



INTRODUCTION

This master plan provides a thorough evaluation of Sawyer County Airport (HYR) based on the relationship between local/regional aviation demand and the recommended development and modernization of the airport to meet its demand. This analysis is done while also considering potential environmental and socioeconomic impacts. The master plan establishes development objectives, provides for a 20-year planning period, and details the rationale for various study elements, including airfield configuration, facility development, on-airport land use recommendations, and support facilities. It also serves as a strategic tool for establishing improvement priorities and justifying the need for federal and state funding assistance.

The Federal Aviation Administration (FAA) recommends that airport sponsors update their master plans every seven to 10 years, or as necessary to address changes in an airport's local community or those specific to the airport. The master plan is tailored to the specific needs of the airport and focuses on the airport's critical issues at the local level. A scope of work developed by the planners and airport sponsor determined the details of the individual master plan elements for HYR.

The master plan has been developed to provide guidelines for the airport's overall maintenance, development, and operation in an environmentally and fiscally responsible manner while adhering to appropriate FAA and Wisconsin Department of Transportation Bureau of Aeronautics (WisDOT BOA) standards.

An important outcome of the master plan process is a recommended development plan that reserves sufficient areas for future facility needs. Such planning will protect development areas and ensure they will be readily available when required to meet these needs. The intended outcome of this study is a detailed on-airport land use concept which outlines specific uses for all areas of airport property, including strategies for revenue enhancement.

WHAT IS A MASTER PLAN?

STUDY OVERVIEW

Sawyer County is responsible for funding capital improvements at HYR, as well as obtaining FAA and WisDOT development grants. In addition, Sawyer County and the WisDOT BOA oversee facility enhancements and infrastructure development conducted by private contractors and consultants at the airport. The master plan is intended to provide guidance for future development; demonstrate the future investment required by Sawyer County, the FAA, and WisDOT; and provide justification for projects for which the airport may receive funding through an updated capital improvement program (CIP).

The airport master plan follows a systematic approach outlined by the FAA to identify airport needs in advance of the actual need for improvement. This is done to ensure the county can coordinate environmental reviews, project approvals, design, financing, and construction to minimize the negative effects of maintaining and operating inadequate or insufficient facilities. An important outcome of the master plan process is a recommended development plan that is responsive to and predicated on future facility needs generated by aviation demand factors. Such planning will ensure that proper areas are suitably planned and protected to respond to actual demands as they present. The intended outcome of this study is a detailed on-airport land use concept which outlines specific uses for all areas of airport property, including strategies for revenue enhancement.

The preparation of this master plan is evidence that Sawyer County, the airport's sponsor, recognizes the importance of the airport and the associated challenges inherent in providing for its unique operating and improvement needs. The cost of maintaining an airport is an investment which can yield impressive benefits to the local community. With a sound and practical master plan, the airport can maintain its role as an important link to the regional, state, national, and global air transportation systems. Moreover, the plan will aid in supporting decisions for directing valuable county, state, and federal resources for future airport development. Some common questions regarding what a master plan is / is not are answered in **Figure iA**.

