

Presentation for

Glencoe Municipal Airport Master Plan & Airport Layout Plan Update

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January 19, 2021

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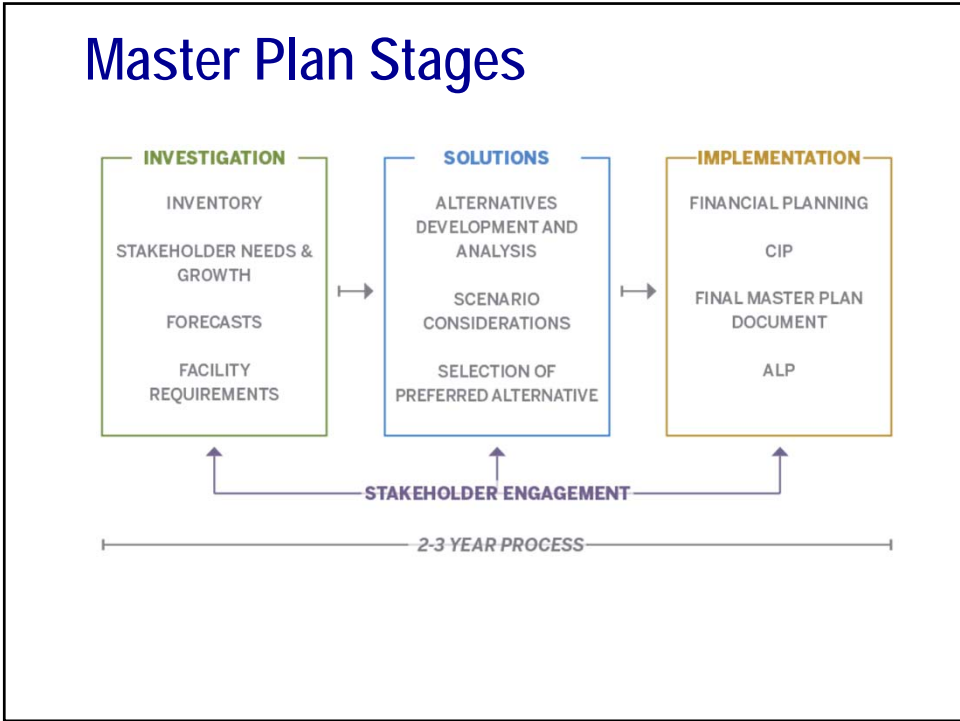
Agenda

- Master Plan Process Overview
- Inventory
- Aviation Forecasts
- Facility Recommendations
- Capital Improvement Plan (CIP)
- Airport Layout Plan
- Next Steps










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Airport Design = Critical Aircraft

<p>A-I</p> <p>American Champion Beech Bonanza 36 Cessna Skyhawk 172 Cessna Skywagon 205 Piper Cherokee PA-28</p> 	<p>B-I</p> <p>Beech King Air 90 Beech Queen Air 65 Cessna Golden Eagle 520 Citation Mustang C510 Piper Navajo</p> 	<p>A-II & B-II</p> <p>Air Tractor AT-502 Beech King Air 200 Citation S/Bravo C550 Hawker 800 Pilatus PC-12</p> 
<p>A-III & B-III</p> <p>Air Tractor AT-72 Bombardier Dash 8 Global Express Falcon 7X</p> 	<p>C-II & D-II</p> <p>Bombardier CRJ-200/700 Challenger 600 Citation X Citation Sovereign Embraer 145 Gulfstream GIV</p> 	<p>C-III & D-III</p> <p>Airbus A320 Boeing 737 Boeing MD-90 Bombardier CRJ-900 Embraer E5</p> 
<p>C-IV & D-IV</p> <p>Airbus A300 Boeing 757 Boeing DC-8 Lockheed Hercules C-130</p> 	<p>D-V</p> <p>Boeing 747 Boeing 777 Boeing Stratolifterness B-52</p> 	<p>Letter = Speed Roman Num. = Size</p>



