1 Inventory

The inventory of existing conditions is the initial step in the preparation of the Gainesville Municipal Airport (GLE) 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. Finally, a summary of socioeconomic characteristics and review of existing environmental conditions on and adjacent to the airport are thoroughly 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 and financial reports; on-site visits; interviews with airport staff, tenants, and users; aerial and ground photography; federal, state, and local publications; and project record drawings.

Airport Terminal

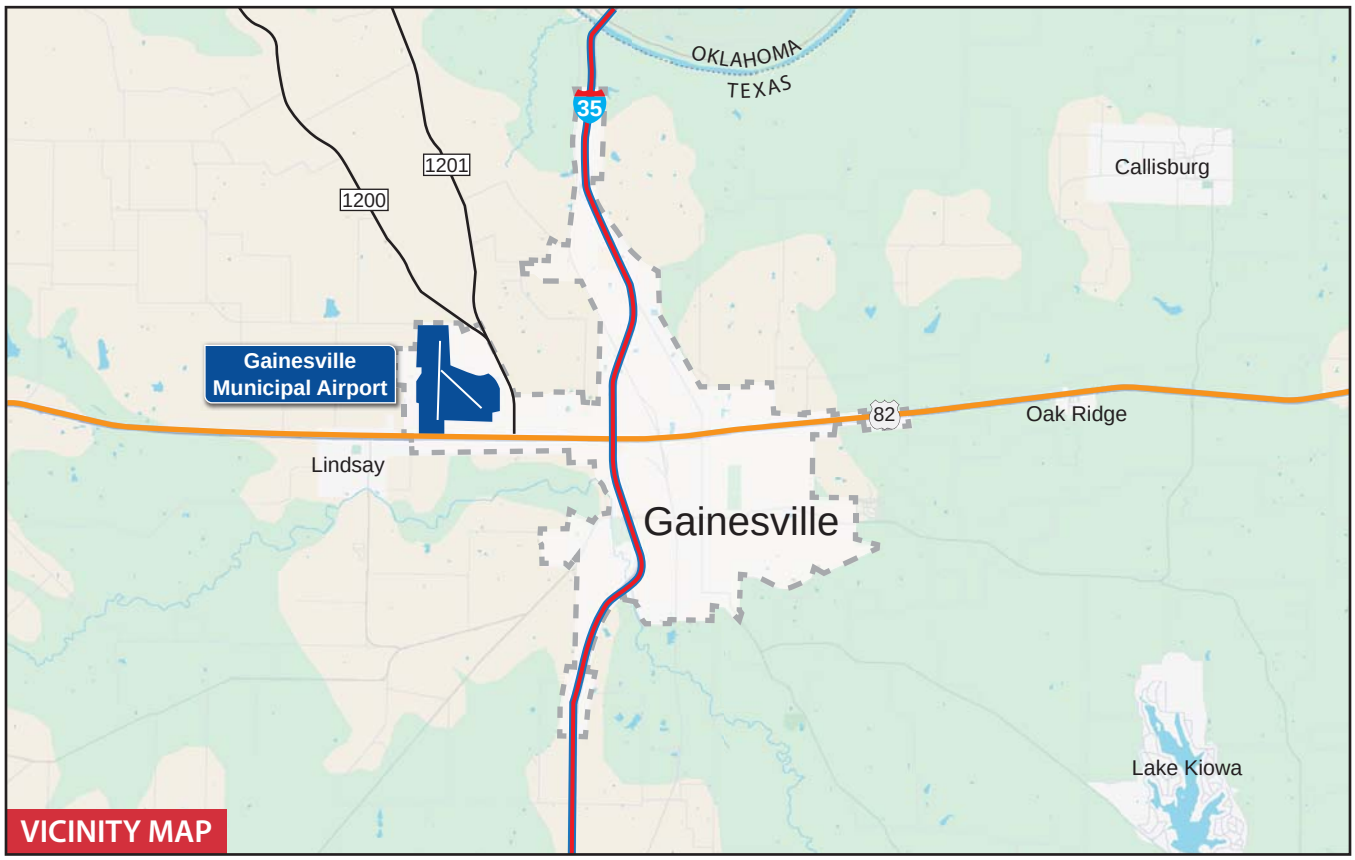
AIRPORT SETTING

LOCATION AND ACCESS

GLE is situated on 1,336 acres of land located within the western quadrant of Gainesville's city limits. Gainesville is located in North Central Texas, in the Texoma Region, north of the Dallas-Fort Worth Metroplex and approximately seven miles south of the Texas-Oklahoma border. The airport is approximately four miles northwest of the City of Gainesville's central business district. Interstate 35 borders the city's west side, providing access to points north and south. East-west access is provided via State Highway 82. From State Highway 82, GLE is accessible from Weber Drive, with access to the terminal from Airport Drive. **Exhibit 1A** depicts the regional setting.


Oklahoma
Tulsa
Oklahoma City
Gainesville
New Mexico
Lubbock
Abilene
Dallas
Waco
Texas
Austin
Houston
San Antonio
Corpus Christi
Mexico
REGIONAL MAP


Stephens
Carter
Ardmore
Johnston
Tishomingo
Jefferson
Love
Marietta
Madill
Marshall
Durant
Leon
Montague
Gainesville Municipal Airport
Bryan
Denison
Montague
Gainesville
Sherman
Bowie
Cooke
Grayson
Howe
Tioga
Alvord
Decatur
McKinney
Denton
Wise
Denton
Collin
Lewisville
Plano
Tarrant
Parker
Dallas
Rockwall
Fort Worth
Arlington
Dallas
LOCATION MAP


OKLAHOMA
TEXAS
1201
1200
Callisburg
Gainesville Municipal Airport
Oak Ridge
Lindsay
Gainesville
Lake Kiowa
VICINITY MAP

AIRPORT ADMINISTRATION

GLE is owned and operated by the City of Gainesville. The Airport Advisory Board, which consists of seven members, is responsible for the orderly and efficient operation of the airport and makes recommendations to the Gainesville City Council on all airport matters. The city employs a full-time Airport Director and three Airport Line Technicians. In addition to day-to-day oversight of the airport, the Airport Director manages, supervises, and coordinates programs and services at the airport, including fuel sales and aircraft services. Other responsibilities include coordination with other city departments, divisions, and outside agencies.

CLIMATE

Climate and local weather conditions are an important consideration in the master planning process, as they can significantly impact an airport's operations. For example, high temperatures and humidity can increase runway length requirements for some aircraft; predominant winds dictate primary runway orientation; and cloud coverages and frequency of inclement weather determine the need for navigational aids and lighting. Knowledge of these weather conditions during the planning process allows the airport to prepare for any improvements that may be needed on the airfield.

Gainesville experiences hot and muggy summers, with an average high temperature in August of 94.3 degrees Fahrenheit (°F). Winters are generally mild; January is the coldest month, with an average low temperature of 31.7°F. According to the Köppen Climate Classification System, Gainesville has a humid subtropical climate with no significant precipitation difference between seasons. The area receives a total of 45.3 inches of precipitation during an average year; May is the rainiest month and snowfall is rare. **Exhibit 1B** summarizes weather patterns at the airport.

Table 1A indicates that visual meteorological conditions (VMC) occur 92.81 percent of the time. When under VMC, pilots can operate using visual flight rules (VFR) and are responsible for maintaining proper separation from objects and other aircraft. Instrument meteorological conditions (IMC) account for all weather conditions less than VMC that still allow for aircraft to safely operate under instrument flight rules (IFR). Under IFR, pilots rely on instruments in aircraft to accomplish navigation. IMC occur 4.27 percent of the time. Less than IMC, or poor visibility conditions (PVC), are present 2.92 percent of the time. These weather conditions can reach visibility levels that are lower than instrument approach minimums. In such cases, when visibility minimums are below ¾-mile, the airport can become inaccessible to air traffic.

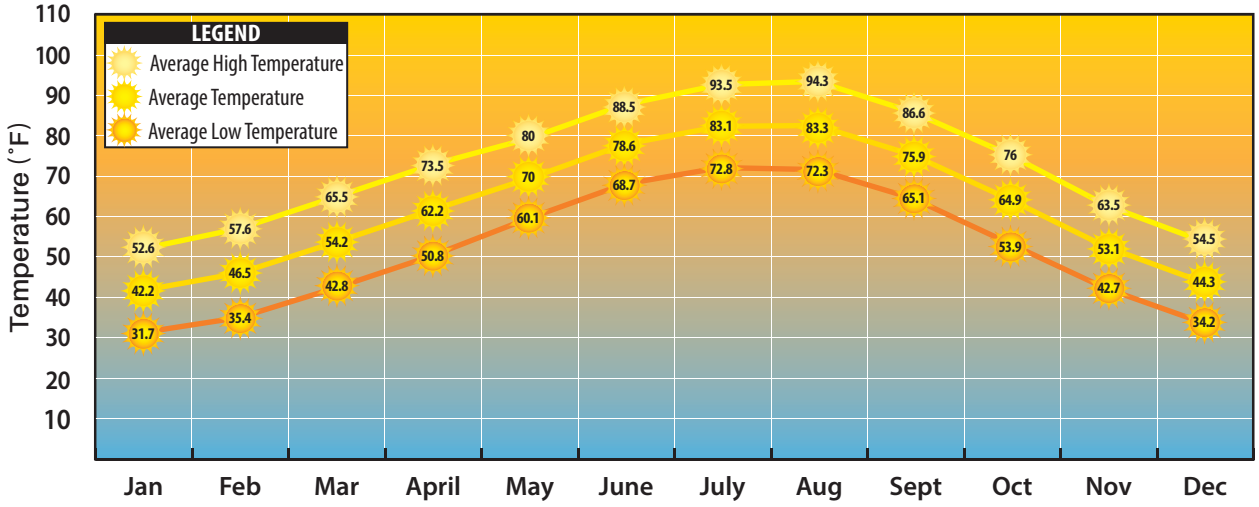
TABLE 1A | Weather Conditions

Condition	Cloud Ceiling	Visibility	% of Total
VMC	≥ 1,000' AGL	≥ 3 statute miles	92.81%
IMC	≥ 500' AGL and < 1,000' AGL	≥ 1 to < 3 statute miles	4.27%
PVC	< 500' AGL	< 1 statute mile	2.92%

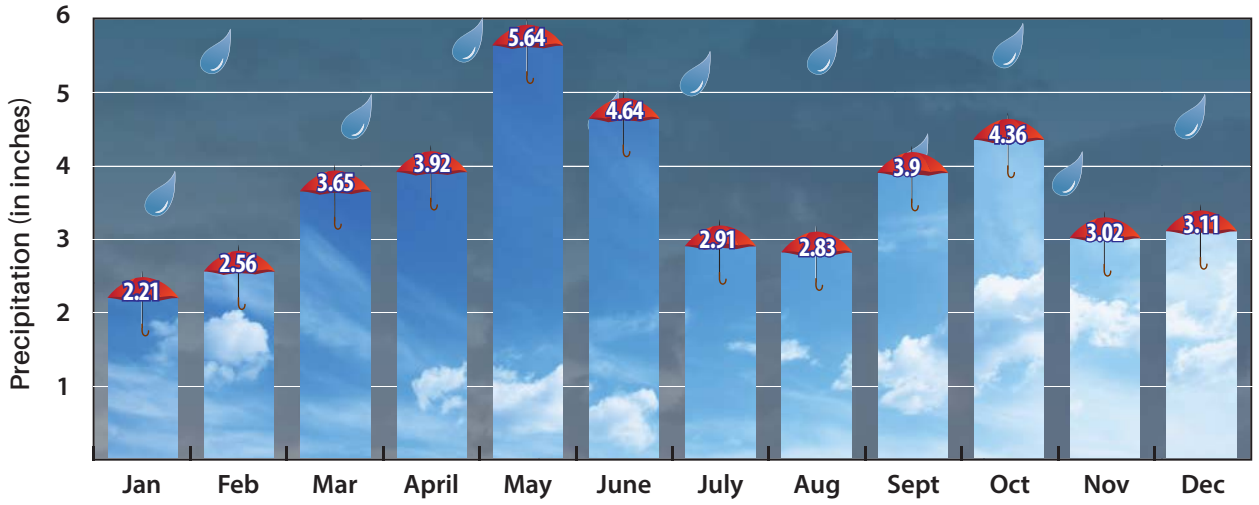
AGL = above ground level
IMC = instrument meteorological conditions
PVC = poor visibility conditions
VMC = visual meteorological conditions

Source: Gainesville Municipal Airport, TX Station ID 72255293929, observations from 1/1/2015 through 12/31/2024

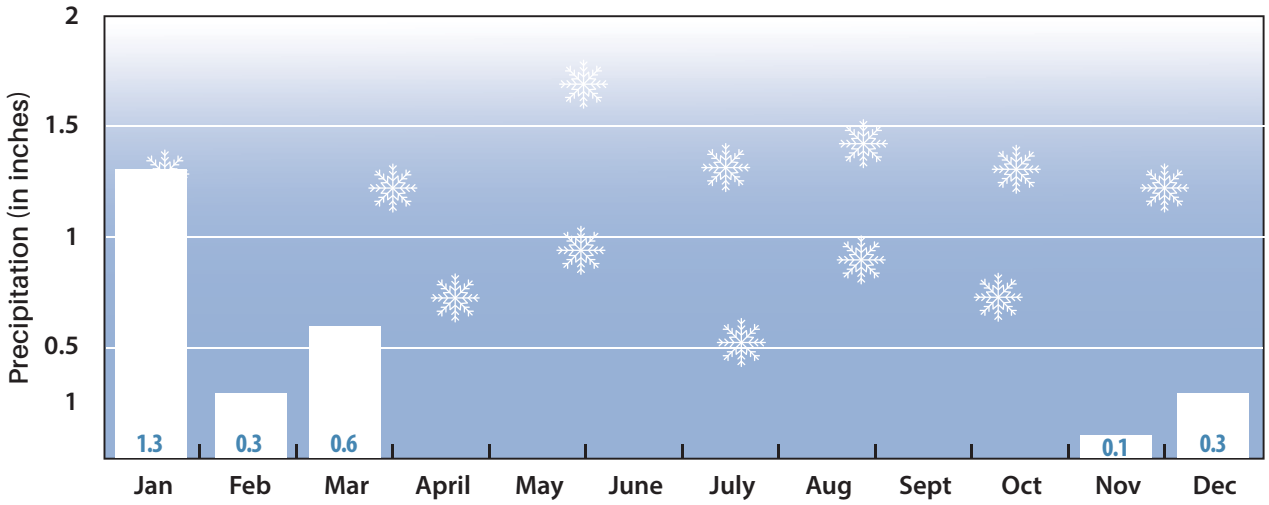
AVERAGE MONTHLY TEMPERATURES



AVERAGE MONTHLY RAINFALL



AVERAGE MONTHLY SNOWFALL



Source: Station: GAINESVILLE 5 ENE, TX

AIRPORT HISTORY

The history of GLE dates back to 1941, when the airfield was constructed as a training base during World War II. Four runways, each of which measured 4,500 feet long by 150 wide, were built. During this period, the United States Army Air Force's Third Air Force trained servicemembers in photographic intelligence for both air and ground forces. Following the war, the airport was determined to be excess and was deeded to the City of Gainesville for civilian use. Two of the four runways were ultimately decommissioned, leaving the dual runway system that exists today. The airport has undertaken numerous improvement projects over the years, including extensions to primary Runway 18-36, terminal building enhancements, and extensive development of the landside area in the form of hangar construction. Today, GLE serves the diverse general aviation needs of North Texas, supporting business/corporate flying, recreational flying, emergency transport, and flight training.

