



INTRODUCTION

A master plan provides an evaluation of an airport's aviation demand and an overview of the systematic development that will best meet those demands. The master plan establishes development objectives and provides for a 20-year planning period that 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 airport improvement priorities and justifying the need for federal and state funding assistance.

The Federal Aviation Administration (FAA) recommends that airports update their long-term planning documents every seven to 10 years, or as necessary to address local changes at an airport. The last master plan for Treasure Valley Executive Airport at Caldwell (EUL or Airport) was completed in 2010 when the airport was called Caldwell Industrial Airport. The City of Caldwell, sponsor of the Airport, has received a grant from the FAA to update the master plan. The FAA grant covers 90 percent of the fixed fee project cost, with the City of Caldwell and the Idaho Transportation Department (ITD) – Division of Aeronautics splitting a 10 percent match.

The master plan has been undertaken to evaluate the Airport's role and capabilities, to forecast future aviation demand, and to plan for the development of new or expanded facilities that may be required to meet that demand. The master plan will provide guidelines for the Airport's overall maintenance, development, and operation in an environmentally and fiscally responsible manner, while adhering to appropriate FAA and ITD standards.

The master plan process will result in a 20-year plan that identifies development areas to ensure they will be readily available when required to meet forecast demand. The master plan is a 20-year vision for the Airport that provides a list of capital improvement projects in order to achieve that vision.



Airport Master Plan

STUDY OVERVIEW

The City of Caldwell is responsible for funding capital improvements at the Airport, as well as obtaining FAA and ITD development grants. In addition, the City of Caldwell oversees facility enhancements and infrastructure development conducted by private entities at the Airport. The master plan provides guidance for future development and justification of projects for which the Airport may request grant funding.

The master plan follows a systematic approach outlined by the FAA to identify airport needs in advance of the actual need for improvements. This is done to ensure that the City of Caldwell can coordinate financing, environmental reviews, project approvals, design, and construction for necessary Airport improvements. While the Airport may have many needs, the master plan focuses on those capital projects that will be eligible for FAA and ITD grant funding.

The City of Caldwell has contracted with the airport consulting firm of Coffman Associates, Inc. to undertake the master plan. Coffman Associates specializes in master planning and environmental studies. The study is prepared in accordance with FAA requirements, including Advisory Circular (AC) 150/5070-6B, *Airport Master Plans*, and AC 150/5300-13A, *Airport Design*. Coffman Associates will lead the team, with support from JUB Engineers, Inc., the current consulting airport engineer of record.

The master plan is intended to be a proactive document which identifies and then plans for future facility needs well in advance of the actual need. This is done to ensure that EUL can coordinate development projects in a timely manner, prior to experiencing the detrimental effects of deteriorating or inadequate facilities.

The preparation of this master plan is evidence that the City of Caldwell recognizes the importance of the Airport to the surrounding region and the associated challenges inherent in providing for its unique operating and improvement needs. The cost of maintaining an airport is an investment which yields impressive benefits to the local community. With a sound and realistic master plan, the Airport can maintain its role as an important link to the regional, state, and national air transportation systems. Moreover, the plan aids in supporting decisions for directing limited and valuable resources for future airport development. Ultimately, the continued investments in the Airport will allow the region to reap the economic benefits generated by historical investments.

MASTER PLAN GOALS AND OBJECTIVES

The primary objective of the Treasure Valley Executive Airport at Caldwell Master Plan is to develop and maintain a financially feasible, long-term development program, which satisfies aviation demand of the region, is compatible with community development, other transportation modes, and the environment, and enhances employment and revenue for the local area. Accomplishing this objective requires an evaluation of the existing Airport to decide what actions should be taken to maintain a safe, adequate, and reliable facility. This master plan provides guidance through an updated capital improvement and financial program to demonstrate the future investments that may be required by the City of Caldwell. The master plan also provides justification for any new priorities. The plan will be closely coordinated with other planning studies in the area and with aviation plans developed by the FAA and ITD.

