INTRODUCTION

ABOUT RIVERSIDE AIRPORT

Riverside Airport (RAL), a 525-acre site located about four miles southwest of downtown Riverside, California, was originally established in the 1920s as Arlington Airport. The airport has a rich history in support of civil aviation since its acquisition by the City of Riverside in 1953. Although the airport no longer offers scheduled commercial flights, RAL was historically served by commercial airlines from the 1950s to as recently as 2007. In 2005, Civil Air Patrol (CAP) Riverside Senior Squadron 5 located its search and rescue base at RAL. The airport also hosts California Baptist University's aviation science program, which includes a robust pilot training program with approximately 300 students.

The airport serves the Southern California Inland Empire region and is conveniently located within driving distance of multiple commercial service airports, including Ontario International Airport (ONT), John Wayne Airport (SNA), and Los Angeles International Airport (LAX). RAL is considered a regional reliever airport within the *National Plan of Integrated Airport Systems* (NPIAS) and has approximately 200 based aircraft. As such, RAL serves a vital role in relieving congestion at nearby commercial service airports while accommodating all forms of general aviation traffic, including corporate aviation, flight training, emergency medical flight services, charter flights, and recreational flying, among others. RAL is poised for continued growth and is expected to remain a vital transportation hub for the region.

WHAT IS A MASTER PLAN?

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 the airport. The last master plan update for RAL was completed in 2010.

The sponsor is responsible for funding capital improvements at RAL, as well as obtaining FAA and Caltrans development grants. The master plan is intended to provide **a true vision for how RAL is developed**, **guidance for future development**, and **justification for projects** for which the airport may receive funding through an updated capital improvement program, which will demonstrate the future investments required by the City of Riverside, Caltrans, and the FAA.

The airport 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 the city can coordinate environmental reviews, project approvals, design, financing, and construction to minimize the negative effects of maintaining and operating inadequate or insufficient facilities. An important outcome of the master plan process is a recommended development plan, which reserves sufficient areas for future facility needs. Such planning will protect development areas and ensure they will be readily available when required to meet future needs. The intended outcome of this study is a detailed on-airport land use concept that outlines specific uses for all areas of airport property and includes strategies for revenue enhancement.

Some common questions regarding what a master plan is / is not are answered in Figure iA below.

