CHAPTER 1: INTRODUCTION

Purpose and Scope

The information presented in this report represents the study findings for the 2024 – Airport Master Plan study prepared for the City of Fairmont, 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 the FAA under grant number AIG 3-27-0029-022-2024.

This study for the Fairmont Municipal Airport (FRM) 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 Airport Layout Plan study was completed in 2010.

The airport sponsor and Kadrmas, Lee & Jackson (KLJ) developed the scope for the project in cooperation with FAA Airports District Office and Minnesota Department of Transportation (MnDOT) 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 received notice to proceed in May 2024 from the airport sponsor. The baseline project data is from inventory efforts completed in 2024. Data from year 2023 was used to establish a baseline of existing airport information.

Background

The Fairmont Municipal Airport was activated for public use in December of 1948. The airport is owned and operated by the City of Fairmont and is located approximately 2 miles east of the central business district. FRM is part of the FAA's National Plan of Integrated Airports System (NPIAS) and is classified as a non-primary Local General Aviation (GA) airport.

The airport has two runways; Runway 13-31 is 5,503 feet long by 100 feet wide, and Runway 2-20 is 3,300 feet long and 75 feet wide, both are paved asphalt. Runway The airport sits on 582.4 acres of land surrounded by mostly agricultural industrial land.

According to the Airport Master Record from January 2024, FRM has approximately 9,400 annual operations which includes 700 air-taxi operations, 3,600 local GA operations, 5,000 itinerant GA operations, and 100 military operations. The National Based Aircraft Inventory Program lists 31 validated based aircraft at FRM as of May 2024, consisting of 29 single-engine aircraft, one multi-engine, and one jet.

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

The previous Airport Layout Plan (ALP) was completed in 2010. Updates were made to the ALP in 2016 for changes to the terminal area and again in 2017 for future configuration of Runway 2-20. Since the ALP updates, there have been several improvements completed at the airport:

- Straightened Parallel Taxiway A and connector at Runway 13 End
- Expanded turnarounds on Runway 2-20
- Added runup/turnaround on Runway 31 End
- 4-box PAPIs for all runway ends
- Construct hangar taxilane and new 7-unit T-Hangar

A Master Plan study will be implemented to identify a strategy to best address the aviation and community needs within today's economic and regulatory environment. Typically, planning studies are updated every 7-10 years and address forecasted needs for the next 20 years.

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 and determine the future location and length of Runway 13-31 to address Runway Object Free Area, Runway Safety Area, Runway Protection Zone and airspace obstruction deficiencies.
- Determine future siting location of localizer and glideslope for Runway 31 Instrument Landing System (ILS). The equipment has reached the end of useful life and MnDOT plans to replace the unit. The existing locations do not meet current siting standards and are located within the Runway Object Free Area. Additionally, other impacts such as grading, roads, and perimeter fencing in the Critical Area need to be evaluated.
- Identify hangar/terminal area development needs and accommodate storm water retention as needed with development.
- Meet current FAA design standards.

