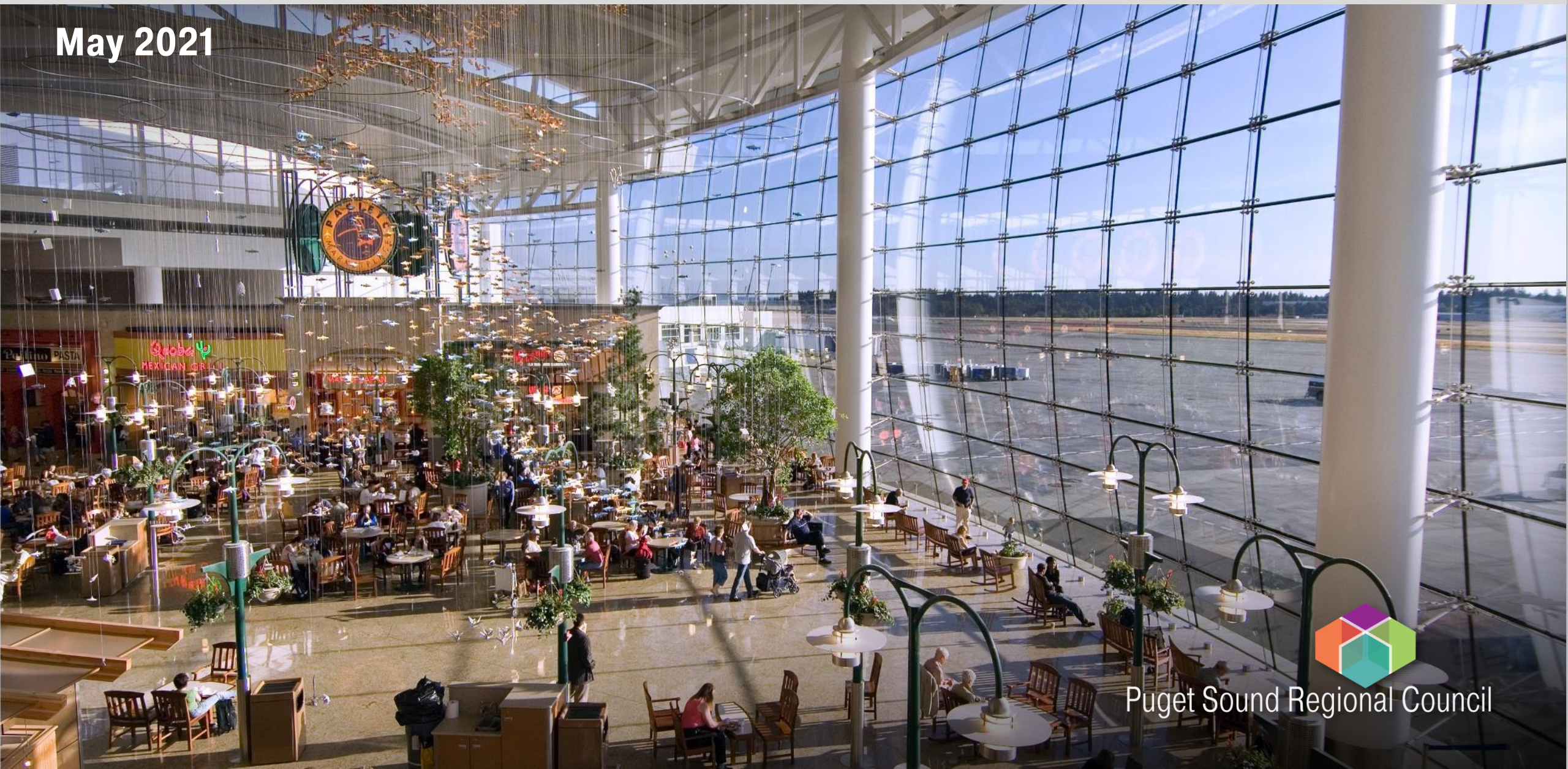
Regional Aviation Baseline Study

May 2021



Puget Sound Regional Council

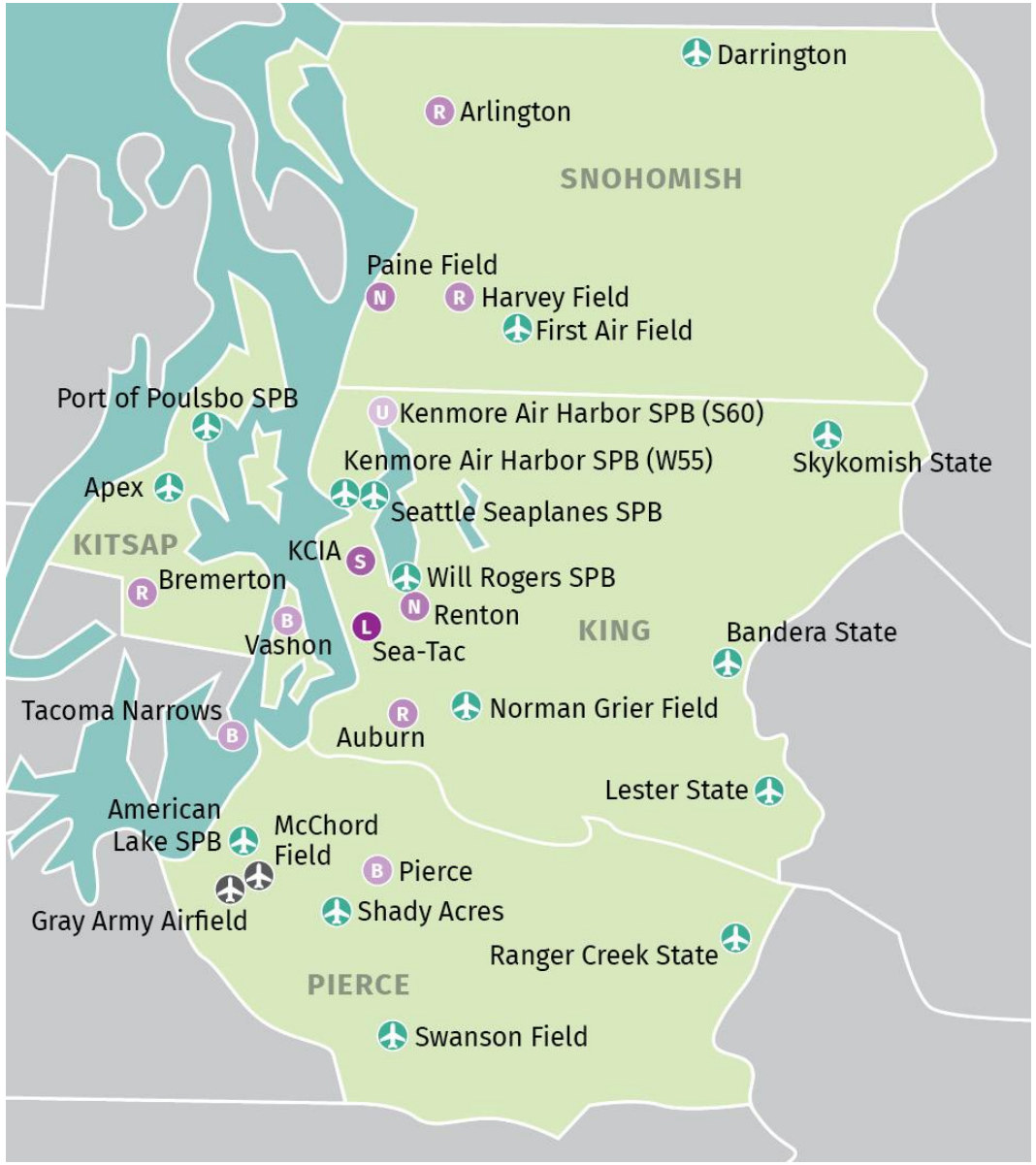
Regional Aviation Baseline Study

Study Objectives

- Identify the roles of each airport and the aviation activities within the region based on existing planning efforts
- Provide a regional perspective on how aviation activities at airports in the region interact with each other, the community and the broader economy
- Obtain input from stakeholders about their needs and build a common understanding about aviation and airspace constraints
- Identify future aviation needs within the central Puget Sound Region and set the stage for future planning

PSRC is not making recommendations on expansion of current airports or siting of new facilities

Overview of Regional Aviation System



National Plan of Integrated Airports System (NPIAS) Airports

- Large hub
- Small/Non-hub
- National
- Regional
- Local/Basic
- Unclassified
- Non-NPIAS Airport
- Military Airport

SPB=Seaplane Base

Trends, Forecast, and System Requirements by Sector

Commercial
Scheduled passenger service

General Aviation
Business, flight instruction, medical, emergency, law enforcement, recreation, and tourism

Air Cargo
Freight and mail carried in the lower hold of passenger aircraft and on dedicated freighters

