fill the gaps between demand and system viability. (Source: LATS Phases I and II)

At the start of its deliberations, the Washington State Aviation Planning Council adopted both a Statement of Purpose and Need and a set of Guiding Principles. The Statement of Purpose and Need summarizes that Council's understanding of its purpose and charge. The Guiding Principles are the underlying assumptions upon which all of the Council's policy recommendations are based.

Statement of Purpose and Need

Maintaining a healthy aviation system is in the interests of the nation and the citizens of Washington State.

Washington's aviation system provides intrastate, national and international access for passengers and goods and is an important component of our national defense capability. Washington State's aviation system is an essential function of our overall transportation system, because it:

- Moves people and goods
- Supports business, employment, and commerce
- Promotes quality of life
- Provides access for critical emergency and disaster management services that other transportation modes cannot accommodate.

Airports in the system range from large airports that serve major population centers to small community airports that are a critical link to sparsely populated expanses and local economies. Although Washington's airports are diverse, with different roles and needs, they must function together as a healthy, balanced system.

The Washington State Aviation Planning Council was established by the Legislature and appointed by the Governor to develop recommendations to the Governor and Legislature for policies and capital investment strategies needed to maintain a healthy aviation system.

The Council's recommendations will be based upon current State policy goals, the analysis presented in the Long-term Air Transportation Study (LATS), public input, and additional technical research. As directed by the Legislature, technical and administrative support will be provided by the Washington State Department of Transportation (WSDOT) Aviation Division and a technical consultant team.

Guiding Principles

1. Washington's aviation system is an essential component of local, state and national economies and must be sustained. Washington's communities depend on their ability to access Washington State's aviation system to move people and goods safely throughout the state, nation, and world.
2. Washington State's aviation system includes commercial aviation and general aviation airports and supporting businesses and facilities, the aerospace industry and airspace. Furthermore, decisions about Washington's aviation system should be considered in the context of local, state, national and international impacts.
3. It will take strong partnerships to effectively address the challenges facing Washington's aviation system between airports, the aviation industry, business community, local, regional and tribal government, educational institutions, Washington State, and the Federal Aviation Administration.
4. To safeguard Washington State's aviation system for future generations, the state must address multiple challenges in a timely manner including: capacity exacerbated by growing demand, delayed maintenance, incompatible land use, funding, work force, and the special needs of small communities.
5. Though Washington's aviation system provides significant economic benefit to the State, it currently suffers from a significant funding shortfall leading to deferred maintenance that will cost even more to address over the long run. As a component of the overall transportation system within the state, funding mechanisms must be considered and funding sources identified which equitably take into account the revenue and benefit derived from aviation activities.
6. The public investment in the aviation system can be maximized by first making the best use of our current assets. Enhancement and expansion of the system must consider environmental and social impacts upon communities and the state.
7. 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.
8. Washington's aviation system should be planned to coordinate with other transportation modes to assure effective, efficient, and complementary transportation options for people and goods.

Recommendations

The Washington State Aviation Planning Council's recommendations address the three primary challenges facing Washington's Aviation System:

1. Aviation Capacity
2. Minimizing Land Use Conflicts
3. Stewardship of the Aviation System

The Council has developed recommendations for the Washington State Aviation System Plan based on policy recommendations that are included in Appendix A of this report.

1. Aviation Capacity

Capacity Recommendations

The Council recommends that the State take a lead role in addressing aviation capacity needs and place a priority on funding and planning the state's air transportation system, including general aviation, to meet future needs. The Legislature and WSDOT will take measures to:

- Enact legislative policy to use existing capacity in the air transportation system before considering constructing new airports.
- Invest in advanced aviation technologies for Automatic Dependent Surveillance-Broadcast (ADS-B) systems, instrument approaches, and other pertinent technologies to address safety, capacity and access for all commercial, regional and community airports identified in the state's system plan.
- When additional aviation capacity is forecast to be needed, and no feasible airport capacity is available within the region, the legislature should fund a site selection study for the placement of new airport(s) if no sponsor is available.

Aviation capacity is the ability to provide facilities, infrastructure and connections for both airside and landside aviation activity. When demand for aviation-related activity surpasses available capacity, there is a shortfall in capacity. Airports in Washington have differing capacity needs and accommodate varying levels of demand. While Commercial Service and Regional Service airports typically serve high performance aircraft, other airports Community Service, Local Service, and Rural Essential airports accommodate a range of general aviation operations. Seaplane Bases only handle seaplane operations

Addressing future aviation capacity is complex and controversial. Complex because of the wide-ranging roles of Washington's 138 airports and controversial in the challenge of balancing state need with the local impacts that result from new aviation capacity.

The Council has recommended that the State take a leadership role in determining how to best meet capacity needs from a system-wide perspective.

Washington's most immediate airfield capacity issues are within the Puget Sound Special Emphasis Area. The four airports forecast to exceed 100 percent of their operations capacity by 2030 are Seattle-Tacoma International, King County International/Boeing Field, Harvey Field, and Kenmore Air Harbor.

Seattle-Tacoma International Airport has physical/geographical constraints that significantly limit opportunities for future expansion. Airports within reasonable proximity to Seattle-Tacoma International and that have the potential to absorb future commercial capacity include Snohomish County/Paine Field, Bremerton National, and Olympia Regional. Airports that can potentially absorb general aviation demand include Renton, Auburn, Snohomish County/Paine Field, Tacoma Narrows, and Thun Field. Airports that have the potential to alleviate capacity constraints at Harvey Field include Snohomish County/Paine Field and Arlington.

Airports with Anticipated Constraints in Operations Capacity by 2030

Airport	Operations Capacity (ASC)	2005 Demand	2005 Utilization	2030 Demand	2030 Utilization
Airports Exceeding 100 Percent Capacity by 2030					
Kenmore Air Harbor, Inc.	56,300	57,000	101%	83,300	148%
Boeing Field/King County Int'l	380,000	251,900	66%	549,200	145%
Sea-Tac International	533,000	346,700	65%	633,600	119%
Harvey Field	230,000	139,200	61%	237,600	103%
Airports Exceeding 60 Percent Capacity by 2030					
Arlington Municipal	270,000	148,500	55%	227,200	84%
Kenmore Air Harbor SPB	60,000	31,200	52%	46,700	78%
Auburn Municipal	231,000	143,500	62%	169,900	74%
Olympia	230,000	89,500	39%	170,800	74%
Friday Harbor	138,000	65,500	47%	98,500	71%
Spokane International	215,000	91,400	42%	151,300	70%
Crest Airpark	240,000	146,300	61%	162,500	68%
Snohomish County/Paine Field	316,200	150,400	48%	199,800	63%

The challenge of meeting Washington’s aviation capacity is shared between many entities including the FAA, local and regional agencies, airlines, and publicly and privately owned airports. The Council believes that the State needs to exercise a leadership role as the primary steward for a healthy and viability aviation system. In this role, it will provide the FAA with support to help it better manage the national aviation system and clarity about its funding priorities. The State will also provide policy direction and support local and regional agencies in fulfilling their distinct aviation roles.



Aviation Planning Council Meeting - March 6, 2008
Photo courtesy of Brett Fish

The State’s leadership role is becoming increasingly critical as its aviation system nears its capacity limits. State government is in a unique position to direct resources in a manner that ensures that the aviation needs of all its people and communities can be anticipated and addressed.



Kenmore Air Harbor will exceed 60% capacity by 2030.

Summary of Aviation System Roles and Responsibilities

Roles	Responsibility
Washington State	Steward of state aviation system by strategically directing resources to local airports, providing policy direction and assistance to local airports and government to maintain viability of system and directly operating certain elements of the system.
Federal Aviation Agency	Steward of national system, airspace and safety by funding and regulating.
Regional Agencies (RTPOs, RPCs, RTCs, COGs)	Assure consistency with regional and state planning.
Local Jurisdictions	Local transportation and land use planning, and local infrastructure.
Airport Sponsors	Airport operations, maintenance, planning and development.
Private Sector	Meet service demands and invest in private infrastructure.

The Aviation Planning Council believes that Washington's taxpayers need to be assured that every effort is made to maximize the productivity of our existing system before there is a decision to create capacity by building new airports.

The Council has concluded that there will be sufficient airfield capacity in the system, and within each special emphasis area, to accommodate demand through 2030 without the need to construct new airports:

- Emerging NextGen technology offers particular promise as a tool to increase the capacity, efficiency and safety of landings and departures without having to expand or build new airports.
- There appears to be sufficient capacity to accommodate demand at nearby airports, assuming existing airports remain open and capacity is not diminished for any reason.

Should it be determined, at some point in the future, that there is or will be insufficient capacity to accommodate demand, and there is no local airport sponsor, the Council recommends that the State undertake a siting study that takes a systemwide perspective in providing for long-term air capacity.

