Regional Aviation Baseline Study

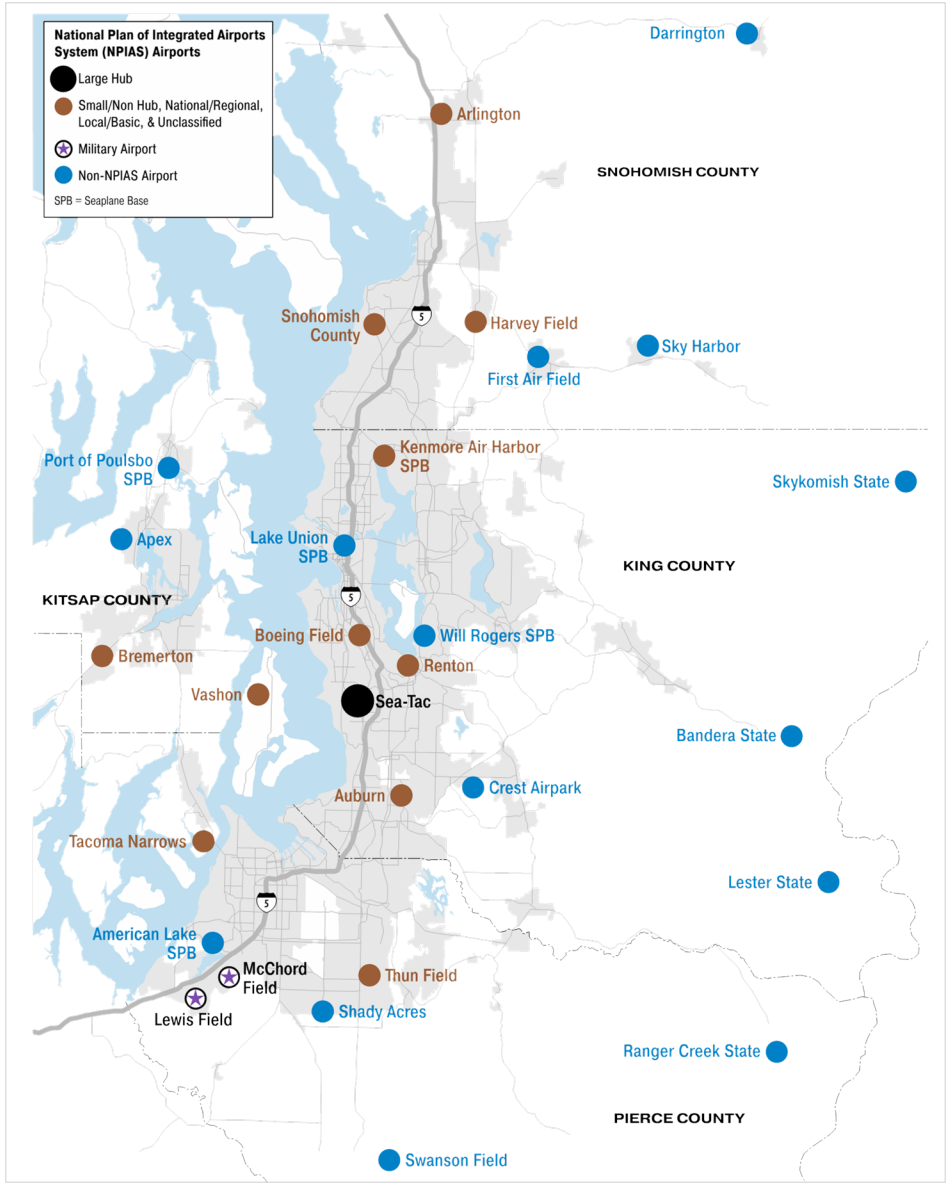
June 27, 2019

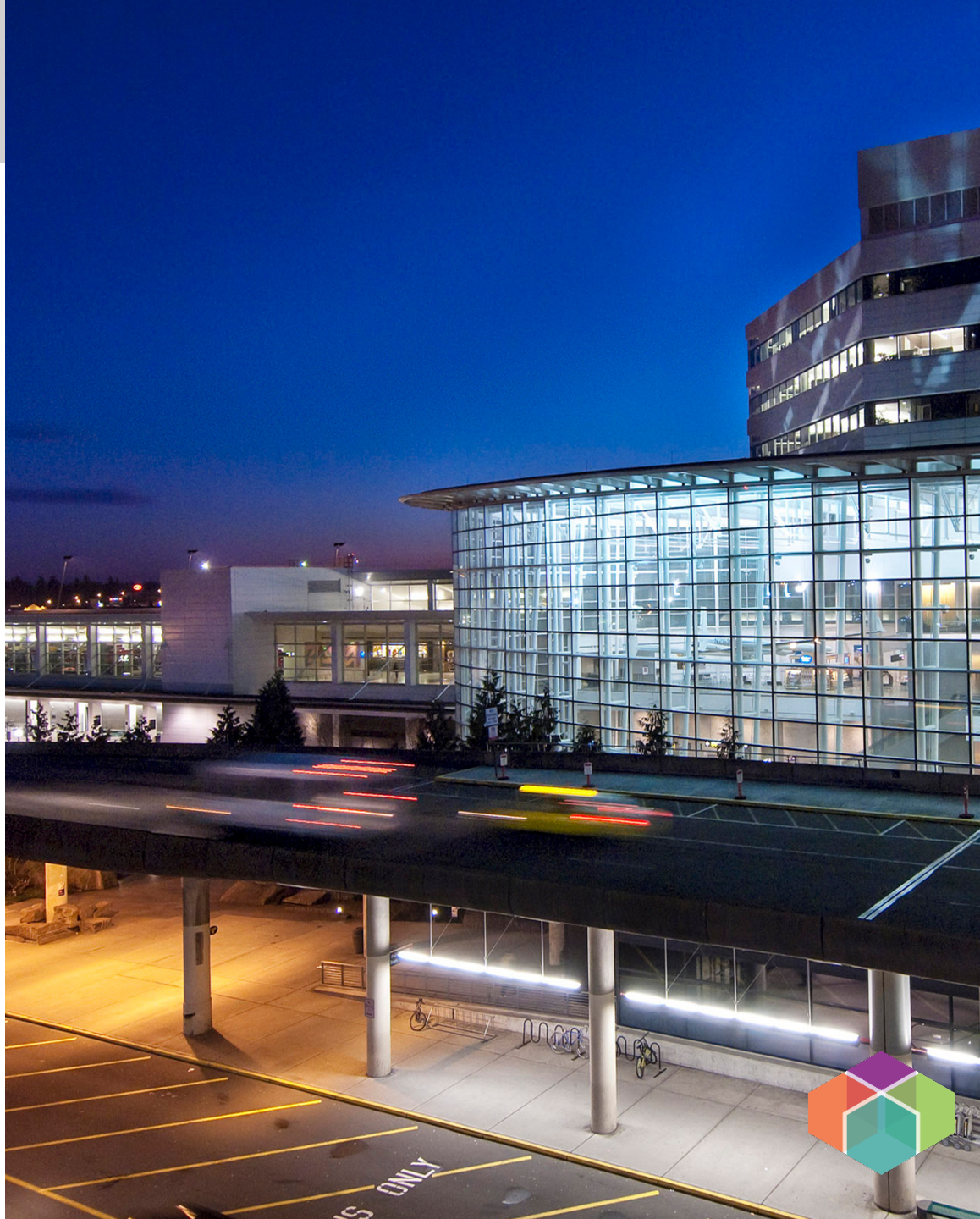
Regional Aviation Baseline Study

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

29 Regional Airports





Study Phases

Airport & Aviation Activity Analysis
(Summer 2019)

Today

- Market trends
- Regional forecasts

(Later in Summer 2019)

- Existing conditions & constraints
- Airspace flow analysis

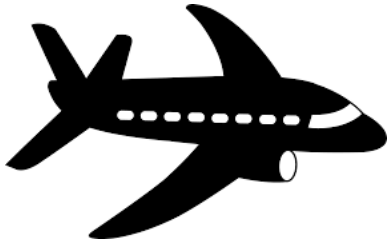
Future Aviation Issues Analysis
(Fall/Winter 2019/2020)

- Future regional landside and airside capacity needs
- Future needs by activity and by airport
- Major challenges
- Economic analysis

Scenario Definition & Evaluation
(Spring/Summer 2020)

- Identify and analyze scenarios
- Identify potential next steps
- Publish final report (Fall 2020)

