



Paine Field Master Plan 2040

Chapter 1 | Introduction

1

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PREPARED FOR
Snohomish County

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1 Introduction

An airport master plan is a comprehensive study of an airport, describing the short-, mid-, and long-term development plans to meet future aviation demand at an airport; it is a tool which provides the framework necessary to guide potential airport development, while considering both internal and external impacts. The last Master Plan developed for Paine Field (PAE) was adopted by the Snohomish County Council on December 4, 2002 and accepted by the FAA on November 13, 2003.

In 2019, Snohomish County and Federal Aviation Administration (FAA) officials identified the need to update PAE's 20-year Master Plan to address current FAA requirements and account for the implementation of commercial passenger service. The following document outlines the PAE Master Planning effort and is an opportunity to develop a strategic framework for future investments and development at PAE with the input of key stakeholders and the public. The Master Plan establishes a framework for the development of airport facilities and will guide future long-term on-Airport land use and development decisions. The Master Plan is prepared in accordance with FAA guidelines and provides a vehicle for community participation in airport planning.

The PAE Master Plan 2040 provides Snohomish County (the County) with a guide for facility development that will efficiently and economically meet future aviation needs through 2040, while preserving the flexibility to respond to the changing and dynamic aviation industry conditions. The findings of this Master Plan are documented in detail in the following eight chapters (including this chapter):

- Chapter One – Introduction
- Chapter Two – Inventory
- Chapter Three – Forecast
- Chapter Four – Facility Requirements
- Chapter Five – Concepts and Alternatives
- Chapter Six – Development Plan
- Chapter Seven – Airport Plans
- Chapter Eight – Environmental Overview

As of July 2023, the airport officially changed its name to *Seattle Paine Field International Airport*. However, this name change occurring during the Master Plan process. For clarity purposes, the following Master Plan document refers to the airport as either *Paine Field* or *PAE* in the subsequent documentation.

1.1 Airport Setting and Regional Aviation Environment

The following section briefing summaries PAE's location in the region, history, and regional aviation planning efforts.

1.1.1 Airport Location and Role

PAE is located in Snohomish County, Washington between the cities of Mukilteo and Everett, located approximately 30 miles north of downtown Seattle. Snohomish County owns and operates Paine Field which is a unique airport with approximately 1,250 acres with two runways including the 9,010' long Runway 16R-34L. The Boeing Company operates its wide-body aircraft assembly plant on 1,100 acres adjacent to Paine Field and leases significant portions of the airport for its operations. Paine Field has the newest commercial airport terminal in Washington state, and serving as home to over 500 aircraft, including small, single engine recreational aircraft, corporate jets, vintage warbirds, and brand-new Boeing aircraft. Paine Field's privately-owned commercial air terminal services a dozen western destinations. The airport offers high quality aviation facilities, including a FAA tower, Cat 1 ILS, Part 139 certification, Fixed Base Operation services and good access to Seattle, Bellevue, and Redmond.

Paine Field has become a major tourist destination with the Future of Flight Aviation Center & Boeing Tour, the Museum of Flight Restoration Center, and the Flying Heritage & Combat Armor Museum (FHAC)¹.

