Duluth Airport Master Plan

Master Plan Advisory Committee (MPAC) Meeting #6

October 20, 2021

Introductions

- Name
- Organization
- Role

Meeting agenda

- Welcome and introductions
- Stakeholder Involvement Update
- Master Plan Overview
- Master Plan next steps

- Part 150 Noise Study - Update

DLH Vision 2040

DLH will maximize its economic impact, meet growing demands of air commerce and maintain its infrastructure by completing DLH Vision 2040

DLH Vision 2040

At the conclusion of DLH Vision 2040 the Duluth Airport Authority will:

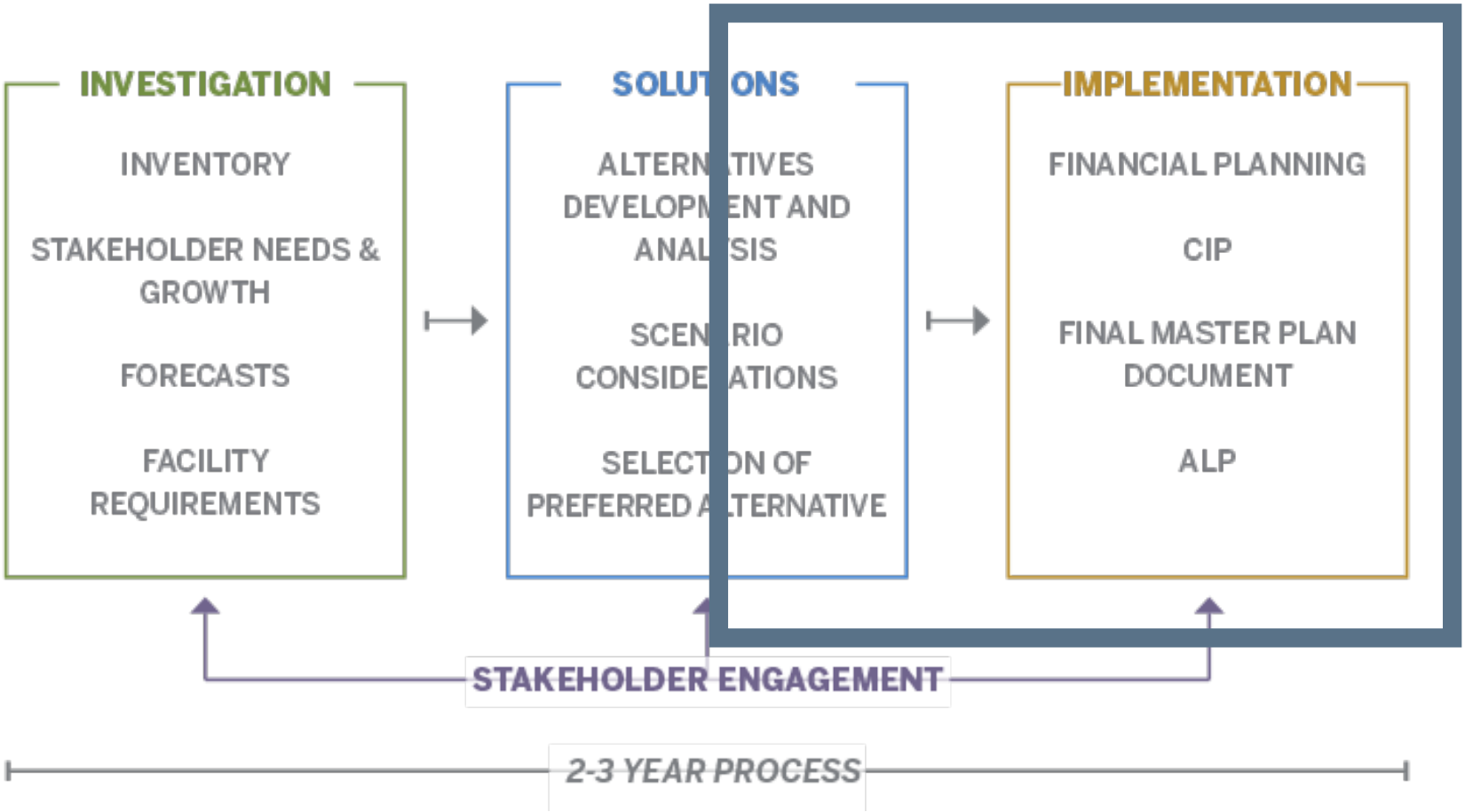
- Provide opportunities for businesses to grow and or relocate
- Anticipate the evolving demand for air service in our region
- Better respond to the needs of general aviation
- Improve agility in responding to tomorrow's opportunities and challenges
- Complement its neighboring communities
- Maintain the DAA's financial sustainability

DLH Vision 2040 – Process Objectives

- Develop a decision tree that guides short, medium and long term land use planning while allowing for flexibility in a dynamic environment
- To provide a graphic representation of existing airport features, future airport development and anticipated land use.
- Identify development zones and site packets
- To establish a realistic schedule for implementation of the proposed development.
- To identify a realistic financial plan to support the development.
- Develop a comprehensive Capital Improvement Plan (CIP) document; Airport CIP is only a subcomponent.
- Technically and procedurally validate the plan through investigation of concepts and alternatives on technical, economic and environmental grounds.
- Prepare and present the plan to the public after seeking their input that adequately addresses all relevant issues and satisfies local, state and federal regulations.

Master Plan Progress Update

Master Plan Stages



Stakeholder and Public Outreach

Stakeholder Outreach Overview

Written:

- Newsletters
- Website blog posts
- Social media posts

In Person/Virtual:

- Public Open House
- Master Plan Advisory Committee
- One-on-one stakeholder meetings
- Technical Advisory Committees (TACs)
  - Runway 3/21
  - Taxiway network and aircraft parking
  - Economic Development
  - Air Traffic Control Tower
- Stakeholder presentations and events

Master Plan Advisory Committee (MPAC) Role

- Represent the broad range of stakeholders
- Review, understand and share project updates
- Provide input and serve as a voice for key stakeholders
- Validate the overall process and DAA progress on commitments for stakeholder outreach

Summary of Engagement Efforts

Master Plan Advisory Committee (MPAC)

- Meeting #1- June 17, 2019
- Meeting #2 – December 18, 2019
- Meeting #3 – June 17, 2020
- Meeting #4 – December 16, 2020
- Meeting #5 – June 30, 2021
- Meeting #5 – October 20, 2021

Runway 3/21 TAC

- Meeting #1 – July 25, 2019
- Meeting #2 – October 4, 2019
- Meeting #3 – June 21, 2021

Taxiway and Building Area TAC

- Meeting #1 – December 3, 2019
- Meeting #2 – March 9, 2020
- Meeting #3 – June 30, 2020
- Meeting #4 – August 12, 2020
- Meeting #5 – December 2, 2020
- Meeting #6 – June 28, 2021
- Meeting #7 – October 13, 2021

Air Traffic Control Tower TAC

- Meeting #1 – August 11, 2020
- Meeting #2 – August 31, 2020
- Meeting #3 – November 12, 2020

Economic Development TAC

- Meeting #1 – April 9, 2020
- Meeting #2, September 22, 2020

Public Meetings

- Open House #1 – September 17, 2019
- Part 150 Noise Study Open House #1 – October 2, 2019
- Open House #2 – 2022 Date TBD

1:1 Stakeholder meetings

Project Newsletters

Project blog Posts

Key Master Plan Focus Areas

Overview of Recommendations

Key Focus Areas of Vision 2040 Master Plan

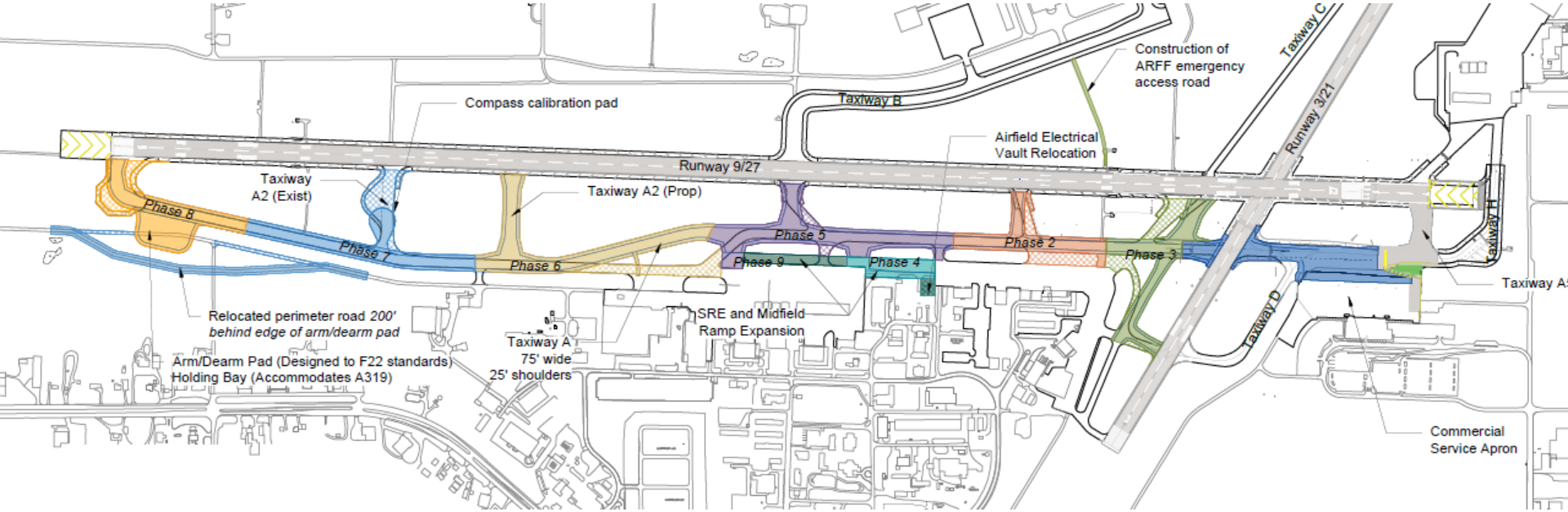
- Taxiway A and general Taxiway network planning
- Air Traffic Control Tower (ATCT) replacement
- Runway 3/21 extension

Taxiway Network Analysis

- The Taxiway TAC and multiple 1:1 stakeholder meetings influenced the development of the taxiway network plan.
- A TAC was also initiated to provide feedback on aircraft parking, building area development and ATCT siting.
- These TACs combined for multiple meetings at the end of the process to combine the analysis into a comprehensive look at taxiways and building areas.

