

Williston Basin International Airport Master Plan Stakeholder Advisory Committee Landside Facility Recommendations Meeting

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Presented by:

Kaci Nowicki
Lead Planner
SEH

Andy Loftus
Project Manager
Burns McDonnell

Anthony Dudas
Airport Director
Williston Basin International Airport



1

Landside Facility Recommendations Agenda

- Welcome & Introductions
- Master Plan Progress Update
- Landside Facility Recommendations & Alternatives
 - Terminal Vehicle Parking
 - Ground Service Equipment Building
 - Snow Removal Equipment
 - Aviation Support Facilities
 - Utility Improvements
- Next Steps
- Discussion/Questions



2

Project Consultant Team



ANDY LOFTUS
Project Manager
Burns McDonnell
aloftus@burnsmcd.com



KACI NOWICKI
Lead Planner
SEH
knowicki@sehinc.com



MELISSA UNDERWOOD
Airport Planner
SEH
munderwood@sehinc.com



3

Welcome & Introductions

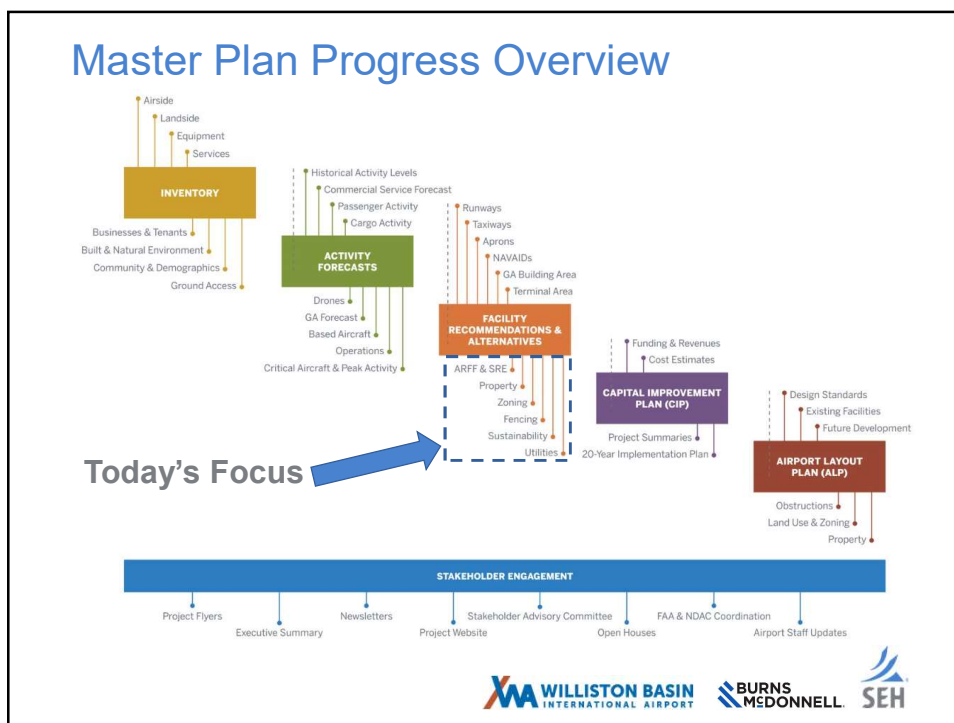
- Name
- Organization
- Role



4



5



6



7



8

Landside Facility Recommendations

- Commercial Service Terminal Building
- Terminal Curbside Traffic Lanes
- Ground Transportation
- **Terminal Vehicle Parking**
- **Ground Service Equipment (GSE) Building**
- **Snow Removal Equipment (SRE)**
- Aircraft Rescue and Fire Fighting (ARFF)
- **Aviation Support Facilities**
- **Utilities**
- Airport Property, Acquisition, and Easements
- Zoning



