

# - INTRODUCTION





## Airport Master Plan - Final







# INTRODUCTION

The update of the Dallas Executive Airport Master Plan has been undertaken to evaluate the airport's capabilities and role, to forecast future aviation demand, and to plan for the timely development of new or expanded facilities that may be required to meet existing and future aviation demand. The overarching goal of the Master Plan is to provide systematic guidelines for the airport's overall maintenance, development, and operation in an environmentally and fiscally responsible manner while adhering to appropriate safety design standards.

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 the City of Dallas can coordinate project approvals, design, financing, and construction of needed improvements prior to experiencing the adverse effects of inadequate facilities.

An important result of the Master Plan process is reserving sufficient areas for future facility development. In doing so, specific development areas can be protected, ensuring they will be readily available when required to meet future needs. This will be accomplished through a detailed land use concept which outlines specific uses for all areas on airport property.

The preparation of this Master Plan is evidence that the City of Dallas recognizes the importance of air transportation to the surrounding area 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 community. With a sound and realistic Master Plan, Dallas Executive Airport can continue its role as an important link to the national air transportation system and maintain the existing public and private investments in its facilities.

The City of Dallas initiated this Master Plan in 2011 to re-evaluate and adjust, as necessary, the future development plan for Dallas Executive Airport. Since completion of the previous Master Plan in 2002, the City of Dallas has invested considerable funds into the airport including the construction of a new general aviation terminal building, airport traffic control tower (ATCT), and dedicated airport maintenance/ operations facility. Furthermore. substantial investments have also been made by private investors including two fixed base operators (FBOs) and other specialty aviation operators. The City of Dallas is responsible for overseeing all capital improvements at the airport and obtaining Federal Aviation Administration (FAA) and Texas Department of Transportation – Aviation Division (TxDOT) development grants. In addition, the City of Dallas oversees facility enhancements and infrastructure development conducted by private entities at the airport.

# **MASTER PLAN GOALS AND OBJECTIVES**

The primary objective of the Dallas Executive Airport Master Plan Update is to develop and maintain a financially feasible, long term development program which will satisfy aviation compatible demand. be with community development, support other transportation modes, and be environmentally sensitive. The accomplishment of this objective requires the evaluation of the existing airport and a determination of what actions should be taken to maintain an adequate, safe, and reliable airport facility to meet the air transportation needs of the area. Once completed, the Master Plan will provide an outline of the necessary development and give

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responsible officials advance notice of future needs to aid in planning, scheduling, and budgeting.

An Airport Master Plan must be developed according to FAA requirements. However, the study will also be developed in a manner which makes it useful to support the airport's strategic business plan. The FAA requires specific components within a Master Plan. The components serve as guidelines which allow for a systematic and technical approach to reach the final development plan.

This Master Plan Update will provide a vision for the airport to encompass the next 20 years and, in some cases, beyond. With this vision, the City of Dallas will have advance notice of potential future airport funding needs so that appropriate steps can be taken to ensure that adequate funds are planned and budgeted.

Specific goals and objectives of the Dallas Executive Airport Master Plan are:

### Preserve Public and Private Investments

The City of Dallas, FAA, and TxDOT have made considerable investments in the airport's infrastructure. Private individuals and businesses have made investments in aviation buildings and other facilities. The Master Plan will provide for continued maintenance, as well as necessary improvements, to the airport's infrastructure to ensure maximum utility of public and private facilities at Dallas Executive Airport.

## Be Reflective of Local and Regional Goals and Objectives

Dallas Executive Airport is a public facility serving the needs of the local

residents and businesses. The Master Plan needs to be reflective of the goals and visions of the surrounding area, especially those related to quality of life, business and development, and land use. On a broader scale, the airport should complement the regional aviation network of the Dallas/Fort Worth Metroplex and surrounding region.

## Maintain Safety

Safety is an essential consideration in planning and development at the airport. The Master Plan will focus on maintaining the highest levels of safety for airport users, visitors, employees, and the adjacent surroundings in general.

#### Preserve the Environment

Protection and preservation of the local environment are essential concerns in the Master Plan. Any improvements called for in the study will be mindful of environmental sensitivities.