Forecast represents regional demand for air service in 2050
if unconstrained by airport or airspace capacity

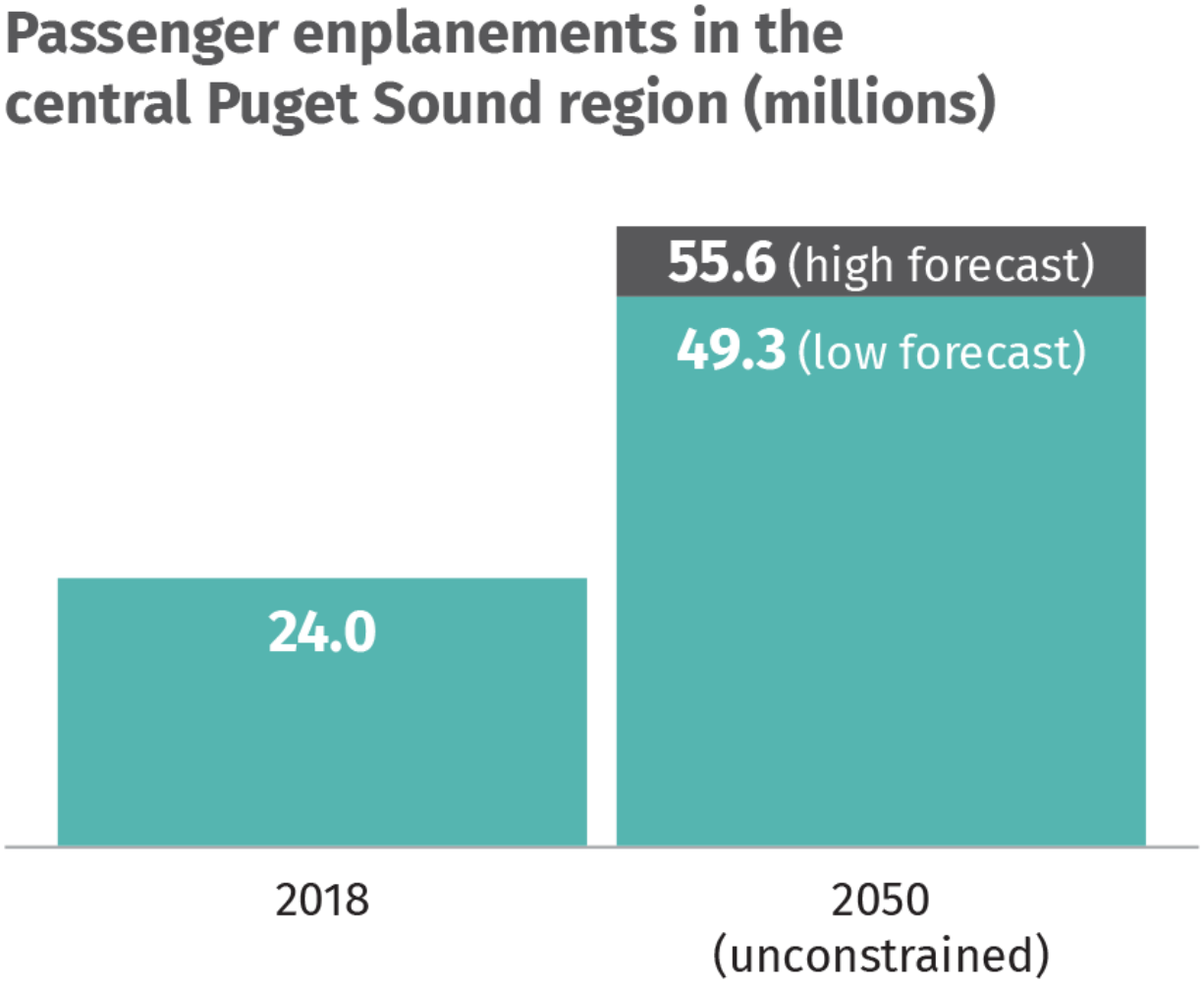
Commercial Aviation

Commercial
Scheduled passenger service

Trends, forecasts, and system requirements

- Based on current airport capacity and plans, the region will be able to accommodate approximately 28,600,000 enplanements by 2027
  - *One enplanement = one passenger boarding a plane*
- The projected demand for passenger enplanements is 55,600,000 by 2050 – nearly double the 2018 demand
- As the region grows, congested roads mean it will take longer to access airports – light rail and other multimodal solutions could help increase access
- Sea-Tac faces airspace constraints – but new FAA navigation systems and procedures could help make better use of airspace