9

Terminal Expansion



10

Terminal Building

- Building Capacity – 300 design hour enplanements
 - Forecasted Design Hour Enplanements – 73 (2038)
- 3 Passenger Boarding Bridges
 - Total operations forecasted stay consistent through planning period
 - Space saved for additional gates and PBBs on ALP



Terminal Holding Area & Restaurant



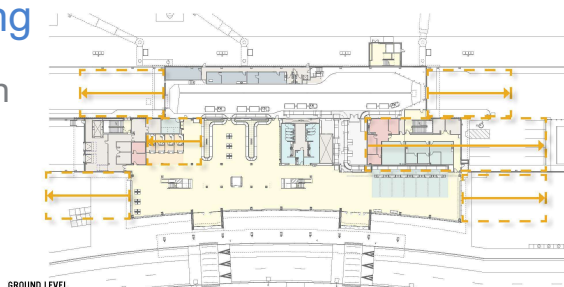
Passenger Boarding Bridges



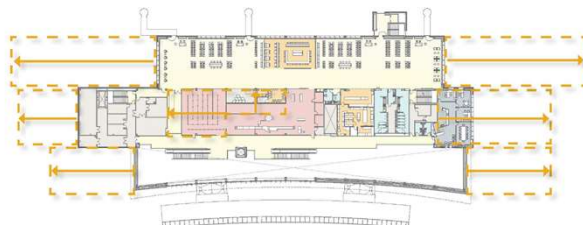
11

Terminal Building

- Interior Expansion Plan
 - Developed by Alliance



GROUND LEVEL



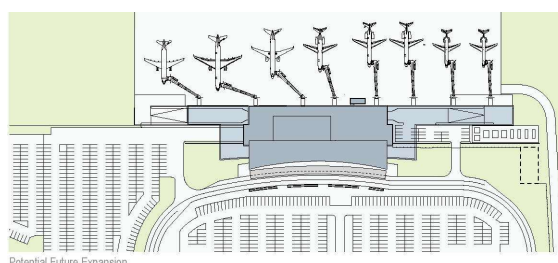
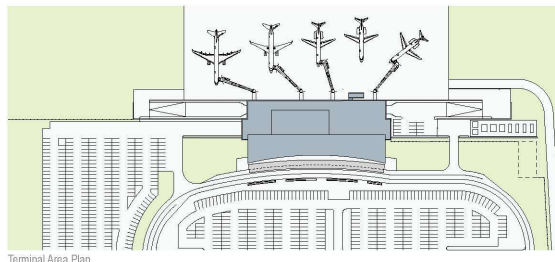
BOARDING LEVEL



12

Terminal Building

- Exterior Expansion Plan
 - Developed by Alliance
 - Accommodates 8 boarding bridges



13

Existing Terminal



14

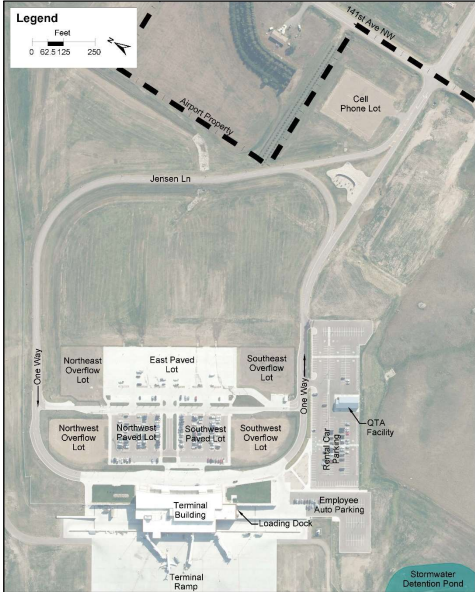
Terminal Vehicle Parking



15

Parking Facilities (Existing)

- Does not meet existing peak demand
- The airport could explore options for duration-based parking fees
- Rental car parking expansion may be needed





16

Future Parking Area:

Develop plan to pave overflow lots to meet growing passenger demand. Plan for longer-term expansion

