

# Aurora State Airport Master Plan Project



Planning Advisory Committee Meeting #4  
Online Meeting  
March 12, 2024



# Agenda

Time	Topic
5:00-5:20	Introductions Recap of Project
5:20-5:40	What a Typical Airport Master Plan Includes
5:40-6:10	Review of Working Paper #1
6:10-6:40	Overview of FAA Approved Forecast
6:40-6:50	Public Comments
6:50-7:00	Next Steps Public comments collected through the website <a href="https://publicproject.net/AuroraAirport">https://publicproject.net/AuroraAirport</a>

# Introductions



# Oregon Department of Aviation (ODAV)

**Kenji Sugahara**

Director

**Tony Beach**

State Airports Manager

**Alex Thomas**

Planning & Project Manager

**Brandon Pike**

Aviation Planner

# Project Team

## Agency Oversight & Funding



## Airport Owner (Sponsor)



## Planning & Engineering



## Public Involvement



## Cultural Resources



Archaeological  
Investigations  
Northwest, Inc.

## Environmental Review



## AGIS Survey



# Project Website Overview

## Aurora State Airport Master Plan

[Resources & Documents](#) [Public Meetings](#) [Contact & Comment](#)

### AIRPORT MASTER PLAN

The Oregon Department of Aviation (ODAV) in cooperation with the Federal Aviation Administration (FAA) is preparing an Airport Master Plan for the Aurora State Airport to address the airport's needs for the next twenty years.

As required by the FAA, the Airport Master Plan will provide specific guidance in making the improvements necessary to maintain a safe and efficient airport that is economically, environmentally, and socially sustainable. The Airport Master Plan will also:

- Define the current, short-term and long-term needs of the Airport through a comprehensive evaluation of facilities, conditions and FAA airport planning and design standards.
- Look at what is happening around the airport that could affect the future plans, development and operation of the airport such as land use, transportation, environmental, economic development, etc.



<https://publicproject.net/AuroraAirport>

# PAC Members & Alternates

- Airport Users/Businesses/Organizations
- Airport Neighbors
- Local Municipalities
- Tribal Organizations
- State Agencies
- Local and Regional Non-Profit Groups
- Environmental / Land Use Groups



# PAC Members & Alternates

## Organization

1000 Friends of Oregon  
AABC/TLM Holdings  
Atlantic Aviation (formerly Lynx Aviation)  
Aurora Air Traffic Control  
Aurora Airport Improvement Association  
Aurora Butteville Barlow Community Planning Organization  
Aurora CTE, Inc  
Charbonneau Country Club  
City of Aurora  
City of Canby  
City of Wilsonville  
Clackamas County  
Columbia Helicopters  
Confederated Tribes of Siletz Indians  
Confederated Tribes of the Grand Ronde Community of Oregon  
Confederated Tribes of Warm Springs Reservation of Oregon

## Name

Roger Kaye  
Ted Millar  
Trent Brownlee  
Raul Suarez  
Tony Helbling  
Ken Ivey  
Bill Graupp  
Jeff Baymor  
Brian Asher  
  
Dr. Joann Linville  
Commissioner Tootie Smith  
Rob Roedts  
Pam Barlow Lind  
  
Cheryl Pouley

## Organization

Friends of French Prairie  
Helicopter Transport Service  
Life Flight Network  
Marion County  
Marion County Planning Department  
Oregon Dept of Aviation  
Oregon Dept of Aviation Board  
Oregon Dept of Land Conservation and Development  
Oregon Dept of Transportation  
Oregon Farm Bureau  
Oregon Office of Emergency Management  
Positive Aurora Airport Management  
Regional Solutions  
Vans Aircraft  
Willamette Aviation  
Wilsonville Chamber of Commerce

## Name

Ben Williams  
Robert Fournier  
Ben Clayton  
Commissioner Danielle Bethell  
Austin Barnes  
Tony Beach  
Cathryn Stephens  
Matt Crall  
Naomi Zwerdling  
  
Sarah Puls  
Bruce Bennett  
Beth Wytoski  
Rian Johnson  
David Waggoner  
Patrick Donaldson

# PAC Meeting Guidelines

Meetings summaries will **include all comments along with responses/ follow up.**