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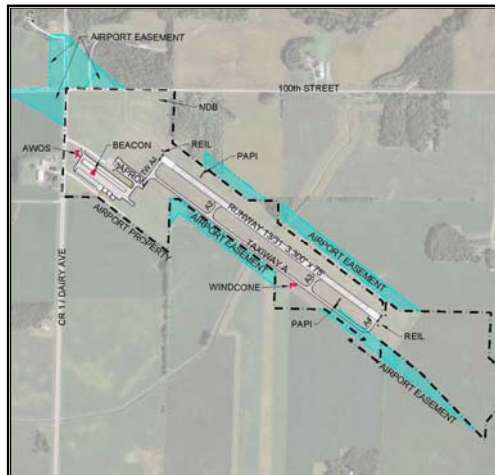
Airport Inventory



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Airport Inventory

- Runway 13/31:
3,300'x75'
 - Non-Precision Approaches
 - PAPIs
 - REILs
- Taxiway A
- AWOS
- Beacon

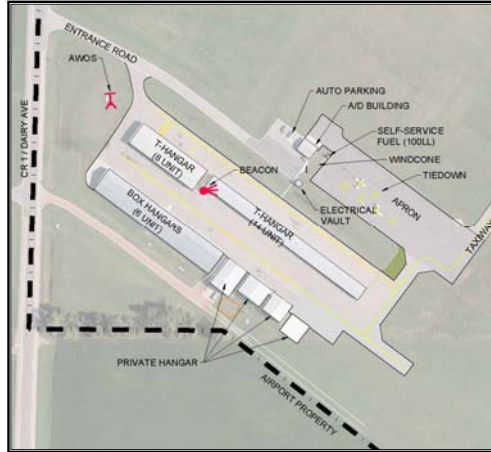


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Building Area

- A/D Building
- Auto Parking
 - ~12 spaces
- Electrical Vault
- Self-Service Fuel (100LL)
- 3 T-Hangar Buildings
 - (28 Units)
- 4 Private Box Hangars



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Aviation Activity Forecasts



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Approved Aviation Forecasts

	2016	2021	2026	2031	2036
<i>Based Aircraft</i>					
Single-Engine	28	35	44	48	51
Multi-Engine	1	2	2	2	3
Total	29	37	46	50	54
<i>Aircraft Operations</i>					
A-I/A-II	8,576	9,499	10,441	11,406	12,394
B-I	1,628	1,804	1,982	2,166	2,353
B-II (Critical)	532	589	648	707	769
>B-II	11	12	13	14	16
Helicopter	109	120	132	144	157
Total	10,855	12,025	13,216	14,438	15,688

FAA Approved Forecasts June 21, 2017



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GYL Critical Aircraft


- King Air 90: RDC B-II Small



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Facilities Recommendations



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Facility Recommendations

- Runway 13/31
 - Ultimate length of 3,900 feet (600' extension south)
 - Acquire land within RPZs and BRLs
- Taxiway Systems
 - Install MITLs



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Facility Recommendations

- Building Area
 - Update A/D Building
 - Construct additional hangars
 - Redesign apron to meet safety separations standards
 - Replace/update fueling system
- Miscellaneous
 - Relocate AWOS
 - Develop SPCC Plan
 - Acquire SRE Equipment and Construct SRE Bldg
 - Install perimeter wildlife fence

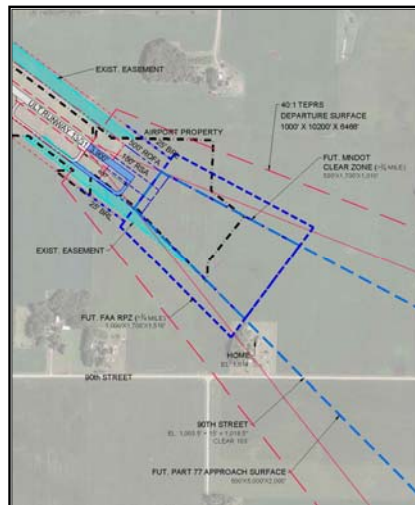


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Ultimate Runway 13/31 Extension

- Ultimate Length of 3,900'
 - 600' Extension to Southeast
 - Matches existing Airport Zoning Ordinance
- Save the Airspace for Future