Taxiway A – Future Layout and Phasing

Estimated Project Cost	TOTAL COST	FAA COST	FAA TAXIWAY	FAA APRON	VAULT RELOCATION	FAA ACCESS ROAD	DAA LOCAL SHARE	148th SHARE	MnDOT SHARE
Phase 1									
Phase 2	$6.9 M	$5.6 M	$5.6 M	-	-	-	$311 k	$678 k	$311 k
Phase 3	$9.0 M	$7.0 M	$6.5 M	-	-	$0.5 M	$417 k	$767 k	$417 k
Phase 4	$4.1 M	$3.7 M	-	$3.0 M	$0.7 M	-	$205 k	-	$205 k
Phase 5	$11.7 M	$8.6 M	$8.1 M	$0.5 M	-	-	$475 k	$2.2 M	$475 k
Phase 6	$12 M	$9.0 M	$9.0 M	-	-	-	$500 k	$2.0 M	$500 k
Phase 7	$11 M	$9.0 M	$6.2 M	$0.8 M	-	$2.0 M	$500 k	$1.0 M	$500 k
Phase 8	$9.0 M	$6.98 M	$5.5 M	$1.4 M	-	-	$387 k	$1.2 M	$387 k
Phase 9	$2.2 M	$2.0 M	-	$2.0 M	-	-	$100 k	-	$100 k



Phases 2 through 9 Taxiway A Cost Shares

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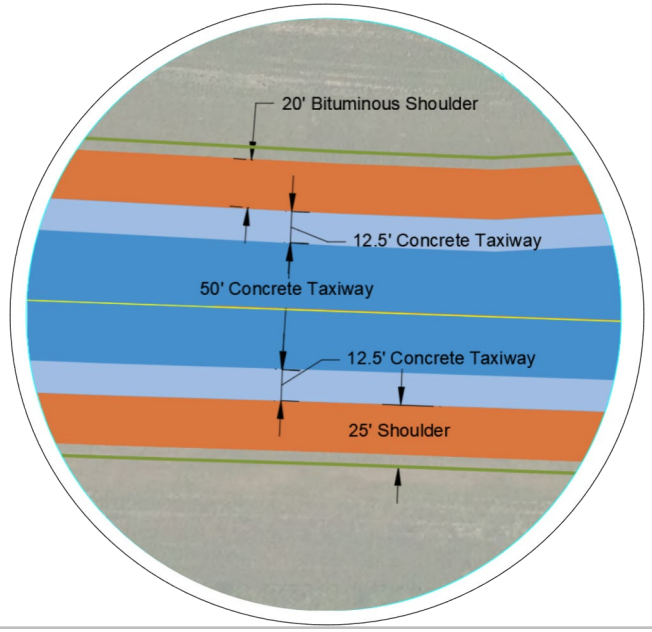
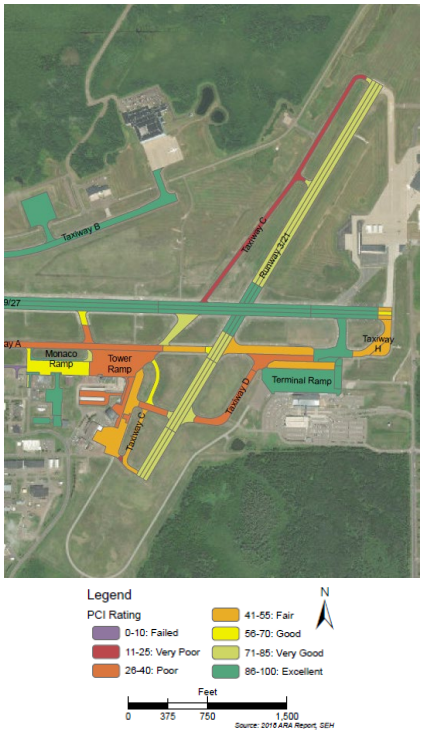
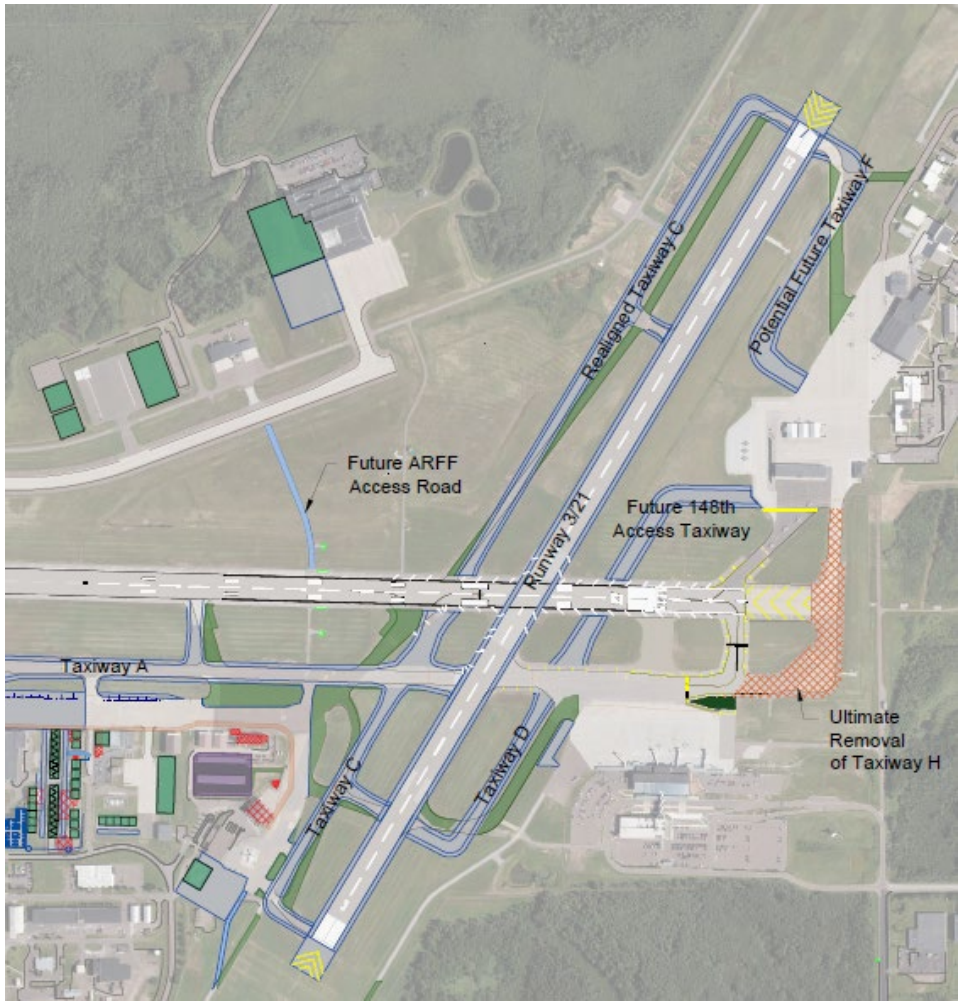


Runway 3/21 Taxiway Network

- The taxiway network serving Runway 3/21 is nearing the end of its useful life and has several non-standard design features.
- Taxiway C is in very poor condition north of Runway 9-27 (2018 Report).
- Pavement rehabilitation of both Runway 3/21 and Taxiway C is needed in the near-term
- The TAC evaluated several alternatives including options to provide a taxiway network on either, or both, sides of the runway.

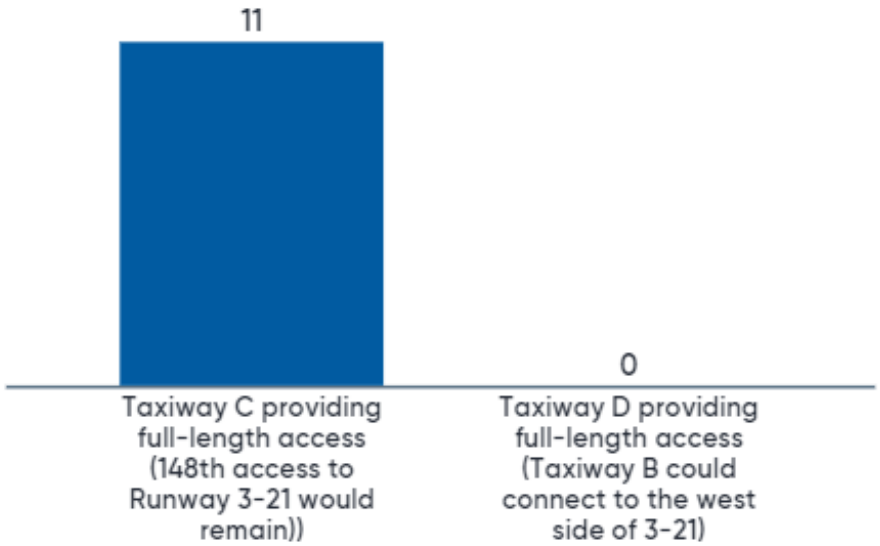


Proposed Runway 3/21 Taxiway Network



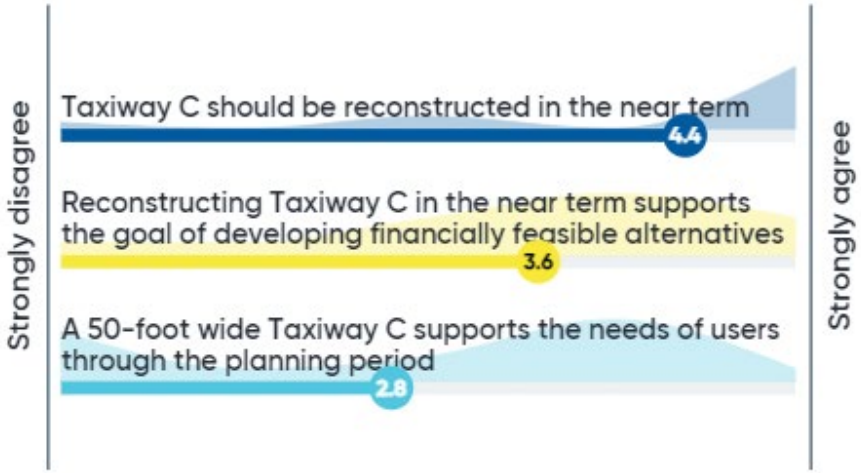
October 2021 TAC Feedback

If Runway 3-21 is extended to 8,000 feet, which full length taxiway do you prefer (assuming a taxiway is only provided on one side)?