Specific objectives of the study include, but are not limited to, the following:

- To research factors likely to affect all air transportation demand segments in Caldwell, Idaho, as well as the Canyon County region over the next 20 years. The analysis will include the development of forecasts of operations (general aviation and military), and based aircraft;
- To determine projected needs of Airport users for the next 20 years factoring recent revisions to FAA airfield geometrical design standards, advancements in instrument approaches or other new technology, the impact of general aviation fleet transitions on design standards, and on-going efforts to improve aviation service to the community;
- To recommend improvements which will meet the future needs of the Airport and its users; This includes potential improvements to existing aviation facilities and to the runway/taxiway/apron system;
- To analyze the existing airfield system to determine the existing and ultimate runway length required to satisfy the Airport's critical aircraft now and into the future;
- To produce accurate base maps of existing and proposed facilities and an updated Airport Layout Plan (ALP) drawing set consistent with the FAA's Standard Operating Procedure (SOP) No. 2.0. The digital Geographic Information System (GIS) data will be submitted into FAA's Airport GIS, or AGIS, system, as required;
- To review future land use and zoning of Airport property, instrument approach areas, and nearby development to ensure flight safety and land use compatibility. This will involve the development of new noise exposure contours, application of current land use compatibility guidelines, review of local land use controls and plans, and analysis of land use management techniques;
- To establish a schedule of development priorities consistent with the FAA's capital improvement planning; and,
- Consider sustainability efforts, specifically waste and recycling improvements, as part of FAA's updated standards.

MASTER PLAN ISSUES

The EUL Master Plan specifically addresses the following issues:

- Assist the City of Caldwell and the Airport Commission, through the Planning Advisory Committee (PAC), and a series of Public Information Workshops, in determining a vision for the Airport;
- Prepare a detailed evaluation of existing and future general aviation demand for EUL;

- Based on the realistic evaluation of the facility in terms of configuration, condition, amenities, location, competition, and forecasted aviation demand, establish goals and priorities for the Airport to meet that vision;
- Identify airfield alternatives based on goals and opportunities, as well as FAA applicable design standards. The analysis will include an evaluation of the airfield geometry to address potential runway incursion hot spots and/or non-standard conditions;
- Provide a landside development plan that identifies areas for accommodating the forecasted growth of aviation and aviation-related business and, if appropriate, areas for non-aviation revenue-producing opportunities. Consideration will be given to the potential for new or expanded aviation facilities, including but not limited to general aviation terminal facilities, aircraft storage hangar capacity and ramp capacity, and Airport support facilities;
- Assess compatible land use near the Airport; and,
- Identify elements of an ongoing maintenance plan.

BASELINE ASSUMPTIONS

A study such as this typically requires several baseline assumptions that are used throughout this analysis. The baseline assumptions for this study are as follows:

- EUL will continue to operate as a general aviation airport through the 20-year planning period;
- Treasure Valley Executive Airport at Caldwell will continue to accommodate general aviation, air taxi, and military operations through the 20-year planning period.
- The aviation industry will grow through the planning period as projected by the FAA. Specifics of projected growth are contained in Chapter Two of the master plan;
- The socioeconomic characteristics of the region will generally grow as forecast (see Chapter Two); and,
- A federal and state airport improvement program will be in place through the planning period to assist in funding capital development needs.

MASTER PLAN ELEMENTS AND PROCESS

This master plan has been prepared in a systematic fashion following FAA guidelines and industry-accepted standards and practices. The study has ten specific elements that are intended to assist in the evaluation of future facility needs and provide the supporting rationale for their implementation. **Exhibit iA** provides a graphical depiction of the elements and process involved with the study.



Element 1 – Initiation includes the development of the scope of services, schedule, and study website. Potential members will be identified and asked to serve on a Planning Advisory Committee (PAC) to assist the consulting team throughout the process. Study material will be assembled in a workbook format and provided to the PAC for review and comment. General background information that includes outlining the goals and objectives to be accomplished during the master plan will be established. Baseline assumptions and specific master plan issues will be outlined.

Element 2 – Inventory is focused on collecting and assembling relevant data pertaining to the Airport and the area it serves. Information is collected on existing Airport facilities and operations. Local economic and demographic data is collected to define the local growth trends, and environmental information is gathered to identify potential environmental sensitivities that might affect future improvements. Planning studies which may have relevance to the master plan are also collected.

