

Chapter 1 Introduction



The City of McMinnville, Oregon is preparing an Airport Master Plan for McMinnville Municipal Airport (MMV) in cooperation with the Federal Aviation Administration (FAA) to address the Airport's needs for the next 20 years. This project will replace the 2004 Airport Layout Plan Report (Century West Engineering), which provided the most recent FAA-approved (signed) Airport Layout Plan (ALP) drawing for the Airport. The Airport Master Plan will provide specific guidance in making the improvements necessary to maintain a safe and efficient airport that is economically, environmentally, and socially sustainable.

Study Purpose

The purpose of the Airport Master Plan is to define the current, near-term, and long-term needs of the Airport through a comprehensive evaluation of facilities, conditions and FAA airport planning and design standards. The study will also address elements of local planning (land use, transportation, environmental, economic development, etc.) that have the potential of affecting the planning, development, and operation of the Airport.



Project Need

The FAA requires airports to periodically update their master plans as conditions change to maintain current planning. Several "as-built" updates were prepared for the 2004 ALP drawing in conjunction with airfield projects completed in 2010, 2019, and 2021. The as-built drawings were coordinated with FAA, although they did not replace the signed 2004 ALP drawing currently on file in the FAA Seattle Airports District Office. However, the most recent (2021) as-built update shown in **Figure 1-1** is most consistent with existing conditions at the Airport.



A detailed summary of major airfield improvement projects completed since the 2004 ALP Report will be provided in Chapter 2 (Existing Conditions), along with a summary of recent FAA grant history for the Airport. In addition to publicly funded projects at the Airport, significant private investment includes construction of several private commercial hangars located on airport property and on adjacent privately-owned property (with city-approved through the fence access agreement).

In order to maintain current planning as required by FAA, updated long-term planning for the Airport is needed to reevaluate/refresh several concepts presented in previous planning efforts. In addition to addressing changing local conditions, updated FAA standards and current trends within the aviation industry also need to be reflected in the updated airport master plan.

The 2004 ALP Report, although dated, serves as a primary source for inventory data. However, where available, more current, or comprehensive data are included in the report to illustrate current conditions. Existing airfield facilities were examined during on-site inspections to update facility inventory data. The consultants also worked closely with airport staff to review the current facility and operational data maintained by the City of McMinnville.





Project Funding

Funding for the Airport Master Plan Update was provided through an FAA Airport Improvement Program (AIP) grant of \$450,000 (89%), and an Oregon Department of Aviation (ODAV) Critical Oregon Airport Relief (COAR) grant of \$37,500 (7%), and a local match of \$18,059 (4%) provided by the City of McMinnville. The total project cost of \$505,559 includes City staff administration time to support the planning process. The AIP is a dedicated fund administered by FAA with the specific purpose of maintaining and improving the nation's public use airports. The AIP is funded exclusively through fees paid by users of general aviation and commercial aviation. The ODAV COAR grant program funding also relies exclusively on aviation user fees.



Goals of the Airport Master Plan

The primary goal of the Airport Master Plan is to provide the framework and vision needed to guide future improvements at McMinnville Municipal Airport. The FAA sets out goals and objectives each master plan should meet to ensure future development will cost-effectively satisfy aviation demand and consider potential environmental and socioeconomic impacts.

Goal 1: Define the vision for the airport to effectively serve the community, airport users, and the region. Assess known issues including air traffic control, runway length, the ability to accommodate development, auto parking, fencing, and land use to develop a realistic sustainable plan to improve the airport.

Goal 2: Document existing activity, condition of airfield facilities, and policies that impact airport operations and development opportunities.

Goal 3: Forecast future activity based on accepted methodology.

Goal 4: Evaluate facilities and conformance with applicable local, state, and FAA standards.

Goal 5: Identify facility improvements to address conformance issues and accommodate demand.

Goal 6: Identify potential environmental and land use requirements that may impact development.

Goal 7: Explore alternatives to address facility needs. Work collaboratively with all stakeholders to develop workable solutions to address needs.

Goal 8: Develop an Airport Layout Plan to graphically depict proposed improvements consistent with FAA standards as a road map to future development. Prepare a supporting Capital Improvement Plan to summarize costs and priorities.