2. Minimizing Land Use Conflicts

Land Use Recommendations

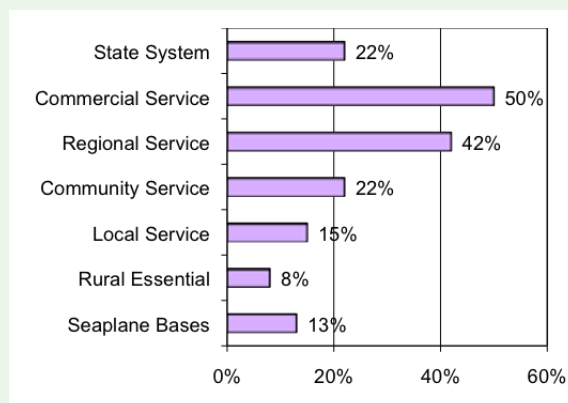
The Aviation Planning Council recommends the State reaffirm and strengthen land use legislation to protect public use airports from encroachment of incompatible land uses, and safeguard the public's investment in the air transportation system. Legislation should specifically be designed to:

1. Amend the Growth Management Act (RCW 36.70A.510 General Aviation Airports and RCW 36.70A.200 - essential public facilities -), and planning enabling statutes (RCW 36.70.547 – General Aviation Airports), to require “protection” of airports from encroachment of incompatible land uses, as well as providing for the “siting” of such uses as Essential Public Facilities.
2. Prohibit the placement of noise sensitive uses within the traffic pattern of public use airports. Examples of such uses include but are not limited to residential, schools, hospitals, and adult care facilities. Where such uses exist, require they be considered non-conforming and further require local governments to amend or update their land use plans to prohibit expansion of such uses and, preferably, phase them out. Similar protections should be extended to contiguous jurisdictions where the airport areas involve more than one city or county.
3. Revise Washington Administrative Codes (WACs) and or Revised Codes of Washington (RCWs) governing the siting of public schools to prohibit new construction of schools in areas impacted by the airport traffic pattern. Work with the Office of Superintendent of Public Instruction (OSPI) to ensure public schools in Washington State are notified of these recommendations.
4. Revise WACs and or RCWs to prohibit structural, visual, electrical and wildlife hazards that interfere with critical airspace surfaces, negatively impact airport operations or endanger the public's safety.
5. Strengthen the authority of the Washington State Department of Transportation (WSDOT), regional transportation planning organizations (RTPOs) and metropolitan planning organizations (MPOs) to certify that transportation and land use elements of comprehensive plans and development regulations provide sufficient protection to airports. Transportation funds provided by these organizations (WSDOT, RTPOs and MPOs), should be provided to Jurisdictions that protect these resources.
6. Require local jurisdictions and airport sponsors to coordinate land use planning, site master planning, and permitting so as to protect airport operations and avoid conflicts.
7. Provide standing for airport operators and the State of Washington to take such actions as necessary to enforce measures intended to protect airports from encroachment.

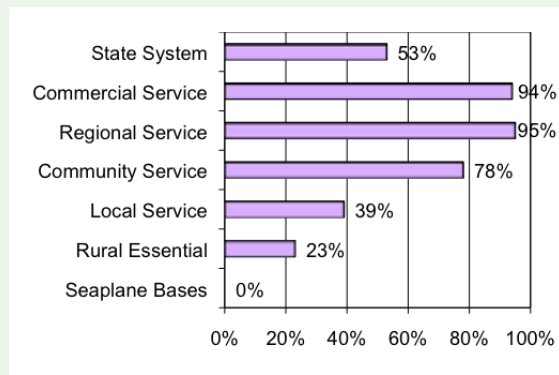
Whenever there are large concentrations of people within an airport’s operating environment there are land use conflicts. Incompatible land uses diminish the capacity of public use airports sometimes resulting in airport closures. When airports cannot function the capacity of the entire system is threatened resulting in reduced efficiency, higher operations and safety costs, and potentially airport closures.

Conflicting land use presents a major challenge to the viability of airports in Washington State. Since the adoption of legislation in 1996 to protect airports from incompatible land uses, only 35 percent of airports in the state are protected by comprehensive plan policies and only 22 percent are protected by consistent zoning regulations. About half of the aviation system is protected by height hazard controls. Unfortunately, actions of local jurisdictions can nullify and dilute these protections.

Compatibility Control by Zoning Performance Assessment



Airspace and Height Hazard Control Performance Assessment



Inadequate planning for land use compatibility results in a poor quality of life for adjacent neighborhoods and constrained operations for aviation facilities. Despite current requirements of the Growth Management Act (GMA) that airports be considered “essential public facilities,” many jurisdictions have failed at this task. Exceptions allowed during the permitting process undermine protections for essential public facilities. Once a local precedent has been set, the gateway is open for more incompatible development. The consequences of unchecked encroachment on aviation facilities include:

- Degraded airport operations:** Incompatible development significantly increases the operational cost of an airport by producing complaint, litigation and change in established approach, departure and en route procedures. These changes can cost an airport and airlines millions of dollars in lost revenue, can make commercial service cost prohibitive, and increase ticket prices. Ultimately, incompatible uses near the airport may result in closure of the essential public facility.

- **Impeded airport expansion:**

All transportation systems must expand to meet growing demand, but conflicting land uses, once established, make it difficult for an airport to expand to accommodate growth.

- **Hampered economic development:**

Airports are valuable transportation assets and economic engines, which promote business and commerce at local, state and national scales. They are crucial to a community's economic competitiveness on a local, state and global level. Incompatible development reduces the airport's contribution to the community and hampers its ability to move people and goods efficiently.

- **Reduced quality of life for airport neighbors:**

Residents within an airport's operating environment are often exposed to increased aircraft noise, light, vibration, fumes, low flying aircraft and other factors that are associated with aviation activities. These can result in increased land use conflicts and diminished quality of life for people living near the airport. One should also expect that as the demand for air transportation increases, so will the intensity of use at the airport.

The Council's urges to the State reaffirm and strengthen laws that prohibit incompatible and promote compatible land uses. The Council also offers a number of recommendations that clarify roles and responsibilities of local jurisdictions and airport operators in protecting airports from incompatible land uses.

What Are the Consequences of Incompatible Development?



3. Stewardship of the Aviation System

Stewardship Recommendations

The State should enact legislation and other measures to preserve the existing capacity of the air transportation system and to ensure that adequate measures are in place to fund airport facility infrastructure that are necessary to meet the needs of intra-state commerce, national mobility, access to communities, access to economic development and provide for emergency services. Measures should include:

1. Enact legislation to conduct an assessment of state aviation taxes and fees derived from aviation activities conducted within Washington. Prepare a report to the Governor that identifies recommendations to fund investments in public airport infrastructure.
2. Enact legislation to provide tax incentives to encourage owners of public use, privately owned airports to maintain and develop their facilities for the benefit of Washington's citizens.
3. Enact legislation to establish an annual statewide air transportation five-year capital investment program consistent with the aviation system plan to assist in identifying airport infrastructure needs and prioritizing system investments. The capital investment program should be supported by contractual grant guarantees that fully protect the public's interest in preserving the aviation system, while optimizing the mix of state and federal dollars to accomplish these purposes.
4. An annual report to the Governor, Legislature, Transportation Commission and RTPOs shall be prepared evaluating the attainment of aviation performance objectives.

The Aviation Planning Council believes that Washington State's primary aviation role should be to serve as a steward of the statewide system. Washington State uses a range of tools to steward its aviation system. These include:

- Direct funding for facility improvements.
- Technical assistance programs.
- The State Growth Management Act.
- Numerous policies that document Washington's interest in maintaining the aviation system.
- Coordination with the FAA and Regional Transportation Planning Organizations.

In spite of these tools, many airports lack access to funds essential for maintenance of their physical condition. Fewer than half the publicly owned airports are eligible for federal funding. State grant funding constitutes about one percent of the federal funding available, and only publicly owned airports are eligible for state grants. There are insufficient funds to address the maintenance needs of the whole system.

The Council recommends the Legislature conduct an assessment of how state aviation taxes and fees might be better directed to fund investments in airport infrastructure. It also recommends strategies to expand funding opportunities at airports, through tax incentives and public-private partnerships.

At the same time, we must demonstrate that we are doing a good job of managing the funds currently available to the system. The Washington State Airport Classification System that was refined through the LATS studies and set forth in the Aviation System Plan is an essential framework for identifying capital investments appropriate for each type of airport in the state system. The Airport Classification framework achieves the following purposes:

- Sets performance objectives to help airports and WSDOT target investments.
- Helps identify deficiencies at airports.
- Helps ensure Washington residents across the state have appropriate levels of access to the national air transportation system.

- Bundles objectives that relate to specific types of aviation appropriate for different classifications.
- Focuses on emergency service and economic development needs.
- It is a tool to strategically target investment of public funds in the aviation system.
- It can be used to identify the capacity requirements and capital improvements that would be necessary if an airport changes classification.

