



Floyd W. Jones Lebanon Airport

A i r p o r t M a s t e r P l a n



INTRODUCTION

Floyd W. Jones Lebanon Airport (LBO) serves the City of Lebanon and Laclede County, Missouri as a general aviation (GA) airport. The airport is part of a larger state- and nationwide system of airports that comprise the National Airspace System, connecting people and goods to larger economic markets. LBO is owned and operated by the City of Lebanon and has a single, 5,000-foot runway that has GPS instrument approaches and a full-service fixed-base operator (FBO).

LBO contributes to the local economy by generating \$676,000 in payroll and \$2.2 million annually in revenue for the state, according to the *Missouri Statewide Airports Economic Impact Study*. The City of Lebanon recognizes the value the airport brings to the community, and the Airport Master Plan is evidence of this. With a sound and realistic development plan in place, LBO can maintain and grow in its role as an important link to the regional, state, and national air transportation systems.

ABOUT THE STUDY

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 Floyd W. Jones Lebanon Airport (LBO) was prepared in 2003. The City of Lebanon (City), the sponsor of the airport, received an Airport Improvement Program (AIP) grant from the Missouri Department of Transportation – Aviation Section (MoDOT)¹ to update the airport master plan.



¹ MoDOT participates in the State Block Grant Program, administering the AIP for the Federal Aviation Administration (FAA)



The City is responsible for funding capital improvements at the airport, as well as obtaining AIP and MoDOT development grants. In addition, the City oversees facility enhancements and infrastructure development conducted by private entities at the airport. **The Airport Master Plan is intended to provide a true vision for how LBO is developed, guidance for future development, and justification for projects** for which the airport may receive funding through an updated capital improvement plan (CIP) to demonstrate the future investment required by the City, as well as the FAA and MoDOT.

An 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 that 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 which outlines specific uses for all areas of airport property, including strategies for revenue enhancement.

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 operation 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, national, and global air transportation system. Moreover, the plan will aid in supporting decisions for directing limited and valuable City resources for future airport development. Ultimately, the continued investments in the airport will allow the City of Lebanon to reap the economic benefits generated by historical investments.

Figure iA summarizes what a master plan is and what it is not.