Key Takeaway:
Provides flexibility to add parking spaces and rental car spaces as needed



17

Ground Service Equipment (GSE) Building



18

Ground Service Equipment

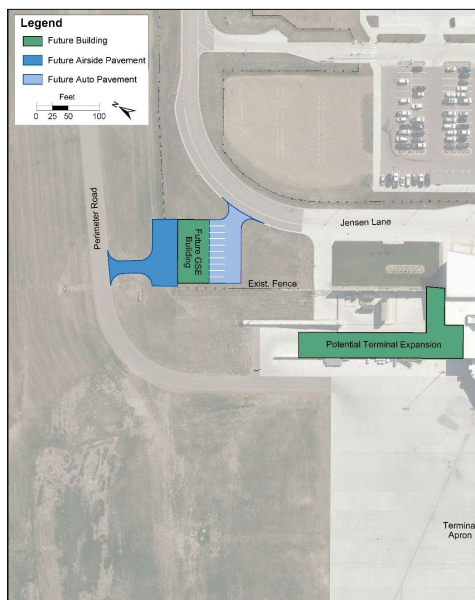
- Storage and maintenance below terminal building – Congestion
- Leased storage area at Overland Aviation – long distance from terminal
- Future space should plan for electrification of vehicles



19

Alternative A:
Site identified by Alliance and Burns & McDonnell during airport design process

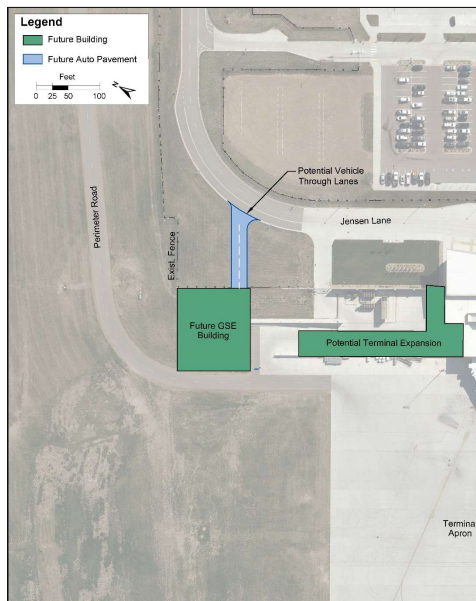
Key Takeaway:
Smaller GSE Building w/ dedicated parking lot and airside connection



20

Alternative B:
Building as depicted on
Airport Layout Plan
(ALP)

Key Takeaway:
*Larger GSE building
w/ vehicle through
lanes*



21

Snow Removal Equipment (SRE)



22

Snow Removal Equipment (SRE)

Airport Owned SRE

Equipment Type	Brand	Model	Manufacture Year	End of Useful Life (Per AIP Handbook)
Truck	Ford	F-250	2015	2025
Liquid Deice Trailer	Batts	T1100	2015	2025
Truck	Ford	F-350 Dyna-Test CFME	2015	2025
Sweeper/Rotary Plow	Oshkosh	H-Series Broom/Snow Blower	1991	2001
Displacement Plow/Hopper Spreader	International	2.5T Truck w/Plow (Auto)	1995	2005
Plow	International	2.5T Truck w/Plow (Manual)	1981	1991
Plow/Sweeper	MB	MB-5 Plow/Broom Truck	2012	2022
Plow/Sweeper	MB	MB-5 Plow/Broom Truck	2014	2024
Plow/Hopper Spreader	MB	MB-1 6x6 Plow Truck	2014	2024
Plow/Hopper Spreader	MB	MB-1 4x4 Plow Truck	2015	2025
Displacement Plow	Bobcat	Toolcat 5600	2013	2023
Rotary Plow	Bobcat	Toolcat 5600	2018	2028
Sweeper	Bobcat	Toolcat 5600	2006	2016
Loader/Displacement Plow/Sweeper	CAT	908 Wheel Loader	2006	2016
Loader/Rotary Plow/Displacement Plow	CAT	962 Wheel Loader	2006	2016

