CHAPTER ONE

Inventory

The inventory of existing conditions is the initial step in the preparation of the Cleburne Regional Airport (CPT) Master Plan. The inventory will serve as an overview of the airport's physical and operational features, including facilities, users, and activity levels, as well as specific information related to the airspace, air traffic activity, and role of the airport. Additionally, a summary of socioeconomic characteristics and a review of existing environmental conditions on and adjacent to the airport are detailed, which will provide further input into the study process.

Information provided in this chapter serves as the baseline for the remainder of the Master Plan, which is compiled using a wide variety of resources, including: applicable planning documents; on-site visits; interviews with airport staff, tenants, and users; aerial and ground photography; federal, state, and local publications; and project record drawings.

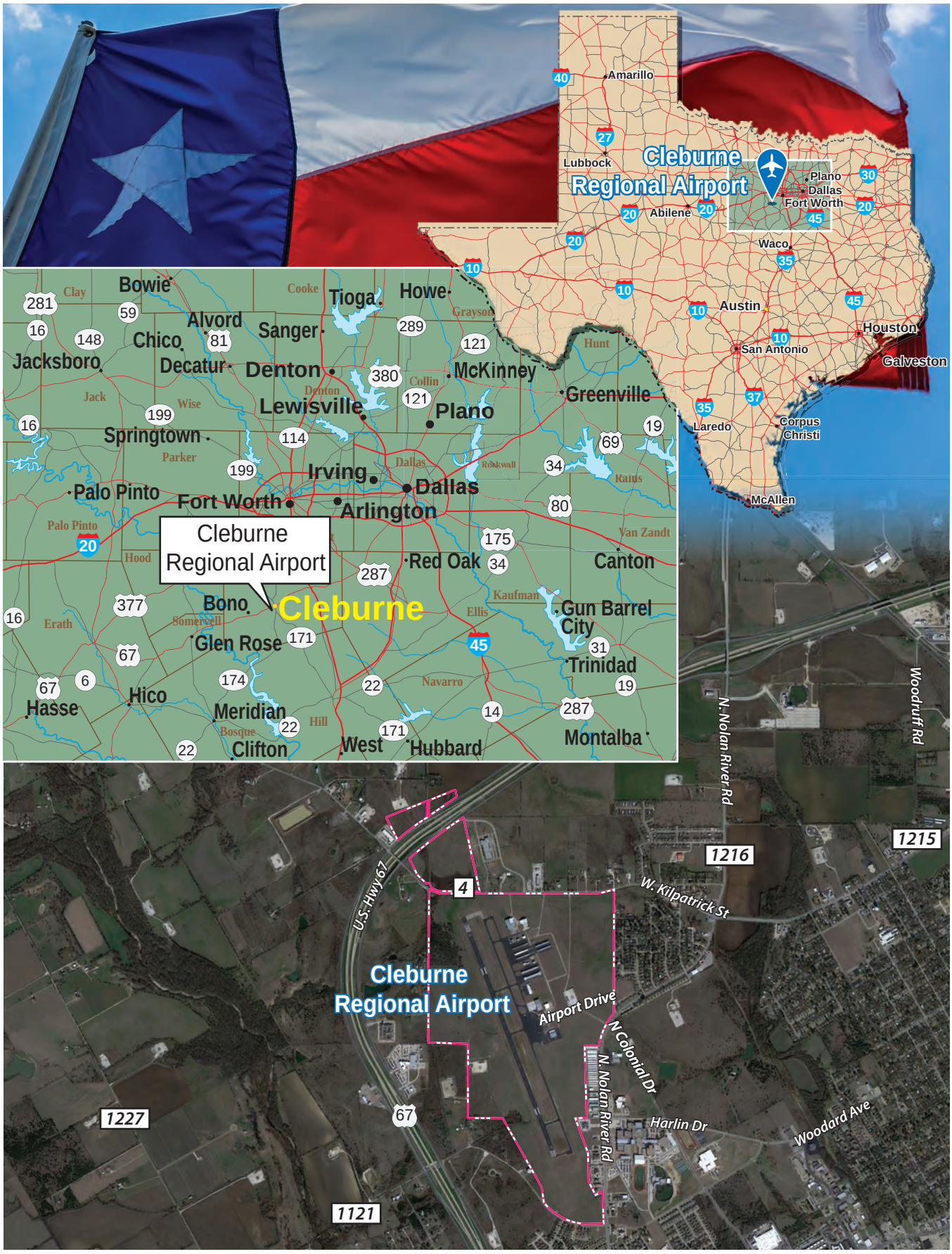
AIRPORT SETTING

CPT is located in the City of Cleburne, Texas, which is a satellite community of the Dallas-Fort Worth Metroplex. The Metroplex, with a population of more than 7.5 million, encompasses 11 counties and is the fourth largest population center in the United States. Cleburne serves as the seat of government for Johnson County. As of the 2020 census, the county had a population of 179,927, and the city population was 31,084.

CPT, which encompasses approximately 440 acres, is situated at an elevation of 854 feet mean sea level (MSL), two miles northwest of the city's central business district. Airport access is provided locally by Kilpatrick St and Nolan River Road, with U.S. Highway 67 less than a mile away. Lake Pat Cleburne is approximately two miles to the south. **Exhibit 1A** depicts CPT in its local and regional setting.

SOCIOECONOMIC CHARACTERISTICS

Socioeconomic characteristics are collected and examined to derive an understanding of the dynamics of growth near the airport. This information is essential in determining aviation demand level requirements, as most general aviation demand is related to the socioeconomic condition of the surrounding region. Statistical analysis of population, employment, income, and gross regional product


Amarillo
Lubbock
Cleburne
Regional Airport
Abilene
Plano
Dallas
Fort Worth
Waco
Austin
Houston
San Antonio
Galveston
Corpus
Christi
Laredo
McAllen
Greenville
Bowie
Alvord
Sanger
Chico
Jacksboro
Decatur
Denton
McKinney
Lewisville
Plano
Springtown
Irving
Dallas
Palo Pinto
Fort Worth
Arlington
Cleburne
Regional Airport
Red Oak
Canton
Bono
Cleburne
Gun Barrel
City
Glen Rose
Trinidad
Hico
Hasse
Meridian
Clifton
West
Hubbard
Montalba
Tioga
Howe
Cleburne
Regional Airport
U.S. Hwy 67
Airport Drive
N Colonial Dr
N. Nolan River Rd
W. Kilpatrick St
Harlin Dr
Woodard Ave
Woodruff Rd
1215
1216
1227
1121
4
67

(GRP) trends provide a picture of the economic strength of the region, as well as the ability of the area to sustain a strong economic base into the future. Additional socioeconomic data will be used in the forecast chapter; however, the information provided in this chapter will introduce socioeconomic trends in the study area.

Exhibit 1B details the socioeconomic profile of Johnson County, including future projections. The data shows that county population has grown steadily over the past 10 years at an annual rate of 1.62 percent with a total population of 177,569 in 2020. Projections indicate that population will grow at a slower pace than previously, with an estimated 221,136 people living in the county by 2041 (1.04% CAGR). Employment has grown faster than population over the same period (2.08% CAGR) and is expected to continue to grow faster than population. Through the next 20 years, employment is projected to climb from 77,076 in 2020 to 122,981 in 2041. The largest industries in Johnson County are construction, retail trade, government, and manufacturing. A selection of the top employers in the county is listed on **Exhibit 1B**.

Per capita personal income (PCPI) levels in the county were at $41,503 in 2020, representing a growth of nearly two percent over the past decade. This level is expected to increase at nearly the same rate through 2041, with PCPI anticipated at $60,703 by 2041 (1.91% CAGR).

As stated previously, socioeconomic indicators are an insightful tool to the current and historical economic strength of the region and will provide valuable in forecasting processes in the next chapter.

CLIMATE

Weather conditions are important to the planning and development of an airport. Temperature is an essential factor in determining runway length requirements, while wind direction and speed are used to determine the optimal runway orientation. The need for navigational aids and lighting is determined by the percentage of time that visibility is impaired due to cloud coverage or other conditions.

Cleburne has hot and humid summers with an average high temperature in August of 96.4 degrees Fahrenheit (F). Winters are generally mild to cool. January is the coldest month with an average low temperature of 32.6°F. According to the Köppen climate classification system, Cleburne has a Humid-Subtropical climate. Due to its location in North Texas, Cleburne is susceptible to supercell thunderstorms, which can produce large hail and tornadoes. The area receives a total of 37.6 inches of precipitation during an average year, with May being the rainiest month. **Exhibit 1C** summarizes weather and wind patterns at the airport.

AIRPORT ADMINISTRATION

The airport is owned and operated by the City of Cleburne which employs a professional management staff which includes an Airport Manager who reports directly to the City Manager. An Airport Associate and Crew Leader report to the Airport Manager, and two part-time Operations personnel report to the crew leader.

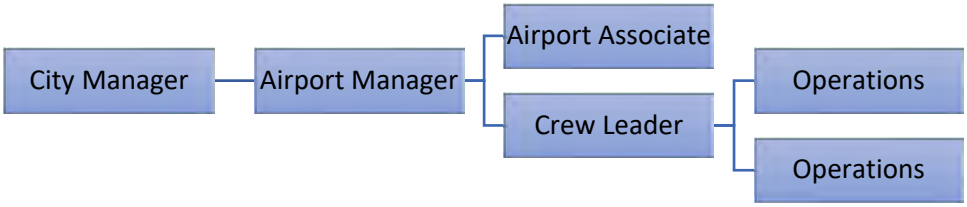


Figure 1A: Airport Organization Structure

An Airport Advisory Board meets regularly throughout the year to discuss matters regarding the operation of the airport. The Board is comprised of five members, serving overlapping two-year terms, as well as a staff of two: the Airport Manager and Secretary. Board members are nominated by a selection committee before being appointed by the City Council. Each member is eligible to serve two terms.

ECONOMIC IMPACT

In 2018, TxDOT conducted a study of the impact and relationships of airports in Texas to the economic health of the state. The *Texas Aviation Economic Impact Study* examined economic benefits provided by the state's 289 airports. Impact types include: direct impacts, which account for activities by on-airport businesses and visitors, who spend money at locations such as hotels and restaurants; multiplier impacts, which result from the recirculation of direct spending and consists of business expenses or goods and services purchases; and total economic impacts, which are the combination of both direct and multiplier impacts. **Table 1A** and **Figure 1B** summarize the economic impact of CPT.

TABLE 1A | Airport Economic Impact

	CPT	All Texas System Airports
Total Economic Activity	$8.9 million	$94.3 billion
Total Payroll	$2.7 million	$30.1 billion
Total Employment	96 jobs	778,955 jobs

Source: Texas Aviation Economic Impact Study: Cleburne Regional Airport (2018)

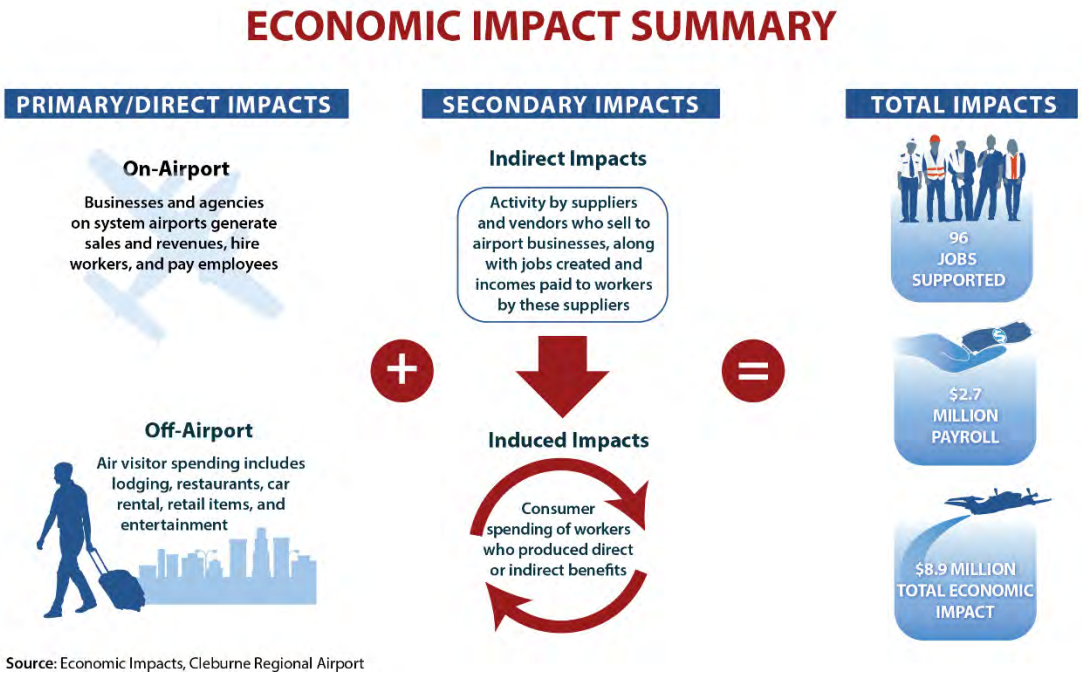
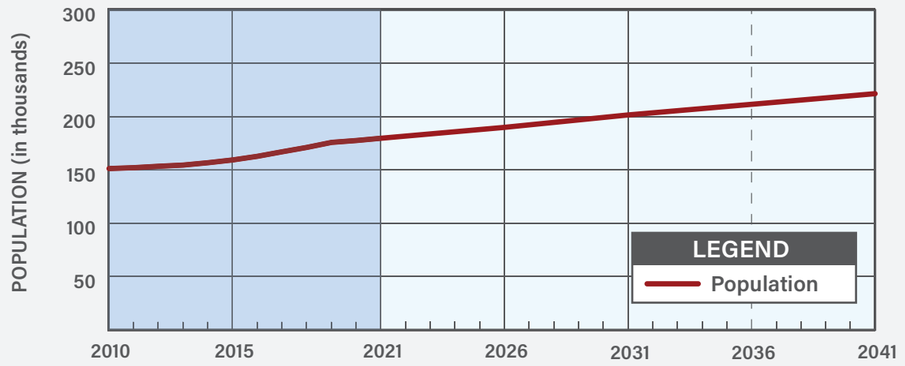


