CLEBURNE
Regional Airport

Airport Master Plan

Draft Final

AIRPORT MASTER PLAN

For

Cleburne Regional Airport (CPT)
Cleburne, Texas

Prepared by

Coffman Associates
Airport Consultants

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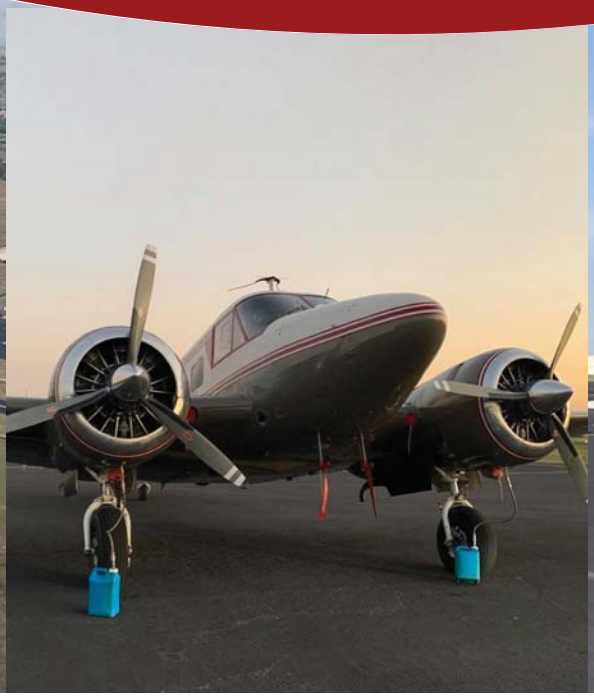

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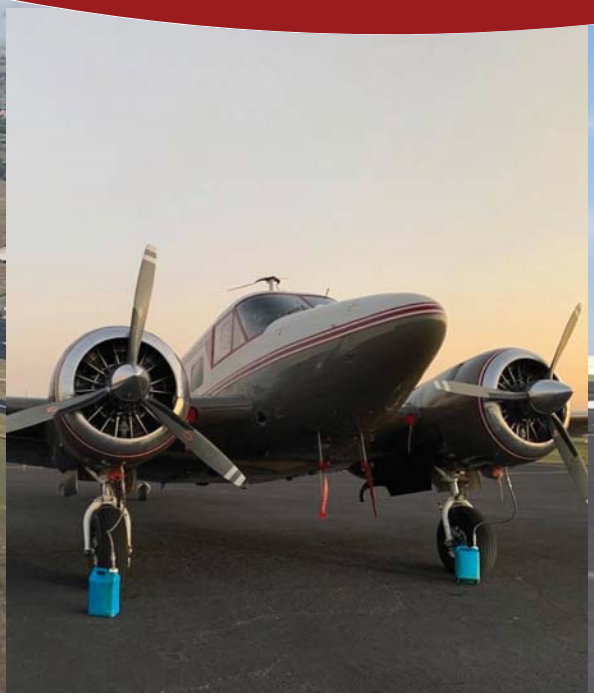


Introduction

Cleburne Regional Airport (CPT) serves the City of Cleburne and Johnson County, Texas as a general aviation (GA) airport and is part of a larger network of airports in the Dallas-Fort Worth Metroplex. CPT is owned and operated by the City of Cleburne and has a single, 5,697-foot-long runway that has GPS instrument approaches and a full-service fixed-base operator (FBO).

CPT contributes to the local economy by generating more than 90 jobs and $8.9 million annually in revenue for the region, according to the *Texas Aviation Economic Impact Study* completed in 2018. The City of Cleburne 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, CPT 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 CPT was completed in 2010. The City of Cleburne (City), the sponsor of the airport, received a grant from the Texas Department of Transportation (TxDOT) – Aviation Division to update the Airport Master Plan. TxDOT, as one of seven block grant states, receives FAA Airport Improvement Program funding and distributes it to airports in the state following FAA guidelines.

The City is responsible for funding capital improvements at the airport, as well as obtaining FAA and Texas Department of Transportation (TxDOT) – Aviation Division 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 vision for how CPT 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 TxDOT – Aviation Division.