#### Attract Public Participation

To ensure the Master Plan reflects the concerns of the public, the local communities, airport tenants, airport users, and businesses throughout the region, the Master Plan process will include an active public outreach program to solicit comments and suggestions which will then be included in the final Master Plan, to the extent possible.

#### Strengthen the Economy

The airport serves as an important economic resource for the area and should be planned and developed accordingly. In continuing support of the area's economy, the Master Plan is aimed at retaining and increasing jobs and revenues for the region and its businesses. Continued airport development to meet local and regional aviation demand will serve the purpose of providing additional jobs to the area and added strength to the overall economy.

#### **MASTER PLAN TASKS**

The Master Plan Update will accomplish these goals and objectives by carrying out the following:

- Determine projected needs of airport users through the year 2031;
- Analyze socioeconomic factors likely to affect air transportation demand in the surrounding region;
- Evaluate existing and projected aviation demand in order to







provide a vision for future airport development that will optimize undeveloped airport property and promote aircraft safety:

- Identify existing and future general aviation facility needs;
- Analyze airport safety and security measures and consider further enhancements to accommodate the general aviation needs of the airport;
- Conduct a runway safety area (RSA) determination related to Runway 31;
- Analyze airfield facilities for optimum use (runway length, taxiways, navigational aids, etc.);
- Develop land use strategies for the use of airport property and evaluate if portions of airport property might be considered "excess" by the FAA and TxDOT and, therefore, may be suitable for non-aviation development;
- Establish a schedule of development priorities and a program for improvements;
- Analyze the airport's financial reguirements for capital improvement needs and grant options;
- Produce current and accurate base maps and Airport Layout Plan (ALP) drawings;
- Coordinate this Master Plan Update with local, regional, state, and federal agencies; and
- Conduct active and productive public involvement through the planning process.



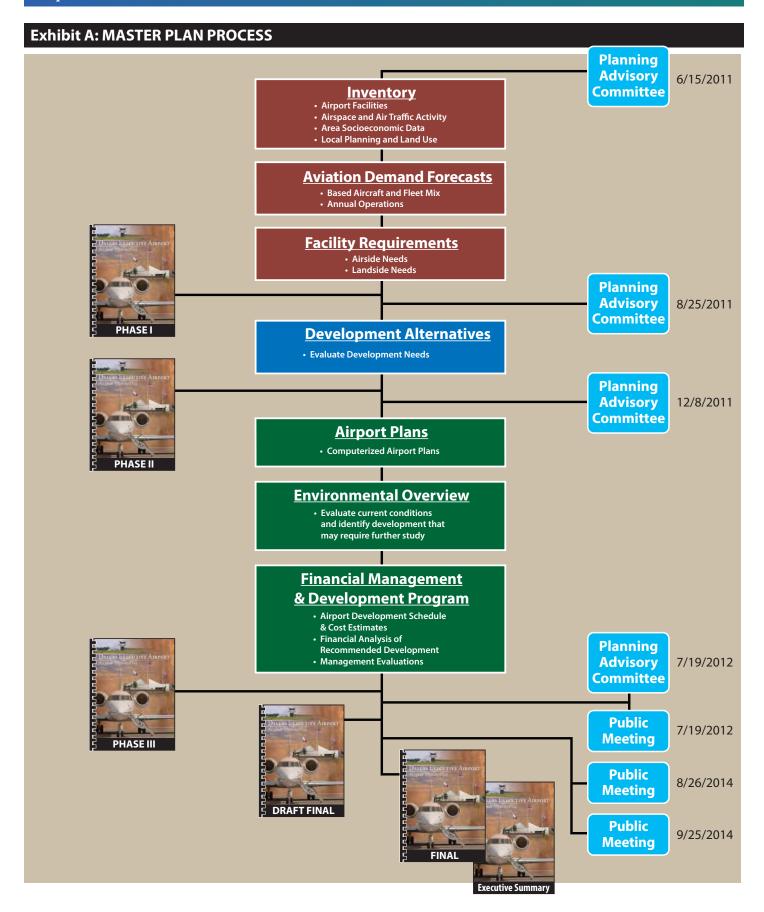
## **MASTER PLAN ELEMENTS** AND PROCESS

The Dallas Executive Airport Master Plan Update is being prepared in a systematic fashion following FAA and TxDOT guidelines and industryaccepted practices. The Master Plan has six general elements that are intended to assist in the discovery of future facility needs and provide the supporting rationale for their implementation. **Exhibit A** provides a graphical depiction of the elements and process involved in the study.