Figure 1B: Economic Impact of CPT

POPULATION

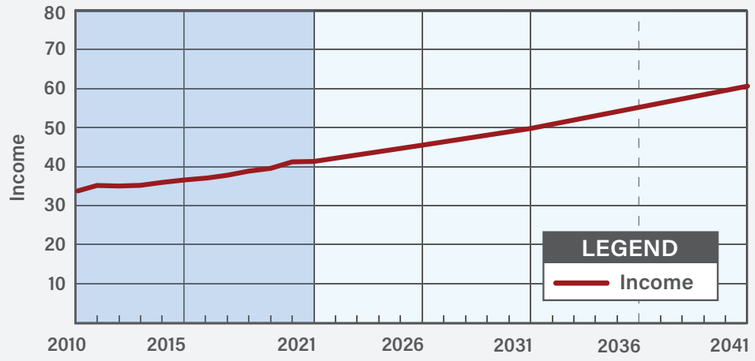


INDUSTRIES

- 11.0% Construction
- 10.5% Retail Trade
- 9.4% State and Local Government
- 8.5% Manufacturing
- 8.4% Other Services, except Public Administration
- 7.0% Accommodation and Food Services
- 6.2% Health Care and Social Assistance
- 5.7% Administration and Waste Services
- 5.6% Transportation and Warehousing
- 4.5% Real Estate
- 4.2% Finance and Insurance
- 3.8% Professional and Technical Services
- 3.6% Farm
- 2.9% Mining
- 2.9% Wholesale Trade
- 1.6% Educational Services
- 1.4% Arts, Entertainment, and Recreational
- 1.1% Information
- 0.4% Foresting, Fishing, and Related Activities
- 0.4% Federal Government, Military
- 0.4% Federal Government, Civilian
- 0.4% Management of Companies
- 0.3% Utilities

INCOME

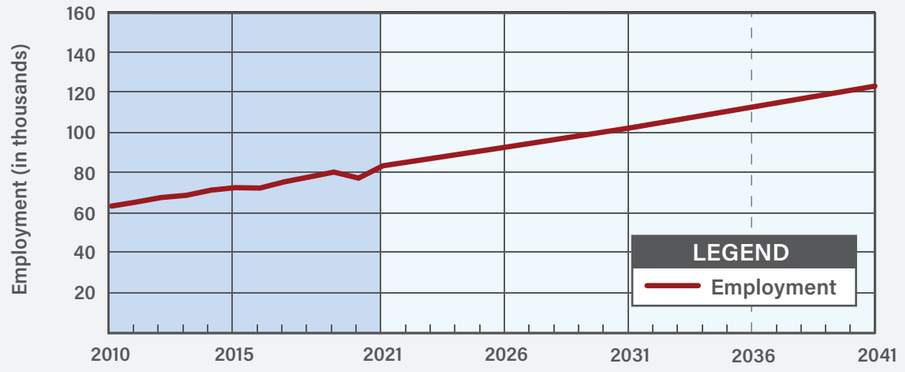
(Mean Household Total Personal Income in 2012 dollars)

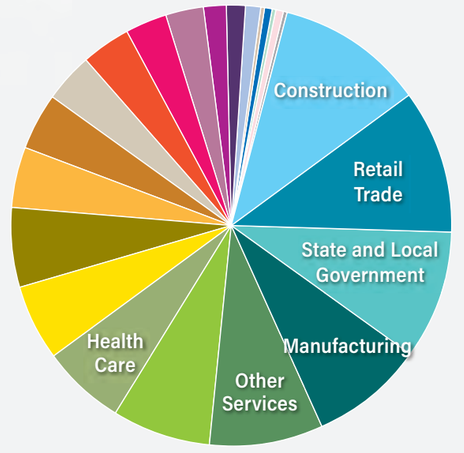


MAJOR EMPLOYERS

EMPLOYER	INDUSTRY
AFGD Inc.	Glass Manufacturer
City of Burleson	Government
City of Cleburne	Government
Clebune School District	Education
Gunderon Southwest	Railroad Car Manufacturer
Halliburton Energy	Wholesale Trade
Harris Methodist Wall Regional	Health Care
Home Depot	Retail Trade
James Hardie Building Products	Building Materials Manufacturer
Johnson County	Government

EMPLOYMENT





Sources: Woods & Poole Complete Economic and Demographic Data Source (CEDDS) 2021

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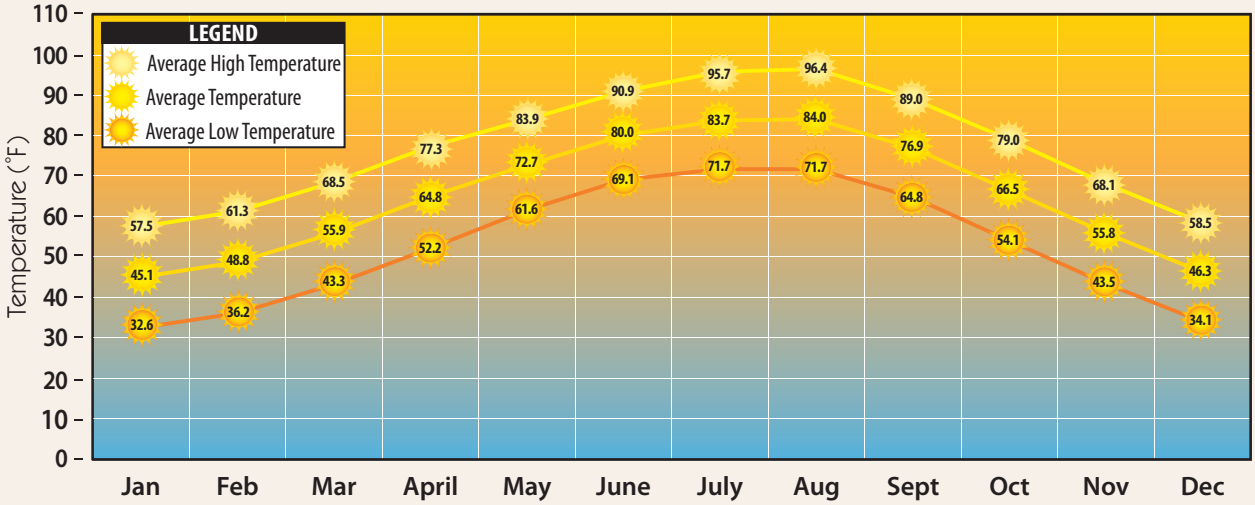
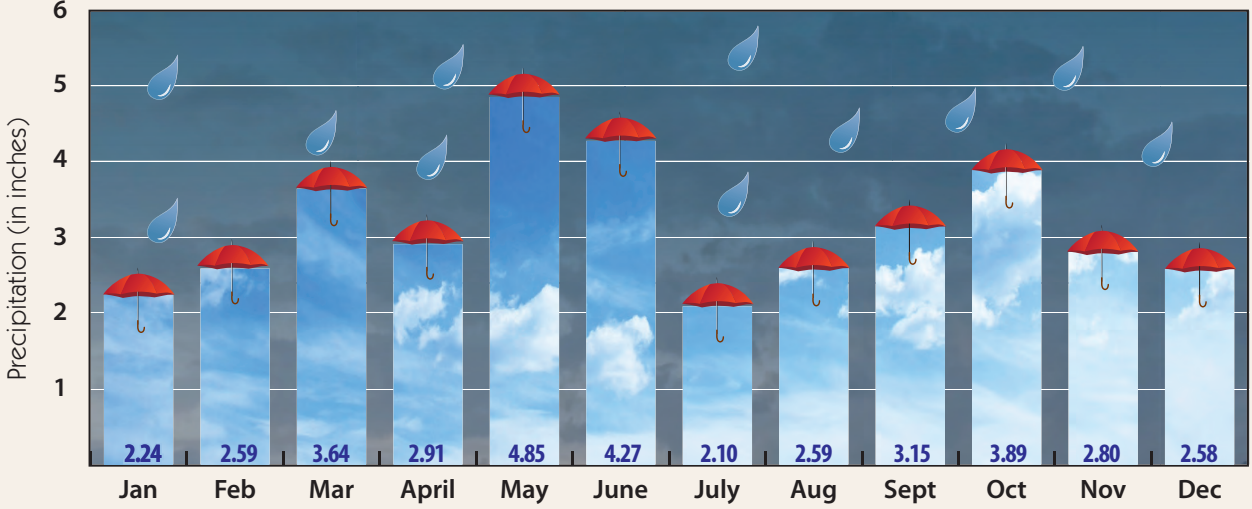
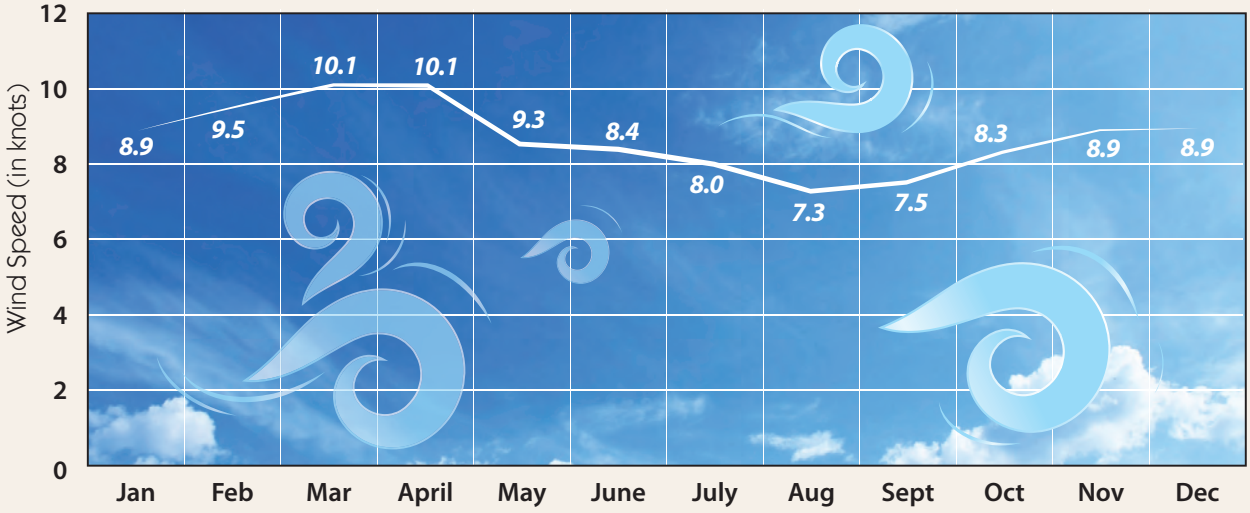
AVERAGE MONTHLY TEMPERATURES



AVERAGE MONTHLY PRECIPITATION



AVERAGE MONTHLY WIND DATA



Source: NOAA National Centers for Environmental Information Climate Normals, 1981-2010 -- Station: Cleburne

THE AIRPORT'S SYSTEM ROLE

Airport planning takes place at the local, state, and national levels, and each has a different emphasis and purpose.

- **Local:** At the local level, CPT last updated their Airport Master Plan in 2010. The Airport Layout Plan was last updated at the same time. Other City-drafted documents also factor into airport planning on a local level.
- **State:** The Texas Department of Transportation (TxDOT) – Aviation Division created the *Texas Aeronautical Facilities Plan* in 1970. It has been renamed the *Texas Airport System Plan* (TASP) and is updated regularly, with the most recent revision published in March 2010. Aviation Division planners meet annually with one-third of TASP members and community leaders to develop plans to improve and maintain the Texas aviation infrastructure.
- **National:** CPT is included in the FAA *National Plan of Integrated Airport Systems* (NPIAS). The NPIAS lists the airports across the country that are important to the system of airports and are therefore eligible for FAA grant funding for certain capital improvements. The NPIAS classifies both commercial service and general aviation airports based on certain operational characteristics of each airport.

LOCAL AIRPORT PLANNING

Airport Master Plan (2010) | The Airport Master Plan is the primary local planning document that provides a 20-year airport development vision based on aviation demand forecasts. The 2010 *Airport Master Plan* used 2005 for its aviation forecast baseline. Given the inevitable uncertainties as the master plan ages, the FAA recommends airports update their master plans every five to ten years, or as necessary to address any significant changes. Primary recommendations from the 2010 Airport Master Plan included an ultimate runway length of 6,500 feet, as well as improvements to instrument approach capabilities, including approach lighting systems and precision runway markings. On the landside, additional apron area and aircraft tie-downs, a larger terminal building, and additional hangars were recommended.

North Central Texas General Aviation and Heliport System Plan (2012) | Starting in 2006, the North Central Texas Council of Governments (NCTCOG) embarked on a multi-year study to evaluate the demand and future needs of the 35 general aviation (GA) airports and five commercial service airports in the 19-county North Central Texas Region. Divided into subregions, each area was evaluated for potential development needs to meet expected demand through 2035. CPT was among the list of airports evaluated in the South Subregion and is categorized as a "public GA" airport.

STATE AIRPORT PLANNING

CPT is included in the 2010 *Texas Airport System Plan* as one of 67 general aviation (GA) business/corporate airports. In general, these airports are designated by TxDOT to enhance and encourage commercial activity in an area by providing access to turboprop and business jet aircraft and are usually located more than 30 minutes from the nearest commercial service or reliever airport. The

Texas Airport System Plan further identifies CPT as a "reliever" airport, providing increased access to general aviation to the community while relieving congestion at large commercial service airports. It is important to note that this is **not** the same reliever designation as defined by the FAA. CPT meets all but one of the minimum design standards; the lowest visibility minimum approach available at the airport is only ⅞-mile. **Table 1B** details the state standards in more detail.

TABLE 1B | Minimum Standards for TASP Business/Corporate GA Airports

AIRPORT CRITERIA	MINIMUM DESIGN STANDARDS
Airport Reference Code	B-II through D-IV
Design Aircraft	Business Jet
Runways	
Length	5,000 feet
Width	100 feet
Strength (single wheel)	30,000 lbs.
Lighting	Medium-Intensity Runway Lighting (MIRL)
Approach	Non-Precision
Visibility Minimums	250' – ¾-mile LPV
Taxiways	
Type	Full-length Parallel
Services	
Services Available	Terminal, Restroom, Telephone, Fuel, Attended 18 hrs.

