

Airport Master Plan Update



Public Open House Meeting #4

October 12, 2022

Introductions



Port Staff

**Warren
Hendrickson**
Airport Senior Manager

Rudy Rudolph
Operations Director

Lisa Parks
Executive Services
Director

Sam Gibboney
Executive Director

Project Team

Leah Whitfield
Project Manager

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Airport Planner

**Darren Murata,
P.E.**
Lead Engineer, DOWL

Airport Master Plan Update

Participation



This presentation will be recorded and posted on the Port's Airport Master Plan Update website.

We will mute all participants during the presentation.

Virtual Attendees – Please type in the chat box if you have a comment or question. Comments can also be emailed to AMPUpdate@portolympia.com.

Comments from the live audience will be heard at the end during the Comments portion of the presentation. Any questions asked will be answered in a Q/A will be

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IAP2 Spectrum

INCREASING IMPACT ON THE DECISION					
	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

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Airport Master Plan Update

Agenda



1. **Studies Underway**
2. **HCP Update**
3. **Review of Master Plan Update Process**
4. **Master Plan Update Goals**
5. **Revised Preferred Alternative**
6. **Emerging Technologies**
7. **Commercial Service Feasibility Study**
8. **Next Steps**
9. **Comments**

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Washington State Legislature Study



Commercial Aviation Coordination Commission (CACC)

The CACC is a group created by the Legislature to develop recommendations to meet Washington state critical aviation system capacity.

Any comments concerning the work of the CACC should be directed to the CACC team CACC@wsdot.wa.gov.

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Ongoing Port Studies



There are two projects that the airport is involved in.

The **Bush Prairie Habitat Conservation Plan (HCP)** is focused on protecting and mitigating impacts to species protected by the Endangered Species Act in and around the airport.

The **Master Plan Update** is focused on meeting the aviation demand.

HCP Update



- Finalizing the conservation and development policy details
- Responding to comments from USFWS and WDFW on the overall HCP
- Revised HCP in November for review by the Port and City of Tumwater
- Draft to agencies and public following

Airport Master Plan Update

Master Plan Update Process



According to the Federal Aviation Administration (FAA), an airport master plan is...

A comprehensive study of an airport that usually describes the short-, medium-, and long-term development plans to meet future aviation demand.

Follows FAA Advisory Circular 150/5070-6B

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Master Plan Update Goals



- Meet aviation demand
- Meet FAA design standards
- Prepare Olympia Regional Airport (OLM) for future development
- Prepare OLM for emerging aviation technologies
- Continued Airport self-sufficiency

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SCHEDULE (Draft)

