1.0 STUDY INTRODUCTION & GOALS

This Airport Master Plan (AMP) defines a development concept for Kanab Municipal Airport (KNB or the Airport) over the course of a 20-year planning period. This plan will provide the City of Kanab (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 City of Kanab.

The ultimate 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 KNB 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 Airport Master Plan 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 City of Kanab, Airport users and tenants, and the surrounding Airport service area. The plan must also satisfy FAA and Utah Department of Transportation (UDOT) 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. 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 facilities and resources needed to accommodate predicted growth based on reasonable assumptions.

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

- Document the issues that are considered at the time 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 Kanab Municipal Airport 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 Master Plan has seven chapters that are designed to identify future facility requirements and provide the supporting rationale for their implementation.

Chapter One - Study Introduction & 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 KNB, its sub-components, and its environs. 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 Forecasts essentially serve 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 trends relating to airport utilization and operational activity levels is especially important in that many of the proposals and recommendations within the plan are principally based on aviation activity demand forecasts. Therefore, it is very important that the forecasts be both reasonable and defensible.

Chapter Four - Airfield Capacity & Facility Requirements utilize 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 definition of requirements for additional facilities, expansion to existing facilities, and 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, as well as navigational aids to increase the safety and efficiency of operations.

Chapter Five - Development Alternatives & 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, matrixes 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. Also included in this chapter is an environmental screening of the preferred development plan.

Chapter Six - Airport Financial Plan provides an overview of the funding sources for the airport capital improvement plan (CIP), and discusses the cost estimates for the projects listed in the CIP. The chapter also examines the rates and charges in place, the revenue sources, current tenant lease provisions, and presents recommendations to meet FAA's goal of financial self-sustainability.

Chapter Seven - Airport Recycling, Reuse, and Waste Reduction Plan presents recommendations for developing and implementing a recycling, reuse, and waste management program at the Airport. Mandated by the U.S. Congress and the FAA, the goal of the reuse, recycling, and waste management program is to help airports achieve environmental sustainability and lower energy costs. The program incorporates best practices from other airports, as well as recommended practices from the FAA and EPA.

Chapter Eight - Airport Layout Plan (ALP) provides 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.

1.3 Overview of Airport Issues and Concerns

KNB's previous Airport Master Plan was completed in 2004 by Creamer and Noble. Since that time, some of the Airport issues and focal points identified in that master planning effort have been addressed through the completion of specific projects and/or the updating of specific airport documents. Some issues may not have been addressed due to changing industry circumstances and/or master plan assumptions and are yet to be resolved.

The FAA wants every master plan to identify and focus on the unique issues at each airport. For the 2016 KNB Airport Master Plan, the following issues and concerns have been identified and will be addressed:

- **Airport Reference Code (ARC):** The Airport currently has an ARC of B-II. This Master Plan will determine if this Runway Design Code (RDC) is still appropriate or if an upgrade to an ARC of C-II is required based on the future aviation traffic projected at KNB.

- **Aerial Survey and Photogrammetry:** To be consistent with FAA master plan requirements, this Master Plan must obtain FAA AGIS-compliant base mapping and provide a detailed analysis of all approaches.
- **Minimum Standards:** Assess KNB's minimum standards and lease rates and make recommendations.
- **Regional Economic Development Initiatives:** Define the role of KNB in relation to the City's overall economic development program. As noted in the City's recently adopted General Plan, one of its top overall community goals is to, "Encourage the attraction, retention and development of business and industry that gives Kanab economic vitality and balance."
- **Instrument Approach:** Determine if the current published instrument approach procedure to Runway 1 can be improved by lowering instrument approach minimums, given the obstructions to the north of the Airport

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 the airport stakeholders that hold 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.

Jviation undertook a comprehensive public outreach process throughout the course of the Master Plan, in conformance with FAA guidance in their Advisory Circular 150/5070-6B, *Airport Master Plans*, Chapter 4. Specifically, Jviation prepared for, attended, and made presentations at three meetings of the City Council, held a user's meeting at the Airport, and an open house for the public.

- Tuesday, October 13, 2015: meeting with the Kanab City Council presenting the project overview, the inventory, and draft forecasts.
- Tuesday, February 23, 2016: Airport user's meeting held at KNB.
- Tuesday, February 23, 2016: meeting with the Kanab City Council, presenting the facility requirements and alternatives.
- Tuesday, July 12, 2016: Open House and final presentation to the City Council presenting the final alternatives and financial plan.

All meeting presentations and project documents and information are available on the project website: http://sites.jviation.com/knb/MP/index.html