SRE Needs

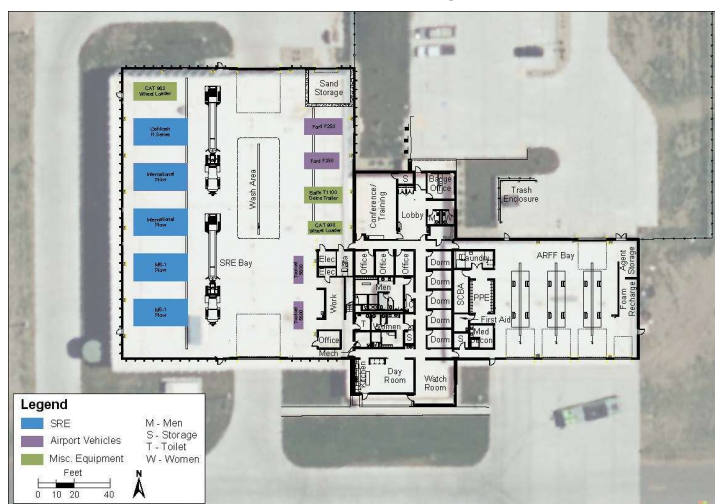
Eligible Item	Existing SRE	FAA Eligible SRE	Size
Rotary Plow	3	2	8,897 tons/hr
Displacement Plow	4	4	88 ft, total
Sweeper	5	4	-
Hopper Spreader	3	4	-
Front End Loader	2	1	-

Recommendation:
SRE vehicles should be replaced based on need and available funding

23

SRE/Maintenance Building

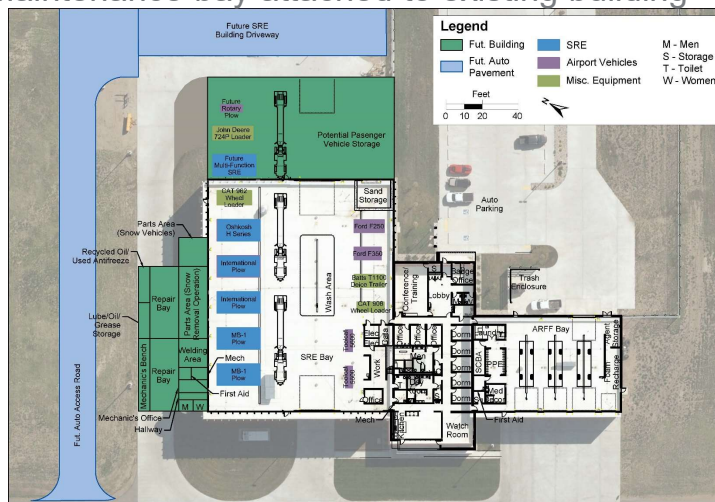
- Not enough space for existing equipment
- No dedicated maintenance bay



24

SRE/Maintenance Building – Alternative A

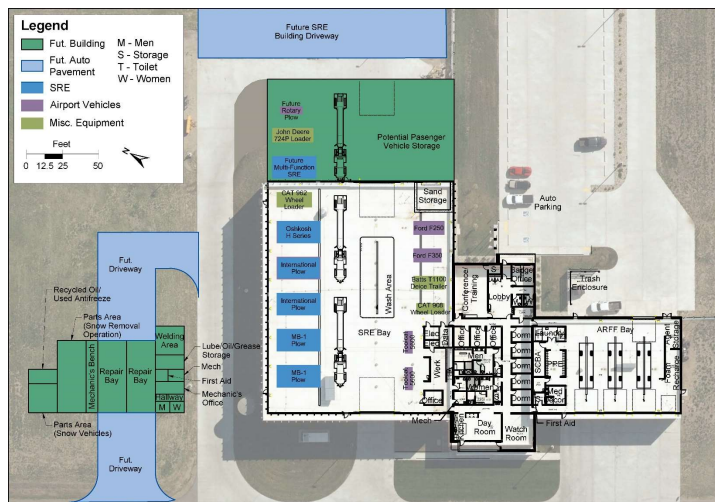
- SRE Building expansion
- Maintenance bay attached to existing building