- Meeting **time for all committee members to speak.** **We have added more time for dialogue.**
- Comments on **non-agenda items** should be provided in writing.
- Committee members are encouraged to **provide comments at least three days before meetings** to allow members time to review and reflect on comments.
- Come prepared for the meeting (by **reviewing materials posted on the website**). We'll let you know if materials will be reviewed in the meeting for the first time.
  - Be on the lookout for Draft Chapter 4 – Facility Goals & Requirements

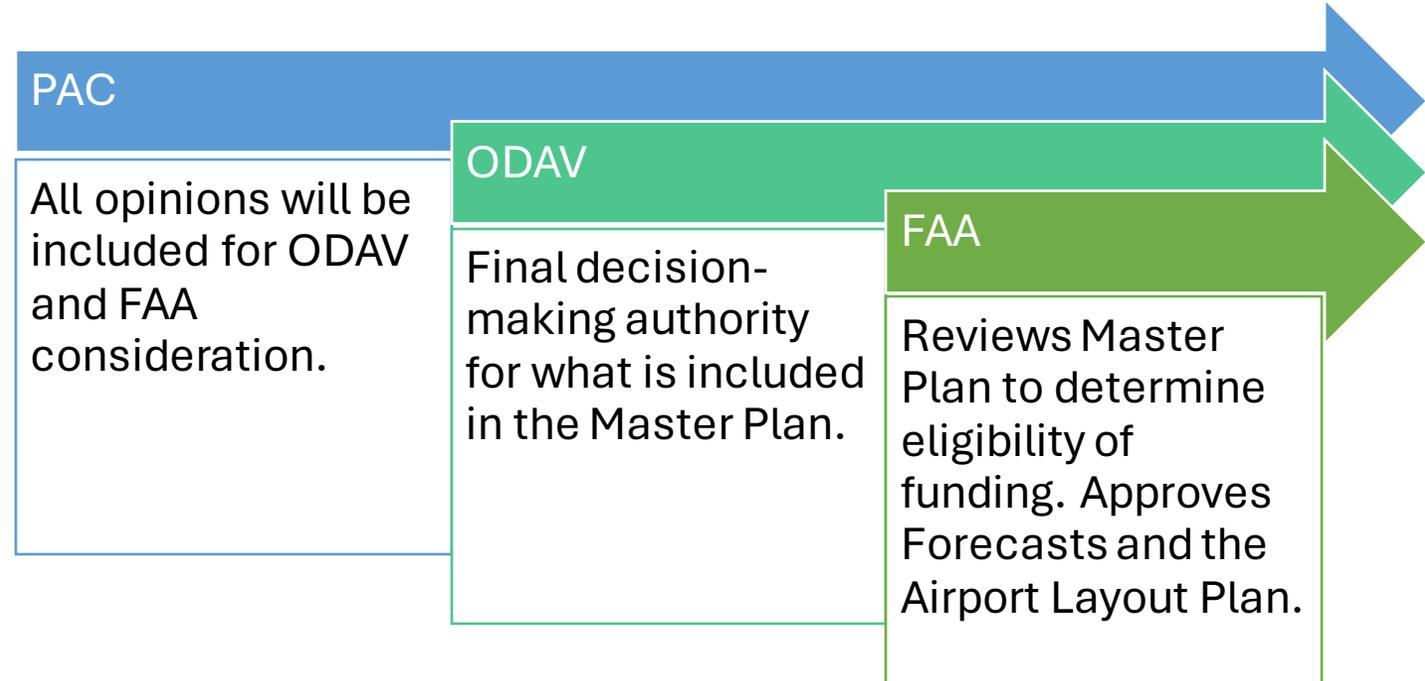
# PAC Meeting Guidelines

As a committee, we agree to **approach this work with honesty, openness, and willingness to work together.**

- This includes building trust and **assuming good intentions in others** and ensuring that our behavior supports a successful process.
- We will work with each other and staff to **address issues as they arise, utilize tools to ensure clear communication and robust participation, and meet the communication needs of members.**
- PAC members represent their organization, please keep your constituents informed of public meetings and project information.
- **We need all attendees to name/identify themselves.** Duplicates will be removed from the meeting.