Source: Texas Airport System Plan (2010)

FEDERAL AIRPORT PLANNING

Many of the nation's existing airports were either initially constructed by the federal government, or their development and maintenance was partially funded through various federal grant-in-aid programs to local communities. The system of airports existing today is therefore due, in large part, to federal policy that promotes the development of civil aviation. As part of a continuing effort to develop a national airport system, the U.S. Congress has maintained a national plan for the development and maintenance of airports.

The FAA maintains a database of public-use airports eligible for Airport Improvement Program (AIP) funding called the *National Plan of Integrated Airport Systems* (NPIAS). The NPIAS is published and used by the FAA in administering the AIP, which is the primary source of federal funds for airport improvement projects across the country. The AIP is funded exclusively by user fees and user taxes, such as those imposed on fuel and airline ticket sales. An airport must be included in the NPIAS to be eligible for federal funding assistance through the AIP.

The most current plan is the 2023-2027 NPIAS, which identifies 3,295 public-use airports (3,287 existing and eight proposed) that are important to the national air transportation system. The plan estimates approximately $62.4 billion in AIP-eligible and justified airport development projects will occur between 2023 and 2027. **Table 1C** identifies the types of airports included in the NPIAS.

TABLE 1C | Activity and Development at NPIAS Airports

Number of Airports	Airport Category	Percentage of Airports	Percentage of Runways	Percentage of 2018 Total Enplanements	Percentage of All Based Aircraft[1]	Percentage of Total Operations	Percentage of NPIAS Cost[2]
30	Large Hub	1	2	69	1	10	32.0
35	Medium Hub	1	2	18	2	5	14.9
80	Small Hub	2	4	9	5	7	9.7
238	Non-Hub	7	9	3	10	10	12.2
383	**Primary Subtotal**	**11**	**17**	**99**	**18**	**32**	**68.8**
107	National	3	4	-	12	11	5.3
501	Regional	15	17	-	22	25	9.0
1,179	Local	36	34	-	20	23	10.3
904	Basic	28	23	-	3	7	6.0
213	Unclassified	7	5	-	1	2	0
2,904	**Nonprimary Subtotal**	**89**	**83**	**0.07**	**58**	**68**	**30.6**
3,287	**Total NPIAS Airports**	**100**	**100**	**100**	**76**	**100**	**100**

[1] Based on active general aviation fleet of 204,380 aircraft in 2020. The remaining aircraft are based at other, non-NPIAS airports.
[2] These costs are rounded and do not include the cost for new airports (0.6 percent)

Source: National Plan of Integrated Airport Systems, 2023-2027

CPT is currently classified as a general aviation (GA) airport in the NPIAS. GA airports are public airports that do not have scheduled commercial air service or has air service with less than 2,500 passenger boardings (enplanements) each year. The NPIAS further categorizes general aviation airports into four subcategories: National, Regional, Local, and Basic, which are identified in **Table 1D**. CPT is categorized as a "Local GA" airport. As a local airport, CPT provides the community with access to both local and regional markets. Local airports may also have some long-distance and international flying. These types of airports generally have high levels of flight training activity and occasional jet traffic.

TABLE 1D | General Aviation Airport Categories

ROLE	DESCRIPTION
National	Located in metropolitan areas near major business centers and support flying throughout the U.S. and the world. These airports provide alternatives to the busy primary airports. National airports have very high levels of activity with many jets and multiengine propeller aircraft. National airports average 203 total based aircraft, including 39 jets.
Regional	Regional airports are also in metropolitan areas and support regional economies with interstate and some long-distance flying. These airports have some jet and multiengine propeller activity. Regional airports average 86 total based aircraft, including three jets.
Local	A critical component of the general aviation system, local airports provide communities with access to local and regional markets. While still located near larger population centers, these airports are not always in metropolitan areas. Flight training and emergency services are a common activity. Local airports average 32 based aircraft with no jets.
Basic	Links the community with the national airport system and supports general aviation activity (e.g., emergency response, air ambulance, flight training, personal flying). These airports have moderate levels of activity with an average of nine based aircraft and no jets.

Source: National Plan of Integrated Airport Systems, 2023-2027

AIRSIDE FACILITIES

Airside facilities are those which facilitate aircraft movements between the air and ground. Generally, these facilities include runways, taxiways, airport lighting and markings, and navigational aids. Airside facilities at CPT are depicted on **Exhibit 1D**.

RUNWAYS

Cleburne Regional Airport is served by a single runway, designated Runway 15-33, which is oriented in a northwest/southeast direction. It is 5,697 feet long and 100 feet wide, constructed of asphalt, and is in excellent condition. Runway 15 has a displaced landing threshold that is 185 feet long which can be used for takeoff but not landing. The surface has a strength rating of 30,000 pounds for single-wheel type landing gears. The runway has non-precision markings which consist of a centerline, threshold, runway identifier, and aiming point markings. The runway surface slopes south with a gradient of 0.15 percent with the Runway 15 end being at an elevation of 853.7 feet mean sea level (MSL) and the Runway 33 end at 844.9 feet MSL. Runway 15-33 is equipped with white medium-intensity runway lights (MIRL) to illuminate the runway edges at night. Standard left-hand traffic patterns are used for Runway 33, while aircraft operators must follow a right-hand traffic pattern for Runway 15.

TAXIWAYS

The taxiway system at CPT consists of parallel and connector taxiways constructed of asphalt, with a small section constructed of concrete, and is depicted on **Exhibit 1D**. Taxiway widths range from 30 feet to 80 feet. All taxiways have blue medium intensity taxiway lighting (MITL) and yellow centerline markings. Primary taxiways serving the airfield include:

Runway 15-33 with associated taxiways (rehabilitation project in progress) with primary apron at right

- Taxiway A is a full-length parallel taxiway providing access to both ends of Runway 15-33. It is 35 feet wide at the south end of the pavement, expanding to approximately 40 feet at midfield, and widening to 80 feet at the Runway 15 entrance. The taxiway is located 400 feet from the runway, centerline to centerline. Taxiway A also provides access to the primary ramp and terminal area.
- Taxiway B is a taxiway that runs partially parallel to Taxiway A and is 30 feet wide. It extends north, from the primary ramp and terminal area at midfield, past Taxiway C, then turns west to join Taxiway A. It is located 210 feet, centerline to centerline, from Taxiway A.
- Four entrance/exit taxiways – designated D, G, J, and H – connect Taxiway A to the runway.

Table 1E summarizes details for each taxiway at the airport.

TABLE 1E | Taxiway Characteristics

Designation	Width (feet)	Description
A	35-80	Primary, full-length parallel taxiway serving Runway 15-33
B	30	Partial parallel taxiway serving Taxiway A, terminal ramp, and aircraft hangars
C	35	Connector taxiway from Taxiway A to corporate hangars
D	40	Connector taxiway from Runway 15-33 to Taxiway A
E	30	Acute-angled taxiway from Taxiway A to Taxiway B
G	40	Connector taxiway from Runway 15-33 to Taxiway A and terminal ramp
J	35	Connector taxiway from Runway 15-33 to Taxiway A

Source: Coffman Associates analysis

HOLDING APRONS

CPT has one holding apron located on Taxiway A prior to the Runway 33 entrance. The holding apron, which sits east of the runway hold line, offers approximately 724 square yards (sy) of holding space. There are no holding aprons prior to Runway 15 but rather the widening of the surface of Taxiway A to 80 feet. Neither of these hold aprons meet current FAA-approved design standards and will be discussed in more detail in Chapter Three.

TERMINAL APRON

The primary terminal apron at CPT is located midfield, along Taxiway A and at Taxiway G. The apron is approximately 16,800 square yards (sy) and has 22 aircraft tiedown spots. The terminal apron provides access to the general aviation terminal building, as well as to three box hangars. Vehicle movement on and off the apron is permitted through an access gate from Airport Drive.

Primary apron with terminal building and fuel farm

RUNWAY CHARACTERISTICS	
Runway	**Rwy 15-33**
Length (ft)	5,697
Width (ft)	100
Surface & Condition	Asphalt, Excellent
End Elevation (MSL)	853.7 | 844.9
Gradient	0.15%
Load Bearing Strength (lbs) Single Wheel Loading (SWL)	30,000
Markings	NPI | NPI
Lighting	MIRL
Visual Approach Aids	PAPI-4 | None
Instrument Approaches	LOC, RNAV | RNAV
Traffic Pattern	Right | Left

WEATHER AND NAVIGATIONAL AIDS
Automated Weather Observing Station (AWOS)
Segmented Circle/Lighted Wind Cone
Rotating Airport Beacon

LEGEND
- Airport Property Line
- M Taxiway Designator

N
0 600
SCALE IN FEET
Google Earth: 7/6/2022

W Kilpatrick St
Yellow Jacket Dr
Harlin Dr
N Colonial Dr
N. Nolan River Rd
Old Soggy Rd
Slats Rodgers Rd
Airport Drive
4
67
1217
AIRPORT BEACON
SUPPLEMENTAL WIND CONE
HOLD APRON
PAPI-4
Runway 15/33 (5,697' x 100')
LOCALIZER
SEGMENTED CIRCLE
LIGHTED WINDCONE
AWOS
SUPPLEMENTAL WIND CONE
A B C D E G J

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AIRFIELD LIGHTING, SIGNANGE, AND MARKINGS

Airfield lighting systems extend an airport's usefulness into periods of darkness and/or poor visibility. A variety of lighting systems are installed at the airport for this purpose. These lighting systems, categorized by function, are summarized below.

Airport Identification Light

The location of an airport at night is universally identified by a rotating beacon. The rotating beacon at a civilian (non-military) land airport projects two beams of light, one white and one green, 180 degrees apart. The beacon serving CPT operates from sunset to sunrise and is located atop a stand-alone pole adjacent to a hangar, approximately 40 feet south of Taxiway C.

Pavement Edge Lighting

Pavement edge lighting defines the lateral limits of the pavement to ensure safe operations during night and/or low visibility times, which maintains safe and efficient access to and from the runway and aircraft parking areas. As stated previously, Runway 15-33 is equipped with white MIRL. Each end of the runways is equipped with threshold lights, which emit green light outward from the runway and red light toward the runway. Green lights indicate the landing threshold to arriving aircraft, while red lights indicate the end of the runway for departing aircraft. The taxiway system at CPT is equipped with blue MITL except for Taxiway B which does not have edge lighting.

Visual Glide Slope Approach Aids

Visual approach aids are installed at airports to assist pilots in determining the correct descent path to the runway surface during landing. Runway 15 has one such system called a precision approach path indicator, or PAPI. A pilot interprets the system of four red and white lights (PAPI-4), which gives the pilot an indication of being above, below, or on the designated descent path. These systems have an effective visual range of three miles during the day and up to 20 miles at night. The Runway 15 PAPI-4 has a standard 3.00-degree glide path; the location of the PAPI is identified on **Exhibit 1D**.

Pilot-Controlled Lighting

The runway lights and PAPI can be activated by pilots by using the pilot-controlled lighting (PCL) system. The airfield lights are activated by a series of clicks with the pilot's microphone transponder on the Common Traffic Advisory Frequency (CTAF) of 122.8 MHz.

Pavement Markings

Pavement markings assist in the movement of aircraft along surfaces at the airport and identify closed or hazardous areas. CPT provides and maintains marking systems in accordance with FAA Advisory Circular (AC) 150/5340-1, *Standards for Airport Marking*, and AC 150/5300-13B, *Airport Design*.

As detailed previously, both Runway 15 and Runway 33 have non-precision markings. Taxiway markings include centerlines, leadoff lines on runway exit points, and runway hold positions. Holding position markings are glass-beaded and highlighted in yellow on black paint, in accordance with FAA standards.

Localizer Antenna

Airports offering full ILS approaches are equipped with both a glideslope antenna and a localizer antenna array. The glideslope antenna provides vertical guidance to landing aircraft, while the localizer provides lateral guidance to the runway centerline. Instrument approaches without a vertical component are known as localizer approaches and are classified as a non-precision approach. Runway 15 is equipped with a localizer approach, the antenna array for which is located 1,160 feet south of the runway surface.

Example of a localizer antenna array

WEATHER AND COMMUNICATION

Weather and communication devices provide pilots with information about the existing conditions at the airport. At airports with no air traffic control tower (ATCT) such as CPT, it is essential that pilots can still communicate with each other and receive current weather reports. These devices are described below and depicted on **Exhibit 1D**.

Wind Indicator/Segmented Circle

CPT is equipped with a lighted wind cone that informs pilot of the wind direction and speed, situated in the center of a segmented circle that relays traffic pattern information. Pilots may reference the segmented circle if they are unfamiliar with the traffic pattern established at an airport. Runway 15 has a non-standard, right-hand traffic pattern, while Runway 33 has the standard left-hand traffic pattern. The segmented circle and wind cone are located 300 feet west of the runway surface.

Wind cone and segmented circle

The airport also has supplemental wind cones located near the ends of each runway. These wind cones provide more immediate wind condition information to pilots of aircraft on final approach and prior to takeoff. The wind cone serving Runway 15 is located adjacent to the Taxiway A hold short marking, and the Runway 33 wind cone is located adjacent to the threshold, approximately 114 feet from the runway edge.

Automated Weather Observing System (AWOS)

The airport is served by an automated weather observing system (AWOS). The AWOS-3 at CPT reports the altimeter setting (barometric pressure), wind direction and speed, temperature, dew point, density altitude (airfield elevation corrected for temperature), as well as visibility and cloud/ceiling data. Weather observations are updated every minute, 24 hours a day, reporting significant weather changes as they occur. Pilots may receive weather information via radio frequency 119.525 MHz or by calling 817-641-4135. The AWOS is located 445 feet west of the runway surface, adjacent to the segmented circle and wind cone.

Common Traffic Advisory Frequency (CTAF)

The CTAF radio frequency at CPT is 122.8 MHz. CTAF is used by pilots at and near the airport to communicate with each other about approaches to or departures from the airport, as well as for activation of the airport's PCL system, as described above.

