

Workplan First Half 2026

Work Group Meeting

April 28, 2026 | Moses Lake, Washington



COMMERCIAL AVIATION
WORK GROUP

Reminder

Mission and Role of the Work Group

- Group is not to search and build a new airport.
- Different than the CACC; different members, different mission.
- Group's goal is to evaluate the long-range commercial aviation and transportation needs of the state, including alternatives for additional aviation capacity which includes expanding use of existing airports and multi-modal opportunities.
- The ultimate goal of the Work Group will be to recommend a workable solution or set of solutions to meet the travel needs of the region.

More here: <https://www.aviationworkgroup.com/>



February Meeting Recap



COMMERCIAL AVIATION
WORK GROUP

February Meeting Recap Summary



- Airline Deregulation and Historical Development
- Today's Washington Traffic Patterns
- Airport Congestion and Slots
- Hubs and Spokes and the Small Community Airline System
- Public Policy: Airport Improvement Program, Funding and Airports
- On-Going Literature Reviews
- Baseline Study Data Forecast - Assessment



Airport Capacity 101

What is it?

Why is it important?

How is it applied?

Airspace Capacity

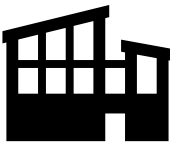


- Not a focus of the Work Group
- Airspace classifications
- Proximity to other airports
- General topography
- Noise sensitive areas
- Proximity to military facilities, and restricted airspace

Source: <https://zseartcc.org/public/images/maps/SEA-CLASSB.jpg>

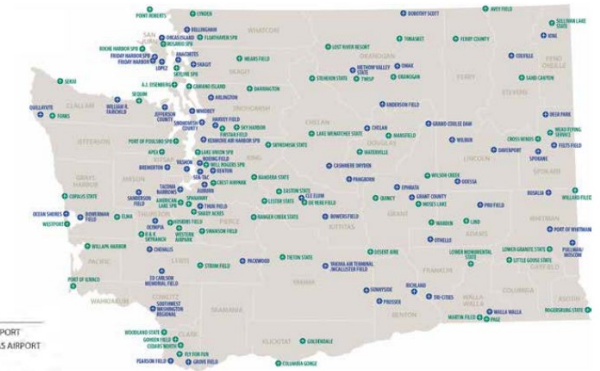


Airports Vary Significantly



Description	Primary Activities	Factors to Classify Airports
MAJOR	<ul style="list-style-type: none"> Commercial service Aircraft or Aerospace Manufacturing 	<ul style="list-style-type: none"> Airport Reference Code (ARC) C-III or greater Primary Activity: Commercial Service and/or Aerospace Manufacturing/Maintenance, Repair & Overhaul (MRO) Population over 40,000
REGIONAL	<ul style="list-style-type: none"> Corporate GA and Business Travel Commuter Passenger Airline Service 	<ul style="list-style-type: none"> ARC B-III or Greater Primary Activity: Corporate GA and Business Travel Population over 30,000
COMMUNITY	<ul style="list-style-type: none"> GA-Personal Transportation/Business and Recreational Pilot Training 	<ul style="list-style-type: none"> Not Metro or Regional Paved Primary Runway Surface 15 or more Based Aircraft
LOCAL	<ul style="list-style-type: none"> GA-Personal Transportation/Recreational Pilot Training Agriculture 	<ul style="list-style-type: none"> Not Metro or Regional Paved Primary Runway Surface Less than 15 Based Aircraft
GENERAL USE	<ul style="list-style-type: none"> GA-Personal Transportation/Recreational including backcountry 	<ul style="list-style-type: none"> Unpaved Primary Runway Surface (including all seaplane bases)

WASHINGTON STATE PUBLIC-USE AIRPORTS



LEGEND
 ● NPIAS AIRPORT
 ● NON NPIAS AIRPORT

Source: Washington State Department of Transportation, Aviation Division

Source: <https://wsdot.wa.gov/sites/default/files/2021-10/aviation-washington-aviation-system-plan-summary.pdf>

What is Airport Capacity (Supply)?

