



ONTARIO
OREGON
THE GATEWAY TO ADVENTURE

Ontario, Oregon Airport (ONO)

Airport Master Plan Update
Technical Advisory Committee Meeting #2
March 29, 2022



J-U-B ENGINEERS, INC.



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AGENDA

Review of the Planning Study



Stakeholder and User Responses



Findings of the Ontario Airport Inventory Study



The Ontario Airport Aviation Forecast



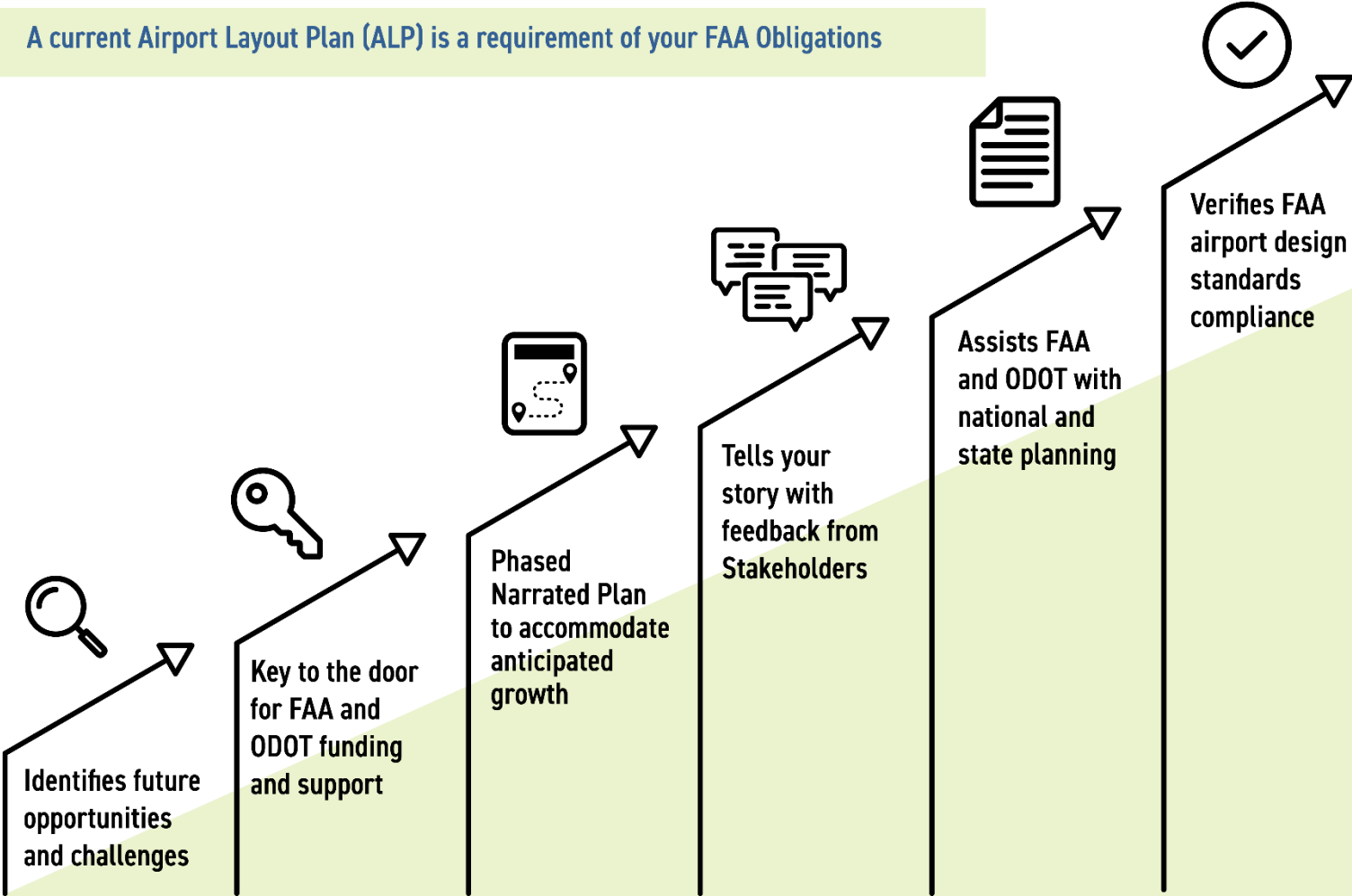
Planning for Needs and Alternatives



Next Steps

WHY DO AIRPORT PLANNING?

A current Airport Layout Plan (ALP) is a requirement of your FAA Obligations



WHAT DO WE GET FROM THIS PROCESS?