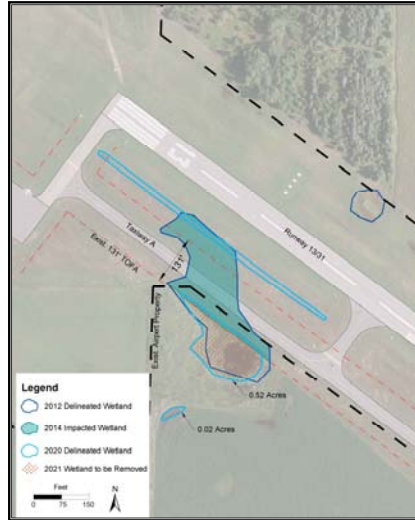
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Wetland Removal

- Wetland attracts wildlife
- Recommended for removal
- Working with FAA on CATEX/NEPA requirements for removal

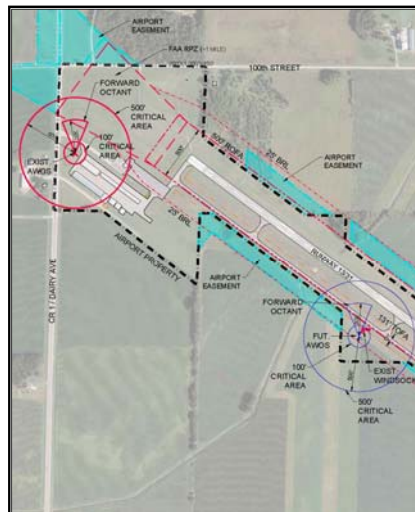
CATEX = Categorical Exclusion
 NEPA = National Environmental Policy Act



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AWOS Relocation

- Hangars within AWOS 500-foot Critical Area
- Future relocation to location mid-airfield



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Fut. Hangar/Apron Development



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Capital Improvement Plan (CIP)



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Potential Funding Sources

- FAA - Airport Improvement Program (AIP)
 - Match 90% of eligible project costs
 - MnDOT matches 50% of Local Share (90/5/5)
 - Entitlement Funds
 - \$150,000 Annually
 - Save up to 4 years (capped at \$600,000)
 - Able to borrow from another Airport
 - Discretionary Funds
 - AIP appropriations each year are dispersed by the FAA at their discretion



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Potential Funding Sources

- Minnesota State Airport Funding
 - Airport Construction Grant Program
 - State Only Projects
 - **Construction, Planning, Equip.:** 75% State / 25% Local
 - **Fuel Systems:** 70% State / 30% Local
 - Airport Maintenance and Operations Program
 - 75% Reimbursement for Routine Maintenance
 - Hangar Loan Revolving Account Program
 - Up to 80% of cost for hangar construction



