AIRPORT MASTER PLAN

ADVISORY COMMITTEE
KICK-OFF MEETING #1 INVITATION

To: Advisory Committee Members

From: Brian Ryks, Duluth Airport Authority

Project: Duluth International Airport Master Plan Study

Re: Meeting #1 – Project Kick-Off Meeting

Action Requested:

The first Advisory Committee Meeting for the Duluth International Airport Master Plan will be held on **Tuesday, March 22, 2011** at the **Skyline Room 2nd Floor Duluth Airport Terminal at 3:00 pm**. Please see the attached meeting agenda for specifics.

This first project meeting will serve as a 'kick-off' to this planning study, and will discuss the master plan process, committee member roles and responsibilities, review the first 'draft' Working Paper #1, and spend most of the time collecting committee input.

Working Paper #1 will be provided to each member individually at least one week prior to the meeting, and will include the 'Introduction' and 'Existing Conditions' chapters. You will be notified by e-mail of the Working Paper #1 delivery, and how to retrieve that document from the file delivery system (Biscom).

There is a lot of information to cover, so we hope you can attend. Should you need to find out more about the meeting, or wish to notify us of your availability, please feel free to call our consultant, Jeff Smith with Reynolds, Smith & Hills (312-526-5019).

We look forward to visiting with you, and starting this important project.

Attached: Meeting #1 Agenda
Advisory Committee Roles & Responsibilities

Sincerely,

Brian Ryks, Executive Director
AIRPORT MASTER PLAN

ADVISORY COMMITTEE
KICK-OFF MEETING #1 AGENDA

MEETING DATE: Tuesday, March 22, 2011
TIME: 3:00 PM (Approx. 2 Hours)
LOCATION: Duluth Airport Terminal Building, Skyline Room (2nd Floor)

This meeting is a ‘kick-off’ to the Duluth International Airport Master Plan study. The purpose of this first meeting is to inform the Advisory Committee of their role, describe the master planning process, and review initial data collection and Working Paper #1 information (Introduction and Existing Conditions).

The agenda for the meeting:

A. Opening Remarks – Brian Ryks / Brian Grefe
   - Welcome & Introductions / Points-of-Contact
   - Current Airport Events

B. Airport Master Planning Process – RS&H
   - Purpose and Role of Advisory Committee
   - Master Plan Scope, Schedules and Deliverables

C. Overview of Working Paper #1 – RS&H
   - Introduction / Public Participation Chapter: overview of the airport master planning effort, study goals, and public involvement program.

   - Existing Conditions Chapter: overview of airport master planning goals, airport facilities, activity levels, key airport users, user aircraft demands, wind/runway usage analysis, land uses and current airport facility/service deficiencies.

D. Status of Other Study Efforts – RS&H
   - Aerial Mapping Update: summary of the aerial and base mapping to support the airport layout plan drawings.

   - Pavement Condition Index (PCI): summary of the pavement evaluation conducted as part of the master plan effort.

   - Exhibit A Property Map Update: summary of the airport property map.
E. SWOT Analysis – Interactive
   - Airport Strengths, Weakness, Opportunities & Threats (SWOT) Analysis

F. Open Committee Discussion - Committee
   - Data Collection Efforts / Interview Contacts
   - Dissemination of Project Information / Executive Summary
   - Public Involvement & Participation Strategies / Public Outreach Process

Additional hand-out and presentation materials will be provided at the meeting.

Meeting Handouts: Meeting Presentation
   List of Committee Members & Contact Information
   Project Schedule & Timeline - Flowchart

Attachments: Advisory Committee Role

Thank you for your attendance
ADVISORY COMMITTEE - ROLE
DULUTH INTERNATIONAL AIRPORT
AIRPORT MASTER PLAN UPDATE

- Committee Overview

The Duluth Airport Authority has assembled an 'Advisory Committee' for the Duluth Airport Master Plan Update project. An update to the Airport Master Plan is being initiated to document the orderly development of facilities that are essential to meet the needs of the Airport. This Committee reviews these study findings and provides suggestions throughout the 12 to 16-month master plan process.