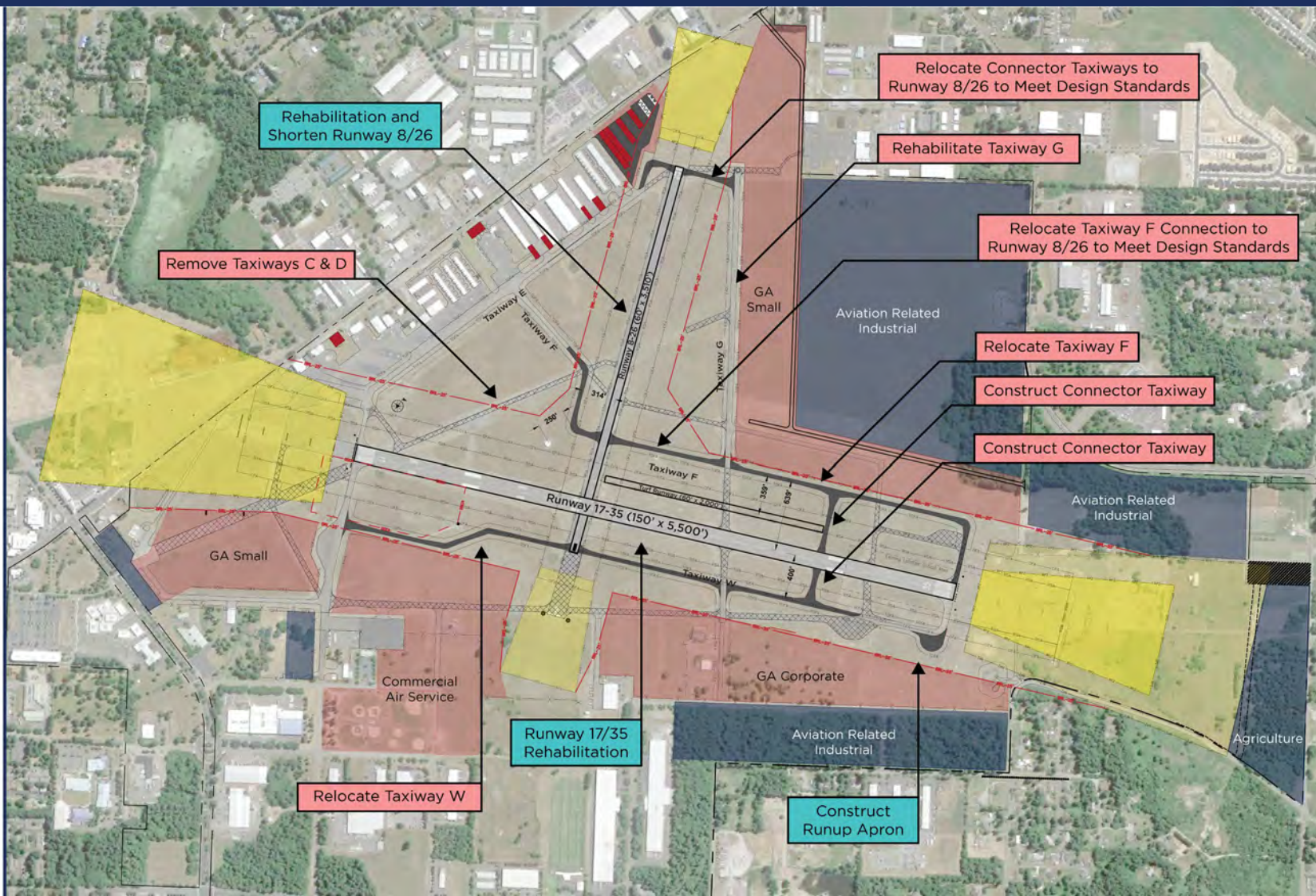


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Revised
MPU
Preferred
Alternative



Project Phasing



Emerging Technologies



Eviation's electric commuter plane Alice makes first test flight

29 September 2022

The first fully electric commuter plane Alice from Eviation Aircraft ([earlier post](#)) successfully **completed** its maiden flight at Moses Lake, Washington. Alice lifted off on 27 Sep at 7:10 a.m. from Grant County International Airport (MWH), flying for a total of eight minutes and reaching an altitude of 3,500 feet.



Emerging Technologies



Figure 23. Potential timeline of electric aircraft implementation.

Source: ACRP Research Report 236: *Preparing Your Airport for Electric Aircraft and Hydrogen Technologies*

Sustainable Aviation Fuels (SAF)

AKA: Biofuel/Plant Based Fuels:

Created from:

- Waste oils
- Plant and algae material
- Animal fats
- FAA approval for up to 50% SAF blend with Jet-A
- SAF is proven, drop-in technology




There is adequate space for fuel farm expansion when demand for biofuels occurs.

Approval of Alternative to 100LL



- EAGLE (Eliminate Aviation Gasoline Lead Emissions) – initiative of aviation organizations with goal to meet objective by 2030
- FAA has approved replacement for 100LL subject to:
 - Regulatory requirements
 - Production and distribution
- Alternative is coming, but roll out will be slow



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Home > News & Media > GA moves closer to unleaded future

FAA APPROVES UNLEADED FUEL FOR PISTON FLEET

GAMI STCS COVER ALL SPARK-IGNITION ENGINE, AIRFRAME COMBINATIONS

September 1, 2022 By Jill W. Tallman

The FAA signed on September 1 supplemental type certificates that allow General Aviation Modifications Inc.'s 100-octane unleaded fuel (G100UL) to be used in every general aviation spark-ignition engine and every airframe powered by those engines. The move was hailed by the industry as a major step in the transition to an unleaded GA future.