The following table lists the types and numbers of airports in the Washington State Airport Classification System.

Classification	# Airports	Description
Commercial Service	16	Accommodates at least 2,500 scheduled passenger boardings per year for at least three years.
Regional Service	19	Serves large or multiple communities; all NPIAS Relievers; 40 based aircraft and 4,000-foot long runway, with exceptions.
Community Service	23	Serves a community; at least 20 based aircraft; paved runway.
Local Service	32	Serves a community; fewer than 20 based aircraft; paved runway.
Rural Essential	39	Other land-based airports, including residential airparks.
Seaplane Bases	9	Identified by FAA as a seaplane base, unless it is a Commercial Service Airport.

Appendix A:

Policy Recommendations

Statewide Aviation Policies

Capacity

1. The State of Washington must take a lead role in addressing its long-term aviation system capacity needs from a system-wide and regional perspective.
2. Washington State shall place a funding and planning priority on maximizing the efficiency and utility of the existing aviation system before creating new airports.
3. If Washington State's existing system cannot provide sufficient aviation capacity to meet existing and future demand and no sponsor has expressed interest, the state will be given the authority to undertake a site selection process for a new airport.

Land Use

1. Washington State should strengthen legislation to define and prohibit incompatible land uses and promoting appropriate land uses adjacent to public use airports.

2. Washington State should use a combination of incentives, legislation and regulatory tools to ensure that local governments address land use requirements to protect airports as essential public facilities, discouraging the encroachment of incompatible land uses adjacent to public use airports.
3. Washington State should develop performance measures to assess how well local governments and local comprehensive plans and policies discourage incompatible development adjacent to public use airports.
4. The State should prohibit airspace intrusion around airports and runway approach paths by structural, visual, or wildlife hazards that could potentially impact airport operations or endanger the safety and welfare of aviation users.
5. Regional Transportation Planning Organizations should be given the authority to certify the transportation and land use element of local comprehensive plans discouraging incompatible development adjacent to public use airports and ensuring consistency of comprehensive plan components and regulations across jurisdictional boundaries.

6. Washington State should develop standards discouraging new development of K-12 public schools, daycare centers and medical facilities from locating adjacent to public use airports.
7. Washington State should require that airport sponsors and local jurisdictions coordinate with each other during the development and amendment of airport master plans and comprehensive plans/development regulations.

Environment

1. Washington State should require airports to appropriately mitigate adverse environmental impacts to threatened and endangered species and habitats occurring at airports, while reducing wildlife attractants that create hazards to airport operations.
2. Washington State should encourage sustainable environmental and energy best management practices in design and operation of airport facilities, consistent with state and federal law.
3. Develop statewide and regional strategies to coordinate, develop and provide a range of transportation mode options for access to public use airports through airport and highway design projects.

Safety

1. Washington State should use incentives, including state and federal resources to ensure that airport facilities meet applicable federal or state design criteria and safety standards.
2. The Washington State Aviation System Plan should identify strategic aviation facilities to support the Washington Comprehensive Emergency Management Plan.

3. Washington State should encourage and support precision instrument approach procedures at all airports with a classification service role of “Regional Service Airport” or higher, and non-precision instrument approach procedures at all airports with a service role of “Community Service Airport” or higher.

Stewardship

1. The Washington State Airport Classification System will guide decisions on future aviation system needs and investments.
2. Washington State should work with the FAA and regional transportation planning organizations to identify additional airports that can meet federal criteria for classification as reliever airports between 2008 and 2035.
3. Update the Washington Aviation System Plan (WASP) to include the following:
 - a. Incorporate economic development studies, aviation forecasts, pavement conditions analysis, capacity analysis, airport facility assessment studies and other studies as appropriate to keep the system plan up-to-date to meet changing conditions in the air transportation system.
 - b. During each System Plan update, review the progress toward achievement and relevance of the policies recommended by the Aviation Planning Council.
 - c. Maintain a relational database, including physical and operational airport inventory information to support Aviation System Planning and the statewide aviation capital investment program.

4. Washington State should ensure that the aviation capital investment program strategically prioritizes system investments necessary to provide for the state's air transportation system needs in a cost-effective manner.
5. Where gaps exist in the aviation system it may be in the State's interest to own, operate, or develop airports.
6. The regional transportation planning process should be coordinated with the aviation system plan and local airport master plans to maximize the net public benefit.
7. It is in the state's interest to implement airport grant terms and conditions that will preserve and protect the State's investments in the system.
8. The WASP should encourage efficient airspace by actions including working with the FAA and investing in facilities and technologies.

Economy

1. Washington State should consider state, regional, or national outcomes in the analyses of aviation investments and policy recommendations.
2. Washington State should encourage and support education infrastructure to train and educate the skilled workforce necessary to support aviation.
3. Washington State should work with state and local economic development agencies to support adequate aviation capacity, service and facilities to support economic growth.

Mobility

1. Washington's aviation facilities should be planned and developed as an integrated system that meets statewide air transportation demand; complements the overall state transportation system; maximizes the use of existing facilities; and is compatible with the environment.
2. Promote adequate access to the national air transportation system for all Washington residents, using adopted standards of the Washington State Airport Classification System.
3. Washington State should identify transportation needs that extend into adjacent states and promote bi-state/multi modal cooperative solutions to ensure coordinated services and maximum cost effectiveness.
4. Washington State should coordinate with federal, state, regional and local transportation agencies to encourage effective ground access to airports through various modes of transportation, freight/cargo efficiencies and rail and road enhancement projects.

Appendix B:

Public Involvement Summary

- **Electronic Town Halls**
- **Regional Meetings**
- **Online Survey**

Public Involvement Summary

Public involvement was an important part of Phase III of the Long-Term Air Transportation Study. The Aviation Planning Council considered both technical findings and public input when developing recommendations. The public outreach process was extensive, and included multiple approaches designed to capture input and reactions of organized stakeholder groups as well as the general public from all areas of the state, including those who have passionate and diverse opinions about aviation, as well as from those who may be less involved, but who will be directly impacted by changes to Washington's aviation system. The following outreach opportunities were available during LATS Phase III:

- Regional Public Meetings – July 2008 and March 2009
- Electronic Town Halls – August 2008 and November 2008
- Online Survey – March 2009
- Briefings to organizations – upon request, ongoing throughout Phase III
- Media Releases
- E-Newsletters
- Aviation Planning Council Meetings/Workshops
- LATS Project Website – www.wsdot.wa.gov/Aviation/lats

Consistent with previous phases of LATS, electronic communication played an important role in the Phase III public outreach program and enabled the Aviation Planning Council to obtain feedback from all areas of the state. Two 60-minute Electronic Town Halls were held online via a moderated session. Key advantages of the Electronic Town Halls include improved sample representation, the ability to present complex information in graphic form with narration from the moderator, and a live question and answer session.

WSDOT also conducted an online survey to assess public opinion on the issues discussed by the Aviation Planning Council during LATS Phase III. The online survey provided the Council with statistically valid feedback from a representative sample of Washington residents and provided an opportunity to cross check findings from the electronic town halls and regional public meetings.

The LATS website was a primary means of sharing project information with the public. The website provided ongoing updates about the project including links to Aviation Planning Council meeting materials and summaries, links to working papers, presentation materials, and reports. WSDOT Aviation News Service, a 4,000-person list-serve maintained by WSDOT Aviation, served as a timely tool for ongoing communications with the public. List serve members received project updates and announcements about Aviation Planning Council meetings and public meetings.

The following is a summary of key findings from the Regional Public Meetings, Electronic Town Halls, and Online Survey. A detailed summary report for each event is available online at www.wsdot.wa.gov/Aviation/lats.

Regional Public Meetings

The Aviation Planning Council and WSDOT Aviation hosted regional public meetings in July 2008 and March 2009. The first set of regional meetings was held on July 22, 2008 at the Future of Flight Aviation Center at Paine Field in Mukilteo (Western Washington) and on July 24, 2008 at the Wenatchee Convention Center (Eastern Washington). The purpose of the July 2008 meetings was to gather public comment on draft statewide aviation policies developed by the Aviation Planning Council to address seven major issue areas: capacity, land use, environment, stewardship, economic vitality, safety, and mobility. The Council based its final recommendations for the Aviation System Plan on these policy recommendations. Approximately 48 people attended the Western Washington meeting and four people attended the Eastern Washington meeting. The meetings coincided with a 21-day public comment period which extended from July 10-31, 2008. A total of 21 comment letters were submitted by e-mail, fax, or mail.

The second set of regional meetings was held on March 24, 2009 at WSDOT Aviation Headquarters in Olympia (Western Washington) and the Ramada Inn in Spokane (Eastern Washington). Approximately 11 people attended the Western Washington meeting and six attended the Eastern Washington meeting. The purpose of the March 2009 meetings was to gather public comment on 26 draft alternative strategies designed to address key issues facing the Washington State Aviation System in the areas of capacity, stewardship, and land use. The Aviation Planning Council considered public comment on the draft alternative strategies as it developed its System Plan Recommendations. The meetings coincided with a 45-day public

comment period which extended from March 4 – April 17, 2009. A total of 192 comment workbooks were submitted and 46 comment letters were submitted by e-mail, fax, or mail.