Goal 9: Provide recommendations to improve land use, zoning, and City oversight of the airport to remove barriers to appropriate growth at the airport.

Goal 10: Summarize the collective vision and plan for the airport in the Airport Master Plan report.



THE FAA ROLE IN THE AIRPORT MASTER PLAN

FAA Advisory Circular (AC) 150/5070-6B Airport Master Plans defines the specific requirements and evaluation methods established by FAA for the study. The guidance in this AC defines planning requirements for all airports, regardless of size, complexity, or role. However, each master plan study must focus on the specific needs of the airport for which a plan is being prepared.

The recommendations contained in an airport master plan represent the views, policies and development plans of the airport sponsor (City of McMinnville) and do not necessarily represent the views of the FAA. Acceptance of the master plan by the FAA does not constitute a commitment on the part of the United States to participate in any development depicted in the plan, nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public law. The FAA reviews all elements of the master plan to ensure that sound planning techniques have been applied. However, the FAA only formally approves the Aviation Activity Forecasts and Airport Layout Plan. The FAA is not directly involved in the local adoption of master plans.

Planning Process

A three-phase planning process is used to provide multiple feedback loops to maintain the flow of information and ideas for the community and project stakeholders, with the goal of maximizing public involvement.

DEVELOP UNDERSTANDING

A comprehensive understanding of the issues and opportunities, existing conditions, and an identified level of future aviation activity that would mandate facility improvements required to satisfy future demand.

Analysis

- Develop Scope of Work
- Public Involvement Strategy
- AGIS Survey
- Existing Conditions Analysis
- Aviation Activity Forecasts

Project Meetings

- Bi-Weekly Planning Team Meetings
- Project Kick-off Meeting
- Planning Advisory Committee (PAC) Meetings

Work Product

- Introduction
- · Existing Conditions
- Aviation Activity Forecasts

EXPLORE SOLUTIONS

A collaborative exploration of local Airport needs, goals, and facility requirements in sequence with the development of community generated ideas, solutions, and development alternatives.

Analysis

- Define Updated Airfield Design Standards
- Perform Demand/Capacity Analysis
- Define Facility Goals and Requirements
- Identify & Prepare Development Alternatives
- Evaluate Development Alternatives

Project Meetings

- Bi-Weekly Planning Team Meetings
- Planning Advisory Committee (PAC) Meetings
- · Public Open House

Work Product

- Facility Goals & Requirements
- Airport Development Alternatives

IMPLEMENTATION

An implementation program with recommended strategies and actions for future land use, transportation, and environmental requirements; a realistic and workable CIP; and current ALP drawings that graphically depict existing conditions at the airport as well as proposed development projects.

Analysis

- Develop Strategies & Actions
- Develop CIP/Phasing/Financial Plan
- Develop ALP Drawing Set

Project Meetings

- Bi-Weekly Planning Team Meetings
- Planning Advisory Committee (PAC) Meetings

Work Product

- Strategies & Actions
- Financial Plan (CIP/Phasing)
- ALP Drawing Set
- Draft Report
- Final Report







Framework of the Airport Master Plan

The framework of the Airport Master Plan provides a clear structure to inform and steer future planning decisions. The process allows the plan to take shape through flexibility, iteration, and adaptation. The framework reflects the Airport's regional setting, airside and landside elements, management, and administration functions. The framework provides guidance, while being flexible enough to adapt to changing conditions encountered during plan development. The process is used to develop understanding, explore solutions, and implement the preferred development alternative for the Airport that is complementary to its adjacent urban and rural environments.