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. One 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 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, 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. Ultimately, the continued investments in the airport will allow the City of Cleburne to reap the economic benefits generated by historical investments.

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

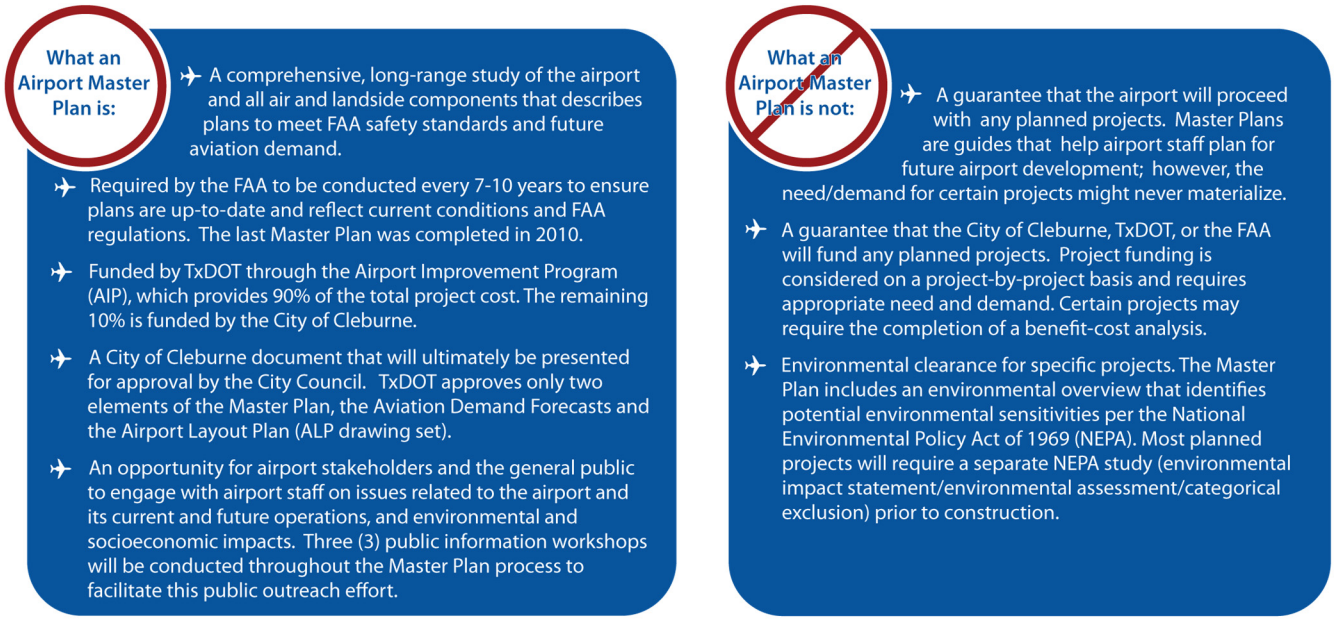


Figure iA: Master Plan Definition

WHO IS PREPARING THE MASTER PLAN?

The City has contracted with the airport planning firm Coffman Associates, Inc. to undertake the Airport Master Plan. Coffman Associates is an airport consulting firm that specializes in master planning and environmental studies and was selected following a qualifications-based selection process.

The Airport Master Plan Update 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 TxDOT. The plan will also be coordinated with the City of Cleburne, as well as other local and regional agencies as appropriate.

STUDY GOALS AND OBJECTIVES

The primary goal of this Airport Master Plan is to provide the framework needed to guide future airport development that will satisfy aviation demand in a cost-efficient manner while considering potential environmental and socioeconomic impacts. Additionally, the plan will evaluate CPT in relationship to the system of airports serving the southwestern portion of the Dallas-Fort Worth Metroplex. 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 Master Plan objectives.