Key Findings

July 2008 Regional Meetings

Participants were asked to indicate their level of support for each of the proposed draft statewide aviation policies – support, neutral, or against. Most participants indicated support for the draft statewide aviation policies. Written comments submitted in person at the regional meetings and during the comment period provided additional insight into response to the statewide aviation policies.

A number of questions were raised about the forecasting model and the accuracy of the capacity data provided. A number of participants expressed the opinion that the capacity policies lacked specific recommendations to address how to meet future capacity needs.

A number of comments expressed the opinion that community and environmental impacts such as noise, air pollution, and health impacts need to be better addressed in considering aviation capacity issues. Others commented that the draft policies were too focused on the needs of aviation and airports, and not on the needs of people and communities. Others encouraged the Aviation Planning Council to consider policies that promote more sustainable practices, and to consider non-aviation modes of travel.

Wenatchee meeting participants addressed the role of airports in responding to emergencies and encouraged special consideration for airports that serve an emergency rescue role during natural and manmade disasters.

March 2009 Regional Meetings

Participants were asked to provide comments by completing a comment workbook in which they were asked to indicate their level of support for each draft alternative strategy and provide written comments.

Capacity Constraints Anticipated by 2030

There were only three strategies where there was clear consensus for this issue area, which are listed below:

- Invest in advanced aviation technology (strong support)
- Use demand management techniques (strong opposition)
- Redistribute demand to nearby airports (strong opposition)

When looking at all responses, opinion was divided on the state expanding airports with capacity constraints, and the state constructing new airports. Support was greater for these strategies outside of the Puget Sound region.

Written comments provide additional insight into response to the draft alternative strategies. Several participants had questions about the accuracy of SeaTac capacity calculations. Concern was expressed about expansion of service at Snohomish County/Paine Field and the Olympia Airport. Participants encouraged the Council to explore non-aviation alternatives to relieve capacity for in-state travel and alternatives to airport expansion or new airport construction. Some expressed concern that the LATS process and draft alternative strategies are biased toward airport expansion. Others expressed concern that the process should be subject to an environmental review process.

Capacity – Airport Closures

Participants supported the strategy of authorizing expanded state ownership to forestall airport closures. Opinion was divided on the state initiating an educational campaign, adding assurances to the state airport grant program, and introducing new legislation to prevent airport closures. The majority of Puget Sound respondents opposed these strategies, but support was greater in other areas of the state. Several Puget Sound area respondents expressed concern that an educational campaign would be a lobbying effort for airports and airplane owners, and would not focus on protecting communities that are negatively affected by noise and other negative aviation-related impacts. Accountability was the key reason for those who supported adding assurances to the state airport grant program. For those who were against this strategy, the most common reason cited was the objection to using state funds to support airports. Those in support of introducing new legislation to prevent airport closures commented on the importance of airport preservation. Those against this strategy felt that closure decisions should be determined by the owner, and that the free market should be allowed to operate.

Capacity – Loss of Service at Small Community Airports

Participants indicated moderate support for the state encouraging local negotiations between small communities and airlines. Support was greater for this strategy outside of the Puget Sound region.

Half of all respondents opposed providing local, state and/or federal support to small communities to retain air carrier service. However, while there was strong opposition to this strategy in the Puget Sound region, there was stronger support elsewhere in the state. Those against this strategy expressed the opinion that the free market should be allowed to work without government intervention. The importance of creating economic development in smaller communities and the importance of protecting state's infrastructure were common themes among supporters of this strategy.

Stewardship

There was consensus on several of the draft stewardship alternative strategies:

- Prioritize system investments (strong support)
- Improve instrument approach capabilities (strong support)
- Establish incentive programs to remove obstructions and enhance safety (strong support)
- Install weather reporting equipment (strong support)
- Improve management of airport pavement (moderate support)
- Establish a program for landing aids and aircraft turnarounds at small airports (moderate support)
- Establish a revolving loan program (moderate support)
- Focus on having projects “shovel ready” (neutral opinion)

Opinion was divided on the state establishing a grant assurances program and increasing its investment in planning. Accountability was the key reason for supporting the state establishing a grant assurances program. For those who were against it, the most common reason cited was the objection to the use of state funds to support airports. For those in support of increasing the state's investment in planning, they saw it as a way to promote system stewardship. Several Puget Sound area respondents expressed concern that this strategy would enable the State to buffer local politicians from controversial projects.

Some participants expressed concern that the alternative strategies are too focused on general aviation issues.

Land Use

When looking at all responses, opinion was divided on all of the proposed land use strategies. In general, those who responded from the Puget Sound area were more likely to oppose the land use strategies, while support was greater in other areas of the state. The responses of participants from outside of the Puget Sound region were more similar to responses from the online survey and E-Town Halls with regard to land use.

Those in support of adding assurances to the state airport grant program to require recipients to adopt comprehensive plan policies and consistent development regulations to discourage incompatible development near airports expressed the opinion that the strategy would increase accountability. They also indicated that this strategy helps insulate airports from local political pressure. For those against this strategy, the most common reason cited was the objection to the use of state funds to support airports. Others cautioned that assurances need to be reasonable, enforceable, and permanent and commented that local government should be in charge of land use decision-making.

Comments were similar in response to the state developing funding eligibility criteria and to the state strengthening legislation to protect public investments in airports as they were to the other land use strategies. Those in support of these strategies indicated that a state role is needed based on the opinion that local government has a poor record when it comes to addressing land use/airport issues. Others expressed concern that funding typically favors airports and airlines, and not communities who may oppose an action. Participants again commented that local government should be in charge of land use decision-making.

Those in support of the state requiring land use certification commented that the language should be stronger. Those against this strategy commented that it favors the needs of airports over community concerns. Others commented that this strategy adds too many layers of bureaucracy.

Participants also expressed concern that the draft alternative land use strategies place too much emphasis on the needs of airports and not enough emphasis on the neighborhood impacts of airport expansion.

Electronic Town Halls

The Aviation Planning Council and WSDOT Aviation hosted Electronic Town Halls on August 26, 2008 and November 18, 2008. A total of 81 Washington residents participated in the first Electronic Town Hall and 115 participated in the second Electronic Town Hall. The Electronic Town Halls were conducted in partnership with Knowledge Networks which recruited participants from KnowledgePanel®, a probability-based panel including those without computers or access to the Internet.

The Electronic Town Halls were led by a moderator who presented background information on the State aviation system information. Participants were asked to respond to multiple choice, scaled, and open ended response questions and invited to submit questions about the aviation system to the moderator. The key advantages of the Electronic Town Hall tool are that it allows for improved sample representation, the ability to present complex information in graphic form with narration from the moderator, and a live question and answer session.

Key Findings

Electronic Town Hall 1 – August 2008

The first Electronic Town Hall elicited feedback on the importance of aviation benefits, the role of state government in aviation, and potential ways the state could address future aviation capacity needs in Washington State.

Importance of Aviation Benefits

Movement of freight and goods (93 percent), response to wildfires (92 percent), connecting Washington to global markets (91 percent), and search and rescue operations (90 percent) were viewed by participants as Very Important or Somewhat Important aviation benefits. Participants also viewed jobs (84 percent), connecting Washington's communities (76 percent), and meeting the needs of small communities (70 percent) as Very Important or Somewhat Important aviation benefits.

Role of State Government

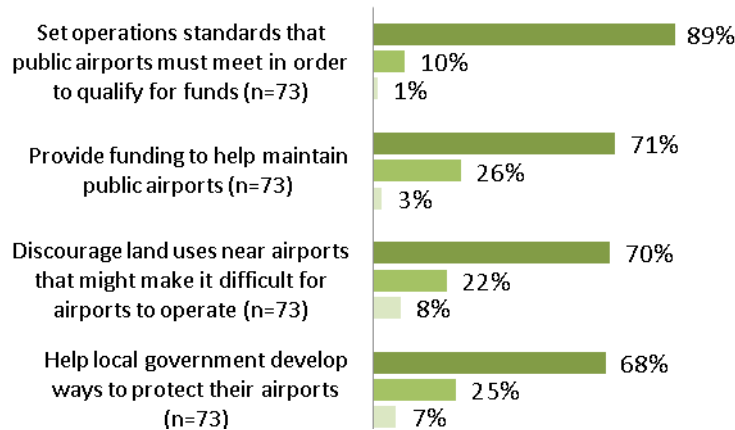
There was strong consensus among participants that state government should set standards for public airports in order to qualify for funds, with 89 percent of participants supporting this role for state government. Participants also indicated support for a state government role in providing funding to help maintain airports (71 percent), discouraging incompatible land uses near airports (70 percent), and helping local governments protect airports (68 percent). Less

than 10 percent of participants indicated little or no support for these roles.