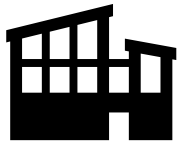


• Airfield (based off design aircraft requirements and operations)



- Maximum number of operations per hour compared to runway/taxiway configuration
- Measured in terms of Delay – difference between constrained and unconstrained operations

• Terminal (based off peak month, average day, peak hour)



- Peak hour passengers and aircraft operations compared to terminal space, processing rates, and gates
- Measured in terms of Level of Service – qualitative/quantitative measures of comfort experienced by passengers

• Ground Transportation (based off peak month, average day, peak hour)



- Peak hour vehicles compared to roadways, terminal curbside area, and parking facilities
- Measured in terms of Level of Service – qualitative/quantitative measures of traffic flow, passenger satisfaction, and convenience

The airport challenge: aligning infrastructure with industry changes

The Continuous Airport Management Balance

Increasing seats per operation helps airports' airside (+) while challenging gate holdrooms, concessions, and ground transportation(!). These realities track customer service feedback on ASQ and other industry surveys.

Key is balancing operations to provide an integrated customer experience.



Terminal

- More peaking
- Baggage systems
- Concessions demand/capacity



Airside

- Airline restructuring
- Upgauging of fleets
- Seat load factors increasing



Ground Transportation

- More parking/PUDO
- Increasing curb congestion
- Roadway challenges

What Affects Demand?



Airfield Capacity



- **Capacity** – maximum number of aircraft operations that can be accommodated, typically expressed as annual or hourly capacity
- **Demand** – magnitude of aircraft operations to be accommodated in a specific type period; type of aircraft
- **Delay** – difference between constrained and unconstrained operating time
 - 4-6 minutes per aircraft operation is generally considered acceptable
- **Weather** – can significantly reduce capacity

Annual Service Volume (ASV) – reasonable estimate of an airport’s annual capacity: runway configuration, runway usage, aircraft mix, weather conditions, etc.

Planning for an additional runway should be considered as activity levels approach 60% ASV (FAA Order 5090-5)

1 Operation = 250 Px
10,000 Ops = 2.5 million Px

1 Operation = 75 Px
10,000 Ops = 750,000 Px



Different Gauge Aircraft Delivered 1,750,000 More Passengers with Same Number of Operations



Equal Runway Capacity

Different Aircraft

Different Passenger Levels



Sample - Airfield Capacity



SEA (2018 Master Plan)

- Estimated delays 20-25 minutes by 2029 and 40+ minutes by 2034
- Limiting factors
 - Location of terminal relative to runways
 - Location of runway exits
 - Limited taxiway system
 - Runway spacing
 - Offset between runway thresholds
 - Airspace; “Noise Corridors”

PAE (2024 Master Plan) – sufficient capacity through 2040+

- 63% annual capacity (average aircraft delay 5-7 minutes)

BLI (2019 Master Plan) – sufficient capacity through 2037+

- 41.7% annual capacity
- % VFR = 62.2%, % IFR = 40.7%



AIRFIELD CAPACITY

Overall aircraft operations demand in Washington is forecast to increase from 13.6 percent of statewide capacity in 2014 to 17.1 percent in 2034. Five airports are expected to exceed 60 percent of their annual service volume in 2034 including one commercial service airport. Sea-Tac's ability to accommodate and expand air cargo activities, particularly international freighter service, should be closely monitored.