TAX INCREMENT REINVESTMENT ZONE

The City of Gainesville has established three Tax Increment Reinvestment Zones (TIRZ). These are designated areas within a municipality's jurisdiction that are intended to promote development, with improvements in the zone funded by future tax revenue generated within the TIRZ. In essence, the TIRZ functions to revitalize an economically underperforming area by using future tax revenue generated from new development and reinvesting it back into the area. GLE is included within the City of Gainesville's TIRZ #2, which encompasses a total of 3,305 acres. TIRZ #2 was established in December 2023 with an eight-member board convened to make recommendations to the city council concerning administration, management, and operation of the TIRZ. The TIRZ is planned to expire in 2063. Over the course of its 40-year duration, the TIRZ is expected to generate more than $143.5 million in new property tax revenue, following an initial investment of $11.1 million. Proposed development within the TIRZ is primarily industrial in nature, as well as airport-related development. **Exhibit 1C** illustrates the location of TIRZ #2.

AIRPORT SYSTEM PLANNING ROLE

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

- **Local |** GLE's most recent airport master plan was prepared in 2005, with a pen and ink revision to the airport layout plan (ALP) in 2007.
- **State |** GLE is included within the 2010 *Texas Airport System Plan* (TASP). The current TASP is undergoing a comprehensive update.
- **National |** GLE is included in the *National Plan of Integrated Airport Systems* (NPIAS), which categorizes overall airport roles and responsibilities based on input from local and state planning efforts (i.e., master plans and state system plans).

LOCAL AIRPORT PLANNING

2005 Airport Master Plan **|** The *2005 Airport Master Plan* provided a 20-year airport development vision based on aviation demand forecasts for activity levels. The study used 2004 data for its aviation forecasts baseline. The primary recommendations from the *2005 Airport Master Plan* included an extension of the primary runway (Runway 17-35 at the time) to 7,000 feet; construction of a full-length parallel taxiway east of the primary runway; property acquisition for safety area and approach protection; improved instrument approach procedures; and construction of additional landside facilities (aprons/taxilanes/hangars).

STATE AIRPORT PLANNING

The current *Texas Airport System Plan* (TASP) is undergoing a comprehensive update. The primary purpose of a state airport system plan is to study the performance and interaction of an entire aviation system. The TASP objectives include providing air service based on the level of service required throughout the state, adequate airport capacity to meet forecasted demand, and an airport system developed to applicable federal and state planning and design standards.

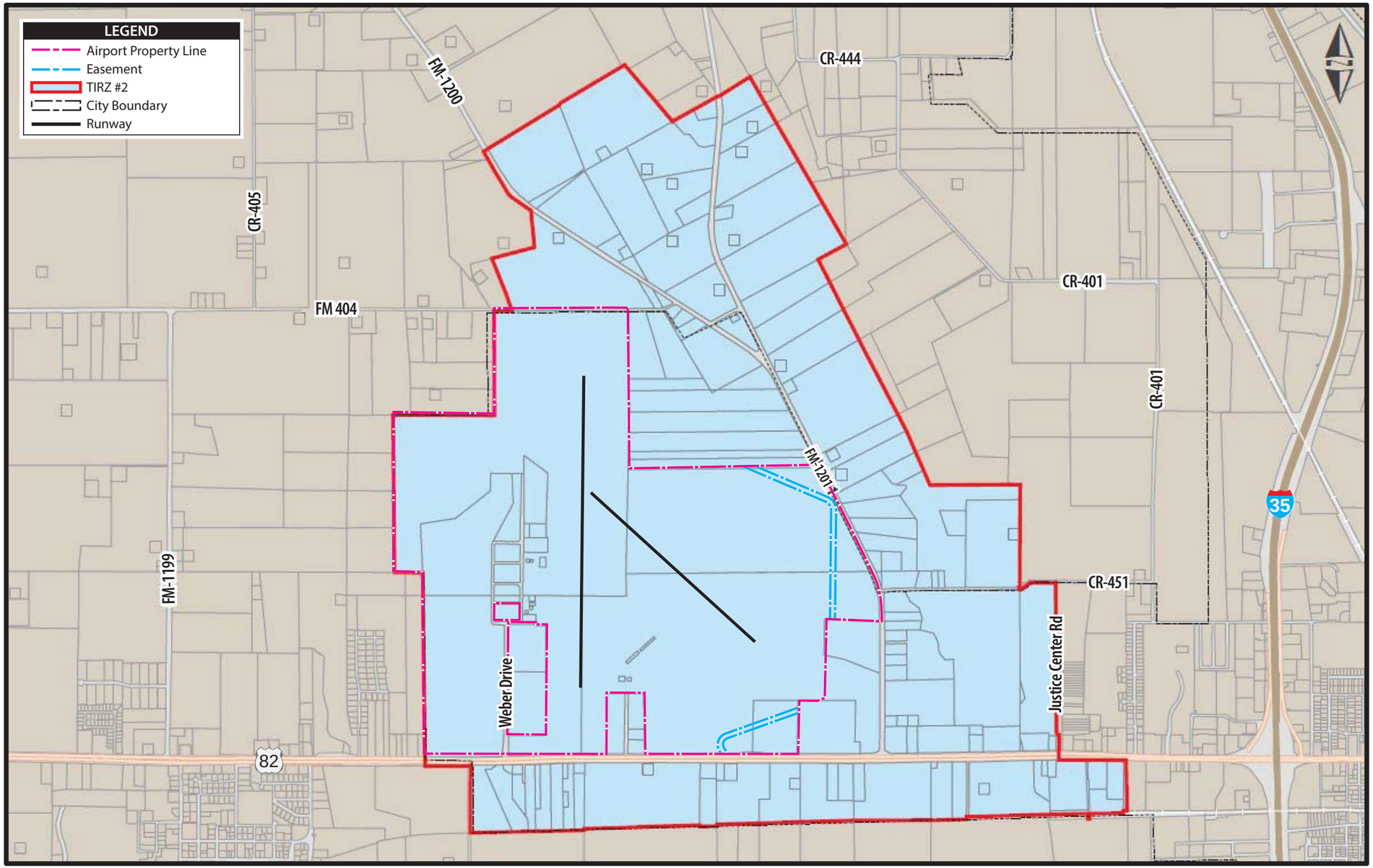
GLE is classified as a business/corporate airport in the TASP. According to the TASP, business/corporate airports provide access to turboprop and turbojet business aircraft and are located near population centers that support business jet activity. These airports serve communities located more than 30 minutes from the nearest commercial service or reliever airport. They typically experience 500 or more business/corporate aircraft operations and have two permanently based jets. The TASP does not identify specific design standards for these airports; however, typical business/corporate airports are developed to airport reference code (ARC) C-II and D-II standards. **Table 1B** compares the state standards for business/corporate airports and existing conditions at GLE.

TABLE 1B | TASP Minimum Design Standards Comparison

	General Aviation	GLE
Role	Business/Corporate	Business/Corporate
ARC	ARC B-II through D-IV	ARC B-II
Runway Length	5,000'	6,000'
Runway Width	100'	100'
Runway Strength	30,000 lbs.	30,000 lbs.
Edge Lighting	MIRL	MIRL
Taxiway	Full Parallel	Full Parallel
Approach Type	Non-Precision	Non-Precision
Visibility Minimums	250' – ¾-mile LPV	250' – ¾-mile LPV
Services Available	Terminal, Restrooms, Telephone, Jet A, Avgas; attended 18 hours	Terminal, Restrooms, Telephone, Jet A, Avgas, Airframe, Powerplant

ARC = airport reference code
LPV = localizer performance with vertical guidance
MIRL = medium intensity runway lighting

Sources: Texas Airport System Plan, 2010; GLE Airport Layout Drawing, 2007



REINVESTMENT ZONE NUMBER TWO, CITY OF GAINESVILLE, TEXAS PRELIMINARY PROJECT AND FINANCE PLAN

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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 that exists today is largely due to federal policy that promotes the development of civil aviation. As part of a continuing effort to develop a national airport system, U.S. Congress has maintained a national plan for the development and maintenance of airports.

The Federal Aviation Administration (FAA) maintains the *National Plan of Integrated Airport Systems* (NPIAS), which is a database of public-use airports that are eligible for *Airport Improvement Program* (AIP) funding. The NPIAS is published and used by the FAA in administering the AIP, which is the 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 on fuel and airline tickets. **An airport must be included in the NPIAS to be eligible for federal funding assistance through the AIP.**

The current plan is the *NPIAS 2025–2029*, which identified 3,287 existing public-use airports and five proposed nonprimary airports anticipated to open by 2029 that are deemed important to national air transportation. The plan estimates that approximately $67.5 billion in AIP-eligible airport projects will require financial assistance between 2025 and 2029, which is an increase of almost $5.1 billion from the previous NPIAS report.

GLE is designated in the NPIAS as a general aviation airport, meaning it does not provide commercial service. Within this airport designation, there are four different airport categories: National, Regional, Local, and Basic. GLE is classified within the Regional category. Regional airports serve to support regional economies with interstate and some long-distance flying. Regional airports have high levels of activity, including by jets and multi-engine propeller aircraft. To qualify as a National airport, the next highest level within the NPIAS, an airport must experience 5,000 or more annual instrument operations, have 11 or more based jets, and experience either 20 or more international flights or 500 or more interstate departures.

CAPITAL IMPROVEMENT HISTORY

To assist in ongoing capital improvements, the FAA and Texas Department of Transportation (TxDOT) Aviation Division provide funding to GLE through the AIP. Texas is a member of the FAA's *Block Grant Program*, which gives TxDOT the responsibility of administering AIP grants to reliever and general aviation airports, including GLE. The State of Texas also offers funding opportunities for which GLE is eligible, which are listed below.

- **Routine Airport Maintenance Program (RAMP) |** TxDOT has historically matched local government grants up to $50,000 for basic improvements, such as parking lots, fencing, and other airside and landside needs. The local match for this program was set at 50 percent. **Beginning in fiscal year 2024, TxDOT increased the total amount available to airports to $100,000 and reduced the local match to 10 percent.**

- **Terminal Building Grants |** TxDOT has funded terminal building construction on a 50/50 basis, up to $1.0 million total project costs, although consideration has recently been given to upgrading the total cost allowance on a case-by-case basis.

- **Airport Traffic Control Tower (ATCT) Grants |** TxDOT funds the construction of up to two ATCTs statewide each year. ATCT funding could be provided on a 90/10 basis, up to a total construction cost of $1.67 million.

- **Federal Aviation Grants |** These grants provide federal and state grant funding for maintenance and improvement projects to airports included in the NPIAS.

Table 1C summarizes airport capital improvement projects and maintenance undertaken at GLE since 1974 with funding from federal, state, and local sources. During this period, the airport has been awarded more than $9.1 million in state and federal grants.

TABLE 1C | Airport Capital Improvement Project History

FY	Local ($)	State ($)	Federal ($)	Project Description
1974	–	–	$7,646	AMP – Shimek, Romig, Jacobs, & Finklea
1980	–	–	$350,000	Overlay, mark, and light RW and TW; drainage and lighting improvements
1985	–	$110,000	–	Reconstruct TW; construct drainage facilities; pave auto park
1991	$59,534	$59,534	$1,071,706	Extend & light RW 17Ð35 (500 feet), extend TW, overlay RW 17Ð35 & parallel TW, relocate VASI, construct underdrain, rehabilitate portion of apron, rehabilitate RW 12-30 & TW, obstruction removal
1994	$6,190	$55,709	–	Construct multi-purpose addition to terminal facility, exposition deck, brick walls and landscaping
1998	$18,561	–	$55,684	Install and maintain AWOS (warranty period through 2/28/05)
2000	$20,620	–	$185,582	Engineering/design for RW extension
2001	–	–	$4,875	Install NADIN Interface for the AWOS
2002	$168,951	–	$210,000	Engineering and construction services associated with earthwork required for a runway and taxiway extension at $330,000 at a 50% matching requirement and final 12 inches of earthwork necessary to bring the subbase to final grade for $40,000 at a 90% federal matching requirement
2002	–	$2,925	–	Engineering services for a Storm Water Discharge Permit & earthwork for a RW & TW extension for $330,000 at 50% matching requirement and final 12 inches of earthwork necessary to bring the sub-base to final grade for $50,000 at a 90% federal matching requirement
2003	$10,978	$10,978	–	RAMP: TxDOT to contract for AWOS Maintenance , Sponsor to contract for airport general maintenance
2003	$254,122	$1,844,899	$442,200	Rehab R/W 17/35 (5000 x 100) and 12/30 (4300 x 75); Extend R/W 17/35 1000 feet; Extend T/W A and construct holding area (1300 x 35); Rehabilitate T/W A (4600 x 35), T/W B and filet (500 x 35), T/W C (2600 x 35), T/W E (500 x 35); Construct T/W D and stub (500 x 35); Expand concrete apron; Reconstruct pcc terminal apron (4333 yd); Mark R/W 17/35 and R/W 12/30; Replace radio controller; Install new light poles w/2 light fixtures, REIL's R/W 17/35, and PAPI-2 R/W 17/35; Construct electrical vault and regulator; Extend MIRL R/W 17/35; Install erosion/ sedimentation controls, topsoil, and seeding, fencing and 5 gates; and Upgrade signage (6 exit, 7 lighted hold, and 1 unlighted hold)

(Continues)

TABLE 1C | Airport Capital Improvement Project History (continued)

FY	Local ($)	State ($)	Federal ($)	Project Description
2004	$5,979	$5,979	–	RAMP: AWOS and NADIN fees pave additional public parking lot, purchase herbicide, reaip beacon tower, terminal building maintenance, paint fuel storage tanks
2004	$15,000	–	$135,000	Update airport master plan; NPE 04-$4,118
2005	$14,400	$14,400	–	RAMP: TxDOT to contract for AWOS maintenance, city to contract for NADIN, pavement repairs to apron, repairs to terminal and hangar buildings, herbicide application, purchase of airfield lighting supplies, professional services t prepare SPCC and SWPPP plans,
2006	$20,910	$20,910	–	RAMP: TxDOT to contract for AWOS maintenance, sponsor to contract for NADIN monthly fee, AWOS repairs A#1 TxDOT to apply herbicide, pavement repairs to apron and taxiways, maintenance for navaids, lighting, hangar and terminal, professional services for SWPPP and SPCC, purchase FOD Boss sweeper
2007	$22,343	$22,343	–	RAMP: TxDOT to contract for AWOS Maintenance, Sponsor to contract for NADIN, AWOS repairs. A#1 Sponsor to contract runway and ramp apron repairs and construction. TxDOT to apply herbicide. Sponsor to contract for repairs to terminal building. Sponsor to contract for drainage repairs. Sponsor to contract for fuel farm modifications, runway/taxi lights and repairs, signage, semi-annual inspections and repairs to NDB.
2008	$181,284	–	$1,625,762	Engineering/design for runway extension pavement repair; Engineering/design the hangar access TW & detention facility; Replace rotating beacon & tower; Repair/overlay RW 17-35 (6000 x 100); Engineering/design for MIRLs; Overlay & repair TW A and Holding area (6000 x 35) & TW D (500 x 35); Construct detention pond; Reimburse MIRL emergency repair; Replace MIRLs RW 17-35 (6000 lf) SBGP-41-2007 $615,567; SBGP-31-2005 $10,325; SBGP-37-2006 $266,863; SBGP-46-2008 $733,007
2008	$26,610	$26,610	–	RAMP: Sponsor to contract for taxiway and ramp rehab. GEN. MAINTENANCE-TxDOT District to apply herbicide. MISC-TxDOT to contract for AWOS maintenance , Sponsor to contract for AWOS AviMEt, AWOS repairs/parts replacement, SPCC and SWPPP updates, hangar and terminal maintenance, airfield lighting and approach aid maintenance, terminal parking lot rehab, other projects tbd and added by amendment.
2009	$11,295	$11,295	–	RAMP: Sponsor to contract for taxiway and ramp rehab.; TxDOT Dist. to apply herbicide; TxDOT- AWOS maint.; Spon - AWOS AviMet; AWOS rep/parts replacement; prof. serv. for SWPPP & SPCC; hangar and terminal repair/maint.; airside/airfield lighting; nav aids; utilit
2010	$9,676	$9,676	–	RAMP: AWOS Maintenance, AviMet Data Link, A#1 terminal and hangar repairs/maintenance, environmental compliance measures, electric gate.
2011	$14,454	$14,454	–	RAMP: TxDOT Contract for AWOS Maintenance, Sponsor to perform airport general maintenance
2012	$8,887	$8,887	–	RAMP: TxDOT to contract for AWOS Maintenance, Sponsor to contract for airport general maintenance projects.
2013	$10,143	$10,143	–	RAMP: TxDOT Contract for AWOS Maintenance, Sponsor to perform airport general maintenance.