October 2021 TAC Feedback

Rate the following statements for future Taxiway C, with Runway 3-21 at its' current length



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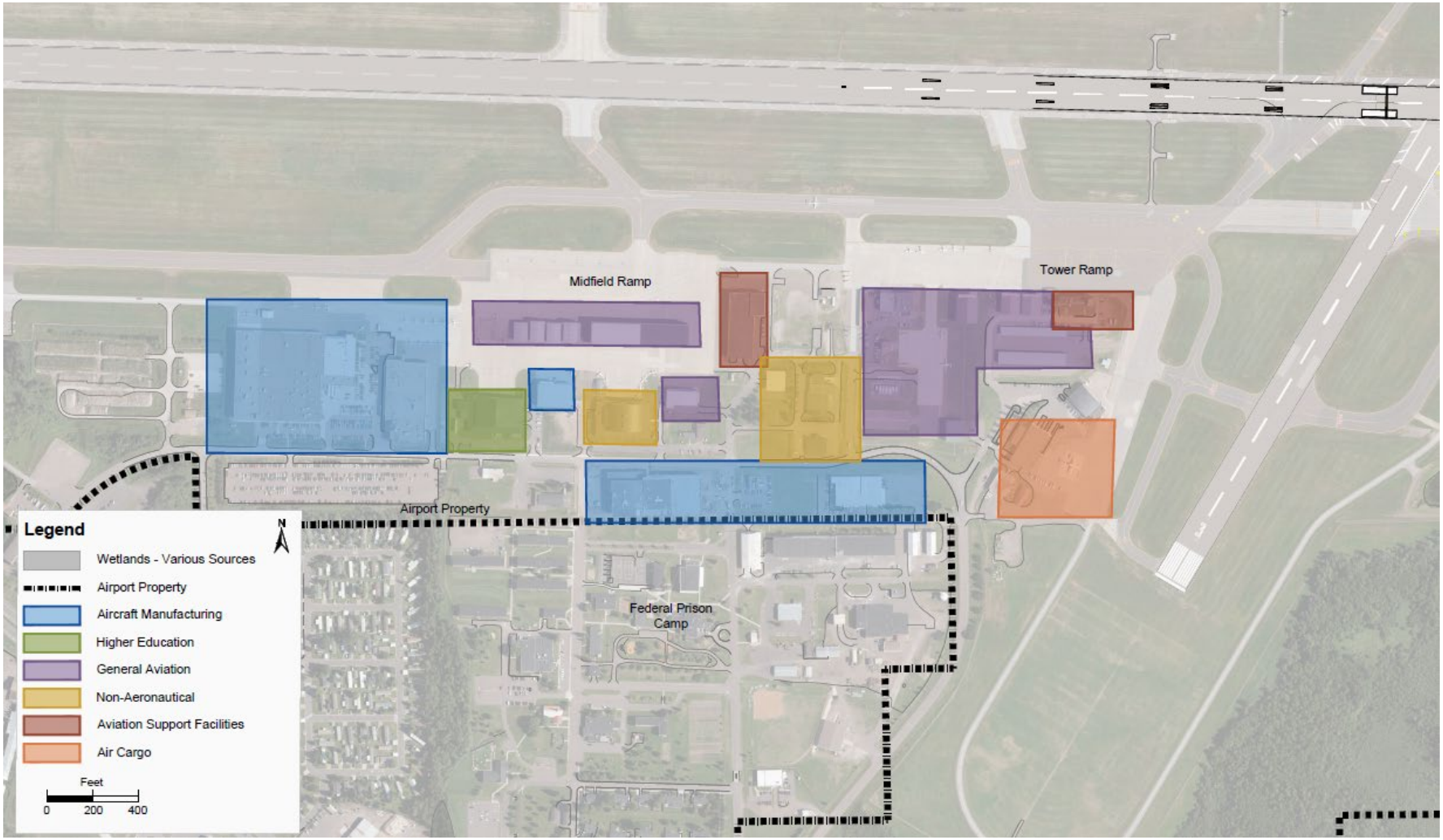
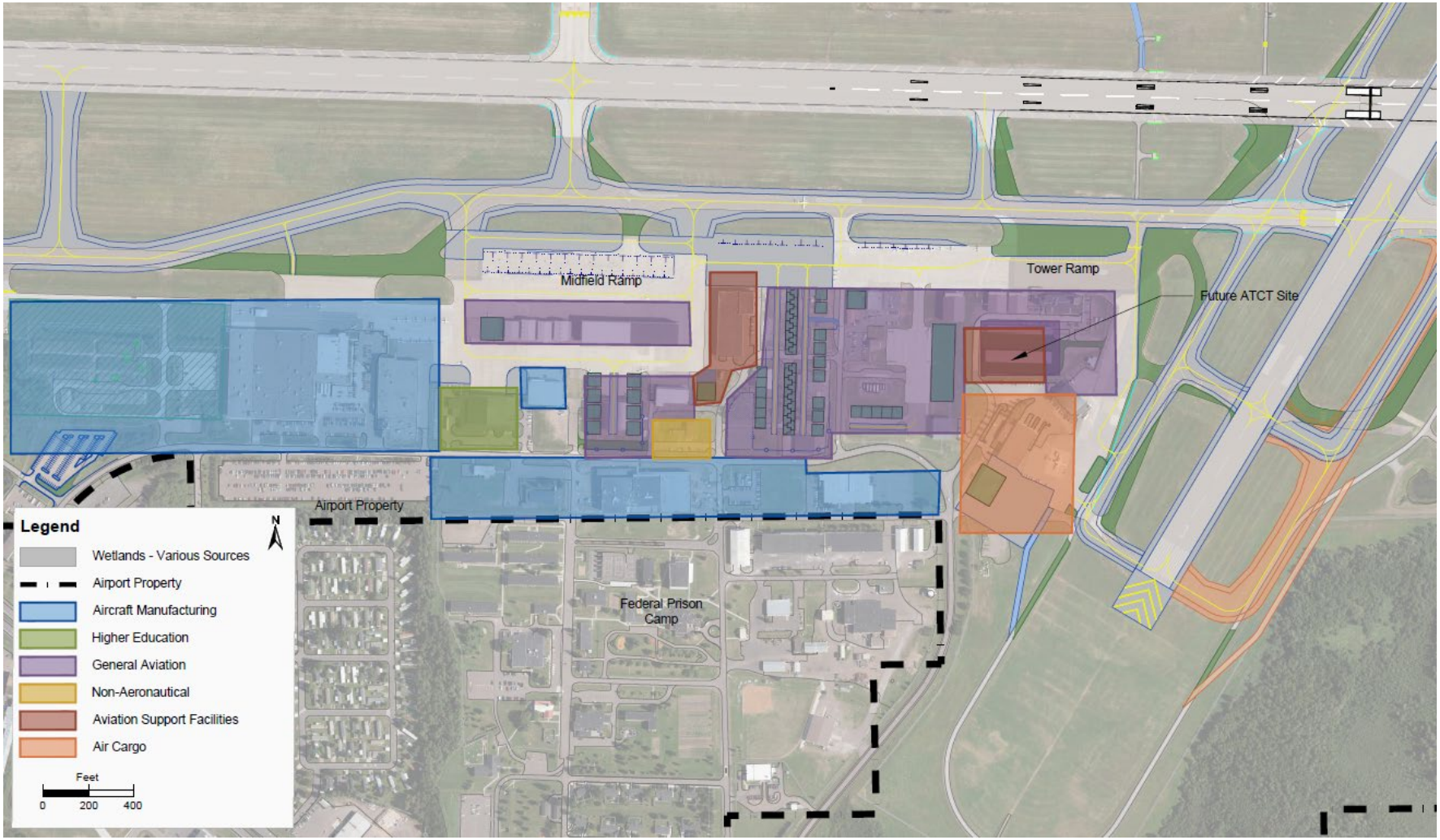
Building Area Development Goals

- Designated helicopter area
  - 3 to 4 helicopter parking spots
  - Large box hangar(s)
- Group development by use and similar sized aircraft
- Remove aircraft parking in Runway Visibility Zone (RVZ)
- Eliminate existing ATCT line of sight challenges and avoid future line of sight limitations
- Aeronautical manufacturing expansion space
- Larger hangars
- Ranch and T-hangars
- Adequate aircraft parking including for large aircraft

