1. Introduction

The Federal Aviation Administration (FAA) recommends that airport master plans be updated every 5 years or as necessary to keep them current. The Master Plan for Joslin Field, Magic Valley Regional Airport (referred to herein as “TWF” or “the Airport”) was last updated in 2003 and, since that time, several projects have been completed at the Airport and major changes have occurred in the aviation industry, as well as in local airline service. Therefore, the City of Twin Falls (the City) and Twin Falls County (the County)—co-sponsors of the Airport (the City/County)—initiated an Airport Master Plan Update to evaluate the Airport’s capacity and role, to forecast future aviation activity, and to plan for the timely development of new or expanded facilities required to accommodate that activity.

The primary objective of the TWF Master Plan Update is to produce a long-term development plan that will yield a safe, efficient, economical, and environmentally compliant facility to accommodate the air transportation needs of the Magic Valley communities and surrounding area. Using a base year of 2009 (for purposes of aviation activity forecasting), the Master Plan Update covers a 20-year planning period (through 2029). This document serves as a written record of the Master Plan Update process and provides the background information, technical analyses, and assessments that formed the basis for the Master Plan Update recommendations.

Development of the Master Plan Update was initiated in August 2010. Various stakeholder meetings and public workshops were held throughout the master planning process to discuss community needs, future Airport requirements, development concepts, etc. The aviation activity forecasts for the Airport were approved by the FAA in December 2010. The final technical analyses for the Master Plan Update were completed in November 2011 and a Draft Airport Layout Plan (ALP) set was submitted to the FAA for review in February 2012. Following a period of review and response to comments, the Final ALP set was approved by the FAA in August 2012.

1.1 Organization of This Report

This Master Plan Update report is organized into nine sections. The remainder of this introductory section describes the process undertaken to execute the Master Plan Update, identifies applicable planning studies that were reviewed, and provides a summary of the Master Plan Update recommendations. Subsequent sections of this Master Plan Update report consist of the following:
- **Section 2: Existing Conditions** – Presents pertinent background information about the Airport, as well as an inventory of existing facilities and conditions at the Airport and its environs to provide a foundation for subsequent planning analyses.

- **Section 3: Aviation Activity Forecasts** – Describes the methods and assumptions used to forecast various measures of aviation activity at the Airport over the 20-year planning period.

- **Section 4: Facility Requirements** – Presents an evaluation of the adequacy of existing Airport facilities against applicable design standards and forecast aviation activity and identifies facility requirements for various functional areas of the Airport.

- **Section 5: Development Concepts** – Describes the development and evaluation of Airport development concepts based on the identified facility requirements.

- **Section 6: Land Use Plan** – Discusses the recommended on-Airport land use plan and identifies strategies for developing an off-Airport land use plan to ensure long-term land use compatibility.

- **Section 7: Implementation Plan** – Describes the projects included in the recommended long-term development plan, as well as the anticipated timeframe for implementation and estimated costs.

- **Section 8: Financial Plan** – Provides information about the existing financial structure of the Airport and identifies the sources of funds that may be used to pay for the projects contained in the recommended development plan.

- **Section 9: Airport Layout Plan Narrative** – Describes the sheets included in the required ALP set that accompanies this Master Plan Update report.

Appendices provide additional detail and background information in support of various elements of the Master Plan Update.

### 1.2 Master Plan Update Elements and Process

FAA Advisory Circular (AC) 150/5070-6B, *Airport Master Plans,* outlines the development of an airport master plan, providing guidance for preparing master plans for all types and sizes of airports. Although the key technical elements described in the AC are generally applicable to most airport master plans, individual master plans should be tailored to the unique conditions at the specific airport. As such, the key elements of a master planning process will vary in complexity and level of detail, depending on the size, function, issues, and problems of the specific airport.

In accordance with AC 150/5070-6B, the TWF Master Plan Update process, illustrated on Exhibit 1-1, was developed in consideration of the specific needs of the Airport. The key elements of the process included a Strategic Planning Initiative (SPI), technical analyses, development and production of key deliverables, and a public involvement program. The following subsections describe these elements.

