

# CHAPTER 1: STUDY OVERVIEW

---

## Introduction

The current update of the Washington Aviation System Plan (WASP ) is part of the Washington State Long-term Air Transportation Study (LATS) and represents the first comprehensive aviation system planning effort in Washington State in over 20 years.

*The Washington State  
Long-Term Air  
Transportation Study  
(LATS) was authorized  
in 2005*

The LATS initiative was authorized in 2005 by the Washington State Legislature through Engrossed Substitute Senate Bill (ESSB) 5121. The transportation bill requires Washington State Department of Transportation (WSDOT) to conduct a long-term air transportation planning study for general aviation and commercial aviation state-wide. The purpose of LATS is to understand what capacity currently exists in aviation facilities and what will be needed to meet future demand for air transportation. In addition to the standard elements of a State Aviation System Plan, this study included an examination of commercial aviation across Washington State as well as a focus on four special emphasis regions identified in the legislation: Tri-cities, Spokane, Puget Sound and Southwest Washington.

LATS includes a study of existing capacity, aviation trends, system performance, market demand and system needs within the Washington State public airport system. The study also includes an assessment of air cargo and a review and evaluation of high speed passenger rail transportation. The statewide aviation system plan and airport capital improvement program addresses air transportation needs in Washington over the next twenty-five years.

LATS study recommendations and findings will be integrated into the Washington Transportation Plan (WTP), the Federal Aviation Administration (FAA) National Plan of Integrated Airport Systems (NPIAS), and regional and local transportation plans. The study will also assist in aligning federal, state, and regional priorities and help to clarify airport sponsor objectives. Ultimately, recommendations from the study will assist the State in managing the Washington public airports as an integrated system, in order to strategically invest the public resources necessary to preserve aviation capacity and provide facilities that effectively accommodate future demand.

# Washington State Long-Term Air Transportation Study (LATS)

## Background

A number of factors underscore the importance of aviation system planning in Washington. Aviation represents an essential element of the state transportation system and provides critical support to the state economy. Washington has a large and dynamic state aviation system, with 138 public use airports that vary in size and role. Airports range from Seattle-Tacoma International Airport—the nation’s 18<sup>th</sup> busiest commercial airport—down to remote or recreational airports, many served only by turf runways, and seaplane bases. In order for the diverse air transportation needs of the state to be met and for long-term strategic investments to be made, Washington’s airports must be maintained and improved under a integrated statewide plan.

Additional challenges face Washington airports over the next 25 years, including:

- Population in Washington has doubled in the last 30 years and will increase by an additional 2.5 million or 40 percent by 2030.
- Limited funding
- Concentration of aviation activity in key regions of the state
- Local land use conflicts
- Uncertain economic conditions

A long-range system plan will help identify key issues facing the state aviation system and will provide strategies to better address those challenges, so that Washington airports can continue to meet the air transportation needs of the state into the future.

## Legislation

In 2005, the Governor authorized the Washington State Long-Term Air Transportation Study (LATS) through Engrossed Substitute Senate Bill (ESSB) 5121. This legislation directed the Washington State Department of Transportation (WSDOT) Aviation to assess existing statewide aviation capacity and implement a plan to address Washington’s future air transportation needs.

The bill authorized a long-term planning study for general aviation and commercial airports in Washington State, with a primary focus on commercial aviation as well as on four Special Emphasis Regions

*A long-term statewide plan is needed to account for significant population growth and to address a variety of challenges expected over the next 25 years*

identified in the legislation – Puget Sound, Southwest Washington, Spokane, and Tri-Cities.

This study has been performed consistent with ESSB 5121 and Federal Aviation Regulations (FAR) Advisory Circular (AC) 150/5070-7 “The Airport System Planning Process.” The study is also consistent with WSDOT’s transportation system policy goals as set forth in the Revised Code of Washington (RCW) Section 47.04.280. See Appendix A for an overview of the State’s planning authority and state transportation goals.

## Study Process

*The three phases of LATS facilitate the development of a systemwide approach to managing Washington’s aviation resources*

The study was developed in three phases. Each phase answered one of the three basic questions fundamental to the development of a systemwide approach to managing Washington’s aviation resources. The LATS process is depicted graphically in Exhibit 1-1 below.

