Open House

MASTER PLAN STUDY

September 19, 2019
Agenda

- Process/Schedule Review
- Background Information Review
- Chapter 5 - Alternatives Analysis
- Conceptual Development Plan (CDP)
- Next Steps
1. PRE-PLANNING
   - Airport Vision
   - Establish Goals & Objectives
   - Master Plan Schedule
   - Project Scoping
   - Special Emphasis Elements

2. INVESTIGATION
   - AIA & AGIS Survey
   - Inventory
   - Forecasts
   - Facility Requirements

3. SOLUTIONS
   - Identification of Alternatives
   - Alternative Analysis
   - Select Preferred Alternatives

4. IMPLEMENTATION
   - Financial Planning
   - Capital Improvement Plan (CIP)
   - Final Master Plan Documentation
   - Airport Layout Plan (ALP)

PUBLIC OUTREACH

PDSC MEETING
PUBLIC OPEN HOUSE
Inventory

- Existing Airport Layout
  - Airside
  - Landside
- Existing Terminal
- Support Facilities & Equipment
- Airport Access
- Airspace
- Emergency Response
- Utilities
- Airport Environs
- Land Use & Zoning
- Environmental Condition Baseline
## Forecasts

### Aviation Activity

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<th>2018</th>
<th>2023</th>
<th>2028</th>
<th>2033</th>
<th>2038</th>
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<td><strong>OPERATIONS</strong></td>
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<td>275</td>
<td>291</td>
<td>308</td>
<td>325</td>
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<td>48,431</td>
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<td><strong>PASSENGER ENPLANEMENTS</strong></td>
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<td>Glider/Ultra-Light</td>
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<tr>
<td><strong>TOTAL BASED AIRCRAFT</strong></td>
<td>256</td>
<td>275</td>
<td>291</td>
<td>308</td>
<td>325</td>
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</tbody>
</table>
Critical Aircraft

- FAA Definition of Critical (Design) Aircraft:
  - The most demanding aircraft (or family of aircraft) with at least 500 annual operations that operates, or is expected to operate, at the Airport.

- Runway 15/33 Critical Aircraft
  - C/D-III, A319/A320 + business jet fleet

- Runway 6/24 Critical Aircraft
  - B-I Small, family of single engine piston-driven general aviation aircraft
Design Standards

- FAA has updated design standards since last master plan
- Runway and taxiway design standards are based on the Critical Aircraft
- Runway 15/33
  - RDC C/D-III design standards
- Runway 6/24
  - RDC B-I Small design standards
Landside Facility Requirements

- **General Aviation**
  - Hangar space to accommodate 70 based aircraft
  - Additional apron space for transient aircraft tie-downs

- **Non-aeronautical development**
  - Demand for up to 100 acres of non-aeronautical development

- **Remote Tower Control Building**
  - Plan for future permanent building

- **Circulation and Access**
  - Widen Earhart Rd. from Lindbergh Drive to commercial terminal parking lot. Consider future loop road around terminal parking.

- **Vehicle Parking**
  - Plan to double current terminal parking lot size
Alternatives Assumptions

- **ASSUMPTION 1:** Recommended improvements must comply with local, state, and federal regulations.
- **ASSUMPTION 2:** Role of the Airport and return of commercial service.
- **ASSUMPTION 3:** Airfield design aircraft.
- **ASSUMPTION 4:** Runway approach, length and width requirements.
- **ASSUMPTION 5:** Efficient and targeted development.
- **ASSUMPTION 6:** Continued use of Runway 6/24.
- **ASSUMPTION 7:** Air carrier passenger terminal requirements.
- **ASSUMPTION 8:** Remote tower requirements.
Alternatives Goals

- Provide direction for future airport development
- Facilitate strategic plan goals
- Facilitate center for innovation
- Encourage private and public investment and compatible land use
- Enhance fiscal self-sufficiency
- Consider aircraft operational requirements
- Consider emerging technology such as electric aircraft
- Maximize airport access and approach capabilities
- Plan for environmental compatibility
Airfield Recommendations

- No significant changes required to existing or planned airfield configuration or RDC.

Airfield Recommendations Summary

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<tr>
<th>Airfield Facility</th>
<th>Required Improvement</th>
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<tr>
<td>Runway 15/33</td>
<td>- Widen to 150’*</td>
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<tr>
<td></td>
<td>- 1,000’ takeoff only extension to the south*</td>
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<tr>
<td></td>
<td>- Extend taxiway A in association with Runway extension*</td>
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<tr>
<td></td>
<td>- Relocate Runway 33 departure RPZ</td>
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<tr>
<td>Parallel Runway 15R/33L</td>
<td>- Plan for future parallel runway *</td>
</tr>
<tr>
<td></td>
<td>- Plan for bypass taxiways at 15R and 33L Runway ends*</td>
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<tr>
<td>Runway 6/24</td>
<td>- Plan for parallel taxiways to TDG 2 standards*</td>
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<tr>
<td>Taxiway System</td>
<td>- Update fillets to meet current design standards</td>
</tr>
<tr>
<td>Airfield Visual Aids</td>
<td>- Install MALS at Runway end 15L*</td>
</tr>
</tbody>
</table>

* 2007 Master Plan Recommendation
Landside Alternatives

❖ Considerations
  ▪ On-Airport land use
  ▪ Landside constraints and opportunities in land rent potential, and existing and planned infrastructure and access
  ▪ Commercial service area layouts

❖ Developed to accommodate forecast demand and align with the airfield recommendations.
Landside Alternatives - Northeast

Alternative 1

Alternative 2
Landside Alternatives - Southeast

Alternative 1

Alternative 2
Landside Alternatives - West

Alternative 1

Alternative 2
Passenger Terminal Area Alternatives

Considerations

- Pre-determined passenger terminal location identified in previous planning study and current future ALP.

- Alternatives show how space might be configured in association with a future replacement terminal and the return of commercial service.
Landside Alternatives – Terminal Area

Alternative 1

Alternative 2
Terminal Building Alternatives

Considerations
- Terminal square footage program.
- One story vs. two story/split level.
- Passenger boarding bridges.
- Airfield and landside access.

Alternatives show how internal terminal space might be configured.
Terminal Layout
Two Story Alternative
Figure 5-12
Level 2
Figure 5-13: Conceptual Development Plan (CDP)
Next Steps

- Continued Community Outreach on alternatives/CDP
- Public input is considered, and alternatives/CDP are revised
- Airport Commission approval of CDP
- Begin Implementation Phase
Northern Colorado Regional Airport

**MART PLAN PROCESS**

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THANK YOU!

Happy Fall Y'all!

MASTER PLAN

Northern Colorado Regional Airport

Mead & Hunt