Source: <https://wsdot.wa.gov/sites/default/files/2021-10/aviation-washington-aviation-system-plan-summary.pdf>

Terminal Capacity

Terminal space programming based on:



- Average Day of the Peak Month (ADPM)
- Design Day Flight Schedules

Aircraft Parking & Gates

Check-in Positions

Security Screening

Holdrooms

Concessions

Restrooms

Baggage Handling Systems

Baggage Claim

International Arrivals Facilities

Circulation

Back of House Space

Sample - Terminal Capacity



Table 3-2
Summary of Major Terminal Facilities Requirements
Seattle-Tacoma International Airport

	Existing 2014	PAL 1 2019	PAL 2 2024	PAL 3 2029	PAL 4 2034
Gates					
International	13	18	22	24	29
Domestic	70	77	82	82	84
Total	83	95	104	106	113
Off-gate parking positions					
		2	31	37	44
Check-In & bag drop					
Kiosk w/o bag check	40	77	80	84	90
Agent with bag check	214	211	219	235	250
Garage kiosk	15	11	11	11	12
Curb kiosk	15	14	15	16	17
Total	284	313	325	346	369
Passenger security screening checkpoint					
Number of screening lanes	31	34	36	37	41
Queue Length (ft.; max 10 min wait)	n/a	992	1,050	1,079	1,196
Outbound baggage system					
Peak hour bags	3,564	4,748	5,911	7,444	8,135
Security screening machines	12	9	11	15	16
Make-up devices	n/a	490	386	422	464
Early-bag storage positions	0	n/a	393	652	715
Domestic baggage claim					
Claim frontage (ft.)	2,700	2,982	3,441	4,136	4,453
Claim devices	16	18	20	22	24

Sources: Requirements for gates and security screening checkpoints estimated by LeighFisher, June 2015; requirements for outbound baggage systems and domestic baggage claim estimated by Logplan, December 2016.

SEA (2018 Master Plan)

The demands on all elements of the terminal building analyzed will be exceeded within the planning period (most were expected to be exceeded within the first planning activity level < 5 years).

- **Gates – exceeded by 36%**
- **Check-in positions – exceeded by 30%**
- **SSCP lanes – exceeded by 32%**
- **Outbound baggage security machines – exceeded by 33%**
- **Baggage claim devices – exceeded by 50%**



