CHAPTER 1: INTRODUCTION

Purpose and Scope

The information presented in this report represents the study findings for the 2018 Perham Airport Master Plan study prepared for the City of Perham, the airport owner. Airport Master Plans are prepared in accordance with Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5070-6B, *Airport Master Plans*. This project was funded in part by a grant through the MnDOT Office of Aeronautics.

This study for the Perham Municipal Airport (16D) will serve as an updated guide identifying future development necessary to accommodate existing and future aviation demands. The airport's current and forecasted safety, capacity and compatibility needs are addressed in this study. Many projects have been completed and new planning considerations have surfaced since the last planning document (Airport Layout Plan) was completed in 1982.

The airport sponsor and Kadrmas, Lee & Jackson (KLJ) developed the scope for the project in cooperation with Minnesota DOT Office of Aeronautics officials to identify the specific needs and objectives of the airport owner. The scope includes work tasks with the purpose of documenting existing conditions, forecasting future aviation activity levels, identifying future facility requirements, formulating, and evaluating development alternatives, preparing implementation plans and engaging the public and other government agencies. Recommendations will be made for improvements that are triggered by safety requirements or demand thresholds.

The project was initiated in August 2018 by the airport sponsor. The baseline project data is from inventory efforts completed in February 2019. Data from year 2018 was used to establish a baseline of existing airport information.

Background

The Perham Municipal Airport is a non-certificated general aviation airport serving the City of Perham and surrounding areas of Otter Tail County in central Minnesota. The airport is owned and operated by the City of Perham. The facility has one runway; Runway 13-31 which is paved and lighted at 4,102 feet long and 75 feet wide and is capable of accommodating instrument approaches during poor weather. The airport is home to 21 based aircraft and approximately 7,200 annual aircraft operations. The airport serves general aviation including personal, business, air ambulance and agricultural spray operations. The City of Perham owns approximately 182 acres of property dedicated for airport use.

Planning Considerations

Planning considerations for an airport master plan are features, elements or events that should be evaluated because they have the potential to affect the airport facility over the long term.

Previous Planning Studies

There has not been a Master Plan Study previously done for the Perham airport. This Airport Master Plan will be the first study of its kind for the airport. Typically, planning studies are updated every 7-10 years and address forecasted needs for the next 20 years.

The most recent approved Airport Layout Plan (ALP) was completed in 1981 which proposed constructing a paved runway (Runway 12-30) and relocating the building area midfield between the new runway and the county highway. The proposed layout was constructed, and the new airport was dedicated in 1992. The runway was later designated to Runway 13-31.

Planning Objectives

Based on the background and planning considerations, the planning objectives for this study identify the methods used to meet the airport development goals outlined by the airport owner. The key project objectives are identified as follows:

- Evaluate entry into the National Plan of Integrated Airport Systems (NPIAS);
- Develop hangar development options;
- Evaluate airport expansions limitations;
- Update Airport Layout Plan to meet current standards

Master Plan Process

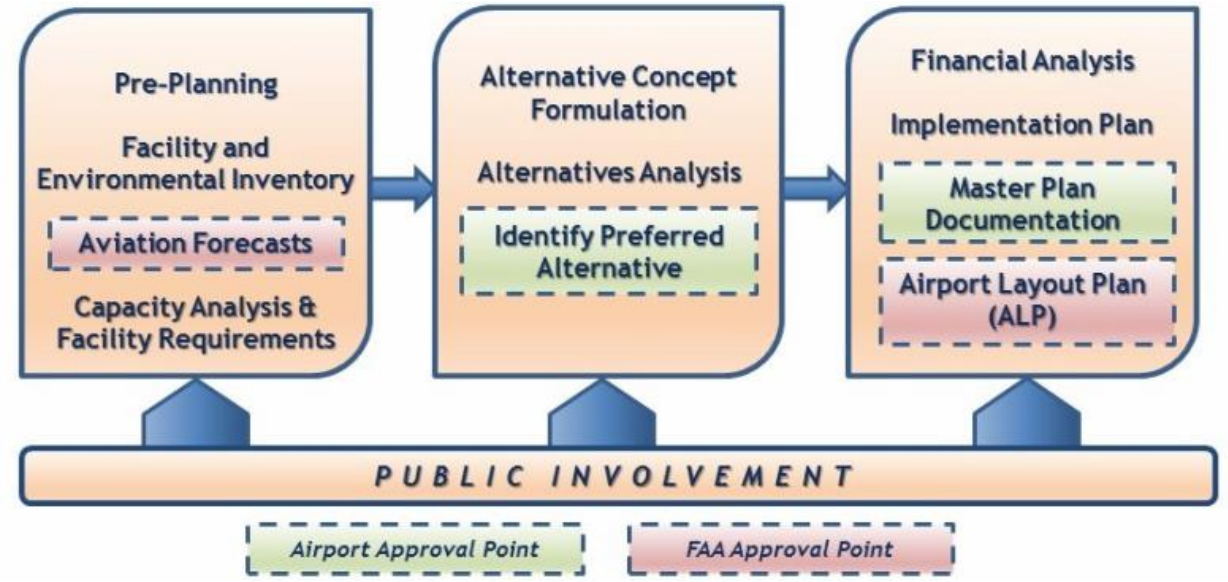
Guidelines for completing a Master Plan are set forth in FAA AC 150/5070-6B. Each master plan study scope and level of effort is customized to fit each individual airport's needs and address critical issues.