- Master Plan Purpose

The master plan assesses the 20-year needs of the Airport. It serves as the Airport’s roadmap for guiding Airport facility, equipment and service needs, as envisioned by the Airport Authority and Advisory Committee. This 20-year plan results in a year-by-year phased project program and set of record Airport Layout Plan drawings depicting future improvements, as approved by the Federal Aviation Administration (FAA) and Minnesota DOT (Mn/DOT Aeronautics). Overall, the major master plan tasks center on: airfield capital facility improvements; landside developments; land use compatibility, and; airport project priorities and funding.

The following are the major study issues for this master plan:

- Crosswind Runway Length Justification
- Restore Useable Runway 27 End Length
- Pavement Rehabilitation & Phasing / Pavement Condition Index Study
- Address FAA and Mn/DOT Standards
  - Taxiway Separation & Intersection Configuration
  - Land Use Zones
- North Airport Business Development Area
- Redevelop General Aviation Area(s)
- Location of New/Replacement Air Traffic Control Tower
- Planning Coordination with Air National Guard
- Planning Coordination with Golden Triangle Study
- Future Airport Surveillance Radar Relocation
- Improved Airport Visibility and Access Plan
- Airport Property Mapping / Land Acquisition Plan
- Planning for Future Cargo Facility
Committee Composition / Members

As a strategic planning process, the master plan is structured to be responsive to local Airport needs, while at the same time, inclusive of more broad regional planning issues. As such, the Duluth Airport Authority understands that master plans which involve an advisory committee are more successful and widely accepted than those without.

The Advisory Committee is a standing group of members focused exclusively on the master plan project. The Committee is comprised of individuals with diverse professional backgrounds and interest in airport and community development. With a vision of furthering the Airport’s needs, the members bring various aviation and non-aviation perspectives to the master plan process, in order to form a well-rounded consensus on the key study issues.

Committee Role / Function

The Advisory Committee serves in an advisory capacity, conferring with the Airport Authority and Consultant throughout the study.

As such, the members have the responsibility to:

✓ attend scheduled meetings
✓ review interim reports and study documents
✓ provide feedback on study recommendations
✓ review project alternatives; recommend a ‘preferred’ master plan course-of-action
✓ concur with master plan adoption
✓ provide awareness of project developments and Airport benefits

Committee Participation

Members of the Advisory Committee are asked to review the interim working papers, and attend six technical meetings. Presentation materials will be provided to each member in advance of the scheduled meeting, along with an agenda outlining the upcoming meeting tasks to be accomplished.
Advisory Committee Meetings / Workshops

The following committee meetings are anticipated -- to be refined as the study progresses:

**Meeting #1**  Kick-Off: With the Sponsor's committee(s) in place, a 'kick-off' meeting serves to establish lines-of-communication, describe the major goals and objectives of the planning process, schedule a timetable for project meetings and deliverables, to coordinate the public involvement process, and solicit initial suggestions and input.

**Meeting #2**  Facility Needs: report on Existing Conditions (Chapter 1), Forecasts (Chapter 2), and Facility Requirements (Chapter 3).

**Meeting #3**  Initial Alternatives: discuss the alternative methodology and initial options under consideration.

**Meeting #4**  Contemplated/Candidate Alternatives: report on the final recommendations for the preferred alternative (Chapter 4).

**Meeting #5**  Final Alternative/Initial Program Implementation: report on the preliminary project phasing plan (Chapter 5) and development of preliminary ALP drawings (Chapter 6).

**Meeting #6**  Final Program Implementation/Financing: report on the finalized program implementation plan (Chapter 5) and financial feasibility analysis (Chapter 7). Present final draft report and presentation to governing body.

Input from the Advisory Committee will receive the full consideration of the Airport Authority and Consultant. Those comments and suggestions which influence study recommendations are incorporated into the master plan documentation.

In addition, the Advisory Committee will provide input as to the logistics of the three public workshop meetings held for the master plan. The workshops are used to coordinate master planning objectives with the needs and concerns of the local community, including prepared announcements to various media sources. The following public workshops are anticipated -- to be refined as the study progresses.
Public Workshop #1  Held at the conclusion of the facility requirement section, and with consideration of initial alternatives analyses.

Public Workshop #2  Held in advance of the selection of a preferred development alternative.