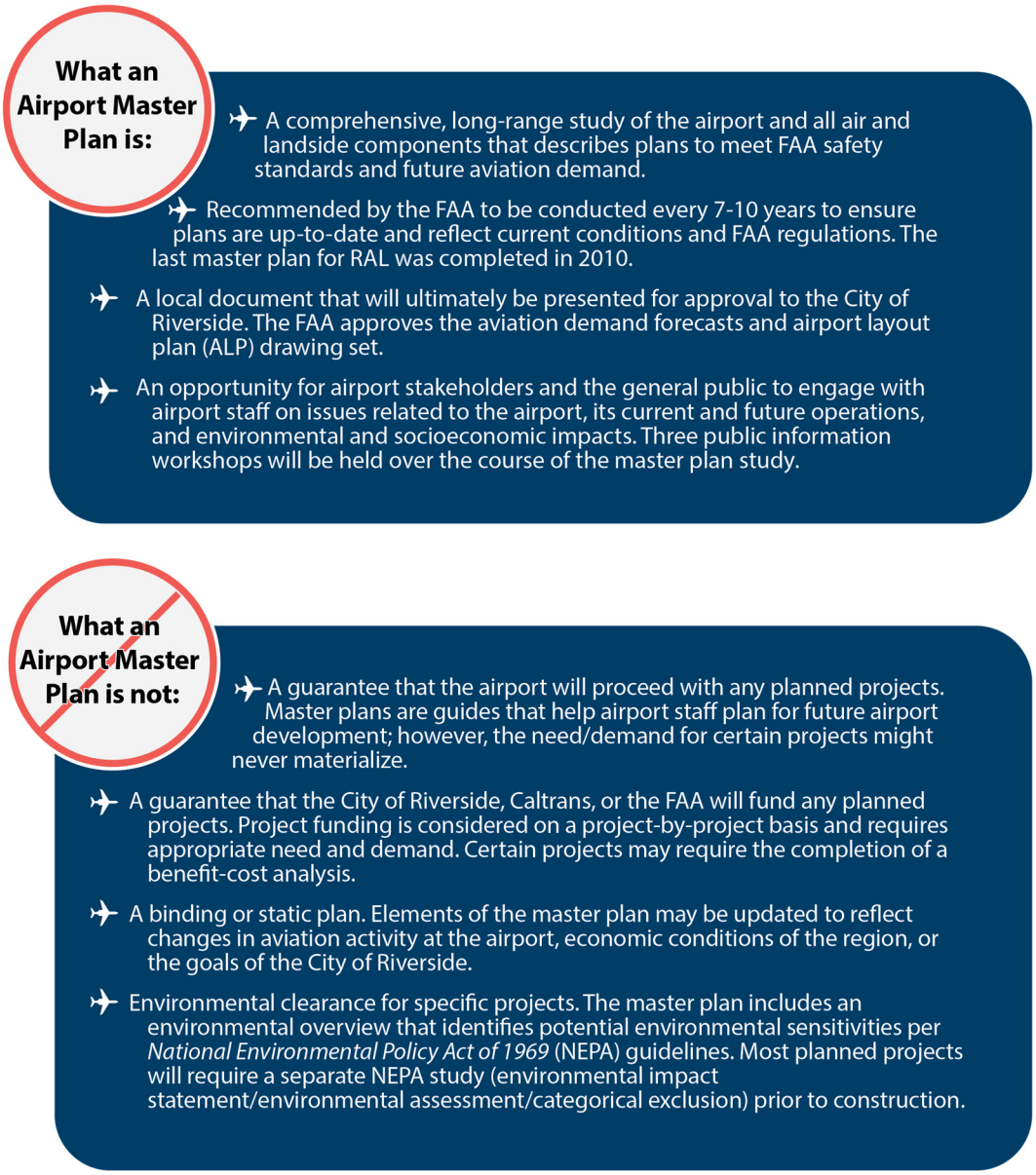

Figure iA – Common Questions Regarding What a Master Plan Is / Is Not

The preparation of this master plan is evidence that the city recognizes the importance of the airport and the associated challenges inherent in providing for its unique operating and improvement needs. The cost of maintaining an airport is an investment that 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, national, and global air transportation systems. Moreover, the plan will aid in supporting decisions for directing limited and valuable city resources for future airport development. Continued investment in the airport will ultimately allow the sponsor to reap the economic benefits.

WHO IS PREPARING THE MASTER PLAN?

The City of Riverside has contracted Coffman Associates, Inc. to undertake the airport master plan. Coffman Associates is an airport planning and consulting firm that specializes in master planning and environmental studies. Coffman Associates will lead the planning team, with support from the following firms:

- **Martinez Geospatial** – aerial photography, ground survey, and geographic information systems (GIS) products to meet FAA 5300-18B requirements for Airports GIS data submittal

- **Kimley-Horn** – order-of-magnitude cost estimates for proposed capital improvement program projects, economic development plan, and airport economic impact study

The airport master plan will be prepared in accordance with FAA requirements, including Advisory Circular (AC) 150/5300-13B, *Airport Design* (as amended), and AC 150/5070-6B, *Airport Master Plans* (as amended). The plan will be closely coordinated with other planning studies relevant to the area and with aviation plans developed by the FAA and Caltrans. The plan will also be coordinated with the City of Riverside and other local and regional agencies, as appropriate.

STUDY GOALS, OBJECTIVES, AND ASSUMPTIONS

The primary goal of this master plan is to provide the framework needed to guide future airport development that will satisfy aviation demand in a cost-effective way while considering potential environmental and socioeconomic impacts. Accomplishing this goal requires an evaluation of the existing airport to decide what actions should be taken to maintain a safe, adequate, and reliable facility. A long-range planning study also requires several baseline assumptions that will be used throughout the analysis. Specific objectives and assumptions for this study are as follows.

STUDY OBJECTIVES

Aviation Demand Forecasts

- Research factors likely to affect all air transportation demand segments at RAL over the next 20 years, including the development of forecasts of general aviation operational and basing demand.

- Determine the airport's current and future critical design aircraft per FAA AC 150/5300-17, *Critical Aircraft and Regular Use Determination*.