SAMPLE

Ground Transportation Capacity

Often the first impression of an airport or region

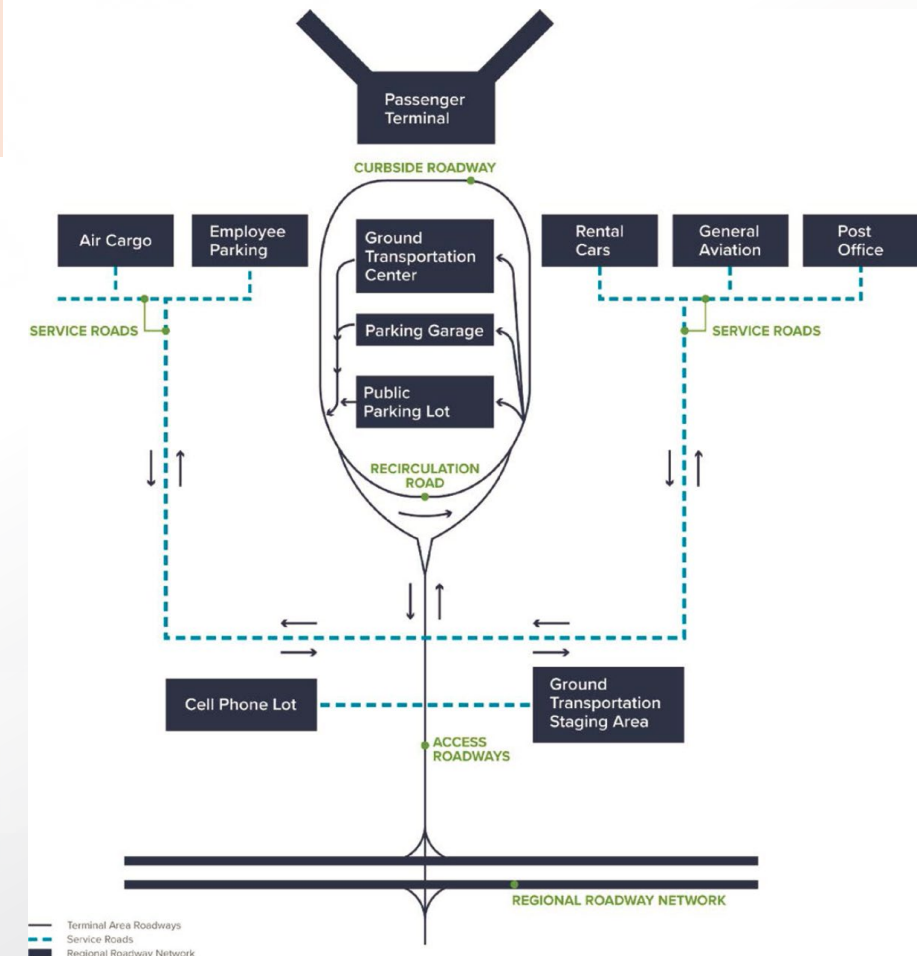
Roadways

- **Access roadways** are those that link the regional highway and roadway network with the airport – not often under airport control
- **Circulation and service roadways** provide paths for movement between terminals, parking, rental car facilities, etc. – often under airport control

Terminal Curbside – roadways immediately in front of the terminal building; used for drop-off/pick-up activity, commercial vehicles, pedestrian crossings



Parking – public, employee, visitor (loading, cell phone, etc.), rental car, commercial vehicles



Source: Figure 2-1. Airport land use and roadway types, *ACRP Report 266: Airport Curbside and Terminal Area Roadway Operations: New Analysis and Strategies, Second Edition (2024)*

Ground Transportation Capacity Cont.