**Exhibit 1-1: The Three Phases of LATS**

<b>Phase I: What do we have?</b>	<b>Phase II: What do we need?</b>	<b>Phase III: How will we get there?</b>
<p>Performed a statewide airport facilities and capacity assessment, including an analysis of current utilization.</p>	<p>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</p>	<p>The Washington State Aviation Planning Council will consider the LATS Phases I and II findings as well as public input. This data and information will be 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.</p>
<p><i>Completed September 2006</i></p>	<p><i>Completed July 2007</i></p>	<p><i>To be completed July 2009</i></p>

**Phase I “What do we have?”** In the first phase of LATS, a statewide airport facilities and capacity assessment was conducted. The analysis identified existing commercial passenger, air cargo and general aviation (GA) capacity at Washington airports as of 2005, as well as existing levels of utilization. Phase I also introduced a state airport classification system that helped define the role and function of individual airports in the statewide system.

**Phase II “What do we need?”** The second phase of LATS focused on understanding the expected future growth in aviation activity in Washington. Long range activity forecasts were developed for each airport, including future demand in airline passenger traffic, air cargo and GA activity. A capacity analysis determined future capacity shortfalls/excess at the individual airport and regional levels.

Performance objectives associated with the state airport classification system were refined in Phase II to better align the system criteria with the findings of the state airport inventory and other Phase I and II study results.. A review of national and state aviation trends, a market analysis of Washington’s commercial airports, and an assessment of the potential impact of high speed passenger rail in the state on airport demand were also conducted. See the Phase II Technical Report for further reading.

**Phase III “How will we get there?”** In the third phase of LATS, an Aviation Planning Council was appointed by the governor to develop policy and strategy recommendations for meeting Washington’s long-term aviation needs. Based on the assessment and analysis from Phases I and II of LATS, as well as on additional analyses conducted during Phase III, the Council will identify priority areas for airport development and investment. The Council shall determine the final recommended actions and submit its report to the legislature, governor, Transportation Commission and regional transportation planning organizations by July 1, 2009.

## Washington State Aviation Planning Council

*An Aviation Planning Council was appointed to develop recommendations based on LATS findings*

The ten member Washington Aviation Planning Council was appointed in Phase III of LATS to develop recommendations regarding the Washington State air transport system. In accordance with Engrossed Substitute Senate Bill (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 GA 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 potential placement of future commercial and GA airport facilities designed to meet the need for improved aviation planning in the region; and
- Include public input in making final recommendations..

The Washington Aviation Planning Council was comprised of representatives from varying geographical areas across the state and with diverse aviation-related backgrounds. In accordance with ESSB 5121, members of the Council consisted of the following:

- Member of the Transportation Commission (serves as Council Chair)
- WSDOT Aviation Director
- Director of the Department of Community, Trade and Economic Development
- Two members of the general public (one from western Washington and one from eastern Washington)
- FAA technical expert
- Commercial airport operator
- Member of the Growth Management Hearings Board
- Washington Airport Management Association representative
- Airline representative

The Council shall submit its final recommendations to the legislature, governor, Transportation Commission, and regional transportation planning organizations by July 1, 2009. The final Washington State Long-term Air Transportation Plan will be based on action by the governor and legislature.

## **Public and Stakeholder Participation**

*Public outreach was comprehensive and a central part of the study*

Extensive public participation has been a central part of LATS. The public outreach process has been comprehensive and well-documented, with outreach activities conducted through all three phases of the study to inform the public and build awareness of the LATS efforts and progress and findings, as well as elicit valuable public input. A Communication and Public Involvement Plan was developed for each phase of the study and included opportunities for public input on the study. Public outreach initiatives over the course of the study have included the following:

- Email list informing over 5,000 registrars of milestones in the LATS study and public participation opportunities, with continual signup available through the LATS website or at public meetings
- A series of Regional Public Meetings conducted across the state during each phase of LATS
- Two Electronic Town Halls – August 2008 and November 2008
- Online Survey – March 2009
- Briefings to government entities and other organizations throughout LATS – on request
- A series of quarterly E-Newsletters
- Aviation Planning Council Meetings/Workshops open to the public – 10 meetings throughout the project
- 30-day public comment period to solicit public input on the draft aviation policies beginning July x, 2008.
- 45-day public comment period to solicit public input on the aviation system strategy alternatives beginning on March 2, 2009
- The LATS project website, with online feedback system taking comments throughout the study–  
<http://www.wsdot.wa.gov/aviation/lats>

Washington State Dept. of Transportation (WSDOT) Aviation has also made efforts to solicit feedback from Washington airport stakeholders and to share results of this important statewide study in a transparent manner. In addition to the public outreach process discussed above, other stakeholder participation in LATS included:

- The FAA worked with the study team through the entire study to review ongoing analysis and guide ongoing efforts.
- A 16 member Technical Advisory Committee (TAC), comprised of representatives of local, regional and state agencies, received regular briefings, reviewed technical analysis, and provided input and recommendations.
- Individual airport sponsors across the state participated in the Phase I airport inventory survey, providing factual information regarding facilities and activity levels, and reviewed the Phase II aviation demand forecasts, recommending revisions where necessary.
- Interviews of more than 30 stakeholders, including state legislators, airline and airport representatives, and system users, were conducted at the beginning of the study in order to inform

stakeholders about the LATS effort and to obtain their input, expectations and recommendations.