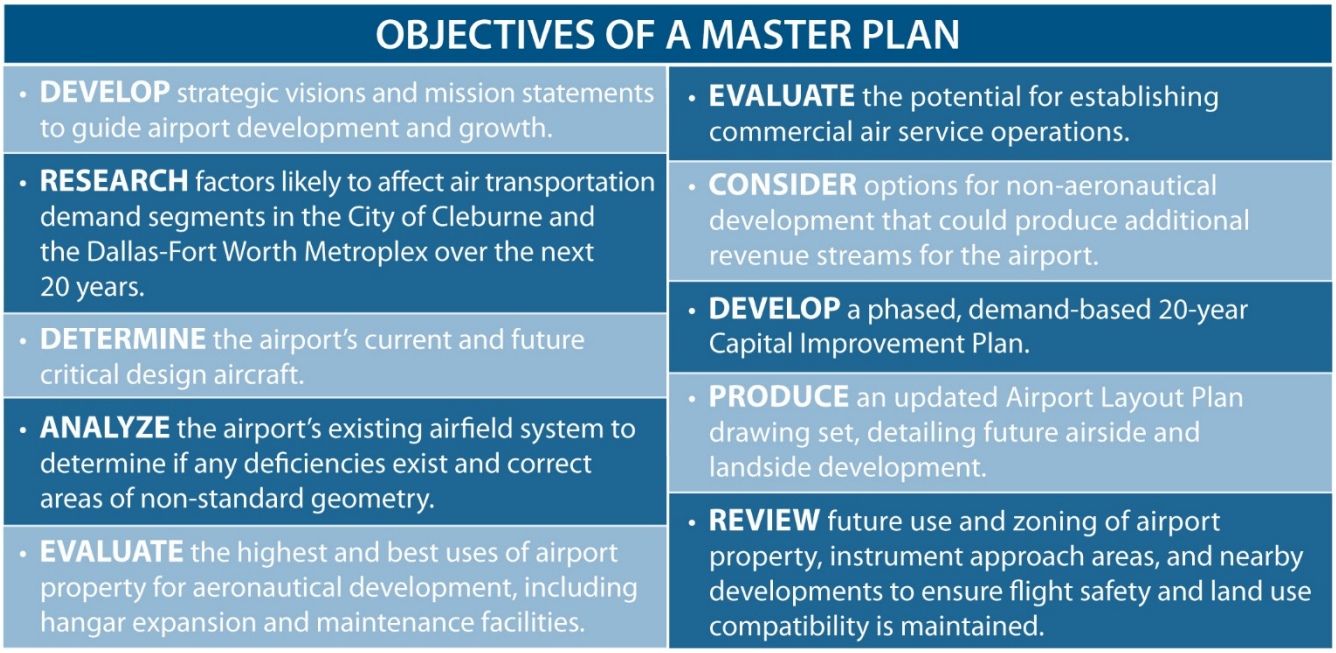


Figure iB: Objectives of a Master Plan

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:

- CPT 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 (20 years) 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 is prepared in a systematic fashion following FAA guidelines and industry-accepted standards and practices. The Master Plan has six chapters, separated out into three project phases, which 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.