Commercial Aviation



Based on the forecasted demand, there will be a gap of 27 million unmet enplanements per year by 2050

General Aviation

General Aviation
Business, flight instruction, medical, emergency, law enforcement, recreation, and tourism

Trends, forecasts, and system requirements

- There will be adequate runway capacity to accommodate general aviation demand through 2050
- There has been a decrease in the number of private pilots and aircraft maintenance technicians in recent years
- Two issues currently facing general aviation airports in the region:
  - *Deteriorating runways*
  - *Insufficient hangar space*

Air Cargo

Air Cargo
Freight and mail carried in the lower hold of passenger aircraft and on dedicated freighters

Trends, forecasts, and system requirements

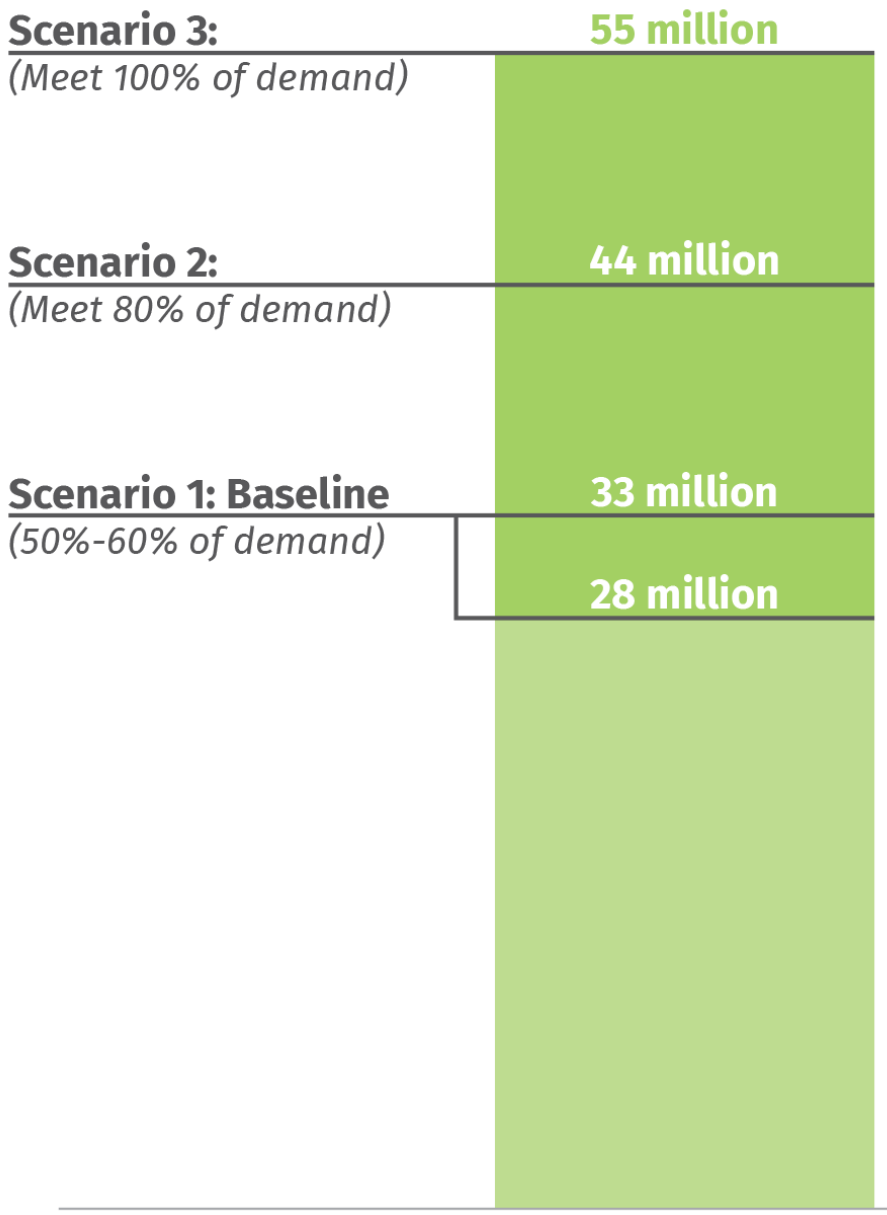
- Growth is driven by globalization and e-commerce as well as strong state exports
- Air cargo growth is tied to international commercial flights, but capacity constraints at airports and off-site facilities can be limiting factors
- 85% of Puget Sound air cargo is served by Sea-Tac and King County International Airport
- Demand for air cargo is expected to more than double by 2050
- Air cargo demand is often seasonal
- There are opportunities to redesign existing on-airport facilities, develop new off-airport facilities, or use other airports as cargo relievers

Air Cargo

Based on current plans, the region will fall short of on-airport warehouse space starting in 2027.