Market Trends and Regional Forecasts



Commercial

Scheduled passenger service

Air Cargo

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

General Aviation

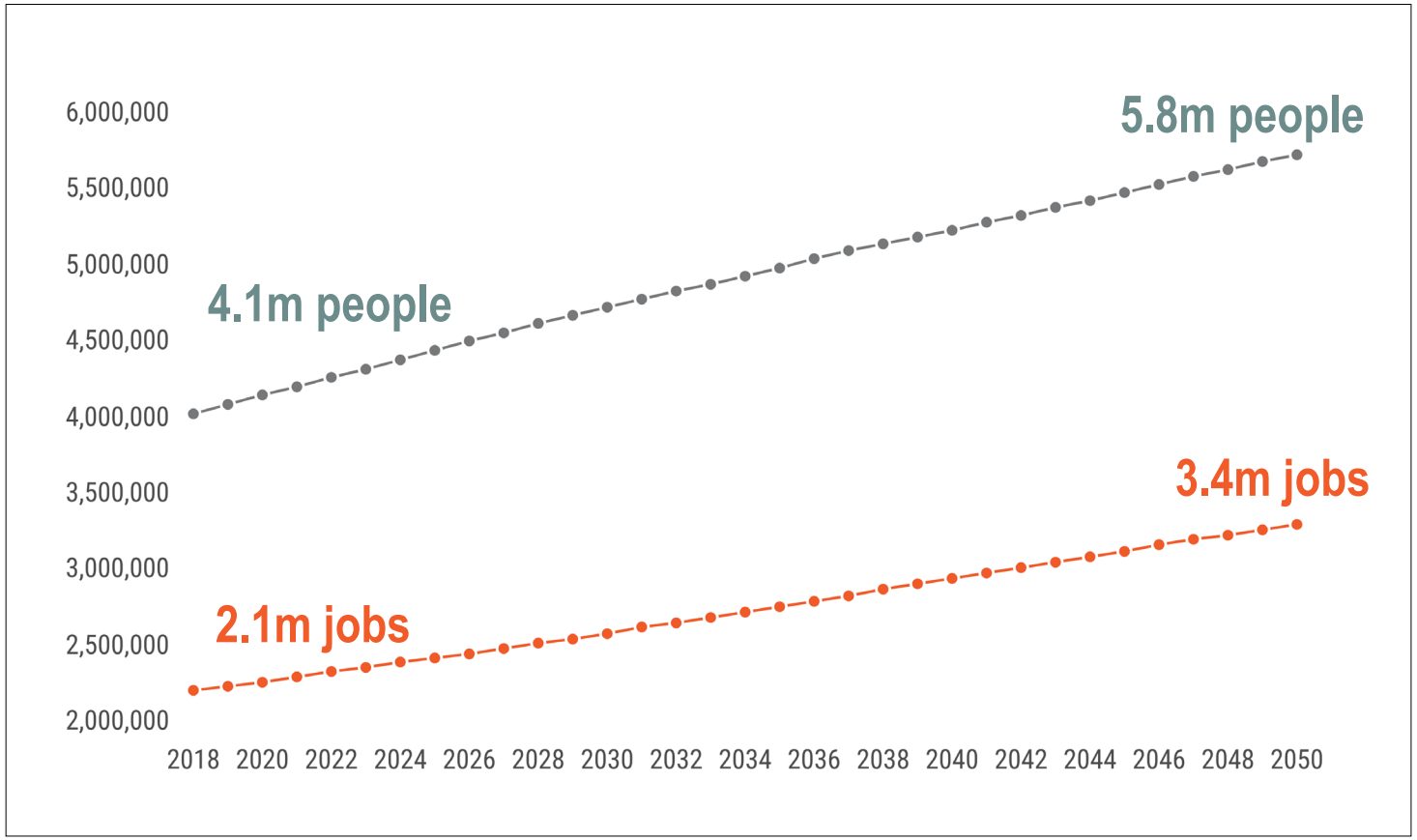
Business, flight instruction, medical, emergency, law enforcement, recreation, and tourism

Forecasts represent unconstrained regional demand in 2050

Overall Aviation Trends

- Aviation closely tied to national economic trends as well as regional economic and demographic trends.
- Recent population, employment and income growth is driving regional aviation demand and this trend is expected to continue.
- Sea-Tac is a growing hub for travel to Asia.

Population and Employment Forecasts, 2018—2050



Commercial Aviation Terminology

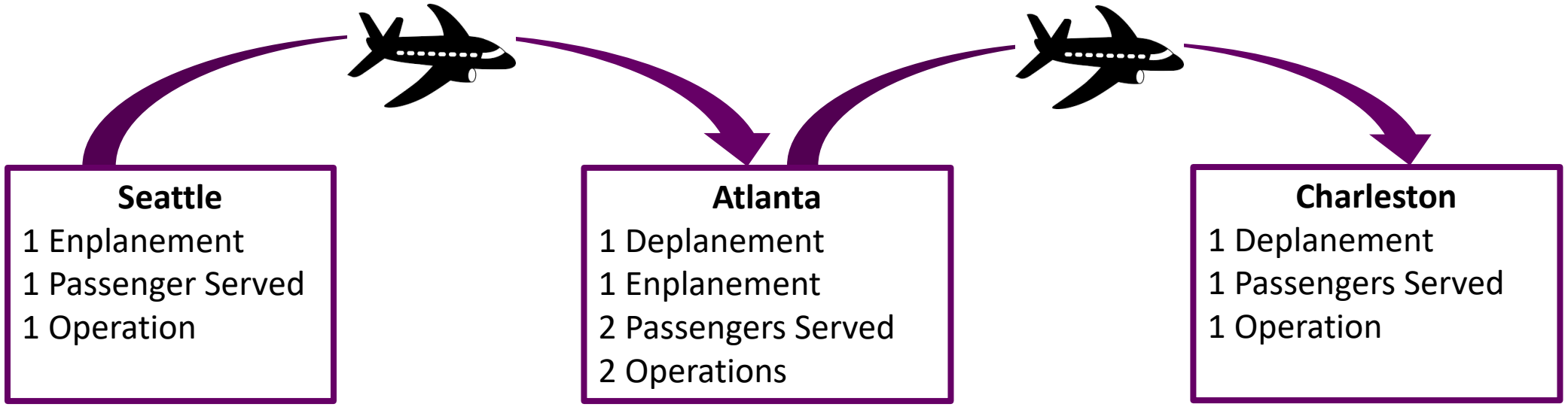
Enplanements: Passenger boarding plane for departure