(Continues)

TABLE 1C | Airport Capital Improvement Project History (continued)

FY	Local ($)	State ($)	Federal ($)	Project Description
2014	$17,377	$17,377	–	RAMP: TxDOT Contract for AWOS Maintenance, Sponsor to perform airport general maintenance.
2015	$7,658	–	$68,924	Obstruction Survey (NPE FY2011) PLANNING GRANT 2011-08 $68,924
2015–2021	$193,655	$193,655	–	RAMP: Sponsor to perform airport general maintenance.
2018	$45,262	–	$407,359	Remove Excess Pavement along Bravo (NPE '14, '15, '16); Mark Taxiway Bravo; Rehabilitate Taxiway Bravo (NPE '14, '15, '16); Contingency, RPR, Admin, Fees, Taxiway Bravo Rehabilitation; Engineering Design for Taxiway Bravo rehab SBGP-091-2015 $35,955.27; SBGP-097-2016 $150,000.30; SBGP-105-2017 $67,419;SBGP-103-2017 $82,581.30; SBGP-109-2018 $16,938; SBGP-108-2018 $54,466
2020	–	$149,394	–	Engineering and Design for Runway 18/36 repair and Parallel Taxiway surface treatment SBGP-109-2018 $132,654.60; SBGP-130-2020 (CARES) $14,739.40
2024	$65,983	–	$ 593,847	Master Plan (IIJA 22-24)
2025	$7,500	–	$142,500	(Construct) AWOS Replacement (IIJA)(TxDOT Agent)
Totals:	**$1,217,372**	**$2,589,168**	**$5,301,085**	

Source: TxDOT Grant History

ECONOMIC IMPACT

In 2018, TxDOT conducted a study of Texas airports' impacts on and relationships with the statewide economy. Impact types include direct impacts, which account for activities by on-airport businesses and visitors who spend at locations such as hotels and restaurants; indirect impacts, which include any portions of direct impacts that are used to purchase goods or services within the state; induced impacts, which are portions of direct and indirect revenues paid to on-airport workers and spent on goods and services within the state; and total economic impacts, which are the sums of direct, indirect, and induced impacts.

TABLE 1D | Aviation Economic Impact

	GLE	All Texas System Airports
Total Economic Impact	$172.8 million	$94.3 billion
Total Payroll	$62.1 million	$30.1 billion
Total Jobs	2,291	778,995

Source: TxDOT, Texas Aviation Economic Impact Study, 2018

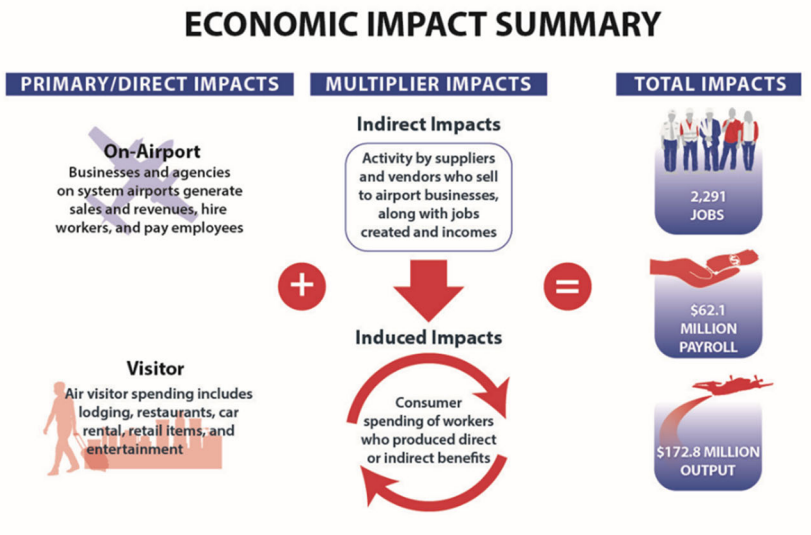


Figure 1A – Economic Impact of GLE

Table 1D and **Figure 1A** summarize the annual economic impact of GLE. This study is now seven years old, so GLE's economic impact has likely grown over time. It is anticipated that TxDOT will update this study in the near future.

AERONAUTICAL ACTIVITY

At airports that primarily serve general aviation activity, the numbers of based aircraft and operations (takeoffs and landings) are key aeronautical activity measures. These indicators will be used in subsequent analyses in this master plan to project future aeronautical activity and determine future facility requirements.

OPERATIONS

As a non-towered airport, GLE does not have accurate historical counts of aircraft operations; however, the emergence of automatic dependent surveillance-broadcast (ADS-B) technology has created the opportunity to acquire operational data at non-towered airports. ADS-B is a surveillance technology that enables pilots of aircraft to determine their precise positions via satellite navigation and periodically broadcast this information. ADS-B provides real-time data to air traffic control and other aircraft, enhancing situational awareness and safety. The FAA has mandated that, as of January 1, 2020, all aircraft operating in most controlled airspace in the United States must be equipped with ADS-B Out capabilities. This requirement is part of a broader effort to modernize the air traffic management system and improve the accuracy and efficiency of aircraft tracking.

GLE has contracted with Virtower, an air traffic management system, to provide operational data utilizing ADS-B technology. Virtower began providing operational data to GLE starting in June 2024. A summary of operations for the 12-month period ending in May 2025 is provided in **Table 1E**. These data establish that 114,451 total operations (takeoffs and landings) occurred at GLE during this time period, with August as the peak month for operations.

TABLE 1E | Operations History

Month	Total Operations (Takeoffs and Landings)	
	2024	2025
January	N/A	8,143
February	N/A	7,981
March	N/A	9,460
April	N/A	9,138
May	N/A	10,388
June	10,233	N/A
July	8,158	N/A
August	11,383	N/A
September	11,124	N/A
October	10,960	N/A
November	9,768	N/A
December	7,715	N/A
Total:	**69,341**	**45,110**
12-Month Total:	**114,451**	

Boldface indicates annual peak month.
N/A = not available

Source: Virtower, data available between June 1, 2024, and May 31, 2025

Aircraft are classified based on operational and physical characteristics represented by the aircraft approach category (AAC) and airplane design group (ADG). The AAC, which is represented by a letter (A through E), generally refers to an aircraft's approach speed in landing configuration, while the ADG, which is represented by a Roman numeral (I through VI), relates to aircraft wingspan or tail height. For example, the A-I category is represented by small aircraft, such as the Cessna 172; the B-II category represents most small to mid-sized business jets, including the Cessna Citation II; and the D-II/D-III category represents the largest/fastest business jets, including the Gulfstream GIV and GV. **Table 1F** summarizes GLE operational data by the various airport reference codes (ARCs) and shows that most operations are within the A-I, A-II, B-I, and B-II categories, which is typical for a general aviation airport.

TABLE 1F | Operations by Aircraft Reference Code (ARC)

ARC	Example Aircraft	12-Month Period
A-I	Cessna 172	109,511
A-II	Pilatus PC-12	408
A-III	DC-7	0
B-I	Cessna 425	509
B-II	Cessna Citation II	772
B-III	Global Express	6
C-I	Learjet 45	120
C-II	Challenger 300	189
C-III	Airbus A320	6
C-IV	C-130/A400M	0
C-V	Airbus A350	0
D-I	Learjet 35	0
D-II	Gulfstream GIV	2
D-III	Gulfstream GV	0

Note: Data captured also include 1,958 helicopter operations and 970 operations classified as "unknown."

Source: Virtower, data available between June 1, 2024, and May 31, 2025

BASED AIRCRAFT

Identifying the current number of based aircraft is important to master plan analysis but can be challenging because of the transient nature of aircraft storage. The airport maintains a record of aircraft based on the airport. As of July 2025, there were 122 based aircraft within the airport's records; however, according to the FAA's validation process, only 115 of those aircraft have been validated as being based at GLE. This means seven aircraft in GLE's based aircraft inventory are already validated at other airports, are not operational or airworthy, or do not have current registrations with the FAA. For the purposes of the master plan and forecasting of aviation demand, only FAA-validated aircraft will be used as the baseline count. The 115 validated based aircraft include 90 single-engine piston aircraft, 17 multi-engine aircraft, six jets, and two helicopters.

AIRSIDE FACILITIES AND SERVICES

There are three broad categories of facilities and services at the airport: airfield, landside, and support.

- **Airfield facilities:** facilities directly associated with aircraft operations, including runways, taxiways, lighting, marking, navigational aids, and weather reporting equipment
- **Landside facilities:** facilities that are necessary to provide a safe transition from surface to air transportation and support aircraft parking, servicing, storage, maintenance, and operational safety
- **Support facilities:** facilities that serve as a critical link to provide the necessary efficiency to aircraft ground operations, such as fuel storage, airport maintenance, firefighting, and fencing

AIRFIELD FACILITIES

Existing airfield facilities are identified on **Exhibit 1D** and described in the sections below.

RUNWAYS

GLE has a dual runway system. Primary Runway 18-36 is oriented north/south and measures 6,000 feet long and 100 feet wide. The runway is constructed of asphalt and has a weight-bearing capacity of 30,000 pounds single wheel loading (S) and 50,000 pounds dual wheel loading (D). The runway is equipped with non-precision markings, which are in good condition and include threshold markings, runway designations, centerline and edge striping, and aiming points. The runway slopes down from the north end at a gradient of 0.88 percent. The runway is equipped with white medium intensity edge lighting to illuminate the runway edges at night and/or during poor meteorological conditions. Standard left-hand traffic patterns are used for each runway end.

Runway 18

Crosswind Runway 13-31 is 4,307 feet long and 75 feet wide and has a weight-bearing capacity of 15,000 pounds S. The asphalt runway surface is reported to be in poor condition with extensive cracking. The runway markings are basic but include aiming points, as well as runway designation and centerline striping. Markings are faded. There are no runway edge lights. Standard left-hand traffic patterns are used for each runway end.

TAXIWAYS

A taxiway is a defined path established for the taxiing of aircraft from one part of an airport to another. The taxiway system at GLE consists of a full-length parallel taxiway with four taxiway connectors. All taxiways are 35 feet wide, with the exception of Taxiway C, which is 40 feet wide. Taxiway A serves as the full-length parallel taxiway, with a 400-foot separation from the runway centerline north of Taxiway D and a 600-foot separation south of Taxiway D. All taxiways are equipped with blue centerline reflectors. **Table 1G** provides information for each taxiway at GLE.

TABLE 1G | Taxiway Data Table

Designation	Width	Description
A	35'	Full-Length Parallel
B	35'	Entrance/Connector to Runway 36 Threshold
C	40'	Connector/Apron Access
D	40'	Entrance/Connector to Runway 13
E	40'	Entrance/Connector to Runway 18 Threshold

Source: Coffman Associates analysis

HOLDING BAYS

A holding bay is a designated area on the airfield that is typically located at the end of a taxiway near the runway end. Pilots typically utilize holding bays to conduct final pre-flight checks prior to takeoff. There are two holding bays on the airfield at GLE. The holding apron on the north end of Taxiway A is approximately 2,500 square yards and the holding apron adjacent to Taxiway D is approximately 1,500 square yards in size. Both are able to accommodate multiple aircraft at one time.

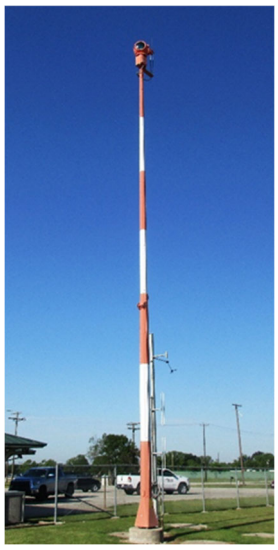
Holding Bay at Taxiway D

AIRFIELD LIGHTING, SIGNAGE, AND MARKING

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

Airport Identification Lighting

The location of the airport at night is universally identified by a rotating beacon. The rotating beacon projects two beams of light, one white and one green, 180 degrees apart. The beacon operates from sunset to sunrise and is located immediately north of the terminal building.



Rotating Beacon

Pavement Edge Lighting

Pavement edge lighting defines the lateral limits of the pavement to ensure safe operations during night and/or low visibility times, maintaining safe and efficient access to and from the runway and aircraft parking areas. Primary Runway 18-36 is equipped with medium intensity runway lighting (MIRL). Each runway end is equipped with threshold lights, which emit green light outward from the runway and emit red light toward the runway. Green lights indicate the landing threshold to arriving aircraft and red lights indicate the end of the runway for departing aircraft. The MIRL associated with Runway 18-36 is preset to low intensity; pilots are able to increase the intensity via the common traffic advisory frequency (CTAF 123.0). Crosswind Runway 13-31 is not equipped with lighting. The entirety of the taxiway system at GLE is equipped with blue centerline reflectors.