- Determine projected needs of airport users for the next 20 years, taking into consideration recent revisions to FAA design standards and the airport's conformance requirements (i.e., airfield geometry), instrument approaches or other new technology, aviation trends, and the impact of general aviation fleet transitions on design standards.

Facility Requirements

- Analyze the airfield system to determine the existing and ultimate runway and taxiway conditions required to satisfy the airport's critical aircraft. This analysis will include future improvements necessary to aid in supporting forecasted demand. The analysis will also consider the potential for closure and removal of any airfield pavement(s) not deemed necessary and/or justified for future capital expenditures.

- Recommend improvements that will enhance the landside area's ability to satisfy future aviation needs, taking into consideration non-aviation uses to maximize airport revenue streams.

Development Alternatives

- Evaluate the highest and best uses of airport property.

- Recommend landside improvements that satisfy the anticipated operational growth, including fixed base operator (FBO) and specialty aviation service operator (SASO) operations.

- Review future use and zoning of airport property and approaches to each runway for future protection. This task will involve the development of new noise exposure contours.

Development Plan and Capital Improvement Program (CIP)

- Establish a schedule of development priorities and a program for improvements proposed in the master plan consistent with the FAA's capital improvement program planning.

Airport Layout Plan (ALP) Update

- Produce accurate base maps of existing and proposed facilities, as well as updated ALP drawings consistent with FAA Standard Operating Procedures (SOPs) 2.00 and 3.00.

- Analyze opportunities and develop strategies for incompatible land use encroachments.

BASELINE ASSUMPTIONS

A long-range planning study requires several baseline assumptions that are used throughout this analysis. The baseline assumptions for this study are as follows.

- RAL will continue to accommodate general aviation tenants, as well as itinerant and local aircraft operations by air taxi, general aviation, and military operators, through the 20-year planning period.
- The aviation industry will develop through the planning period as projected by the FAA. Specifics of projected changes in national aviation industries are described in Chapter Two.
- The socioeconomic characteristics of the region will generally change as forecasted (Chapter Two).
- A federal and state airport improvement program will be in place through the planning period to assist in funding future capital development needs.

MASTER PLAN ELEMENTS AND PROCESS

The master plan has nine elements that are intended to assist in the evaluation of future facility needs and provide the supporting rationale for their implementation. **Figure iB** provides a graphical depiction of the process involved in the study.