Working Paper 1



- Study Initiation
- Public Involvement/ Stakeholder Coordination
- Aviation Inventory and Existing Conditions
- Environmental
- Aviation Forecasts

Working Paper 2



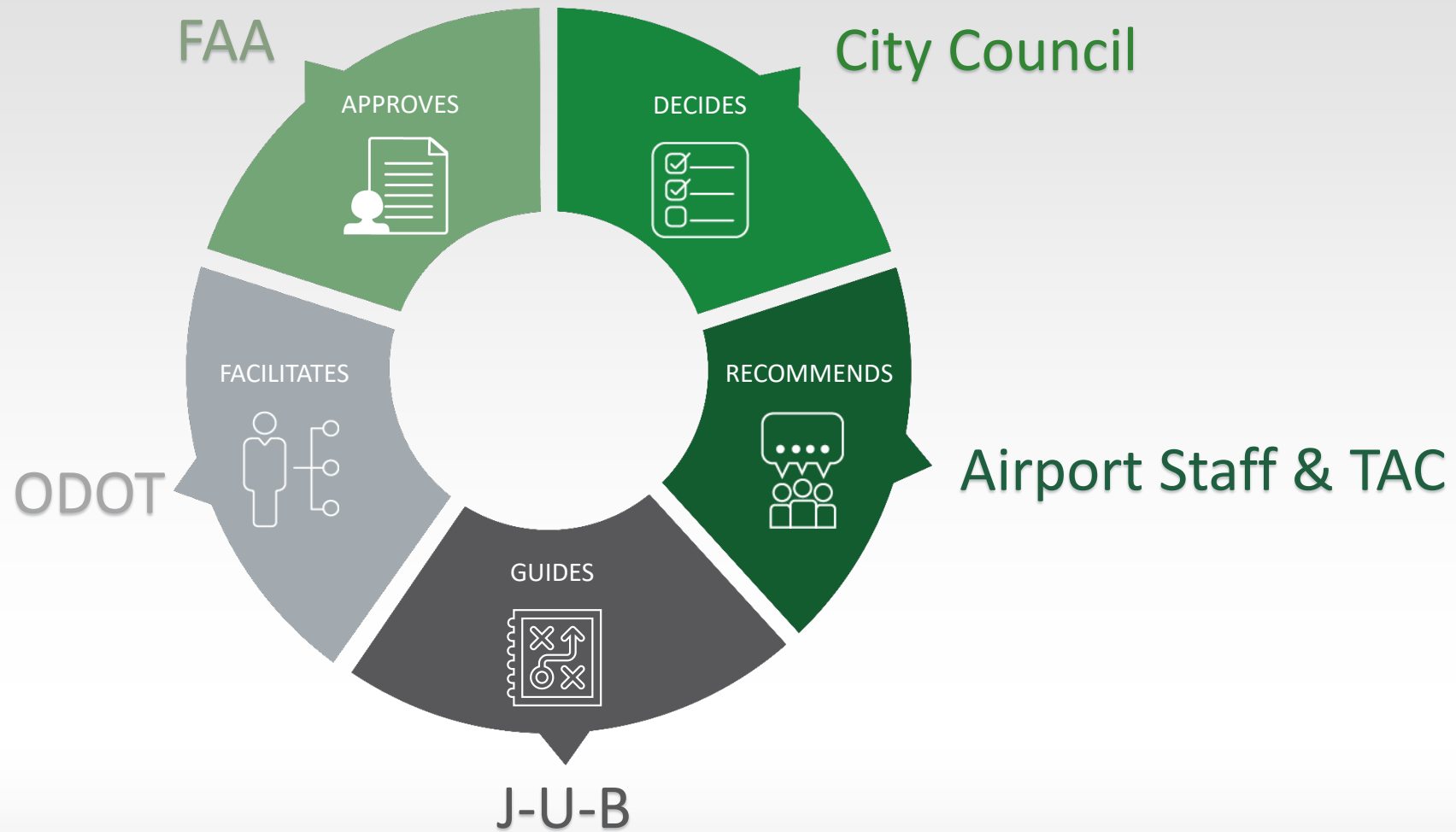
- Facility Requirements
- Alternatives and Development Evaluation

Final Product



- Facilities Implementation Plan and Financial Feasibility Analysis
- Updated Airport Master Plan Narrative
- Updated Airport Layout Plans

WHO DOES WHAT?



ROLE OF THE TECHNICAL ADVISORY COMMITTEE (TAC)

What is it?

- Advisory board to the City Council
- Liaisons between the community and Airport

What do members do?

- Exchanges different ideas and perspectives
- Takes community benefits into consideration
- Works together to provide recommendations that meets the needs and interests of all parties

TAC MEMBERS



- | | |
|---------------------|-------------------------------|
| Justin Zysk | Airport Manager |
| Adam Brown | City Manager |
| John Kirby | City Council |
| Dan Cummings | Economic Development Director |
| John Freeburg | Committee |
| Gary Taylor | Committee President |
| Shawn Coleman | Committee Vice Chair |
| Shay Myers | Committee |
| Luke Keller | Committee |
| David Bryant | TVCC |
| Brian Rindlisbacher | BLM |
| Jessica Sherwood | BLM |
| Michael Spelman | BLM |
| Catherine Weber | FBO |
| Shawna Peterson | Eastern Oregon Border Board |

Who are we
missing?