Airfield Data				
RUNWAY				
Runway Designation	**18**	**36**	**13**	**31**
Length	6,000'		4,307'	
Width	100'		75'	
End Elevation	845.4' MSL	792.4' MSL	826.3' MSL	792.2' MSL
Gradient	0.88%		0.79%	
Surface Material/Condition	Asphalt/Excellent		Asphalt/Poor	
Markings	Non-precision		Basic	
Lighting	MIRL		NA	
Load Bearing Strength	30,000 lbs S | 50,000 lbs D		15,000 lbs S	
Visual Approach Aids	PAPI-2 (Right)	PAPI-2 (Left)	NA	
Instrument Approach Procedures	LPV GPS	LPV GPS	None	
Traffic Pattern	Left	Left	Left	Left

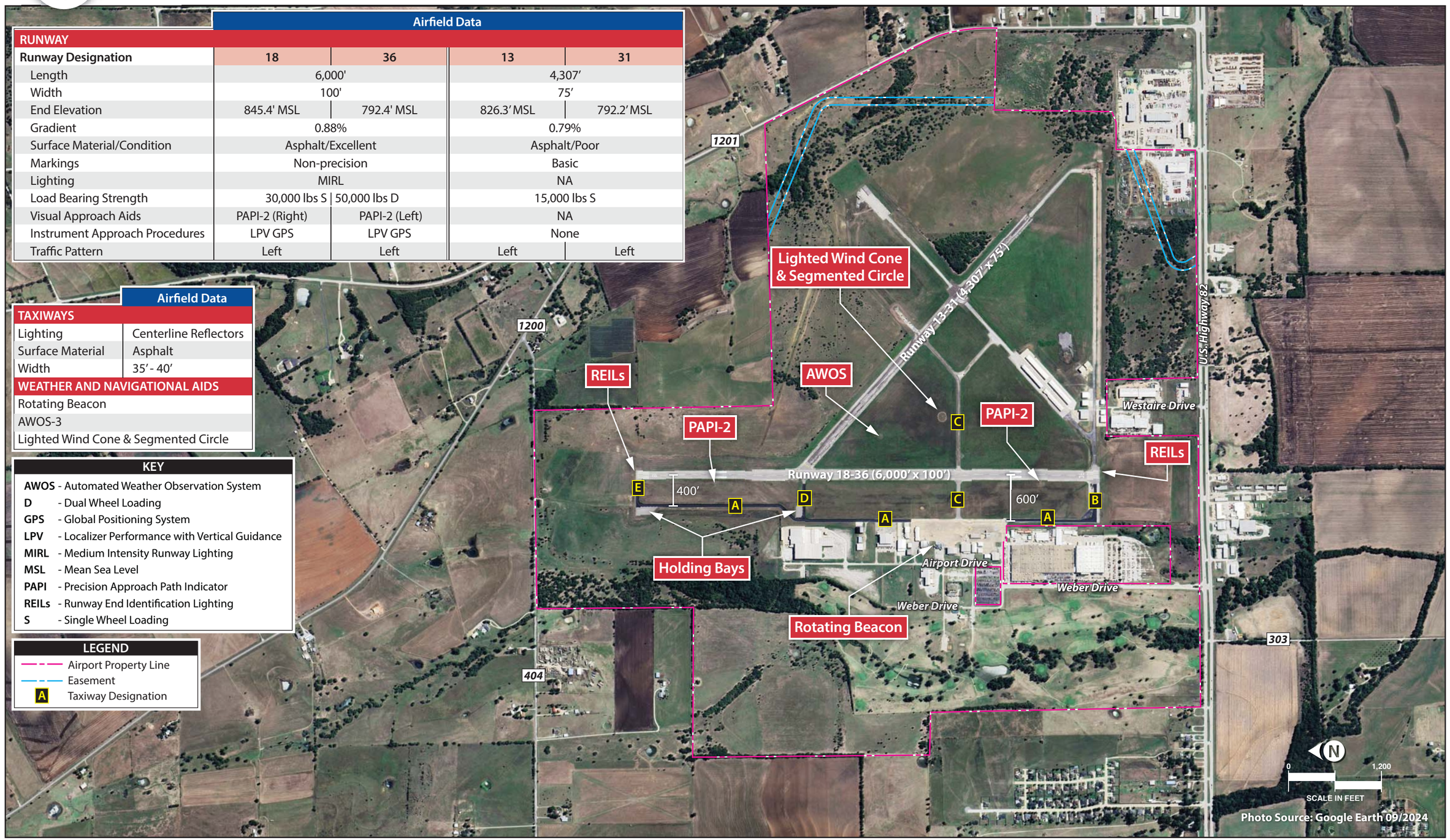
Airfield Data	
TAXIWAYS	
Lighting	Centerline Reflectors
Surface Material	Asphalt
Width	35' - 40'
WEATHER AND NAVIGATIONAL AIDS	
Rotating Beacon	
AWOS-3	
Lighted Wind Cone & Segmented Circle	

KEY

AWOS - Automated Weather Observation System
D - Dual Wheel Loading
GPS - Global Positioning System
LPV - Localizer Performance with Vertical Guidance
MIRL - Medium Intensity Runway Lighting
MSL - Mean Sea Level
PAPI - Precision Approach Path Indicator
REILs - Runway End Identification Lighting
S - Single Wheel Loading

LEGEND

Airport Property Line
Easement
A Taxiway Designation



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Visual Approach Aids

Visual glideslope approach aids provide visual cues to pilots, alerting them as to whether they are on the correct glide path to landing. Each end of Runway 18-36 is outfitted with two-light precision approach path indicator (PAPI) lights with a 3.00-degree standard glide path. A pilot interprets the system of red and white lights for an indication of positioning above, below, or on the designated descent path to the runway. Runway 13-31 is not equipped with visual glideslope approach aids.

PAPI-2 System

REILs

Runway end identification lights (REILs) provide a visual identification of the runway end for landing aircraft. The REILs consist of two synchronized flashing lights which are located laterally on each side of the runway end, facing the approaching aircraft. These flashing lights can be seen during the day or night for up to 20 miles, depending on visibility conditions. Both ends of Runway 18-36 are equipped with REILs. Runway 13-31 is not equipped with REILs. The PAPIs and REILs associated with Runway 18-36 operate continuously; their locations are identified on **Exhibit 1D**.

Approach Lighting System (ALS)

An ALS is a configuration of lights positioned symmetrically along the extended runway centerline to supplement navigational aids, such as an instrument landing system (ILS), to provide lower visibility minimums or enhance nighttime approaches under visual flight rule conditions. The approach lighting system provides a pilot with visual cues concerning aircraft alignment, roll, height, and position relative to the threshold. None of the runways at GLE are equipped with an ALS.

Airfield Signage

Airfield identification signs assist pilots in identifying runways, taxiway routes, and critical areas. The presence of runway/taxiway signage is an essential component of a surface movement guidance control system and is necessary for the safe and efficient operation of the airport. The airfield at GLE is equipped with lighted location, directional, and mandatory instruction signs.

Airfield Directional Signage

Pavement Markings

Pavement markings aid in the safe and efficient movement of aircraft along airport surfaces and identify closed or hazardous areas on the airport. GLE provides and generally maintains marking systems in accordance with Part 139.311(a), FAA Advisory Circular (AC) 150/5340-1, *Standards for Airport Marking*, and AC 150/5300-13B, *Airport Design*.

Holding Position Marking

As previously detailed, Runway 18-36 is equipped with non-precision markings that include designation, centerline, threshold, aiming point, and side stripe markings. Runway 13-31 has basic markings that also include aiming points; these markings are in poor condition. All taxiways at the airport are marked with a yellow centerline, holding position markings, and leadoff lines on regularly used exits. Centerline markings assist pilots with maintaining proper clearance from pavement edges and objects near taxiway edges. Aircraft holding positions are marked at each runway/taxiway intersection. Holding positions are located 250 feet from the centerline on Runway 18-36. The holding position on Taxiway C prior to Runway 13-31 is also located 250 feet from the runway centerline.

WEATHER AND COMMUNICATION AIDS

Automated Weather Observing System (AWOS)

AWOS-3

GLE is equipped with an AWOS-3, which measures and reports wind direction and speed, visibility, temperature and dew point, altimeter setting (barometric pressure) and density altitude, cloud height, and precipitation type and intensity. The AWOS-3 updates observations every minute for 24 hours a day and transmits the information to pilots at and near the airport by a very high frequency (VHF) ground-to-air radio transmitter via frequency 118.375 megahertz (MHz). Pilots can also receive the weather report by calling a local telephone number (940-612-3549). The AWOS equipment is located at the approximate midpoint of Runway 18-36, approximately 500 feet east of the runway centerline.

Wind Cone and Segmented Circle

GLE also has a lighted wind cone and segmented circle, which are located east of Runway 18-36, approximately 200 feet from Taxiway C. The wind cone informs pilots of the wind direction and speed, while the segmented circle communicates aircraft traffic pattern information.

Lighted Wind Cone and Segmented Circle

AREA AIRSPACE AND AIR TRAFFIC CONTROL

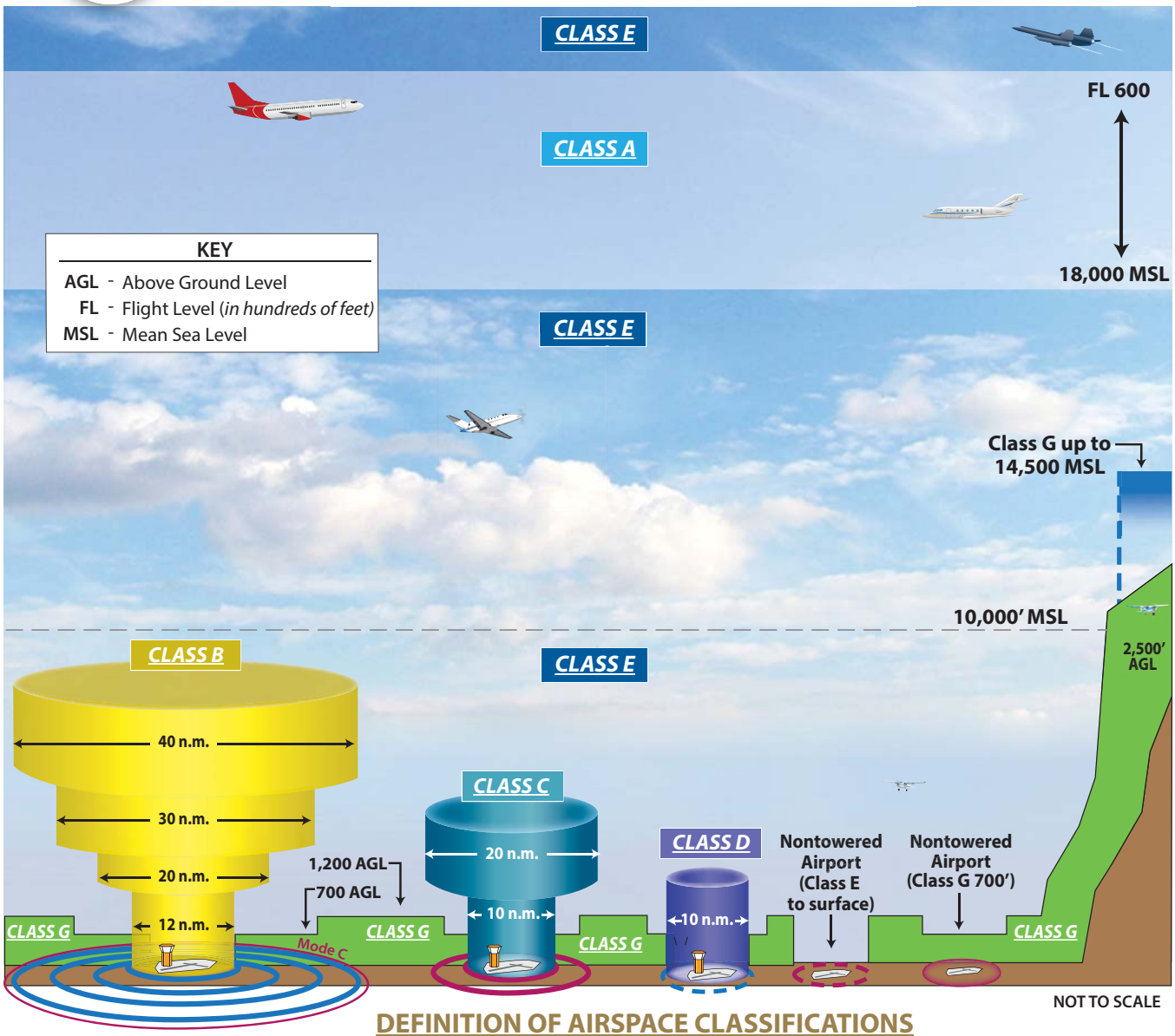
The *Federal Aviation Administration Act of 1958* established the FAA as the responsible agency for the control and use of navigable airspace within the United States. The FAA established the National Airspace System (NAS) to protect persons and property on the ground and create a safe and efficient 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; associated rules, regulations, and procedures; technical information; and personnel and material. The system also includes components shared jointly with the military.

AIRSPACE STRUCTURE

Airspace within the United States is broadly classified as either controlled or uncontrolled. The difference primarily relates 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 United States, as shown on **Exhibit 1E**. 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.

Class A | Class A is controlled airspace and includes all airspace from 18,000 feet mean sea level (MSL) to Flight Level 600 (approximately 60,000 feet MSL). This airspace is designated in Federal Aviation Regulation (FAR) Part 71.193 for positive control of aircraft. The positive control area (PCA) allows flights that are governed only under IFR operations. An aircraft must have special radio and navigational equipment, and the pilot must obtain clearance from an air traffic control (ATC) facility to enter Class A airspace. Additionally, the pilot must possess an instrument rating to operate in Class A.

Class B | Class B is controlled airspace surrounding high-activity commercial service airports. Class B 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 within Class B airspace, an aircraft must be equipped with special radio and navigation equipment and



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

the pilot must obtain clearance from air traffic control. A pilot is required to have at least a private pilot certificate or be a student pilot who has met the requirements of FAR Part 61.95, which requires special ground and flight training for Class B airspace. Aircraft are also required to utilize a Mode C transponder within a 30-nautical-mile (nm) range of the center of the Class B airspace. A Mode C transponder allows ATC to track the location and altitude of the aircraft. The nearest Class B airspace is Dallas/Fort Worth International Airport (DFW), which is located approximately 16 nautical miles (nm) from GLE.

Class C | Class C is controlled airspace surrounding lower-activity commercial service and some military airports. The FAA has established Class C airspace at 120 airports around the country as a means of regulating air traffic in these areas. 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 operate inside Class C airspace, aircraft must be equipped with a two-way radio and an encoding transponder, and the pilot must have established communication with ATC. Examples of Class C airspace include Will Rogers International Airport (OKC) and Tinker Air Force Base (TIK).