*The LATS recommendations reflect a wide range of public and stakeholder input and interests*

As a result of these efforts, LATS incorporates diverse perspectives and input from across Washington State and the final study recommendations reflect a wide range of public and stakeholder interests.

A complete description of the public process including surveys, the Electronic Town Halls, Strategy Workbooks, and comments received during the public meetings is presented in Chapter 10 of this report.

## **Washington Aviation System Plan (WASP)**

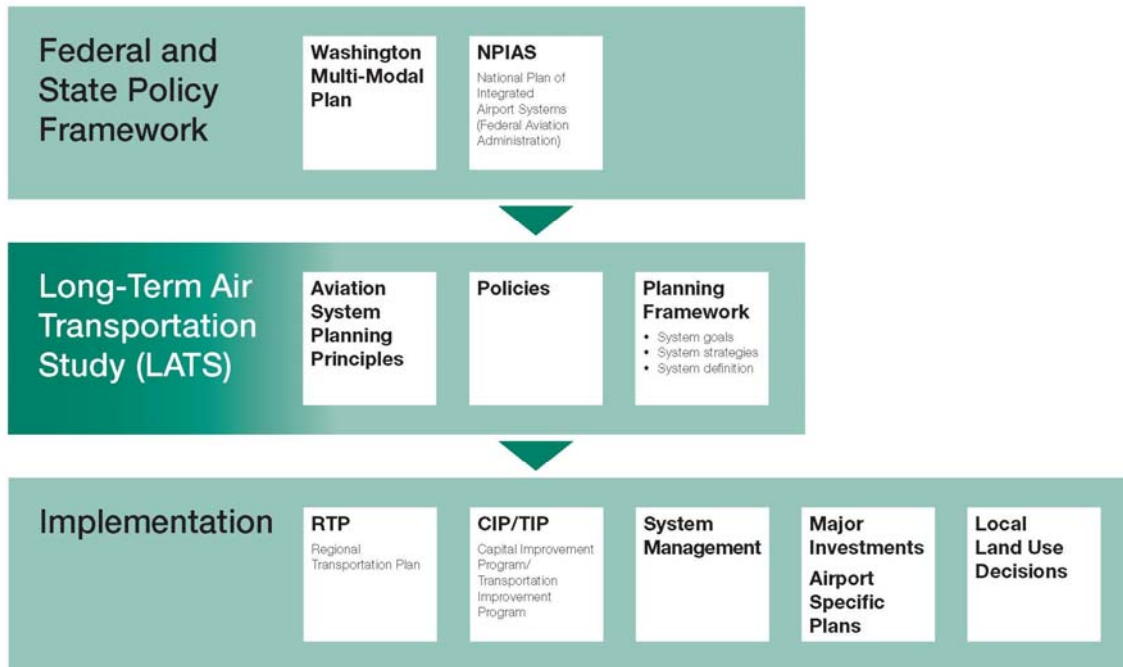
### **Overview of System Planning in Washington**

In 1970, the FAA began funding the state airport system planning effort, which is now referred to as the Washington Aviation System Plan (WASP). Washington State's first plan was completed in 1973 and has undergone periodic updates. The last major update to the WASP was conducted in 1993, with minor updates in 1998 and 2001.

The system plan provides the overall guidance for advancing the aviation system throughout the state. System planning determines the extent, type, location and timing of airport development needed in the state. The goal is to establish a viable, balanced and integrated system of airports. Generally, airport system planning at the state level lies between FAA's national planning, as documented in the National Plan of Integrated Airport Systems (NPIAS), and individual airport master planning by local agencies. Information in local airport plans feeds into the state aviation system plan, which is then transferred up to the federal NPIAS.

Over the last 30 years, state and federal legislation has moved aviation system planning from a single independent plan to a significant element within the overall state transportation framework. The WASP is now an essential component of the inter-modal Washington Transportation Plan (WTP). Exhibit 1-2 on the following page shows where the current system plan update, also known as LATS, falls within the planning hierarchy.