Chapter One Introduction

- Project Progress
- Issues and Hot Topics
- Outreach/Feedback

PROJECT SCHEDULE

ONO	Completed	03/2022	04/2022	05/2022	06/2022	07/2022	08/2022	09/2022	10/2022	11/2022	12/2022
Project Creation	★										
Chapter 1 Introduction	📖										
Chapter 2 Inventory	📖										
Chapter 3 Forecasts		📖									
Chapter 4 Facility Requirements				📖							
Chapter 5 Alternatives					📖						
Chapter 6 Phased Development							📖				
Chapter 7 ALP Drawings									📖		★
FAA Reviews		➔					➔			➔	
Consultations/Public Involvement	👥	👥			👥					👥	
Deliverables	📄					📄			📄		📄

PLAN FOR KEY ISSUES

- 1 Potential Development and Enhancement
- 2 Grant Assurance Compliance
- 3 FAA Design Standards Compliance
- 4 Future Design/Critical Aircraft



Welcome to the Ontario, Oregon Airport Master Plan Update.

Over the coming months the Airport will evaluate the overall facilities and surrounding environment of the airport and seek input for future plans. The project is particularly focused on the land located west of the runway where the golf course used to be. The City and the Airport want to use the available space to provide benefit to the community and additional revenues for the Airport. Your input is appreciated. Information about the project, the process, and the documents created will be updated on this page as the City moves through the Master Planning effort.

Master Plan Documents

- Chapter 1 - Introduction
- Chapter 2 - Inventory
- Chapter 3 - Forecast
- Chapter 4 - Facilities Requirements
- Chapter 5 - Alternatives
- Chapter 6 - Project Implementation
- Chapter 7 - ALP

Planning Links

- Master Plan Future Use Survey
- TAC Meeting 1
- TAC Meeting 1 Notes
- TAC Meeting 2
- Public Meeting
- TAC Meeting 3

Contact Information

If you have comments, ideas, or questions concerning the future of the Ontario Airport, please contact the project representative or the airport manager

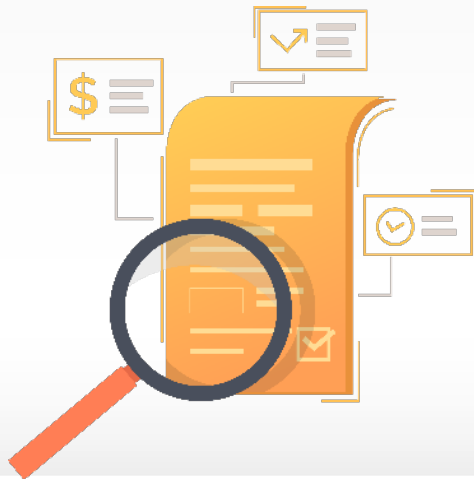
Justin Zysk - Airport Manager

Call: 541-709-7651

Email: [Click Here](#)

CITY AND STAKEHOLDER OVERVIEW

- Solicited information via
 - In-person conversations
 - Survey
 - Social Media



STAKEHOLDER ASSESSMENT

Main Themes

- Covered/Indoor Parking for GA and Corporate jets that park overnight
- Terminal building with 24-hour access area for hanging out and relaxing
- Restaurant on the property to give a reason to choose to fly into Ontario
- More existing hangars that are move-in ready
- Grass strip tiedown area with a shelter/fire pit area for fly-in campers (Bozeman is an example)
- Deicing
- Development of the west side (golf course)

Chapter Two Inventory

- Role
- Airfield and Pavements
- Airspace, Land use
- Activity

INVENTORY

- Role in System
 - Local general aviation airport in the National Plan of Integrated Airport Systems (NPIAS)
 - \$5,216,288 in federal funds from 2003 to 2021
 - \$4,789,461 in state funds from 2007 to 2021
- Activity
 - 89 based aircraft
 - 18,062 aircraft operations (2021)
- Airside
 - Beacon and Local Weather available
 - 5,006' x 100' Runway 15/33
 - 2 Apron areas, 34 tie-downs
- Airspace and Approaches
 - VFR and IFR Capabilities
 - Runway 15: 1-mile visibility minimum
 - Runway 33: 7/8-mile visibility minimum