US FAA sets out initial standards for eVTOL vertiport designs

By David Kaminski-Morrow | 28 September 2022

US aviation regulators have unveiled design guidance for vertiports, as the aerospace industry progresses with multiple proposed eVTOL aircraft.

It focuses on safety-critical geometry, with dimensions for take-off and landing zones, as well as approach and departure paths in the surrounding airspace.

The guidance also sets out initial criteria for lighting and markings – including a recommended vertiport identification symbol – plus standards for battery and electric charging infrastructure.



eVTOL (Electric Vertical Takeoff and Landing) Vertiport

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Commercial Service Feasibility Study



- Funded by FAA.
- Not related to the CACC or WSDOT Aviation System Plan.
- Preliminary evaluation of OLM's compatibility to meet FAA requirements for regional commercial service.
- Focused on the feasibility of what the existing airfield can accommodate with regard to emerging aircraft.

A component of the MPU consisting of:

- Passenger and Operations Forecast
- Facility Requirements
- Alternatives

Commercial Service Feasibility Study



Commercial Service is often referred to as Part 139 and subject to additional regulations:

- Part 139 certification must be requested by the airport sponsor and approved by the FAA.
- Applies to scheduled flights of 9+ passengers and unscheduled of 30+ passengers.
- Airports are required to meet additional standards including providing Aircraft Rescue & Firefighting (ARFF) coverage of flights.

Commercial Service Feasibility Forecast



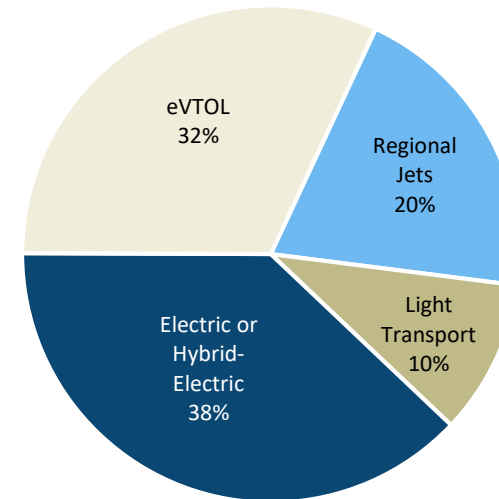
Part 139 Forecast Assumptions for OLM:

- Not forecasted to become a commercial hub
- Sustainable aviation will continue to grow
- Two primary elements: satellite service to a hub and point-to-point regional service
- Forecasts have an upper limit based on existing capacity
- Commercial activity not anticipated until after 2020 at the earliest

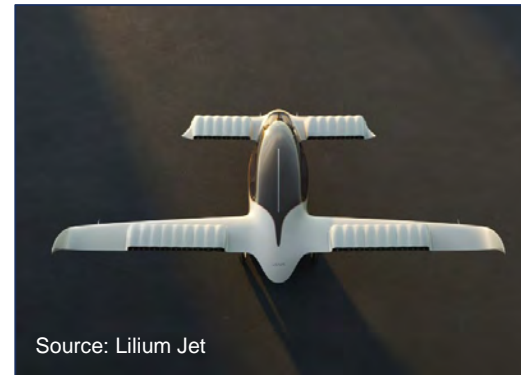
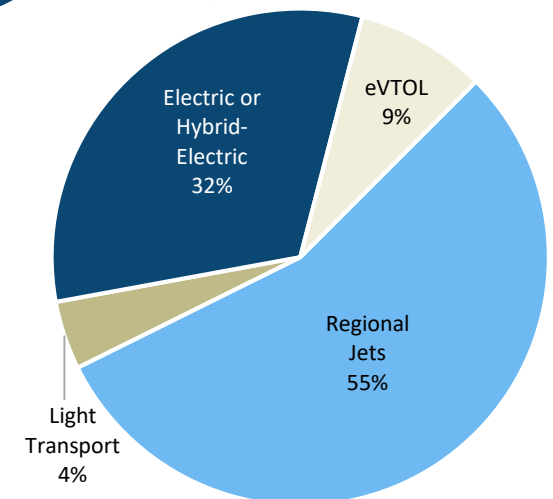
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Commercial Activity	2025	2030	2035	2040
Satellite Service	0	0	70,000	159,000
Regional Service	0	0	113,000	129,000
Total	0	0	183,000	288,000
Satellite Service	0	0	1,100	2,600
Regional Service	0	0	8,900	10,200
Total	0	0	10,000	12,800