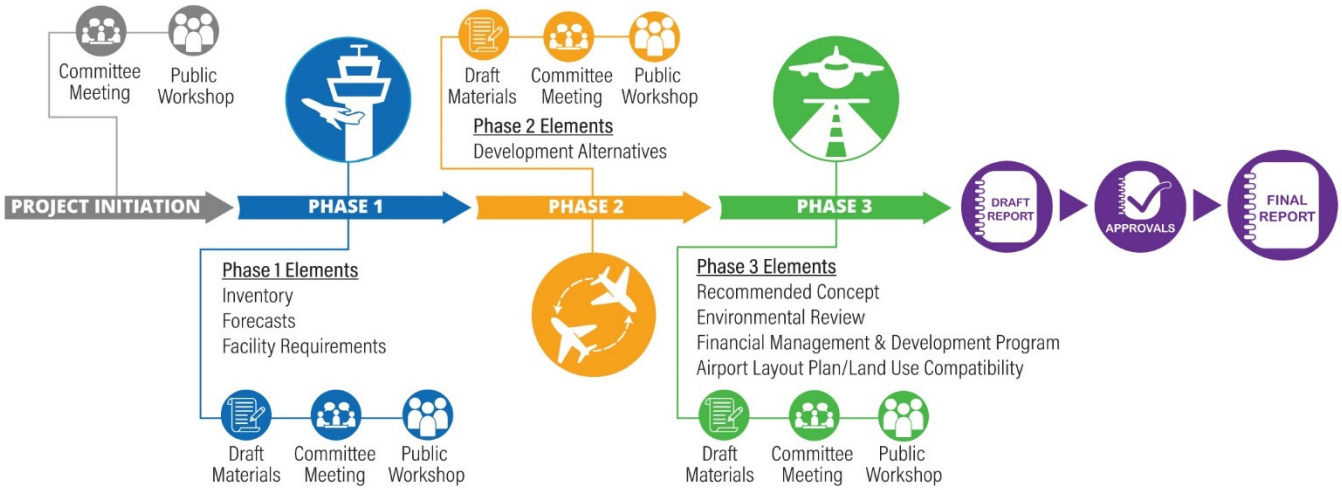


Figure iC: Master Plan Study Process

Chapter One – Inventory of Existing Conditions 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 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 have relevance to the Master Plan are also collected.

Chapter Two – Aviation Demand Forecasts examine the potential aviation demand at CPT. 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 on FAA 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 TxDOT for review and approval.

Chapter Three – Demand Capacity and Facility Requirements determines 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.

Chapter Four – 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.

Chapter Five – Master Plan Concept provides both a graphical and narrative description of the recommended plan for the use, development, and operation of CPT. This chapter also includes updates to the Airport Layout Plan (ALP) according to guidelines set in FAA 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.

Chapter Six – Financial Management and Development Program provides a proposed capital needs program, which defines the schedules and costs that may be associated with the development plan. The 20-year capital program also includes an overview of various funding sources to aid in the funding of the identified projects on the recommended concept.

The final step in the master plan process will include production of a draft final report and ALP drawings in print and digital form. These materials will be presented to the City of Cleburne and TxDOT 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, CPT 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, a Planning Advisory Committee (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 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 three 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. 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: cleburne.airportstudy.net.

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. 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 – Cleburne Regional Airport

STRENGTHS	• Airport can market and propagate economic opportunities (hangar tenants, small business, etc.) • Abundance of real estate on and adjacent to airport property • Proximity of airport to City business center • Immediate access to highway/tollway • Airport sits outside DFW/DAL Class B airspace • Airport management is on-site and dedicated
WEAKNESSES	• Utility infrastructure to the south of airport property is lacking • Housing development west of the airport • Runway pavement strength is low considering some operators (Falcon 900 is a bi-monthly visitor)
OPPORTUNITIES	• Airport can serve the growing population of southern areas of Dallas-Fort Worth Metroplex • Future opportunities for advanced air mobility options • Airport needs to maximize the demand for the airport when compared to other local airports • Room for improvement regarding community-airport relations
THREATS	• Housing developments, encroachment, most recently to the west of the airport • Local airports in the region might be better equipped to address general aviation demand • Awareness and advocation for airport are lacking

MASTER PLAN SUMMARY

Planned development at CPT is focused on accommodating projected growth in activity and meeting FAA airfield design standards. The capital improvement program (CIP) that has been developed identifies both airside (runways, taxiways, navigational aids, etc.) and landside (terminal building, aprons, hangars, access roads, vehicle parking, etc.) facility needs.

To properly plan for future demand that may occur, aviation demand forecasts were prepared. Because of the cyclical nature of the aviation industry and the economy as a whole, it is virtually impossible to predict with certainty year-to-year fluctuations in activity when looking five, ten, and twenty years into the future. Recognizing this reality, the Master Plan is keyed toward potential demand "horizon" levels rather than future dates in time. These "planning horizons" were established as levels of activity that will call for consideration of the implementation of the next step in the airport master plan program. By developing the airport to meet the aviation demand levels instead of specific points in time, the airport will serve as a safe and efficient aviation facility which will meet the operational demands of its users while being developed in a cost-effective manner. This program allows the City to change specific development in response to unanticipated needs or demand.