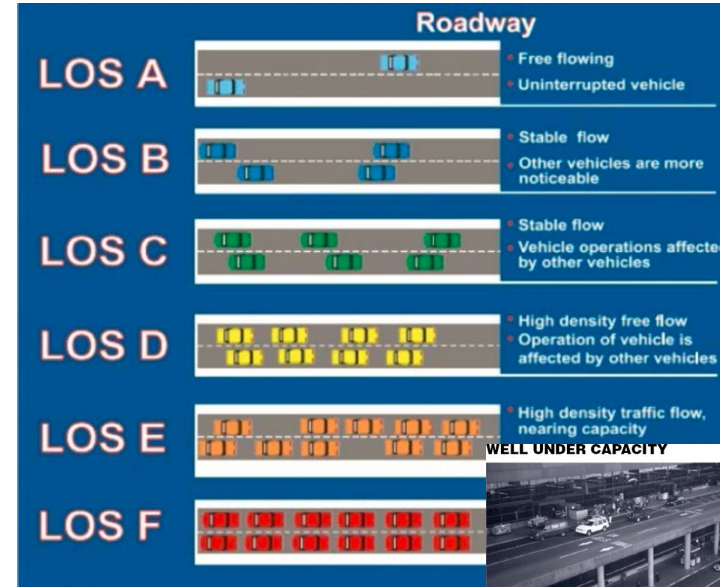


Roadway

- Number of lanes & geometry
- Vehicle & user characteristics
- Traffic control

Terminal Curbside

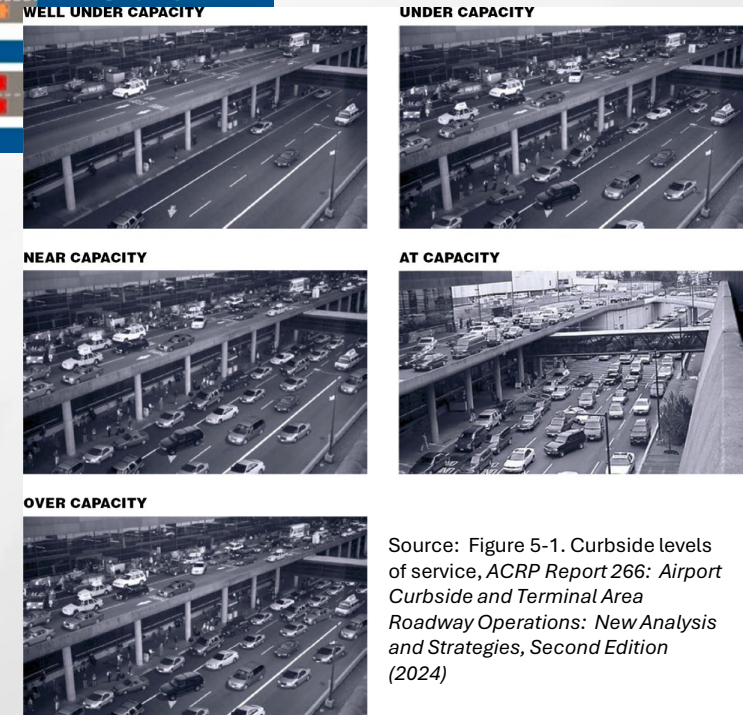
- Number of lanes & geometry
- Vehicle & user characteristics
- Dwell times
- Curbside utilization ratio – demand for curbside parking compared to its capacity (1.70 or less is acceptable)



Source: Figure 2-10. Roadway LOS scale, ACRP Report 266: Airport Curbside and Terminal Area Roadway Operations: New Analysis and Strategies, Second Edition (2024)



Both measured for a peak hour in terms of “Level of Service (LOS)” – density or delay; LOS D considered acceptable or near capacity



Source: Figure 5-1. Curbside levels of service, ACRP Report 266: Airport Curbside and Terminal Area Roadway Operations: New Analysis and Strategies, Second Edition (2024)

Ground Transportation Capacity Cont.

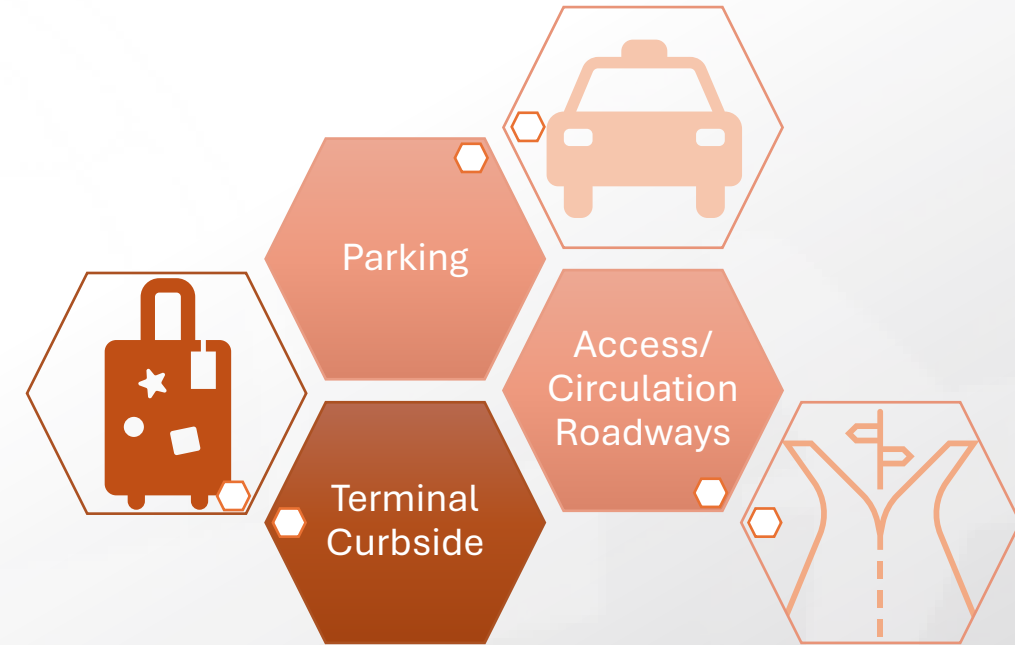
Parking

- Number of parking spaces by user type: public, employee, rental car, commercial vehicles, etc.
- Length of time of stay
- Seasonal considerations