Operations



Enplanements





OLYMPIA REGIONAL
AIRPORT
PORT OF OLYMPIA

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Commercial Service Feasibility Alternative

COMMERCIAL SERVICE DEVELOPMENT ALTERNATIVE

LEGEND		
DESCRIPTION	EXISTING (E)	ULTIMATE (U)
TAXIWAY / AIRFIELD DEVELOPMENT		
STRUCTURAL / FACILITIES (BUILDING)		
RUNWAY DEVELOPMENT		SAME
AIRPORT PROPERTY LINE (APL)		SAME
RUNWAY PROTECTION ZONE (RPZ)		
RUNWAY SAFETY AREA (RSA)		
RUNWAY OBJECT FREE AREA (ROFA)		
TAXIWAY OBJECT FREE AREA (TOFA)		
EASEMENT		
FUTURE REMOVAL		N/A
FENCE		

LEGEND		
DESCRIPTION	EXISTING (E)	ULTIMATE (U)
20' BUILDING RESTRICTION LINE (BRL)		
SURVEY MONUMENTS		SAME
AIRPORT REFERENCE POINT (ARP)		
AIRPORT BEACON		SAME
PRIMARY WIND CONE AND SEGMENTED CIRCLE		SAME
AIRCRAFT TIEDOWN		SAME
ASOS		SAME
CONTOURS		SAME
PAPI		SAME
THRESHOLD SITING SURFACE (TSS)		
DEPARTURE SURFACE		SAME