25

SRE/Maintenance Building – Alternative B

- Maintenance bay constructed as separate building



26

Aviation Support Facilities



27

Fuel Facilities

Aviation Fuel


Fuel Tank Owner	Installation Year	Tank Type	Fuel Type	Capacity (Gallons)
Overland Aviation	2018	Above ground	Jet-A	15,000
Overland Aviation	2018	Above ground	Jet-A	15,000
Overland Aviation	2018	Above ground	100LL	12,000

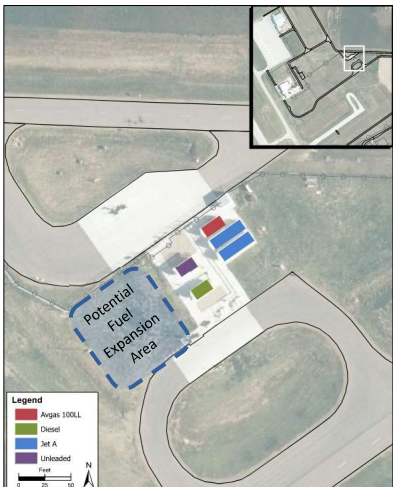
Source: City of Williston

Vehicle Fuel

Fuel Tank Owner	Installation Year	Tank Type	Fuel Type	Capacity (Gallons)
City of Williston	2018	Above ground	Diesel	10,000
City of Williston	2018	Above ground	Unleaded	10,000


Source: City of Williston





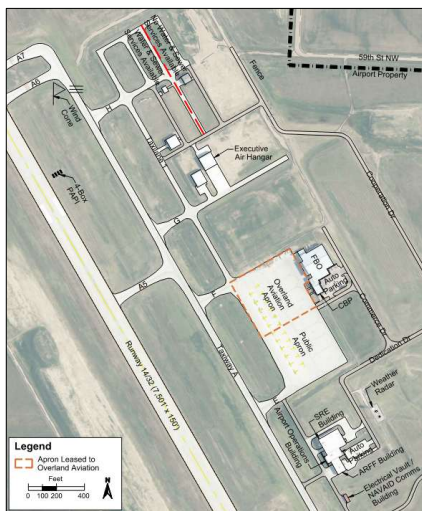
Recommendation:

The fueling facilities should be expanded to meet capacity and/or demand for new fuel types as demand warrants.



28

General Aviation Automobile Parking & Access Roads



- GA building area accessed from 141st Avenue NW via Cooperation Drive
- Auto parking at the FBO is accessed via Dedication Drive and Commerce Drive
- FBO parking demand exceeds available space during peak cargo operations
- Roads built in 2019 – good condition

Recommendation:

Routine maintenance continue to be performed to extend the life of the pavement

Additional parking to be constructed as needed



29

Utilities



30

Wastewater

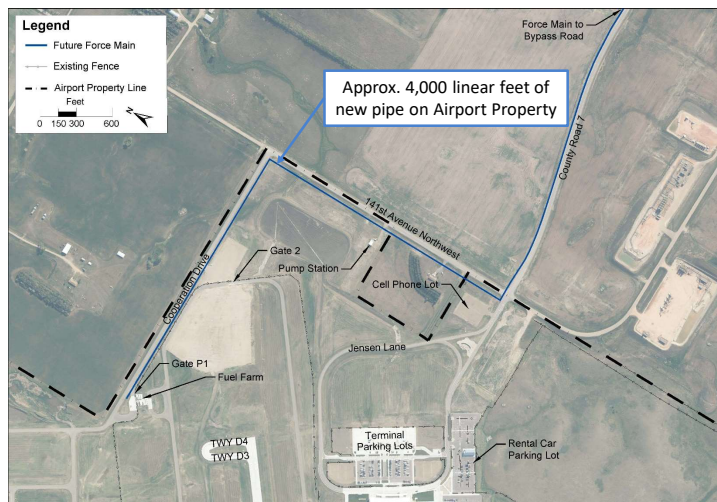
- Airport is not served by a sanitary sewer
 - Gravity flow from all facilities to 45,000 gallon holding tank.
 - Contracted to have sanitary waste pumped from tank (near fuel farm) several times per week
 - Several miles to nearest municipal sewer connection
- Sanitary sewer service would eliminate several pumping trips/services per year