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1 Federal Aviation Administration, Advisory Circular 150/5070-6B, *Airport Master Plans,* Change 1, May 1, 2007.
1.2.1 STRATEGIC PLANNING INITIATIVE

The master planning process began with a Strategic Planning Initiative to provide an opportunity for City/County officials and other key community leaders to help develop goals and objectives for the Master Plan Update. The goals and objectives resulting from the SPI are summarized in the following paragraphs, with additional information presented in Appendix A. The key elements or goals of the SPI included the following:

- Identify Airport strengths, weaknesses, opportunities, and threats regarding the Airport’s financial condition, air service, and land use.
- Develop goals to counter weaknesses and threats and to accentuate strengths and opportunities.
- Identify specific objectives to meet goals that can be identified in the Master Plan Update.

The development of goals and objectives centered on the following strategies: identify nonaeronautical revenue opportunities, identify financial strategies, and identify land use strategies.
1.2.1.1 Identify Non-aeronautical Revenue Opportunities

The identification of non-aeronautical revenue opportunities within Airport property was a goal determined through the SPI process. Specific objectives or strategies that were developed to achieve this goal are as follows:

- Identify lands for non-aeronautical development
- Develop a marketing plan (subsequent to the Master Plan Update) to help develop Airport lands
- The marketing plan should include the following components:
  - Develop strategic partnerships with surrounding businesses, institutions, and industries
  - Identify target businesses and industries
  - Identify feasible land uses given current site/market limitations
  - Identify capital improvement needs and develop and implement a capital improvement program
  - Consider the role of development incentives

1.2.1.2 Identify Financial Strategies

As is common for an airport the size and function of TWF, the Airport requires City/County revenue contributions to aid in funding operation and maintenance of the Airport. Working toward financial self-sufficiency and thereby reducing the City/County tax burden associated with the Airport has been identified as an important goal. Objectives or strategies that were developed to meet this goal are as follows:

- Minimize operation and maintenance expenses
- Develop non-aeronautical revenue opportunities
- Take advantage of funding opportunities
- Review terms/rates of current leases

1.2.1.3 Identify Land Use Strategies

Developing on-Airport land can influence the characteristics of the Airport, as well as the characteristics of the local region. Consequently, the land use within and surrounding the Airport was an important point of discussion during the SPI process. Several goals related to land use were identified as part of the SPI, as follows:

- Maintain compatibility with Airport environs
- Investigate the highest and best use of available on-Airport land
- Target and identify areas for potential industrial/aeronautical uses
- Develop the concept of the Airport as the gateway to Twin Falls (to be included in a marketing plan)

Objectives or strategies that were developed to meet these goals include the following:
• Reserve prime lands on Airport property for long-term aeronautical-related development
• Ensure long-term Airport land use compatibility
• Promote development valuing Airport proximity (to be included in a marketing plan)
• Explore partnerships with the College of Southern Idaho and other local/regional entities
• Recognize that the Airport is a gateway to Twin Falls (to be included in a marketing plan)

1.2.2 TECHNICAL ANALYSES

The technical analyses conducted in support of the Master Plan Update followed a defined process consisting of several interrelated components, including aviation activity forecasting, facility requirements analysis, concept development and selection, implementation costs and phasing, environmental considerations, and a financial plan.

As shown on Exhibit 1-1, the technical analysis elements were undertaken giving consideration to the goals and objectives established through the SPI process. In addition, specific nonaeronautical revenue opportunities, financial strategies, and land use strategies identified through the SPI process were considered during formulation and evaluation of the development concepts.

1.2.3 KEY DELIVERABLES

The two primary deliverables of the Master Plan Update process are identified on Exhibit 1-1 and include the Master Plan Update report and the ALP set. As stated previously, this document presents the Master Plan Update report, which serves as a written record of the Master Plan Update process described in this section. The ALP set provides a graphical representation of the recommended development plan included in the Master Plan Update report and is produced as a separate set of full-sized drawings. Additional information regarding the ALP set developed as part of the master planning process is provided in Section 9, including a reduced-size reproduction of the ALP set.