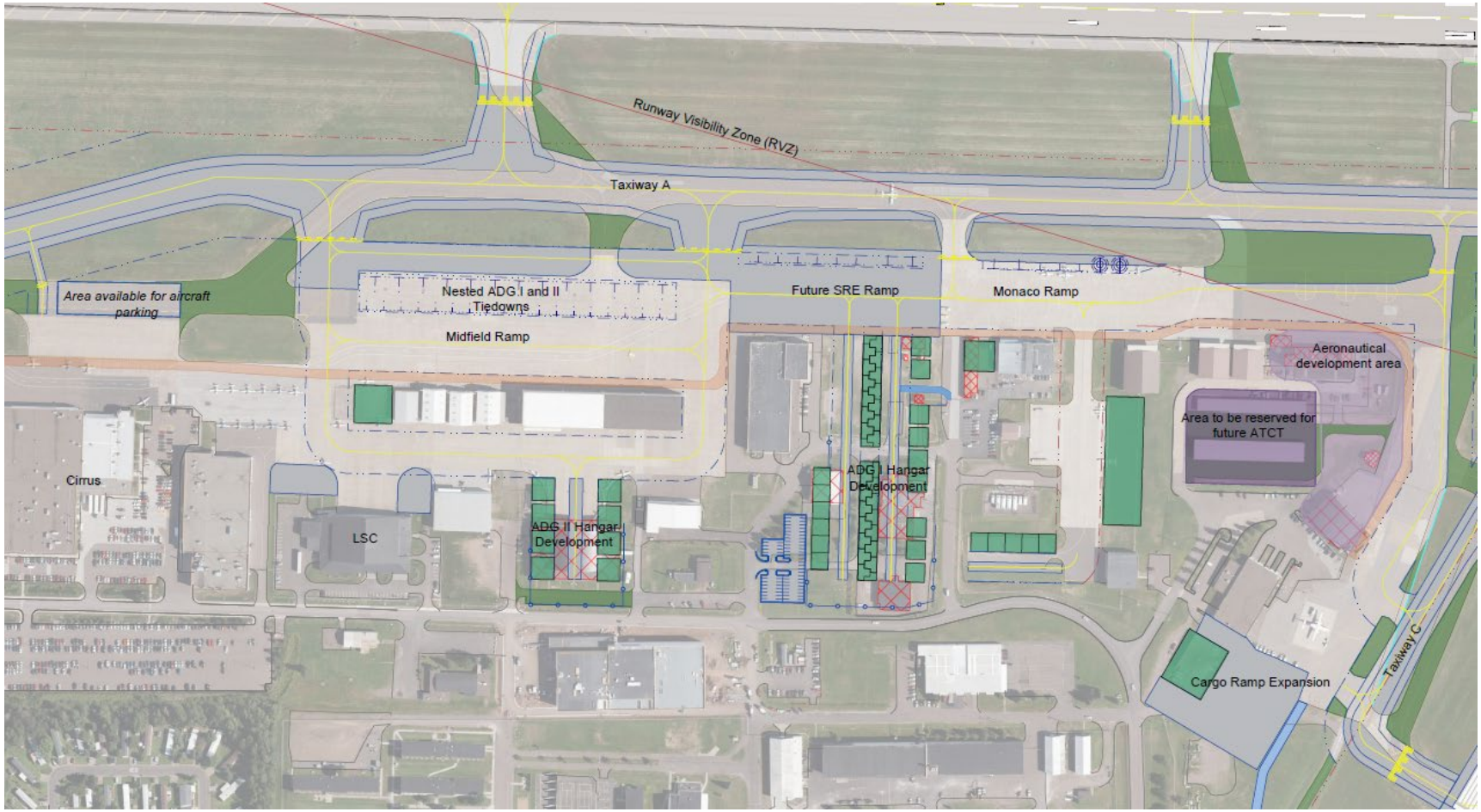
Exist Southwest Quadrant Development



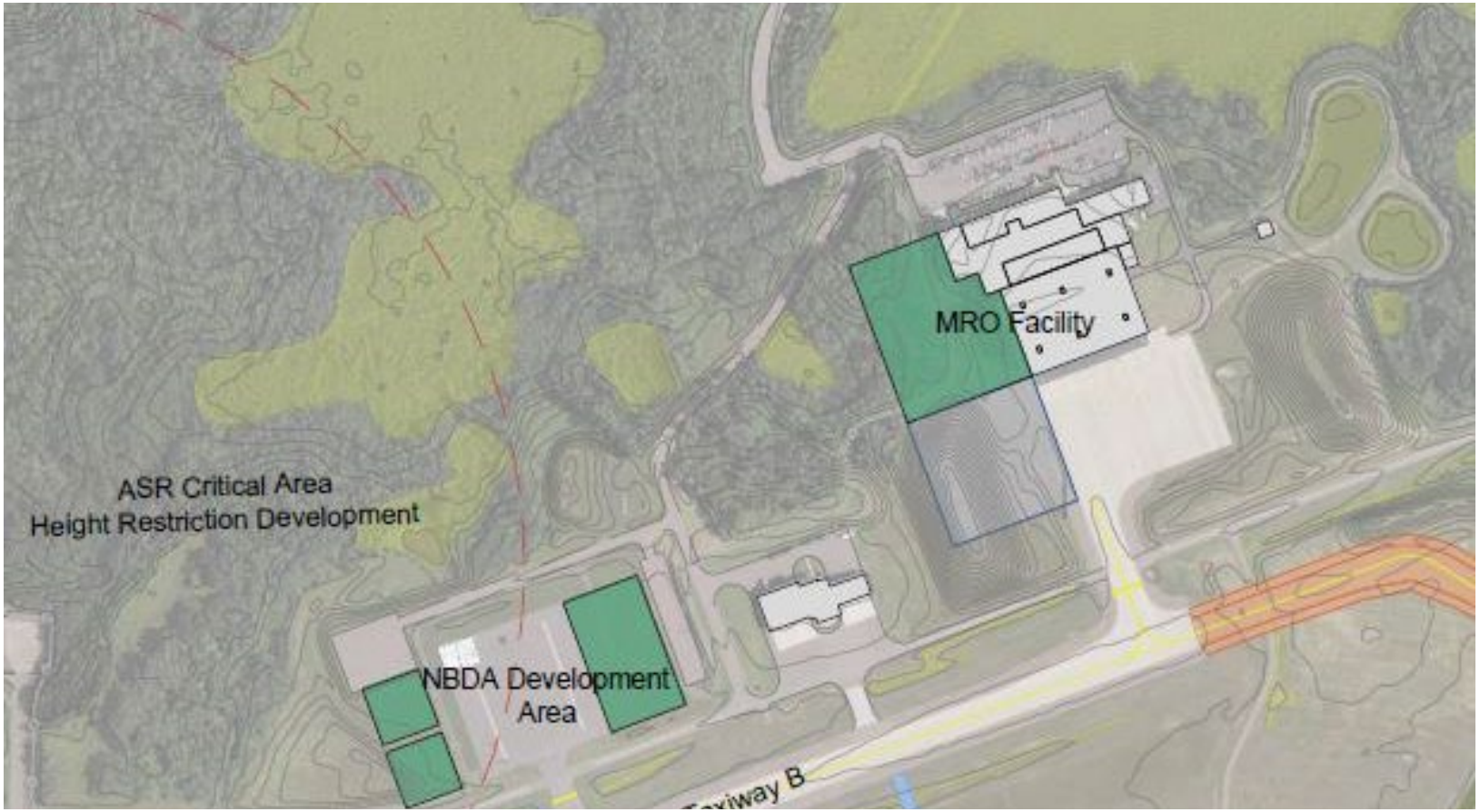
Proposed Southwest Quadrant Development



Southwest Building Area



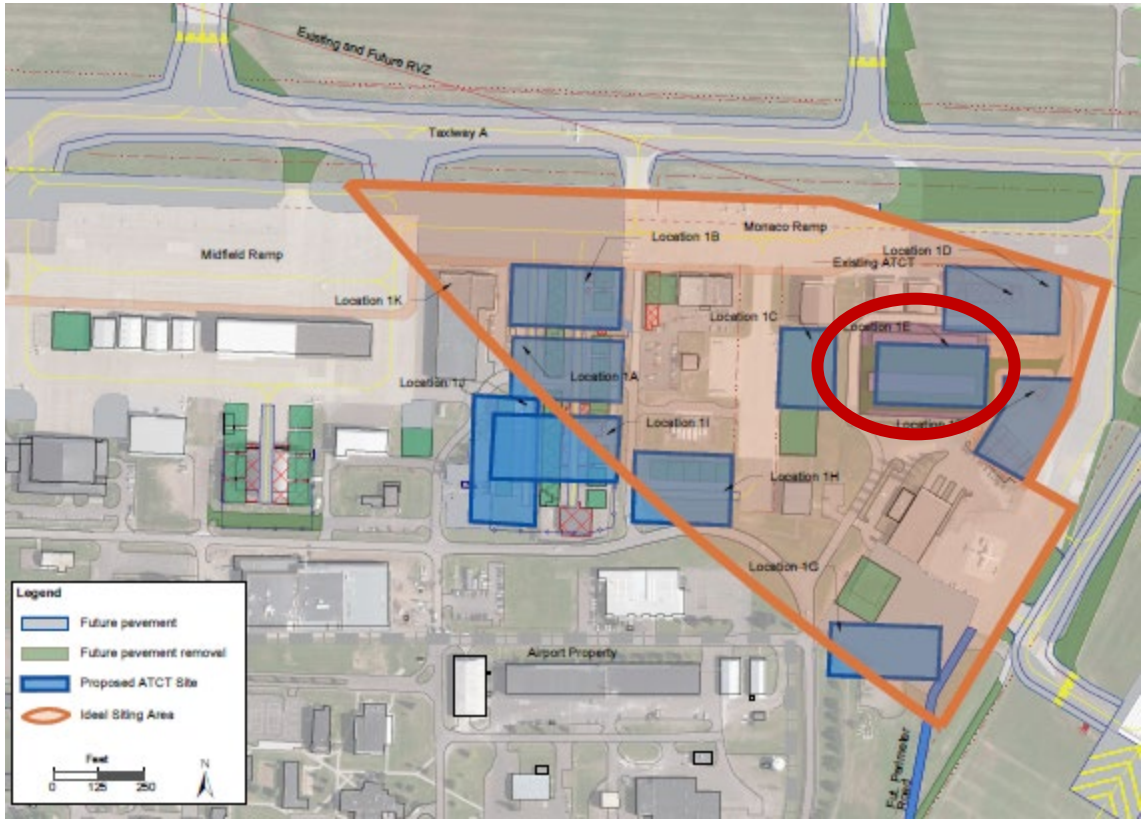
North Building Area



East Building Area (Long-Term)

- Although demand for the site may not occur in the 20-year planning term, space should be reserved by the Runway 3 end (southwest of the terminal) for long-term hangar development.
- Site could accommodate small aircraft or larger corporate aircraft, depending on demand.

Preferred Future Air Traffic Control Tower Site



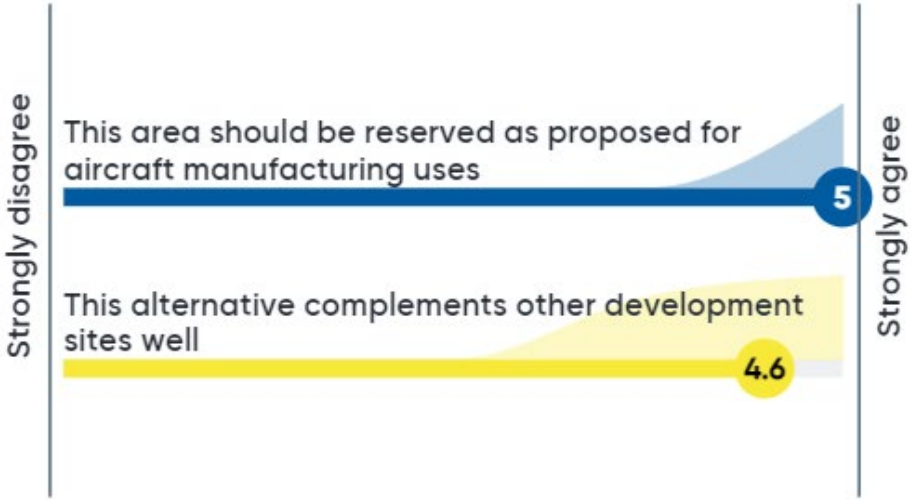
More information on the ATCT TAC meetings can be found on the [project website]

Air Traffic Control Tower - Next steps

1. FAA Siting Study
   - FAA reimbursable agreements – Will require a funding source to cover costs
   - DAA is initiating coordination with FAA
2. Identify funding source for ATCT design and construction
3. NEPA review
4. Design
5. Multi-year construction
   - Site preparation including T-hangar relocation
   - Tower construction

October 2021 TAC Feedback

Rate the following statements below for the area west of Cirrus



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October 2021 TAC Feedback

Considering the proposed building area development, rate these statements

Runway 3/21

- Runway 3-21 TAC recommended an ultimate length of 8,000’ – shown as an ultimate condition on the ALP.
- Length of 8,000’ would support the needs of both the 148th and the critical aircraft
- Funding is not available from the FAA for this extension. Alternative funding sources (ie. bonding or other) will need to be secured for the project to move forward.