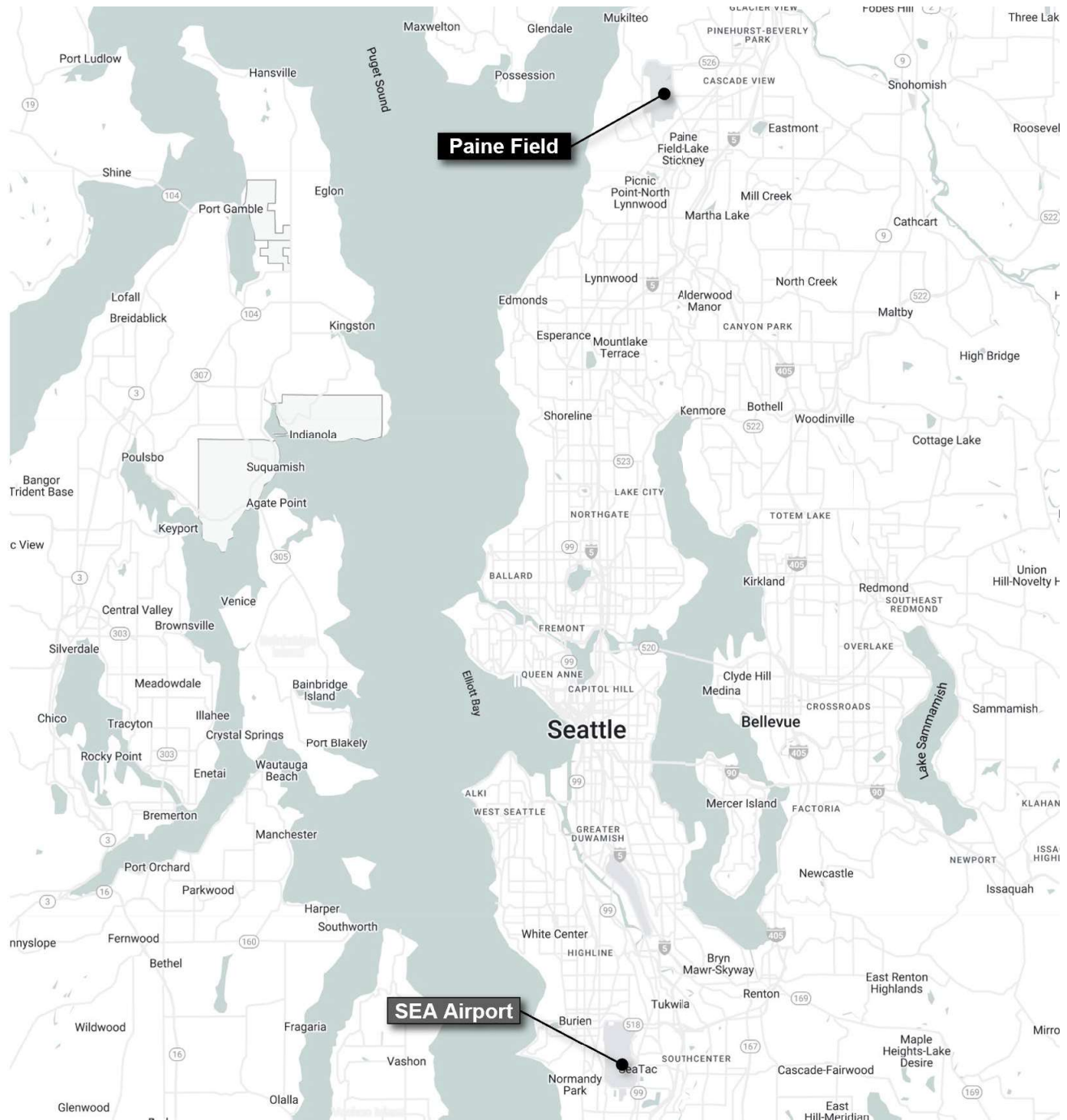
WSDOT conducted an Aviation Economic Impact Study which, using 2018 data, estimated Paine Field's impact at over 158,000 jobs (46,000 direct) and an output of almost \$60 billion annually.

Planning and development at the Airport is primarily regulated by the Federal Aviation Administration (FAA) as a condition of participation in the FAA's Grant Program which requires participating airports to adopt Airport Master Plans subject to review and approval by the FAA. This Master Plan is anticipated to be approved by the County Executive, County Council and Federal Aviation Administration by Fall of 2023. The Master Plan identifies aviation demand and facility requirements at Paine Field through 2040. Continued passenger service growth through the Paine Field terminal is included in the forecasts and projections and capital facilities to accommodate demand are included in the approved Development Plan (CIP) portion of the Airport Master Plan.

Snohomish County has received federal Airport Improvement Program (AIP) grant funds for Paine Field. As a condition of accepting AIP funds, Snohomish County is subject to statutorily mandated grant agreement with FAA which require that the County "make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport." Additionally, Paine Field was transferred to the County subject to deed restrictions via the Surplus Property Act of 1944, which impose substantially similar obligations to those set forth in the Grant Assurances. **Exhibit 1.1-1, PAE Airport Diagram**, depicts the general location of PAE in the Puget Sound region.

¹ Note: FHAC is currently closed but is expected to open in 2023 as the Wartime History Museum.