LANDSIDE FACILITIES

Landside facilities support the aircraft and pilot/passenger transition between air and ground. Typical landside facilities include the terminal/FBO, on-airport businesses, aircraft hangars, and vehicle parking. An overview of the landside facilities and a building inventory at CPT are depicted on **Exhibit 1E.**

TERMINAL/FBO COMPLEX

A fixed-base operator (FBO) is an airport service center responsible for a variety of aviation services, such as passenger handling, aircraft fueling, parking, maintenance, aircraft towing and storage, and other related services. The City of Cleburne manages the only FBO at the airport. There are 13 designated vehicle parking spots at the terminal, including two handicapped-accessible spots. The FBO is in the passenger terminal at the center of the primary apron.

Airport Terminal/FBO Building

AIRPORT BUSINESSES

There are four specialty aviation service operators (SASOs) located at the airport. These are companies that offer one or more specialized aviation services, such as flight instruction or aircraft maintenance and repair. The airport businesses operating at the airport at the time of publication include:

- DJS Aviation – Aircraft maintenance, repair, and overhaul (MRO); aircraft rental
- Frakes Aviation – Aircraft modifications
- Nationwide Aviation – Part 61 fixed-wing flight instruction
- Plane Place Aviation – Turbine and jet maintenance

AIRCRAFT HANGARS

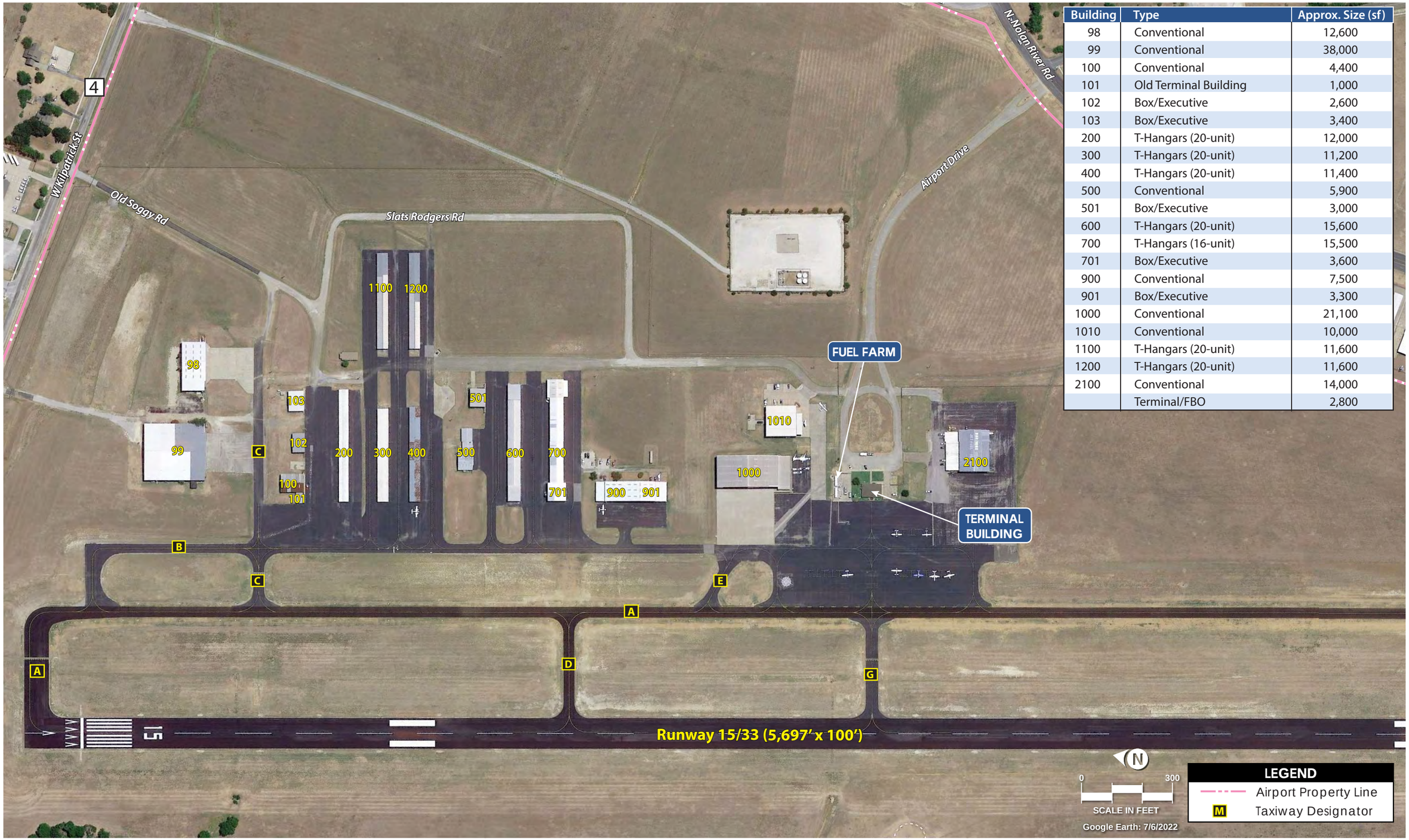
It is important to identify those hangars that may be used for aircraft storage. By having a reasonable estimate of the baseline hangar capacity, a determination of future hangar needs can be made based upon forecast hangar demand. Existing hangar facilities at CPT consist of large, conventional-style hangars used to store multiple aircraft, mid-sized box/executive hangars, and T-hangars that are designed to accommodate smaller aircraft. The box hangars range in size from 1,000 to 4,000 square feet (sf), while the conventional hangars used for storage and/or aircraft maintenance are greater than 4,000 sf, with the largest exceeding 10,000 sf. Hangars at CPT are identified on **Exhibit 1E** with their approximate size.

Hangars at CPT

Another view of the hangars at CPT

SUPPORT FACILITIES

The previous sections addressed airside and landside facilities, those critical to the movement of aircraft and people on the airport. This section discusses other airport facilities that support airport operations, including ARFF, fuel storage, and perimeter fencing. These facilities are identified on **Exhibit 1E**.



Building	Type	Approx. Size (sf)
98	Conventional	12,600
99	Conventional	38,000
100	Conventional	4,400
101	Old Terminal Building	1,000
102	Box/Executive	2,600
103	Box/Executive	3,400
200	T-Hangars (20-unit)	12,000
300	T-Hangars (20-unit)	11,200
400	T-Hangars (20-unit)	11,400
500	Conventional	5,900
501	Box/Executive	3,000
600	T-Hangars (20-unit)	15,600
700	T-Hangars (16-unit)	15,500
701	Box/Executive	3,600
900	Conventional	7,500
901	Box/Executive	3,300
1000	Conventional	21,100
1010	Conventional	10,000
1100	T-Hangars (20-unit)	11,600
1200	T-Hangars (20-unit)	11,600
2100	Conventional	14,000
	Terminal/FBO	2,800

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AIRPORT RESCUE AND FIRE FIGHTING (ARFF)

Airports that have regularly scheduled commercial air service using aircraft with 10 or more seats are required to have available ARFF services. These airports must follow regulations outlined in 14 CFR Part 139, which includes the ability of ARFF responders to reach the center of the runway within three minutes.

Since CPT is not a Part 139 airport and does not have commercial air service, the airport is not required to have on-airport firefighting facilities. Emergency services are provided by the City of Cleburne, with the closest fire station located 1.6 miles away on West Kilpatrick Street.

FUEL STORAGE

Fuel is stored in a "fuel farm" that is owned by the city and is located adjacent to the terminal building. The airport offers both AvGas and Jet A fuel for piston- and turbine-powered aircraft, respectively. There are two 12,000-gallon tanks that are above-ground, one for each type of fuel. Pilots may choose to pump their own fuel at self-serve pumps, similar to a vehicle gas station, or they can elect to have fuel pumped by an airport staff member, in which case fuel is delivered by fuel trucks with on-board tanks and pumps. The Jet A fuel truck has a capacity of 3,000 gallons, and the AvGas truck has a 1,000-gallon tank. Both trucks are equipped with spill prevention and contamination gear, as well as fire extinguishers.

Fuel Farm with fuel trucks

PERIMETER FENCING

The entirety of the airfield is enclosed with security fencing, which is regularly inspected. The fence provides a barrier to both trespassers and wildlife. Vehicle access on and off the airport is provided through automatic gates, situated at various locations around the airport.

Perimeter fence at Gate 7

AREA AIRSPACE AND AIR TRAFFIC CONTROL

The *FAA Act of 1958* establishes the FAA as the responsible agency for the control and use of navigable airspace within the U.S. The FAA has established the National Airspace System (NAS) to protect people and property on the ground, in addition to establishing a safe and efficient airspace environment for civil, commercial, and military aviation. The NAS covers the common network of U.S. airspace, including air navigation facilities; airports and landing areas; aeronautical charts; associates rules, regulations, and procedures; technical information; and personnel and materials. The system also includes components jointly shared with the military.

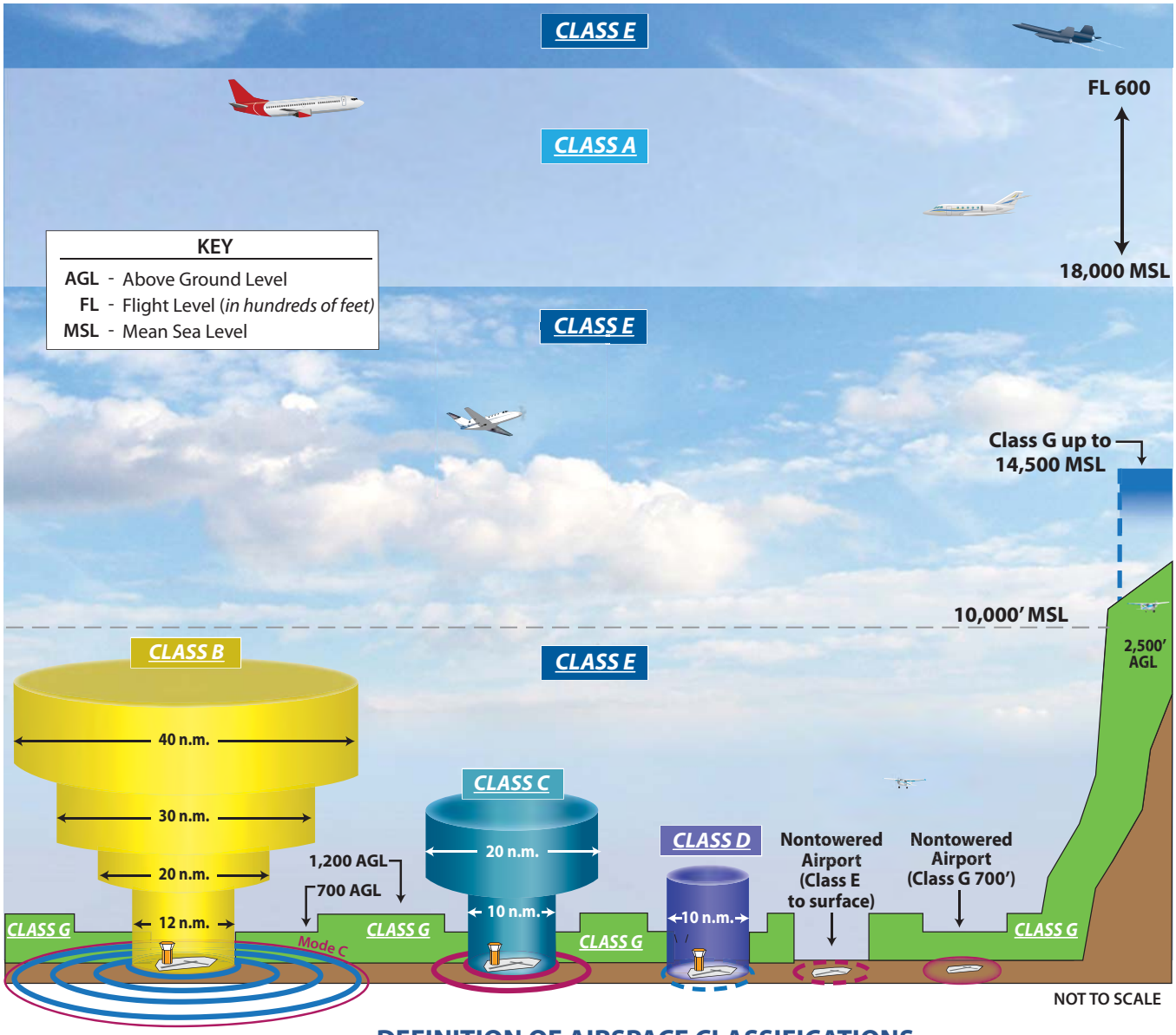
AIRSPACE STRUCTURE

Airspace within the U.S. is broadly classified as either "controlled" or "uncontrolled." The difference between controlled and uncontrolled airspace relates primarily to requirements for pilot qualifications, ground-to-air communications, navigation and air traffic services, and weather conditions. Six classes of airspace have been designated in the U.S., as shown on **Exhibit 1F**. Airspace designated as Class A, B, C, D, or E is considered controlled airspace. Aircraft operating within controlled airspace are subject to varying requirements for positive air traffic control. Airspace encompassing CPT is depicted on **Exhibit 1G**.

Class A Airspace: Class A airspace includes all airspace from 18,000 feet MSL to flight level (FL) 600 (approximately 60,000 feet MSL) over the contiguous 48 states and Alaska. This airspace is designated in Federal Aviation Regulation (FAR) Part 71.33 for positive control of aircraft. All aircraft must be on an IFR clearance (instrument flight plan) to operate within Class A airspace.

Class B Airspace: Class B airspace has been designated around some of the country's major airports, such as Dallas-Fort Worth International Airport (DFW), to separate all aircraft within a specified radius of the primary airport. Each Class B airspace is specifically tailored for its primary airport. All aircraft operating within Class B airspace must have air traffic control clearance. Certain minimum aircraft equipment and pilot certification requirements must also be met. This airspace is the most restrictive controlled airspace routinely encountered by pilots operating under VFR in an uncontrolled environment. The nearest Class B airspace to CPT supports DFW.

Class C Airspace: The FAA has established Class C airspace at approximately 120 airports around the country that have significant levels of IFR traffic. Class C airspace is designed to regulate the flow of uncontrolled traffic above, around, and below the arrival and departure airspace required for high-performance, passenger-carrying aircraft at major airports. To fly inside Class C airspace, an aircraft must have a two-way radio, an encoding transponder, and have established communication with the air traffic control (ATC) facility. Aircraft may fly below the floor of or above the ceiling of the Class C airspace without establishing communication with ATC. The nearest Class C airspace to CPT surrounds Abilene Regional Airport (ABI), 114 nautical miles to the west.