31

Sanitary Sewer Expansion

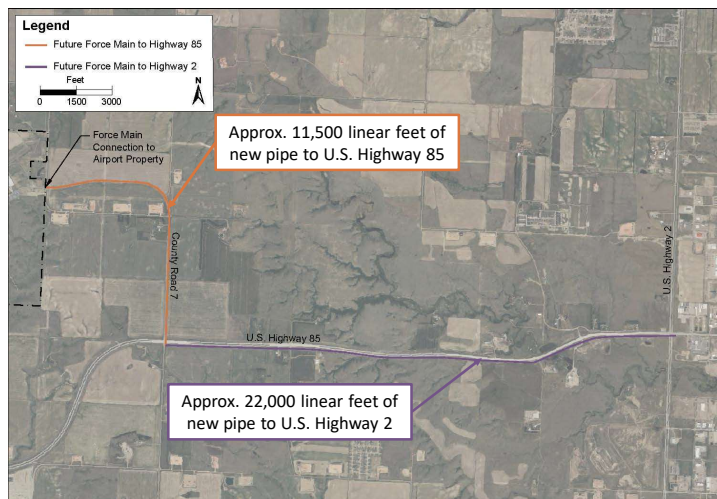
- Proposed extension to alleviate need for continuous pumping



32

Sanitary Sewer Expansion

- Proposed extension to alleviate need for continuous pumping



33

Sanitary Sewer Expansion

- Approximately 37,500 feet of total piping and pump station improvements
- Eligible for federal funding on airport property
 - Eligible when serving FAA eligible facilities (ie. commercial and GA terminal spaces)
- Project is best coordinated with associated local sanitary sewer extension
- Extension could support other economic development opportunities along the expansion route



34

Landside Recommendations Discussed at Previous SAC Meeting



35

Aviation Support Facilities

- Airport Fencing
- Airport Property, Acquisition, and Easements
- Zoning



36

Airport Fencing

- 10-foot wildlife and security fence around the airfield
- Installed at XWA in 2019 – good condition.

Recommendation:

Inspect fence line daily

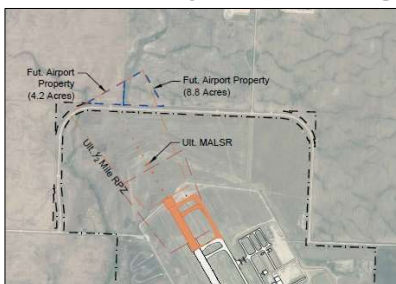
A fence inspection schedule should be included in the Wildlife Hazard Management Plan (WHMP)



37

Airport Property, Acquisition, and Easements

- City of Williston owns 1,570.3 acres in fee for XWA
- City to acquire 13 acres for Runway 14 extension to 8,500 feet and ½ mile visibility minimums
- No other changes to airport property are recommended in the 20-year planning period.