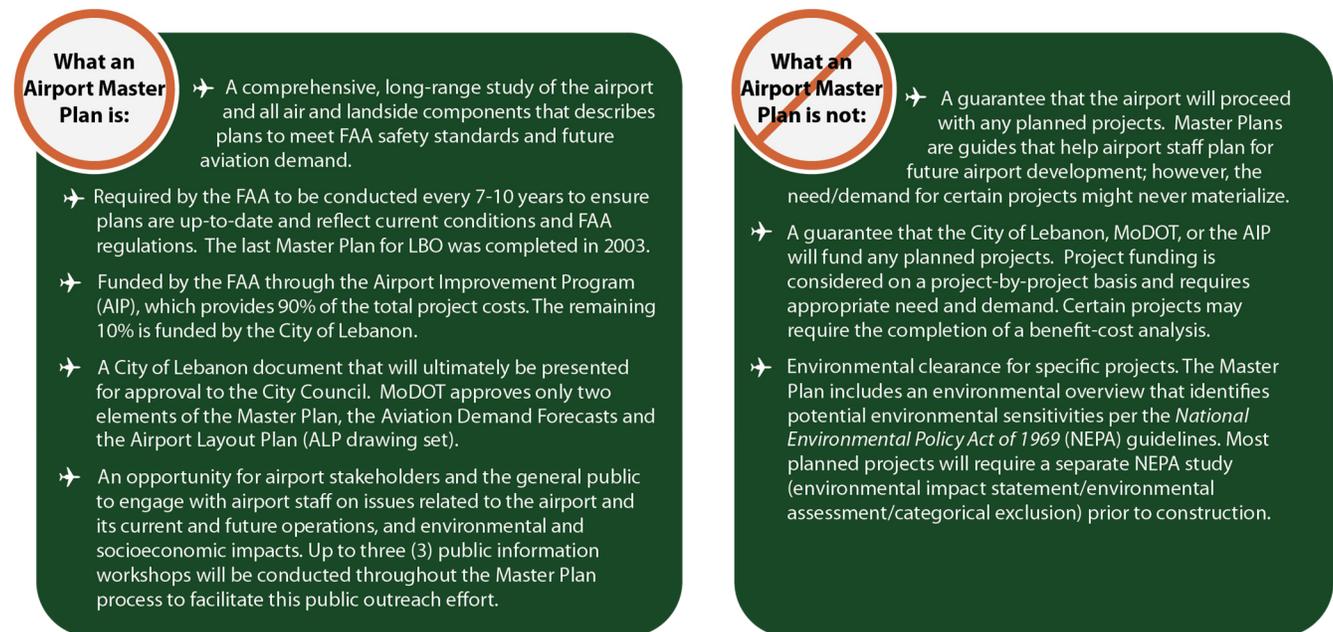


Figure iA: Master Plan Definition



WHO IS PREPARING THE MASTER PLAN?

Through a qualifications-based selection process, the City has contracted with the airport planning firm Coffman Associates, Inc. to prepare the Airport Master Plan. Coffman Associates is an airport consulting firm that specializes in master planning and environmental studies. Coffman Associates will lead the planning team, with support from Martinez Geospatial. Martinez Geospatial is a survey and imagery company who will provide valuable airport mapping and Airport Geographic Information System (AGIS) survey data throughout the master plan process.

The airport master plan will be prepared in accordance with FAA requirements, including Advisory Circular (AC) 150/5300-13A, *Airport Design* (as amended), and AC 150/5070-6C, *Airport Master Plans* (as amended). The plan will be closely coordinated between the City of Lebanon, MoDOT, FAA, and other local and regional agencies, as appropriate, while accounting for other relevant planning studies.

STUDY GOALS AND OBJECTIVES

The primary goal of this master plan is to develop and maintain a financially feasible, long-term development program, which will satisfy aviation demand of the region; be compatible with community development, other transportation modes, and the environment; and enhance employment and revenue for the local area. 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. **Figure iB** summarizes the objectives of this Airport Master Plan.

MASTER PLAN OBJECTIVES	
<ul style="list-style-type: none"> • DEVELOP strategic visions and mission statements to guide airport development/growth • RESEARCH factors likely to affect air transportation demand segments in the City of Fort Worth and the Dallas-Fort Worth Metroplex over the next 20 years • DETERMINE the airport’s current and future critical design aircraft • ANALYZE the airport’s existing airfield system to determine if any deficiencies exist and correct areas of non-standard geometry • EVALUATE highest and best uses of airport property for aeronautical development, including hangar expansion and maintenance facilities 	<ul style="list-style-type: none"> • EVALUATE the potential for establishing air service operations • CONSIDER options for non-aeronautical development that could produce additional revenue streams for the airport • DEVELOP a phased, demand-based 20-year Capital Improvement Plan • PRODUCE an updated Airport Layout Plan drawing set, detailing future airside and landside development • REVIEW future use and zoning of airport property, instrument approach areas, and nearby developments to ensure flight safety and land use compatibility is maintained

Figure iB: Objectives of a Master Plan

BASELINE ASSUMPTIONS

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



- LBO will continue to accommodate general aviation tenants, as well as itinerant and local aircraft operations by air taxi, general aviation, and military operators.
- 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 – Aviation Demand Forecasts.
- The socioeconomic characteristics of the region will generally change as forecast (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.
- A national/global economic and aviation industry recovery from the COVID-19 pandemic will occur over the course of the next several months and years.