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5-Year CIP

2021

Install Credit Card Chip Reader
Wetland Removal

2022

9-Unit T-Hangar & Taxilanes

2023

Relocate AWOS

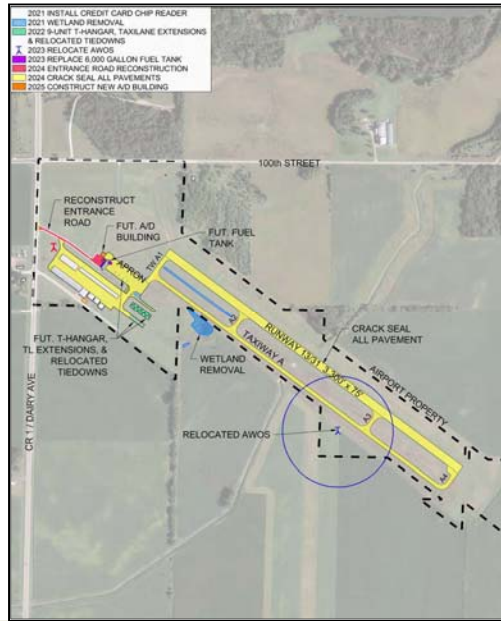
Replace 6,000 Gallon Fuel Tank

2024

Entrance Road Reconstruction
Crack Seal All Airport Pavements

2025

Construct new A/D Building



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10-Year CIP

2028

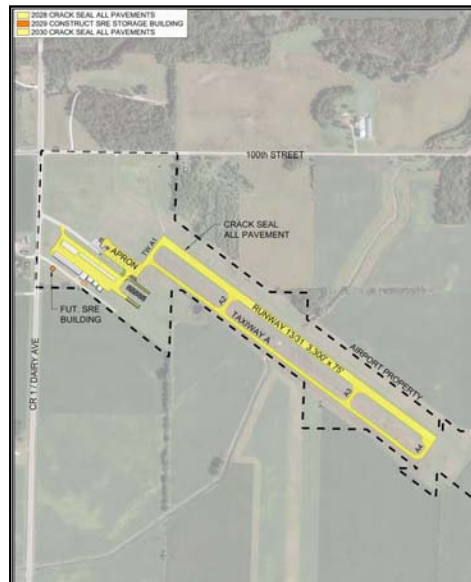
Crack Seal All Airport Pavements

2029

Construct SRE Storage Building

2030

Crack Seal All Airport Pavements

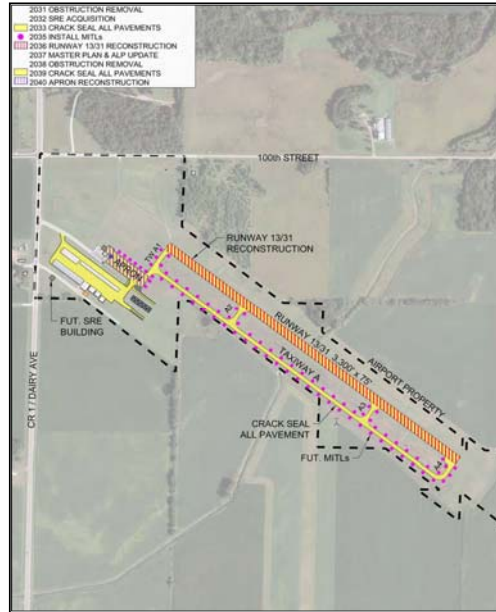


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20-Year CIP

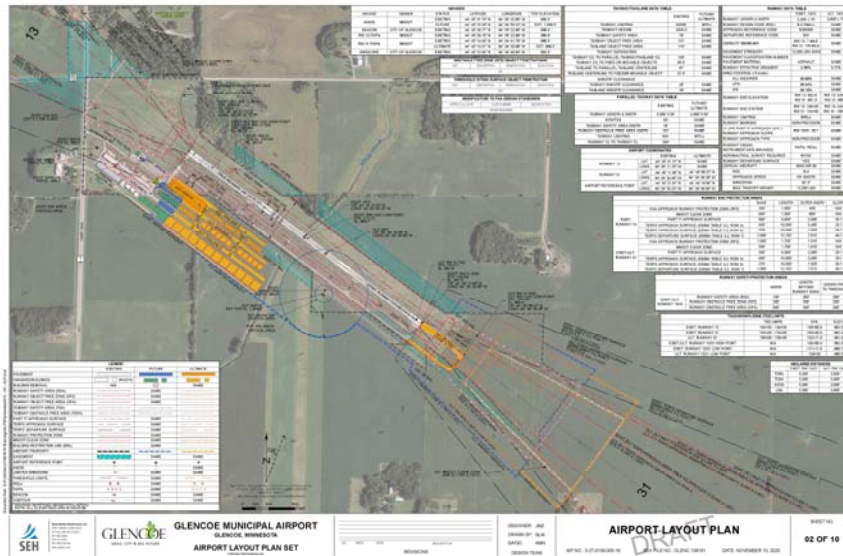
- 2031** - Obstruction Removals
- 2032** - SRE Acquisition
- 2033** - Crack Seal All Pavements
- 2035** - Install Taxiway Lights (MITLs)
- 2036** - Runway Reconstruction
- 2037** - Master Plan Update
- 2038** - Runway 13/31 Reconstruction
- 2039** - Crack Seal All Pavements
- 2040** - Apron Reconstruction



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Airport Layout Plan



GLENCOE MUNICIPAL AIRPORT
 GLENCOE, MINNESOTA
AIRPORT LAYOUT PLAN SET

PREPARED BY: SEH
 DATE: NOVEMBER 10, 2020
 SHEET NO: 02 OF 10

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Next Steps

- Council Approval of Master Plan & ALP
- FAA & MnDOT Review and Approval of Master Plan and ALP
 - 6-Month to 1-Year Process



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Questions?

Thank you!



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