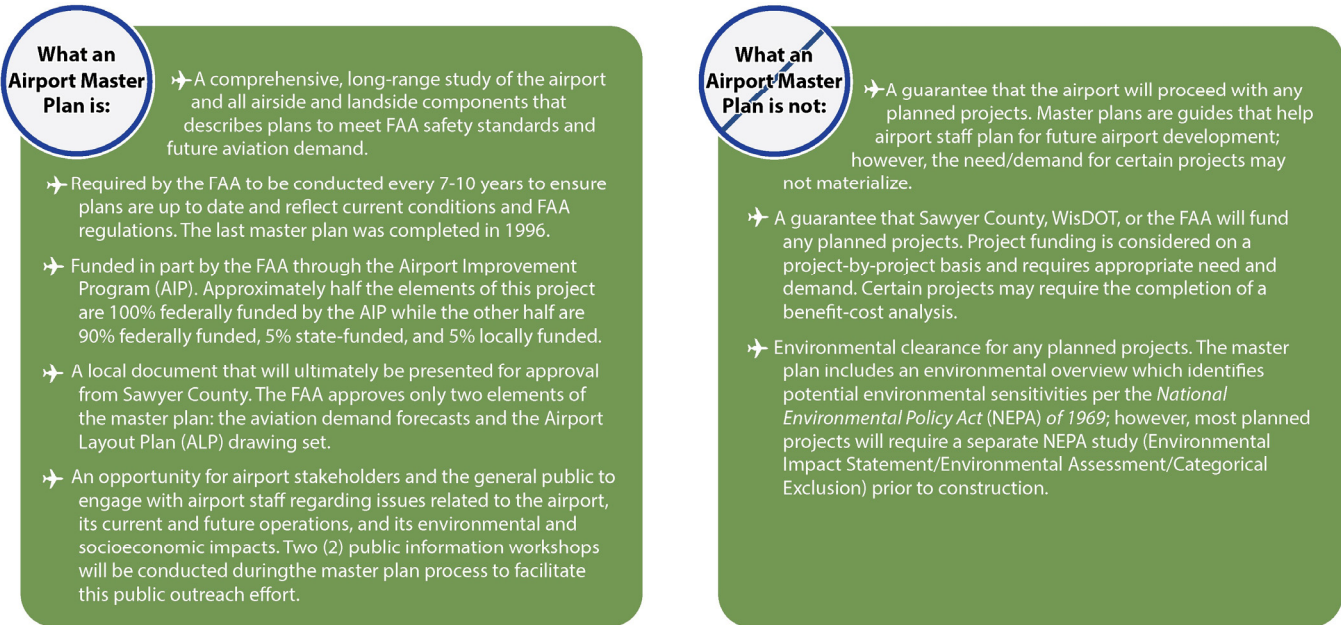


Figure iA – What is an Airport Master Plan?

WHO IS PREPARING THE MASTER PLAN?

Sawyer County and the WisDOT BOA have contracted with Coffman Associates, Inc. to undertake the airport master plan. Coffman Associates is an airport planning and consulting firm that specializes in master planning and environmental studies. Coffman Associates will lead the planning team, with support from Martinez Geospatial and Becher Hoppe Associates. Becher Hoppe Associates is a Wisconsin-based engineering firm that will provide valuable support services and offer insights into development alternatives and estimates of probable costs, as well as other tasks.

The airport master plan update will be prepared in accordance with FAA requirements, including Advisory Circular (AC) 150/5300-13B, *Airport Design*, and AC 150/5070-6B, *Airport Master Plans*. The plan will be closely coordinated with other planning studies relevant to the area and with aviation plans developed by the FAA and BOA. The plan will also be coordinated with Sawyer County, the City of Hayward, the Town of Hayward, and other local and regional agencies, as appropriate.

MASTER PLAN GOALS AND OBJECTIVES

The primary goal of this master plan is to provide the framework needed to guide future airport development that will cost-effectively satisfy aviation demand while considering potential environmental and socioeconomic impacts. Additionally, the plan will evaluate HYR in relation to the system of airports serving the State of Wisconsin. Accomplishing this goal requires an evaluation of the existing airport to decide what actions should be taken to maintain a safe, adequate, and reliable facility.