Deplanements: Passenger exiting plane for arrival

Total Passengers: Enplanements + Deplanements

Operations: Plane takeoffs + landings

An individual flying from Seattle, stopping in Atlanta to make a connection, and landing in Charleston equals a total of 4 Passengers Served (2 Deplanements + 2 Enplanements) and 4 Operations.



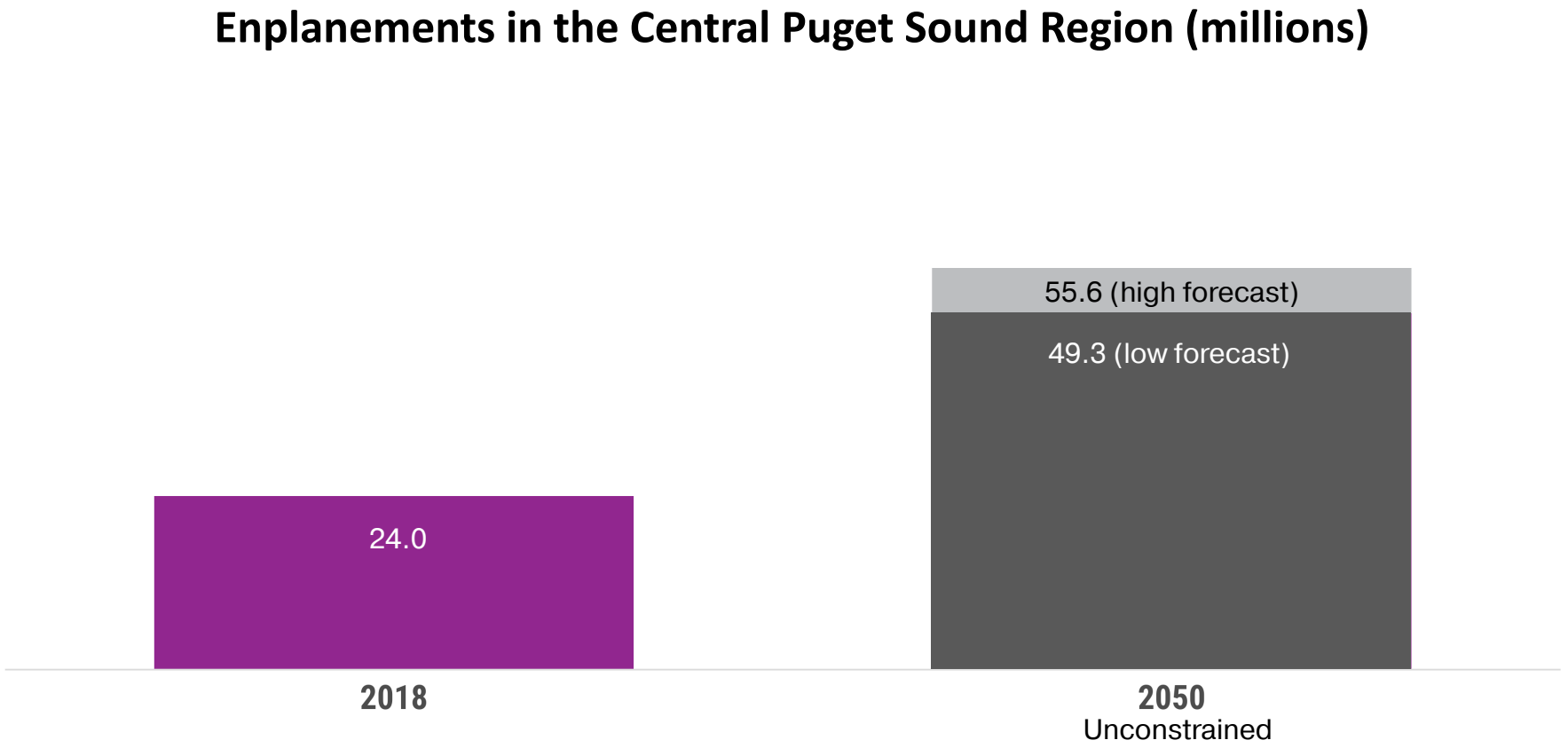
Commercial Enplanement Comparison

U.S. Airport Passenger Enplanements Ranking, 2017 (millions)