DEFINITION OF AIRSPACE CLASSIFICATIONS

CLASS A Think A - Altitude. Airspace above 18,000 feet MSL up to and including FL 600. Instrument Flight Rule (IFR) flights only, ADS-B 1090 ES transponder required, ATC clearance required.

CLASS B Think B - Busy. Multi-layered airspace from the surface up to 10,000 feet MSL surrounding the nation's busiest airports. ADS-B 1090 ES transponder required, ATC clearance required.

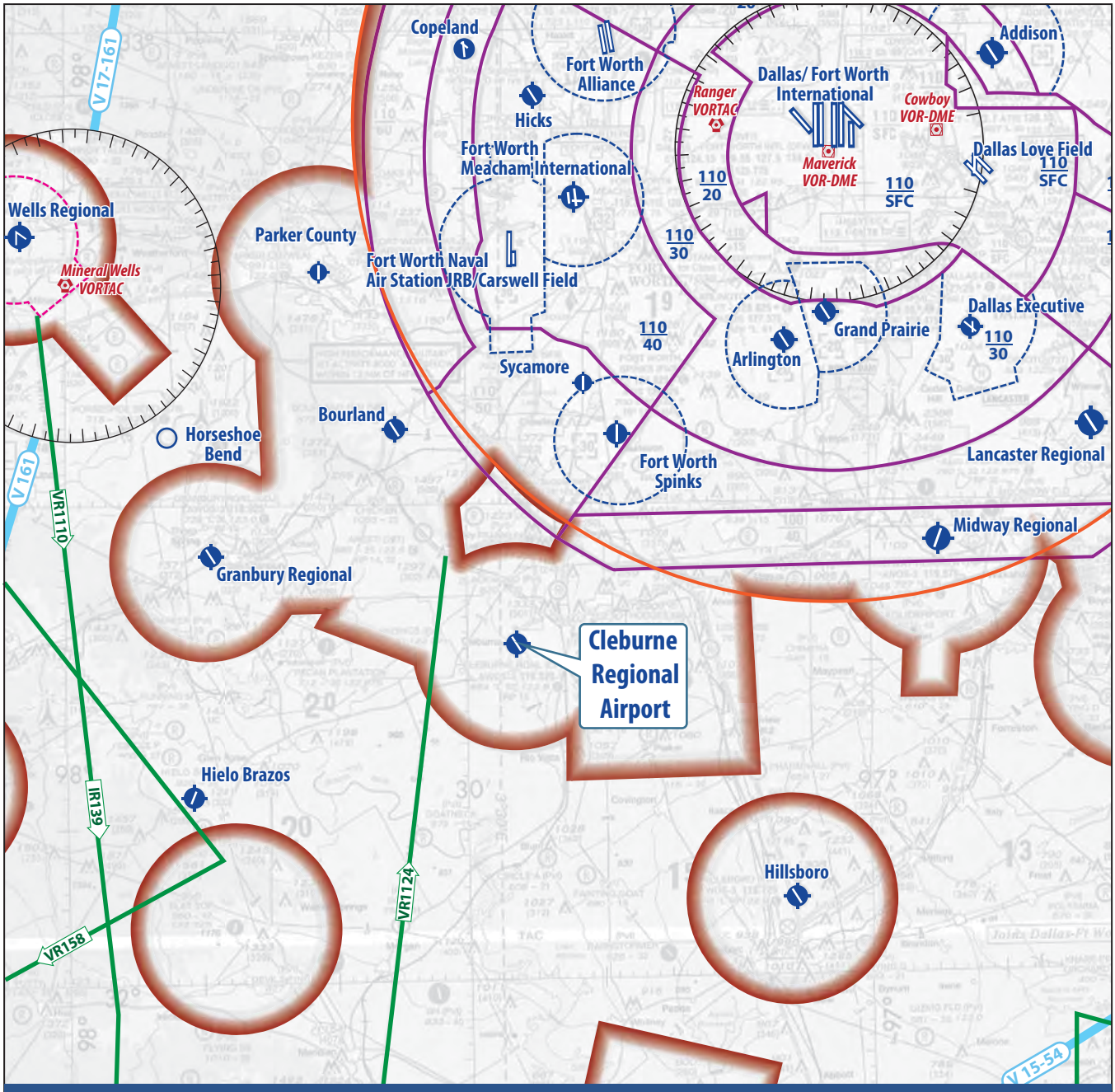
CLASS C Think C - Mode C. Mode C transponder required. ATC communication required. Generally airspace from the surface to 4,000 feet AGL surrounding towered airports with service by radar approach control.

CLASS D Think D - Dialogue. Pilot must establish dialogue with tower. Generally airspace from the surface to minimum 2,500 feet AGL surrounding towered airports.

CLASS E Think E - Everywhere. Controlled airspace that is not designated as any other Class of airspace.

CLASS G Think G - Ground. Uncontrolled airspace. From surface to a 1,200 AGL (in mountainous areas 2,500 AGL) Exceptions: near airports it lowers to 700' AGL; some airports have Class E to the surface. Visual Flight Rules (VFR) minimums apply.

Source: www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/media/15_phak_ch15.pdf



LEGEND

- Other than Hard Surfaced Runways
- Airport with hard-surfaced runways 1,500' to 8,069' in length
- Airports with hard-surfaced runways greater than 8,069' or some multiple runways less than 8,069'
- VORTAC
- VOR-DME
- Compass Rose
- Class B Airspace
- Mode C
- Class D Airspace
- Class E Airspace
- Class E Airspace with floor 700 ft. above surface
- Victor Airways
- Military Training Routes

NORTH

NOT TO SCALE

Source: Dallas Sectional Charts, US Department of Commerce, National Oceanic and Atmospheric Administration - 06/17/21
San Antonio Sectional Charts, US Department of Commerce, National Oceanic and Atmospheric Administration - 06/17/21

Class D Airspace: Class D airspace is controlled airspace surrounding airports with an air traffic control tower (ATCT). The Class D airspace typically constitutes a cylinder with a horizontal radius of four or five miles from the airport, extending from the surface up to a designated vertical limit, typically set approximately 2,500 feet above the airport elevation. Fort Worth Spinks Airport (FWS) is the nearest Class D airspace and is located 14.2 nautical miles northeast of CPT.

Class E Airspace: Class E airspace consists of controlled airspace designed to contain IFR operations near an airport and while aircraft are transitioning between the airport and enroute environments. Unless otherwise specified, Class E airspace terminates at the base of any overlying airspace. Only aircraft operating under IFR are required to be in contact with ATC when operating in Class E airspace. While aircraft conducting visual flights in Class E airspace are not required to be in radio contact with ATC facilities, visual flight can only be conducted if minimum visibility and cloud ceilings exist.

Class E airspace begins over CPT at 700 feet above ground level (AGL) and extends up to the 18,000-foot MSL floor of Class A airspace. Below 700 feet AGL is categorized as Class G airspace at the airport.

Class G Airspace: Airspace that is not designated as Class A, B, C, D, or E is considered "uncontrolled," or Class G airspace. Air traffic control does not have the authority or responsibility to exercise control over air traffic within this airspace. Class G airspace lies between the surface and any overlaying controlled airspace.

While aircraft may technically operate within this Class G airspace without any contact with ATC, it is unlikely that many aircraft would operate this low to the ground. Furthermore, federal regulations specify minimum altitudes for flight. FAR Part 91.119, *Minimum Safe Altitudes*, states that except when necessary for takeoff or landing, pilots must not operate an aircraft over any congested area of a city, town, or settlement, or over any open-air assembly of people, at an altitude of 1,000 feet above the highest obstacle within a horizonal radius of 2,000 feet of the aircraft.

Over less congested areas, pilots must maintain an altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure. Helicopters may be operated at less than the minimums prescribed above if the operation is conducted without hazard to people or property on the surface. In addition, each person operating a helicopter shall comply with any routes or altitudes specifically prescribed for helicopters by the FAA.

Victor Airways: For aircraft arriving or departing the regional area using VOR facilities, a system of Federal Airways, referred to as Victor Airways, has been established. Victor Airways are corridors of airspace eight miles wide that extend upward from 1,200 feet AGL to 18,00 feet MSL and extend between VOR navigational facilities. Victor Airways near CPT are identified on **Exhibit 1G**. For aircraft enroute to or departing CPT, there are several Victor Airways available converging at the Millsap VORTAC, located 36 nautical miles northwest of the airport.

Military Operations Areas: Military Operations Areas (MOAs) are areas of airspace where military activities are conducted. The nearest MOA to CPT is the Brownwood 1 East MOA, which has a northeastern boundary that begins approximately 46 nautical miles west of CPT. The Brownwood 1 East MOA is controlled by the Fort Worth Air Route Traffic Control Center (ARTCC) with active military aircraft operating in the Brownwood 1 East MOA from 7,000 feet MSL up to but not including 18,000 feet MSL. This MOA is operated daily from 7:00 a.m. to 10:00 p.m., and other times as issued by notices to airmen (NOTAM).

Prohibited/Restricted Areas: The nearest prohibited area to CPT is P-49, located 44.5 nautical miles to the south. P-49 is in continuous use, from the surface up to and including 2,000 feet MSL. There is no air-to-ground communication available for P-49. The nearest restricted area to CPT is R-6302D, located approximately 60 nautical miles to the south. R-6302D is operated Monday through Friday, from 7:00 a.m. to 7:00 p.m., and other times as issued by NOTAMS, and extends from the surface up to and including 30,000 feet MSL. Both R-6302D and P-49 are associated with Fort Hood, a U.S. Army installation in Coryell and Bell Counties, Texas.

Terminal Radar Service Area: A Terminal Radar Service Area (TRSA) is non-regulated airspace surrounding busy Class D airports where ATC provides traffic separation with the use of a radar. The purpose of a TRSA is to provide VFR aircraft with additional, yet voluntary, benefits such as vectoring, sequencing, and separation. Though typically busier than other Class D airports, these airports are not busy enough to be classified as Class B or Class C airports. The closest TRSA to CPT is the Longview TRSA, which surrounds East Texas Regional Airport (GGG), approximately 138 nautical miles to the east.

AIRSPACE CONTROL

The FAA has established 21 Air Route Traffic Control Centers (ARTCCs) throughout the continental United States to control aircraft operating under IFR within controlled airspace and while enroute. An ARTCC assigns specific routes and altitudes along Federal Airways to maintain separation and orderly traffic flow. The Fort Worth ARTCC controls IFR airspace enroute to and from CPT.

Flight Service Station (FSS)

A Flight Service Station (FSS) is an air traffic facility that provides pilot briefings, flight plan processing, inflight radio communications, search and rescue (SAR) services, and assistance to lost aircraft or aircraft in emergency situations. These facilities also relay air traffic control clearances, process NOTAMs, broadcast aviation meteorological and aeronautical information, and notify Customs and Border Protection of transborder flights. The Fort Worth FSS is the nearest FSS to CPT.

Air Traffic Control Tower (ATCT)

There is no ATCT at CPT. Aircraft operating at and in the vicinity of the airport are not required to file any type of flight plan or contact any air traffic control facility unless they are entering airspace where contact is mandatory. Such a case would be entering DFW Class B airspace, located just six nautical miles to the north. Aircraft operating near and at the airport communicate with other local aircraft by using the airport Unicom frequency, which is 122.8 MHz. Enroute air traffic control services are provided through the Fort Worth ARTCC, which controls aircraft over north Texas, southern Oklahoma, and parts of Louisiana and Arkansas.

NAVIGATIONAL AIDS

Navigational aids are electronic devices that transmit radio frequencies that pilots in properly equipped aircraft can translate into point-to-point guidance and position information. The types of electronic navigational aids available for aircraft flying to/from CPT include the very-high frequency omni-directional range (VOR), non-directional radio beacon (NDB), and global positioning system (GPS).

The VOR provides azimuth readings to pilots of properly equipped aircraft by transmitting a radio signal at every degree to provide 360 individual navigation courses. Frequently, distance measuring equipment (DME) is combined with a VOR facility to provide distance as well as directional information to the pilot. Military tactical air navigation aids (TACANs) and civil VORs are commonly combined to form a VORTAC. A VORTAC provides distance and directional information to both civil and military pilots. The Ranger VORTAC is the closest navigational aid to CPT, located 34.6 nautical miles north of the airport.

A NDB is a low or medium frequency radio beacon that transmits nondirectional signals where a pilot of a properly equipped aircraft can determine bearings and “home in” on the station. The MUFIN NDB is the closest to CPT and is located 32.3 nautical miles north of the airport.

GPS was initially developed by the United States Department of Defense for military navigation around the world. However, GPS is now used extensively for a wide variety of civilian uses, including civil aircraft navigation. GPS uses satellites placed in orbit to transmit electronic signals, which pilots of properly equipped aircraft use to determine altitude, speed, and navigational information. This provides more freedom in flight planning and allows for more direct routing to a destination. GPS provides enroute navigation and non-precision instrument area navigation (RNAV) approaches to both Runway 15 and Runway 33 at CPT.

FLIGHT PROCEDURES

Flight procedures are a set of predetermined maneuvers established by the FAA, using electronic or visual navigational aids that assist pilots in location and landing or departing from an airport. At CPT, there are standard terminal arrivals (STARs), instrument approach procedures, and departure procedures.

Standard Terminal Arrivals (STARs)

A STAR is a preplanned, coded ATC arrival route established for aircraft operating on an instrument flight plan destined for certain airports. STARs simplify clearance delivery procedures and facilitate transition between enroute and instrument approach procedures. There are currently six published STAR procedures into CPT.

Instrument Approach Procedures

Instrument approach procedures assist pilots in location and landing at an airport during low visibility and cloud ceiling conditions. They are categorized as either precision, approach with vertical guidance

(APV), or non-precision. Precision instrument approaches provide an exact course alignment and vertical descent path for an aircraft on final approach to a runway with a height above threshold (HATh) lower than 250 feet and visibility lower than ¾-mile. APVs also provide course alignment and vertical descent path guidance by having a HATh of 250 feet or more and visibility minimums greater than ¾-mile. Non-precision instrument approaches only provide course alignment information; there is no vertical component of a non-precision instrument approach.