Element One analyzes the existing conditions at the airport. The inventory efforts are 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. Planning studies which may have relevance to the Master Plan are also collected and reviewed. Information collected during the inventory efforts is summarized in Chapter One – Inventory.

Element Two examines the potential aviation demand at the airport. The analysis utilizes local socioeconomic information, as well as national and regional air transportation trends, to quantify the levels of aviation activity which can reasonably be expected to occur at Dallas Executive Airport. Demand forecasts for based aircraft totals, aircraft fleet mix, general aviation operations, military operations, air taxi activity, and peaking characteristics will be provided through the year 2031. 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 long term planning period. The results of this analysis are presented in Chapter Two – Aviation Demand Forecasts.

Element Three comprises the demand capacity and facility requirements analysis. The intent of this analysis is to compare the existing facility capacities to forecast aviation demand and determine where deficiencies in capacities (as well as excess capacities) may exist. Where deficiencies are identified, the size and type of new facilities to accommodate that demand are provided. The airfield analysis focuses on improvements needed to safely serve the type of aircraft expected to operate at the airport in the future,







as well as navigational aids to increase the safety and efficiency of operations. This element also examines the aviation terminal area, hangar, parking apron, and support needs. The findings of this analysis are presented in Chapter Three – Facility Requirements.

Element Four considers a variety of solutions to accommodate the projected facility needs identified in previous chapters. This element proposes various facility and site plan configurations which can meet the projected facility needs for both airside and landside development. 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. In addition, an RSA determination will be conducted in this element considering the non-conforming safety areas that currently exists southeast of Runway 31. These results are presented in Chapter Four – Development Alternatives.

Element Five comprises two independent, yet interrelated work efforts: a recommended development plan and an environmental overview. A graphic and narrative description of the recommended plan for the use, development, and operation of the airport, and a review of federal environmental requirements applicable to Dallas Executive Airport will be presented. This analysis is included in Chapter Five – Master Plan Concept.

Element Six focuses on the capital needs program which defines the schedules, costs, and funding sources for the recommended development projects. The resultant effort will include the formulation of a detailed capital improvement program (CIP). A historical comparison of airport

revenues and expenditures will be made and future cash flow projections will be evaluated to better determine the economic feasibility of the proposed airport development. The results of this analysis are presented in Chapter Six – Financial Program.

The official ALP drawings that are produced as a result of the recommended development concept and used by the FAA and TxDOT in determining grant eligibility and funding will be included as an appendix to the Master Plan.

#### **STUDY COORDINATION**

Dallas Executive Airport is of interest to many stakeholders within the surrounding area including citizens, community organizations, airport users, airport tenants, area-wide planning agencies, and aviation organizations. Playing a significant role in the regional, state, and national aviation systems, Dallas Executive Airport is of importance to both the FAA and TxDOT who are responsible for overseeing air transportation systems for federal and state governments, respectively.

To assist in the development of the Master Plan Update, a cross-section of

community members, stakeholders, and interested persons have been identified to act in an advisory role in the development of the Master Plan. Members of this Planning Advisory Committee (PAC) reviewed reports and provided comments throughout the study to help ensure that a realistic, viable plan was developed.

To assist in the review process, draft phase reports were prepared at various milestones in the planning process. The production of draft phase reports 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. Public meetings were also included as part of the plan coordination so that information could be presented to the public. These meetings gave the public an opportunity to view the working materials, ask questions, and provide feedback with the consultant and airport staff. **Exhibit A** depicts the project work flow as it relates to PAC meetings and public meetings.

The material presented in the Master Plan was made available to the public on the internet via a website dedicated to the study at:

www.dallasexec.airportstudy.com.