1	Hartsfield–Jackson Atlanta International Airport	ATL	50.3
2	Los Angeles International Airport	LAX	41.2
3	O'Hare International Airport	ORD	38.6
4	Dallas/Fort Worth International Airport	DFW	31.9
5	Denver International Airport	DEN	29.8
6	John F. Kennedy International Airport	JFK	29.5
7	San Francisco International Airport	SFO	26.9
8	McCarran International Airport	LAS	23.4
9	Seattle–Tacoma International Airport	SEA	22.5
10	Charlotte Douglas International Airport	CLT	22.0

Source: Federal Aviation Administration

Commercial Enplanement Demand Forecast



Source: WSP USA Analysis

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2050 Forecast
High: 55.6m
Low: 49.3m

Source: Federal Aviation Administration

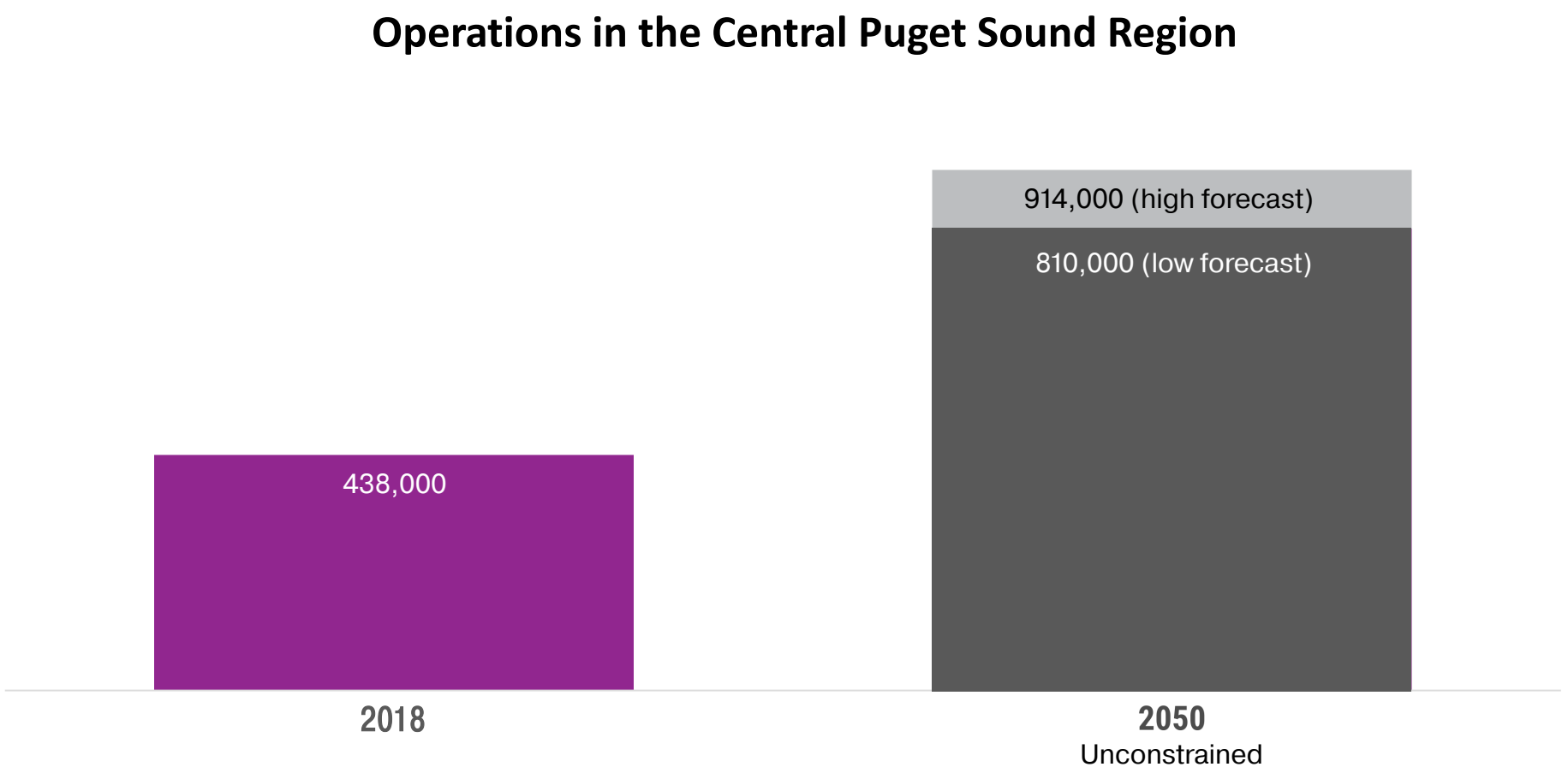
Commercial Operations Comparison

U.S. Airport Passenger Operations Ranking, 2017 (thousands)