The Airport Master Planning process involves several coordinated steps. The master plan study for Perham consists of the following elements:

- **Pre-Planning** – Airport development concerns are identified and planning objectives prepared to address these issues. An overall vision for the study is formulated that will guide the process.
- **Inventory of Existing Conditions** – Overview of airport setting and environment; infrastructure and assets which includes airside, landside, and support facilities; airspace, navigational aids, and airport access.
- **Environmental Inventory** – Overview of existing known environmental issues at the Airport.
- **Forecast of Aviation Demand** – Using established forecasting methods, estimate current and project future airport activity for general aviation and other activity.
- **Facility Requirements** – Compare the existing capacity with the future demand and identify the facility requirements to satisfy the aviation safety, capacity, and compatibility needs.
- **Alternatives Development and Evaluation** – Identify and evaluate options considering both on-airport and off-airport impacts consistent with the study goals and objectives. A preferred alternative is selected.
- **Implementation Plan** – Provide a comprehensive plan for implementation of the preferred alternative including project triggers, sequencing, and cost estimates. This section includes project Implementation, Financial Issues affecting Implementation, and Compatibility.
- **Airport Layout Plan (ALP)** – Document the existing and planned airport facilities through a set of drawings approved by the airport sponsor and the state.

- **Stakeholder and Public Involvement** – Prepare and execute a plan to engage important airport stakeholder and the public throughout the study to gather their input and address their concerns.

Exhibit 1-1 – Airport Master Planning Process



Source: KLJ

Study Documentation & Approvals

The Master Plan Update was divided into chapters of information to document airport planning data, analysis, findings, and recommendation of the study. The following sections included in the narrative report:

- Chapter 1 – Introduction
- Chapter 2 – Facility & Environmental Inventory
- Chapter 3 – Aviation Activity Forecasts
- Chapter 4 – Facility Requirements
- Chapter 5 – Alternatives Analysis
- Chapter 6 – Implementation & Compatibility

- Appendix A – Glossary of Terms
- Appendix B – General Aviation Airports 101
- Appendix C – Meetings and Public Involvement
- Appendix D – ALP

Each chapter was prepared separately and distributed to the airport owner for review and comment. After the airport owner's review, each draft chapter findings were made available to key airport stakeholders including MnDOT for input prior to a final review and approval by the airport owner.

Master Plan Format

The required and recommended contents of Airport Master Plans are detailed per FAA and State standards. Effective airport master plans are based on the analysis of significant amounts of data, and many airport master plans typically present not only the planning conclusions, but all data and accompanying analysis in considerable detail.

This Master Plan study presents data in a sequential manner following the typical planning process. Appendices are included to provide more detailed information on a subject. In addition, internet hyperlinks are included to reference documents that are current as of the time of this report.

Public Involvement

Public involvement is a key component to the successful development of an Airport Master Plan study. The purpose is to encourage information sharing and feedback from airport stakeholders including the airport owner, airport users/tenants, local government officials, resource agencies, elected and appointed officials and the public. Public involvement provides valuable input to assist the airport owner in decision making and develop consensus on study conclusions.

A Master Plan Advisory Committee (MPAC) was established to provide input throughout the life of the study. The purpose of the MPAC was to facilitate group discussion and feedback from different stakeholders groups, providing recommendations to the airport owner. MPAC members represented the following stakeholder groups:

- City of Perham
- Perham Airport Users/Tenants
- Perham Area Businesses
- Minnesota Department of Transportation: Office of Aeronautics

MPAC members met at three points throughout the study to discuss technical elements and provide direct feedback. Members also received copies of draft study documentation for review and comment. This input assisted the City of Perham with study decision making.

Due to the COVID-19 pandemic and the restrictions in place to slow the transmission of the disease, a public open house was not feasible. To foster public involvement in the master plan project, the City of Perham utilized online tools and an awareness campaign to engage with the public. The city's website provided a summary of the project and its findings, contained draft study documents, and a comment form to provide feedback. These efforts provided an opportunity for the airport owner and its representatives to share information on the study and solicit feedback from the public.

See **Appendix C: Public Involvement** for other information including copies of meeting agendas, attendees, presentations, and summaries.

Conclusion

This Airport Master Plan for the Perham Municipal Airport provides the City of Perham with a usable guidance document to assist with capital improvement decision making to meet aviation demands for the near future. As with any planning study, assumptions made are subject to change due to

unpredictable internal and external events. For this reason, this study should be reviewed periodically to verify project scope and triggering events are still valid to meet the airport need.