Approach minimums are published for different aircraft categories (aircraft categories are described in greater detail in Chapter 2) and consist of a minimum "decision" altitude and required visibility. According to FAR 91.175, a pilot must be able to make a safe landing, have the runway in sight, and the visibility requirement met. There are no cloud ceiling requirements; the decision altitude is the point at which the pilot must meet all three criteria for landing, otherwise they cannot land using the published instrument approach.

There are three non-precision instrument approach procedures at the airport. Runway 15 has both an RNAV (GPS) and localizer (LOC) approach, while Runway 33 is equipped with an RNAV (GPS) approach. The current instrument approaches available at CPT are presented in **Table 1F**.

TABLE 1F | Instrument Approach Procedures

TYPE	A	B	C	D
RNAV (GPS) Runway 15				
LPV DA	1,240–1⅜			
LNAV/VNAV DA	1,397–1⅛			
LNAV MDA	1,360–1		1,360–1⅜	
Circling	1,400–1		1,680–2½	1,700–2¾
LOC Runway 15				
Straight-In	1,360–1		1,360–1⅜	
Circling	1,400–1		1,680–2½	1,700–2¾
RNAV (GPS) Runway 33				
LPV DA	1,102–⅞			
LNAV/VNAV DA	1,102–⅞			
LNAV MDA	1,180–1			
Circling	1,400–1		1,680–2½	1,700–2¾

LPV: Localizer Performance with Vertical Guidance
LNAV/VNAV: Lateral Navigation/Vertical Navigation
DA: Decision Altitude
MDA: Minimum Descent Altitude
Approach Speed: A: <90knots; B: 91-120 knots; C: 121-140 knots; D: 141-166 knots.
(xxx–xx): Decision height (ft.)/Visibility minimum (mi.)

Source: U.S. Terminal Procedures, Cleburne Regional (CPT)

Departure Procedures

Similar to a STAR, a departure procedure is a preplanned procedure for pilots to follow during departure in IFR conditions. These charted routes provide for obstacle clearance and a transition from the terminal area to the appropriate enroute structure. There are four published departure procedures at CPT.

RUNWAY USE AND TRAFFIC PATTERNS

The traffic pattern at the airport is maintained to provide the safest and most efficient use of the airspace. At CPT, Runway 15 has a non-standard, right-hand traffic pattern, which means aircraft make right turns within the traffic pattern. Runway 33 has the standard left-hand traffic pattern.

AREA AVIATION FACILITIES

A review of other public-use airports with at least one paved runway within a 30-nautical mile radius of CPT was conducted to identify and distinguish the types of air service available in the region. It is important to consider the capabilities and limitations of these airports when planning for future changes or improvements to CPT. **Table 1G** provides basic information on these airports. It should be noted that only public-use airports have been included in the list. **Exhibit 1H** provides additional details about those airports included in the NPIAS within a 30 nm radius of CPT.

TABLE 1G |Area Airports

Airport	Distance/ Direction from CPT[1]	FAA Service Level[2]	State Service Level[3]	Based Aircraft[4]	Annual Operations[4]	Longest Runway (ft.)[1]	Lowest Visibility Minimum[1]
Cleburne Regional (CPT)	**---**	**Local GA**	**Business/ Corporate**	**119**	**33,124**	**5,697**	**⅞-mile**
Fort Worth Spinks (FWS)	14.2 nm NNE	Regional GA Reliever	Reliever	232	70,346	6,002	½-mile
Bourland Field (50F)	15.8 nm NNW	NA	NA	118	46,800	4,049	1-mile
Sycamore Strip (9F9)	16.9 nm NNE	NA	NA	25	920	3,375	NA
Granbury Regional (GDJ)	20.2 nm WNW	Local GA	Business/ Corporate	88	33,200	3,603	¾-mile
Hillsboro Municipal (INJ)	23.5 nm SE	Local GA	Community Service	24	10,800	3,998	1-mile
Arlington Municipal (GKY)	25.3 nm NE	National GA Reliever	Reliever	247	88,222	6,080	¾-mile
Parker County (WEA)	26.7 nm NNW	NA	NA	86	50,040	2,892	1-mile
Mid-Way Regional (JWY)	27.1 nm ENE	Regional GA	Business/ Corporate	91	49,700	6,500	¾-mile
Eagle's Nest Estates (T56)	27.4 nm ENE	NA	NA	64	5,840	3,216	NA
Fort Worth Meacham (FTW)	28.2 nm N	National GA Reliever	Reliever	316	142,065	7,502	½-mile
Grand Prairie Municipal (GPM)	28.5 nm NE	Regional GA Reliever	Reliever	191	65,693	4,001	2½-mile

GA: General Aviation
NA: Not Applicable

Sources: [1]airnav.com, [2]FAA NPIAS, [3]TASP (2010), [4]FAA Form 5010: Airport Master Record

ENVIRONMENTAL INVENTORY

The purpose of the following environmental inventory is to identify potential environmental sensitivities that should be considered when planning future improvements at the airport. Research was performed for each of the 14 environmental impact categories described within the FAA's Order 1050.1F *Environmental Impacts: Policies and Procedures*. **Exhibit 1J** identifies the environmental sensitivities on and near the airport.

- Air Quality
- Biological Resources (including fish, wildlife, and plants)
- Climate
- Coastal Resources
- *Department of Transportation Act*, Section 4(f)
- Farmlands
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Historical, Architectural, Archeological, and Cultural Resources
- Land Use
- Natural Resources and Energy Supply
- Noise and Compatible Land Use
- Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks
- Visual Effects (including light emissions)
- Water Resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)

AIR QUALITY

The concentration of various pollutants in the atmosphere describes the local air quality. The significance of a pollutant's concentration is determined by comparing it to the state and federal air quality standards. In 1971, the U.S. Environmental Protection Agency (EPA) established standards that specify the maximum permissible short- and long-term concentrations of various air contaminants. The National Ambient Air Quality Standards (NAAQS) consist of primary and secondary standards for criteria pollutants: ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead (Pb).

Based on federal air quality standards, a specific geographic area can be classified as either an "attainment," "maintenance," or "nonattainment" area for each pollutant. The threshold for nonattainment designation varies by pollutant.

The airport resides in Johnson County. Johnson County is in nonattainment for 8-Hour Ozone (Serious) for the 2008 standard and Marginal for the 2015 standard, as of January 31, 2022. Johnson County is in attainment for all other criteria pollutants.[1]

[1] Texas Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants | Green Book | US EPA https://www3.epa.gov/airquality/greenbook/anayo_tx.html

FORT WORTH SPINKS (FWS)

Distance from CPT ..... 14.2 nm NNE
Airport NPIAS Classification .... Reliever
FAA Asset Study Classification . Regional
Elevation ..... 700.4′
Weather Reporting ..... ATIS, AWOS
ATCT ..... Yes
Annual Operations 70,346
Based Aircraft 232

Runways	18R/36L	18L/36R(turf)
Length	6,002′	3,660
Width	100′	60′
Pavement Strength		
SWL	60,000	NA
DWL	70,000	NA
DTWL	100,000	NA
Lighting	MIRL, MALSR (36L)	NA
Marking	Precision	NA
Approach Aids	PAPI-4	NA
Instrument Approach Procedures	ILS (36), GPS	None

Services Provided: Jet A & 100LL fuel, hangars and tiedowns, aircraft maintenance

GRANBURY REGIONAL (GDJ)

Distance from CPT ..... 20.2 nm WNW
Airport NPIAS Classification ..... GA
FAA Asset Study Classification ..... Local
Elevation ..... 777.5′
Weather Reporting ..... AWOS
ATCT ..... None
Annual Operations 33,200
Based Aircraft 88

Runways	14/32
Length	3,603′
Width	60′
Pavement Strength	
SWL	12,000
DWL	NA
Lighting	MIRL
Marking	Nonprecision
Approach Aids	PAPI-2
Instrument Approach Procedures	VOR (14), GPS (14)

Services Provided: Jet A & 100LL fuel, hangars and tiedowns, aircraft maintenance

ARLINGTON MUNICIPAL (GKY)

Distance from CPT ..... 25.3 nm NE
Airport NPIAS Classification ..... Reliever
FAA Asset Study Classification ..... National
Elevation ..... 628.2′
Weather Reporting ..... ASOS
ATCT ..... Yes
Annual Operations 88,222
Based Aircraft 247

Runways	16/34
Length	6080′
Width	100′
Pavement Strength	
SWL	60,000
DWL	NA
Lighting	MIRL, REIL (16)
Marking	Nonprecision (16), Precision (34)
Approach Aids	PAPI-4, MALSR (34)
Instrument Approach Procedures	ILS (34), GPS (34)

Services Provided: Jet A &100LL fuel, hangars and tiedowns, aircraft maintenance

MID-WAY REGIONAL (JWY)

Distance from CPT ..... 27.1 nm ENE
Airport NPIAS Classification ..... GA
FAA Asset Study Classification .... Regional
Elevation ..... 727′
Weather Reporting ..... AWOS
ATCT ..... None
Annual Operations 49,700
Based Aircraft 91

Runways	18/36
Length	6,500′
Width	100
Pavement Strength	
SWL	30,000
DWL	90,000
Lighting	MIRL, REIL (18)
Marking	Precision (18), Nonprecision (36)
Approach Aids	PAPI-4
Instrument Approach Procedures	GPS

Services Provided: Jet A & 100LL fuel, hangars and tiedowns, aircraft maintenance

FORT WORTH MEACHAM (FTW)

Distance from CPT ..... 28.2 nm N
Airport NPIAS Classification ..... Reliever
FAA Asset Study Classification ..... National
Elevation ..... 710.1′
Weather Reporting ..... ATIS, ASOS
ATCT ..... Yes
Annual Operations 142,065
Based Aircraft 316

Runways	16/34	17/35
Length	7,502 ′	4,005′
Width	150′	75′
Pavement Strength		
SWL	80,000	12,500
DWL	100,000	50,000
DTWL	190,000	NA
Lighting	HIRL, MALSR (16) MALS (34)	MIRL
Marking	Precision	Nonprecision
Approach Aids	PAPI-4 (16)	PAPI-2
Instrument Approach Procedures	ILS, GPS	NA

Services Provided: Jet A & 100LL, hangars and tiedowns, aircraft maintenance

GRAND PRAIRIE MUNICIPAL (GPM)

Distance from CPT ..... 28.5 nm NE
Airport NPIAS Classification ..... Reliever
FAA Asset Study Classification ..... Regional
Elevation ..... 588.4′
Weather Reporting ..... AWOS
ATCT ..... Yes
Annual Operations 65,693
Based Aircraft 191

Runways	18/36
Length	4001′
Width	75′
Pavement Strength	
SWL	30,000
DWL	NA
Lighting	MIRL, REIL (36)
Marking	Nonprecision
Approach Aids	VASI-4
Instrument Approach Procedures	GPS (36), VOR (36)

Services Provided: Jet A & 100LL fuel, hangars and tiedowns, aircraft maintenance

KEY

ATCT | Airport Traffic Control Tower
AWOS | Automated Weather Observation System
DME | Distance Measuring Equipment
DWL | Dual Wheel Loading
(D)DTWL | (Double) Dual Tandem Wheel Loading
FAA | Federal Aviation Administration
GPS | Global Positioning System
HIRL | High Intensity Runway Lights
MIRL | Medium Intensity Runway Lights
MALSR | Medium Intensity Runway Light with Runway Alignment Indicator Lights
NA | Not Applicable
nm | Nautical Mile
NPIAS | National Plan of Integrated Airport Systems
PAPI | Precision Approach Path Indicator
SWL | Single Wheel Loading
VASI | Visual Approach Slope Indicator
VOR | Very High Frequency Omni-Directional Range

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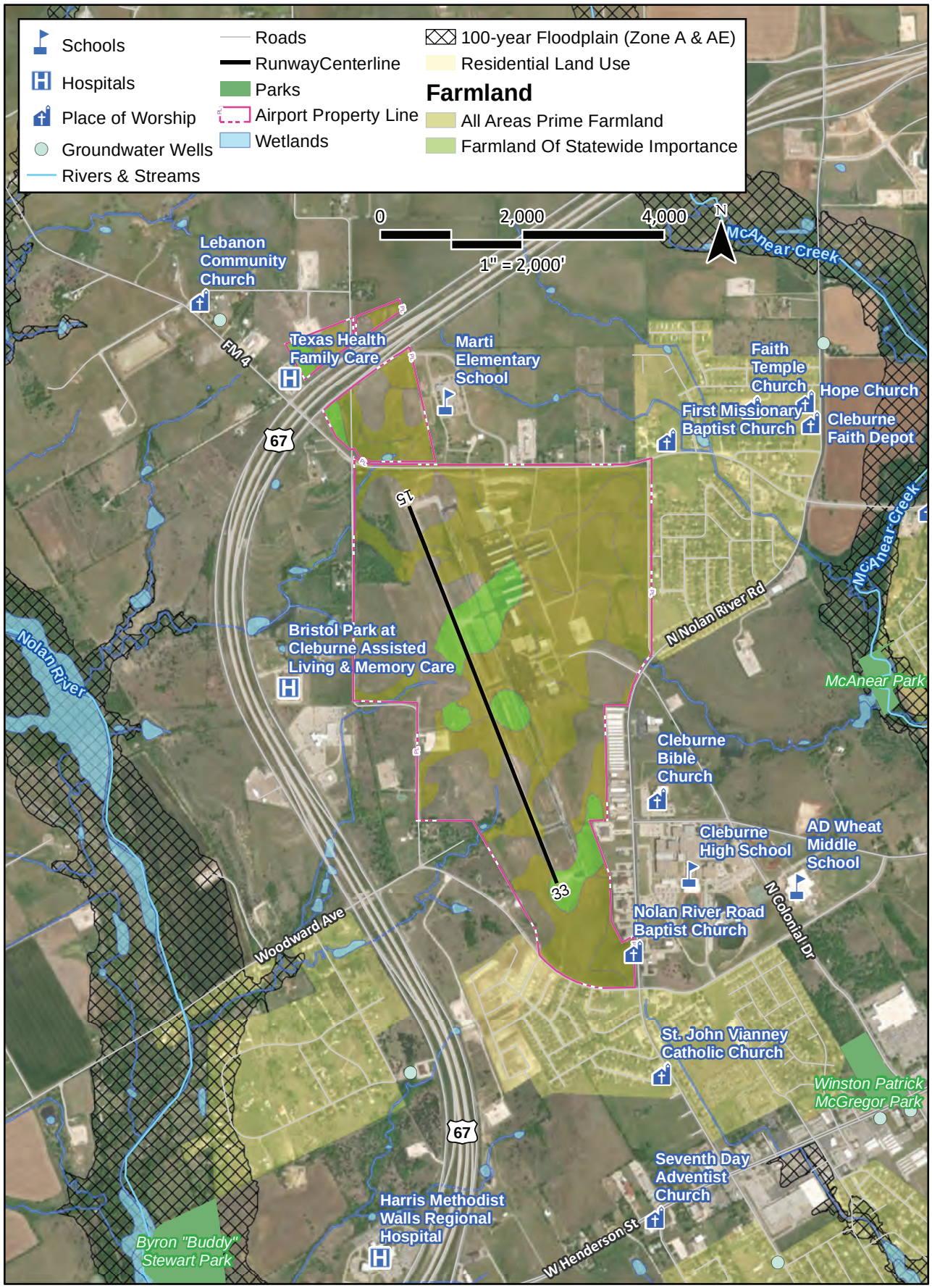
Schools
Hospitals
Place of Worship
Groundwater Wells
Rivers & Streams
Roads
RunwayCenterline
Parks
Airport Property Line
Wetlands
100-year Floodplain (Zone A & AE)
Residential Land Use
Farmland
All Areas Prime Farmland
Farmland Of Statewide Importance
0
2,000
4,000
1" = 2,000'
N
Lebanon Community Church
FM 4
Texas Health Family Care
Marti Elementary School
McAnear Creek
Faith Temple Church
Hope Church
First Missionary Baptist Church
Cleburne Faith Depot
67
15
33
Nolan River
Bristol Park at Cleburne Assisted Living & Memory Care
N Nolan River Rd
McAnear Park
Cleburne Bible Church
Cleburne High School
AD Wheat Middle School
N Colonial Dr
Nolan River Road Baptist Church
Woodward Ave
St. John Vianney Catholic Church
Winston Patrick McGregor Park
Seventh Day Adventist Church
Harris Methodist Walls Regional Hospital
W Henderson St
Byron "Buddy" Stewart Park