The forecast approach used historical and forecasted general aviation and economic trends of the airport, the State of Texas, and the nation. This resulted in modest growth projections for CPT through the planning period of the Master Plan, which is summarized in **Figure iD**. These forecasts were reviewed and approved by TxDOT, which acts on behalf of the FAA in Texas as part of the State Block Grant Program.

	BASE YEAR	Short-Term (1-5 year)	Intermediate-Term (6-10 year)	Long-Term (11-20 year)
BASED AIRCRAFT				
Single Engine Piston	111	115	120	133
Multi-Engine Piston	3	3	3	3
Turboprop	1	3	6	10
Jets	3	5	7	11
Helicopters	1	2	3	5
TOTAL BASED	**119**	**128**	**139**	**162**
ANNUAL OPERATIONS				
Itinerant				
Air Taxi	300	400	550	750
General Aviation	10,444	12,100	13,000	13,700
Military	24	24	24	24
Total Itinerant	***10,768***	***12,524***	***13,574***	***14,474***
Local				
General Aviation	31,132	34,100	36,100	40,300
Military	0	0	0	0
Total Local	***31,132***	***34,100***	***36,100***	***40,300***
TOTAL OPERATIONS	**41,900**	**46,600**	**49,700**	**54,800**
PEAKING				
Peak Month	4,190	4,660	4,970	5,480
Design Day	140	155	166	183
Busy Day	175	194	207	228
Design Hour	21	23	25	27

Figure iD: Master Plan Forecast Summary

MASTER PLAN CONCEPT

The master plan concept includes improvements to the airfield and landside areas to satisfy FAA design and safety standards and to meet current and forecast needs. Airfield design standards are based on the characteristics of the airport's critical design aircraft, which is represented by both the Beechcraft King Air 300 and the Cessna Citation II/SP currently and adding the Citation Sovereign/Latitude in the future condition. Based on these aircraft and the planned instrument approach visibility minimums of 1-mile, Runway 15-33 is planned to meet Runway Design Code (RDC) B-II-5000 airfield design standards.

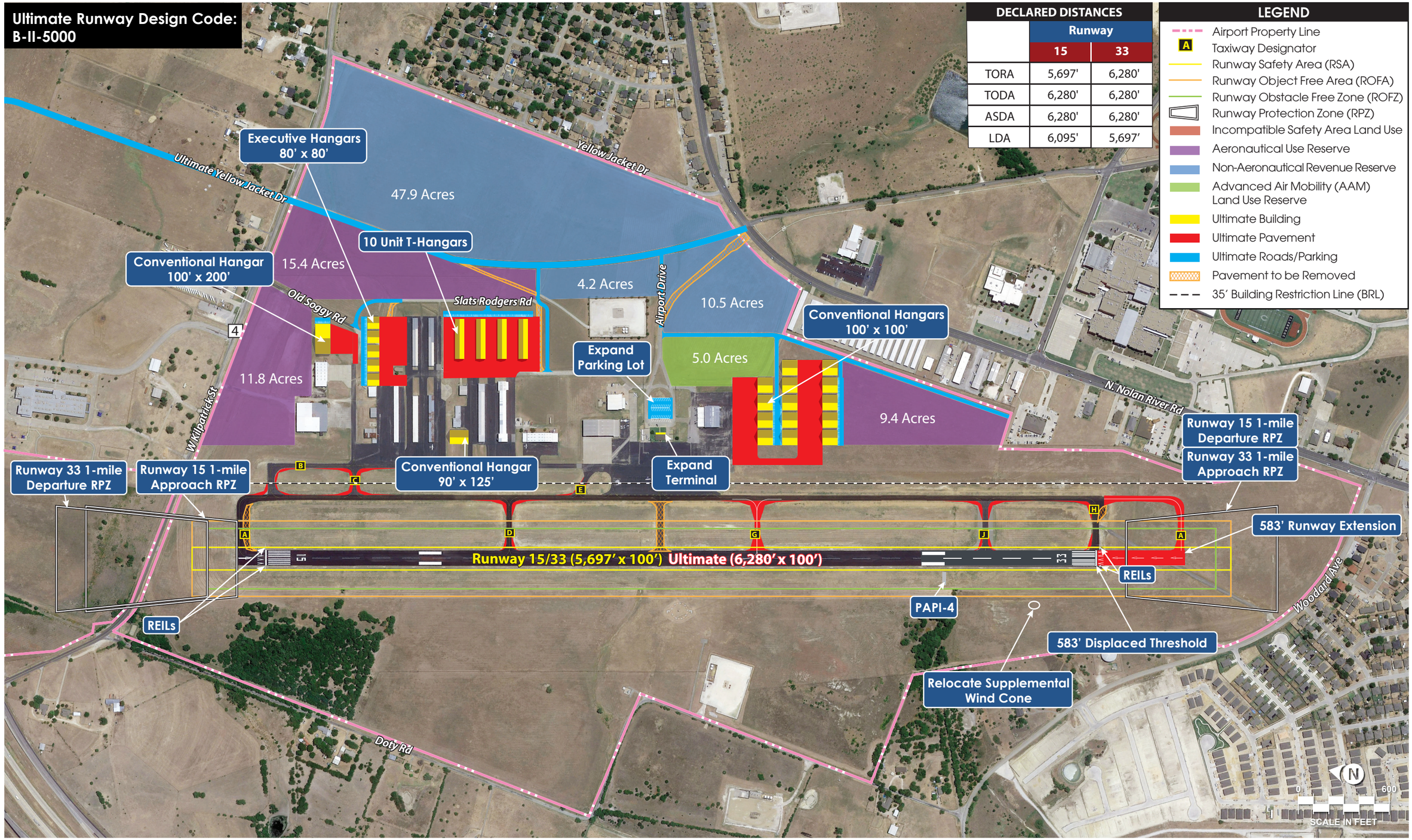
The following summarizes the Recommended Master Plan Concept, which is depicted on **Exhibit iA**. A more detailed discussion of the Recommended Master Plan Concept can be found in Chapter Five.