The limiting factor for both Sea-Tac and King County International Airport is warehousing and landside access.

Scenarios to Address 2050 Aviation Demand



Scenarios to Address 2050 Aviation Demand

Scenario 1: Baseline
Meet 50-60% of demand

- Current capacity
- Plans for increased capacity at Sea-Tac through the Sustainable Airport Master Plan

Scenario 2
Meet 80% of demand

- Assumes Sea-Tac Long-Term Vision projects
- Would require 2 commercial service runways at 1 or 2 airports
- Would require significant development at 1 or 2 airports

Scenario 3
Meet 100% of demand

- Assumes Sea-Tac Long-Term Vision projects
- Would require 3 commercial service runways at up to 3 airports
- Would require significant development at up to 3 airports

Benefits and Challenges of Meeting Aviation Demand

	Benefits	Challenges
Baseline: Meet 50%-60% of demand	No additional increase in potential 2050-level noise and GHG emissions, single-occupancy vehicle trips to airports	Lowest increase in airport economic impact and jobs by 2050. Approximately $4 billion to $9 billion in added economic activity and 27,000 to 61,000 added jobs due to Sea-Tac Sustainable Airport Master Plan
Meet 80% of demand	Roughly $20 billion in added economic activity 135,000 added jobs Increased business, consumer travel choice	Would increase 2050-level noise and GHG impacts, single-occupancy vehicle trips by 60% over baseline*
Meet 100% of demand	Roughly $31 billion in added economic activity 209,000 added jobs Greater business, consumer travel choice	Would increase 2050-level noise and GHG impacts, single-occupancy vehicle trips by almost 100% over baseline*

**Assumes no improvement in current aircraft efficiency, noise emissions, and fuel types*

Evaluating the Region's Airports

29 regional airports were analyzed for the ability to potentially accommodate new or additional commercial air service.

This analysis is not a recommendation for expansion at these airports.

This analysis was designed to show the degree to which the region might accommodate forecasted demand using existing facilities.

Building a new airport was not assessed as part of this study.

Evaluating the Region's Airports

Evaluation criteria included:

- Ability to accommodate at least one 7,000-foot runway
- Airfield capacity
- Airspace challenges
- Flood zone constraints
- Ownership considerations
- Impact to aerospace manufacturing
- Transportation infrastructure
- Proximity to population and jobs

All but 4 airports were eliminated due to critical considerations like runway length, conflicts with existing flight paths, likelihood of flooding, or impacts to the surrounding developed area.

Evaluating the Region's Airports

Four airports met the minimum standards:

— Arlington Municipal

— Bremerton National

— Paine Field

— Tacoma Narrows

PSRC is not recommending new or expanded commercial air service at any of these airports. The decision to accommodate commercial air service rests solely with the airport sponsor.

Public Engagement Methods

The Regional Aviation Baseline Study team collected input through 4 primary methods:

Survey

- Statistically-representative, random sample survey of residents in the four-county region
- 1,416 respondents
- Available in English, Chinese, Somali, and Spanish

In-depth interviews

- Replaced focus groups (due to COVID-19)
- Selected from survey participants
- 22 interviews

Online open house

- Ran September 21 through October 31, 2020
- Promoted to more than 200,000 addresses in the four-county region
- Included poll questions and comment form
- More than 14,000 page views and nearly 400 users left comments

Virtual public meetings

- Three public meetings: September 23, 29, and 30, 2020
- 176 participants total
- Included poll questions and opportunity to submit questions and comments

Community Input

Most people who participated said the region should prioritize meeting the demand for aviation and also expressed significant concern about noise and environmental impacts.

Next Steps

The study forecasts that demand for commercial aviation service will double by 2050, and the region will fall short of on-airport warehouse space for air cargo by 2027.

- **Final Report:** PSRC will release the final report and executive summary in May 2021; it is our intent that this study will provide a foundation for regional decision makers.
- **Commercial Aviation Coordinating Commission:** The CACC is tasked with developing recommendations to meet Washington state critical aviation system capacity needs.
- **Additional studies:** Many entities are studying aviation issues; these studies may help inform next steps in the region.
  Visit www.psrc.org/aviation-baseline-study for more information.

Thank you

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