BIOLOGICAL RESOURCES

Biotic resources include the various types of plants and animals that are present in an area. The term also applies to rivers, lakes, wetlands, forests, and other habitat types that support plants and animals.

The U.S. Fish and Wildlife Service (USFWS) is charged with overseeing the requirements contained within Section 7 of the *Endangered Species Act* (ESA). The ESA provides a framework to conserve and protect animal or plant species whose populations are threatened by human activities. The FAA and USFWS review projects to determine if a significant impact to protected species will result during the implementation of a proposed project. Significant impacts occur when a proposed action could jeopardize the continued existence of a protected species or would result in the destruction or adverse modification of federally designated critical habitat in the area. The USFWS's Information for Planning and Consultation (IPaC) resource list describes species and habitat protected under ESA within the vicinity of the airport. There is no federally designated critical habitat at the airport; species are listed in **Table 1H.**

The IPaC also lists the following "Bird of Conservation Concern" for the airport: lesser yellowlegs (*Tringa flavipes)*, which is protected under the federal Migratory Bird Treaty Act (MBTA).

Table 1H | Species Protected under ESA Section 7 with Potential to Occur Near the Airport

Common Name (*Scientific Name*)	Federal Status	Habitat and Range	Potential for Occurrence at Airport
Birds			
Golden-cheeked warbler *(Dendroica chrysoparia)*	Endangered	Nests in oak-juniper woodlands of Central Texas. This bird requires older growth forest with a denser tree canopy where they forage for a variety of insects, including caterpillars.	Not Likely. Suitable habitat does not appear to be on the airport.
Piping plover *(Charadrius melodus)*	Threatened	These shorebirds live on sandy beaches and lakeshores.	Not Likely. Suitable habitat does not appear to be on the airport.
Red knot *(Calidris canutus rufa)*	Threatened	The red knot prefers sandy beaches and mud flats. In general, nests are found on sparsely vegetated, dry, sunny, slightly elevated tundra locations, often on windswept ridges or slopes with low cover.	Not Likely. Suitable habitat does not appear to be on the airport.
Clams			
Texas fawnsfoot (Truncila macrodon)	Proposed Threatened	The Texas fawnsfoot is most commonly observed in riffles within streams and rivers but has been identified in a variety of habitats. Within the Brazos River basin, the Texas fawnsfoot has been found in multiple locations, including the Clear Fork of the Brazos River, the Brazos River between Possum Kingdom Lake and Lake Granbury, the Brazos River below Waco, the Navasota River, and the Little River.	Unknown. Development near or within on-airport water sources should be reviewed.
Insects			
Monarch butterfly *(Danaus plexippus)*	Candidate	Generally, breeding areas are on the leaves of milkweed (*Asclepias* sp.).	Individuals may occur seasonally as a potential migratory stopover.

Source: USFWS IPaC. 2022. (IPaC: Home (fws.gov)

CLIMATE

Increasing concentration of greenhouse gases (GHG) can affect global climate by trapping heat in Earth's atmosphere. Scientific measurements have shown that Earth's climate is warming with concurrent impacts, including warmer air temperatures, rising sea levels, increased storm activity, and greater intensity in precipitation events. Climate change is a global phenomenon that can also have local impacts. GHGs, such as water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and O_3, are both naturally occurring and anthropogenic (man-made). The research has established a direct correlation between fuel combustion and GHG emissions. GHGs from anthropogenic sources include CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). CO_2 is the most important anthropogenic GHG because it is a long-lived gas that remains in the atmosphere for up to 100 years.[2]

The U.S. EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2017* found that the transportation sector, which includes aviation, accounted for approximately 29 percent of U.S. GHG emissions in 2019. Of this, the aviation sector contributed approx. 175.0 million metric tons (MMT) of carbon dioxide equivalent (CO_2e), or nearly 9.4 percent of all transportation emissions.[3] Transportation emission sources include cars, trucks, ships, trains, and aircraft. Most GHG emissions from transportation systems are CO_2 emissions resulting from the combustion of petroleum-based products in internal combustion engines. Relatively insignificant amounts of CH_4, HFC, and N_2O are emitted during fuel combustion. From 1990 to 2017, total transportation emissions increased. The upward trend is largely due to increased demand for travel; however, much of this travel was done in passenger cars and light-duty trucks.

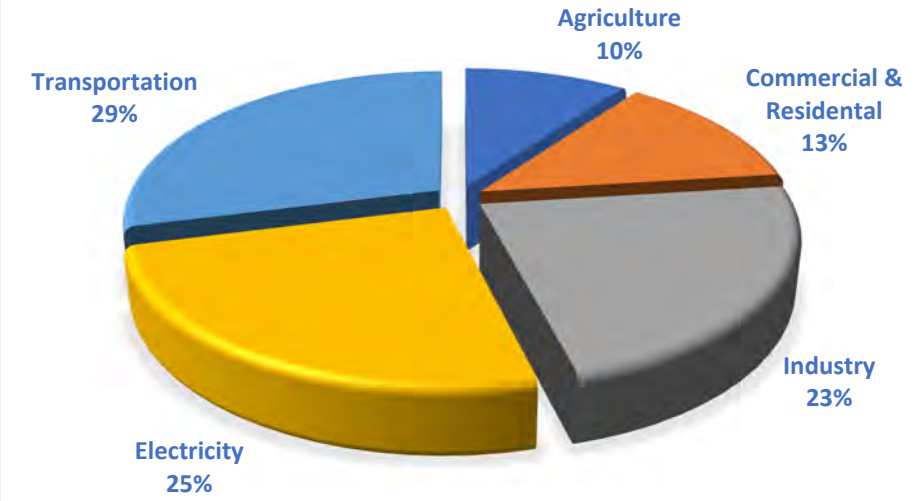

Figure 1C: 2019 Sources of Greenhouse Gas Emissions in the U.S. Source: U.S. EPA (2022)

In addition to transportation-related emissions, **Figure 1C** shows GHG emissions sources in the U.S. in 2019. Several other factors influence the quantities of greenhouse gas emissions released into the atmosphere, including agriculture, commercial & residential, industry, and electricity.

Information regarding the climate for Cleburne and surrounding environments, including wind, temperature, and precipitation, is found earlier in this chapter.

[2] Intergovernmental Panel on Climate Change AR5 Synthesis Report: Climate Change 2014 (http://www.ipcc.ch/)
[3] This information is being updated in the latest EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2020,* which is out for public review as of February 2022.

COASTAL RESOURCES

Federal activities involving or affecting coastal resources are governed by the *Coastal Barriers Resource Act*, the *Coastal Zone Management Act*, and Executive Order (E.O.) 13089, *Coral Reef Protection*.

The *Texas Coastal Resiliency Master Plan* was developed to guide future management of the state's coastline in support of sustaining resilient local communities and coastal ecosystems. Climate impacts and coastal hazards including coastal erosion, sea level rise, coastal storm surge, habitat loss and degradation, and water quality decline are becoming more severe in Texas - and the General Land Office (GLO) established a series of Resiliency Strategies as presented in the plan to address these hazards in a system-wide approach.[4]

The airport is not located within a coastal zone. The closest National Marine Sanctuary is the Flower Garden Bank National Marine Sanctuary, located 343 miles from the airport.[5]

DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F)

Section 4(f) of the *Department of Transportation Act,* which was recodified and renumbered as Section 303(c) of 49 United States Code, provides that the Secretary of Transportation will not approve any program or project that requires the use of any publicly or privately owned historic sites, public parks, recreation areas, or waterfowl and wildlife refuges of national, state, regional, or local importance unless there is no feasible and prudent alternative to the use of such land, and the project includes all possible planning to minimize harm resulting from the use.[6] **Table 1J** lists Section 4(f) resources near the airport.

Table 1J | Department of Transportation Section 4(f) Resources within Three miles of the Airport

Resource	Distance from Airport (miles)	Direction from Airport
Parks		
Hulen Park	2.5	Southeast
Brewster Park	1.6	Southwest
Cleburne Golf Links	2.9	South
E. Buffalo Trail	2.3	Southeast
J.E. Standley Park	2.0	Southeast
P.D. Lacewell Park	2.0	Northeast
John P. Bradshaw	2.9	Northeast
Splash Station	2.6	Southeast
Winchester Park	1.7	Southeast
Schools		
Cleburne High School	0.2	Southeast
AD Wheat Middle School	0.5	Southeast
Hill College	1.3	South
Gerard Elementary School	2.1	Southeast
Lowell Smith Middle School	2.3	Southeast

Source: Google Earth Aerial Imagery (February 2022); Coffman Associates analysis

There are no other Section 4(f) Resources within the vicinity of the airport (i.e., wilderness and recreation areas, wildlife refuges or waterfowl habitats). The nearest wilderness and national recreation areas are listed below:

- Nearest Wilderness Area: Big Slough Wilderness (147 miles from the airport)
- Nearest Recreation Area: Chicksaw National Recreation Area (143 miles from airport)

[4] *Texas Coastal Resiliency Master Plan:* https://www.glo.texas.gov/coastal-grants/projects/files/Master-Plan.pdf
[5] Google Earth Aerial Imagery (2022)
[6] 49 U.S. Code § 303 - Policy on lands, wildlife and waterfowl refuges, and historic sites

FARMLANDS

Under the *Farmland Protection Policy Act* (FPPA), federal agencies are directed to identify and consider the adverse effects of federal programs on the preservation of farmland, to consider appropriate alternative actions which could lessen adverse effects, and to assure that such federal programs are, to the extent practicable, compatible with state or local government programs and policies to protect farmland. The FPPA guidelines, developed by the U.S. Department of Agriculture (USDA), apply to farmland classified as prime or unique, or of state or local importance as determined by the appropriate government agency, with concurrence by the Secretary of Agriculture.

Information obtained from the USDA Natural Resources Conservation Service's (NRCS) Web Soil Survey indicates that soils throughout the airport property are classified as "All areas are prime farmland," "Farmland of statewide importance," or "Not prime farmland." **Table 1K** identifies each soil type in the airport area**.** Although the airport is not currently farmed or irrigated, there are areas on the airport that may be protected under the FPPA.

Table 1K | Farmland classification – Summary by Map Unit

Map unit symbol	Map unit name	Rating
AbC	Aledo-Bolar association, 1 to 8 percent slopes	Not prime farmland
BoB	Bolar clay loam, 1 to 3 percent slopes	Farmland of statewide importance
BoC	Bolar clay loam, 3 to 8 percent slopes	Farmland of statewide importance
HnB	Hensley clay loam, 1 to 3 percent slopes	Not prime farmland
KrB	Krum silty clay, cool, 1 to 3 percent slopes	All areas are prime farmland
LeB	Lewisville silty clay, 1 to 3 percent slopes	All areas are prime farmland
LeC	Lewisville silty clay, 3 to 5 percent slopes, eroded	Not prime farmland
LIB	Lindale clay loam, 1 to 3 percent slopes	All areas are prime farmland
PnB	Ponder clay loam, 1 to 3 percent slopes	All areas are prime farmland
PoB	Ponder-Urban land complex, 1 to 3 percent slopes	Not prime farmland
SaB	Sanger clay, 1 to 3 percent slopes	All areas are prime farmland
SaC	Sanger clay, 3 to 5 percent slopes	All areas are prime farmland
SIB	Slidell clay, 1 to 3 percent slopes	All areas are prime farmland

Source: NRCS Web Soil Survey, February 2022

HAZARDOUS MATERIALS, SOLID WASTE AND POLLUTION PREVENTION

Federal, state, and local laws regulate hazardous materials use, storage, transport, and disposal. These laws may extend to past and future landowners of properties containing these materials. In addition, disrupting sites containing hazardous materials or contaminants may cause significant impacts to soil, surface water, groundwater, air quality, and the organisms using these resources. According to the U.S. EPA's *EJSCREEN*, there are no Superfund or brownfields sites within three miles of the airport.