Public Workshop #3  Held with the Duluth Planning Commission / Metropolitan Interstate Committee.

### SWOT Analysis

The following exhibit shows the process used to engage the Advisory Committee at the Master Plan kick-off meeting. This helps categorize opinions by individual members regarding the Airport's **Strengths**, **Weaknesses**, **Opportunities** and **Threats** (SWOT) for each of the major master plan issues. Once compiled, this forms the basis for steering the 'mission goals and objectives' throughout the master plan study.

**DULUTH AIRPORT MASTER PLAN UPDATE**  
**SWOT Analysis - **St**rengths**, **W**eak**nesses**, **O**pportunities**, **Th**reats**

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<tr>
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<th>Helpful</th>
<th>Harmful</th>
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<td><strong>Strengths</strong></td>
<td><strong>Weaknesses</strong></td>
</tr>
<tr>
<td><strong>External Origin</strong> (Attributes of the environment beyond the Airport boundary)</td>
<td><strong>Opportunities</strong></td>
<td><strong>Threats</strong></td>
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*Notes:*

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ADVISORY COMMITTEE - COMPOSITION
DULUTH INTERNATIONAL AIRPORT
AIRPORT MASTER PLAN UPDATE

• Advisory Committee
The Advisory Committee is primarily responsible for evaluating the technical merits and logistical implementation of the study, and other items requiring insight and coordination with the FAA and Mn/DOT.

• Recommended Composition of Advisory Committee
Committee participation allows for focused and diverse input by key Airport stakeholders, interested constituents, and representatives of the general public. Committee membership is assembled by the Sponsor through nomination or appointment, tailored to the Airport’s specific public involvement needs. Members are principally composed of stakeholders with exposure to Airport planning and operations. A roster of 8 to 12 members is recommended for the Duluth Airport Master Plan Update.

The following is the source of committee representation contemplated for this study:

- Sponsor’s Staff
- Surrounding City/County/Township Planning-Zoning Designees
- Regional Economic Development / Chamber of Commerce Designees
- FAA/Air Traffic Control
- State DOT
- Major Airport Tenants / FBO
- Key Operators and Users / Air National Guard Representative
- Citizen-Based Organizations / Surrounding Residential Groups
Duluth International Airport

Airport Master Plan Project

Master Plan Advisory Committee Kick-Off Meeting

March 22, 2011
Presentation Agenda

- Introductions – Brian Ryks / Brian Grefe
- Airport Master Planning Process / Project Status – RS&H
- Advisory Committee Role – RS&H
- Duluth Master Plan Effort / Working Paper #1 – RS&H
- Committee Insight / SWOT Analysis – Advisory Committee
- Open Discussion – Advisory Committee
Introductions

Study Participants

Introductions:
- Airport Staff
- FAA and Mn/DOT
- Consultant Team
- Advisory Committee Members

Duluth International Airport Overview:

Airport News and Current Events:
Presentation Agenda

- Introductions – Brian Ryks / Brian Grefe
- Airport Master Planning Process / Status – RS&H
- Advisory Committee Role – RS&H
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Airport Master Plan Process / Status

Airport Master Plan Process

What is a Master Plan?
- 20-Year Plan Sets Airport Development Vision
- Comprehensive Roadmap for Project Improvements
- Concentrates on Facilities & Property
- Complies with FAA and Mn/DOT Standards / Essential to Enable FAA Grants

Major Products of the Master Plan:
- Narrative Report
- Airport Layout Plan (ALP) Drawings
- Capital Improvement Program (CIP)
Airport Master Plan Process / Status
Study Progress

Involvement Program:
- Airport Sponsor, FAA and Mn/DOT Coordination
- Advisory Committee Meetings
- Public Information Workshops
- Website Postings
- Press Releases

Investigative:
- INVENTORY
- AVIATION ACTIVITY FORECAST
- AIRPORT FACILITY REQUIREMENTS
- AERIAL MAPPING
- PAVEMENT MANAGEMENT STUDY
- EXHIBIT ‘A’ PROPERTY MAP
- ENVIRONMENTAL REVIEW