	Regional Setting	Airside Elements	Landside Elements	Airport Administration
Develop Understanding	Location & Vicinity Socio-Economic Data Airport Role Airport History Area Airports Context Airport Operations Relevant Studies Environmental Data Local Surface Transportation Land Use/Zoning	Area Airspace Instrument Flight Procedures Navigational Aids Runway/Helipad Taxiways/Taxilanes Pavement Condition Airside Support Facilities	Aprons/Tiedowns FBO/Terminal Building Hangars Airport Fencing Airport Surface Roads Vehicle Parking Utilities Aircraft Fueling	Airport Ownership & Management Airport Financials Airport Rates and Charges Local Rules & Regulations Oregon Aviation Laws FAA Compliance Overview
Explore Solutions				
Implementation				

Project Schedule

The Airport Master Plan schedule depicted in **Figure 1-2** is expected to occur over the course of 18-24 months. FAA approvals can take anywhere from 3-6 months following the completion of the final draft narrative reports and drawings. FAA-funded master planning project grants cannot be amended to account for changes in project scope or level of effort. This contract requirement ensures that only work included in the FAA-approved project scope of work will be required by FAA for project completion.



Figure 1-2: Project Schedule



Known Issues & Opportunities

At the outset of the Airport Master Plan, several known issues and opportunities were identified by airport management, the consultant, the FAA, or users of the Airport. The issues and opportunities identified below are among the focus areas that will be addressed during the master plan. The goal of this examination is to ensure a comprehensive and thorough assessment that addresses and documents proposed solutions, potential constraints, and methods of implementation.

The Airport Sponsor has developed a prioritized list of near-term projects including pavement rehabilitation, a fencing project in the northern section of the Airport, and lighting for Runway 17/35. A range of issues and opportunities are summarized below and shown on **Figure 1-3**:

TERMINAL AREA PAVEMENT REHABILITATION/ RECONFIGURATION

Rehabilitation of several areas of apron (asphalt pavements) in the terminal area are included among the near-term CIP priorities. Future aircraft parking needs for locally based and transient aircraft (fixed wing and helicopter) will be evaluated during the master plan process.

2 AIRFIELD LIGHTING

Future projects identified include lighting Runway 17/35 and replacing the existing edge lighting on Taxiway A.

3 AIRPORT FENCE EXTENSION (NORTH SECTION)

A new section of airport fencing is planned to extend along the north section of the Airport. The project is currently in the environmental stage and construction is expected in 2024. The conceptual alignment of the fence will be evaluated in the environmental process and final fence and gate configurations will be determined during design. This project will be incorporated into the master planning evaluations as an existing condition.

4 AIRPORT FUEL STORAGE

Existing and future aircraft fueling needs will be included in the updated terminal area evaluations to ensure that adequate space is provided for bulk tank storage, mobile fuel trucks, and dispensing facilities.

5 HANGAR DEVELOPMENT AREAS

The updated terminal area evaluations will address near-term and long-term hangar development needs with a primary focus on identifying buildable hangar sites. Access to utilities, surface streets, and taxiways/taxilanes/aprons are key factors in siting both commercial and aircraft storage hangars. New or expanded aviation services including fixed base operator (FBO), flight training, specialized aircraft maintenance, and aviation support businesses are typically concentrated in central terminal areas, while aircraft storage hangars may be located throughout the landside area.



6 HELICOPTER FACILITIES AND OPERATIONS

MMV accommodates significant helicopter flight training activity. Currently, one local operator bases several small helicopters on the east side of the main apron, adjacent to their hangar and support buildings. Future helicopter-related evaluations are expected to address aircraft movement (hover-taxiing, etc.) within the terminal area, future building needs, aircraft parking, aircraft fueling, and general aircraft operations in conjunction with fixed-wing aircraft.

TERMINAL AREA FACILITIES (TERMINAL/FBO BUILDING)

A central component of the updated terminal area planning will be the evaluation of future FBO building/ general aviation terminal needs, vehicle circulation and parking.

8 AERONAUTICAL /NON-AERONAUTICAL DEVELOPMENT

The Airport has an extensive land area capable of accommodating a wide range of aeronautical and some areas for non-aeronautical uses. The process for FAA approval of non-aeronautical land uses was updated in the 2018 AIP Reauthorization Act. Section 163 of the Act provides guidance to facilitate appropriate non-aeronautical development while protecting the airport's primary aeronautical functions. An evaluation of aeronautical and non-aeronautical land uses will be performed as part of the master plan, and definitions will be assigned to all airport lands.

Figure 1-3: Known Issues & Opportunities