Master Plan Objectives

- Identify aviation demand forecasts of based aircraft and aircraft operations;
- Complete environmental study, to include full inventory – especially of nearby wetlands and noise-sensitive receptors – and consideration of future impacts based on the recommended plan;
- Analyze current aircraft operations, especially corporate aircraft (Jack Links and others), to determine appropriate critical aircraft and associated planning design standards;
- Consider expansion or relocation of the terminal building with attached hangar;
- Evaluate airport space constraints in light of appropriate safety areas and setbacks;
- Perform justification analysis for airfield system, to include length (runways) and width (runways/taxiways);
- Conduct airfield geometry analysis, including the existing direct access taxiway;
- Consider decommissioned VOR and its future on airport (removal analysis);
- Consider air ambulance helicopter and fixed-wing use(s) now and in future (e.g., helipad necessity);
- Consider construction of additional corporate hangars;
- Consider larger apron areas (apron area is too small for locally based and itinerant aircraft needs);
- Develop future layout as determined via planning process;
- Establish development strategy, to include expanded hangar and apron development to support existing and anticipated based aircraft and itinerant operations;
- Develop 20-year capital improvement plan, including a recommended phasing plan;
- Provide strategies to protect the airport from encroachment and incompatible land uses;
- Review and recommend updates of the airport's rates and charges; and
- Complete planning process as a collaborative measure inclusive of key stakeholders and the public.

Baseline Assumptions | A long-range planning study requires several baseline assumptions which will be used throughout this analysis. The baseline assumptions for this study are as follows:

- HYR will continue to accommodate general aviation tenants, as well as itinerant and local air taxi, general aviation, and military aircraft operations.
- The aviation industry will develop through the planning periods as projected by the FAA. Specifics of projected changes in national aviation industries are described in Chapter Two – Aviation Demand Forecast.
- The socioeconomic characteristics of the region will generally change as forecast (see Chapter Two).
- A federal and state airport improvement program will be in place through the planning period to assist in funding capital development needs.

STRUCTURE OF THE MASTER PLAN

Master Plan Elements and Process | The airport master plan is prepared with the appropriate elements determined from the scope of services that has been coordinated with the county. The study includes a variety of elements that are intended to assist in the identification of future facility needs and which provide the supporting rationale for their implementation. **Figure iB** provides a graphical depiction of the elements and process involved in the study.



Figure iB – Master Plan Process and Elements

Element 1 – Study Initiation and Project Administration includes development of the scope of services, schedule, and study website. The purpose of this element is to allow for appropriate time to manage the project, including the website; project updates with the sponsor; team management; and overall quality assurance and quality control (QA/QC).

Element 2 – Inventory of Existing Conditions is an element which assembles and organizes information and data pertaining to Sawyer County Airport and the surrounding area. A series of inventory efforts are necessary to collect and organize a variety of specific historical, technical, legal, financial, environmental, and planning data, which establish a baseline of existing information off of which the remainder of the master plan is built.

Element 3 – Aviation Demand Forecasts examines the estimates of future levels of air traffic and based aircraft at Sawyer County Airport using industry-accepted forecasting methods. These forecasts will consider factors such as historical demand and use, socioeconomic characteristics, and FAA projections to estimate future demand at HYR.

Element 4 – Airport Facility Requirements analyzes and assesses the available capacities of various facilities at Sawyer County Airport, including their conformance or non-conformance with FAA standards, and identifies the facilities that will be needed to meet compliance requirements or projected demand over the next 20 years.

Element 5 – Airport Development Alternatives considers a variety of solutions to accommodate projected airside and landside facility needs through the long-term planning period. An analysis is completed to identify the strengths and weaknesses of each proposed development alternative, with the intention of determining a single feasible direction for development.

Element 6 – Airport Plans and Land Use Compatibility develops a revised set of airport plans and associated text for distribution and use in the administration of the airport. This element also evaluates the noise exposure and land use compatibility of plan implementation.

Element 7 – Financial Management and Development Program analyzes benefits and costs that may be associated with the recommended plan, and determines and sets out the assumptions, terms, and conditions by which agreed-upon capital improvement programs can be financially implemented for the airport.

Element 8 – Geographical Information System (GIS) Services is a collection of data to comply with the 18B survey. This process includes the collection of high-resolution aerial photography, high-precision surveys of safety critical airport data, and compilation of data into a uniform GIS dataset.

Element 9 – Final Reports includes the final review period for the airport plans and financial chapters of the master plan report, and a draft final master plan document will be prepared. This document will incorporate appropriate comments and corrections received during the review period.