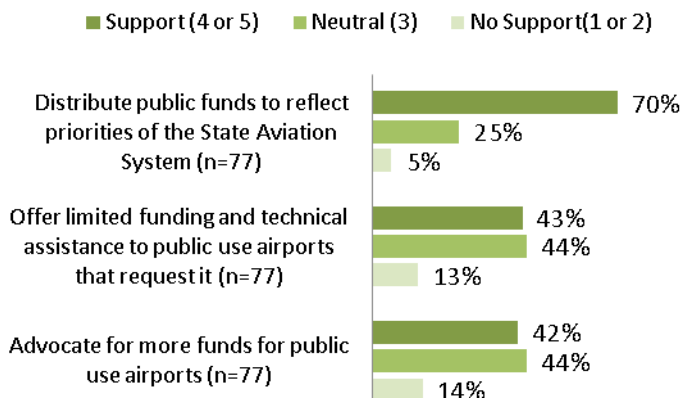
Seventy percent of participants supported the state prioritizing funding to reflect the priorities of the State Aviation System. Participants were moderately supportive of the state offering funding and technical assistance to public use airports as a preservation tool. Forty-three percent of participants indicated support for the state offering funding and technical assistance to public use airports, while 44 percent expressed a neutral opinion about this role for state government. Participants also indicated moderate support for the state advocating for more funds for public use airports. Forty-two percent of participants indicated support for the state advocating for more funds for public airports while 44 percent expressed a neutral opinion about this role for state government.

How much would you support these ideas for the state government's role in aviation?

■ Support (4 or 5) ■ Neutral (3) ■ No Support (1 or 2)



What role should the state play in funding and preserving our public use airports?

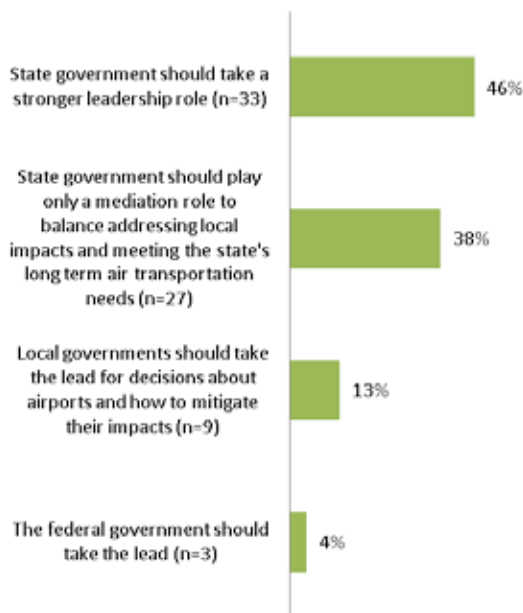


Addressing Future Aviation Capacity Needs

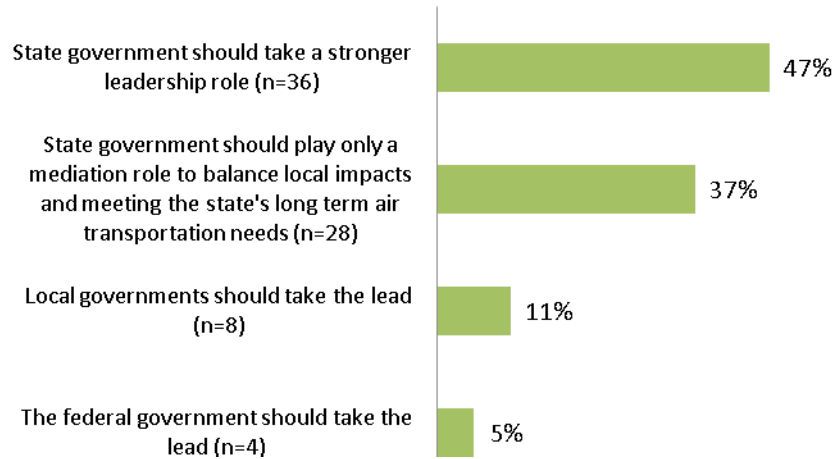
Participants were most supportive of the state taking a leadership role in making decisions about airport expansion and about building or finding a location for new airports. Participants were also supportive of the state playing a mediation role. Participants expressed limited

support for local government taking the lead in decision-making about expanding or building new airports. Participants were least supportive of the federal government taking the lead in decisions about airport expansion or building new airports.

When it comes to expanding existing airports, how should decisions be made?



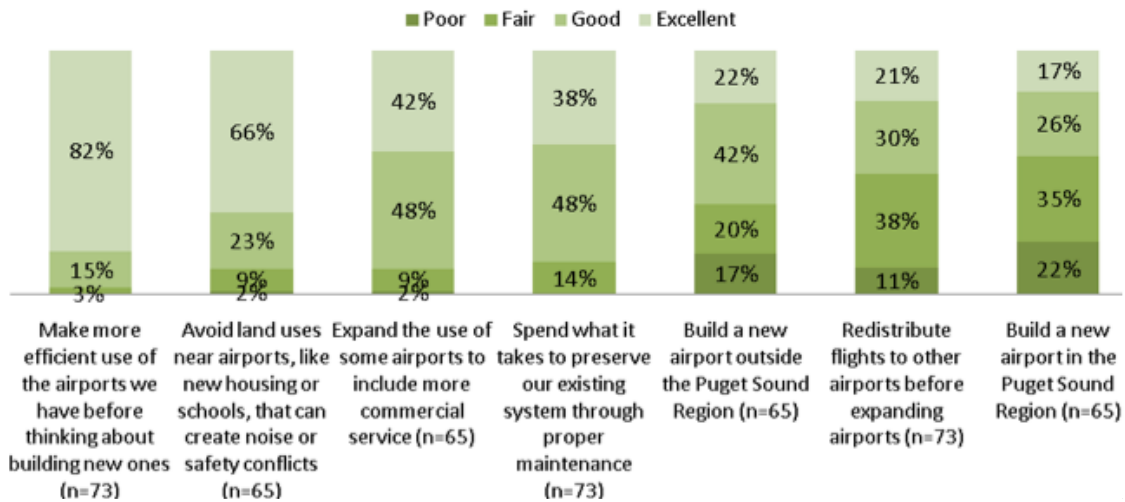
When it comes to building or finding a location for new airports, how should decisions be made?



Participants indicated a preference for making use of the existing system before adding new capacity. Participants also indicated support for avoiding incompatible land uses near airports, for expanding the use of some airports to include more commercial service, and preserving the existing system through proper

maintenance. Opinion was divided about the idea of redistributing flights to other airports. Participants were least supportive of building a new airport in the Puget Sound region as a way to ease capacity shortfalls.

How should the state address capacity shortfalls?



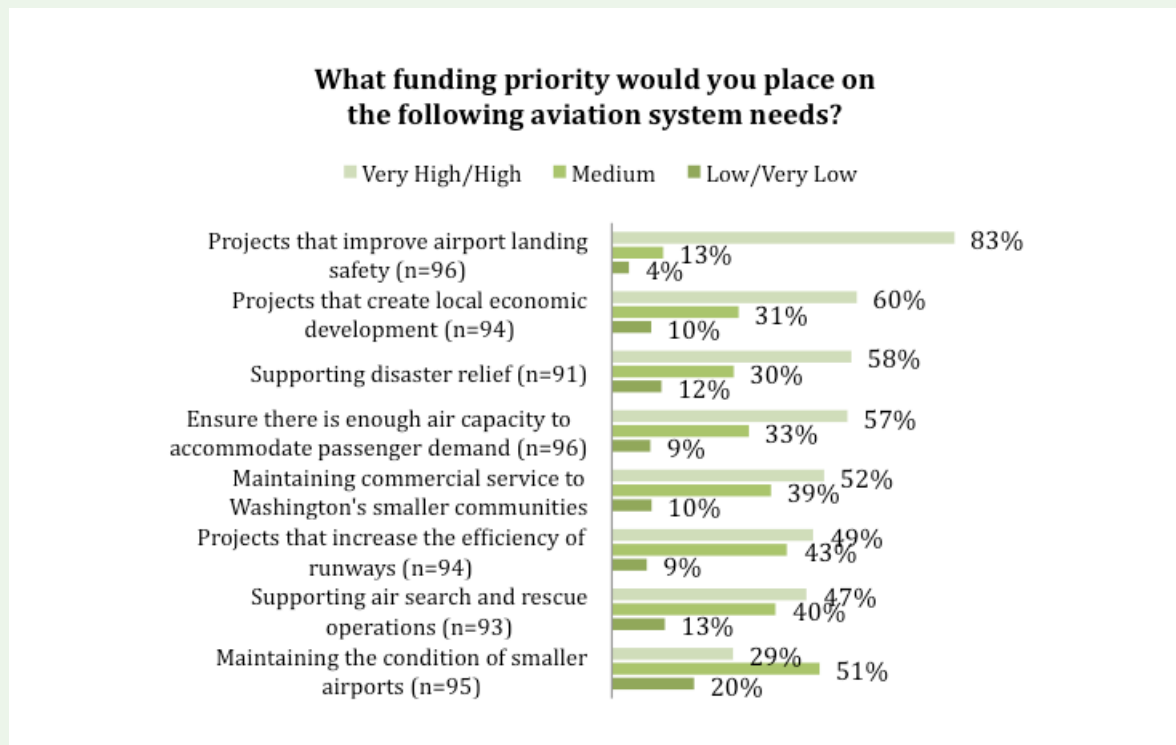
Electronic Town Hall 2 – November 2008

The second Electronic Town Hall elicited feedback on funding priorities for various aviation system needs, level of support for various ways of preserving Washington’s airports, and potential ways to address future capacity needs.