Runway 3/21 Extension - Next steps

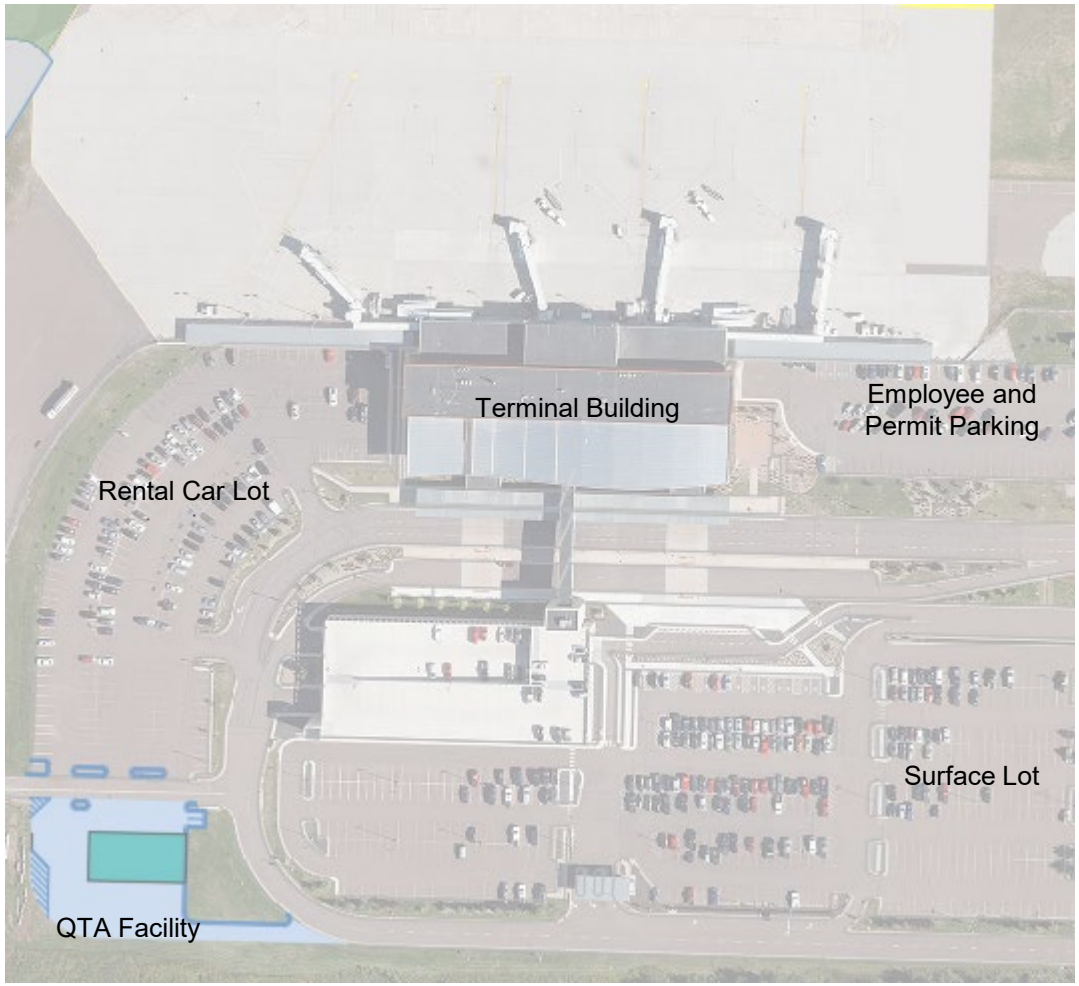
1. Identify funding source
   - FAA – Not justified for funding
   - Bonding
   - Air National Guard
   - Other
2. NEPA review
3. Wetland permitting
4. Design
   - FAA reimbursable agreements
5. Multi-year construction
   - Align with related taxiway projects

Example Revenue Generating Opportunities

- Continued building area development
- DAA owned hangars
- QTA Facility
- Non-aeronautical development opportunities

QTA Facility

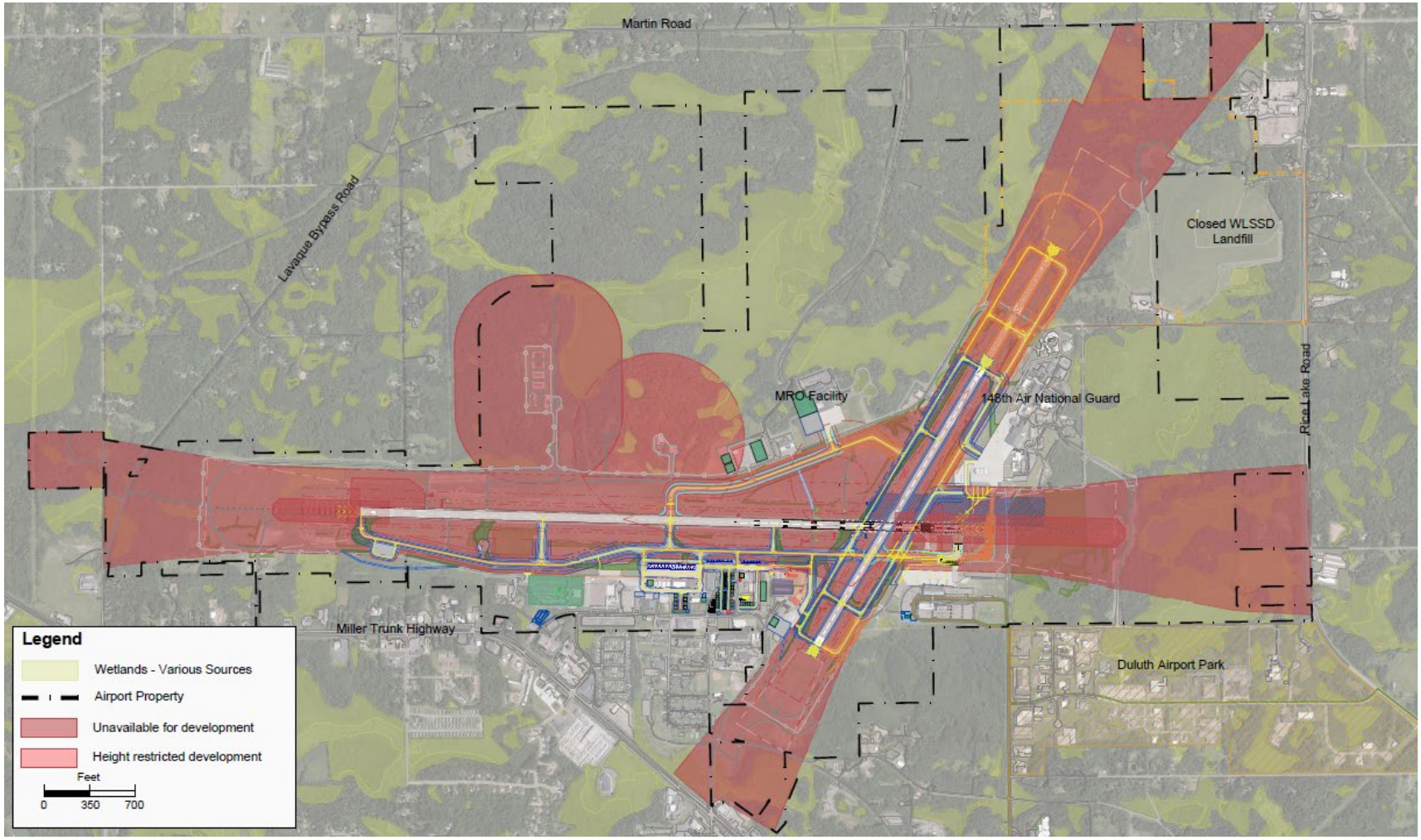
- Provides on-site infrastructure for rental car cleaning and processing
- Reduces turnaround time and labor
- DAA owned
- Funded through CFCs



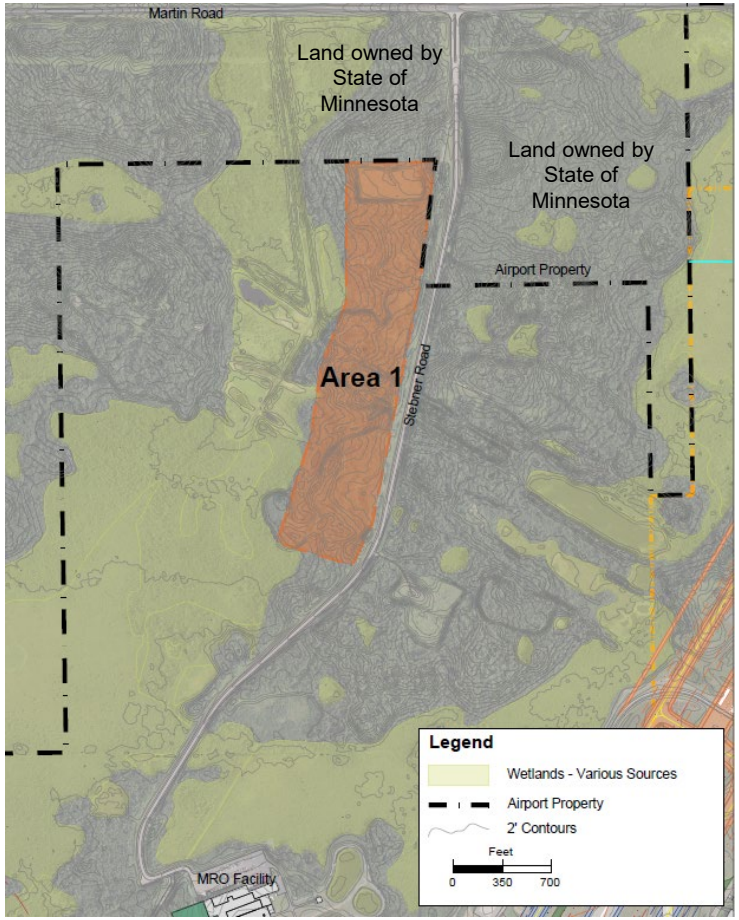
Releasing Property for Non-Aeronautical Use

- FAA approval required to release land from the federal obligations to use it for aeronautical use.
  - The reasonableness and practicality
  - The effect of the request on needed aeronautical facilities.
  - The net benefit to aviation.
  - The compatibility of the proposal with the needs of aviation.
- Other requirements will remain in place –
  - Example: Requirement to charge fair market value for non-aeronautical uses.
- Process to release land for non-aeronautical use can be initiated after Master Plan is complete.

Restricted Development Areas



Potential Development Area 1
Stebner Road



Non-Aeronautical Use

~ 35 Acres

Zoning: Commercial (St. Louis County)

Timeline: Requires FAA Land Release

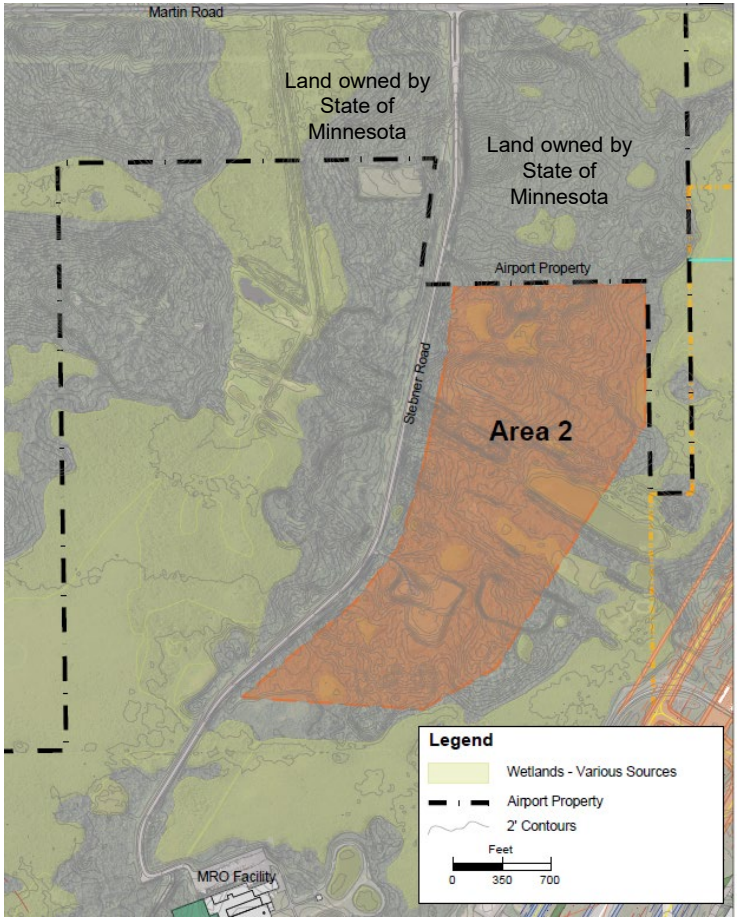
Opportunities

- Road Access
- Potential to avoid wetlands
- Adjacent public land – Owned by State of Minnesota