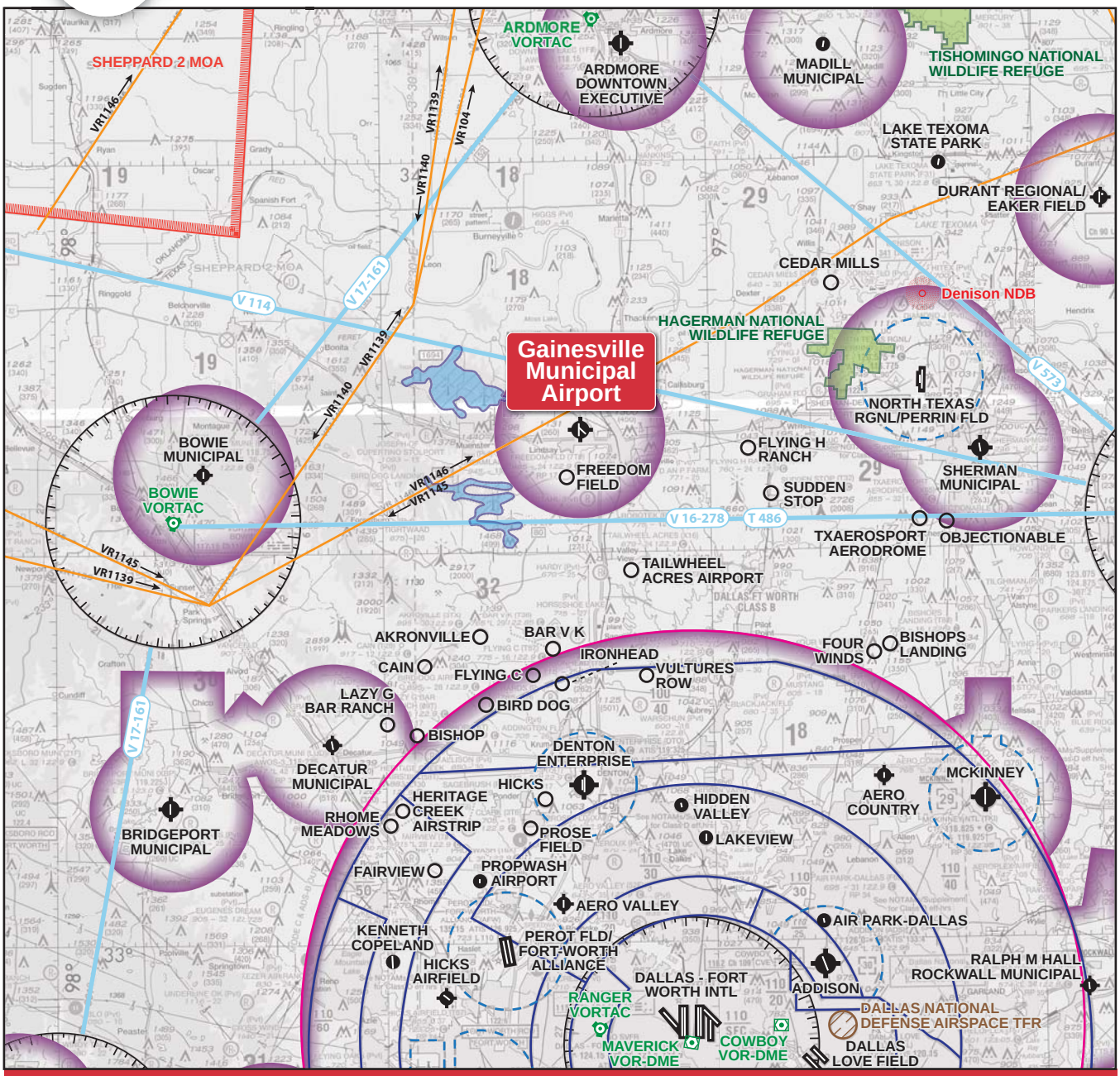
Class D | Class D is controlled airspace surrounding most airports with operating ATCTs and not classified under B or C airspace designations. Class D airspace typically constitutes a cylinder with a horizontal radius of four or five nm from the airport, extending from the surface up to a designated vertical limit, which is typically set at approximately 2,500 feet above the airport elevation. If an airport has an instrument approach or departure, the Class D airspace sometimes extends along the approach or departure path. The nearest Class D airspace is associated with Denton Enterprise Airport (DTO), which is located approximately 27 nm to the south.

Class E | Class E is controlled airspace surrounding an airport that encompasses all instrument approach procedures and low-altitude federal airways. Only aircraft conducting instrument flights are required to be in contact with the appropriate ATC facility 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. As shown on **Exhibit 1F**, Gainesville Municipal Airport is in Class E airspace, the surface of which begins at 700 feet above ground level (AGL). The airspace surrounding the airport below 700 feet AGL is Class G airspace.

Class G | Class G is uncontrolled airspace that is typically found in rural areas and does not require communication with an air traffic control facility. Class G airspace lies between the surface and the overlying Class E airspace (700 to 1,200 feet AGL). While aircraft may technically operate within Class G airspace without any contact with ATC, it is unlikely many aircraft will operate this low to the ground. Furthermore, FAR Part 91.119, *Minimum Safe Altitudes*, specifies minimum altitudes for flight.

SPECIAL USE AIRSPACE

Special use airspace is defined as airspace where activities must be confined because of their nature, or where limitations are imposed on aircraft not taking part in those activities. Special use airspace identifies for other users the areas where these non-standard operations may be occurring by outlining active times and/or altitudes to provide separation information in the area. Most special use airspace is designated on FAA aeronautical charts. The special use airspace in the vicinity of GLE is depicted on **Exhibit 1F**.



LEGEND

- 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'
- Airport with other than hard-surfaced runway
- Compass Rose
- VORTAC
- VOR-DME
- Non-Directional Radio Beacon (NDB)
- Wind Turbine Farm
- Class B Airspace
- Class D Airspace
- Class E (sfc) Airspace with floor 700' above surface that laterally abuts 1200' or higher Class E airspace
- Mode C
- Victor Airways
- Military Training Routes
- Wildlife Refuge
- Alert Area and Military Operations Area (MOA)

Source: Dallas-Fort Worth Sectional Chart, US Department of Commerce, National Oceanic and Atmospheric Administration, April 2025

Victor Airways | Victor airways are a system of federal airways established for aircraft arriving to or departing from the regional area and navigating by using very high frequency omni-directional range (VOR) facilities. Victor airways are corridors of airspace that are eight miles wide and extend upward from 12,000 feet AGL to 18,000 feet MSL and extend between VOR facilities. There are several Victor airways surrounding the airport, identified with yellow lines marked with a "V" preceding a designation number on **Exhibit 1F**.

Military Operations Areas (MOAs) | An MOA is an area (volume) of airspace designated for military training use. This is not restricted airspace; however, pilots who use this airspace should be on alert for the possibility of military traffic. A pilot may need to be aware that military aircraft can be found in high concentrations, conducting aerobatic maneuvers, and possibly operating at high speeds and/or at lower elevations. The nearest MOA is the Sheppard 2 MOA, which is located approximately 30 nm northwest.

Restricted Airspace | Restricted airspace is an area of airspace, typically used by the military, in which the local controlling authorities have determined that air traffic must be restricted (if not continually prohibited) for safety or security concerns. Restricted airspace is depicted on aeronautical charts with the letter "R" followed by a serial number. Restricted areas denote the existence of unusual, often invisible, hazards to aircraft, such as artillery firing, aerial gunnery, or guided missiles. Penetration of restricted areas without authorization from the using or controlling agency may be extremely hazardous to the aircraft and its occupants. Restricted airspace zones may not always be active; in such cases, schedules of local dates and times are typically available to aviators that specify when a zone is active, and at other times, the airspace is subject to normal operation for the applicable airspace class. There are no restricted airspace areas in the vicinity of the airport.

Alert Areas | Alert areas are depicted on aeronautical charts to inform non-participating pilots of areas that may contain high volumes of pilot training or unusual types of aerial activity, such as military operations. Pilots should be particularly alert when flying in these areas. Military activities or other flight training in these areas typically operate at lower altitudes and may occur at any time of the day or night. General aviation flights are not restricted within these areas, but pilots are strongly cautioned to be alert for high-speed military training aircraft.

Military Training Routes (MTRs) | MTRs are designated airspace established for use by high-performance military aircraft to train below 10,000 feet AGL and at speeds exceeding 250 knots. There are visual (VR) and instrument (IR) designated MTRs. An MTR with no segment above 1,500 feet AGL is designated with the VR or IR label followed by a four-digit number. An MTR with one or more segments above 1,500 feet AGL is identified by the route designation followed by a three-digit number. The arrows on the route show the direction of travel. MTRs in the vicinity of GLE are depicted on **Exhibit 1F** using an orange line and are associated with their identifying numbers.

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 en route. An ARTCC assigns specific routes and altitudes along federal airways to maintain separation and orderly traffic flow. The Fort Worth ARTCC controls IFR air traffic en route to and from GLE.

Flight Service Station (FSS) | Flight service stations are air traffic facilities that provide pilot briefings, flight plan processing, in-flight radio communications, search and rescue (SAR) services, and assistance to lost aircraft in emergency situations. FSS facilities also relay ATC clearances, process notices to airmen (NOTAMs), broadcast aviation metrological and aeronautical information, and notify Customs and Border Protection of trans-border flights. The Fort Worth Flight Service Station is the nearest FSS to GLE.

NAVIGATIONAL AIDS

Navigational aids are electronic devices that transmit radio frequencies pilots of properly equipped aircraft can translate into point-to-point guidance and position information. The types of electronic navigational aids available for aircraft flying to and from GLE include a VOR facility, a non-directional 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 navigational courses. Distance measuring equipment (DME) is frequently combined with a VOR facility (VOR-DME) to provide distance as well as direction information to pilots. Military tactical air navigation aids (TACANs) and civil VORs are commonly combined to form a VORTAC. The VORTAC provides distance and direction information to both civil and military pilots. The following are located near GLE:

- Bowie VORTAC – 32 nm west
- Ardmore VORTAC – 33.5 nm north
- Texoma DME – 43.9 nm northeast
- Ranger VORTAC – 45.7 nm south
- Maverick VOR/DME – 47.6 nm south
- Cowboy VOR/DME – 48 nm south

A non-directional beacon (NDB) is a radio transmitter at a known location that is used as an aviation or marine navigational aid. The signal transmitted does not include inherent directional information, in contrast to other navigational aids, such as a VOR. NDB signals follow the curvature of the earth, so they can be received at much greater distances at lower altitudes – a major advantage over VOR. NDBs are generally being phased out of use by the FAA; however, one is still in operation in the vicinity of GLE: the Denison NDB, 28.4 nm northeast 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 around the earth to transmit electronic radio signals, which pilots of properly equipped aircraft use to determine altitude, speed, and other navigational information. This provides more freedom in flight planning and allows for more direct routing to destinations. GPS provides en-route navigation and non-precision instrument area navigation (RNAV) approaches to both ends of Runway 18-36.

Instrument Approach Procedures

Instrument approach procedures assist pilots in locating and landing at an airport during low visibility and cloud ceiling conditions. They are defined as either precision with vertical guidance (APV) or non-precision. Precision instrument approach aids provide an exact course alignment and vertical descent path for an aircraft on final approach to a runway with a height above threshold (HAT) lower than 250 feet and visibility lower than ¾-mile. Examples of a precision approach include a Category (CAT) I instrument landing system (ILS) and a ground-based augmentation system (GBAS) landing system (GLS). APVs also provide course alignment and vertical descent path guidance with HATs of 200 feet or more and visibility minimums of ¾-mile or greater. Example APV approaches include vertical navigation (VNAV) and localizer performance with vertical guidance (LPV). Non-precision instrument approaches (NPAs) provide only course alignment information with no vertical component. NPAs can have visibility minimums down to ½-mile or greater and have HATs of no lower than 250 feet. Examples of NPAs include VOR, NDB, area navigation (RNAV), lateral navigation (LNAV), localizer performance (LP), and localizer (LOC) approaches.

Instrument approach minimums are published for different aircraft categories (described in greater detail in Chapter Two) and each consists of a minimum decision altitude and required visibility. According to FAR 91.175, a pilot must be able to make a safe landing and have the runway in sight, and the visibility requirement must be 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 currently two published instrument approach procedures at GLE. Runway 18 and Runway 36 both have RNAV-GPS approaches, as detailed in **Table 1H**.

TABLE 1H | Instrument Approach Procedures

	Approach Category			
	A	B	C	D
Runway 18 RNAV (GPS) – LPV	267' DA; ⅞-mile VM			
Runway 18 RNAV (GPS) – LNAV/VNAV	268' DA; ⅞-mile VM			
Runway 18 RNAV (GPS) – LNAV MDA	374' DA; 1-mile VM			
Runway 18 RNAV (GPS) – Circling	434' DA; 1-mile VM	474' DA; 1-mile VM	674' DA; 2-mile VM	754' DA; 2½-mile VM
Runway 36 RNAV (GPS) – LPV	250' DA; ¾-mile VM			
Runway 36 RNAV (GPS) – LNAV/VNAV	250' DA; ¾-mile VM			
Runway 36 RNAV (GPS) – LNAV MDA	342' DA; 1-mile VM			
Runway 36 RNAV (GPS) – Circling	435' DA; 1-mile VM	494' DA; 1-mile VM	674' DA; 2-mile VM	754' DA; 2½-mile VM

DA = decision altitude
GPS = global positioning system
LNAV = lateral navigation
LPV = localizer performance with vertical guidance
MDA = minimum descent altitude
RNAV = area navigation
VM = visibility minimum

Source: Airnav.com

RUNWAY USE AND TRAFFIC PATTERNS

The traffic pattern at the airport is maintained to provide the safest and most effective use of the airspace. At GLE, all runways have standard left-hand traffic patterns, which means aircraft make left turns when in the pattern for landing.

Understanding runway utilization is an important component of calculating airfield capacity and delay, as well as in the consideration of instrument approach procedures. Runway usage for the last 12 months ending on May 31, 2025, is detailed in **Table 1J**.

TABLE 1J | Runway Usage

	Takeoffs	Landings
Runway 18	58%	63%
Runway 36	32%	31%
Runway 13	7%	1%
Runway 31	3%	5%

Source: Virtower, data available between June 1, 2024, and May 31, 2025

GLE is situated at 846 feet MSL. The standard traffic pattern altitude is 1,000 feet above the elevation of the airport surface (1,846 feet MSL). The traffic pattern for heavy and turbine aircraft is 1,500 feet above the airfield elevation (2,346 feet MSL), while rotorcraft and ultralight aircraft should maintain an altitude of 1,346 feet MSL. There are no specific operating procedures for helicopters.

GLE does not have aircraft restrictions, curfews, or a mandatory noise abatement program, as these programs would violate the federal *Airport Noise and Capacity Act of 1990* (ANCA). Federal law requires the airport to remain open 24 hours a day, seven days a week, and accept all civilian and military aircraft that can be safely accommodated.

LANDSIDE FACILITIES

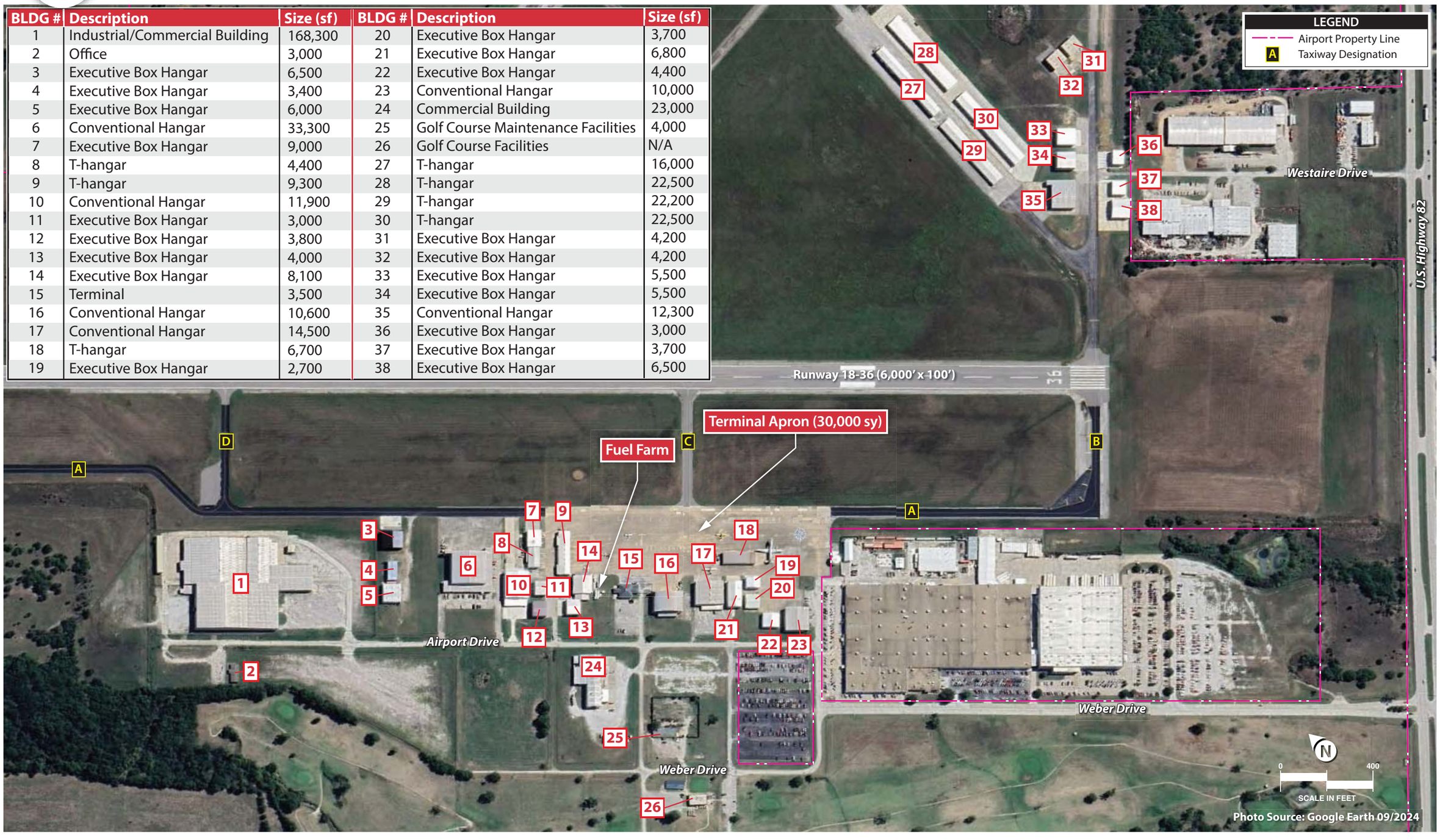
Landside facilities are those that support the aircraft and pilot/passenger handling functions, as well as other non-aviation facilities that typically provide a revenue stream to the airport. These facilities include the passenger terminal/fixed base operator (FBO) complex, general aviation facilities, automobile parking, and other non-aviation business located at the airport.