INVENTORY

Airside



Landside



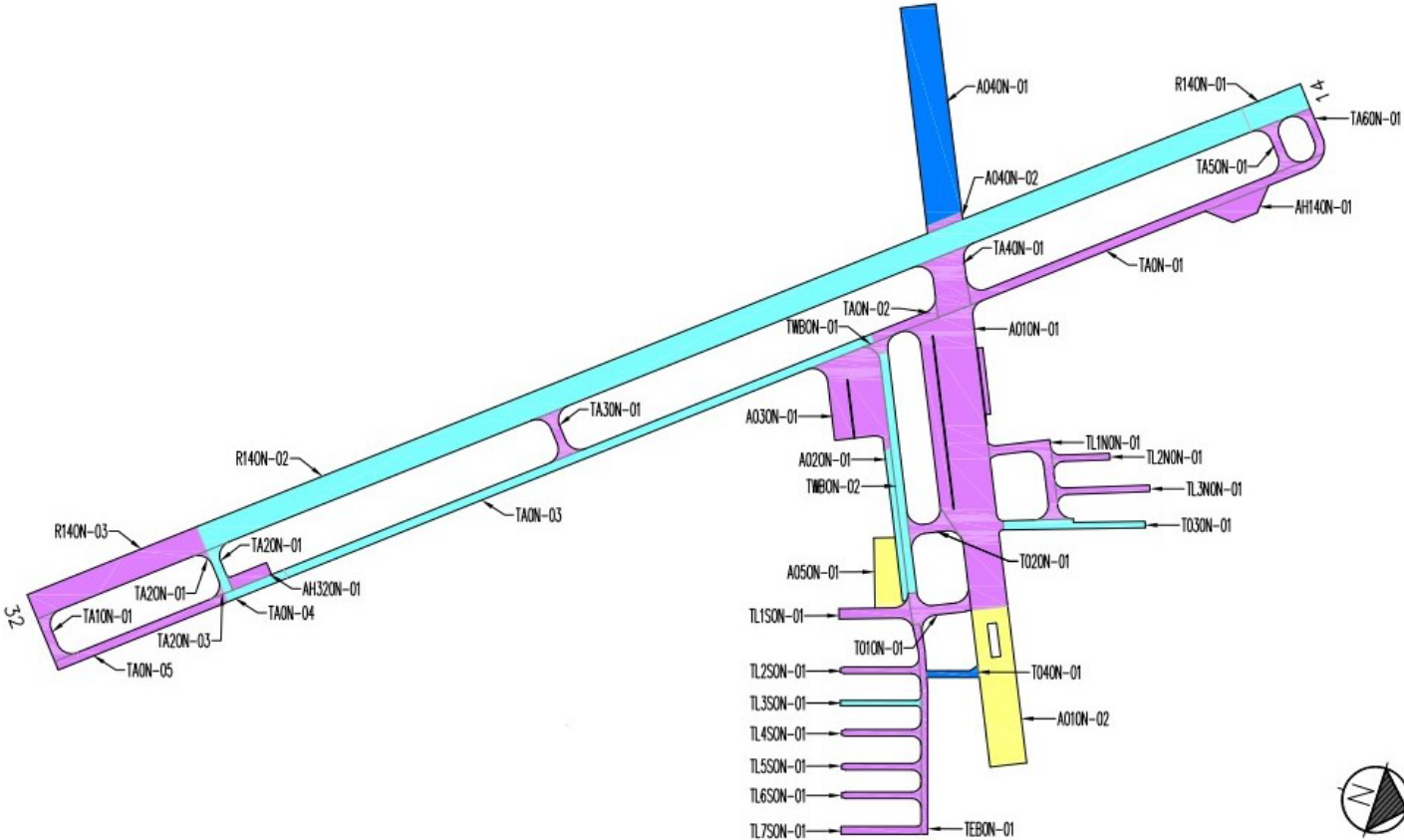
DESIGN STANDARDS

Standard/Specification	Standard	Existing
Runway Design Code (Runway 15/33)	B-II, NP, Large	B-II, NP, Large
Critical Aircraft	Beechcraft King Air 200	Beechcraft King Air 200
Runway Length/Width	4,000 x 75 Feet	5,006 x 100 Feet
Runway Safety Area Width/Beyond End	150'/300'	150'/300'
Runway Object Free Area Width/Beyond End	500'/300'	500'/300'
Runway Obstacle Free Zone Width/Beyond End	400'/200'	400'/200'
Runway Protection Zones	500'x700'x1,000' (15 End) 1,000'x1,510'x1,700' (33 End)	500'x700'x1,000' (15 End) 1,000'x1,510'x1,700' (33 End)
Runway to Aircraft Holdline	200'	200'
Runway to Parallel Taxiway	240'	245'
Runway to Aircraft Parking	250'	>250
Taxiway Design Group	2	2
Taxiway Width	35'	35'
Taxiway Safety Area Width	79'	79'
Taxiway/Taxilane Object Free Area Width	131'/115'	131'/115'

PAVEMENT CONDITION

2017 Pavement Inventory

- Runway and taxiway pavement in good condition
- Pavement near the eastern hangered areas classified as poor, in need of reconstruction