Exhibit 1-1 PAE Airport Diagram



Source: Landrum & Brown

1.1.2 Brief Airport History

PAE was constructed in 1936 and funded by the Works Progress Administration and was originally planned to be the commercial airport for Snohomish County. Planned by local Works Progress Administration officials and the U.S. Department of Commerce, PAE was designed to bring jobs and economic growth to the Pacific Northwest. Situated eight miles southwest of Everett and 17 miles north of the Seattle city limits, PAE's location was unpopulated and situated on a direct route from Portland to Vancouver, British Columbia, and Alaska. When completed, the airfield was originally designed to include four runways.

PAE supported military operations starting in 1941 and continued to be operated as a military base through the Korean War. By 1946, PAE was deeded to the County from the U.S. military. Since World War II, PAE remains the County's largest GA airport.

In the late 1960s, the Air Force ceased operations at PAE and left the site ready for either greater economic expansion or creation of a regional airport. The County took over full management of the site and opened it for commercial development. In 1966, PAE became the home to the Boeing Company as they purchased property to the north of PAE to site its 747 manufacturing plant, transforming PAE into an important aviation and commercial center. Ever since, Boeing has been a major tenant and force at PAE.

The PAE, which is also part of the 5th largest export district on the U.S. West Coast by value, serves an integral part of the custom aerospace logistic chain. PAE is a facility of statewide significance and supports the production and maintenance of all the widebody jets for The Boeing Company and associated airlines. These programs include the former 747, the current 767, 777, 777X, 787 and Dreamlifter aircrafts, as well as the KC-46A Military Tanker and Air Force One. These planes are manufactured in the largest building in the world by volume, along with a new composite wing facility that opened in 2016. The Boeing Company's presence in PAE supports more than 40,000 workers, representing 46% of all aerospace workers in the state. It also supports thousands more through the support of the more than 200 suppliers that are located off the airport in Snohomish County.

It is one of the County's largest employers and a critical asset to PAE's future. This facility has its own fire department, security team, medical facility and even fitness center.

PAE began commercial passenger flights on March 4, 2019, through a public-private partnership with Propeller Airports Paine Filed, LLC, to build and operate a terminal.

Regional Aviation Studies

The following studies were underway during this Master Plan. A summary of these studies is provided below.

1.1.2.1 Snohomish County Comprehensive Plan

Snohomish County is currently updating their Comprehensive Plan that will guide County decisions and services on a wide range of topics, including land use, transportation, parks, housing, capital facilities and the natural environment. The Comprehensive Plan will consist of five components: General Policy

Plan, Future Land Use Map, Transportation Element, Capital Facilities Plan, and the Park and Recreation Element. Washington State’s Growth Management Act requires that cities and counties update their Comprehensive Plans on a periodic schedule. The county’s Comprehensive Plan is due in December of 2024 and will plan for the next 20 years of population and employment growth through the year 2044.

1.1.2.2 Regional Aviation Baseline Study

The Puget Sound Regional Council conducted the Regional Aviation Baseline Study (completed in 2021) and was designed to provide an overview of the regional aviation system and forecast future needs for the Puget Sound region. The study examined a total of 29 airports varying in size to help forecast future air cargo, GA, and commercial activity needs and potential locations. The Study documented the potential of PAE to accommodate future air cargo and commercial passenger demand, while noting PAE will require further environmental analysis before any expansion of the terminal, terminal ramp or terminal facilities occurs (2018 Environmental Assessment).

1.1.2.3 Commercial Aviation Coordinating Commission

The Washington State Legislature created the Commercial Aviation Coordinating Commission (CACC) in 2019. The CACC was tasked with recommending a new primary commercial aviation facility and additional ways to add capacity to accommodate future demand at other facilities. The CACC made the following recommendations in September 2022:

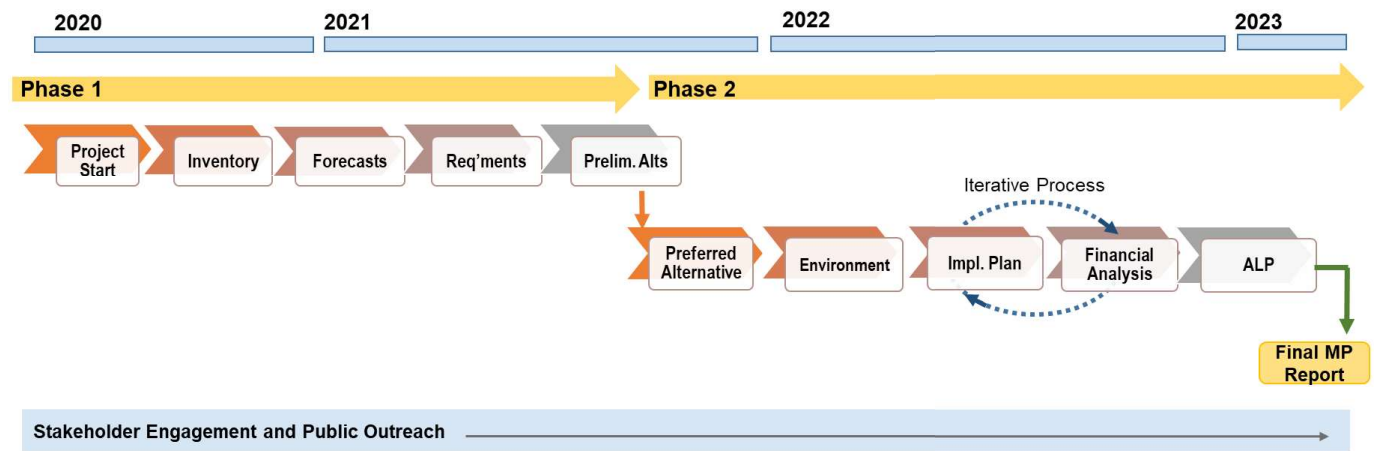
- Add capacity to PAE according to its Airport Master Plan (with potential for additional capacity), assume Seattle-Tacoma International Airport (SEA) executes its Sustainable Airport Master Plan (SAMP), assist other airports interested in pursuing regional commercial service (distributed air service supported by emerging technology).
- Continue to develop a greenfield site option with a two-runway configuration. Pierce County Central, Pierce County East, and Thurston County Central are the three greenfield sites remaining under consideration for a new airport, out of the 10 that were analyzed by the State's consultant.

The final phase of the CACC will provide a single preferred location recommendation by June 2023, after the completion of this Master Plan.

1.2 Master Plan Process

The Master Plan process occurred over a two plus year timeline and followed a traditional FAA Master Plan process set forth by the FAA in Advisory Circular (AC) 150/5070-6B, *Airport Master Plans*. This process involved extensive opportunities for public involvement and comment, as well as input from many stakeholders, including the airlines, FAA, Boeing, PAE tenants, the public, and other public entities.

Exhibit 1-2 Master Plan Process



Source: Landrum & Brown

1.3 Master Plan Committees

At the outset of the Master Plan process, and in addition to the Project coordination team, three specific committees were created to provide guidance to the Master Planning process. The structure of these committees is attached in **Exhibit 1.3-1, Master Plan Committees**.

The **Steering Committee** was established to provide policy and strategic guidance to the Master Plan. The Steering Committee included the following members.

- PAE Airport Director
- PAE Aerospace Economic Director
- Port of Everett Representative
- Business Leaders

The **Stakeholder Advisory Committee** was comprised of major tenants, federal and local government agencies, airlines and community representatives and provided technical inputs to the plan. There were approximately 20 members on this committee represented by the following groups.

- Puget Sound Regional Council (PSRC)
- WSDOT
- FAA
- Alaska Airlines
- Boeing
- General Aviation community
- Aviation-related businesses
- Major Employers (Boeing, ATS)
- Citizens from County Council Districts
- Economic Development Organizations

- PAE Airport Commission
- Pilots Association
- Local government and staff

The **Technical Committee** was comprised of technical PAE staff to review and provide technical input into the Master Plan. In addition, regularly scheduled meetings were held with PAE technical staff to discuss issues.