TERMINAL BUILDING

The terminal building at GLE was constructed in 1996, measures approximately 3,500 square feet (sf), and includes an additional 1,000 sf of covered outdoor space. The terminal offers a variety of services and amenities to pilots and visitors, including a public lobby, a pilots' lounge, a flight planning room, a conference room, offices for airport staff, a kitchen area, and restrooms. FBO services are provided by the City of Gainesville and managed from the terminal building. Available services include aircraft fueling (self-service 100LL fuel and full-service Jet A fuel), passenger handling, and aircraft parking. Two courtesy cars are available for transient pilot use. As depicted on **Exhibit 1G**, the terminal building is located on the west side of the apron and is accessible via Airport Drive. The building is open daily from 8:00 a.m. to 5:00 p.m.

Airport Terminal

BLDG #	Description	Size (sf)	BLDG #	Description	Size (sf)
1	Industrial/Commercial Building	168,300	20	Executive Box Hangar	3,700
2	Office	3,000	21	Executive Box Hangar	6,800
3	Executive Box Hangar	6,500	22	Executive Box Hangar	4,400
4	Executive Box Hangar	3,400	23	Conventional Hangar	10,000
5	Executive Box Hangar	6,000	24	Commercial Building	23,000
6	Conventional Hangar	33,300	25	Golf Course Maintenance Facilities	4,000
7	Executive Box Hangar	9,000	26	Golf Course Facilities	N/A
8	T-hangar	4,400	27	T-hangar	16,000
9	T-hangar	9,300	28	T-hangar	22,500
10	Conventional Hangar	11,900	29	T-hangar	22,200
11	Executive Box Hangar	3,000	30	T-hangar	22,500
12	Executive Box Hangar	3,800	31	Executive Box Hangar	4,200
13	Executive Box Hangar	4,000	32	Executive Box Hangar	4,200
14	Executive Box Hangar	8,100	33	Executive Box Hangar	5,500
15	Terminal	3,500	34	Executive Box Hangar	5,500
16	Conventional Hangar	10,600	35	Conventional Hangar	12,300
17	Conventional Hangar	14,500	36	Executive Box Hangar	3,000
18	T-hangar	6,700	37	Executive Box Hangar	3,700
19	Executive Box Hangar	2,700	38	Executive Box Hangar	6,500



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AIRPORT BUSINESSES

Several specialty aviation service operators (SASOs) and other non-aviation related businesses operate at GLE. SASOs are companies that offer one or more specialized aviation services, such as flight instruction or aircraft maintenance and repair. The aviation-related businesses operating at the airport at the time of publication include the following:

- **Excel Aviation –** aircraft maintenance; inspections; repairs/alterations to airframes, engines, and auxiliary power units (APUs) (located in Building #6; see **Exhibit 1G**)
- **Ayers Flight Training –** flight training and aircraft rental (located in Buildings #13 and #14)
- **Flying Colors of Texas –** aircraft painting and restoration (located primarily in Building #7)

The airport also supports non-aeronautical businesses, including the Gainesville Municipal Golf Course, which is located on the west side of airport property (includes Buildings #25 and #26), and two industrial-use facilities (Buildings #1 and #24).

AIRCRAFT HANGAR FACILITIES

Existing hangar facilities at GLE consist of large conventional-style hangars, mid-sized executive hangars, and T-hangars that are designed to accommodate smaller aircraft. Conventional hangars typically offer more than 10,000 sf of storage space, while the smaller executive hangars usually range in size from 2,500 sf to 10,000 sf. Conventional and executive hangars comprise the majority of hangars at GLE. Hangars at GLE are identified on **Exhibit 1G** along with their approximate square footage.

Conventional Hangar

The approximate total square footages of the existing hangar types are as follows:

- Conventional hangars – 92,600 square feet
- Executive hangars – 94,000 square feet
- T-hangars – 103,600 square feet

AIRCRAFT PARKING APRONS

Aircraft aprons are pavement areas that are sufficiently removed from aircraft taxiways and movement areas and facilitate the safe and efficient transition of passengers from the airside element (runways and taxiways) to the landside element. Aprons facilitate access to the terminal and hangars and provide short- and long-term aircraft parking. There is one primary apron area at GLE, which is utilized for public

aircraft parking and tiedowns. As shown on **Exhibit 1G**, the apron measures approximately 30,000 square yards and has 13 marked tiedown positions for locally based and transient aircraft. The south end of the apron is marked with a compass calibration pad.

VEHICLE PARKING

More than 100 marked and publicly accessible vehicle parking spaces are available to support facilities at the airport, including accessible parking spaces. The terminal building has a public parking area with approximately 26 spaces, including one accessible parking space. The remaining marked parking spaces are associated with hangars on the airport, with the hangar occupied by Excel Aviation providing approximately 55 marked parking spaces. There are also unmarked parking areas associated with many of the hangars, which are intended for tenant use.

SUPPORT FACILITIES

AIRCRAFT RESCUE & FIREFIGHTING (ARFF)

As a general aviation airport, GLE is not required to maintain on-site ARFF equipment or services. Firefighting services are provided by the City of Gainesville Fire Department, which operates out of three stations. Station #1, which is located at 201 Santa Fe Street, is the closest to GLE at 4.1 miles from the airport. It is also the largest station in terms of personnel and equipment and offers six on-site firefighters, one engine, one quint, one rescue truck, two rescue boats, one fire safety trailer, and one mobile command trailer.

Fuel Tanks

FUEL STORAGE

Fuel storage facilities at GLE are located on the west side of the apron, just north of the terminal building, as shown on **Exhibit 1G**. There are currently two aboveground tanks: one for 100LL fuel and one for Jet A fuel. Each tank has a 12,000-gallon capacity and is owned by the city. Full service is available for both 100LL and Jet A fuel, and 100LL fuel can also be dispensed via a self-service pump equipped with a credit card reader. There is also a truck for Jet A fuel, which has a 3,000-gallon capacity, as well as a 100LL fuel truck with a 600-gallon capacity.

Self-Service 100LL

Annual fuel flowage records for Jet A and Avgas from 2021 through 2024 are charted in **Figure 1B**. Over this period, GLE sold an average of 116,363 gallons of Avgas and 252,816 gallons of Jet A fuel each year. On a monthly basis, an average of 9,697 gallons of Avgas and 21,068 gallons of Jet A fuel were sold.

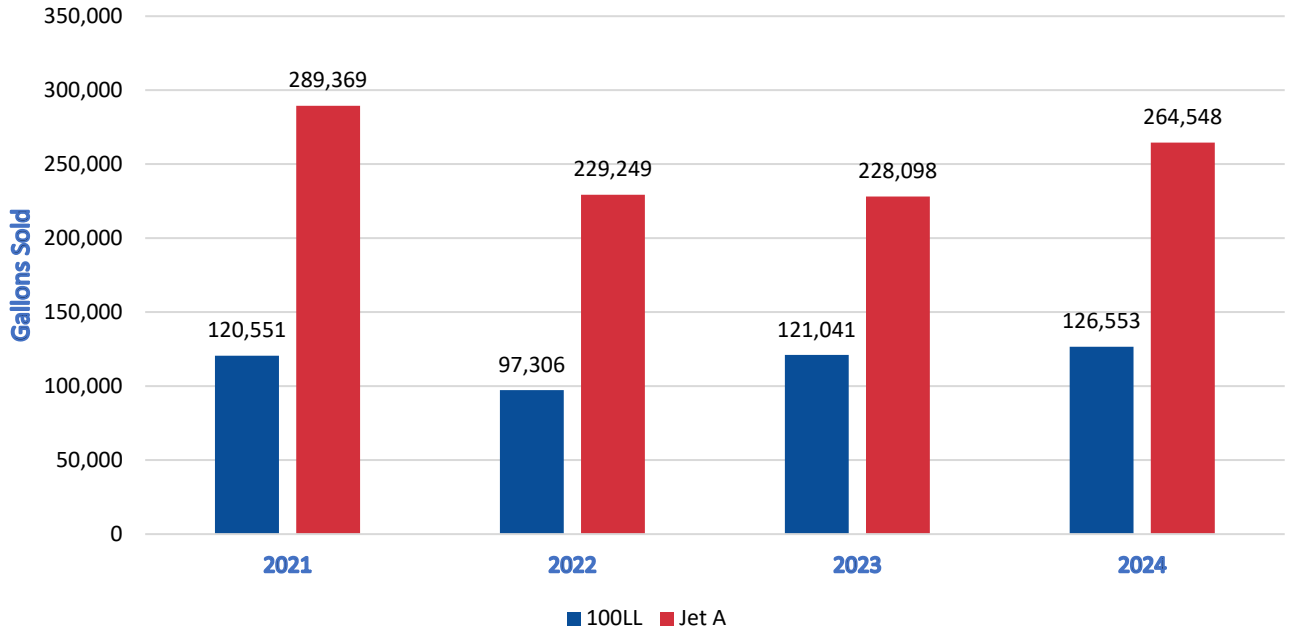


Figure 1B – Annual Fuel Flowage

UTILITIES

The availability and capacity of the utilities serving the airport are factors in determining the development potential of the airport property, as well as the land immediately adjacent to the facility. Of primary concern in the inventory investigation is the availability of water, gas, sewer, and power sources. Providers are detailed below:

- Electric – Oncor Electric Delivery, PenTex Energy, Reliant Energy, TXU Energy
- Natural gas – Atmos Energy
- Water/sewer – City of Gainesville Water Department
- Solid waste – Gainesville Industrial Waste
- Communication – Nortex (fiber), EarthLink (fiber), AT&T (fiber/DSL), Frontier (fiber/DSL)

REGIONAL AIRPORTS

A review of other public-use airports with at least one paved runway within a 30-nm radius of GLE was conducted to identify and distinguish the types of air service provided in the region. It is important to consider the capabilities and limitations of these airports when planning for future changes or improvements to GLE. **Exhibit 1H** provides basic information on these airports.

SOCIOECONOMIC CHARACTERISTICS

For an airport planning study, a profile of the local community that includes its socioeconomic characteristics is collected and examined to derive an understanding of the dynamics of growth within the study area. Socioeconomic information related to the local area is an important consideration in the master planning process. The community profile for the City of Gainesville on **Exhibit 1J** is derived from the U.S. Census Bureau and the Gainesville Economic Development Corporation (EDC). From a population perspective, the city has experienced steady growth since 2000, with the population increasing at a compound annual growth rate (CAGR) of 0.58 percent. By comparison, Cooke County has been growing over that same time period at a slightly faster rate with a 0.68 percent CAGR, while the State of Texas has experienced rapid growth with a 1.67 percent CAGR. In terms of age, Gainesville is a relatively young city with a median age of 35.4 years. Key industries in Gainesville include education, health care, arts and entertainment, manufacturing, and retail; these industries, along with others, support a labor force of more than 8,000 people. Additional socioeconomic information will be included in Chapter Two as part of the forecasting effort.

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 13 impact categories within FAA Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures* (§1.2(b)(1)). When considering the effects to the impact categories listed below, the FAA may examine the short- and long-term effects, beneficial and adverse effects, effects on public health and safety, economic effects, and effects on the quality of life for American people.

1. Aviation Emissions and Air Quality
2. Biological Resources (including fish, wildlife, and plants)
3. Coastal Resources
4. *Department of Transportation Act*, Section 303 (referred to as “Section 4[f]”) and Land and Water Conservation Fund (referred to as “Section 6[f]”)
5. Farmlands
6. Hazardous Materials, Solid Waste, and Pollution Prevention
7. Historical, Architectural, Archeological, and Cultural Resources
8. Land Use
9. Natural Resources and Energy Supply
10. Noise and Noise-Compatible Land Use
11. Socioeconomic and Children’s Health and Safety Risks
12. Visual Effects (including light emissions)
13. Water Resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)

CEDAR MILLS AIRPORT (3T0)

Distance from GLE ..... 22.3 nm ENE
FAA Service Level ..... NA
Based Aircraft ..... NA
Operations ..... NA
Longest Runway ..... 3,000' (turf)
Lowest Visibility Minimums..... Visual Only

GAINESVILLE MUNICIPAL AIRPORT (GLE)

FAA Service Level ..... Regional GA
Based Aircraft 115
Operations..... 114,451
Longest Runway..... 6,000'
Lowest Visibility Minimums ... 3/4-mile

BOWIE MUNICIAL AIRPORT (0F2)