Solutions:
- ALTERNATIVES DEVELOPMENT & EVALUATION

Implementation:
- FACILITIES IMPLEMENTATION PLAN
  - FINANCIAL FEASIBILITY ANALYSIS
  - AIRPORT LAYOUT PLAN (ALP) DRAWINGS
  - MASTER PLAN REPORT
  - EXECUTIVE SUMMARY

We Are Here:
- March
- June
Presentation Agenda

- Introductions – Brian Ryks / Brian Grefe
- Airport Master Planning Process / Project Status – RS&H
- Advisory Committee Role – RS&H
- Duluth Master Plan Effort / Working Paper #1 – RS&H
- Committee Insight / SWOT Analysis – Advisory Committee
- Open Discussion – Advisory Committee
Advisory Committee Role

Committee Member Roles

**Purpose:**
- Encourage study participation
- Incorporate members’ regional knowledge

**Responsibilities:**
- Attend advisory meetings (6)
- Review interim reports and study documents
- Provide feedback on study recommendations
- Review project alternatives; recommend a ‘preferred’ master plan course-of-action
- Concur with master plan adoption
- Provide awareness of project developments and Airport benefits
Advisory Committee Role

Public Involvement Program

Improve Community Awareness
- Public Announcements / Engage Press / Releases
- Public Outreach Opportunities (3 Workshops)
- Airport Executive Brochure / Website Postings

Coordinate Multi-Jurisdictional Buy-In
Presentation Agenda

- Introductions – Brian Ryks / Brian Grefe
- Airport Master Planning Process / Project Status – RS&H
- Advisory Committee Role – RS&H
- Duluth Master Plan Effort / Working Paper #1 – RS&H
- Committee Insight / SWOT Analysis – Advisory Committee
- Open Discussion – Advisory Committee
Strategic Vision for the Master Plan

• Provide for the commercial passenger needs of the area
• Continue to foster a viable Air National Guard mission at the Airport
• Continue to contribute to the local and regional economy through aviation activity
• Continue to foster a positive business environment for aircraft manufacturing and maintenance at the Airport
• Continue to support general aviation growth
• Provide for needed facility/infrastructure improvements in an economically achievable way
• Achieve FAA MnDOT Design Standard Compliance
Master Planning Technical Issues

- Crosswind Runway Length Justification
- Restore Usable Runway 27 End Length
- Pavement Rehabilitation & Phasing
- Address FAA and Mn/DOT Standards
  - Taxiway Separation & Intersection Configuration
  - Land Use Zones
- North Airport Business Development Area
- Redevelop General Aviation Area(s)
Location of New/Replacement Air Traffic Control Tower
Planning Coordination with Air National Guard
Planning Coordination with Golden Triangle Study
Planning for Future Cargo Facility
Future Airport Surveillance Radar Relocation
Improved Airport Visibility and Access Plan
Airport Property Mapping / Land Acquisition Plan
Overview

Chapter 1 - Executive Summary

Chapter 2 – Introduction/Public Involvement Program

Chapter 3 – Issues and Existing Conditions

- Airport Facilities
- Key Users
- Airport Usage
- Land Uses
- Environmental Factors
Major Airport Users:

- Scheduled Airlines (United, Delta and Allegiant)
- Unscheduled & Charter Air Carriers
- Air Cargo Operators
- MN Air National Guard
- General Aviation
- Fixed Based Operator / Techstops
- Cirrus Industries
- Lake Superior College Flight Training
### Duluth Master Plan Effort / Working Paper #1

**Airport Familiarity – Airfield Facilities**

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**-- DLH Runway and Taxiway Pavements**
**Total 5.3 Million SF**