# Decision Making

- **PAC** = Round table discussions and collection of committee member opinions at decision points. All opinions will be included in the meeting summary.
- **ODAV** = as the airport sponsor, will be the final decision-making authority. They will decide what is included in the Master Plan.
- **FAA** = reviews chapters of the Master Plan and has approval authority for the Aviation Activity Forecasts and the Airport Layout Plan.



**Where are we &  
where are we going?**

# Project Schedule





# Airport Master Plan Overview

# What is an Airport Master Plan?

## An Airport Master Plan IS

- An existing facilities summary
- An outlook of future aviation activity
- A plan for facility improvements
- A planning-level budget for facility improvements
- A visual representation (ALP) of proposed facility improvements

## An Airport Master Plan IS NOT

- A design/construction project
- Guarantee of proposed projects
- Environmental analysis
- County land use plan/action
- County transportation system plan

# Why are we doing an Airport Master Plan

**The Airport Master Plan (AMP) and process is guided by the FAA and ultimately results in projections of future activity and the preparation of an Airport Layout Plan (ALP).**

- FAA funding requirement
- Plan for the future
- Reflects current FAA airport design standards
- Updated ALP plans set
- Final AMP will replace prior planning



*Note: AMPs are a 20-year document but are typically updated on a more frequent timeline as conditions change (often 7-10 years).*

# Working Paper #1

# What's included in Working Paper #1

## Chapters

- Introduction
- Existing Conditions
- Aviation Activity Forecast (2021-2041)
  - Based Aircraft
  - Aircraft Operations (Takeoffs & Landings)
  - Critical (Design) Aircraft



## **Working Paper #1 Timeline**

- **May 2022**
  - First Draft WP# 1 Submitted to FAA and PAC for review
- **August 2022 to November 2023**
  - Ongoing coordination (forecast review) with FAA
  - Several rounds of edits and responses to FAA and public review comments
  - Updates to WP#1 posted on project website
- **Final Draft WP#1 Submitted to FAA on November 2, 2023**

**Clarifying  
Questions?**

# FAA Approved Forecast



U.S. Department of Transportation  
**Federal Aviation Administration**

Northwest Mountain Region  
 Colorado · Idaho · Montana · Oregon · Utah  
 Washington · Wyoming

Seattle Airports District Office  
 2200 S 216<sup>th</sup> Street, Rm 1W-422  
 Des Moines, WA 98198

November 15, 2023  
 \*Corrected January 23, 2024

Tony Beach  
 State Airports Manager  
 Anthony.BEACH@odav.oregon.gov  
 Oregon Department of Aviation

Federal Aviation Administration (FAA)  
 Aurora (UAO) Aviation Activity Forecast Approval  
 Airport Improvement Program Grant Number 3-41-0004-022-2021

The FAA Airports District Office has reviewed the aviation forecast for the Aurora (UAO) Airport Working Paper No. 1 (latest revision dated November 2023). The FAA approves these forecasts for airport planning purposes, including Airport Layout Plan (ALP) development, in addition to the existing and future critical aircraft. The FAA approval is based on the information submitted in Chapter 3, summarized as follows:

Airport Planning and TAF Forecast Comparison				
	Year	Airport Forecast	TAF	AF/TAF (% Difference)
<b>Passenger Enplanements</b>				
Base yr.	2021	0	0	0.0%
Base yr. + 5yrs.	2026	0	0	0.0%
Base yr. + 10yrs.	2031	0	0	0.0%
Base yr. + 15yrs.	2036	0	0	0.0%
<b>Commercial Operations</b>				
Base yr.	2021	2,006	1,727	16.2%
Base yr. + 5yrs.	2026	2,056	1,845	11.4%
Base yr. + 10yrs.	2031	2,108	1,967	7.1%
Base yr. + 15yrs.	2036	2,160	2,097	3.0%
<b>Total Operations</b>				
Base yr.	2021	76,028	76,794	-1.0%
Base yr. + 5yrs.	2026	79,354	78,053	1.7%
Base yr. + 10yrs.	2031	82,825	79,109	4.7%
Base yr. + 15yrs.	2036	86,449	80,198	7.8%

Note: TAF data is on a U.S. government fiscal year basis (October through September).