Funding Priorities

More than half of participants identified improving airport landing safety (83 percent), creating local economic development (60 percent), supporting disaster relief (58 percent), meeting passenger capacity demand (57 percent), and maintaining service to smaller communities (52 percent) as top funding priorities.

Participants outside of the Puget Sound region were significantly more likely to view economic development and maintaining service to smaller communities as the highest priority aviation system needs. Participants within the Puget Sound region were significantly more likely to view ensuring there is enough air capacity to accommodate passenger demand and improving airport landing safety as the highest priority needs.

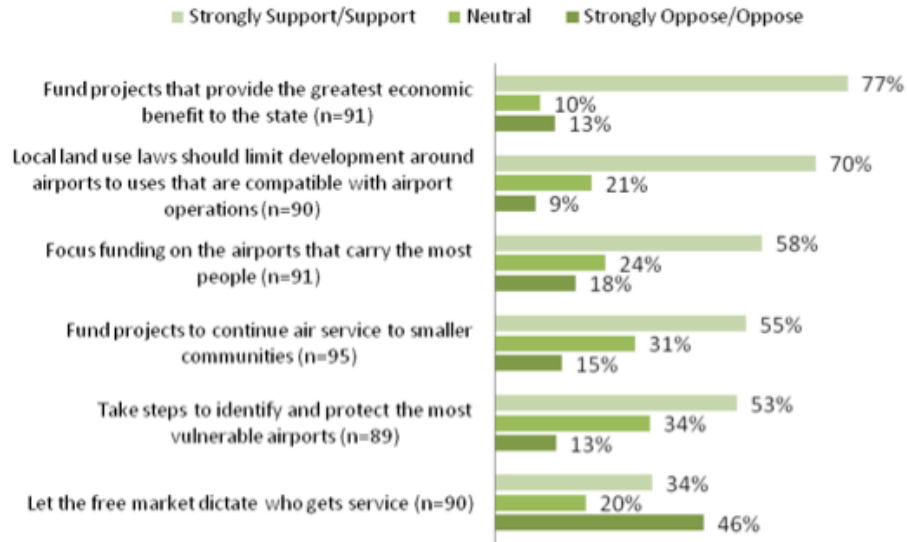


Preserving Washington's Airports

Participants were most supportive of funding projects that provide the greatest economic benefit to the state (77 percent) and limiting incompatible land uses around airports (70 percent). More than half of the participants supported focusing funding on the airports that

carry the most people (58 percent), funding projects to continue air service to smaller communities (55 percent), and taking steps to protect the most vulnerable airports (53 percent). Participants were least supportive of letting the free market decide who gets service.

Please indicate your level of support for each of the following ideas for preserving Washington's current airports.

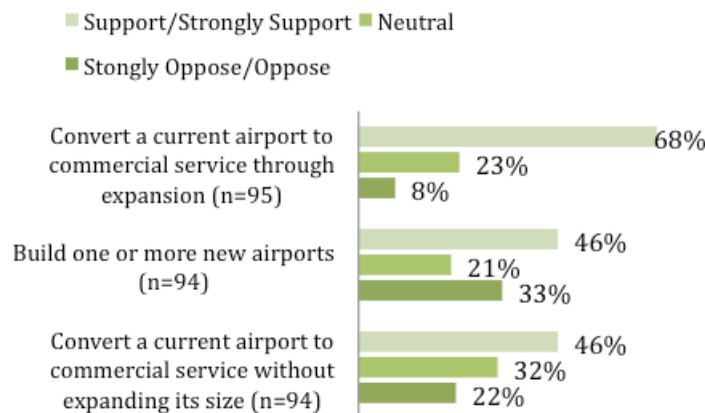


Addressing Future Aviation Capacity Needs

Participants were most supportive of converting a current airport to commercial service through expansion as a means to meet the State's future capacity needs. Participants living outside of the Puget Sound region were more likely to support this idea than those within the Puget Sound region. Opinion was divided on the

idea of building a new airport as a means to meet the State's future capacity needs. While 46 percent supported this idea, 33 percent opposed it. Opinion was also divided on the idea of converting an existing airport without expansion as a means to meet future capacity needs. While 46 percent supported this idea, 32 percent were neutral, and 22 percent were opposed.

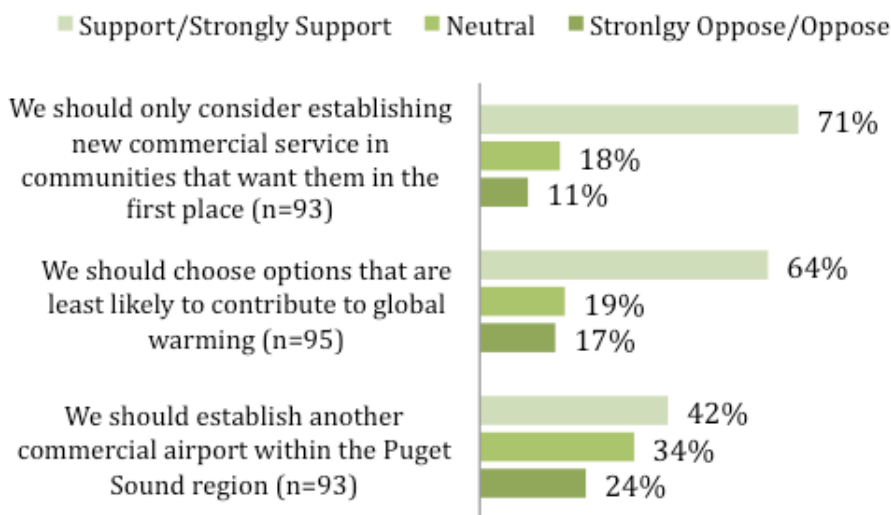
Level of support for ideas to meet the State's future capacity needs



When asked to indicate the level of support for criteria for constructing a new commercial airport, participants were most supportive of only considering establishing commercial service in communities where there is existing support (71 percent). Participants also supported choosing

options least likely to contribute to global warming (64 percent). Opinion was divided about establishing another airport in the Puget Sound Region. While 42 percent of participants were supportive of this criterion, 24 percent were opposed. Another 34 percent of participants indicated a neutral opinion.

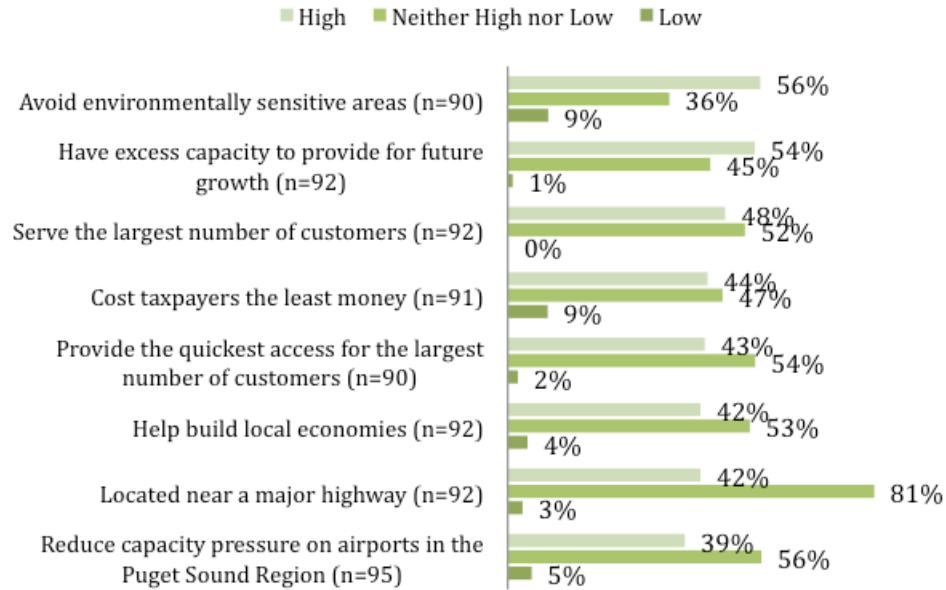
Indicate your level of support for each of the following criteria for the construction of a new commercial airport.