National Pollutant Discharge Elimination System (NPDES) permits outline the regulatory requirements of municipal storm water management programs and establish requirements to help protect the beneficial uses of the receiving waters. They require permittees to develop and implement Best Management Practices (BMPs) to control/reduce the discharge of pollutants to waters of the United

States to the maximum extent practicable (MEP). In Texas, EPA issues NPDES permits on tribal lands and in federal waters off the coast in the Gulf of Mexico. All other permits are issued by the Texas Commission on Environmental Quality.

The Johnson County Stormwater Management Plan includes pollution prevention and land development rules and regulations. Johnson County ensures existing and new land development rules and regulations comply with the MS4 stormwater permit requirements.

There is a solid waste landfill within three miles of the airport named City of Cleburne Transfer Station Facility. Cleburne Solid Waste Service provides an integrated solid waste management system to the city, including the airport.

HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Determination of a project's environmental impact to historic and cultural resources is made under guidance in the *National Historic Preservation Act* (NHPA) *of 1966*, as amended, the *Archaeological and Historic Preservation Act* (AHPA) *of 1974*, the *Archaeological Resources Protection Act* (ARPA), and the *Native American Graves Protection and Repatriation Act* (NAGPRA) *of 1990*. In addition, the *Antiquities Act of 1906*, the *Historic Sites Act of 1935*, and the *American Indian Religious Freedom Act of 1978* also protect historical, architectural, archaeological, and cultural resources. Impacts may occur when a proposed project causes an adverse effect on a resource which has been identified (or is unearthed during construction) as having historical, architectural, archaeological, or cultural significance.

No survey reports for cultural resources at the airport have been provided as part of this study, and the presence of buried cultural resources is not known. The airport was constructed from 1959 to 1960 and may still have historic-age structures constructed prior to 1972.

LAND USE

Land use regulations near airports are achieved through local government codes, city policies, and plans that include airport districts and planning areas. Regulations are used to avoid land use compatibility conflict around airports.

The Cleburne Comprehensive Plan outlines components to establish land use patterns that preserve agriculturally oriented uses and improve existing commercial corridors. The Plan's land use map defines the area of the airport as Transportation and Industry. It is surrounded by a Regional Corridor along US-67 to the west and Traditional Neighborhoods to the east. Regional Corridors are built with the purpose to promote regional connectivity and mobility within the city.[7]

The airport is surrounded by open space to the west and single-family homes to the east. Cleburne High School and Middle School border the southeast boundary of the airport.

[7] The Cleburne Comprehensive Plan pg. 146 Executive Summary edited (cleburne.net)

NATURAL RESOURCES AND ENERGY SUPPLY

Natural resources and energy supply provide an evaluation of a project's consumption of natural resources. It is the policy of FAA Order 1053.1C, *Energy and Water Management Program for FAA Buildings and Facilities*, to encourage the development of facilities that exemplify the highest standards of design, including principles of sustainability.

Natural resources and energy supply are discussed earlier in this chapter under "Fuel Storage."

NOISE AND NOISE COMPATIBLE LAND USE

Federal land use compatibility guidelines are established under 14 Code of Federal Regulations (CFR) Part 150, *Airport Noise Compatibility Planning*. According to 14 CFR Part 150, residential land and schools are noise-sensitive land uses that are not considered compatible with a 65 decibel (dB) Day-Night Average Sound Level (Ldn or DNL)[8]. Other noise-sensitive land uses (such as religious facilities, hospitals, or nursing homes), if located within a 65 dB DNL contour, are generally compatible when an interior noise level reduction of 25 dB is incorporated into the design and construction of the structure. Special consideration should also be given to noise-sensitive areas within Section 4(f) properties where the land use compatibility guidelines in 14 CFR Part 150 do not account for the value, significance, and enjoyment of the area in question.[9]

Cleburne Airport Master Plan (2010) states that with the number of operations and the ultimate airport layout, the 65 DNL contour remains within the current airport property boundary; however, the City should take steps to ensure compatibility with development adjacent to the Airport with the appropriate governmental entities that hold jurisdiction within the Airport's area of influence.[10] The baseline noise contours for the existing conditions will be updated as part of this current Master Plan effort. **Table 1L** shows noise-sensitive land uses within 3 miles of the airport.

Table 1L | Noise-Sensitive Land Uses within Three Miles of Airport

Facility	Distance from Airport (Miles)	Direction from Airport
Schools/Child Care Centers		
Cleburne High School	0.2	Southeast
AD Wheat Middle School	0.5	Southeast
Hill College	1.3	South
Gerard Elementary School	2.1	Southeast
Lowell Smith Middle School	2.3	Southeast
Hospital		
Cleburne Rehabilitation Health	1.2	Northeast
Places of Worship		
Hope Church	1.4	Northeast
Granbury Street Church of Christ	1.8	Northeast
Cleburne Bible Church	0.3	Northeast

Source: Google Aerial Imagery 2022

[8] The DNL accounts for the increased sensitivity to noise at night (10:00 PM to 7:00 AM) and is the metric preferred by FAA, the U.S. EPA, and the U.S. Department of Housing and Urban Development as an appropriate measure of cumulative noise exposure.

[9] 49 U.S. Code § 47141 – Compatible land use planning and projects by State and Local Governments

[10] Cleburne Airport Master Plan. 2010. https://www.cleburne.net/DocumentCenter/View/44/Airport-Master-Plan?bidId=

SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS

Socioeconomics

Socioeconomics is an umbrella term used to describe aspects of a project that are either social or economic in nature. A socioeconomic analysis evaluates how elements of the human environment such as population, employment, housing, and public services might be affected by the proposed action and alternative(s).

FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* specifically requires that a federal action causing disproportionate impacts to an environmental justice population (i.e., a low-income or minority population), be considered, as well as an evaluation of environmental health and safety risks to children. The FAA has identified factors to consider when evaluating the context and intensity of potential environmental impacts.

Would the proposed action:

- Induce substantial economic growth in an area, either directly or indirectly;
- Disrupt or divide the physical arrangement of an established community;
- Cause extensive relocation when sufficient replacement housing is unavailable;
- Cause extensive relocation of community businesses which would cause severe economic hardship for affected communities;
- Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities; or
- Produce a substantial change in the community tax base?

Environmental Justice

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.

Meaningful Involvement ensures that:

- people have an opportunity to participate in decisions about activities that may affect their environment and/or health;
- the public's contribution can influence the regulatory agency's decision;
- their concerns will be considered in the decision-making process; and
- the decision-makers seek out and facilitate the involvement of those potentially affected.[11]

[11] Environmental Justice EPA https://www.epa.gov/environmentaljustice U.S. EPA EJSCREEN website (2022), EJScreen Standard Report (1 mile radius from eastern airport boundary) and ACS Summary Report (2019)

The EPA's EJSCREEN identified minority populations within one mile of the airport's eastern border. There are 439 people identified as minority. Approximately 26 percent of the population has identified as Hispanic or Latino. According to 2019 American Community survey estimates, the population within one mile of the airport is 1,239 persons, of which 37 percent of the population is considered low-income, and 30-35 percent are considered people of color.

CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY

Federal agencies are directed, per E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks, to make it a high priority to identify and assess the environmental health and safety risks that may disproportionately impact children. Such risks include those that are attributable to products or substances that a child is likely to encounter or ingest (air, food, water – including drinking water) or to which they may be exposed.

According to the U.S. EPA EJSCREEN report, approximately 25 percent of the population within the one-mile study area previously identified is under the age of 17. This equated to 235 children in 2019.

VISUAL EFFECTS

Visual effects deal broadly with the extent to which a proposed action or alternative(s) would either (1) produce light emissions that create an annoyance or interfere with activities; or (2) contrast with, or detract from, the visual resources and/or the visual character of the existing environment. Each jurisdiction will typically address outdoor lighting, scenic vistas, and scenic corridors in zoning ordinances and their general plan.

LIGHT EMISSIONS

Light Emissions. Light emission impacts typically relate to the extent to which any light or glare results from a source that could create an annoyance for people or would interfere with normal activities. Generally, local jurisdictions will include ordinances in the local code addressing outdoor illumination to reduce the impact of light on surrounding properties. See the discussion of airport lighting presented earlier in this chapter.

VISUAL RESOURCES AND VISUAL CHARACTER

Visual character refers to the overall visual makeup of the existing environment where a proposed action or its alternative(s) would be located. For example, areas near densely populated areas generally have a visual character that could be defined as urban, whereas less developed areas could have a visual character defined by the surrounding landscape features, such as open grass fields, forests, mountains, deserts, etc.

Visual resources include buildings, sites, traditional cultural properties, and other natural or manmade landscape features that are visually important or have unique characteristics. Visual resources may include structures or objects that obscure or block other landscape features. In addition, visual resources can include the cohesive collection of various individual visual resources that can be viewed at once or in concert from the area surrounding the site of the proposed action or alternative(s).

The airport lies on the outskirts of a residential area and is visible from US Highway 67. This highway is not a designated scenic highway within the state or the county.[12]

WATER RESOURCES

Wetlands

The U.S. Army Corps of Engineers regulates the discharge of dredged and/or fill material into waters of the United States, including adjacent wetlands, under Section 404 of the *Clean Water Act* (CWA). Wetlands are defined in E.O. 11990, *Protection of Wetlands*, as "those areas that are inundated by surface or groundwater with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction." Wetlands can include swamps, marshes, bogs, sloughs, potholes, wet meadows, river overflows, mudflats, natural ponds, estuarine areas, tidal overflows, and shallow lakes and ponds with emergent vegetation. Wetlands exhibit three characteristics: the soil is inundated or saturated to the surface at some time during the growing season (hydrology), has a population of plants able to tolerate various degrees of flooding or frequent saturation (hydrophytes), and soils that are saturated enough to develop anaerobic (absent of air or oxygen) conditions during the growing season (hydric).

USFWS manages the National Wetlands Inventory on behalf of all federal agencies. The National Wetlands Inventory identifies surface waters and wetlands in the nation. The inventory indicates riverine wetlands surrounding the northeast and west boundaries of the airport. There are freshwater retention ponds present two miles southeast of the airport surrounded by residential parcels.[13]

The map shows two retention ponds within the vicinity of the airport. The NRCS Web Soil Survey indicated hydric soils present within the airport boundaries due to conditional flooding in the area.[14]

Floodplains

E.O. 11988, *Floodplain Management*, directs federal agencies to take action to reduce the risk of flood loss, minimize the impact of floods on human safety, health, and welfare, and restore and preserve the natural and beneficial values served by the floodplains.

The location of the airport is not within a 100-year floodplain boundary.[15]

[12] Scenic Texas America Texas-Official-One-Pager.pdf (scenic.org)
[13] National Wetlands Inventory Wetlands Mapper https://www.fws.gov/wetlands/Data/Mapper.html
[14] NRCS Web Soil Survey, February 2022 - Web Soil Survey (usda.gov)
[15] FEMA Map Center, Panel: 48251C0285J eff. 12/4/2012 - FEMA Flood Map Service Center | Welcome!

Surface Waters

The Clean Water Act establishes water quality standards, controls discharges, develops waste treatment management plans and practices, prevents or minimizes the loss of wetlands, and regulates other issues concerning water quality. Water quality concerns related to airport development most often relate to the potential for surface runoff and soil erosion, as well as the storage and handling of fuel, petroleum products, solvents, etc. Additionally, Congress has mandated (under the CWA) the NPDES.

The City's stormwater drainage system includes about 14 miles of channels; approximately 13.5 miles of culverts; and roughly 35 miles of pipes in addition to the natural streams including Nolan River, Stone Lake Creek, McAnear Creek, West Buffalo Creek, East Buffalo Creek and its tributaries, and Lockett Branch. There are several locations throughout the City that are currently overtopping at bridges and culverts, and some residences are in the floodplain. A set of strategies are going to be required as part of a future stormwater management program.[16]

Groundwater

Groundwater is subsurface water that occupies the space between sand, clay, and rock formations. The term aquifer is used to describe the geologic layers that store or transmit groundwater, such as wells, springs, and other water sources. Examples of direct impacts to groundwater could include withdrawal of groundwater for operational purposes or reduction of infiltration or recharge area due to new impervious surfaces.[17]

The EPA's Sole Source Aquifer (SSA) Program was established under Section 1424(e) of the Safe Drinking Water Act (SDWA.) Since 1977, it has been used by communities to help prevent contamination of groundwater from federally funded projects. It has increased public awareness of the vulnerability of groundwater resources. The SSA program is authorized by Section 1424(e) of the Safe Drinking Water Act of 1974 (Public Law 93-523, 42 U.S.C. 300 et. seq), which states:

> "*If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination in the Federal Register.*"[18]

According to the U.S. EPA Sole Source Aquifer for Drinking Water website, there are no sole source aquifers located within airport boundaries. The nearest sole source aquifer is 143 miles from the airport, Arbuckle-Simpson Aquifer.[19]

[16] City of Cleburne 2014. *Plan Cleburne - The Cleburn Comprehensive Plan* - http://www.cleburne.net/DocumentCenter/View/926/ComprehensivePlanFinal
[17] United States Geological Survey - What is Groundwater? https://www.usgs.gov/faqs/what-groundwater
[18] Overview of the Drinking Water Sole Source Aquifer Program | US EPA https://www.epa.gov/dwssa/overview-drinking-water-sole-source-aquifer-program#Authority
[19] Interactive Map for Sole Source Aquifers Sole Source Aquifers (arcgis.com)

Wild and Scenic Rivers

The *National Wild and Scenic Rivers Act* was established to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations.

The Nationwide River Inventory (NRI) is a list of over 3,400 rivers or river segments that appear to meet the minimum *Wild and Scenic Rivers Act* eligibility requirements based on their free-flowing status and resource values. The development of the NRI resulted from Section 5(d)(1) in the *Wild and Scenic Rivers Act*, directing Federal agencies to consider potential wild and scenic rivers in the comprehensive planning process.

The only designated wild and scenic river in Texas is a segment of the Rio Grande. However, the closest designated wild and scenic river identified is the Cossatot River located 228 miles east of the airport in Arkansas.[20] The nearest National River Inventory feature is named Brazos River, located 25 miles away.

[20] National Wild and Scenic Rivers System - https://www.rivers.gov/texas.php; Nationwide Rivers Inventory – Rivers https://www.rivers.gov/texas.php