\*Highlighted cells corrected to correspond to values from Table 3-23 Forecast Summary.

Based on the approved forecast, the FAA also approves the C-II family of aircraft, for the existing and future critical aircraft.

Our approval is based on the following:

- The forecast is supported by reasonable planning assumptions and current data
- The forecast appears to be developed using acceptable forecasting methodologies
- The difference between the FAA Terminal Area Forecast (TAF) and the Airport's forecast for total operations is within the 10 percent and 15 percent allowance for the 5 and 10 year planning horizons.

Approval of this forecast does not automatically justify any of the capital improvements shown on the ALP or recommended in the master plan. All future projects will need to be justified by current activity levels at the time of proposed implementation. Lastly, the approved forecasts may be subject to additional analysis, or the FAA may request a sensitivity analysis if this data is to be used for environmental or Part 150 noise planning purposes.

This forecast was prepared at the same time as the evolving impacts of the COVID-19 public health emergency. Forecast approval is based on the methodology, data, and conclusions at the time the document was prepared. However, consideration of the impacts of the COVID-19 public health emergency on aviation activity is warranted to acknowledge the reduced confidence in growth projections using currently-available data.

Accordingly, FAA approval of this forecast does not constitute justification for future projects. Justification for future projects will be made based on activity levels at the time the project is requested for development. Documentation of actual activity levels meeting planning activity levels will be necessary to justify AIP funding for eligible projects.

If you have any questions about this forecast approval, please call me at (206) 231-4248.

Sincerely,  
 Tim House

TIMOTHY ALLEN HOUSE  
Digitally signed by TIMOTHY ALLEN HOUSE  
 Date: 2024.01.23 14:33:42 -0800

Lead Planner  
 SEA Airports District Office

cc: (Samantha Peterson)

## Key Takeaways from the FAA Forecast Approval

- FAA review and approval of the aviation activity forecasts is a critical path item in the airport master planning process
- The FAA-approved forecasts will be used in upcoming master plan analyses
- Facility requirements and proposed improvements will correspond to the FAA-approved forecast

# Forecast Summary (2021-2041)

Activity	CAGR	2021	2026	2031	2036	2041
<b>Based Aircraft</b>						
Single Engine*	-2.0%	220	199	179	162	146
Multi Engine**	-6.1%	15	11	8	6	4
Jet	1.3%	36	38	41	43	46
Helicopter	3.2%	10	12	14	16	19
<b>Total Based Aircraft</b>	<b>-1.3%</b>	<b>281</b>	<b>260</b>	<b>242</b>	<b>227</b>	<b>215</b>
<b>Aircraft Operations</b>						
<b>Itinerant</b>						
Itinerant Air Taxi	2.5%	2,006	2,056	2,108	2,160	2,214
Itinerant GA	2.1%	36,390	37,154	37,934	38,731	39,544
Itinerant Military	0.0%	79	79	79	79	79
<b>Itinerant Total</b>	<b>0.4%</b>	<b>38,475</b>	<b>39,289</b>	<b>40,121</b>	<b>40,970</b>	<b>41,838</b>
<b>Local</b>						
Local GA	1.3%	37,488	40,000	42,639	45,413	48,328
Local Military	0.0%	65	65	65	65	65
Local Total	1.3%	37,553	40,065	42,704	45,478	48,393
<b>Total Operations</b>	<b>0.9%</b>	<b>76,028</b>	<b>79,354</b>	<b>82,825</b>	<b>86,449</b>	<b>90,230</b>

# Aviation Activity Forecasts

## Aircraft Operations

- Increase at an average of 0.9% annually through 2041
- Current and Future Design Aircraft:
  - Medium Business Jet (C-II)
  - Aircraft Approach Category C
  - Airplane Design Group II

## Based Aircraft

- Decrease at an average of -1.3% annually through 2041
- Overall, piston aircraft decline and turbine aircraft increase

## Key Takeaways from the FAA Forecast Approval

- The total number of based aircraft at Aurora State Airport is projected to decline from 281 to 215 (*average annual rate: -1.3%*)
- Annual aircraft operations (takeoffs and landings) are projected to increase from around 76,000 to 90,000 over the next 20 years (*average annual rate: +0.9%*)
- These projections are consistent with FAA national expectations for the general aviation (GA) fleet and for GA airports with air traffic control towers

# Design Aircraft

The existing and future design aircraft corresponds to Aircraft Approach Category C and Airplane Design Group II.