1	Hartsfield-Jackson Atlanta International Airport	ATL	880
2	O'Hare International Airport	ORD	867
3	Los Angeles International Airport	LAX	700
4	Fort Worth International Airport	DFW	654
5	Denver International Airport	DEN	575
6	Charlotte Douglas International Airport	CLT	554
7	McCarran International Airport	LAS	543
8	San Francisco International Airport	SFO	460
9	John F. Kennedy International Airport	JFK	453
10	George Bush Intercontinental Airport	IAH	450
11	Newark Liberty International Airport	EWR	444
12	Phoenix Sky Harbor International Airport	PXH	431
13	Seattle-Tacoma International Airport	SEA	412

Source: Federal Aviation Administration

Commercial Operations Demand Forecast



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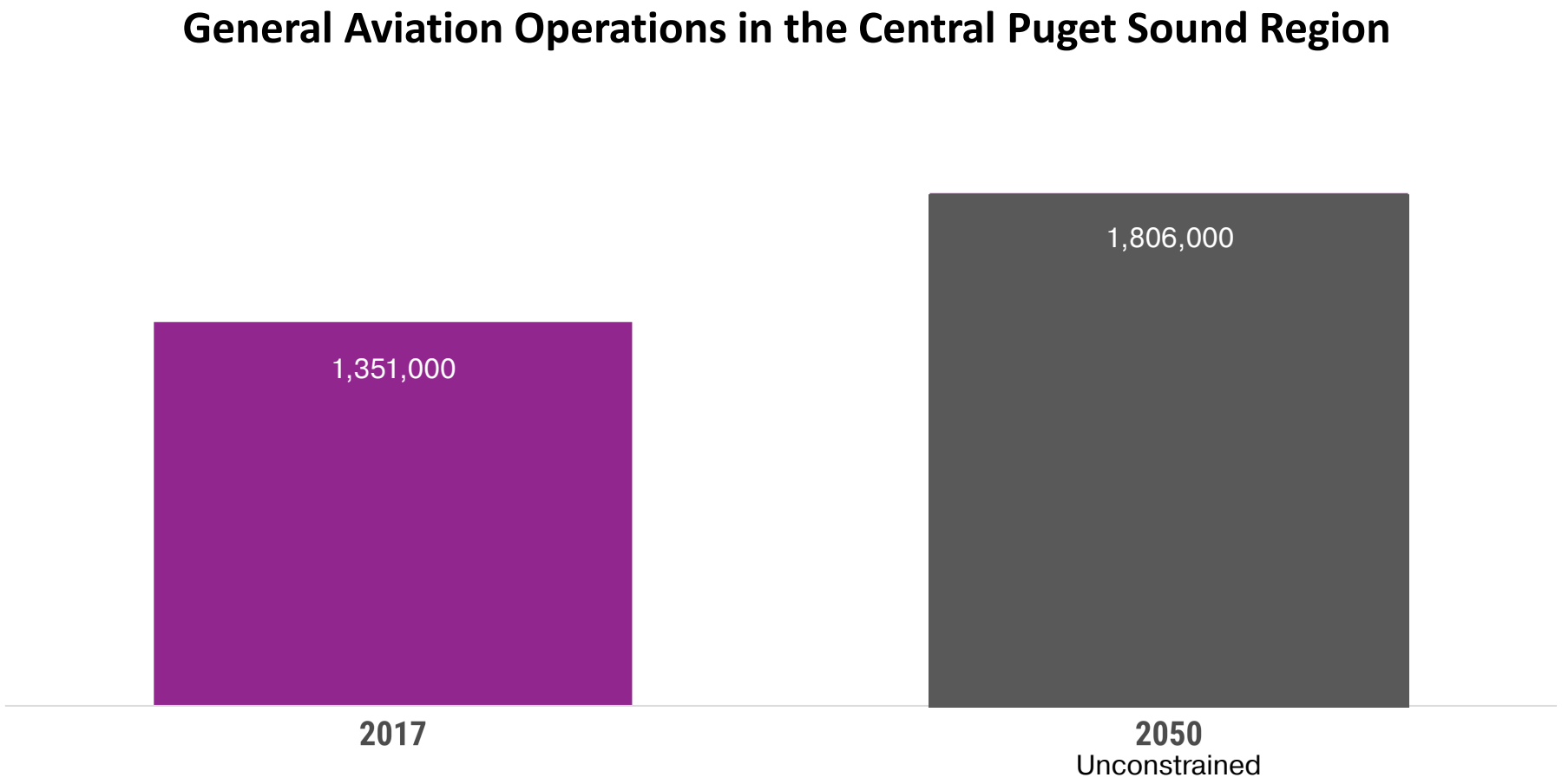
2050 Forecast
High: 914k
Low: 810k