## Exhibit 1-2: Washington's Aviation System Planning Hierarchy



### System Plan Components

The Washington Aviation System Plan update considers a variety of technical tasks and analyses conducted throughout the Washington Long-Term Air Transportation Study (LATS). As depicted in Exhibit 1-3, findings from analyses culminate in the development of recommendations for the Washington State aviation system.

The technical tasks completed in LATS include:

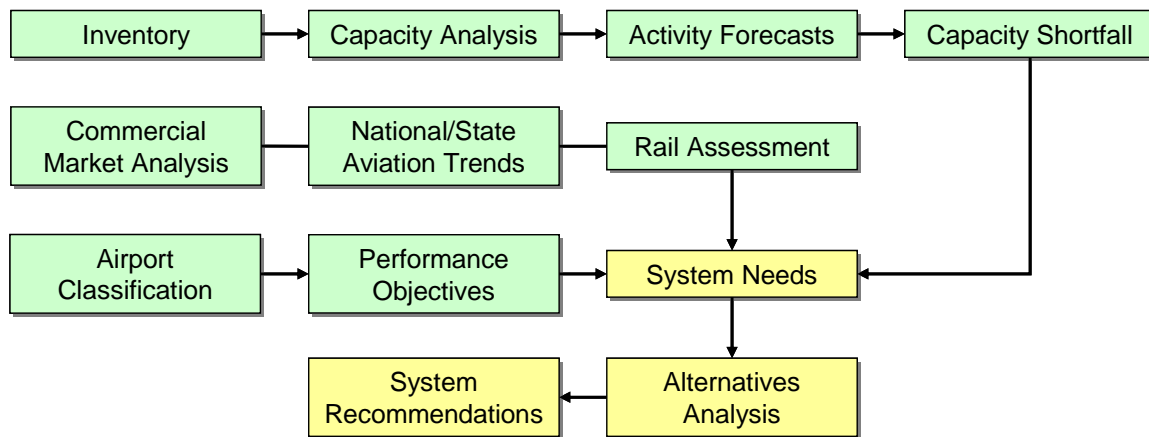
*The system plan considers a variety of technical tasks and analyses completed in LATS*

- Inventory of existing facilities and activity at Washington public airports
- Capacity analysis and airspace assessment for Washington public airports
- Review of national and state aviation trends
- Market analyses for Washington's commercial service airports
- Development of a State Airport Classification System, and the establishment of measurable performance objectives for each airport class



- Forecasts of future aviation activity in Washington, including airline passenger traffic, general aviation activity, and air cargo
- Determination of future capacity shortfalls at the individual airport and regional levels
- Analysis of capacity and demand in the four Special Emphasis Regions across the state
- High-speed passenger rail service assessment to determine whether proposed rail improvements could alleviate capacity constraints in the aviation system
- Identification and evaluation of alternative strategies that address the long-term needs of the Washington aviation system

**Exhibit 1-3: The Washington Aviation System Plan Components**



Further documentation is available in the Phase I and Phase II technical reports.

### System Plan Report Layout

The organization of the system plan report is described below.

- **Chapter One: Study Overview** Provides an overview of the Washington State Long-Term Air Transportation Study (LATS) and the Washington Aviation System Plan (WASP)
- **Chapter Two: Washington Public Airports** Presents a discussion of the public airports in the state and introduces the Washington State airport classification system.

- **Chapter Three: Statewide Activity** Provides an overview of aviation in Washington State, including a discussion of current commercial service and general aviation (GA) activity.
- **Chapter Four: Regional Activity** Introduces the four special emphasis regions designated in Engrossed Substitute Senate Bill 5121 and provides an overview of current/historical activity in each region.
- **Chapter Five: Aviation Trends** Discusses current commercial service and general aviation trends, as related to both the U.S. and Washington State.
- **Chapter Six: System Performance** Presents the performance objectives, developed as part of LATS, that is associated with the airport classification system and provides an assessment of current aviation system performance.
- **Chapter Seven: Activity Forecast** Describes the forecast demand for commercial service, GA and air cargo activity across Washington State through 2030.
- **Chapter Eight: Capacity Analysis** Describes existing commercial service, GA and air cargo capacity in the state and provides an assessment of expected capacity shortfalls/excess through 2030.
- **Chapter Nine: Alternative Airports Assessment** Presents a first level screening of potential alternate airports for the airports forecast to reach their capacity limits by 2030.
- **Chapter Ten: Public Process** Provides an overview of the public outreach process throughout the study, summarizing key findings from each of the public initiatives.
- **Chapter Eleven: Policy Guidance** Presents the Aviation Planning Council policy development process and the Council's recommended policies.