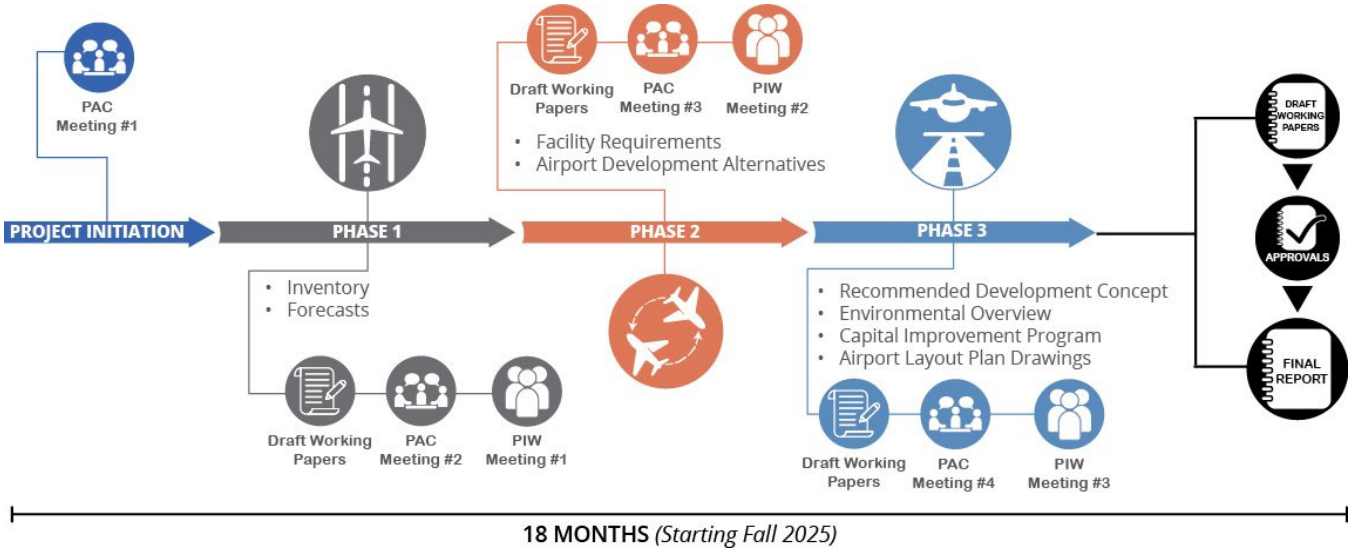

Figure iB – Project Workflow

Element 1 – Study Initiation and Organization includes the development of the scope of services, schedule, graphic schema, and study website. General background information will be established that includes an outline of the goals and objectives to be accomplished during the master plan. Finally, a planning advisory committee (PAC) will be established and an initial (or "kickoff") meeting will be held.

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

Element 3 – Aviation Demand Forecasts examines the potential aviation demand at RAL. The analysis utilizes local socioeconomic information and national air transportation trends to quantify the levels of aviation activity that can reasonably be expected to occur at RAL over a 20-year period. An existing and ultimate critical design aircraft based on AC 150/5000-17, *Critical Aircraft and Regular Use Determination*, is also established to determine future planning design standards. The results of this effort are used to determine the types and sizes of facilities that will be required to meet the projected aviation demand at the airport through the planning period. The forecasts result in estimates of demand for annual aircraft operations and based aircraft. This element is one of two elements that are submitted to the FAA for approval.

Element 4 – Facility Requirements determines the available capacities of various facilities at the airport, whether they conform with FAA standards, and what facility updates or new facilities will be needed to comply with FAA requirements and/or projected 20-year demand.

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 Master Plan Concept involves coordination with airport staff and the PAC to result in the selection of a recommended development concept. The airport's noise exposure and land use compatibility will also be evaluated. An environmental overview will identify any potential environmental concerns that must be addressed prior to the implementation of the recommended development program.

Element 7 – Capital Financial Plan analyzes the benefits and costs associated with the recommended plan. Specific project costs are established for the development of a capital improvement program that ensures logical staging of improvements.

Element 8 – Airport Plans will be developed to depict the recommended development concept. The drawings will meet the requirements of FAA SOP 2.00, *Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)* (effective October 1, 2013). The updated ALP set will be included as an appendix to this study.

Element 9 – Final Reports produces the draft final report and ALP drawings in print and digital formats. These materials will be presented to the City of Riverside, Caltrans, and the FAA for review and approval. Once approved, a final report will be prepared and made available in print and digital formats.

COORDINATION AND OUTREACH

This study is of interest to many within the local community and region, including local citizens, local businesses, community organizations, city officials, airport users/tenants, and aviation organizations. As a component of the regional, state, and national aviation systems, RAL is of importance to both state and federal agencies responsible for overseeing the air transportation system.

To assist in the development of the master plan, a PAC has been established to act in an advisory role. PAC members will meet up to four times at designated points during the study to review study materials and provide comments to help ensure a realistic, viable plan is developed.

Draft phase reports will be prepared at various milestones in the planning process. The phase report process allows for timely input and review during each step within the master plan to ensure all issues are fully addressed as the recommended program develops.

Three open-house public information workshops are also planned as part of the study coordination and outreach efforts. 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 will be advertised through local media outlets. All draft phase reports, meeting notices, and materials will be made available to the public on a study-specific website: https://ral.airportstudy.net.