**-- Runway 9 and 27 have Precision ILS Instrument Approaches**

**-- Duluth Air Traffic Control Tower provides Radar Services**

<table>
<thead>
<tr>
<th>Facility Item</th>
<th>Runway Facilities</th>
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<tbody>
<tr>
<td><strong>Runway 9-27</strong></td>
<td><strong>Rwy 9 End</strong></td>
</tr>
<tr>
<td>Runway Length x Width / Surface</td>
<td>10,162’ x 150’ Concrete (Grooved)</td>
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<tr>
<td>Paved Shoulders</td>
<td>80’ (40’ Per Side)</td>
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<tr>
<td>Airport Reference Code (ARC)</td>
<td>ARC D-V (Widebody Transport Critical Aircraft)</td>
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<tr>
<td>Pavement Strength (Gear Type)</td>
<td>94,000 (SWG)</td>
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<tr>
<td>Pavement Condition</td>
<td>PCN 75 R/C/W/U</td>
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<tr>
<td>Displaced Threshold</td>
<td>None</td>
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<tr>
<td>Overrun / Blast Pad</td>
<td>400’ x 220’ Blast Pad</td>
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<tr>
<td>Runway Type / Marking</td>
<td>Precision</td>
</tr>
<tr>
<td>Instrument Approach Aids</td>
<td>CAT II ILS</td>
</tr>
<tr>
<td>Instrument Approach Minimums</td>
<td>1,200’ RVR</td>
</tr>
<tr>
<td>PART 77 Approach / Slope</td>
<td>1,000’ x 50,000’ x 16,000’ @ 50:1</td>
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<tr>
<td>Visual Approach Aids</td>
<td>PAPI-4L</td>
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<tr>
<td>Runway Edge Lighting</td>
<td>High Intensity Runway Lights (HIRL)</td>
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<tr>
<td>Taxiway System / Separation</td>
<td>Yes</td>
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<tr>
<td>Land and Hold Short Operations</td>
<td>Yes</td>
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<tr>
<td>Aircraft Arresting System (BAK)</td>
<td>Yes</td>
</tr>
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| **Runway 3-21**                | **Rwy 3 End**     | **Rwy 21 End** |
| Runway Length x Width / Surface| 5,718’ x 150’ Asphalt (Grooved) | |
| Paved Shoulders                | 70’ (36’ Per Side) - Between Runways 9-27 and Taxiway ‘A’ | |
| Airport Reference Code (ARC)   | ARC C-II (Narrowbody Transport Critical Aircraft) | |
| Pavement Strength (Gear Type)  | 52,000 (SWG) | 100,000 (DWG) | 361,000 (DTWG) |
| Pavement Condition             | PCN 16 F/C/XT | |
| Displaced Threshold            | None | None |
| Overrun / Blast Pad            | None | None |
| Runway Type                    | Non-Precision | Non-Precision |
| Instrument Approach Aids       | VOR | TACAN | RNAV (GPS) | TACAN | VOR/DME | RNAV (GPS) |
| Instrument Approach Minimums   | 1-Mile | ±500’ | 1-Mile | ±500’ | |
| PART 77 Approach / Slope       | 500’ x 10,000’ x 3,500’ @ 34:1 | 500’ x 10,000’ x 3,500’ @ 34:1 |
| Visual Approach Aids           | PAPI-4L | REIL | VASIL-4L | REIL |
| Runway Edge Lighting           | High Intensity Runway Lights (HIRL) | |
| Taxiway System / Separation    | Full-Parallel (500’ to 275’ Separation) | |
| Land and Hold Short Operations | No | No | |

Note: Reference appendix for abbreviations and acronyms.
Source: FAA Airport/Facility Directory | FAA AVN Database.
Airport Familiarity – Terminal Quadrants

- North Business Development Area
- MN Air National Guard Base
- FBO / Cirrus / Cargo / ANG Support
- Airline Passenger Terminal
Airport Familiarity – Terminal Building

New Passenger Terminal Facilities
Runway 3-21 (Good to Excellent)

Runway 9-27 (Fair to Excellent)
Runway 3-21 (Good to Excellent)

Runway 9-27 (Poor to Excellent)
Duluth Master Plan Effort / Working Paper #1
Pavement Condition Index (2020 Projected)

Runway 3-21 (Good to Excellent)

Runway 9-27 (Poor to Excellent)
Duluth Master Plan Effort / Working Paper #1

Airport Land Use Safety Zones

Minnesota Land Use Safety Zone Boundaries (A, B, and C)

Duluth International Airport (DLH)
Presentation Agenda

- Introductions – Brian Ryks / Brian Grefe
- Airport Master Planning Process / Project Status – RS&H
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- Committee Insight / SWOT Analysis – Advisory Committee
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<td>Attributes of the Airport (within Airport boundary)</td>
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<td><strong>External Origin</strong></td>
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<td>Attributes of the environment (beyond the Airport boundary)</td>
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To Achieving the Objective
Duluth Master Plan Effort / Working Paper #1

