

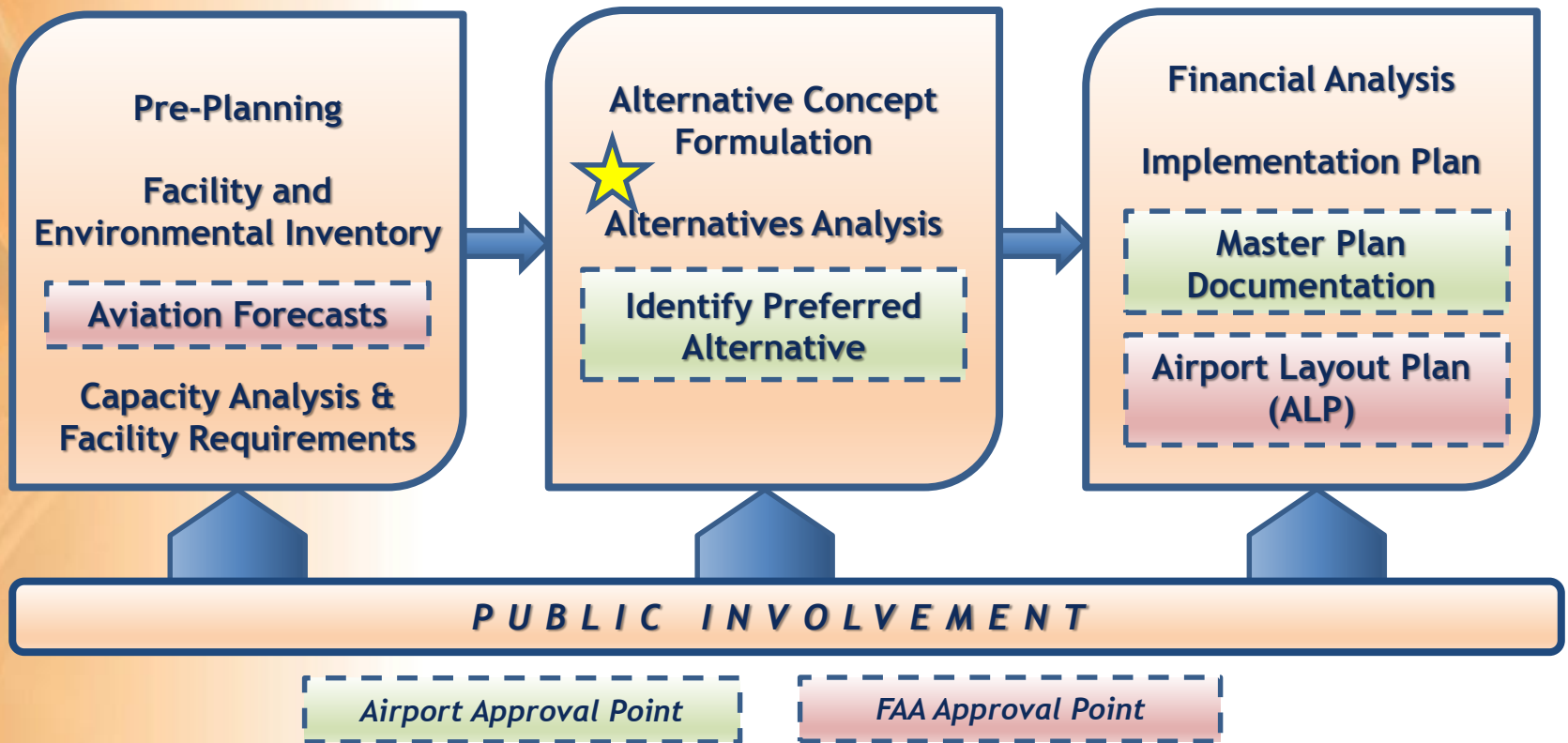


# Grand Forks International Airport Master Plan Study

Authority Briefing #3  
Grand Forks, ND  
December 13, 2016

# Airport Master Planning

*Planning the future of the Grand Forks International Airport*



# Project Status Update

- ◇ Completed Tasks
  - ◇ Capacity Analysis
  - ◇ Facility Requirements
  - ◇ Alternatives Formulation
- ◇ Upcoming Tasks
  - ◇ Open House
  - ◇ Select Preferred Alternative
  - ◇ Implementation Plans



# Key Facility Needs

- Operational solution for future primary runway reconstruction
- Airfield capacity enhancements
- Upgrade terminal complex for increase in flow/volume of passengers, aircraft
- Flexibility to accommodate development opportunities