Source: Federal Aviation Administration

General Aviation Trends

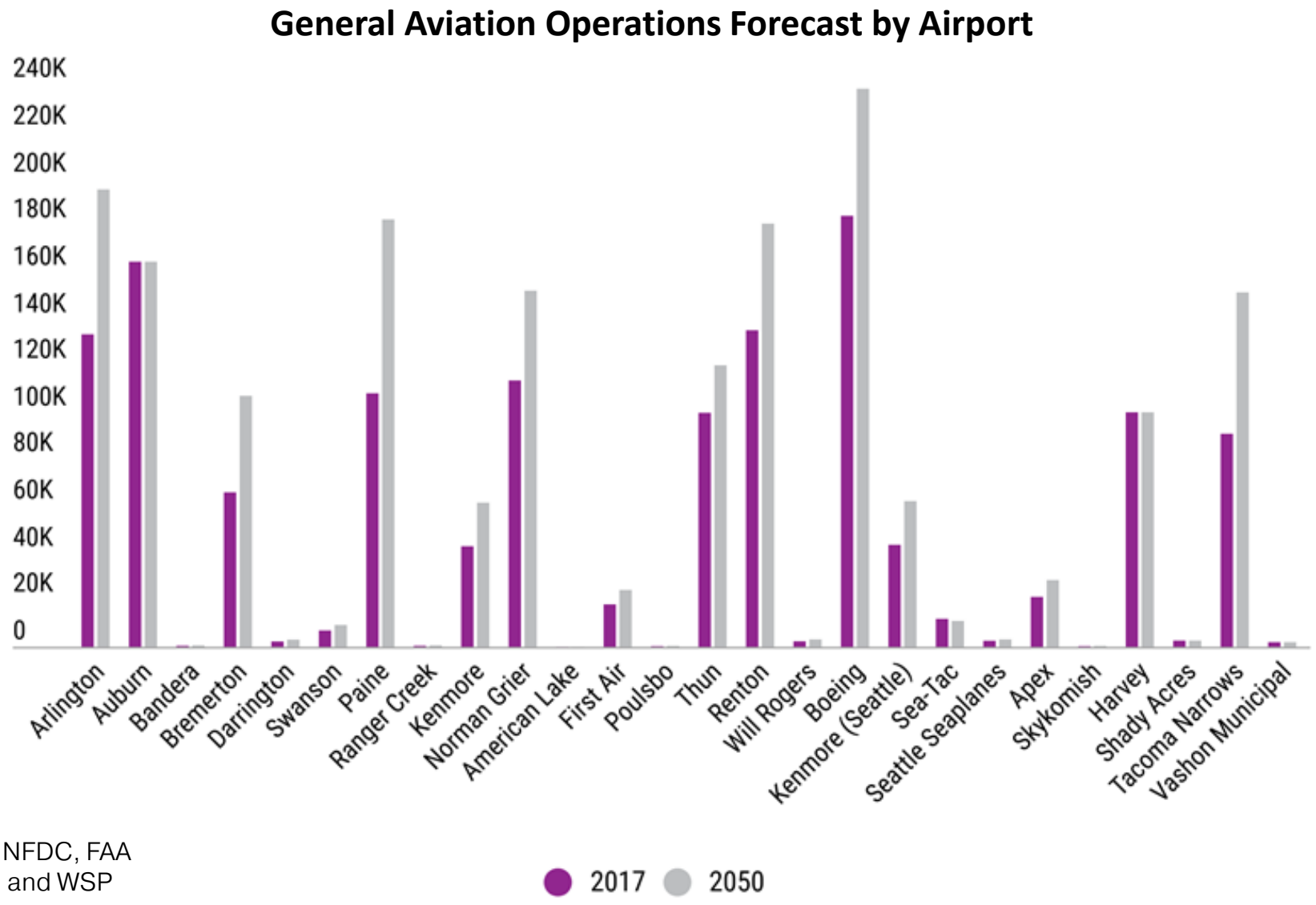
- General aviation has been in a gradual decline for decades nationally.
- Increasing costs, competition from other activities, and even lower airfares have resulted in fewer pilots and fewer hours flown by general aviation.
- In contrast to overall trends, business and for profit aviation activities show signs of improvement. This is only a small segment of GA activity, however.
- Aircraft maintenance technician numbers in the region are declining.
- Student pilots grew faster in Puget Sound (46 percent increase) than the national average (24 percent increase) from 2012 to 2017.