38

Airport Zoning

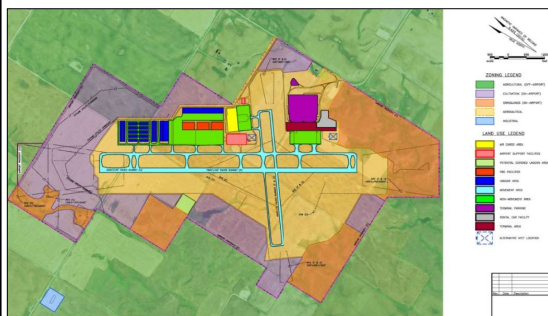
- City of Williston holds jurisdiction over airport property
- Land use surrounding the airport is controlled by the Joint Powers Board
- Two types of zoning in effect at XWA:
 - Municipal land use zoning
 - Development on airport property subject to Development Standards set forth by the City of Williston. Land surrounding the airport is submit to Williams County zoning and is zoned agricultural.
 - Airport safety overlay zoning
 - Height and safety zoning to protect airspace and to keep the surrounding area clear of incompatible land uses.
 - The 2015 Williams County Zoning Ordinance and Subdivision Regulations was amended in May 2019 by the Joint Powers Board for the newly constructed airport.



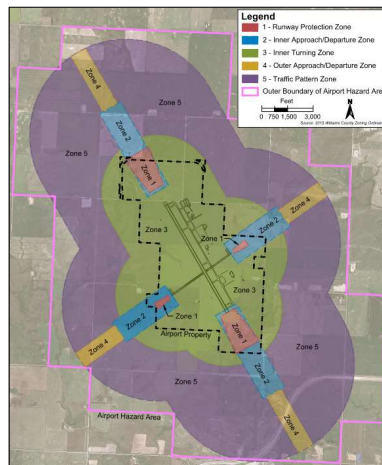
39

Airport Zoning

Municipal Land Use & Zoning



Airport Safety Zoning Overlay



Recommendation:
 No changes are recommended to the zoning in place on and around the airport.



40



41

Master Plan Next Steps

Project Team

- Submit final Landside Facility Recommendations & Alternatives chapter to NDAC & FAA for review
- FAA & NDAC completing final review of Airside Facility Recommendations & Alternatives
- Begin Financial Planning based on results of the airside and landside facility recommendations
- Public outreach – Open House & Air Show events

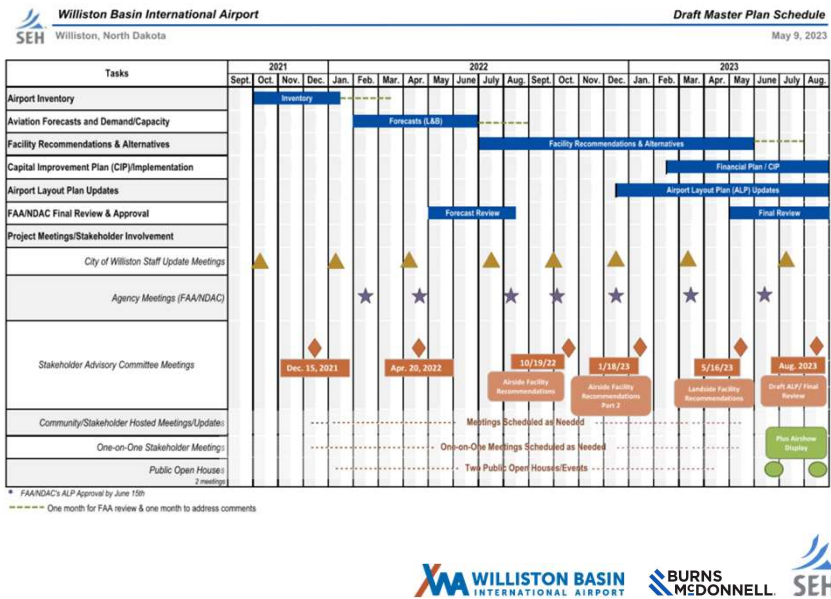
• SAC

- Meeting #6:
 - August 2023
 - Topics
 - Implementation Plan, Financial Analysis & 20-year Capital Improvement Plan
 - Final document review
 - Airport Layout Plan update



42

Next Steps



43

Questions and Discussion



44