COMMUNITY INVOLVEMENT

Coordination and Outreach | The airport master plan is of interest to many within the local community and region, including local citizens, local businesses, community organizations, county officials, airport users, airport tenants, and aviation organizations. As a component of the regional, state, and national aviation systems, the master plan is of importance to both state and federal agencies responsible for overseeing the air transportation system.

To assist in the development of the airport master plan, the county has assembled a planning advisory committee (PAC), which consists of a group of stakeholders and includes government representatives, airport users and tenants, and local community leaders who will act in an advisory role in the development of the master plan. Members of the PAC will meet four times at designated points during the study to review study materials and provide comments to help ensure that a realistic, viable plan is developed.

Draft working paper materials will be prepared at various milestones in the planning process. The working paper process allows for timely input and review during each step within the master plan to ensure that all issues are fully addressed as the recommended program develops.

Two open house public information workshops are included as part of the study coordination effort. These workshops are designed to allow any and all interested persons to become informed and provide input concerning the master plan process. Notices of meeting times and locations are advertised through

local media outlets. Draft working papers and other information related to the master plan are available to the public via a website dedicated to the study: sawyercounty.airportstudy.net

SWOT Analysis | A SWOT analysis is a strategic business planning technique used to identify **Strengths**, **Weaknesses**, **Opportunities**, and **Threats** associated with an action or plan. The SWOT analysis involves identifying an action, objective, or element and identifying the internal and external forces that are positively and negatively impacting that action, objective, or element in a given environment. For this study, the SWOT analysis factors are being applied to the airport within the confines of the master plan. As a result, the analysis helps provide a continuous vision and direction for the development of the master plan.

SWOT Definitions | This analysis groups information into two categories:

- Internal – attributes of the airport and market area that may be considered strengths or weaknesses to the action, objective, or element.
- External – attributes of the aviation industry that may pose opportunities or threats to the action, objective, or element.

The SWOT further categorizes information into one of the following:

- **Strengths** – internal attributes of the airport that are helpful to achieving the action, objective, or element.
- **Weaknesses** – internal attributes of the airport that are harmful to achieving the action, objective, or element.
- **Opportunities** – external attributes of the industry that are helpful to achieving the action, objective, or element.
- **Threats** – external attributes of the industry that are harmful to achieving the action, objective, or element.

SWOT Analysis Exercise | The SWOT analysis for the airport is based upon information gathered during the first PAC meeting, which was conducted on May 25, 2023. As previously discussed, the PAC is a group of stakeholders, community leaders, and government agencies representing diverse interests in the airport. A SWOT analysis was conducted with this group to identify key factors which might be addressed in the master plan. A summary of the results from the SWOT analysis exercise is shown in **Table iA**. These results were used to frame the subjective/judgmental processing of the data presented in the master plan.

TABLE iA | SWOT Analysis

Strengths	<ul style="list-style-type: none"> • Runway 3-21 is in good condition • Strong county financial investment in the airport • Crosswind runway is good for taildraggers and provides an alternative landing option • Instrument approach • Multiple approaches available (ILS and GPS) • Close proximity to Hayward
Weaknesses	<ul style="list-style-type: none"> • Not enough hangars • Lack of available land to develop more hangars • Lack of public awareness of the airport's value • Turf crosswind runway is only open seasonally • Proximity of wetlands • No T-hangars or lower budget hangars available • Crosswind runway is not paved • No aircraft maintenance is available at the airport • Proximity to the Namekagon River creates fog and low visibility • No 24-hour fuel available • Airport is not attended 24 hours a day • Runway access does not require a badge • No ordinance for airport trespassing • No electric car charging at terminal
Opportunities	<ul style="list-style-type: none"> • Supportive county board • Avigation easements protect airport's airspace • Air charter growth • Electrification of aircraft • Advanced Air Mobility (AAM)
Threats	<ul style="list-style-type: none"> • Electrification of aircraft • Environmental concerns • Noise complaints • Approach minimums changing due to tree heights

Source: Kickoff PAC Meeting, May 25, 2023