Measured in terms of occupancy or space utilization

Demand is based on the following:

- Pricing of parking
- Convenience
- Other available modes
- Trip purpose – business vs personal



Sample – Ground Transportation Capacity



SEA (2018 Master Plan)

- Additional circulation roadway lanes needed
- Curbside activity needs to be more uniformly distributed, additional curb length added, potential need for additional travel lanes
- Off-airport parking facilities need to increase capacity or reduce market share
- Employee parking capacity will need to increase significantly
- Rental car facilities will need to increase by approximately 270,000 SF

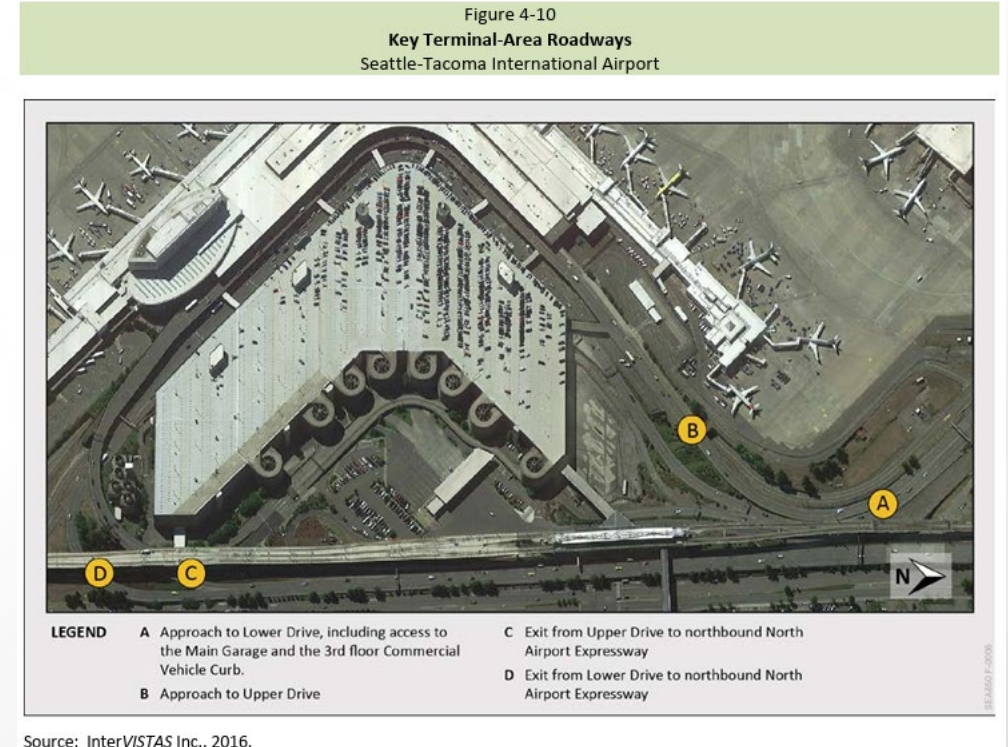


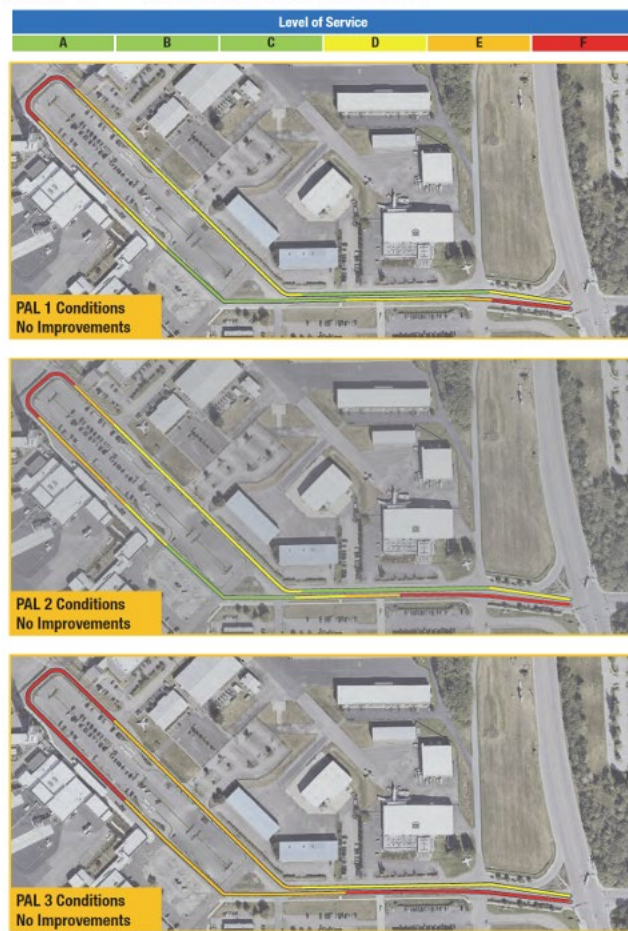
Figure shows the circulation roadways identified as requiring additional capacity

Sample – Ground Transportation Capacity Cont.



PAE (2024 Master Plan)

Exhibit 4-13 Anticipated Levels of Service by PAL



Note: Conditions assume no incremental improvements to serve demand
Source: Century West Engineering

Table 4-28 Terminal Parking and Curb Requirements Summary

Parking	Criteria	Existing	PAL 1	PAL 2	PAL 3
Total Passenger Parking	1,200 stalls/1M Enplan.	971	613	921	2,593
Premium Lots ¹	53.54% Total Pass. Parking	647	328	493	1,388
Economy Lots ¹	36.64% Total Pass. Parking	308	225	337	950
Valet Parking ¹	9.82% Total Pass. Parking	66	60	90	255