ADDITIONAL INVENTORY

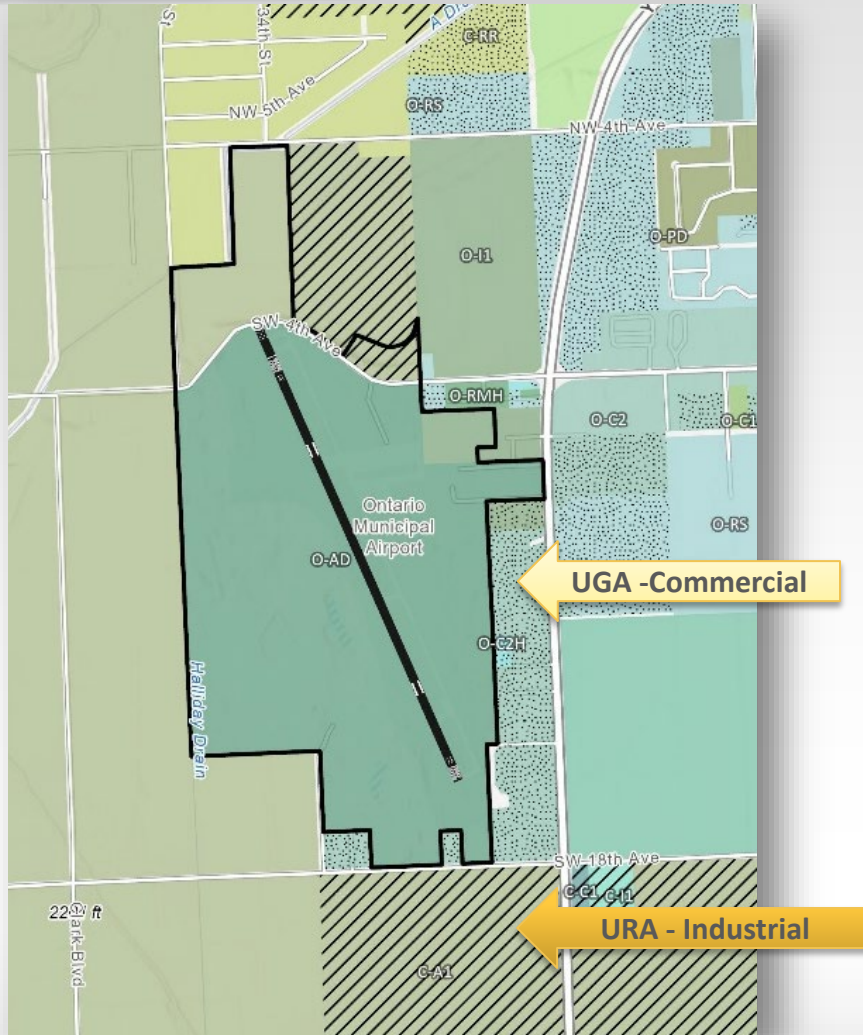
- Fueling system
 - Airport owned Fuel farm – 3 above ground tanks
 - 2 fuel trucks
 - 4,000 USG for Jet A
 - 2,000 USG 100LL
- FBO
 - Silverhawk Aviation Academy
 - 5,026 square foot maintenance hangar
- Hangars
 - 48 Hangars (Including permit requests)
- Terminal Building / Pilot's Lounge
 - 3,115 square feet
- Other businesses
 - EMS Life Flight - 9,369 square foot hangar
 - BLM Seat Base – 2,383 square foot office building



ENVIRONMENTAL FINDINGS

Analysis	Status	Impact
Air Quality	<input checked="" type="checkbox"/> Complete	
Climate	<input checked="" type="checkbox"/> Complete	
Biological Resources	<input checked="" type="checkbox"/> Complete	
Water Resources, Wetlands, Surface Waters, Groundwater, Scenic Rivers	<input checked="" type="checkbox"/> Complete	
Coastal Resources	<input checked="" type="checkbox"/> Complete	
Natural Resources and Energy Supply	<input checked="" type="checkbox"/> Complete	
Historical, Architectural, Archeological and Cultural Resources	<input type="checkbox"/> Pending Cultural Resource Survey	
Farmlands	<input checked="" type="checkbox"/> Complete	Airport expansion to surrounding areas would impact farmland and require coordination with USDA/NRCS.
Land Use	<input checked="" type="checkbox"/> Complete	
Noise and Compatible Land Use	<input checked="" type="checkbox"/> Complete	
Visual Effects	<input checked="" type="checkbox"/> Complete	
Socioeconomics, Environmental Justice, Children's Environmental Health, Safety Risks	<input checked="" type="checkbox"/> Complete	
Hazmat, Solid Waste & Pollution Prevention	<input checked="" type="checkbox"/> Complete	Any projects impacting Ralston Aviation and the BLM would require coordination with IDEQ.

ZONING AND LAND USE



Future chapters will research zoning and land use to verify that areas are zoned appropriately.

DESIGN CRITERIA

Aircraft Approach Category (AAC)

Category	Approach Speed
A	Less than 91 knots
B	91 to 121 knots
C	121 to 141 knots
D	141 to 166 knots
E	More than 166 knots

Airplane Design Group (ADG)

Group Number	Tail Height (ft)	Wingspan (ft)
I	Less than 20	Less than 49
II	20 to 30	49 to 79
III	30 to 45	79 to 118
IV	45 to 60	118 to 171
V	60 to 66	171 to 214
VI	66 to 80	214 to 262

The critical aircraft ultimately determines the dimensional requirements of an airport. Ontario Municipal Airport has a B-II Airport Reference Code (ARC).

Beechcraft King Air 200 Characteristics

Characteristic	Aircraft Performance	FAA Design Code	Aircraft Classification
Approach Speed	90 Knots	AAC	B
Wingspan	54.5 Feet	ADG	II
Tail Height	14.8 Feet		
Max Takeoff Weight (MTOW)	12,500 Pounds	AAC/ADG	B-II
Main Gear Width (MGW)	17.7 Feet	TDG	2
Cockpit to Main Gear (CMG)	15 Feet		

FUTURE/DESIGN CRITICAL AIRCRAFT

Airport Design

- Airfield Design Based Upon Aircraft
- Based upon Wingspan and Approach Speed
- Also based upon Wheel Track and Wheelbase
- 500 Take-offs or Landings by 'Biggest and Fastest' Aircraft, Determine Which set of Design Standards
- Critical Aircraft