This segment of activity represents the most demanding family of high-performance jet aircraft regularly operating at the Airport.

Aircraft Approach Category	Aircraft Approach Speed (knots)
A	less than or equal to 91
B	92 to 121
C	122 to 141
D	142 to 166

Airplane Design Group	Aircraft Wingspan
I	less than or equal to 49'
II	50' to 79'
III	80' to 118'
IV	119' to 171'

A-I (small)  
12,500 lbs. or less



Beech Baron 55  
Beech Bonanza  
**Cessna 182**  
Piper Archer

B-I (small)  
12,500 lbs. or less



**Beech Baron 58**  
Beech King Air C90  
Cessna 402  
Cessna 421

A-II, B-II (small)  
12,500 lbs. or less



Super King Air 200  
**Pilatus PC-12**  
**DCH Twin Otter**  
Cessna Caravan

B-II  
Greater than 12,500 lbs.



Super King Air 300, 350  
Beech 1900  
**Cessna Citation**  
Falcon 20, 50

A-III, B-III  
Greater than 12,500 lbs.



DHC Dash 7, Dash 8  
**Q-200, Q-300**  
DC-3  
Convair 580

C-I, D-I



**Lear 25, 35, 55, 60**  
Israeli Westwind  
HS 125-700

C-II, D-II



Gulfstream II, III, IV  
**Canadair 600**  
Canadair Regional Jet  
Lockheed JetStar

C-III, D-III



Boeing Business Jet  
**Gulfstream 650**  
B 737-300 Series  
MD-80, DC-9

C-IV, D-IV



**B - 757**  
B - 767  
DC - 8-70  
DC - 10

## Design Aircraft Definition

The design aircraft defined in the FAA-approved forecast is used to establish the applicable design categories based on:

- Aircraft Physical Dimensions (wingspan and tail height)
- Aircraft Approach Speed
- Large or Small Aircraft (above or below 12,500 pounds takeoff weight)

## Design Aircraft Criteria - *Aurora State Airport*

- Aircraft Approach Category C activity exceeded the 500 annual operations threshold required by FAA (**AAC C**)
- Airplane Design Group II or larger aircraft also exceeded the 500 annual operations threshold required by FAA (**ADG II**)
- **AAC** and **ADG** are independently justified through current and forecast activity levels, and the **C-II** designation most accurately represents this segment of aircraft activity at the Airport

