CHAPTER 11: AVIATION SYSTEM POLICIES

LATS Policy Development Process

Policy recommendations
were developed by the
Aviation Planning Council
to help guide the
Washington aviation
system

A primary responsibility of the Washington State Aviation Planning Council was to develop a series of policy recommendations for the state's aviation system. These policies are intended to guide decisions regarding how best to meet Washington's long-term aviation needs. As shown in Exhibit 11-1, proposed policies for the Washington State aviation system will be considered in the context of the State Transportation Goals, the Washington Transportation Plan, and Federal Aviation Administration guidance.

Federal and Washington **NPIAS** Multi-Modal State Policy Framework Long-Term Air Aviation Planning System Framework **Transportation** Planning **Principles** Study (LATS) Implementation RTP CIP/TIP Major Local System Land Use Management Investments Decisions Airport Specific Plans

Exhibit 11-1: Washington Aviation System Planning Hierarchy

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.

Aviation Planning Council Statement of Purpose

The Aviation Planning
Council's purpose and
charge is captured in
the adopted
Statement of Purpose

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.

Aviation Planning Council Guiding Principles

The Council's policy recommendations are based on a series of Guiding Principles To provide the framework for developing specific policy recommendations, the Aviation Planning Council first adopted a series of nine Guiding Principles. The Guiding Principles represent assumptions intended to direct state policy in all aspects of its aviation programs. These Guiding Principles are presented below.

 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.

Aviation Policy Areas

The Aviation Planning Council developed policy recommendations related to the following seven key areas:

Policy recommendations have been developed for seven key areas

- Capacity: Policy recommendations focus on the State's role in ensuring the capability of the statewide aviation system to meet future operations demand. Where demand is anticipated to exceed system capacity, recommendations are made as to additional actions that may be needed to maintain and/or expand the system.
- Land Use: These policy recommendations address the need to protect airports from encroachment by development of incompatible uses in the airport vicinity. The policies address regulation of incompatible land uses as well as airspace intrusions at both the State and local levels.
- **Environment:** The Environmental policies address a range of issues, from mitigating adverse impacts to wildlife protection, energy conservation, alternative fuels and waste reduction.
- Safety: The need for aviation system safety is addressed through policy recommendations on the application of design criteria and safety standards, instrumentation and weather reporting, as well as identification of airports critical to the Washington Comprehensive Emergency Management Plan.
- **Stewardship:** Proposed stewardship policies address issues including but not limited to maintenance of the State's system plan, capital investment and funding, technical assistance to airports and the potential for public/private partnerships.
- **Economy:** Policies relevant to the economy address airports not only as supporting the economic growth of the State, but also the need of the State to support airports through investment in aviation infrastructure and education.
- Mobility: The Mobility policies stress the importance of the
 aviation system as an integral part of Washington's overall
 transportation infrastructure. Washington airports link the State to
 the national air transportation system. Federal, state, regional and
 local transportation agencies need to be involved in the planning
 and development of an integrated transportation system.

Aviation Policy Recommendations

The specific policy recommendations developed by the Washington State Aviation Planning Council within each key area are presented below.

Capacity

It is in Washington State's interest that its aviation system has sufficient capacity so that people and goods can get where they need to go efficiently and affordably and so our communities can thrive.

Washington's most immediate capacity issues are within the Puget Sound Special Emphasis Area, where four airports are forecast to exceed their operations capacity by 2030. These airports are Seattle-Tacoma International, King County International/Boeing Field, Harvey Field, and Kenmore Air Harbor. Current economic conditions and recent trends at Sea-Tac indicate that Sea-Tac may not reach capacity until beyond the 2030 planning horizon. However, Puget Sound remains the busiest and most congested aviation area, where state needs will need to be balanced with local impacts. A number of other capacity constraints have also been identified in the state, including terminal constraints that for the most part have ready solutions and aircraft storage shortfalls at many GA airports across Washington.

To support the state's interest in meeting future aviation capacity, the Council has recommended policies that would have the State take a lead role in addressing long-term aviation system capacity needs from a system-wide and regional perspective.

The Council has concluded that there will be sufficient 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 dimished 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.

Capacity Policies

Capacity policies

- 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

In spite of Growth Management Act (GMA) policy direction, many local governments are not protecting public use airports from incompatible land uses through their comprehensive plans, zoning, and development regulations. Competing land uses often impede airport operations and make it difficult for airports to expand to accommodate growing demand. Some examples of land use problems near airports include noise-sensitive facilities (such as homes, schools, hospitals, etc), tall structures in aircraft approach paths, and activities that attract birds.