Primary Considerations:

- *Operations – game camera, fuel sales, TAF, TFMSC, other*
- *Based Aircraft – basedaircraft.com*

Airplane Approach Category (AAC)

Category	Approach Speed (kts)
A	Less than 91
B	91 or greater, but less than 121
C	121 or greater, but less than 141
D	141 or greater, but less than 166
E	166 or greater

Airplane Design Groups (ADG)

Group	Tail Height (ft)	Wingspan (ft)
I	<20	<49
II	20-<30	49-<79
III	30-<45	79-<118
IV	45-<60	118-<171
V	60-<66	171-<214
VI	66-<80	214-<262



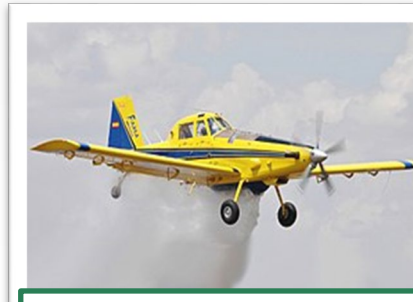
A-I
Cessna 172



A-II
Pilatus PC-12



B-I
Cessna Citation
Mustang



B-II
Air Tractor AT-802



Current
Critical Aircraft

B-II
King Air B-200

DISCUSSION & QUESTIONS



Chapter Three
Forecasts of Aviation
Demand

- Economic Influences and Socioeconomics
- Based Aircraft Projections and Forecast
- Aircraft Operations and Forecast

FACTORS FOR FORECASTING

Influencing Factors on Forecasting

- FAA and State of Oregon
- Service Area (Ontario, OR-ID Micropolitan Statistical Area) Growth Trends
 - Socioeconomic
 - Increased Business Interests
- Based Aircraft and Annual Operations
- Game Camera records

Based Aircraft and Operations Projections and Forecasting

- FAA Single-Engine Piston, Multi-Engine Piston, Jet, Turboprop, and Helicopter Trends
- FAA Fuel Sales, Pilot Hours Flown, and Fleet Mix
- Type of Aircraft Forecasts calculated using data from FAA Terminal Area Forecast (TAF) and FAA Traffic Flow Management System Counts (TFMSC)