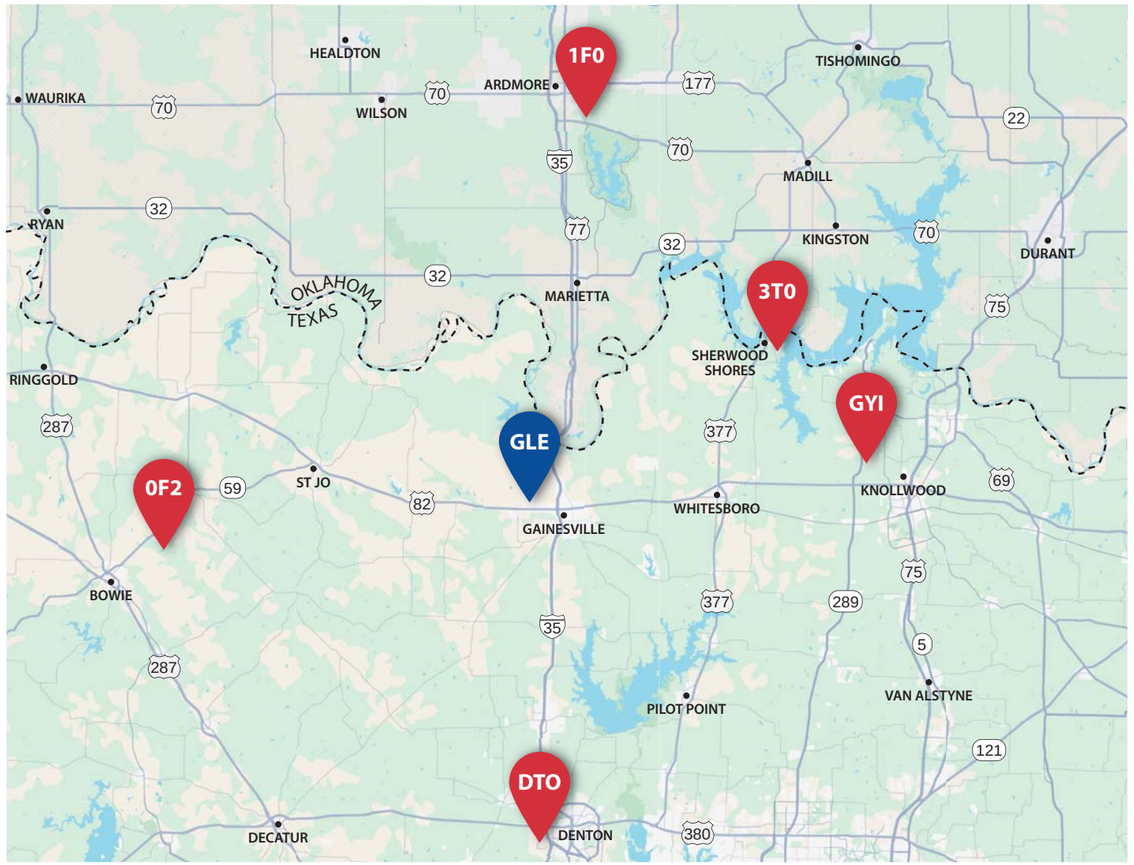
Distance from GLE ..... 29.0 nm W
FAA Service Level ..... Local GA
Based Aircraft 26
Operations ..... NA
Longest Runway ..... 3,603'
Lowest Visiblity Minimums 1-mile

NORTH TEXAS REGIONAL AIRPORT (GYI)

Distance from GLE ..... 26.4 nm E
FAA Service Level ..... Regional GA
Based Aircraft 151
Operations 83,576
Longest Runway ..... 9,000'
Lowest Visibility Minimums..... 1/2-mile

DENTON ENTERPRISE AIRPORT (DTO)

Distance from GLE ..... 27.0 nm S
FAA Service Level ..... Reliever - National
Based Aircraft 480
Operations 198,417
Longest Runway ..... 7,002'
Lowest Visibility Minimums..... 1/2-mile



ARDMORE DOWNTOWN EXECUTIVE AIRPORT (1F0)

Distance from GLE ..... 29.9 nm N
FAA Service Level ..... Local GA
Based Aircraft 29
Operations ..... NA
Longest Runway ..... 5,014'
Lowest Visibility Minimums..... 1-mile

NA = Not Available

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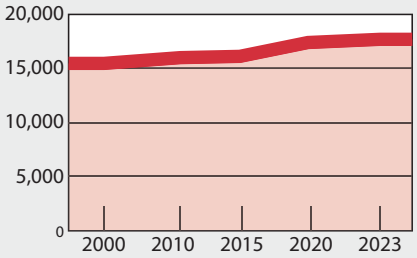
POPULATION PROJECTIONS

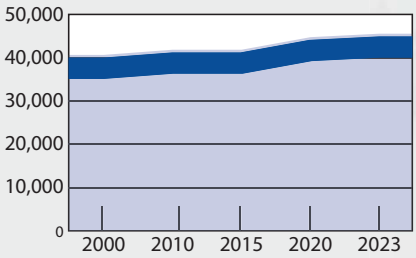
Gainesville

0.58% CAGR



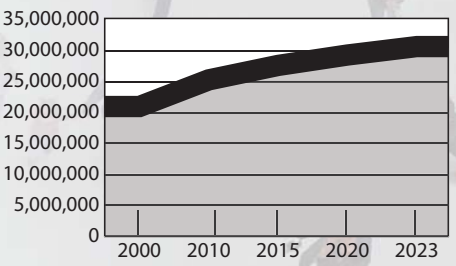
Cooke County

0.68% CAGR



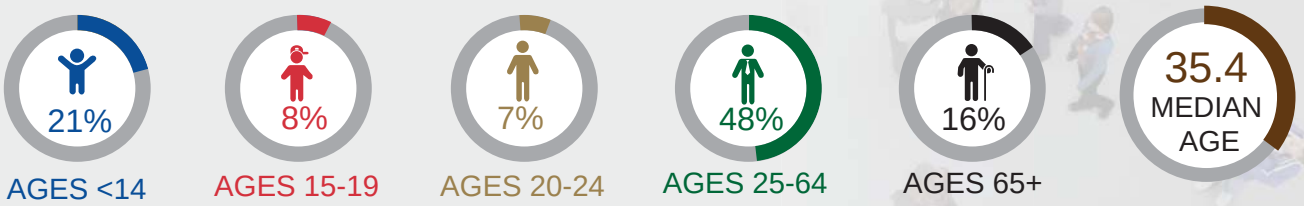
Texas

1.67% CAGR

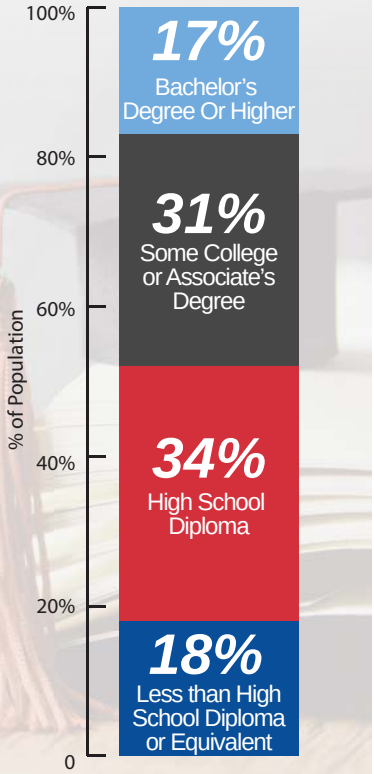


CAGR: Compound Annual Growth Rate

POPULATION BY AGE



EDUCATION



EMPLOYMENT BY SECTOR

- **21%** Educational services, health care, & social assistance
- **18%** Arts, entertainment, food & recreation
- **12%** Manufacturing
- **12%** Retail trade
- **10%** Construction
- **6%** Professional, scientific, management, administrative, & waste management
- **6%** Other services, except public administration
- **5%** Public administration
- **4%** Agriculture, forestry, fishing, hunting, & mining
- **4%** Transportation, warehousing, & utilities
- **2%** Information
- **1%** Wholesale trade

HOUSEHOLDS & INCOME

Total Households	6,819
Average Household Size	2.52
Median Income	$56,341
Median Home Value	$182,600
Total Housing Units	6,819
Owner-Occupied Housing Units	57.2%
Renter-Occupied Housing Units	42.8%

MAJOR EMPLOYERS

WinStar World Casino & Resort	Cooke County
Safran Seats US	IFS Coatings
Gainesville ISD	Gainesville State School
North Texas Medical Center	North Central Texas College
Walmart	City of Gainesville

Sources: U.S. Census Bureau; Gainesville Economic Development Corporation

AVIATION EMISSIONS AND AIR QUALITY

The concentration of various pollutants in the atmosphere defines 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 (NO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead (Pb). A specific geographic area can be classified as an attainment, maintenance, or nonattainment area for each pollutant based on federal air quality standards. The threshold for nonattainment designation varies by pollutant.

Gainesville Municipal Airport (GLE) is in Cooke County, which is in attainment for all federal criteria pollutants.[1]

BIOLOGICAL RESOURCES

Biological 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 of the federal *Endangered Species Act* (ESA), specifically Section 7, which sets forth requirements for a consultation to determine if a proposed project may affect a federally endangered or threatened species. If any agency determines that an action may affect a federally protected species, Section 7(a)(2) requires the agency to consult with the USFWS on any action that is likely to jeopardize the continued existence of the proposed species or result in the destruction or adverse modification of proposed critical habitat. 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 proposed critical habitat in the area. The USFWS *Information for Planning and Consultation* (IPaC) resource list describes species and habitats protected under the ESA within the vicinity of the airport (**Table 1K**).

Section 3 of the ESA is used to protect federally designated critical habitat areas. Designated critical habitat areas are geographically defined and have been determined to be essential to recovery of a specific species. There are no designated critical habitats at the airport.

The federal *Migratory Bird Treaty Act* (MBTA) protects migratory birds and their eggs, nests, and feathers. Potential impacts to species protected under the MBTA are evaluated by the USFWS in consultation with other federal agencies. Habitat for migratory birds may occur if bushes or other types of ground nesting substrate are present. The type of breeding season for migratory birds that could be present is from March 15 to August 25.

[1] U.S. EPA, Green Book, Texas Nonattainment / Maintenance Status for Each County by Year for All Criteria Pollutants, data current as of May 31, 2025

Based on a review on aerial imagery, dense clusters of trees appear to be present near the southern, eastern, and western borders of the airport. The remaining portions of the airport are comprised of flat grasslands. According to the National Wetlands Inventory, there are freshwater ponds that traverse the airport, as well as freshwater forested wetlands situated on the western side of airport boundaries that cross over the Gainesville Municipal Golf Course.

TABLE 1K | Species Protected Under ESA Section 7 with Potential to Occur at the Airport

Common Name (*Scientific Name*)	Federal / State Status*	Habitat and Range	Potential for Occurrence
BIRDS			
piping plover (*Charadrius melodus*)	Federal Threatened / State Threatened	Piping plovers can be found in coastal habitats that include sand spits, small islands, tidal flats, shoals, and sandbars with inlets.	**Not likely to occur.** The airport is located over 320 miles from the nearest coastline.
rufa red knot (*Calidris canutus rufa*)	Federal Threatened / State Threatened	Rufa red knots are often observed in coastal marine and estuarine habitats with large areas of exposed intertidal sediments.	**Not likely to occur.** The airport is located over 320 miles from the nearest coastline. There are no estuarine habitats on the airport.
whooping crane (*Grus americana*)	Federal Endangered / State Endangered	This species breeds, migrates, and forages in various habitats that include coastal marshes and estuaries, inland marshes, lakes, open ponds, shallow bays, salt marsh and sand or tidal flats, upland swales, wet meadows and rivers, and pastures and agricultural fields.	**May occur.** Although the airport is located over 320 miles from the nearest coastline, freshwater ponds, riverines, and freshwater forested shrub wetlands are present at GLE.
REPTILES			
alligator snapping turtle (*Macrochelys temminckii*)	Federal Proposed Threatened	This species can be found in large rivers, streams, canals, lakes, and swamps. Alligator snapping turtles favor habitats that feature high canopy forest areas and structures like tree root masses, stumps, and submerged trees.	**May occur.** Wetlands and riverines traverse the airport that connect to larger creeks and rivers (i.e., Montague Creek and Elm Fork-Trinity River).
INSECTS			
monarch butterfly (*Danaus plexippus*)	Federal Proposed Threatened	This migratory species is found in a variety of habitats. Monarch butterflies require milkweed (*Asclepias* spp.) for breeding. In the southwestern United States, migrating monarch butterflies often occur near water sources (e.g., rivers, creeks, riparian corridors, roadside ditches, and irrigated gardens).	**May occur.** The airport is surrounded by open fields that could provide foraging habitat for this species.

***USFWS Status Definitions:**

- Endangered = an animal or plant species that is in danger of extinction throughout all or a significant portion of its range
- Threatened = an animal or plant species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range
- Proposed Threatened = an animal or plant species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and has been proposed to be listed as threatened; proposed threatened species are not protected by the take prohibitions of Section 9 of the ESA

Sources: USFWS IPaC (https://ipac.ecosphere.fws.gov/location/L6I2QIXPLRHEVCIZEBTPGUMM2I/resources), accessed June 2025; USFWS (https://www.fws.gov/species), accessed June 2025

Terrestrial and avian species identified for Cooke County on the Texas Parks & Wildlife Department's (TPWD) *Annotated County Lists of Rare Species* that are state-listed, but not federally listed, are outlined below. There is no aquatic habitat at the airport that is suitable to support marine mammals or fish listed by TPWD for Cooke County.

Birds

- interior least tern (*Sternula antillarum athalassos*) – state endangered
- white-faced ibis (*Plegadis chihi*) – state threatened

Reptiles

- Texas horned lizard (*Phrynosoma cornutum*) – state threatened

COASTAL RESOURCES

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

The airport is not located within a coastal zone. The closest National Marine Sanctuary is the Flower Garden Banks, which is located over 400 miles south of the airport.

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 Title 49 United States Code, provides that the Secretary of Transportation will not approve any program or project that requires the use of publicly or privately owned historic sites; public parks or 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.

There are two potential Section 4(f) resources within one mile of the airport: Gainesville Municipal Golf Course, which is situated on the western side of airport property, and Lindsay Park, which is located 0.70 miles southwest of the airport on the south side of U.S. Highway 82.

The nearest historic feature listed on the National Register of Historic Places (NRHP) is St. Peter's Roman Catholic Church, at the intersection of 6th Street and Ash Street, which is 1.05 miles south of the airport.

No waterfowl and wildlife refuges, wilderness areas, or national recreation areas are located within one mile of the airport and no *Land and Water Conservation Fund* Section 6(f)- funded facilities are located at the airport.[2]

[2] Land and Water Conservation Fund (https://lwcf.tplgis.org/mappast/), accessed June 2025

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, consider appropriate alternative actions that could lessen adverse effects, and ensure such federal programs are compatible with state or local government programs and policies to protect farmland, to the extent practicable. The FPPA guidelines, which were developed by the U.S. Department of Agriculture (USDA), apply to farmland classified as prime, unique, or of state or local importance, as determined by the appropriate government agency with concurrence by the Secretary of Agriculture.

The USDA National Resources Conservation Service (NRCS) *Web Soil Survey* shows the types of soils on the airport, along with their farmland classifications. The airport contains soils that are classified as the following ratings (as detailed in **Table 1L**):

- Farmland of statewide importance
- All areas are prime farmland
- Not prime farmland

GLE is located outside a designated urbanized area boundary;[3] therefore, any portion of the airport not designated as urban land that also contains soils designated as farmland may be protected under the FPPA.

TABLE 1L| Farmland Classification, Summary by Map Unit – Cooke County, Texas (TX097)

Web Soil Survey Symbol	Soil Type	Farmland Rating
7	Bolar clay loam, 1 to 5 percent slopes	Farmland of statewide importance
36	Hensley loam, 1 to 5 percent slopes	Not prime farmland
43	Lindy loam, 1 to 5 percent slopes	All areas are prime farmland
47	Maloterre-Aledo gravelly clay loams, 3 to 12 percent slopes	Not prime farmland
56	Normangee clay loam, 1 to 3 percent slopes	Not prime farmland
57	Normangee clay loam, 1 to 5 percent slopes, eroded	Not prime farmland
61	Purves clay loam, 3 to 5 percent slopes	Not prime farmland
70	Slidell clay, 1 to 3 percent slopes	All areas are prime farmland
71	Slidell-San Saba complex, 1 to 3 percent slopes	All areas are prime farmland
74	Tinn soils, 0 to 1 percent slopes, frequently flooded	Not prime farmland
78	Wilson clay loam, 1 to 5 percent slopes	Farmland of statewide importance
79	Wilson clay loam, 1 to 5 percent slopes, eroded	Not prime farmland

Source: USDA-NRCS, Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx), accessed June 2025

HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

Hazardous Materials

Federal, state, and local laws regulate hazardous materials use, storage, transportation, and disposal. These laws may extend to past and future landowners of properties that contain these materials. Disrupting sites that contain hazardous materials or contaminants may cause significant impacts to soil, surface water, groundwater, and air quality, as well as the organisms using these resources.