Master Plan Process

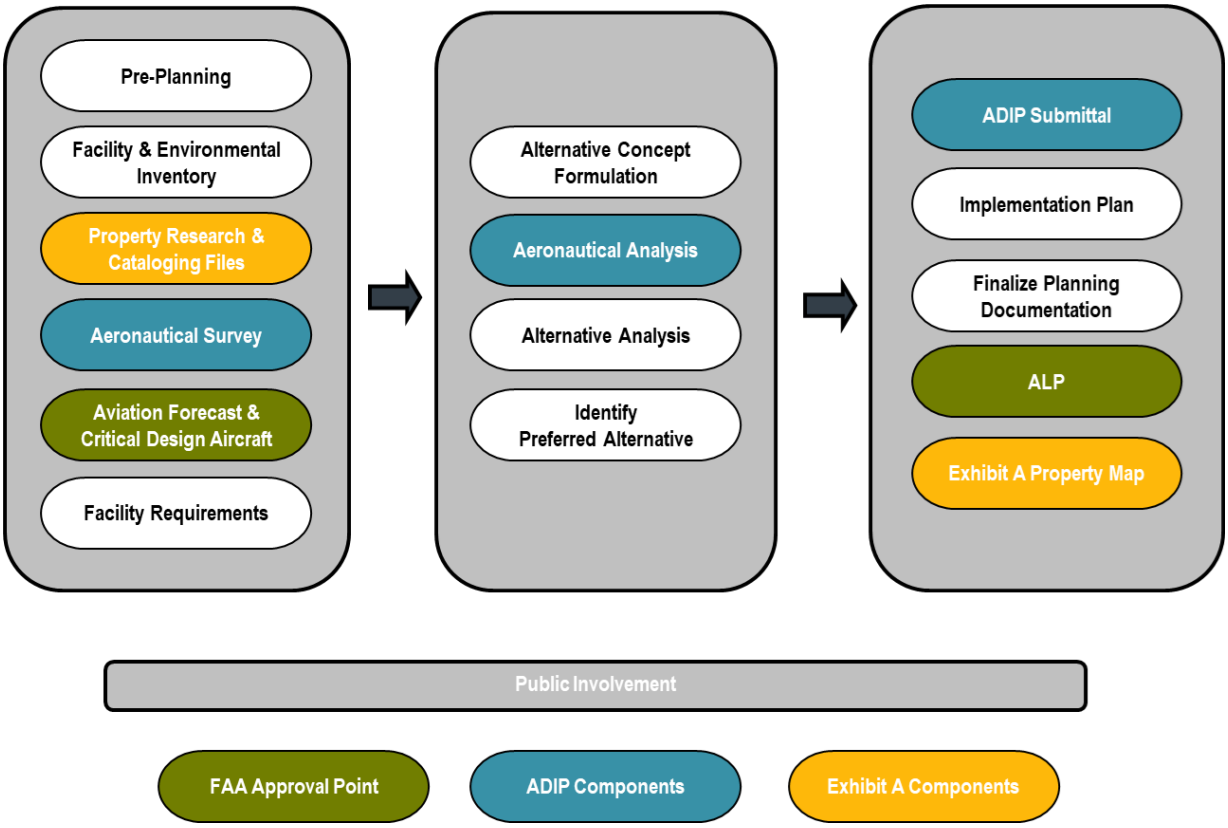
Guidelines for completing a Master Plan are set forth in FAA AC 150/5070-6B. Each master plan study scope and level of effort is customized to fit each individual airport's needs and address critical issues.

The Airport Master Planning process involves several coordinated steps. The master plan study for FRM 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 utilizing data from an FAA Aeronautical Survey.
- **Forecast of Aviation Demand** – Using established forecasting methods, estimate current and project future airport activity for general aviation, air cargo, and passenger enplanements.
- **Demand Analysis and 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.
- **Environmental Overview** – Provide an overview of anticipated environmental impacts as part of the development of alternatives.
- **Implementation Plan** – Provide a comprehensive plan for implementation of the preferred alternative including project triggers, sequencing, and cost estimates.
- **Land Use Compatibility** – Complete a comprehensive review of land surrounding the airport for potential uses that are incompatible with safe airport operations and provide mitigation recommendations.
- **Airport Layout Plan (ALP)** – Document the existing and planned airport facilities through a set of drawings approved by the airport sponsor, state, and FAA.
- **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



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 are 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
- Chapter 7 – Airport Layout Plan

- Appendix A – Glossary of Terms
- Appendix B – General Aviation Airports 101
- Appendix C – Meetings and Public Involvement
- Appendix D – Recycling Solid Waste
- Appendix E – Runway Length Analysis

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 the State and FAA for input prior to a final review and approval by the airport

owner. Each approved final draft chapter was then published on the airport's website for public viewing on the project website (https://inputcentral.com/fairmont-airport-plan).

The Master Plan Update was adopted by the City of Fairmont on [FUTURE DATE]. The ALP was submitted to the State and FAA for review and approval on [FUTURE DATE].

Master Plan Format

The required and recommended contents of Airport Master Plans are detailed per FAA 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 FAA 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 stakeholder groups, providing recommendations to the airport owner. MPAC members represented the following stakeholder groups:

- City of Fairmont
- FRM Airport Users/Tenants
- Community/Area Businesses

A public open house will be held at the end of the planning process to present alternatives decided by the MPAC. Locals in the surrounding area of the airport, city and county officials, and airport tenants will be invited and able to provide comments.

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

Conclusion

This Airport Master Plan for the Fairmont Municipal Airport provides the City of Fairmont 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.