BASED AIRCRAFT FORECAST

Current Based Aircraft: **89**

Projected Based Aircraft: **105**



OPERATIONS FORECAST

2021 Annual Operations: **18,237**

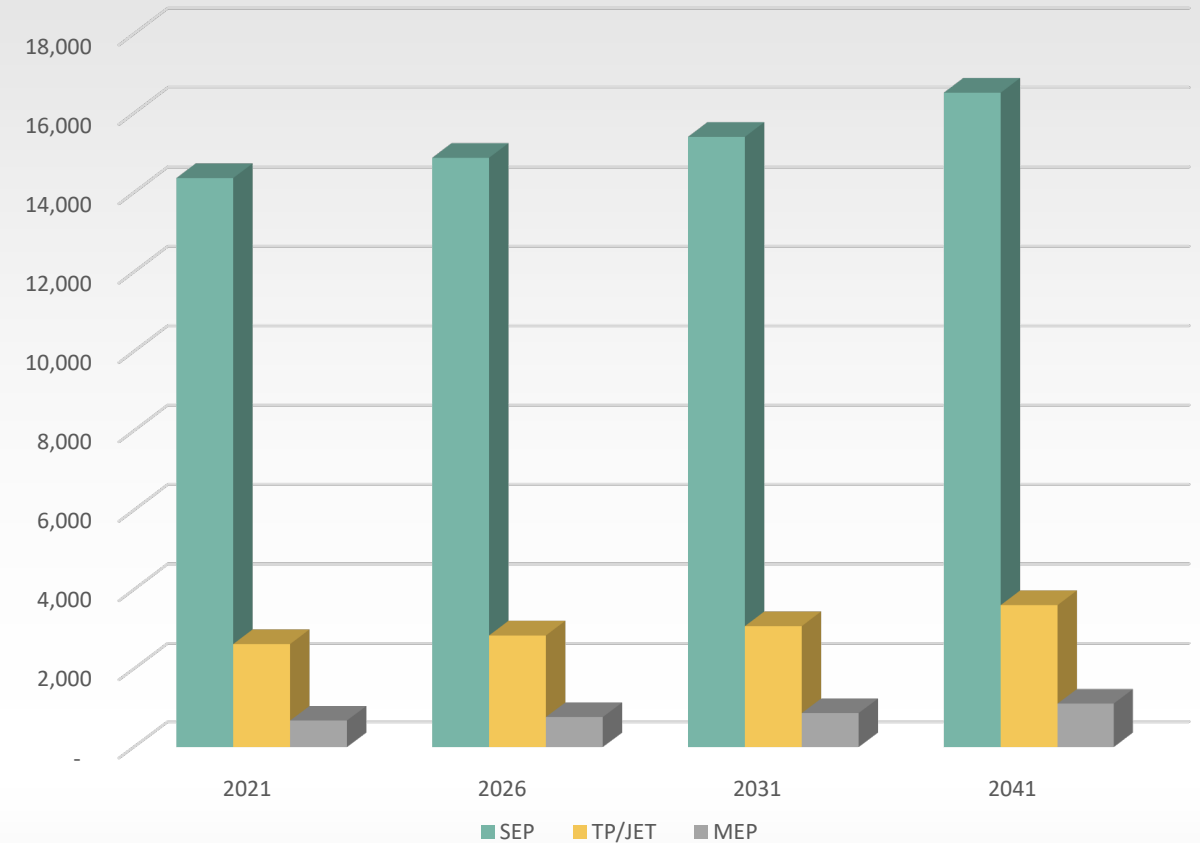
- Itinerant: 11,307
- Local: 6,930

Projected Operations: **22,300**

- Itinerant: 13,826
- Local: 8,474



Operations by Aircraft Type



SUMMARY OF FORECAST

	Consultant	FAA
Existing Based Aircraft Count	89	59
Projected 20-Year Based Aircraft Count	105	59
2021 Annual Operations	18,062	13,138
Projected 20-Year Operations Count	22,300	15,316

	2021	2026	2031
Projected B-II Operations	2,245	2,540	2,873
Short-term Airport Design Codes	ADG B-II / TDG-2: Beechcraft King Air 200, Air Tractor AT-802		
Ultimate Airport Design Codes	ADG B-II / TDG-2: Beechcraft King Air 200, Air Tractor AT-802		



Beechcraft
King Air 200



Air Tractor
AT-802

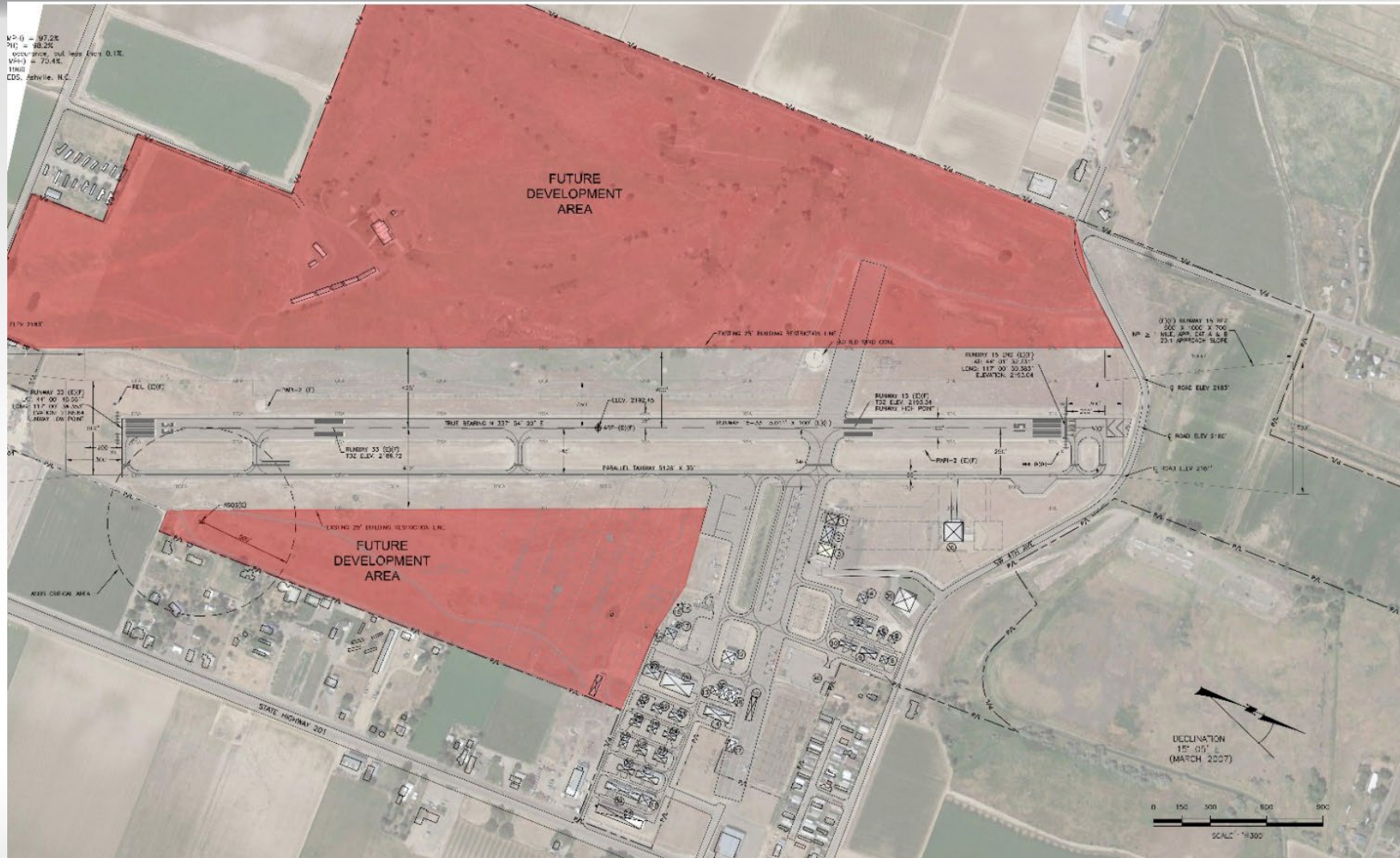
Critical Aircraft
 The most demanding aircraft or group of aircraft (in terms of size and/or speed) that contributes to over **500** operations annually

WHAT NEEDS TO CHANGE OR EXPAND?