Strategic Vision for the Master Plan

- Provide for the commercial passenger needs of the area
- Continue to foster a viable Air National Guard mission at the Airport
- Continue to contribute to the local and regional economy through aviation activity
- Continue to foster a positive business environment for aircraft manufacturing and maintenance at the Airport
- Continue to support general aviation growth
- Provide for needed facility/infrastructure improvements in an economically achievable way
- Achieve FAA MnDOT Design Standard Compliance
Proposed Areas of Discussion:

- Meet Passenger Needs for the Region
- Continue to Support MN Air National Guard at Airport
- Continue to Support Aviation Business Growth
- Continue to Support General Aviation Growth
- Continue to Support Air Cargo Growth
- Other
### Committee Insight / SWOT Analysis

**Meet Passenger Needs for the Region**

<table>
<thead>
<tr>
<th>Internal Origin Attributes of the Airport (within Airport boundary)</th>
<th>Helpful Strengths</th>
<th>Harmful Weaknesses</th>
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<tbody>
<tr>
<td>- Convenience Factor Over Driving</td>
<td>- Airline Service Dispatch Reliability</td>
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<tr>
<td>- Availability of Multiple Carriers</td>
<td>- Lack Restrooms/Concessions in Pax. Lounge</td>
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<tr>
<td>- Low Cost Carriers</td>
<td>- Taxi Availability - Airport Livery Modes</td>
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<tr>
<td>- Good Runway (ILS)</td>
<td>- Lack of Regional Connectivity</td>
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<tr>
<td>- 24-Hour Air Traffic Control Tower</td>
<td>- Lack of Local Anchor Business/Industry</td>
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<tr>
<td>- 24-Hour ARFF Fire Rescue</td>
<td>- Existing Terminal Building Efficiency</td>
<td></td>
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<td>- 24-Hour US Customs</td>
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<tr>
<th>External Origin Attributes of the environment (beyond the Airport boundary)</th>
<th>Helpful Opportunities</th>
<th>Harmful Threats</th>
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<tbody>
<tr>
<td>- Proximity to Iron Range</td>
<td>- High Air Fares</td>
<td></td>
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<tr>
<td>- New Terminal Building</td>
<td>- Future High Speed Rail</td>
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<td></td>
<td>- New Terminal Building</td>
<td>- Future High Speed Rail</td>
</tr>
<tr>
<td></td>
<td>- High Air Fares</td>
<td>- Other Airports - MSP Proximity</td>
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### Committee Insight / SWOT Analysis

#### Continue to Support MN Air Nat Guard at Airport

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<th>Helpful (To Achieving Master Plan Objective)</th>
<th>Harmful (To Achieving Master Plan Objective)</th>
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<tr>
<td></td>
<td><strong>Strengths</strong></td>
<td><strong>Weaknesses</strong></td>
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<tr>
<td></td>
<td>- Base Infrastructure</td>
<td>- Single Runway Usage (Rwy 9-27)</td>
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<tr>
<td></td>
<td>- Emergency Assets</td>
<td>- Length of Crosswind/Secondary</td>
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<tr>
<td></td>
<td>- Serves Various Homeland/Domestic Missions</td>
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<td></td>
<td>- 24-Hour Air Traffic Control Tower</td>
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<td></td>
<td>- 24-Hour ARFF Fire Rescue</td>
<td></td>
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<td></td>
<td>- Uncongested Airspace</td>
<td></td>
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<tr>
<td></td>
<td>- Local Economic &amp; Employment Significance</td>
<td></td>
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<td></td>
<td>- Available Land for Expansion</td>
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<th>Harmful (Threats)</th>
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<tr>
<td></td>
<td><strong>Opportunities</strong></td>
<td><strong>Threats</strong></td>
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<tr>
<td></td>
<td>- Community Support</td>
<td>- Change in National Guard Mission at Duluth</td>
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<tr>
<td></td>
<td>- Compatible Land Opportunity</td>
<td>- Insufficient Crosswind/Secondary Runway</td>
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<td></td>
<td>- ANG Life Support Capability of Domestic Ops</td>
<td>- Inadequate Land Use Control Around Airport</td>
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<td></td>
<td>- Active Airmen onto base w/ fulltime AF</td>
<td>- Federal Budget Cuts</td>
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<td>- Partnership Opportunities with Airport</td>
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<td>- Guard Mission Expansion into MRO Hangar</td>
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Committee Insight / SWOT Analysis