# Alternatives Evaluation

- ◇ Initial Screening Process
- ◇ Evaluation Criteria
  - ◇ Operational Performance
    - ◇ Capacity, Capability, Efficiency
  - ◇ Best Planning Tenets & Other Factors
  - ◇ Environmental Impacts
  - ◇ Fiscal Factors



# Airfield

- ◇ Key Considerations
  - ◇ Runway 17R/35L Needs Reconstruction
  - ◇ One Runway Serves Air Carriers
  - ◇ Limited Total Airfield Capacity
  - ◇ Safety Risks from Taxiways, Crossing Traffic
  - ◇ Enhance Approaches to Runway 17R, 9L

# Airfield

- ◇ Alternative A1
  - ◇ Reconstruct Runway 17R/35L
- ◇ Alternative A2
  - ◇ Reconstruct Runway 17R/35L
  - ◇ Utilize Taxiway A as Temporary Runway
- ◇ Alternative A3
  - ◇ Construct New Runway 17R/35L
  - ◇ Repurpose Existing Runway as Taxiway



# Airfield

- ◇ Alternative B1
  - ◇ Reconstruct Runway 17R/35L
  - ◇ Extend Runway 9L/27R for Air Carrier Use
- ◇ Long-Term
  - ◇ Extend Primary Runway to 8,000 feet



# Airfield

Category	Alternative A1	Alternative A2	Alternative A3	Alternative B1
RWY 17L/35R Action	Reconstruct	Reconstruct	New Runway	Reconstruct
RWY 9L/27R Action	None	None	None	Extend to 6,800'
Taxiway A Action	None	Reconstruct, Temp. Runway	New Taxiway	None
GFK Air Service Impact*	25-38 Weeks	+/- 1 Week	1-2 Weeks	+/- 1 Week
Wetland Impacts	None	5.0 Acres	5.4 Acres	14.7 Acres
Land Acquisition	None	None	55.6 Acres	76.9 Acres
Temporary Impacts	Air Service to AFB or Other Airports	Limits Aircraft Parking Areas	Not Significant	Not Significant
Permanent Impacts	Not Significant	Reconstructs Taxiway A	Opportunity for Westward Expansion, Additional Pavement Areas	County Highway 5 Realignment, Improves Airfield Safety (ATC)
Planning-Level Cost (To be updated)	\$36 million	\$58 million	\$68 million	\$61 million

*\*Closure timelines impacted by project phasing and funding*

# Airfield

Category	Alternative A1	Alternative A2	Alternative A3	Alternative B1
<b>Pros</b>	Least Costly Alternative	Reduces Air Service Disruption, Utilizes Existing Infrastructure Areas	Minimizes Air Service Disruption, Creates New Opportunities for Terminal Area Development Westward	Reduces Air Service Disruption, Corrects Safety Issue Noted from ATC, Provides Flexibility of Two Air Carrier Runways
<b>Cons</b>	Long-Term Air Service Disruption, Risk of Permanently Losing Passengers to Other Airports	High Project Cost, Reconstruction of Taxiway A Before End of Useful Life	Highest Project Cost, Land Acquisition + Relocation, Increases Total Pavement Area to Maintain	High Project Cost, Relocation of County Highway 5, Land Acquisition, Highest Wetland Impact

# Airfield

- ◇ **Alternative C1**
  - ◇ New 3,300' x 60' Runway
  - ◇ North-South Configuration
  - ◇ Primarily for Flight Training
  - ◇ Increases Airfield Capacity by 44%
  - ◇ Reduces Costly Delays
  - ◇ Estimated Cost: \$8.2 million



# Passenger Terminal Area

- ◇ Key Terminal Considerations
  - ◇ Passenger Circulation
  - ◇ Holdroom Space
  - ◇ Aircraft Gate Layout
  - ◇ Irregular Operations
  - ◇ Baggage Makeup
  - ◇ Storage Space
  - ◇ Automobile Parking



# Passenger Terminal Area

- ◇ Terminal Building
  - ◇ Holdroom Expansion
  - ◇ 3<sup>rd</sup> Boarding Bridge
  - ◇ FIS Capability
  - ◇ Ultimate Expansion
- ◇ Aircraft Parking Configuration
  - ◇ Future Fleet Mix