Exhibit 1.3 Master Plan Committees



Source: Landrum & Brown

1.4 Summary of Community Engagement

Throughout the PAE Master Plan 2040 process, PAE undertook an extensive community engagement program designed to inform, educate, and engage the community, PAE users and related businesses, local and federal agencies, and others to seek meaningful input. This included, but was not limited to, PAE tenants, the public, and community leaders (elected and others) in the vicinity of PAE, as well as other active members of the PAE community and aviation industry. Snohomish County staff and consultants designed and facilitated interactive meeting formats to ensure a balanced and fair discussion of the issues.

Because the COVID-19 pandemic eliminated most opportunities for face-to-face interaction, the Community Engagement Plan relied on communications tools that allow for appropriate social distancing, primarily using digital communication tools such as Zoom and Microsoft Teams.

Public Outreach – Three publicly posted outreach meetings (i.e. public workshops) were held throughout the study period (November 2021, June 2022, and February 2023) to provide information,

as well as to solicit public comments, feedback and suggestions. These public workshops served to provide the public an opportunity to comment and participate in the Master Plan process. A section was added to the PAE website with details about the Master Plan, including information on meetings, materials, and surveys. A summary of each of these outreach meetings is provided in **Appendix I, J, and K**.

The Master Plan team also coordinated with additional public entities.

- PAE Airport Commission
- Snohomish County Committee for Improved Transportation (SCCIT)
- Community Transit
- FAA
- Naval Air Station Whidbey Island (NASWI)

Approximately 32 formal presentations and meetings were held throughout the Master Plan process. **Appendix H** provides a summary of the list of the times of the various technical committee, steering committee, public outreach meetings and the various stakeholder presentations.

1.5 Master Plan Vision, Guiding Principles, and Strategies

A visioning workshop was undertaken at the outset of this project. The PAE Master Plan visioning workshop was undertaken to establish the vision and guiding principles for the Master Plan based on input from Airport staff and the Steering Committee. The Steering Committee developed the vision and guiding principles provided below. These guiding principles served as guidance in various stakeholder and public meetings that were conducted throughout the Master Plan process.

The direction and guidance from the Steering Committee about the future of PAE was critical to this planning process.

1.5.1 Airport Vision for Paine Field Airport

The resulting Airport Vision was recommended by the Steering Committee and is presented as follows.

Snohomish County's Paine Field Airport will remain the primary economic engine for Snohomish County, the Puget Sound region, and the state of Washington, providing family wage jobs, opportunity, and infrastructure to serve our residents.

Paine Field wants to preserve and enhance the prosperity and quality of life of Snohomish County's residents by strengthening its main lines of business: supporting aerospace, trade and other industries, commercial air service, and general aviation.

Paine Field Airport will ensure that its operations are safe, and fiscally, environmentally and socially responsible.

1.5.2 Master Plan Guiding Principles

The resulting Guiding Principles are presented below and fundamental in evaluating the range of development alternatives that will be prepared in the Master Plan.

Table 1-1 Master Plan Guiding Principles

Category of Principle	Potential Principle
Public Benefit	<i>Paine Field will be managed in a way that benefits the greater good, or the broader public.</i>
Safety	<i>Manage, maintain and invest in Paine Field to prioritize the safety of all its users and the public.</i>
Economic Development	<i>Promote development at the airport that provides family wage jobs.</i>
Airport Resilience	<i>Ensure that the airport is prepared to adopt new technologies and capitalize on emerging opportunities to better serve the public and customers.</i>
Environmental Stewardship	<i>Protect natural resources and support long-term environmental sustainability to ensure that the needs of today are met without jeopardizing the future.</i>
Social Responsibility	<i>Assure that activities at Paine Field support the lives, livelihood, and values of Snohomish County’s residents.</i>
Fiscal Responsibility	<i>Manage revenues, expenditures and investments that protect Paine Field’s financial health and enable investments to achieve our vision.</i>

Sources: PAE and Landrum & Brown

1.5.3 Additional Features of the Master Plan

Additional features of this Master Plan include the following elements:

- **Financially Feasible:** The phasing of capital projects is aligned with the ability to secure available funding.
- **Environmentally Compatible:** The plan strives for environmental stewardship in accordance with PAE guidelines.
- **Balanced:** The plan maintains a balance between PAE development needs and community impacts.
- **Technically Sound:** The plan complies with federal, state, and local requirements and can be constructed efficiently and cost effectively.
- **Responsive:** The plan addresses the physical and operational needs of all stakeholders.