Continue to Support Aviation Business Growth

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<td><strong>Strengths</strong>&lt;br&gt;- Airfield&lt;br&gt;- Available Facilities&lt;br&gt;- New Northside Business Development Area&lt;br&gt;- Core of Diversified Aviation Businesses&lt;br&gt;- 24 Hour US Customs&lt;br&gt;- 24 Hour Fixed Base Operator (FBO)</td>
<td><strong>Weaknesses</strong>&lt;br&gt;- Aging Airport Buildings/Infrastructure&lt;br&gt;- Distance to Rail, Shipping Port, Interstate&lt;br&gt;- Shipping Port Not 12-Month Operation&lt;br&gt;- Perception of Limited Labor (for MRO)</td>
</tr>
<tr>
<td><strong>External Origin</strong>&lt;br&gt;Attributes of the environment (beyond the Airport boundary)</td>
<td><strong>Opportunities</strong>&lt;br&gt;- Pro-Business Climate&lt;br&gt;- MRO Hangar Availability&lt;br&gt;- Skilled Workforce / Strong Work Ethic&lt;br&gt;- Foreign Trade Zone (FTZ)&lt;br&gt;- Work Force Development&lt;br&gt;- Aviation College Degree&lt;br&gt;- Collaboration - Northern Aero Alliance&lt;br&gt;- Business Incentives&lt;br&gt;- Controlled Environment&lt;br&gt;- Gas Station</td>
<td><strong>Threats</strong>&lt;br&gt;- Environmental Lands / Compliance&lt;br&gt;- Duluth Perception as Remote Facility&lt;br&gt;- Limited Specialized Labor Recruitment&lt;br&gt;- Competition at Others Regional Airports&lt;br&gt;- Price of Aviation Fuel</td>
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Committee Insight / SWOT Analysis
Continue to Support General Aviation Growth

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<td>To Achieving Master Plan Objective</td>
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**Strengths**
- 24 Hour Air Traffic Control Tower
- 24 Hour US Customs
- 24 Hour Fixed Base Operator (FBO)
- International Port of Entry
- Geographic location - Tech Stop Flights
- Lake Superior College Flight Training
- New Northside Business Development Area
- Various Aviation Service Providers
- Service Parings

**Weaknesses**
- Aging Airport Infrastructure
- Lack of GA Community/User Group(s)
- Cost of Airport Services

**Opportunities**
- Expansion of Facilities (Hangars)
- Proximity of Great Circle Techstops

**Threats**
- Commercial Airport Pilot Intimidation
- Competing Airports
## Committee Insight / SWOT Analysis
### Continue to Support Air Cargo Growth

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<tr>
<td><strong>Internal Origin</strong></td>
<td><strong>Strengths</strong></td>
<td><strong>Weaknesses</strong></td>
</tr>
</tbody>
</table>
| Attributes of the Airport (within Airport boundary) | - 24 Hour US Customs  
- FedEx Sorting Facilities | - No Uniform Cargo Development  
- Northside Vehicle Access |
| **External Origin** | **Opportunities**                    | **Threats**                                  |
| Attributes of the environment (beyond the Airport boundary) | - Opportunity for International Cargo with Great Circle Route From Longer Range Aircraft | - MSP Airport Competition |
Presentation Agenda

- Introductions – Brian Ryks / Brian Grefe
- Airport Master Planning Process / Project Status – RS&H
- Committee Role – RS&H
- Duluth Master Plan Effort / Working Paper #1 – RS&H
- Committee Insight / SWOT Analysis – Advisory Committee
- Open Discussion – Advisory Committee
Open Discussion
Committee Feedback & Input

• Data Collection Efforts
• Sources of Information / Contacts
• Collection of Committee Feedback
• Public Involvement & Participation Strategies
• Next Meeting

Thank you for your participation
Contact Information

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