

## MINUTES AIRPORT ADVISORY COMMISSION

Wednesday, May 17, 2023 - 6 p.m.
Virtual Meeting
YouTube



#### 1. CALL TO ORDER, ROLL CALL

Call to order: 6:01 p.m.

Roll Call: John Foley; Chair, Doug Brenizer; Vice Chair, Christopher Burkholder, Kat Pence, Mike Morrow,

Arnaud Verstuyf

**Absent**: LTC Nathan Edgecomb **Staff:** John Paskell, Lynda Rose

Guest: Marieke Armstrong, Kevin Mulcaster (Mead & Hunt)

#### 2. APPROVAL OF AGENDA

**Motion:** Move to approve the May 17, 2023, agenda as presented.

Motion by: Member: Brenizer Seconded by: Verstuyf

**Action:** Approved the meeting agenda for May 17, 2023, as presented.

Vote: Unanimous Motion approved

#### 3. APPROVAL OF MINUTES

**Motion:** Move to approve the March 15, 2023, minutes as presented.

**Motion by**: Member: Brenizer Seconded by: Pence

**Action:** Approved the meeting minutes for March 15, 2023, as presented.

Vote: Unanimous Motion approved

#### 4. PUBLIC COMMENT - NA

#### 5. PRESENTATION

a. Marieke Armstrong: Airport Master Plan Update

Comments/Questions: Brenizer, Burkholder, Nishioka, Armstrong, Mulcaster

#### 6. REPORTS

a. Airport Manager Report: John Paskell (see attached letter to Salem Planning Commission)

Comments/Questions: Brenizer, Verstuyf, Pence, Burkholder, Paskell

#### 7. ITEMS FOR COMMISSION DISCUSSION

Comments/Questions: Foley, Paskell

#### 8. ADJOURNMENT

Meeting adjourned at 7:01 p.m. Next meeting: July 19, 2023

AAC Minutes – May 17, 2023 Page 1



# EXPERIENCE EXCEPTIONAL

Airport Advisory Commission

Salem Airport (SLE) Master Plan

May 17, 2023



# Meeting Agenda

- Project Overview
- Existing Conditions
- Environmental Considerations
- Aviation Forecasts
- Facility Requirements
- Next Steps





# **Project and Goals**

## Purpose

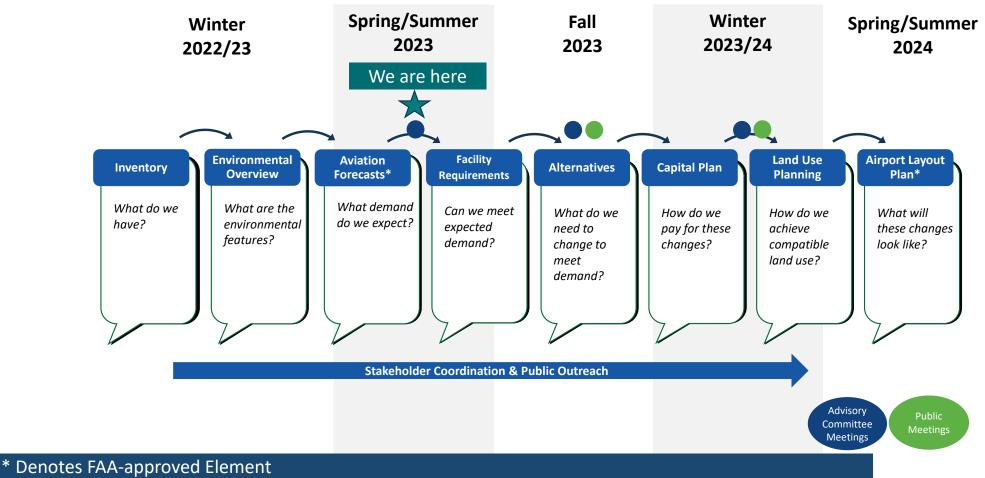
- Evaluating the Airport's Needs For Over a 20-year Planning Period
- Meeting FAA Requirements and Design Standards
- Complementing Community Interests
- Updating the Capital Improvement Plan
- Approving the Airport Layout Plan
- Receiving the Grant Funding

## Airport Master Plan Goals

- Runway/Taxiway Geometry
- Analysis of Existing Infrastructure
- Property Development Alternatives
- Long-Term Planning
- Financial Resiliency
- Future of Runway 16/34
- Reintroduction of Commercial Service



# **Project Schedule**







# **Existing Conditions**

Airside	Landside
Runway System	Airfield Communication Facilities
	and Equipment
Taxiway System	Airfield Vehicle Access Routes
Aircraft Parking and Transient	Aircraft Hangars
Aprons	G
NAVAIDS, Lighting System, and	Airport Maintenance and Material
Shelters	Storage
Pavement Markings, Lighting,	Fencing/Gates/Security
Signage	
Air Cargo/Freight Facilities	General Aviation Service Operator
	Facilities
Aircraft Fuel Storage and	General Aviation Terminal Facilities
Dispensing Systems	
Air Traffic Control Tower	Other Airport Tenant Facilities