Element 3 – Aviation Demand Forecasts examines the potential aviation demand at the Airport. The analysis utilizes local socioeconomic information, as well as national air transportation trends to quantify the levels of aviation activity which can reasonably be expected to occur at EUL over a 20-year period. The primary aviation demand indicators are general aviation operations, including air taxi and military, based aircraft, and peaking characteristics. An existing and ultimate critical design aircraft are determined, based upon AC 150/5000-17, *Critical Aircraft and Regular Use Determination*, to identify planning design standards. The results of this effort are used to determine the types and sizes of facilities which will be required to meet the projected aviation demand at the Airport through the planning period.

Element 4 – Demand-Capacity and Facility Requirements determine available capacities of various facilities at the Treasure Valley Executive Airport at Caldwell and their conformance or non-conformance with FAA standards, and identify the facilities that will be needed to meet compliance requirements or projected demand over the next twenty 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 direction for development.

Element 6 – Recommended Concept and Land Use Compatibility Analysis presents the 20-year vision for the Airport with a single consolidated master plan concept that combines both airside and landside recommendations. The recommended concept may be one of the airside and landside alternatives studied in the alternatives section or, more likely, it will be a composite utilizing the best elements of each.

Element 7 – Environmental Evaluations provide the City of Caldwell, community, and public officials with proper guidance regarding NEPA environmental documentation for the future development as outlined in the master plan.

Element 8 – Capital Improvement Program (CIP), Implementation Plan, and Financial Plan present a 20-year capital improvement program and a financial analysis that indicates potential sources of funding, project eligibility for funding, and the range of funding that may be the responsibility of the Airport sponsor.

Element 9 – Airport Layout Plan prepare a new ALP drawing set for the Treasure Valley Executive Airport at Caldwell. All plans will be prepared in a format which complies with the content contained within FAA's current guidelines for the preparation of an airport layout plan as defined by the FAA Airports ARP SOP 2.00, *Standard Procedure for FAA Review and Approval of Airport Layout Plans* (October 1, 2013), and which is readily acceptable to the FAA and can be utilized by the sponsor staff in carrying out implementation.

Element 10 – Public Coordination and Communication includes meeting with PAC members to review working papers, discuss study findings, and meet with FAA, ITD, Airport Administration, and the City of Caldwell to discuss status reports on the study and presentations of final recommendations. The working papers prepared for the master plan will be presented to the general public in public workshops. Each working paper (draft chapter) will be hosted on a dedicated website until the draft final master plan is prepared.

Element 11 – Final Reports are edits/comments/suggestions collected related to all previous chapters that will be addressed in this task by formally updating the previous chapters.

COORDINATION

The Treasure Valley Executive Airport at Caldwell Master plan is of interest to many within the local community and region. As a component of the state and national aviation systems, EUL is also of importance to both state and federal agencies responsible for overseeing the air transportation system.

To assist in the development of the master plan, the City of Caldwell has assembled a PAC list consisting of a group of stakeholders, including government representatives, Airport users and tenants, and local community leaders to act in an advisory role in the development of the master plan.

Members of the PAC will meet four (4) times at designated points during the planning process to review study materials and provide comments to help ensure a realistic and viable plan is developed. **Table IA** provides a list of entities represented on the PAC.

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.

A series of open-house Public Information Workshops are also planned as part of the study coordination effort. These workshops are designed to allow all interested persons to become informed and provide input concerning the master plan process. Notices of meeting times and locations were advertised through local media outlets. All draft reports and meeting materials were made available to the public on a project website: <http://caldwell.airportstudy.net>.

**TABLE IA | Planning Advisory Committee - Representing Entities
Treasure Valley Executive Airport at Caldwell Master Plan**

Airport Administration
Airport Advisory Board
Airport Commission
Federal Aviation Administration
City of Caldwell – City Council
City of Caldwell – Chamber of Commerce
City of Caldwell – Economic Development
City of Caldwell – Public Works
Fixed Base Operator (FBO) Representative
Idaho Transportation Department (ITD) – Division of Aeronautics