CHAPTER 2
INTRODUCTION / PUBLIC INVOLVEMENT PROGRAM

2.1 INTRODUCTION

The Duluth Airport Authority initiated an Airport Master Plan Update to assess the service and facility needs of the Duluth International Airport. As a roadmap for bringing projects, people and funding together in a coordinated manner, the study provides direction regarding the Airport's 20-year development plan, as envisioned by the Airport Authority. The study is also evidence that the Airport and local officials recognize the importance of aviation as part of the overall community and transportation planning process.

2.1.1 Purpose

The Airport Master Plan is primarily a 'facilities plan', comprehensively assessing airfield, airspace, terminal area, landside and ground access components, with the overarching purpose of documenting the orderly development of the Airport facility, service and equipment needs. The 20-year plan identifies the optimum layout and the sequence of projects necessary to adequately maintain, expand and upgrade Airport facilities, in which cost estimates and potential funding sources are phased to coincide with the Airport's year-by-year budget capabilities. In addition, the projects must be substantiated and generally depicted on the Airport Layout Plan (ALP) record drawings, in accordance with Federal Aviation Administration (FAA) and Minnesota DOT (Mn/DOT Aeronautics) procedural requirements. From this, the Airport Master Plan documentation enables the Airport to apply for funding improvements as eligible under the respective federal and state airport aid program.

2.1.2 Study Background

An updated Airport Master Plan is necessary to provide up-to-date information in order to re-assess short and long-term Airport improvements. The previous 2000 Duluth Airport Master Plan report is outdated, with recommendations no longer supported by current aviation and community trends, as the 2000 ALP drawing received conditional FAA approval, with multiple technical revisions completed through 2007. The 2000 ALP base mapping inaccuracies require the Duluth ALP drawings to be regenerated from new digital survey-based aerial mapping, and to meet FAA and Mn/DOT airport planning standards and policy guidance.

In addition, the following planning studies have been completed for the Duluth International Airport:

- *1974 Duluth Airport Master Plan and ALP Drawings*
- *1991 Duluth Airport Master Plan and ALP Drawings*
- *1996 Duluth International Airport FAR Part 150 Study and Noise Exposure Map*
- *1997 Economic Development Plan* – Outline the economic impact on the surrounding community, and ways to further develop the Airport economically.
- *2000 Duluth Airport Master Plan and ALP Drawing Update* – The purpose of the study was to develop a plan that accommodated the aviation needs "well into the new millennium."

2.1.3 Major Study Goals and Objectives

Through discussion with the Airport, FAA and Mn/DOT, the following goals and objectives have been identified as the major action items to be resolved as part of this Master Plan Update:

- Maintain Runway 9/27 Length
- Secondary Runway Length Justification
- 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)
- Identify New/Replacement Air Traffic Control Tower Site
- Planning Coordination with Air National Guard
- Planning Coordination with Golden Triangle Study
- Future Airport Surveillance Radar Relocation Site
- Improved Airport Visibility and Access Plan
- Airport Property Mapping / Land Acquisition Plan
- Planning for Future Cargo Facility

2.1.4 Study Approach / Major Study Tasks

The Airport Master Plan is structured to provide concise documentation quantifying future Airport needs, and the resolution of key planning issues. In accordance with FAA Advisory Circular 150/5070-6B, *Airport Master Plans* and Mn/DOT planning guidance, the following are the sequence of major study components:

1. Study Design
2. Public Involvement Program
3. Existing Conditions
4. Aviation Forecasts
5. Facility Requirements
6. Alternatives Development and Evaluation
7. Airport Layout Plans (ALP)
8. Facilities Implementation Plan
9. Financial Feasibility
10. Airport Land Use Ordinance
11. Pavement Condition Index (PCI) Study
12. Study Documentation and Deliverables
13. Project Administration and Coordination

Although an 'update', this study is comprehensive in evaluating Airport facility needs with respect to user demand, site development considerations and funding levels. From this, an updated narrative report concisely documents the Sponsor's decision-making process in arriving at the preferred 20-year Airport development plan, as depicted on the new ALP drawings.

While the Airport Master Plan is responsive to local issues, above all, the study follows federal and state policy in providing for a facility that is:

- Safe and in accordance with FAA and Mn/DOT design standards
- Economically viable and substantially user-supported
- In accordance with broad local, regional, state and national planning goals

2.2 AIRPORT STRATEGIC VISIONING

The purpose of the strategic vision is to articulate the Airport's long-term aspirations, as used to guide the goals and objectives established for the Airport Master Plan process.

2.2.1 Strategic Vision Statement

The strategic vision is a focused statement, as defined by the broad-reaching principles and values intended to guide the Airport's core mission, and lines of business. The Airport's function, role and economic significance are key factors used to collaborate the strategic vision. In particular, the vision identified in conjunction with the Advisory Committee consisted of the following ideas:

- Providing commercial passenger needs for the greater Duluth metropolitan area;
- Continuing to foster a viable Minnesota Air National Guard (MNANG) mission at the Airport;
- Continuing to contribute to the local and regional economy through aviation activity;
- Continuing to foster a positive business environment for aircraft manufacturing and maintenance at the Airport;
- Continuing to support general aviation;
- Providing needed facility/infrastructure improvements in an economically achievable way; and,
- Achieving FAA and Mn/DOT Design Standards Compliance.