Runway 15-33

- Extension to 6,280 feet planned to accommodate larger general aviation business jets that have the potential to operate and hangar at CPT in the future. A 583-foot extension of the runway is planned to the south.
- Maintain current runway width of 100 feet.
- Improve the pavement strength to 60,000 pounds dual wheel loading (DWL) to accommodate for heavier general aviation aircraft that use the airport.
- Increase the current GPS-based Runway 33 instrument approach procedure visibility minimum from 7/8-mile to 1-mile; the current Runway 15 1-mile instrument approach procedures are planned to be maintained as such through the planning period.
- Establish a 583-foot displaced threshold on Runway 33 so that the Runway Protection Zone (RPZ) associated with the instrument approach procedure no longer includes incompatible housing and commercial land uses.
- Add a Precision Approach Path Indicator (PAPI) to Runway 33 to improve vertical guidance to the runway surface while landing.

Taxiway Improvements

The taxiway system at CPT is planned to be maintained at a width of 35 feet to meet Taxiway Design Group (TDG) 2A standards. Some non-standard taxiway geometry issues are addressed in the Concept, including shifting Taxiway G 640 feet south to remove direct access from the apron to the runway and trimming the Taxiway A entrance to Runway 15 down from 80 to 35 feet. The holding bay on Taxiway H will be removed when the parallel taxiway is extended to coincide with the runway extension.



DECLARED DISTANCES	Runway	
	15	33
TORA	5,697'	6,280'
TODA	6,280'	6,280'
ASDA	6,280'	6,280'
LDA	6,095'	5,697'

LEGEND

- Airport Property Line
- A — Taxiway Designator
- Runway Safety Area (RSA)
- Runway Object Free Area (ROFA)
- Runway Obstacle Free Zone (ROFZ)
- Runway Protection Zone (RPZ)
- Incompatible Safety Area Land Use
- Aeronautical Use Reserve
- Non-Aeronautical Revenue Reserve
- Advanced Air Mobility (AAM) Land Use Reserve
- Ultimate Building
- Ultimate Pavement
- Ultimate Roads/Parking
- Pavement to be Removed
- 35' Building Restriction Line (BRL)

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Passenger Terminal Building and Parking

The existing terminal building has approximately 2,800 square feet made up of functional areas serving passengers and pilots, such as flight planning, lounge, and restrooms, as well as office space and operational areas for airport staff. As aviation activity levels grow, additional space, particularly for travelers, will become necessary. The Master Plan includes a 630-square-foot expansion of the terminal to allow for growth and remodel opportunities in order to optimize the footprint of the building.