1.2.4 PUBLIC INVOLVEMENT PROGRAM

A public involvement program was created as one of the first tasks completed prior to initiating the technical aspects of the Master Plan Update. As illustrated on Exhibit 1-1, the public involvement program had a key role throughout the entire master planning process. The public involvement program was designed to encourage information sharing and collaboration among Airport management, the consultant team, Airport tenants and users, resource agencies, public officials, residents, and the general public. The public involvement program created for the Master Plan Update included the following elements, which are discussed further in Appendix B and summarized as follows:

• **Technical Review Committee (TRC)** – A TRC was established to further encourage stakeholder participation in the planning process, incorporate the institutional knowledge of Airport tenants and users, and review the technical elements of the Master Plan Update. The TRC convened three times during the Master Plan Update process.
• **Public workshops** – Throughout the master planning process, a series of public workshops were hosted by Airport management and were open to the general public. At each workshop, representatives from the Airport and the consultant team were available to discuss and present applicable planning information and results. These workshops provided an opportunity for the general public to learn about the master planning process, discuss topics of concern or interest, and provide feedback and comments relative to the technical elements of the Master Plan Update.

• **Project website** – A project website was developed as a resource for stakeholders and the general public to ask and receive answers to questions and keep up-to-date on the most recent activities and information regarding the TWF Master Plan Update. In addition to providing general information about the Airport and the Master Plan Update process, the website provided information on previous and upcoming public workshops, an online form for submitting questions/comments, and contact information for the Airport and the consultant team.

### 1.3 Previous Planning Studies

A number of significant planning studies completed within the past 10 years either directly or indirectly affect the future development of the Airport and were reviewed during the Master Plan Update process. An overview of these planning documents is provided below, categorized as nationwide, statewide, and local studies. It should be noted that the following list identifies and briefly describes significant studies that pertain to development of the Airport and/or its immediate environs, and does not represent all documents or information that were reviewed as part of the Master Plan Update process.

#### 1.3.1 Nationwide Planning Studies

• **National Plan of Integrated Airport Systems (NPIAS)**

  - TWF is included in the NPIAS, a 5-year plan that is continually updated and published by the FAA, which lists public-use airports and their development programs. The NPIAS identifies all airports in the United States that are considered significant components of the national aviation network; identifies the current state of development, technology, and repair at each airport; and provides estimates of the funding needed to bring each airport up to current standards of design, technology, and capacity. The needs identified in the NPIAS are considered to be in the national interest and are eligible for federal financial planning and development assistance.

• **FAA Terminal Area Forecast (TAF)**

  - The TAF is the official aviation activity forecast for FAA facilities and includes active airports in the NPIAS. These forecasts are prepared to meet FAA budget and planning needs and provide information for use by state and local authorities, the aviation industry, and the public. The TAF includes historical data and 20-year forecasts for enplaned passengers, aircraft operations, and based aircraft.

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• **FAA Aerospace Forecast** – The FAA Aerospace Forecast provides a long-range forecast of aviation activity specific to broad aviation segments, rather than specific airports. Segments included in the Aerospace Forecast include domestic and international commercial aviation markets, air cargo, the commercial aircraft fleet, and general aviation.

### 1.3.2 STATEWIDE PLANNING STUDIES

• **Idaho Air Passenger Demand Study** – In 2003, a Statewide air passenger demand study was undertaken on behalf of the Idaho Transportation Department (ITD) to provide a variety of information regarding the demand for airline travel in the State’s individual commercial air service markets, including TWF. The current status of commercial airline service at each commercial-service airport in Idaho is discussed, passenger demand at these airports is estimated, the market area and market potential for each airport are defined, and the top destination markets for each airport are analyzed.

• **Idaho Airport System Plan** – The Idaho Airport System Plan is the ITD’s comprehensive plan for linking Statewide aviation facilities (public-use airports) with those of the nation and the world, and guides the development of airports throughout Idaho. The system plan includes the following components:
  - **Idaho Airport System Plan** – This report presents an evaluation of the long-term needs of each included airport, including a recommended development plan that strategically improves airport facilities.
  - **Economic Impact Analysis** – The economic benefits of each included airport is quantified to show the importance of the airport to the State and local economy.
  - **Compatible Land Use Guidelines** – This report promotes an understanding of compatible land use planning around airports and provides assistance to land use planners and local governments that have an airport within their jurisdiction.