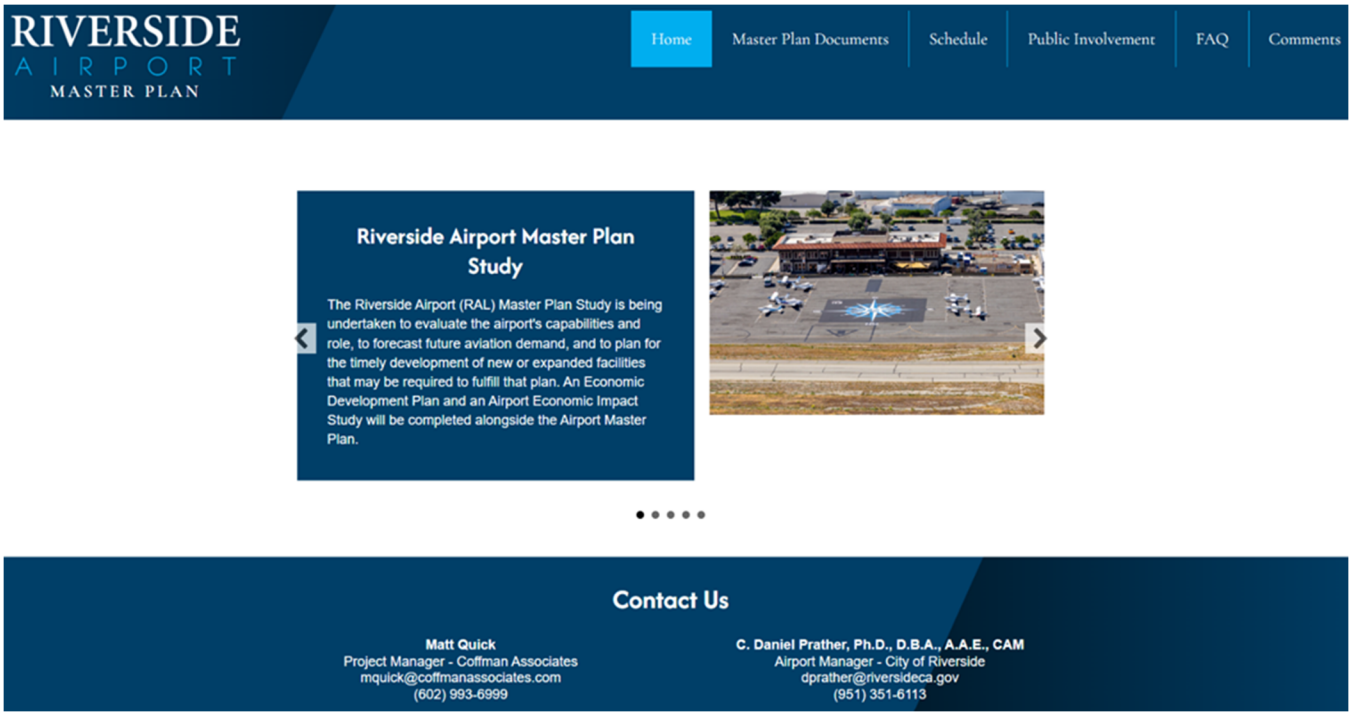

Figure iC – Homepage of Study Website

SWOT ANALYSIS

A SWOT analysis is a strategic business planning technique used to identify **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats associated with an action or plan. This exercise involves identifying an action, objective, or element, and then identifying the internal and external forces that are positively and negatively impacting it. The internal forces include attributes of the airport and market area that may be considered strengths or weaknesses, while the external forces are those outside the airport's control, such as the aviation industry as a whole or the economy, which manifest as opportunities or threats.

A SWOT analysis was conducted with the PAC in November 2025. A summary of this exercise and discussion is included in **Table i**. It is important to note that some attributes may fall into more than one category.

TABLE i | SWOT ANALYSIS

S **STRENGTHS**	• City leadership with forward vision, viewing the airport as a local asset • Towered airport with helpful management • Host for numerous flight schools anticipating growth • Strong community support and partnerships • Numerous well-attended annual community events • Bustling airport cafe • Lower operating costs due to utility rates • Railroad access through Union Pacific rail spur • Great proximity in the heart of southern California • Growing hub for green technology
W **WEAKNESSES**	• Traffic congestion due to flight school training • Natural gas line encroachment near Runway 27 • Low-speed exit taxiways • Nearby noise-sensitive land uses • Security issues related to vagrancy and associated vandalism • Limited revenue streams
O **OPPORTUNITIES**	• More community engagement through building on reputation as an event space • Growth potential for both aeronautical and non-aeronautical development due to available property to the north and west • Flexibility regarding the police department facility location • Utilities can be provided for new development • Ample parking • Multiple growing businesses jet users located nearby
T **THREATS**	• Need to balance general aviation and training environment with commercial growth • Encroaching incompatible land uses • Noise complaints • FAA grant funding availability