

# 1. STUDY INTRODUCTION AND GOALS

This airport master plan (AMP) defines a development concept for the Colorado Plains Regional Airport (AKO or the Airport) over the course of a 20-year planning period. This plan will provide the Town of Akron (the Airport Sponsor or Sponsor) with a long-range vision for airport development that is designed to result in a safe, efficient, economical, and environmentally-acceptable air transportation facility that meets both existing and projected aviation demand levels.

The study was funded by the Federal Aviation Administration (FAA) and the Town of Akron. Technical work was conducted by a study team that was led by Jviation, Inc. and supported by GDA Engineers. The FAA requires airport sponsors to maintain current Airport Layout Plans (ALP), Exhibit A property maps, and Capital Improvement Plans (CIP), and also recommends that airport master plans be updated on a regular basis. The FAA recommends that airport master plans address the "unique issues at each airport."

The goal of the AMP is to provide a carefully considered, systematic approach to the Airport's overall maintenance, development, and operation over a 20-year period. This planning document is intended to identify and then plan for future facility needs well in advance of the actual demand for those future facilities.

The AMP is also designed to review and assess the Airport's current conformance with federal and state airport design and operational standards to help ensure that the Airport continues to operate in as safe a manner as possible. This is being undertaken to ensure that AKO can appropriately coordinate project approvals, design, financing, and construction, while avoiding the detrimental effects that could be realized due to inadequate or noncompliant airport facilities.

## 1.1 Master Plan Purpose and Objectives

The primary purpose of this AMP is to produce a comprehensive planning guide for the continued development of a safe, efficient, and environmentally-compatible aviation facility that meets the goals of the Town of Akron, Airport users and tenants, and the surrounding Airport service area.

The plan must also satisfy FAA and Colorado Department of Transportation (CDOT) guidelines for the development of airport master plans and facilities, while incorporating characteristics that are unique to the service area. The study focuses on aeronautical forecasts, need and justification for development, and a staged plan for recommended development.

In addition, the plan considers input from Airport users and tenants as well as community leaders to position the Airport to take advantage of future opportunities. Proposed airport development must adhere to standards that provide for safe aviation facilities while accommodating future demand.

The staged plan typically looks at planning horizons of 0–5 years, 6–10 years, and 11–20 years. The first phase generally addresses existing facility deficiencies or non-compliance to airport design standards. The subsequent phases typically address the

The primary objective: to produce a comprehensive planning guide for AKO that continues development of a safe, efficient, and environmentally-compatible aviation facility.





facilities and resources needed to accommodate predicted growth based on reasonable assumptions.

In addition to addressing these objectives, the AMP must also fulfill broad master planning objectives established in FAA Advisory Circular (AC) 150/5070-6B, *Airport Master Plans*. These objectives include:

- Document the relevant issues that are considered during the preparation of the plan.
- Justify proposed development through the technical, economic, and environmental investigation of concepts and alternatives.
- Prepare a graphic presentation of development and anticipated land uses in the vicinity of the Airport.
- Develop a realistic implementation schedule, particularly the short-term capital improvement program (CIP).
- Propose an achievable financial plan to support the implementation schedule.
- Provide sufficient project definition and detail for subsequent environmental evaluations that may be required.
- Present a plan that adequately addresses the issues and satisfies local, state, and federal regulations.
- Document policies and future aeronautical demand to support municipal or local deliberations on spending, debt, land use controls, and other policies necessary to preserve the integrity of the Airport and its surroundings.
- Establish the framework for a continuing planning process.

## **1.2 Master Plan Study Elements**

The AKO master plan has been prepared to be consistent with the guidance provided in FAA AC 150/5070-6B, *Airport Master Plans*, and other industry-accepted principles and practices. Specifically, this AMP has seven chapters that are designed to identify future facility requirements and provide the supporting rationale for their implementation. As required by FAA, the master plan looks 20 years into the future. The planning periods are divided into three phases: short-term, 0-5 years; intermediate period, 6-10 years; and long-range planning, 11-20 years. FAA acknowledges that forecast accuracy decreases the farther it extends into the future, and therefore recommends that the forecasts should be monitored and compared against actual activity levels, and updated on a regular basis.