General Aviation Demand Forecast



Source: FAA ATADS, NFDC, FAA Aerospace Forecast, and WSP

General Aviation Demand Forecast



Source: FAA ATADS, NFDC, FAA Aerospace Forecast, and WSP

General Aviation Demand Forecast

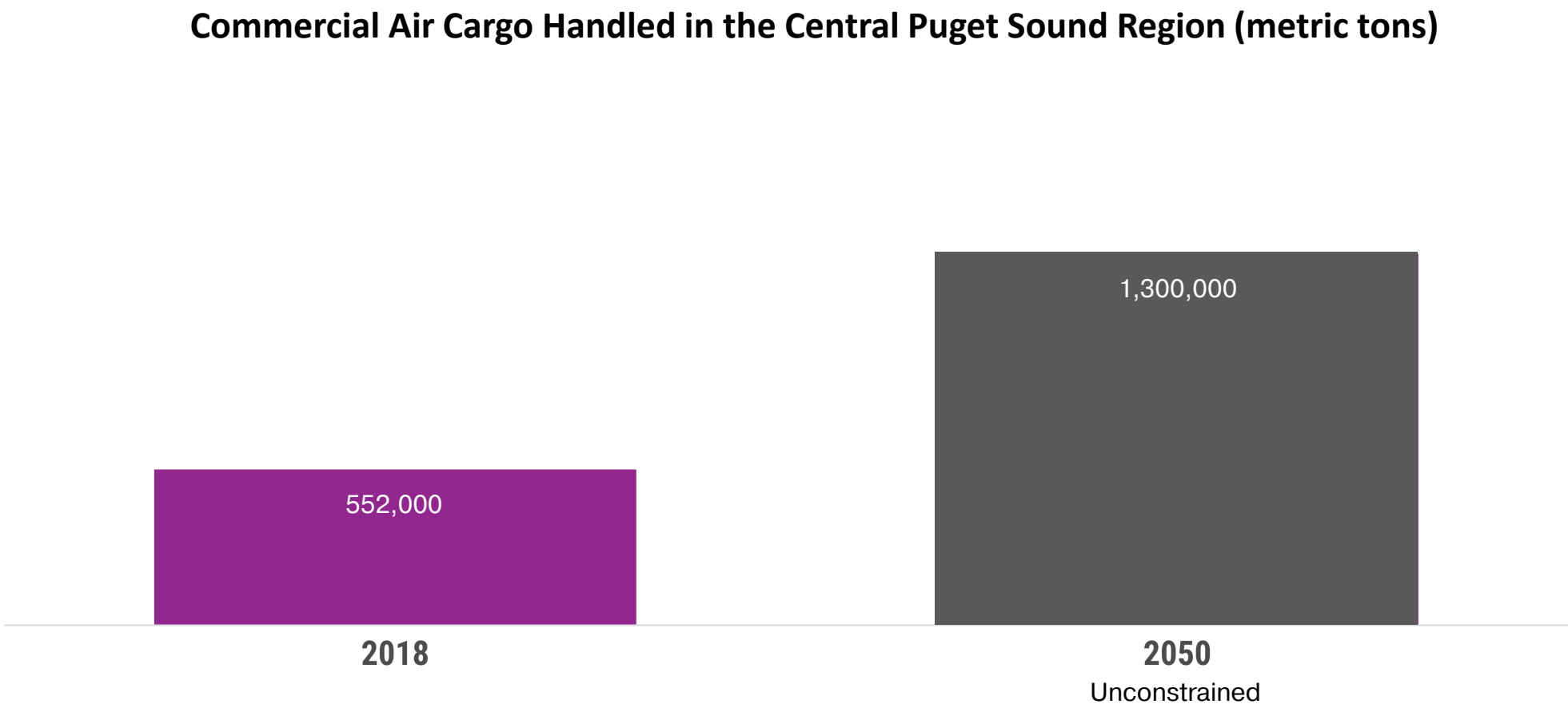
Airports with substantial recreational activity are expected to experience little or no growth.

Ex: Auburn, Thun, Harvey

Airports with significant business or for profit activity are expected to experience growth.

Ex: Arlington, Bremerton, Paine Field, Norman Grier, Renton, Boeing Field, Tacoma Narrows along with seaplane operations in Kenmore and Lake Union

Air Cargo Demand Forecast



Source: WSP USA Analysis

Air Cargo Trends

- Air cargo at Sea-Tac and King County International Airport increased by 40% from 2012 to 2017.
- Globalization and e-commerce are international trends that are driving dramatic air cargo growth.
- Strong Washington state exports and the increase in international flights at SeaTac have further spurred regional air cargo growth.
- Tariffs and the cooling of the international economy are expected to slow growth in the short term.
- Continued globalization, e-commerce and a robust regional economy are expected to catalyze air cargo demand in the long term.

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Upcoming

Statewide Commercial Aviation Coordinating Commission: Charged with selecting site(s) by 2022

Thank you

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