Participants were most supportive of avoiding environmentally sensitive areas (56 percent) and having excess capacity to provide for future growth (54 percent) as criteria for building a new commercial airport. Participants had divided opinions on serving the largest number of customers, providing the quickest access to the largest number of customers, and helping

to build local economies. Participants who live inside the Puget Sound region were more likely to give high weight to the criterion of locating a new airport near a highway than those who live outside the Puget Sound region.

If Washington State decided to build a new commercial service airport, what weight would you give to each of these criteria?



Online Survey

The Aviation Planning Council and WSDOT Aviation conducted an online survey from April 3-17, 2009 to gather feedback from Washington residents on issues relating to aviation system funding and meeting future aviation capacity needs. The survey also presented an opportunity to cross-check findings from the regional public meetings and Electronic Town Halls.

This statistically valid survey was conducted in partnership with Knowledge Networks, which recruited participants using KnowledgePanel®, a probability-based panel used for academic and public policy research. Participants were randomly drawn from the 1,300+ panelists in the State of Washington. The panel was recruited by a traditional random digit dialing (RDD) technology and consists of both Internet-connected households and those without internet connections. Knowledge Networks provides internet access to those who do not have it. Knowledge Networks invited 1,322 Washington residents to complete the survey. In total, 938 surveys were completed for a 71 percent completion rate.

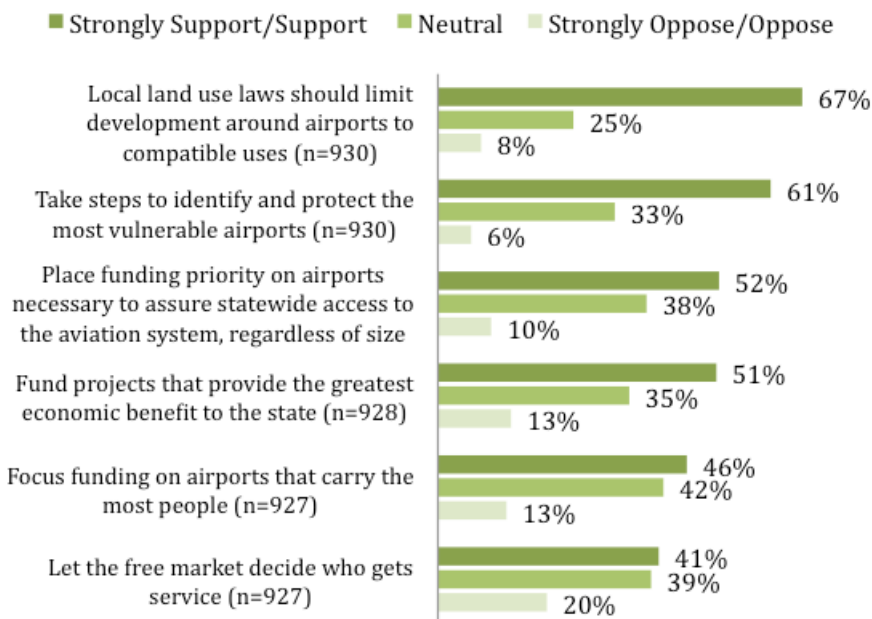
Key Findings

Airport Closures

Because airport closures is one of the key issues facing Washington's aviation system, participants were asked to indicate their level of support for ideas to address the decreasing number of airports in Washington State. At least half of the respondents agree (somewhat to strongly) that local land use should limit development (67 percent), that there be active steps to identify the most vulnerable airports (61 percent), and that a

funding priority be placed on airports necessary for statewide access regardless of size (52 percent), and to focus funding on projects provide the greatest economic benefit (51 percent). Just under half (46 percent) support the idea of placing a funding priority on airports that carry the most people while 41 percent support the idea that a free market should dictate which airports remain in service. Respondents in the Central Puget Sound Region were more likely to support a funding priority for airports that carry the most people.⁵

Support for the following ideas for addressing the decreasing number of airports in Washington State



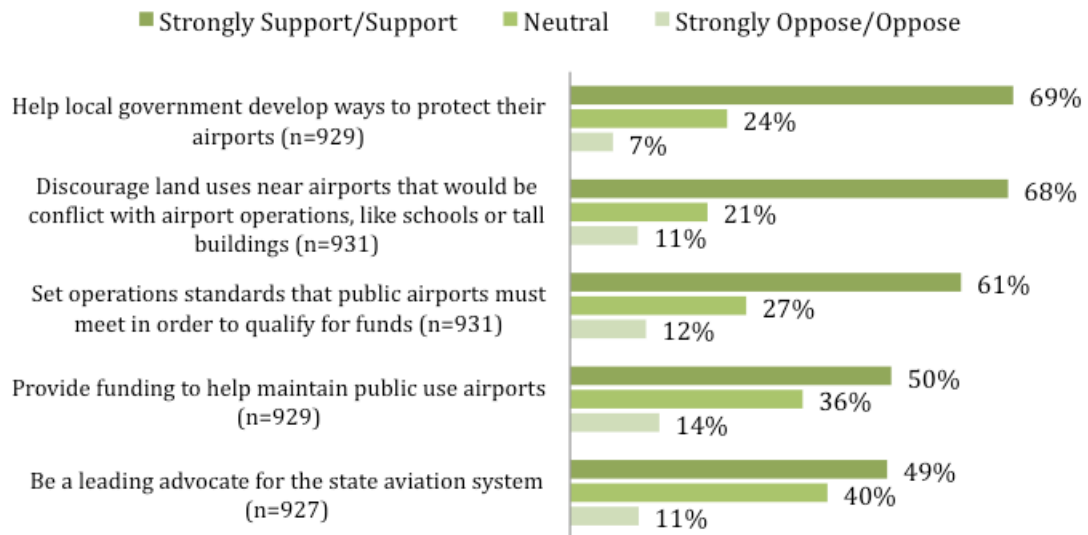
5. T-test, $r=-.16$

Although the results cannot be compared statistically, it should be noted that participants in the Electronic Town Halls agreed with the online participants in strongly supporting local land use laws, but the Electronic Town Hall participants provided more support for funding projects that provide the greatest economic benefit. Electronic Town Hall participants also provided less support for taking steps to identify vulnerable airports and to fund projects for continued air service to smaller communities than did the online survey respondents.

Role of State Government

Overall at least half or more of respondents support all the roles proposed for the state to protect the long term air transportation needs. The roles of helping local government develop ways to protect their airports (69 percent) and discouraging incompatible land uses near airports (68 percent) received the most support.

Support for roles the state government should play in protecting long term aviation needs



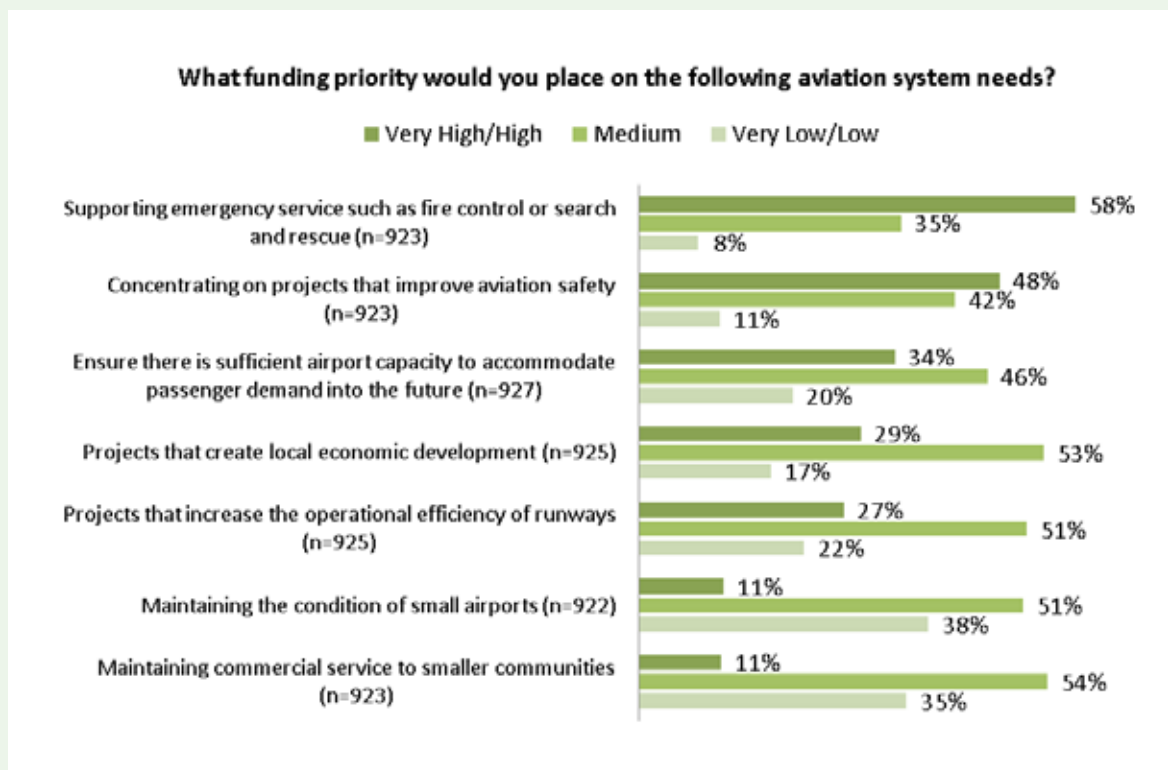
Funding Priorities for Aviation

More than half of respondents placed a high funding priority on supporting emergency service such as fire control (58 percent) and nearly half of respondents placed a high funding priority on concentrating on projects that improve aviation safety (48 percent).