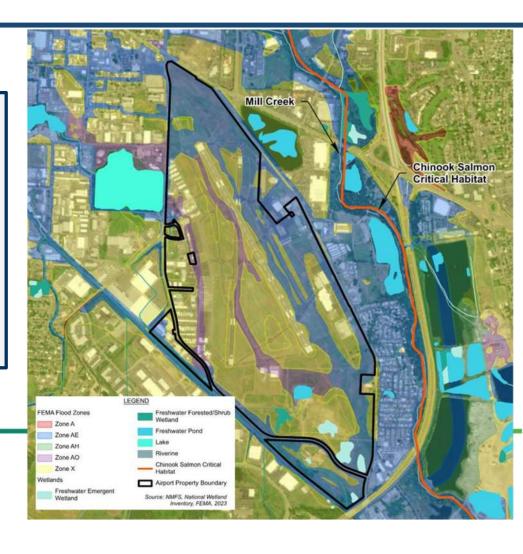


## **Environmental Overview**

- Air Quality
- Threatened and Endangered Species
- Climate
- Coastal Resources
- Section 4(f) Resources
- Farmland and Soils
- Hazardous Materials
- Historical and Cultural Resources

- Natural Resources and Energy Supply
- Noise
- Socioeconomic, Environmental Justice, and Children's Environmental Health and Safety Risks
- Water Resources







# Introduction to Forecasts

## Analyzes the following:

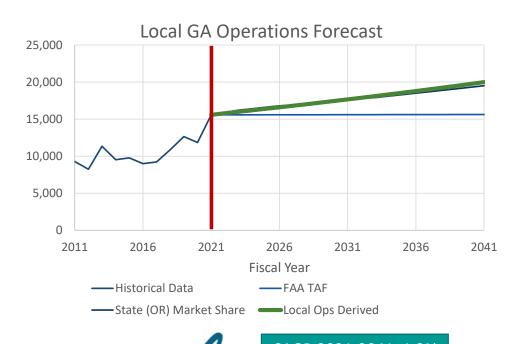
- General Aviation Forecast
- Community Profile
- Aviation Activity Profile
- Commercial Forecasts
- Peak Forecasts and Critical Aircraft
- Summary

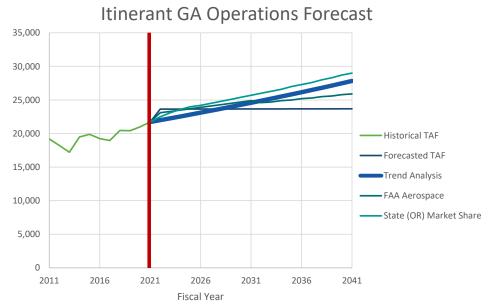






# **General Aviation Operations**





SLE MASTER PLAN

CAGR 2021-2041: 1.2%



# **Facility Requirement Analysis**

## Analyzes the following:

- Airfield Design Standards
- Airfield Demand and Capacity
- Runway Length
- Aeronautical Facilities
- Non-Aeronautical Facilities
- Passenger Terminal Facilities
- Electric Aircraft Facilities





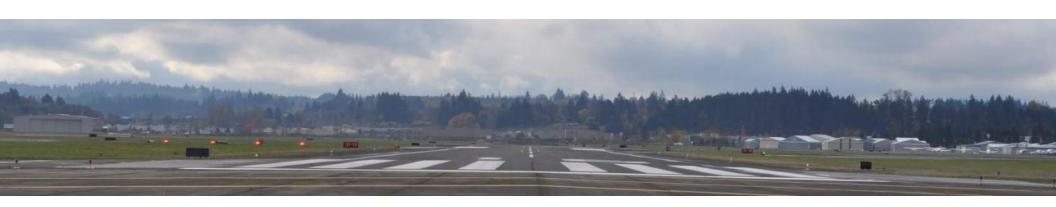


# Runway 16/34 Analysis

- Runway is not eligible for FAA funding
- Future maintenance will be 100% funded by the City
- What are the potential considerations and opportunities for the City?
- > Considerations:
  - Runway Pavement
  - Taxiway Pavement
  - Taxiway / Taxilane System
  - Obstructions
  - Navaids

- Lighting and Electrical
- Hangars
- Terminal Apron
- GA Apron
- Aeronautical Development

- Non-Aeronautical Development
- Avigation Easements
- Noise



# **Next Steps**

## **Chapter PAC Review – Spring / Summer 2023**

- ✓ Existing Conditions
- ✓ Environmental Considerations
- Aviation Forecasts FAA Review