Challenges

- No existing utilities
- Tree clearing
- Narrower site to avoid wetlands (500' deep)
- Topographic / ground elevation (20' decrease from Stebner Road towards wetlands)

Potential Development Area 2
Stebner Road



Non-Aeronautical Use

~ 90 Acres

Zoning: Commercial (St. Louis County)

Timeline: Requires FAA Land Release

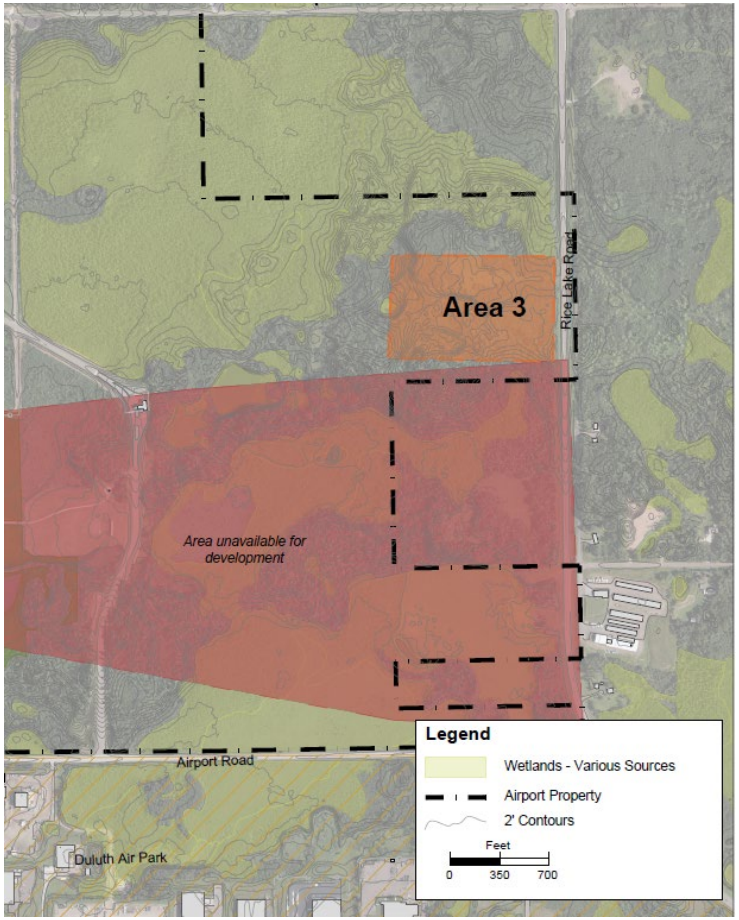
Opportunities

- Road Access
- Large site
- Adjacent public land – Owned by State of Minnesota

Challenges

- No existing utilities
- Tree clearing
- Scattered wetlands – ability to avoid
- Topographic / ground elevation changes

Potential Development Area 3
Rice Lake Road



Non-Aeronautical Use

~ 28 Acres

Zoning: Mixed Use Business (City of Duluth)

Timeline: Requires FAA Land Release

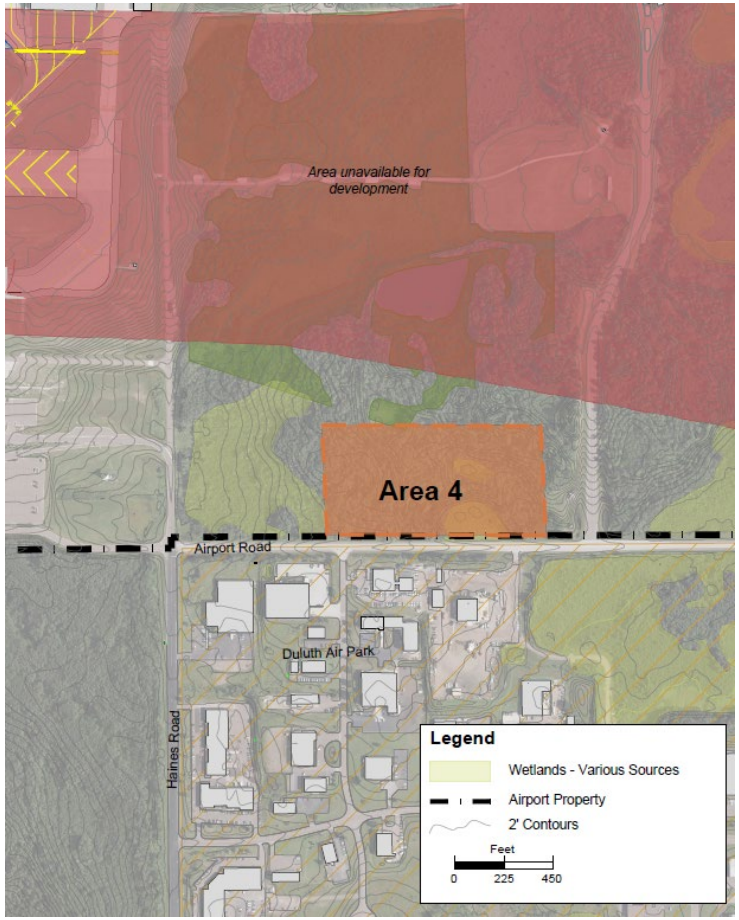
Opportunities

- Road Access
- Large site
- Ability to avoid wetlands

Challenges

- Tree clearing
- Topographic / ground elevation changes

Potential Development Area 4
Airport and Haines Road



Non-Aeronautical Use

~ 10 Acres

Zoning: Rural Residential (City of Duluth)

Timeline: Requires FAA Land Release

Opportunities

- Road Access
- Busy roadway
- Nearby utilities
- Minimal Wetland impacts / potential to avoid

Challenges

- Tree clearing
- Building out utilities to site
- Topography / Ground elevation

Development Summaries

- DAA will be developing development area summaries to summarize all available information on development and redevelopment sites.

Additional Master Plan Recommendations

- Continued maintenance and life-cycle replacement of DAA owned infrastructure
- New terminal parking technology and pricing structure
- TNC (Uber/Lyft) infrastructure and customer experience improvements
- Continued improvement and replacement of DAA equipment fleet
- Continued DAA-owned building maintenance. Some DAA owned buildings should be removed as they are at the end of their useful life and to support redevelopment

Financial Implementation Plan

Financial Implementation Plan

- **Vision 2040 Process Objectives:**
  - To establish a realistic schedule for implementation of the proposed development.
  - To identify a realistic financial plan to support the development.
  - Develop a comprehensive Capital Improvement Plan (CIP) document; Airport CIP is only a subcomponent.

- Identifies sources and uses of funds to support the Master Plan recommendations and evaluate financial feasibility of the plan
  - Plan includes impacts of non-aeronautical revenue generating development

- For forecasting purposes, a conservative 1.8% growth factor was applied to prevent revenue projection that would not be feasible if industry volatility continues

- **Goal: A feasible implementation plan**

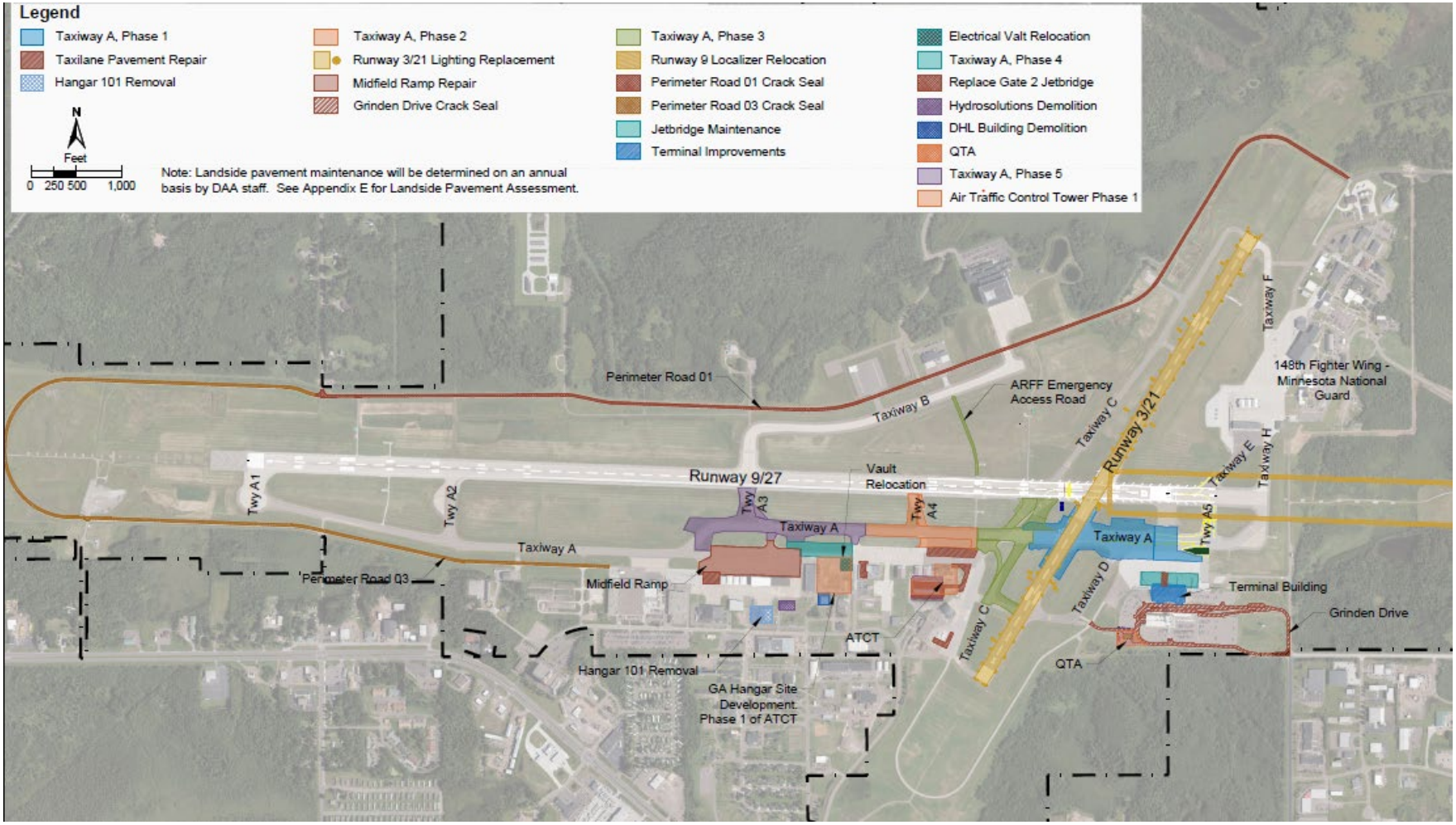
Financial Implementation Plan Major Projects