**Figure 1-1** displays the master planning process. The process is broken down into three district phases, into which the chapters fall. Chapters One, Two, and Three are in the Investigation-Preparation phase. Chapters Four and Five are completed during the Solutions-Evaluations phase, and the remaining chapters are written during the final phase, Implementation-Documentation.

Report chapters are designed to identify future facility requirements and provide the supporting rationale for their implementation.





#### FIGURE 1-1: MASTER PLAN PROCESS

Source: Jviation

**Chapter One, Study Introduction and Goals** provides an overview of the AMP, including its purpose, objectives, work products, and overall structure of the project.

**Chapter Two, Inventory of Existing Conditions** establishes a sound basis for plan and program development through the assimilation and documentation of relevant data. The inventory is designed to assemble essential data regarding the physical, operational, and functional characteristics of AKO, its sub-components, and its environs. For example, the Airport's facilities are analyzed in relation to current FAA airport design standards, and any non-conforming conditions are identified and subsequently analyzed in this master plan. This data collection process also includes the gathering of environmental data so that it can be considered throughout the master planning process and potential follow-on environmental efforts.

**Chapter Three, Aviation Activity Forecast** essentially serves as the hub of the AMP by utilizing local socioeconomic information as well as regional and national air transportation trends to project the levels of aviation activity that can reasonably be expected to occur over the upcoming 20-year planning period. Assessing these future activity trends is especially important and the facility improvement recommendations within the plan are principally based on meeting aviation activity demand forecasts. Therefore, it is very important that the forecasts be both reasonable and defensible. FAA requires that the forecasts developed for the master plan be compared to the FAA's Terminal Area Forecast (TAF): if they differ by more than 10 percent, an explanation must be provided explaining the difference.

**Chapter Four, Airfield Capacity and Facility Requirements** utilizes the results of the Forecast to assess the ability of existing airside and landside facilities to meet the projected level of demand for the short-, mid-, and long-term planning horizons. This analysis results in the determination of those facilities that will meet the forecast of demand over the course of the 20-year planning period. Beyond this, airport facilities are examined with respect to improvements needed to safely serve the type of aircraft expected to operate at the Airport in the future, including compliance with FAA design standards, and NAVAID to increase the safety and efficiency of operations.



**Chapter Five, Development Alternatives and Recommended Plan** considers a variety of solutions to accommodate the anticipated facility needs identified within the Facility Requirements analysis. Through this process, various facility and site plan alternatives are proposed and evaluated with respect to their ability to meet the projected facility needs. This analysis ultimately results in the Preferred Alternative that is deemed to best meet the facility requirements in the most efficient and appropriate manner available to achieve the Airport's long-term goals. As a tool for the alternatives review and evaluation, matrices are employed to help identify the strengths and weaknesses of each proposed development alternative, with the intention of determining a single direction for development. This evaluation method focuses on several key criteria including: cost, efficiency, feasibility, operational effectiveness, impacts, and other measures. An environmental screening of the preferred development plan is also included in this chapter.

**Chapter Six, Airport Layout Plan** (ALP) provides a graphic description of the recommended plan for the use, development, and operation of the Airport. The ALP is a set of drawings intended to illustrate the existing and future facilities at the Airport as well as other key features such as airport geometrics, airspace, property lines and interests, and other facets.

**Chapter Seven, Program Implementation Plan** focuses on the capital improvement program, which defines the schedules, costs, and funding sources for the recommended development plan. It is important that the development program be practical, reasonable, and capable of enhancing the economic viability for the Airport.

## 1.3 Overview of AKO's Issues and Concerns

AKO's previous AMP was completed in 2005; since then, some of the Airport issues and focal points identified in that master plan have been addressed through the completion of specific projects or by updating Airport documents. Some issues have not been addressed due to changing industry standards or master plan assumptions and have yet to be resolved.