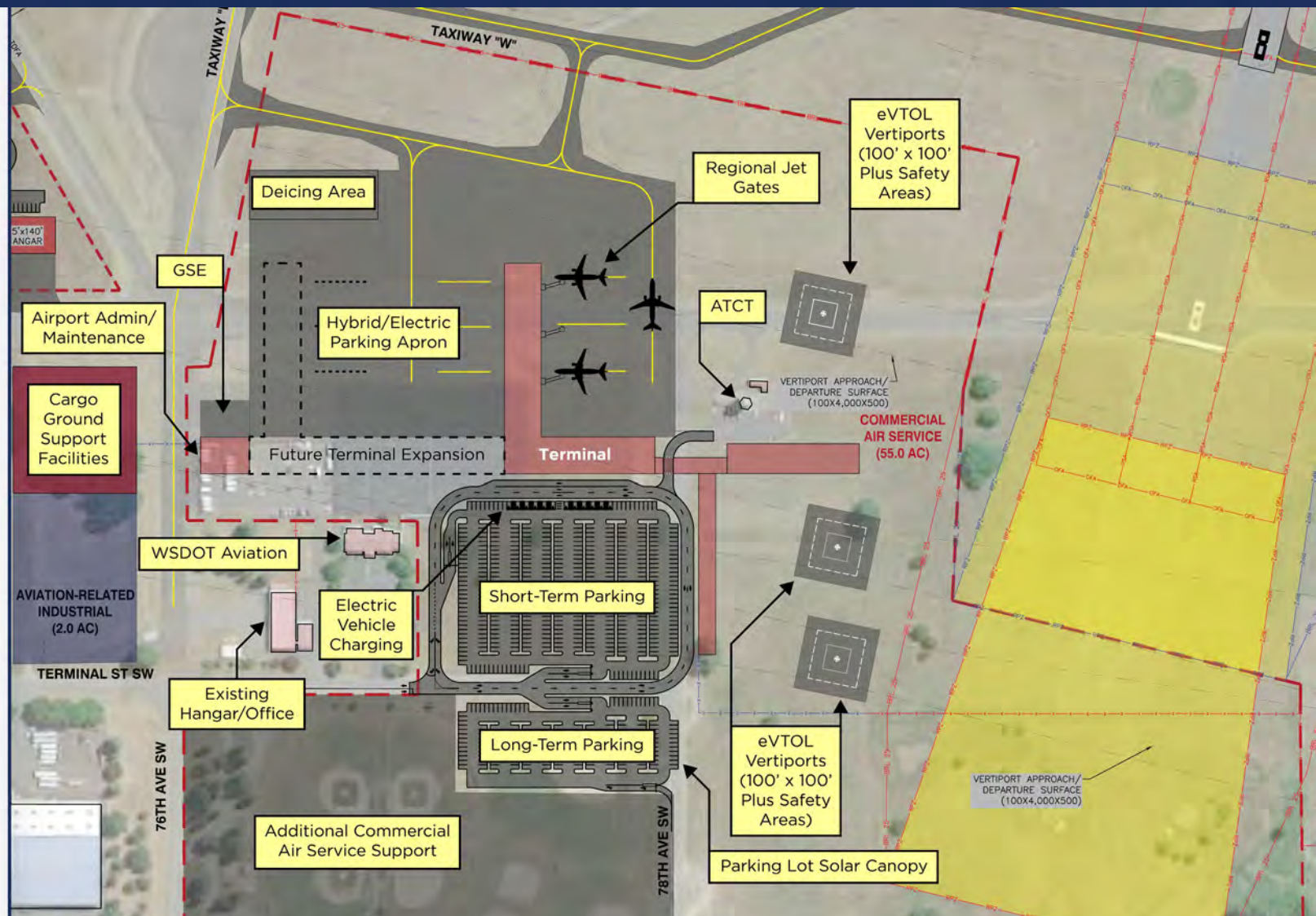


Commercial Service Feasibility Future Concept



LEGEND		
DESCRIPTION	EXISTING (E)	ULTIMATE (U)
TAXIWAY / AIRFIELD DEVELOPMENT		
STRUCTURAL / FACILITIES (BUILDING)		
RUNWAY DEVELOPMENT		SAME
AIRPORT PROPERTY LINE (APL)		SAME
RUNWAY PROTECTION ZONE (RPZ)		
RUNWAY SAFETY AREA (RSA)		
RUNWAY OBJECT FREE AREA (ROFA)		
TAXIWAY OBJECT FREE AREA (TOFA)		
EASEMENT		
FUTURE REMOVAL		N/A
FENCE		

LEGEND		
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AIRPORT BEACON		SAME
PRIMARY WIND CONE AND SEGMENTED CIRCLE		SAME
AIRCRAFT TIEDOWN		SAME
ASOS		SAME
CONTOURS		SAME
PAPI		SAME
THRESHOLD SITING SURFACE (TSS)		SAME
DEPARTURE SURFACE		SAME



Airport Master Plan Update

Next Steps



- Finalize Commercial Service Feasibility Study
- Finalize Airport Layout Plan (ALP) and submit for FAA review and approval
- Publish Draft Master Plan Update Report

Airport Master Plan Update

Public Comments



- Limited to 3 minutes each, up to 30 minutes
- To be included in the Master Plan Update Report comments should be submitted in writing to Project Team via comment card or via email at AMPUpdate@portolympia.com.
- Reminder CACC comments should be submitted to CACC@wsdot.wa.gov.
- Q&A document will be updated following this open house.

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Thank You!



- AMPUpdate@portolympia.com
- Q&A document will be updated following this open house.