2.2.2 SWOT Analysis

The Airport used a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis during the Advisory Committee to assign relevance to the Airport's strategic vision. The following exhibit shows a typical SWOT diagram. It was used to engage the Advisory Committee in identifying the most meaningful aspects in of assessing actions that may be helpful or harmful associations that are internal and external to the Airport environs.

The SWOT evaluation was able to help the Airport understand the Master Plan including the proposed projects will affect them internally through the Airport's Strengths and Weaknesses and externally through their Opportunities and threats.

This process helps focus and categorize opinions by individual members for each of the major master plan goals and objectives. Once compiled, this forms the basis for steering the strategic vision as demonstrated by the Airport's capability to successfully achieve the desired goals and objectives of the Airport Master Plan.

SWOT Analysis - Strengths, Weaknesses, Opportunities, Threats

		Helpful	Harmful
		To Achieving the Objective	To Achieving the Objective
Internal Origin	Attributes of the Airport (within Airport boundary)	Strengths	Weaknesses
External Origin	Attributes of the environment (beyond the Airport boundary)	Opportunities	Threats

S	Strength: Advantageous position or situation in serving needs.
W	Weakness: Limitation or deficiency that impedes potential or effectiveness.
O	Opportunity: Major favorable reality.
T	Threat: Major unfavorable reality

Individual SWOT analyses were identified and discussion by the Advisory Committee for the following areas of discussion in conjunction with the Airport's Strategic Vision:

- Meet Passenger Needs for the Region;
- Continue to Support the MNANG at the Airport;
- Continue to Support Aviation Business Growth;
- Continue to Support General Aviation Growth; and,
- Continue to Support Air Cargo Growth.

A number of future airfield initiatives were discussion during the SWOT analysis that would become primary ideas for investigation during the master plan process. These had to do with:

- Major anticipated airfield rehabilitation and reconstruction projects to continue to support the air passenger, cargo, military, and general aviation traffic. This was addressed by all five SWOT evaluations;
- The potential need to extend Runway 3-21 and determine the ultimate runway length. This was assessed in terms of meeting regional passenger needs as well as support MNANG; and,
- The potential conversion of inline Taxiway Echo for additional runway length for Runway 9-27 and its ultimate runway length. This was assessed primarily in terms of future air cargo needs but also support of aviation business growth in general.

2.3 PUBLIC INVOLVEMENT PROGRAM

The purpose of the public involvement program is to coordinate planning objectives with the needs and concerns of the local community by providing an opportunity for information sharing and collaboration

among interested participants, stakeholders and regulatory agencies. 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. The public involvement program used technical meetings, public outreach workshops and various media sources to inform and solicit information from the general public regarding the study process, major findings and conclusions.

2.3.1 Advisory Committee

The Duluth Airport Authority understands that master plans which involve a diverse and focused participation by informed persons are more successful and widely accepted than those without. For this reason, a standing committee was formed from individuals with an interest in the Airport and community development, in an advisory capacity, conferring with the Airport Staff and consultant throughout the study.

The committee is primarily responsible for evaluating the technical merits and logistical implementation of the Airport Master Plan, commenting on study findings, and encouraging awareness and adoption of project recommendations. This wide-range of participation brings various perspectives to the study, and improves the ability to form a well-rounded consensus. The committee input received consideration as a part of scheduled meetings, outreach efforts and general feedback.

2.3.2 Project Meetings

The following Airport Master Plan meetings provided an opportunity to present project findings, coordinate planned recommendations, and to solicit feedback concerning interim study conclusions:

Meeting #1 **Kick-Off**: serves to establish lines-of-communication, identify the Airport's Vision, describe the major goals and objectives of the planning process, coordinate the public involvement process, and solicit input and collect initial committee member suggestions via use of a SWOT analysis.

Meeting #2 **Existing Conditions/Forecasts**: The facilities needs are reported on in the Existing Conditions (Chapter 3), Forecasts (Chapter 4), and Facility Requirements (Chapter 5).

Meeting #3 **Facility Requirements and Alternatives**: Facilities needs are determined in response to the any facilities deficiencies identified during examination of existing conditions and any capacity and expansion needs in response to the accommodating forecast demand. Candidate alternatives are reported on as final recommendations for the most feasible alternative in the Alternatives Chapter (Chapter 6).

Meeting #4 **Final Program Implementation/Financing:** The most feasible alternative is reported on in the preliminary project Phasing Plan and shown as developments on the preliminary ALP Drawings (Chapter 7), Implementation Plan (Chapter 8), and Financial Plan (Chapter 9).