## **Chapter Preparations – Fall 2023**

- Facility Requirements
- Alternatives Development

## Meetings – Late 2023

- Planning Advisory Committee #2
- Public Meeting #1
- City Council Meeting #2



# Questions? Thank you.



## **Contact Information**

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**FOR MEETING OF:** <u>May 16, 2023</u>

**AGENDA ITEM NO.: 6.2** 

TO:

PLANNING COMMISSION

FROM:

MICHAEL SLATER, PLANNING COMMISSIONER

SUBJECT: COMMISSIONER MOTION

### **MOTION:**

I move that the Planning Commission send the City Council the attached letter, which encourages the City to undertake a feasibility study for the installation of solar panels, battery storage, and a microgrid at the Salem airport as part of the airport's master plan update.

### **DISCUSSION:**

The Planning Commission is an advisory body to the City Council. As we identify issues or opportunities, we should alert the City Council in a timely manner. This is especially true when the solution will require money and resources be dedicated to a project.

The attached letter explains my recommendation and why it is the right time to pursue this action.

Attachments:

A. Draft Letter to City Council

#### Dear Mayor Hoy and Councilors:

We are writing to recommend that the City of Salem conduct a feasibility study for the installation of a photovoltaic (PV) array, battery storage, and microgrid at Salem's McNary Field.

The Federal Aviation Administration declared in 2018 that: "Solar is a renewable energy source that contributes to national goals of sustainability, energy independence, and air quality improvement. It is particularly well-suited to airports because of the available space at airports, unobstructed terrain, and energy demand."

Commercial airports, large and small, have embraced solar energy as a way to reduce the carbon footprint of airport operations. Chattanooga's airport (TN), slightly larger than Salem's, led the way with the installation of a one-megawatt system in 2010. Today, they have a system that generates 2.7 megawatts. This capacity meets the total energy needs of the airport operations.<sup>2</sup> The New York Times, in a 2021 article, reported that 20% of public airports have integrated solar panels into their landscape.<sup>3</sup>

A one-megawatt system requires about 6 non-contiguous acres of solar panels. A Salem's McNary Field has 751 acres. It would require converting less than one percent of the airport's existing land to support a one-megawatt system.

A review of McNary Field's airport existing and future design will show that there are many opportunities to site a one-megawatt ground-mounted solar array that both meet the FAA's design requirements and limits the loss of buildable land. For example, the space between the east taxiway and building footprints along Turner Road is a potential candidate for a solar array. Similarly, the southeast corner where Airport Road meets Turner Road may also be a good candidate.<sup>5</sup>

The cost for a ground-mounted solar system is more expensive than a rooftop system, although ground-based arrays are often larger and benefit from efficiencies of scale. Current estimates for installation of ground-mounted solar arrays range from \$2.00 to \$4.00 a watt. Therefore, a one-megawatt system would cost between \$2 million and \$4 million before grants or other incentives. Fortunately, the city has a successful track record of raising grant funds for infrastructure development. One recent example is a \$1 million grant from the Oregon Department of Energy to help fund the installation of solar panels and a microgrid at the City's new public works building.

<sup>&</sup>lt;sup>1</sup> Federal Aviation Administration. "Technologic Guidance for Selecting Solar Technologies on Airports." Version 1.1. Washington, DC. April 2018, p. 1.

<sup>&</sup>lt;sup>2</sup> Chattanooga Airport. Chattanooga Airport Solar Farm. Accessed on April 22, 2023. https://www.chattairport.com/solar-farm

<sup>&</sup>lt;sup>3</sup> Zipkin, Amy. "Seeking Space for Solar Farms, Cities Find Room at Their Airports." *The New York Times*. December 20, 2021.

<sup>&</sup>lt;sup>4</sup> Oregon Department of Energy. "Study on Small-Scale and Community-Based Renewable Energy Projects." State of Oregon. Salem, OR. September 2022, p. 18.

<sup>&</sup>lt;sup>5</sup> The FAA has permitted solar arrays in the runway protection zone. See page 31 of "Technologic Guidance for Selecting Solar Technologies on Airports."

A solar array with battery backup and a microgrid would also improve the airport's resilience in the case of a disaster. Moreover, reducing GHG emissions from City facilities and establishing a system of microgrids are both part of the Salem's climate action plan.<sup>6</sup>

The City has approved funding for improvements to the airport and is also undertaking a master plan process. We recommend that the scope of the master plan be expanded to include a solar feasibility study. Fortunately, the consultants engaged to conduct the master plan are qualified to provide a solar feasibility study.

Sincerely,

<sup>&</sup>lt;sup>6</sup> City of Salem & Verdis Group. Salem Climate Action Plan. Final Draft. November 2021. Accessed on May 5, 2023. https://www.cityofsalem.net/home/showpublisheddocument/5348/637801058544930000