**Clarifying  
Questions?**

**Public Comments?**

# Public Comments

**If you would like to speak, you have 2 minutes:**

- Please “raise your hand”
- Press \*9 for callers

**Submit your comments via the online comment form:**

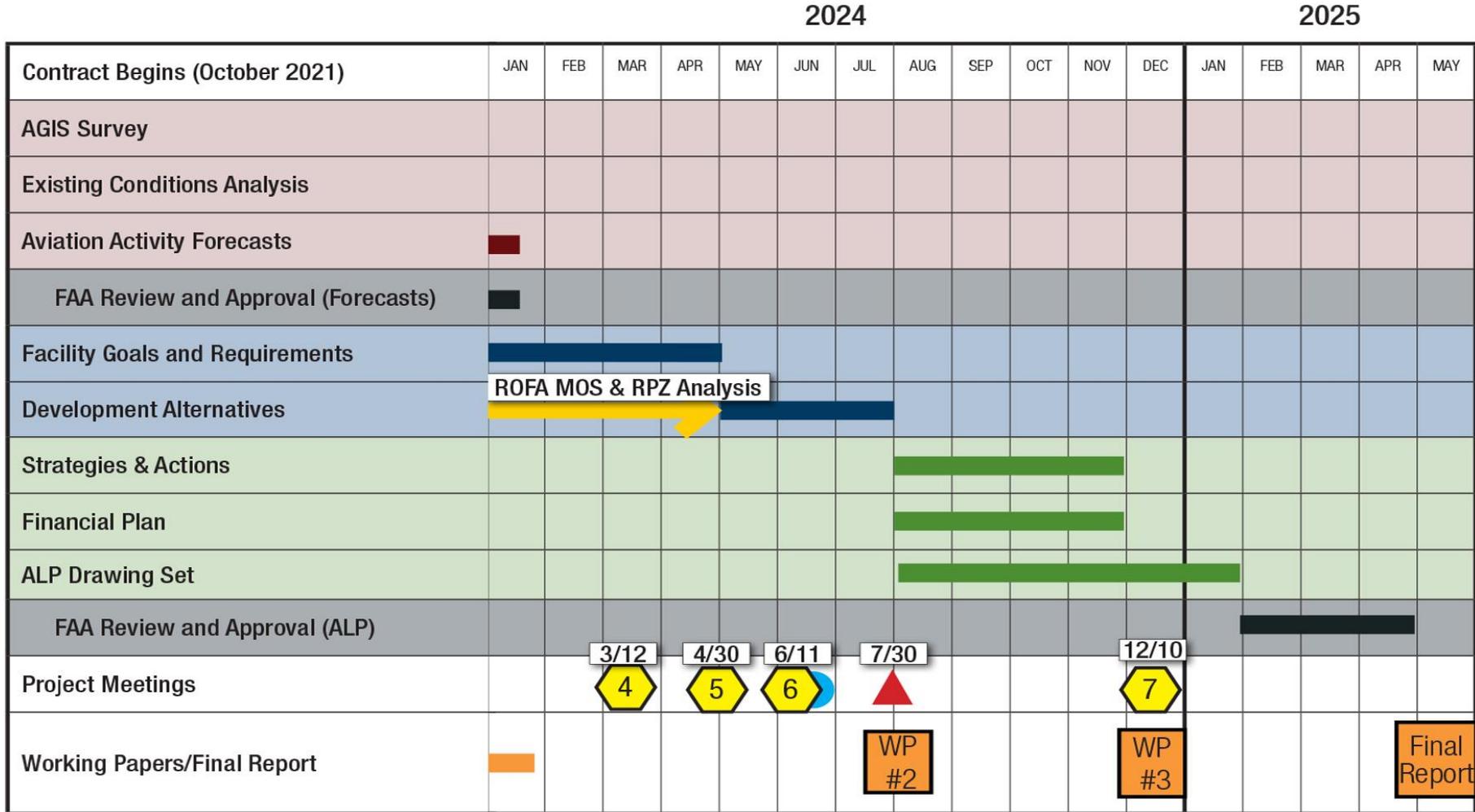
**[publicproject.net/AuroraAirport](https://publicproject.net/AuroraAirport)**

- All comments will be responded to in the meeting summary
- Themes from comments will be shared at the following PAC Meeting



# Next Steps

# Next Steps



## Next Steps - Facility Requirements Evaluation (Chapter 4)

- The next step in the master planning process is to define on-airport facility needs based on current and forecast aviation demand.
- The applicable FAA airfield design standards are consistent with the existing and future design aircraft defined in the FAA-approved forecasts.
- Facility needs may include conformance to established FAA design standards, other specific criteria, and activity-driven demand (e.g., hangars, aircraft parking, etc.).

# Airport Facility Requirements (Aeronautical Uses)

Most airport facility requirements are classified as **Airside** or **Landside**:

- **Airside** facilities are those directly related to the arrival, departure, and movement of aircraft.
- **Landside** facilities accommodate aircraft storage and servicing needs, and support (secondary support facilities may also be classified as support).

# Facility Requirements - Examples

## Airside facilities:

- Runways
- Taxiways
- Airfield Instrumentation and Lighting

## Landside facilities:

- Aircraft Parking Aprons
- Fueling Apron, Fuel Storage, Dispensing
- FBO Facilities
- Aircraft Hangars
- Aircraft Wash Pads

# Thank You

**Alex Thomas – ODAV**

**Tony Beach – ODAV**

**Brandy Steffen – JLA Public Involvement**

**David Miller – Century West Engineering**



**Project Website: <https://publicproject.net/AuroraAirport>**