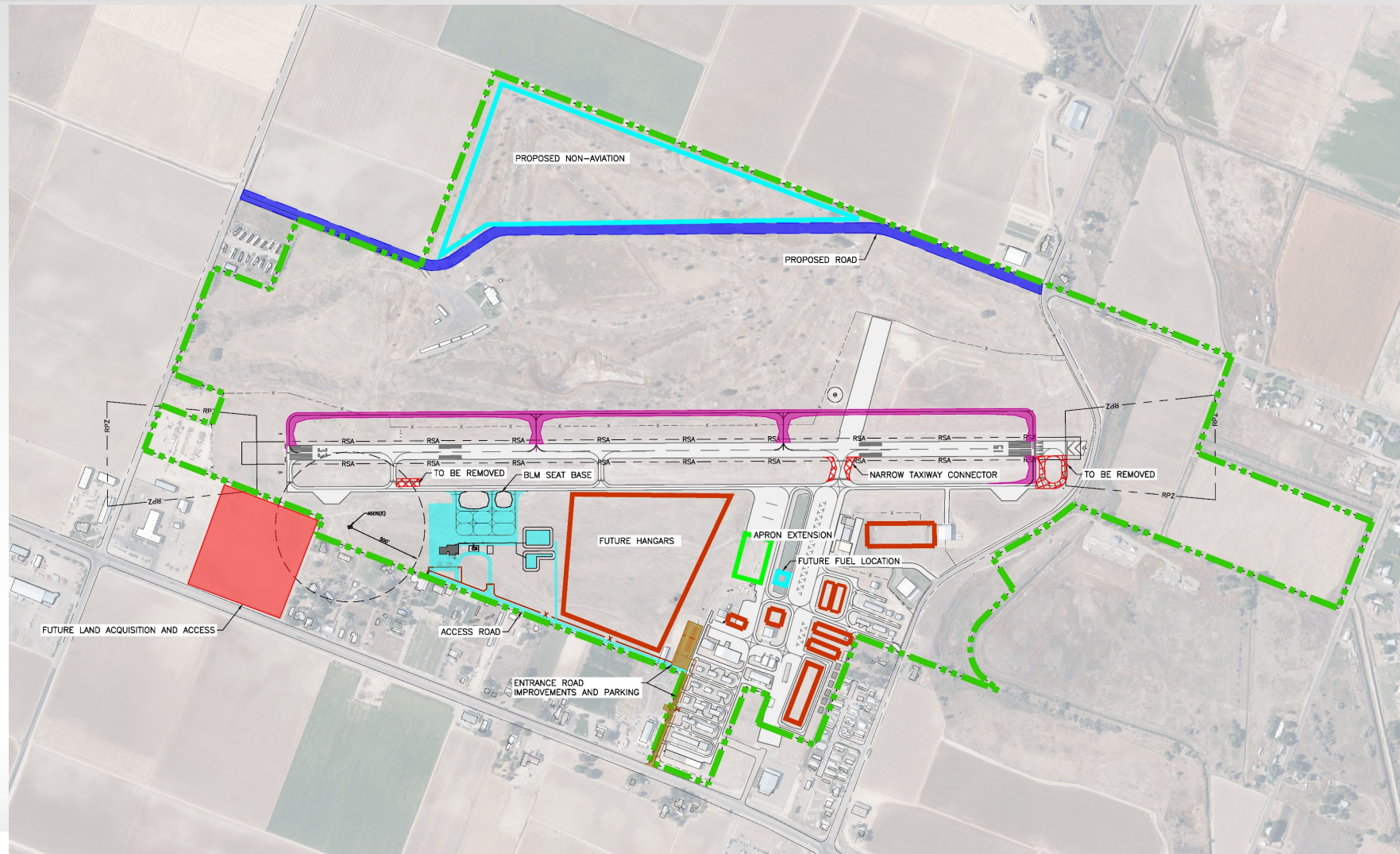


- Make the airport desirable to the region and give pilots a reason to plan a trip to Ontario for more than just fuel.
- Control the growth to show the community that growth of an airport can be good if done right.

DESIGN FOR DEVELOPMENT AND ENHANCEMENT



DEVELOPMENT CONCEPTS



DISCUSSION & QUESTIONS



NEXT STEPS



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THANK YOU FOR BEING HERE TODAY!



J-U-B ENGINEERS, INC.



**THE
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OTHER J-U-B COMPANIES

ADDITIONAL FACTORS TO CONSIDER

Advance Air Mobility

- A vertiport maybe recommended at this location
- UAV operations maybe recommended
 - Benefit the community with aerial agricultural applications
 - Unmanned firefighting applications to supplement BLM effort
 - What would you need to be successful?

Definitions

- **Vertiport:** Areas designed specifically for Advanced Air Mobility aircraft to take off and land
- **UAV:** Unmanned Aerial Vehicle