Respondents placed a medium funding priority on ensuring there is sufficient airport capacity to accommodate passenger demand into the future (46 percent). At least a third of respondents indicated a low priority for maintaining the condition of small airports (38 percent) and for supporting commercial service to smaller communities (35 percent). Respondents in the Central Puget Sound Region were more likely to give higher priority to ensuring that there is sufficient airport capacity to accommodate passenger demand.⁶

Whereas online survey respondents gave the highest priority to supporting emergency services, Electronic Town Hall participants placed a higher priority on improving airport landing safety and creating local economic development higher funding priorities.

When asked to choose which priority should be the highest, respondents gave the highest priority to supporting emergency service. The lowest priority was for maintaining commercial service to smaller communities. Again, this is different from the Electronic Town Hall participants, who indicated that projects that create local economic development and ensuring there is enough air capacity to accommodate passengers should be the highest funding priorities. Both groups agree that increasing the efficiency of runways and maintaining the condition of smaller airports should be given a low priority when making funding decisions.

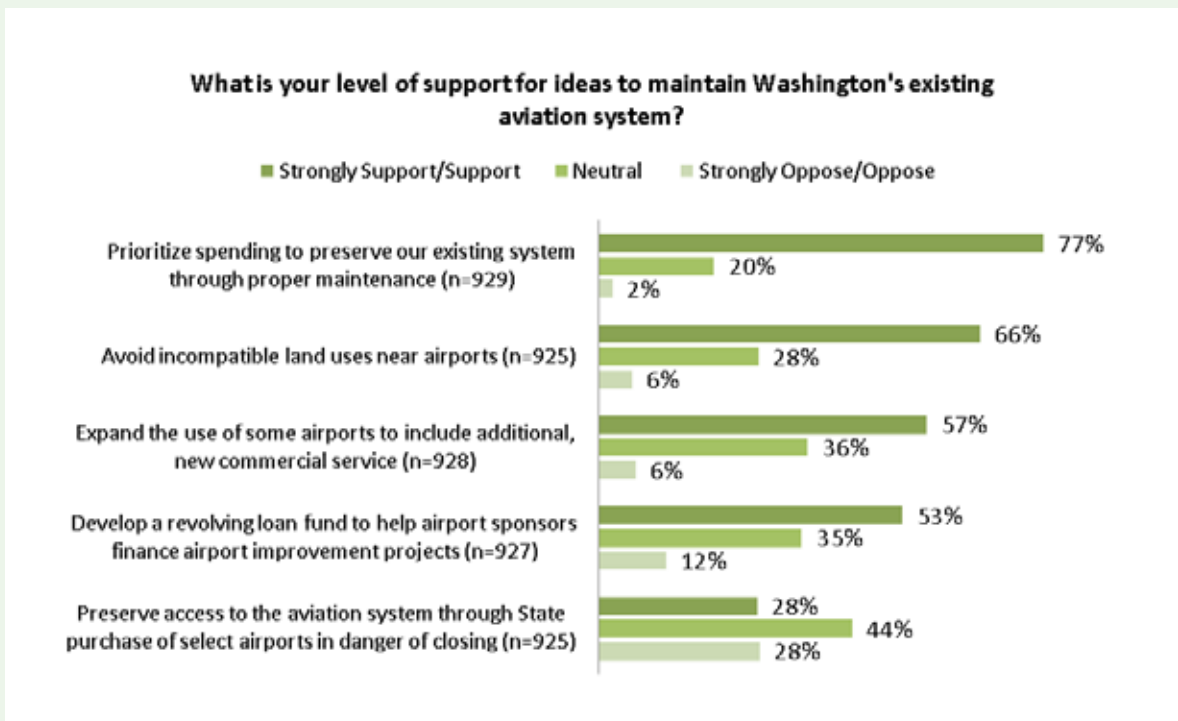


6. T-test, $r = -.13$

Preserving Washington's Existing Aviation System

When considering ways to maintain Washington's existing aviation system, at least half or more of respondents support all the proposals, except the proposal to preserve access to the aviation system through State purchase of select airports that are in danger of closing. Almost a third (28 percent) of respondents opposed this idea of maintaining the aviation system. Forty-four percent of respondents indicated a neutral opinion and 28 percent indicated support for this idea.

Electronic Town Hall participants were not asked about prioritizing spending to preserve the existing system through proper maintenance, but they had similar levels of support for avoiding incompatible land uses and expanding the use of airports to include more commercial service.



Meeting Future Capacity Needs

Almost half (46 percent or higher) of respondents support all the proposals for meeting future capacity needs, except to build new airports. The strongest support was given to looking first at ways of making more efficient use of existing airports before thinking about building new airports (89 percent), to increasing the capacity of existing airports through investments in advanced aviation technology (74 percent), and to moving some types of services to other airports (72 percent). Participants were

least supportive of building new airports to meet future capacity needs. Just 18 percent of respondents supported this idea and nearly half of respondents indicated a neutral opinion.

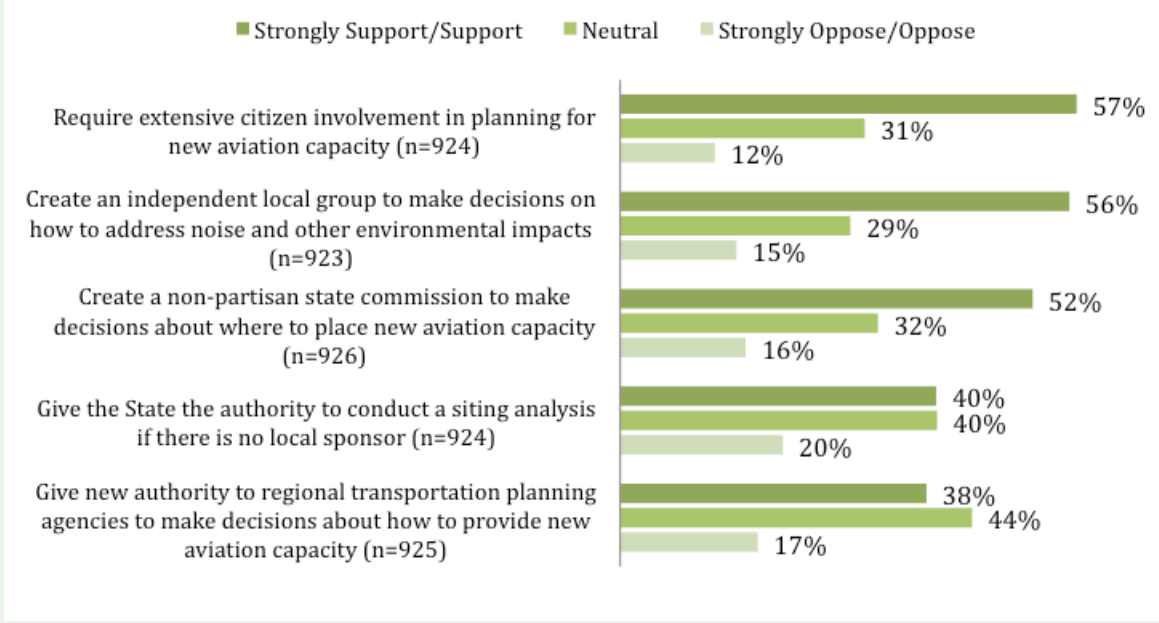
Electronic Town Hall participants indicated similar levels of support for converting current airports to commercial service with and without expansion; however Electronic Town Hall participants indicated a lot more support (46 percent) for building one or more new airports.



At least half of the respondents support requiring extensive citizen involvement in planning for new aviation capacity (57 percent), creating an independent local group to make decisions on how to address noise and other environmental impacts (56 percent), and creating a non-partisan state commission to make decisions about where

to place new aviation capacity (52 percent). Participants were least supportive of giving new authority to regional transportation agencies and giving the State authority to conduct a siting analysis in the absence of a local sponsor. Electronic Town Hall participants indicated similar levels of support for these proposals.

Level of support for ways to meet future capacity needs in a reasonable timeframe





Washington State Department of Transportation

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