# Passenger Terminal Area

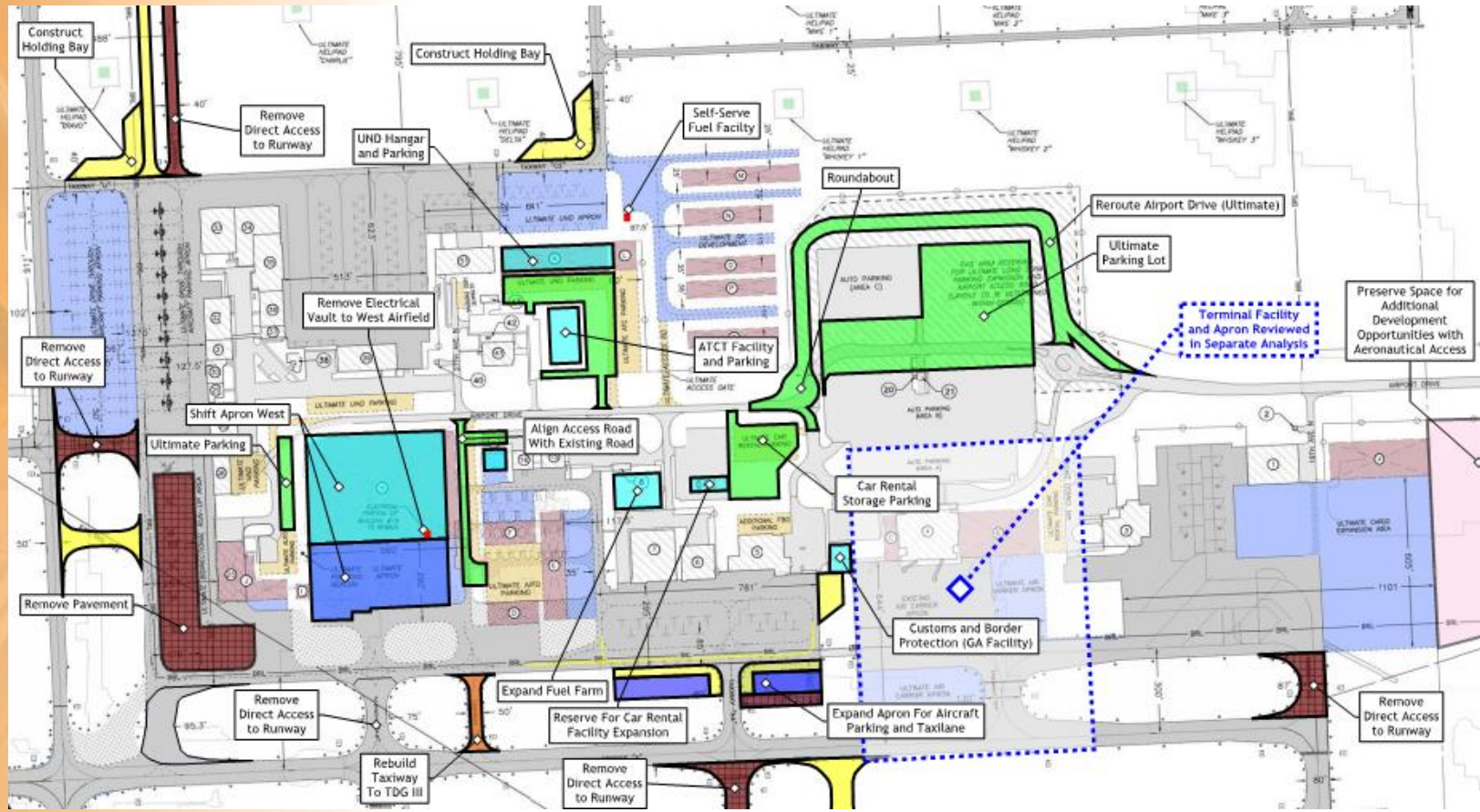
- ◇ Air Carrier Apron
  - ◇ Maximize Available Space
  - ◇ Improve Traffic Flow
  - ◇ Improve Gate Accessibility
  - ◇ Dedicated Deicing Pad
  - ◇ Irregular Operations



# General Aviation / Other

- ◇ East GA Hangar Area Development
- ◇ Reconfiguration of West Hangar Area
- ◇ Alpha Apron Improvements
- ◇ Taxiway Safety/Capacity Enhancements
- ◇ CBP Replacement Facility

# General Aviation / Other





# Next Steps

- ◇ Focus Group Comments
- ◇ Alternatives Refinement/Analysis
- ◇ Public Open House
- ◇ Preferred Alternative Selection
- ◇ Implementation Plans
- ◇ Airport Layout Plan



# Thank You!

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