- **Short-Term Master Plan Improvements**
  - Taxiway A reconstruction
  - Removal of Hangar 101
  - Ranch hangar construction south of Monaco Air
  - Quick Turnaround (QTA) Facility for rental cars
  - Construction of a new Air Traffic Control Tower

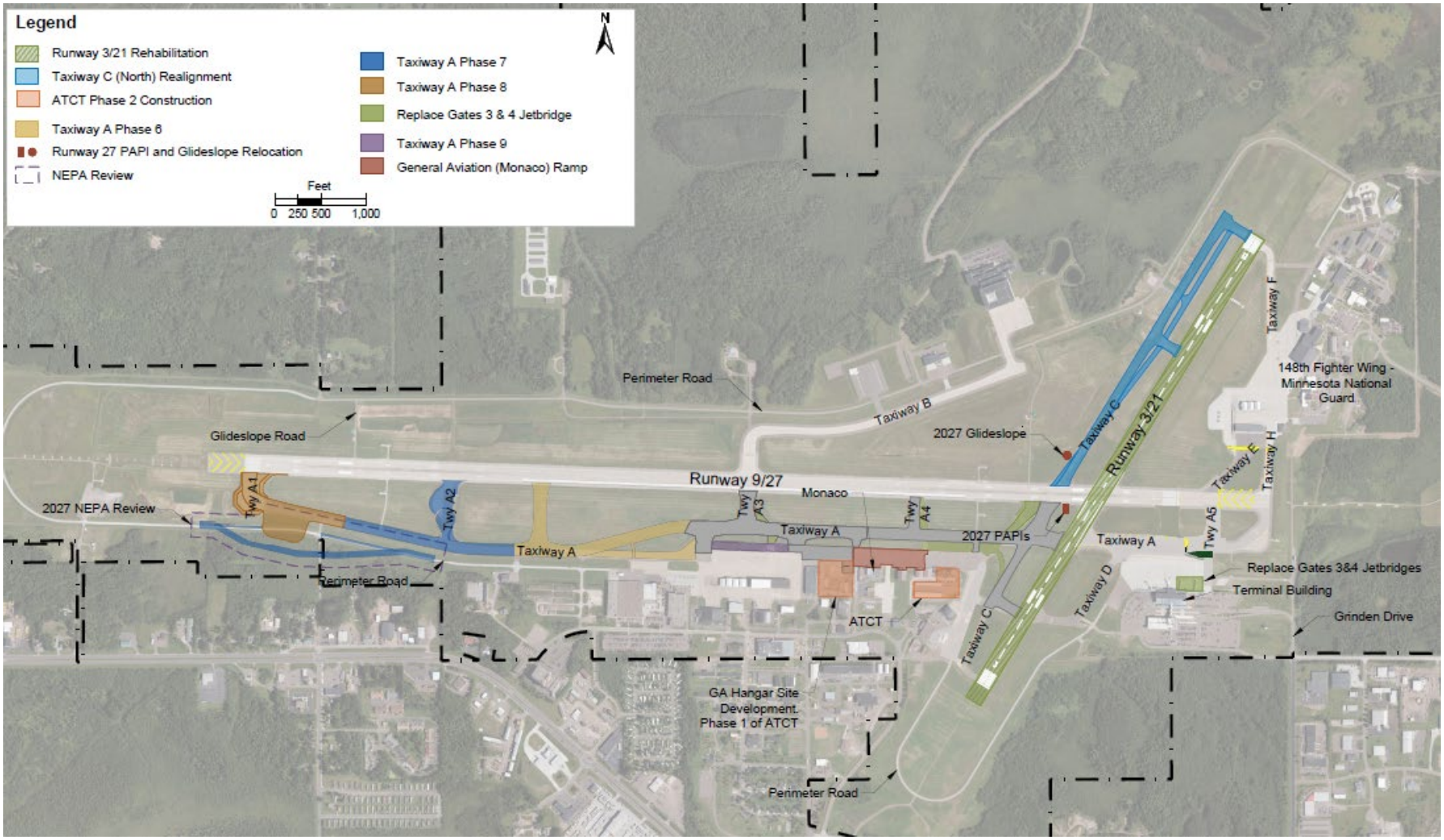
- **Intermediate-Term Improvements**
  - Runway 3/21 rehabilitation
  - Taxiway C Relocation
  - Phase 2 of the Air Traffic Control Tower construction
  - Taxiway A reconstruction
  - Construction/reconstruction of the General Aviation ramp and apron

- **Long-Term Improvements**
  - Runway 9/27 lighting and shoulder replacement,
  - Continuation of the reconstruction of the general aviation aprons and taxilanes
  - Reconstruction of Runway 3/21 at its current length

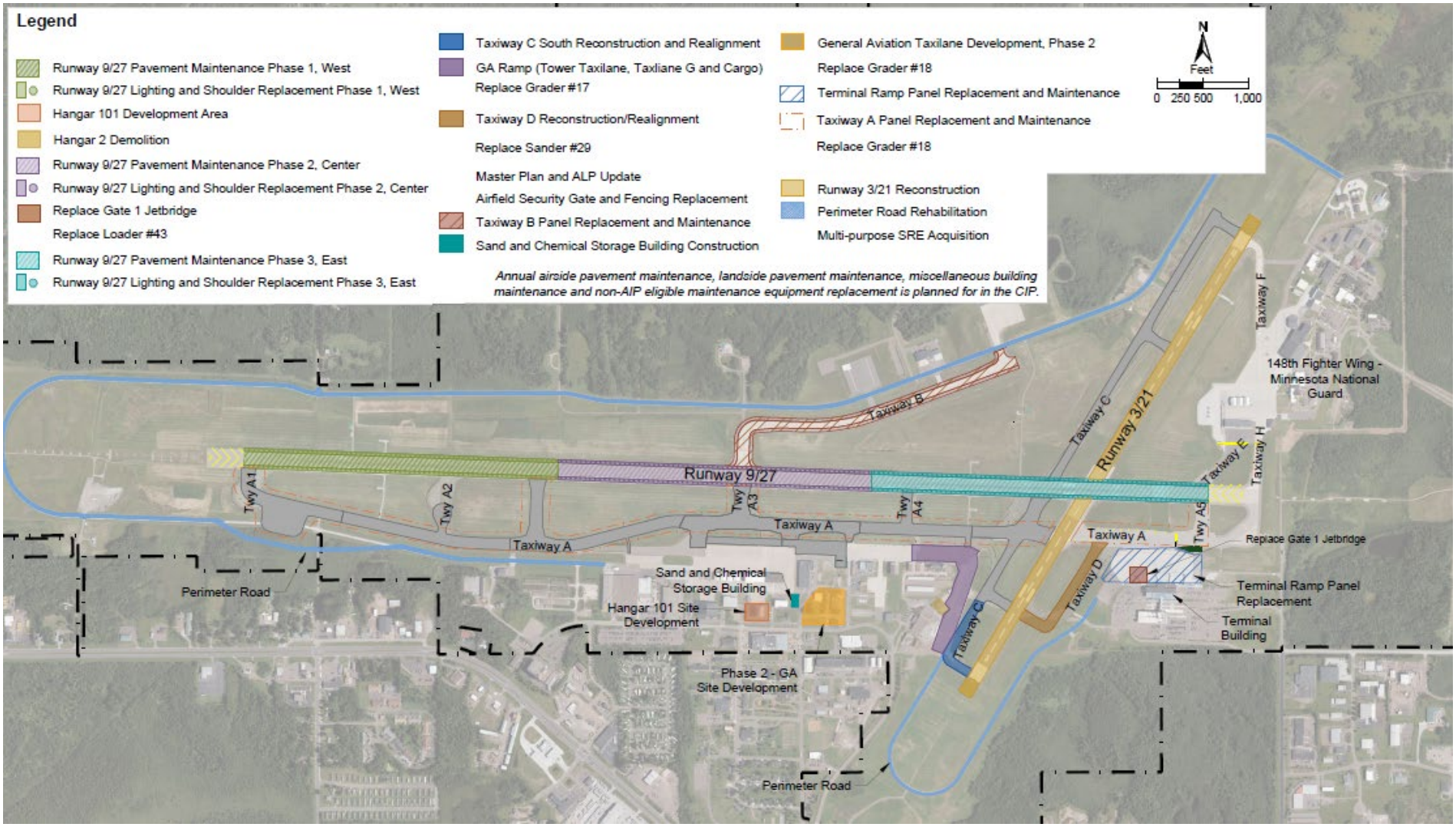
Short-Term Projects



Intermediate-Term Projects



Long-Term Projects



Projects anticipated beyond the 20-year CIP

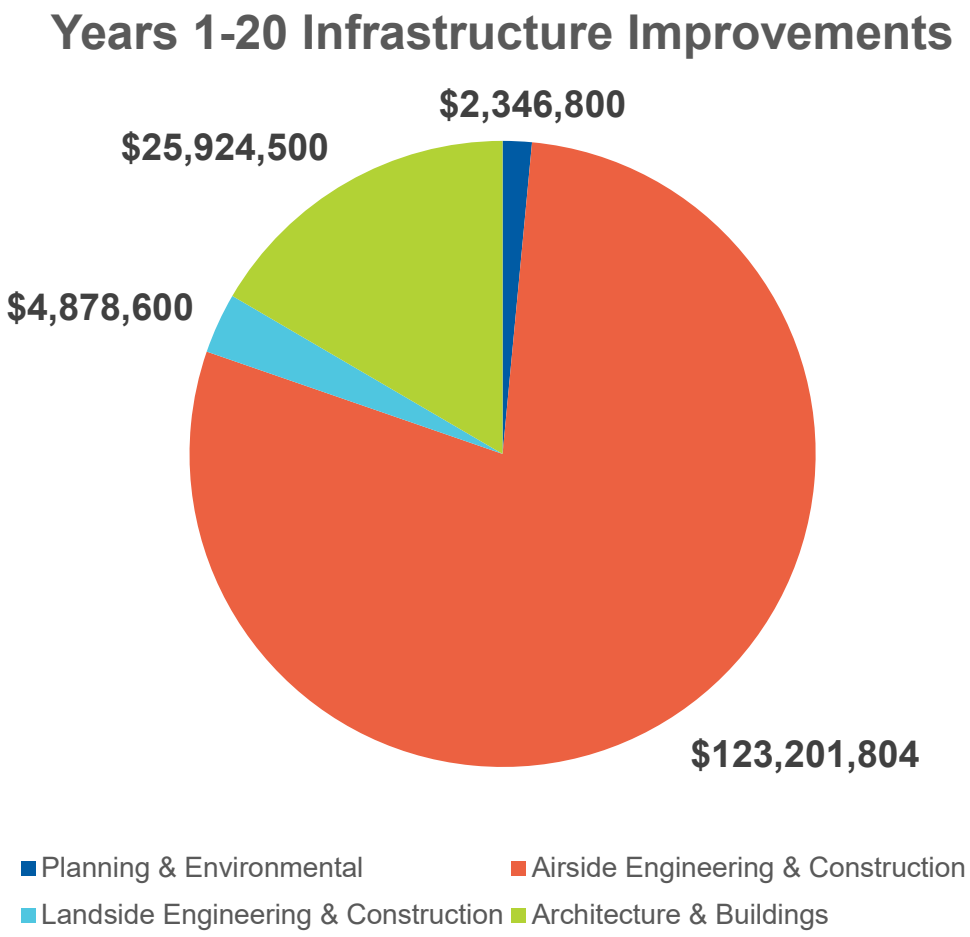
- Runway 3/21 extension
- Taxiway network expansion to Runway 3/21
- Taxiway B extension (from MRO facility to the east)