The Washington State Airport Classification System revealed that many public use airports do not meet objectives derived from the GMA to protect airports from incompatible land uses:

- Only 33% of the state's public use airports meet the objective for having compatible land use policies in the local jurisdiction's comprehensive plan.
- Only 47% of the airports meet the objective for appropriate zoning of the airport (e.g. Airport, Industrial, or Public Use).
- Statewide compliance is higher (62%) for the objective of runway protection zone control, but still too low. Runway protection zones are areas at the ends of runways that should be free of occupied buildings in order to protect people from an aircraft accident. They should also be free of activities hazardous to aviation, such as those that attract wildlife.
- Although the importance of height hazard control has been recognized for more than 60 years in Washington, only 53% of the public use airports are protected by zoning that regulates height hazards or by regulations that prohibit penetrations of imaginary

surfaces defined in the federal aviation regulation known as Part 77.

 The worst performance is for compatibility control. Statewide, only 22% of public use airports have zoning or development regulations that discourage incompatible development near airports.

The Aviation Planning Council has recommended land use policies that are intended to strengthen compliance with GMA through incentives, legislation, and regulations.

Land Use Policies

Land Use policies

- 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.
- 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 airport.
- 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

The Aviation Planning Council's environmental policy recommendations are motivated both by a commitment to environmental quality and an interest in system-wide planning and coordination. The Council's recommended policies consider both the aviation impacts on the environment and the impacts of the environment on aviation.

The range of aviation environmental impacts include:

- Greenhouse gases, impacts
- General Air quality
- Noise
- Habitat and water quality

The Council believes that emerging technologies and best practices can be used to manage certain aviation-related environmental repercussions such as surface water runoff and on-airport carbon emissions. These should be adopted together with conservation and green building practices.

There are a range of regulations at the federal, state and local levels designed to protest the environment such as the:

- Part 150 Noise Compliance (FAA)
- Clean Air Act
- Clean Water Act
- Growth Management Act
- Local land use laws
- Mitigation plans required through SEPA and NEPA

Because of the plethora of environmental regulations already in place, WSDOT Aviation's primary role environmental has been to encourage interjurisdictional coordination and to provide funding and technical assistance to communities and airports.

Environment Policies

Environment policies

- 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

The Council has developed safety policy recommendations to address the issues critical to operating a safe aviation system in Washington State. The Council's safety policy recommendations are based on the belief that a safe aircraft operating environment currently exists within the State, and that this can be continued by assuring that:

- Runway safety areas and airfield design criteria are in compliance with FAA standards.
- Approach paths and airspace surfaces are free from obstructions.
- No hazardous obstacles are allowed to locate in the airport operating environment.
- Real-time weather reporting and Visual Glide Slope Indicator (VGSI) navigational aids are available.

The Council's policy recommendations for safety are based upon the performance measures associated with the Washington State airport classification system and findings from the LATS system performance of analysis.

Safety Policies

Safety policies

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

The Aviation Planning Council believes that system stewardship is Washington State's primary aviation role. Within the air transportation system, individual airports perform a variety of different functions, accommodate different types of aircraft, and contribute at different levels to local, regional, and statewide demand. Airports in Washington range from small seaplane bases to international commercial service airports. The maintenance and effective management of the State Aviation System is essential for the Council's policy interests in airport preservation, aviation safety, airport capacity and environmental protection to be met.

The Aviation Planning Council endorses the Washington State Airport Classification System. Developed as part of the LATS technical studies, the system defines the role of each airport in the state system and the types of facilities and services necessary for each classification. The plan also forecasts the level of public investment required to meet forecast increases in aviation demand.

In addition, Washington State can utilize 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.

Many airports, particularly privately owned public use airports, lack access to funding to support facilities essential to maintain the physical condition of airports. Less than half the publicly owned airports are eligible for federal funding. State grant funding constitutes about 1% 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.

Several of the proposed stewardship policies tackle the issue of state role in working with other aviation system stewards such as FAA, in funding system improvements and in addressing gaps in the system.

Stewardship Policies

Stewardship policies

- 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. In order to provide funding for preservation and necessary development of the aviation system, the State shall return a portion of the general fund revenue generated by aviation system activity to the Department of Transportation Aviation Division for support of such improvements.
- 6. Where gaps exist in the aviation system it may be in the State's interest to own, operate, or develop airports.
- 7. The regional transportation planning process should be coordinated with the aviation system plan and local airport master plans to maximize the net public benefit.
- 8. 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.
- 9. The WASP should encourage efficient airspace by actions including working with the FAA and investing in facilities and technologies.

Economy and Mobility

The preservation of existing public use airports is of utmost importance in meeting Washington's system-wide as well as regional capacity needs. Preserving capacity contributed by both privately owned and publicly owned public use airports is especially important in regions with high demand and/or high growth. The Council recommends that the State take a lead role in ensuring that Washington's long-term aviation system capacity needs be met. The Council's policy recommendations on economic vitality and mobility reinforce the need to prevent airport closures, because local communities need access to the national aviation system to sustain their economies and provide essential services to their citizens.

Economy Policies

Economy policies

- 1. Washington State should consider state, regional, or national outcomes in the analyses of aviation investments and policy recommendations.
- 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 Policies

Mobility policies

- 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.
- 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.

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