### 1.3.3 LOCAL PLANNING STUDIES

• **2003 Joslin Field, Magic Valley Regional Airport Master Plan Update** – The most recent update to the Airport Master Plan provided the framework on which the current Master Plan Update is based. Significant development projects recommended in the 2003 Master Plan Update included runway and taxiway extensions, support facilities, and additional general aviation apron/parking areas. The 2003 Master Plan Update also recognized the need to re-orient the Airport’s existing crosswind runway (Runway 12-30) to meet FAA-recommended wind coverage.

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6 Wilbur Smith Associates and T-O Engineers, Inc., *Idaho Airport System Plan*, 2010. (Note: Technical reports for the 2010 *Idaho Airport System Plan* were completed in 2008.)
• **City of Twin Falls Comprehensive Plan**¹ – The City’s comprehensive plan is a guiding document adopted by the community to help decision-makers evaluate development proposals and implement the desired future plan for the community. The plan documents and updates existing conditions, presents analyses of important community issues, and sets forth proposed visions and growth directions for the City. Community surveys conducted as part of the comprehensive planning process indicated that the expansion of Airport services (i.e., additional airline service) was among the most important improvements related to community facilities desired by residents.

Goals and objectives identified in the City’s comprehensive plan that pertain to the Airport focus on two primary issues: (1) expanding agricultural areas north of the Airport to discourage incompatible (i.e., residential) development and (2) improving the entrance experience to downtown Twin Falls from the Airport to convey a positive first impression of the City to visitors arriving by air, in a manner that enhances the sense of openness and connects the surrounding agricultural landscape.

• **Twin Falls County Comprehensive Plan**⁹ – The County’s comprehensive plan is intended to facilitate the decision-making process by covering the major categories of physical development in relation to the needs of County citizens. The plan includes 13 components, one of which is transportation (including the Airport).

Goals and objectives identified in the County’s comprehensive plan that pertain to the Airport focus on continuous planning for efficient Airport accessibility, discouraging residential development in the vicinity of the Airport through appropriate zoning regulations, and continuing to support and participate on the Airport Advisory Board.

• **City of Twin Falls Strategic Plan**¹⁰ – The strategic plan contains the City’s priorities, goals, and objectives for the 5-year planning period, 2008-2012. The plan is used to guide the City’s decision-making process, as a benchmark of how well individual departments are performing, and to determine how well the City is meeting its community’s needs and expectations. No specific Airport-related goals or objectives are identified in the strategic plan. However, completing this Master Plan Update and implementing a long-term development plan to address the needs of the Airport in an efficient and fiscally responsible manner supports the overall mission, goals, and objectives of the City, as stated in the strategic plan.

• **Twin Falls Master Transportation Plan**¹¹ – The primary goals of the City’s transportation plan are to provide clear and efficient connectivity of transportation facilities, develop and implement appropriate design and operation standards, and provide sufficient roadway capacity to meet current and future needs. The Airport is not discussed or evaluated specifically in the transportation plan. Rather, the plan identifies existing conditions and discusses future conditions regarding the roadways that provide access to and surround the Airport. This plan is incorporated by reference into the City’s comprehensive plan.

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1.4 Summary of Key Master Plan Update Recommendations

The Master Plan Update provides a recommended long-term development plan involving all functional areas of the Airport, including runways/taxiways/aprons, passenger terminal, general aviation, support facilities, and ground access. Specific focus was on the need to realign the Airport’s crosswind runway to provide adequate crosswind coverage for small aircraft operating at the Airport, as specified in FAA planning guidelines. The analyses and evaluation of various alternative runway orientations were based, in part, on analyses completed for the 2003 Master Plan Update, as well as initial conceptual planning completed subsequent to the 2003 Master Plan Update. A recommended realignment concept for the Airport’s crosswind runway (Runway 12-30) is presented in this document.

Another area of focus in this Master Plan Update is on the need for expanded passenger terminal facilities. Changes in passenger and baggage security screening policies and implementation of new technologies and procedures, as well as the recent experience with new airline service at the Airport, has resulted in space constraints and inefficiencies in passenger flows within the passenger terminal building. A key recommendation of the Master Plan Update is to further define facility requirements, feasible expansion options, and funding opportunities for potential modification of the passenger terminal building.