- Ongoing infrastructure maintenance and replacement will continue

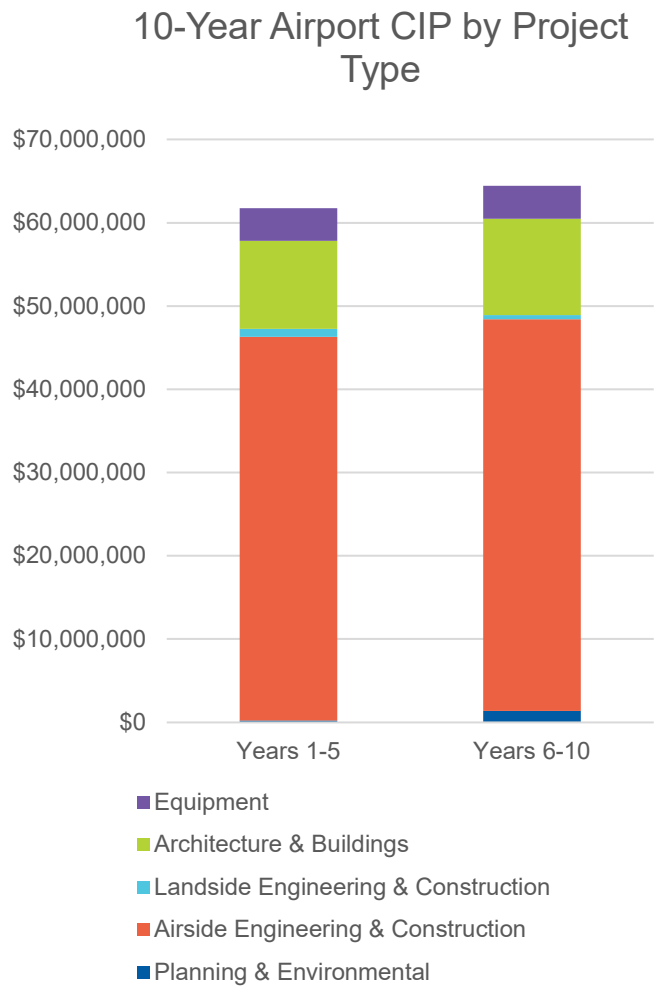
Primary Sources of Funding

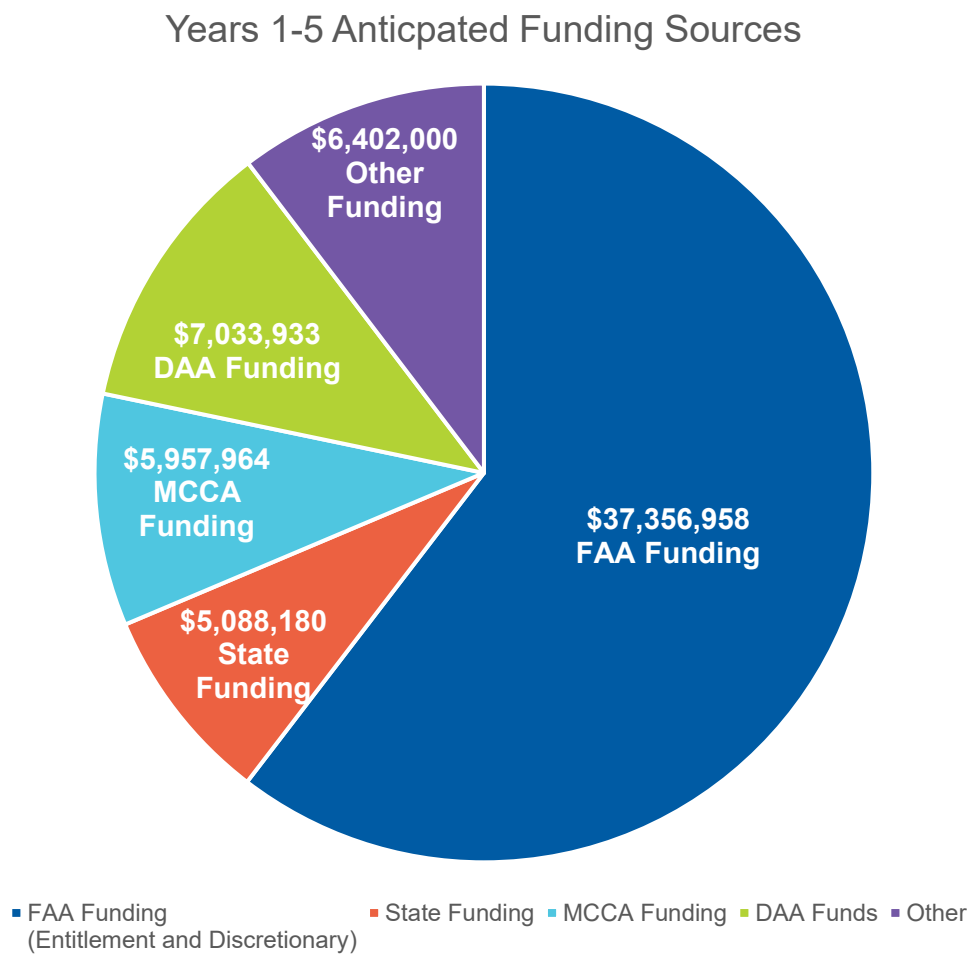
- AIP Entitlement
- AIP Discretionary
- Passenger Facility Charge (PFC) - $4.50
- CARES/CRSSA/ARP pandemic related grants
- Military Construction Cooperative Agreement (MCCA)
- MnDOT Aeronautics
- State Bond Funding
- Customer Facility Charges (CFC) – Rental Cars @ $4.00
- Airport reserves/discretionary revenues
- New incremental aeronautical, non- aeronautical development revenue, and scheduled rates & charges increases
- Third Party Funding

Financial Implementation Plan
20 Year Infrastructure Improvements



Financial Implementation Plan





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What are the next steps?

- FAA and MnDOT Draft chapter reviews
- Draft Airport Layout Plan
- Finalize Financial Implementation Plan
- Develop final engagement materials
  - Executive summary
  - One pagers – summary flyers
  - Online content
  - Master Plan presentations
- DAA Board Approval
- Public Open House
- FAA and MnDOT final reviews and approvals

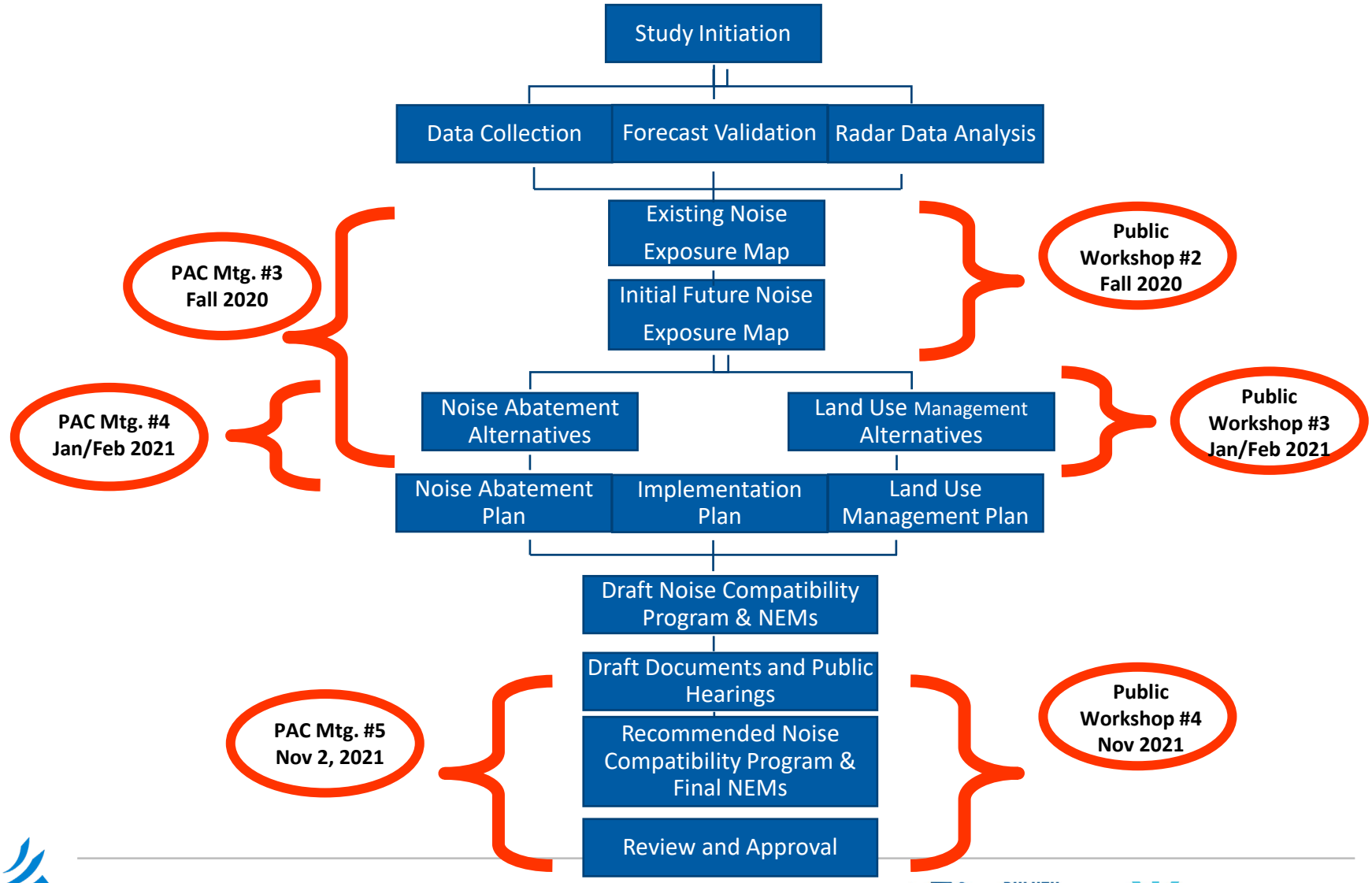
Part 150 Noise Study

Project Update

Part 150 Noise Study

- Project website
  - https://duluthairport.com/noise-study/
- Involvement in Public Advisory Committee (PAC)

Part 150 Noise Study Progress



Part 150 Noise Study Progress

Public Information Workshop and Hearing

November 2, 2021

Public Workshop 6:00 p.m. to 7:00 p.m.

Public Hearing 7:00 p.m. to 8:00 p.m.

Duluth International Airport, Level 3 Amatuzio Conference Room

Thank You!