Parking at the terminal building is lacking in the current condition with only 13 parking positions. An expansion of the parking area includes paving the space contained within Airport Drive and adding approximately 50 more parking spaces.

General Aviation

New general aviation facilities, including aircraft storage hangars and aprons, are planned at various location throughout the airport. Development of general aviation facilities should only occur as dictated by demand. The locations and sizes of hangars and aprons proposed in the Concept may not reflect the needs of future developers and their customers, but rather it is intended to be used as a guide for airport staff when considering new developments. CPT has adequate property available for a variety of operations including fixed-base operators (FBOs), specialty aviation service operators (SASOs), maintenance/ repair/overhaul (MRO) operators, and private aircraft operators. New aprons, taxilanes, and vehicle access roads and parking lots are included to accommodate these general aviation developments.

Surface Road Rerouting

The City of Cleburne has existing plans to reroute Yellow Jacket Drive though the eastern portion of the airport property. As a result, Airport Drive will be adjusted to accommodate the new roadway. Additional surface road changes include adjustments to Slats Rodgers Road and Old Soggy Road to improve traffic flow and access in and around the airport. A new access road is also planned to extend south from Airport Drive to provide access to future hangar developments.

Advanced Air Mobility Reserve

An emerging technology in aviation is advanced air mobility (AAM), which uses electrically powered vertical takeoff and landing (eVTOL) aircraft to move people short distances. In the near future, this may include from Cleburne to vertiports in the Dallas-Fort Worth Metroplex. As of the completion of this Master Plan, the FAA and private companies had not yet developed standards for vertiports. However, the Concept includes five acres of land adjacent to Airport Drive reserved for the construction of an AAM vertiport facility. However, the land may also be reserved for traditional aeronautical uses should the airport or City deem it necessary.

Non-Aviation Development Reserve

With the new location of Yellow Jacket Drive, the eastern portion of the airport will be dissected into areas that could not be used for aeronautical development. Furthermore, it is prudent to establish some form of separation between aeronautical facilities and land uses outside the airport, such as residential or commercial zones. Therefore, much of the area east of the airport is reserved for non-aviation developments, such as hotels and retail businesses. These 62 acres may be developed to provide additional revenue streams for the airport; any income generated from land leases on airport property must be kept and spent on airport maintenance and improvement projects.

DEVELOPMENT FUNDING

The full implementation of this Master Plan is likely to take two decades or more at a cost of $55.9 million in 2022 dollars. The breakdown of funding over the three planning horizons is presented in **Table iB**. Approximately 88.8 percent of the total is eligible for grant funding from the Airport Improvement Program (AIP), which is administered by the FAA or TxDOT. The funding source for the AIP is the Aviation Trust Fund, which is funded through various user fees and taxes on airline tickets, aviation fuel, and aircraft parts. A more detailed discussion of the Capital Improvement Program can be found in Chapter Six of this Master Plan.

TABLE iB | CPT Development Funding Summary

Planning Horizon	Total Cost	FAA/TxDOT-Eligible[1]	Local Share
Short-Term Program (1-5 years)	$8,474,640	$7,597,176	$877,464
Intermediate-Term Program (6-10 years)	$12,213,135	$10,801,000	$1,412,135
Long-Term Program (11-20 years)	$35,262,100	$31,279,825	$3,982,275
Total Program Costs	**$55,949,875**	**$49,678,001**	**$6,271,874**

[1]This includes various grant-in-aid sources from FAA and/or TxDOT and is discussed in detail in Chapter Six.

GOING FORWARD

With the Airport Master Plan completed, the most important challenge is implementation. The cost of developing and maintaining aviation facilities is an investment which yields impressive benefits for the City of Cleburne. This plan and associated development program provide the tools the City will require to meet the challenges of the future. By providing a safe and efficient facility, CPT will continue to be an asset to the City of Cleburne and surrounding region.