Every master plan needs to identify and focus on the unique issues at each airport. The following issues and concerns have been identified and will be addressed in the 2016 AKO master plan.

- **Existing Facilities and Environmental Resources:** Assess environmental impacts of proposed projects and the need for additional environmental documentation.
- Aviation Trends and Forecasts: Prepare general aviation activity forecasts considering declining traffic levels and revenues. These two elements will depend on an understanding of aviation industry trends while considering the unique vision for AKO.
- Development Needs Assessments: Prepare assessments of facilities needed to meet demand forecasts and analyze alternatives for major development areas. A detailed analysis on all precision and non-precision approaches for future aviation demand will also be completed when determining forecasted needs.



- Capital Improvements: Identify future capital improvements based on the analysis of existing and future demand as well as a financial evaluation and implementation plan. These will identify how improvements may be funded.
- Aerial/Property Survey and Photogrammetry: To be consistent with FAA master plan requirements, this master plan will obtain FAA AGIS-compliant base mapping and provide a detailed analysis of all approaches. Additionally, this project includes a property boundary survey consistent with updated FAA guidelines.

### 1.4 Master Plan Communication and Coordination

Public involvement is a part of many airport planning studies since it encourages information sharing and collaboration among the community and airport stakeholders with a collective interest in the Airport. Stakeholders typically include airport management, the airport sponsor, tenants, users, local businesses and residents, federal and state agencies, elected and appointed public officials, and the general public. With a diverse stakeholder group, a variety of forums are often employed to enhance the effectiveness of project coordination.

- The Planning Advisory Committee (PAC) served as a resource to ensure the study addressed the issues facing the Airport and its surrounding community today and into the future. Key tenants and Town representatives were included in this effort to ensure their interests were considered. The members of this group were charged with reviewing and commenting on draft study products, and to provide linkages to constituencies. The group met three times during the project.
- An online survey of key airport stakeholders (including users, tenants, based aircraft owners/pilots, transient pilots, and Airport users) was conducted to get feedback on a variety of topics, including their existing and projected activities. The survey results were utilized to help guide planning actions during the subsequent Airfield Capacity and Facility Requirements tasks.
- Various public outreach materials were created to generate public awareness of the AMP. The materials and outreach program served as important sources of information for interested parties to keep them informed of the planning process, to solicit input and to facilitate decision making during the process. The outreach materials include a project website, press releases for local media, and meeting advertisements.

Other forms of public involvement included regular public briefings to the Town of Akron Council, as well as a public information meeting/workshop. The public workshop provided an opportunity to engage the public in meaningful conversation about the Airport and the AMP.

## 1.5 Colorado Plains Regional Airport Vision Statement

As part of the master plan process, a visioning meeting was held with members of the PAC. The meeting included a 10-year visioning exercise whereby members of the PAC considered the opportunities that lay ahead for the Airport and how they may influence how AKO is developed and operating in the future.



A Vision Statement was created from the visioning meeting to reflect the values of the community, Airport stakeholders, and Airport users. The Vision Statement is as follows:

"Colorado Plains Regional Airport's reputation is built upon Safety, Reliability, and Outstanding Customer Service. Our efforts are focused to support the community's deeply rooted base in agriculture and to serve as an incubator for businesses in our region. Maximizing the development potential of our airport facilities allows AKO to provide business and employment opportunities that benefit both AKO and the community.

Supporting general aviation throughout our region is critical to our mission. We offer capable, convenient, and affordable services and amenities for locally-based aircraft owners and transient pilots. Our openness to innovative partnerships brings us state-of-the-art aviation services that attract world-wide customers.

We pride ourselves on exceeding the expectations of our customers and the general public. Our employees demonstrate a passion for aviation and are knowledgeable and professional. This, along with our can-do attitude and willingness to go the extra mile, make AKO a unique and valued asset in our community and the region."

The AMP recommendations and outcomes will be fully consistent with the Vision Statement adopted by the Airport users and community.