Rental Car Parking	0.75 stalls/PH Pass. (Depart)		149	281	690
Ground Transportation Parking	31 stalls/1M Enplanement	16	16	24	68
Terminal Curb Front (Feet)	1.75 feet/PH Pass. (Total)	338	578	1,043	2,394

¹ Mix based on 2019 parking data.
Source: Century West Engineering

BLI (2019 Master Plan)

Table 5-13: Automobile Parking Requirements

Year	Annual Enplaned Passengers	Public Parking	R-A-C Ready/Return Area	Employee
2016	417,930	2,063	131	250
2022	392,209	1,936	253	250
2027	424,606	2,096	253	250
2032	459,679	2,269	253	300
2037	497,649	2,457	253	350

Note: RAC ready/return area was expanded to 253 spaces in 2017.



Capacity Assessment Western WA Airport System



- Look at demand and constraints as a system
- Understand WA and adjacent state and province systems
- Understand constraints at airport level
- What do we do about it?
 - What can existing airports handle? Expand to accommodate?
 - How do other modes play a role?
 - How is it done in a sustainable way?

Discussion:

Considerations for Annual Report and Second Half Work Plan

Annual Report Considerations (Running List)

- Support Sustainable Aviation Fuel (SAF) production in the Pacific Northwest.
- Maintaining air service to small communities.

Second Half Work Plan Considerations (Running List)

- TBD
- TBD



Questions from the Work Group

- Next Meetings:
 - July 8 – Pending at Chehalis-Centralia Airport
- Start development of Workplan for 2nd Half 2026 (Jul to Dec)