MASTER PLAN ELEMENTS AND PROCESS

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

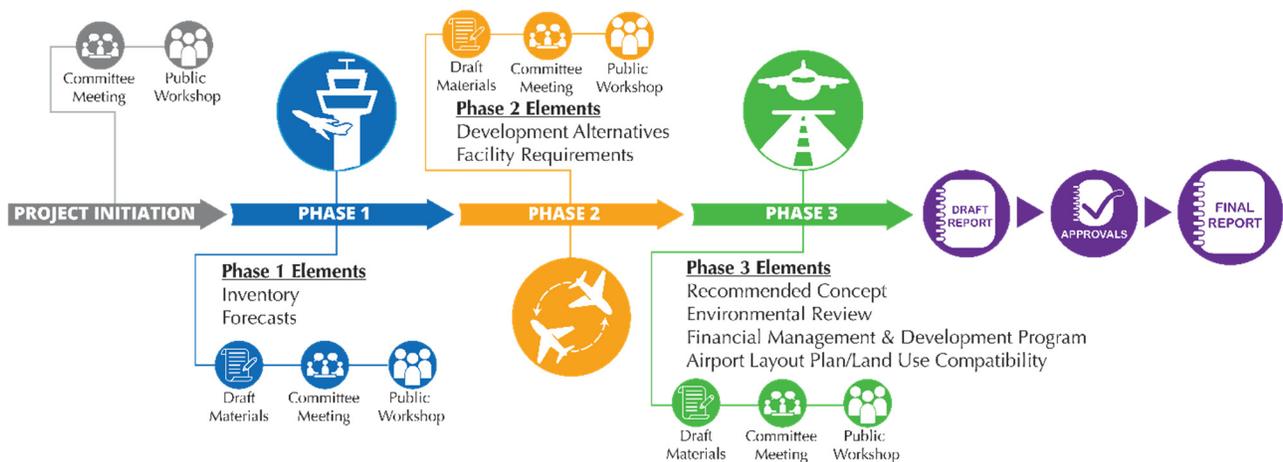


Figure iC: Master Plan Study Process

Element 1 – Initiation includes the development of the scope of services, schedule, and study website. Study materials will be assembled in a workbook format. General background information will be established that includes outlining the goals and objectives to be accomplished during the Master Plan.

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 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 that may have relevance to the master plan are also collected.



Element 3 – Aviation Demand Forecasts examine the potential aviation demand at LBO. The analysis utilizes local socioeconomic information, as well as national air transportation trends, to quantify the levels of aviation activity that can be reasonably expected to occur over a 20-year period. An existing and ultimate critical design aircraft, based upon 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 which will be required to meet the projected aviation demand at the airport through the planning period. The forecasts will be submitted to MoDOT for review and approval.

Element 4 – Facility Requirements determine the available capacities of various facilities at the airport, whether they conform to 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 consider 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 – Airport Plans/Land Use Compatibility involves coordination with airport staff and the Airport Advisory Board and will result in the selection of a recommended development concept. Airport layout plans will be developed to depict the recommended development concept. The drawings will meet FAA’s Standard Operating Procedure (SOP), *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 master plan. 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 plan.

Element 7 – Financial Management and Development Program analyzes the costs that may be associated with the development plan, with in-depth financial analysis to estimate capital funds required from federal and state grant-in-aid programs. A 20-year capital program and development schedule that prioritizes projects will be established.

Element 8 – Final Reports and Approvals will include production of the draft final report and ALP drawings in print and digital form. These materials will be presented to the City, MoDOT, 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. This includes 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, LBO is of importance to both state and federal agencies responsible for overseeing the air transportation system.



To assist in the development of the airport master plan, the LBO Airport Advisory Board (Board) will act as the study Planning Advisory Committee (PAC). Board members will meet up to four times at designated points during the study to review study materials and provide comments to help ensure that a realistic, viable plan is developed.

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 up to four open-house public information workshops is 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 are advertised through local media outlets. All draft working papers, reports, meeting notices, and materials will be made available to the public on a study-specific website: LBO.airportstudy.net.

SWOT ANALYSIS

A SWOT analysis is a strategic business planning technique used to identify **Strengths**, **Weaknesses**, **Opportunities**, and **Threats** associated with an action or plan. The SWOT analysis involves identifying an action, objective, or element, and then identifying the internal and external forces that are positively and negatively impacting that action, objective, or element in a given environment. A SWOT analysis was conducted at the first PAC meeting, the findings of which are presented in **Table iA**.

TABLE iA SWOT Analysis – Floyd W. Jones Lebanon Airport	
STRENGTHS	<ul style="list-style-type: none"> • Accessible to major freeways • Existing airfield facilities are in good shape • Good supply of flight training students from local community college • Supportive airport management and city government
WEAKNESSES	<ul style="list-style-type: none"> • Runway width of 75 feet is limiting to what aircraft can operate • Steep grade off the ends of both runways • Proximity of interstate • Local perception of airport is not positive • Immediate proximity of schools, residential zones to airport • Pavement maintenance needed • Airport facilities are lacking in order to support more corporate jet traffic
OPPORTUNITIES	<ul style="list-style-type: none"> • New businesses, existing businesses would like to use airport • Existing city administration is supportive of change, growth at airport
THREATS	<ul style="list-style-type: none"> • Rising fuel costs divert sales to other local airports • Incoming city officials are not as supportive of the airport