[3] NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx), accessed June 2025

The two statutes of most importance to airport projects are the *Resource Conservation Recovery Act* (RCRA), as amended by the *Federal Facilities Compliance Act of 1992*, and the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA), as amended (also known as Superfund). The CERCLA provides for the cleanup of any release of a hazardous substance that may endanger public health or the environment. These laws may extend to past and future landowners of properties that contain these materials. Locations identified as Superfund sites are listed on the *National Priorities List* (NPL). The airport does not contain any facilities or parcels that are listed as active Superfund or brownfield sites.[4]

Based on the Texas Commission on Environmental Quality's (TCEQ) database, no leaking petroleum storage tanks are present at the airport.[5] The airport has two aboveground aircraft fuel facilities that are located just north of the terminal building. When both fuel tanks are full, the airport can store 12,000 gallons of Avgas and 12,000 gallons of Jet A fuel. Spill prevention, control, and countermeasure (SPCC) plans are required for these facilities, per U.S. EPA regulations.

Solid waste in Gainesville is initially hauled to the City of Gainesville Transfer Station, where waste is then transferred for hauling and disposal at the Texoma Area Solid Waste Authority (TASWA) Disposal and Recycling Facility.[6]

National Pollutant Discharge Elimination System (NPDES) permits outline the regulatory requirements of stormwater management programs and establish requirements to help protect the beneficial uses of the receiving waters. This program requires 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. In Texas, the Texas Pollutant Discharge Elimination System (TPDES) program has federal regulatory authority over discharges of pollutants to Texas surface waters. The program is administered by the TCEQ, except for permits associated with oil, gas, and geothermal exploration, which are regulated by the Railroad Commission of Texas.[7] Procedures are outlined in GLE's stormwater pollution prevention program (SWPPP) to address chemical or fuel spills.

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 of 1966* (NHPA), as amended, the *Archaeological and Historic Preservation Act of 1974* (AHPA), the *Archaeological Resources Protection Act* (ARPA), and the *Native American Graves Protection and Repatriation Act of 1990* (NAGPRA). The *Antiquities Act of 1906*, the *Historic Sites Act of 1935*, and the *American Indian Religious Freedom Act of 1978* also protect historic, architectural, archaeological, and cultural resources. Impacts may occur when a proposed project causes an adverse effect on a resource that has been identified (or is identified after being unearthed during construction) as having historic, architectural, archaeological, or cultural significance.

[4] NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx), accessed June 2025
[5] TCEQ, Leaking Petroleum Storage Tank Sites (https://data.texas.gov/dataset/Texas-Commission-on-Environmental-Quality-Leaking-/hedz-nn4q/data_preview), June 2025
[6] Gainesville, Texas, Transfer Station (https://www.gainesville.tx.us/213/Transfer-Station), accessed June 2025
[7] TCEQ, Wastewater and Stormwater (https://www.tceq.texas.gov/permitting/wastewater), accessed June 2025

From the information available at the time this report was prepared, no systematic airport-wide cultural surveys have been conducted. Much of the airport has been developed; however, there is still a chance intact cultural resources may be present either on the ground surface or subsurface.

According to the NRHP, there are no listed NRHP resources on the airport.[8] The closest NRHP-listed resource is St. Peter's Roman Catholic Church, which is located 1.05 miles south of the airport. Based on a review of historic aerials, no historic-age buildings (i.e., 50 years or older) are located at the airport.

LAND USE

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

The airport is currently surrounded by agricultural land with scattered residential neighborhoods and industrial land uses. U.S. Highway 82 borders the airport on the south side of its boundary. The existing comprehensive land use plan was adopted by the City of Gainesville in 1997.[9] The plan identified the airport as an industrial land use. Based on the city's zoning ordinance, industrial land use is defined as manufacturing, warehousing, distribution, storage, and an array of commercial and industrial operations. Prohibited land uses on land zoned for industrial include explosives manufacturing or storage, junkyards, petroleum refinery, commercial stables, and land uses that would result in obnoxious or excessive emissions, among others.[10] The City of Gainesville is currently updating its comprehensive plan under the *Guiding Gainesville 2040* effort.

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.

The City of Gainesville relies on a combination of groundwater and surface water resources. Antlers aquifer and Hubert H. Moss Lake are utilized for potable water.[11] According to the 2024 *Annual Drinking Water Quality Report*, these water sources are susceptible to certain water contaminants. Texas has a deregulated electricity market, so there are numerous electricity providers within the City of Gainesville.[12]

[8] National Park Service, National Register of Historic Places (https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466), accessed June 2025

[9] Municipal Planning Resources Group, Inc., City of Gainesville, Texas, Comprehensive Land Use Plan, dated September 1997

[10] Gainesville, Texas, Code of Ordinances, Appendix A, Zoning (https://library.municode.com/tx/gainesville/codes/code_of_ordinances?nodeId=PTIICOOR_APXAZO), accessed July 2025

[11] City of Gainesville, 2024 Annual Drinking Water Quality Report, accessed June 2025

[12] United Staters Power Outage Map (https://poweroutage.us/electricity-rates/tx/gainesville), accessed June 2025

NOISE AND NOISE-COMPATIBLE LAND USE

Federal land use compatibility guidelines are established under Title 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). 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 structures. 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.[13]

There are a few scattered rural residences immediately south and east of airport boundaries, respectively along U.S. Highway 82 and FM 1201. The closest residential neighborhood is located 0.70 miles west of the airport boundary, where single-family homes are located off U.S. Highway 82. Additionally, North Texas Medical Center is located one mile east of the airport, north of U.S. Highway 82. There are no schools, places of worship, or live-in medical facilities within one mile of the airport.

SOCIOECONOMICS AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS

Socioeconomics

Socioeconomics is an umbrella term used to describe aspects of a project that are 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 or alternative(s).

Children's Environmental Health and Safety

Per Executive Order (E.O.) 13045, *Protection of Children from Environmental Health Risks*, federal agencies are directed 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 attributable to products or substances a child is likely to encounter or ingest (i.e., air, food, and water, including drinking water) or to which they may be exposed.

There are scattered residential units to the east, west, and south of the airport. The closest residential neighborhood (comprised of single-family homes) is located 0.70 miles west of the airport. There are no schools within one mile of the airport. The closest park/recreational facility is Lindsay Park, which is located 0.70 miles southwest of the airport.

[13] Title 49 U.S. Code § 47141, Compatible Land Use Planning and Projects by State and Local Governments

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 its zoning ordinances and general plan.

Light Emissions

These 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, a local jurisdiction will include ordinances in the local code that address outdoor illumination to reduce the impact of light on surrounding properties.

Airfield lighting at the airport includes medium intensity runway lighting (MIRL) along Runway 18-36, taxiway edge reflectors for all taxiways at the airport, two-light precision approach path indicator (PAPI-2) lights along Runway 18-36, and runway end identification lights (REILs) at each end of Runway 18-36. Other lighting includes building and parking lot security lighting associated with the airport's landside facilities, which are located primarily on the west side of the airport.

There are residential homes adjacent to the airport's western, southern, and eastern boundaries. These residential units are buffered from on-airport lighting by vegetation located on the Gainesville Municipal Golf Course and along adjacent roadways.

Visual Resources and Visual Character

Visual resources include buildings, sites, traditional cultural properties, and other natural or human-made 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).

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, locations near densely populated areas generally have visual characters that could be defined as urban, whereas less developed areas could have visual characters defined by the surrounding landscape features (such as open grass, fields, forests, mountains, deserts, etc.).

The airport is primarily surrounded by pockets of residential neighborhoods and industrial facilities within one mile of its borders. Visually, the airport is not only characterized by airport development, but by flat open land, some of which is farmed. Views of the airport are accessible from surrounding roadways; long-range views of the airport are not readily available from off-airport properties due to the relatively flat topography of the airport environs.

There are no national scenic byways or all-American roads in Texas;[14] however, the State of Texas has a *State Scenic Byways Program* that includes 30 potential state scenic byways. None of these byways are located near the airport. The closest designated Scenic Texas Byway is a segment of Interstate 16, southwest of Gainesville, that is located over 100 miles from the airport. No scenic corridors are identified in the city's comprehensive land use plan.[15]

WATER RESOURCES

Wetlands

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and/or fill material into waters of the United States, including wetlands with continuous surface connections to traditional navigable waters, under Section 404 of the *Clean Water Act* (CWA). Wetlands are defined in E.O. 11990, *Protection of Wetlands*, and can include swamps, marshes, bogs, sloughs, potholes, wet meadows, river overflows, mudflats, natural ponds, estuarine areas, tidal overflows, and shallow lakes and ponds with emergency vegetation.

Wetlands exhibit three characteristics:

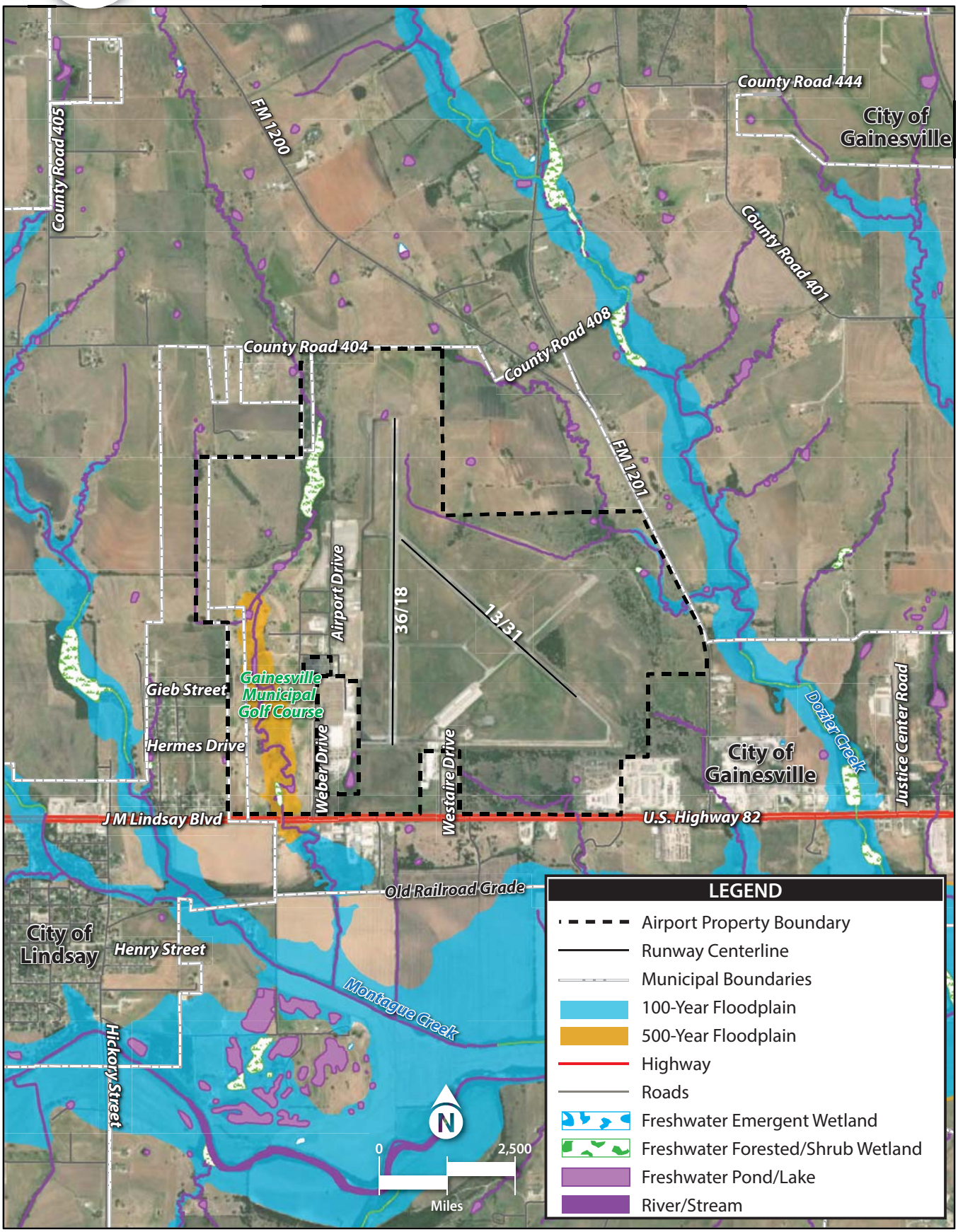
1. The soil is inundated or saturated to the surface at some time during the growing season (hydrology)

2. The soil has a population of plants that are able to tolerate various degrees of flooding or frequent saturation (hydrophytes)

3. The soil is saturated enough to develop anaerobic (absent of air or oxygen) conditions during the growing season (hydric)

The USFWS manages the *National Wetlands Inventory* (NWI), which identifies surface waters and wetlands in the nation at a macro level based on aerial photography. Based on the NWI, there are freshwater riverines located on the northeastern and eastern ends of the airport that appear to drain into Dozier Creek. On the western side of the airport, there are freshwater ponds and riverines located on the Gainesville Municipal Golf Course. These riverines connect to Montague Creek, which is south of the airport, as shown on **Exhibit 1K**.[16] Because the riverines that run through the airport appear to connect to larger bodies of water, these wetlands may fall under Section 404 of the CWA (as currently implemented by the USACE) as a jurisdictional water.

[14] Scenic Texas, State Scenic Byway Program (https://scenictexas.org/state-scenic-byways-program/), June 2025
[15] Municipal Planning Resources Group, Inc., City of Gainesville, Texas, Comprehensive Land Use Plan, dated September 1997
[16] USFWS, National Wetlands Inventory (https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/), accessed June 2025



Source: ESRI Basemap Imagery (2023), FEMA, NWI, Coffman Associates analysis

Floodplains

E.O. 11988, *Floodplain Management*, directs federal agencies to take action to reduce the risk of flood loss; minimize the impacts of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by the floodplains. U.S. Department of Transportation (DOT) Order 5650.2, *Floodplain Management and Protection*, implements the guidelines contained in E.O. 11988.

A review of Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels 48097C0300C and 48097C0295C indicates that there are 100-year floodplains on the east side and 500-year floodplains on the west side of the airport (**Exhibit 1K**).[17]

Surface Waters

The CWA 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, the U.S. Congress has mandated the NPDES under the CWA.

As previously discussed under *Hazardous Materials, Solid Waste, and Pollution Prevention*, the TPDES program has federal regulatory authority over discharges of pollutants to Texas surface waters. The airport is located within the Montague Creek-Elm Fork Trinity River watershed. There is one impaired waterbody (a portion of Montague Creek-Elm Fork Trinity River) south of the airport.[18]

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.[19]

The U.S. EPA's Sole Source Aquifer (SSA) program was established under Section 1424(e) of the *Safe Drinking Water Act* (SDWA). Since 1977, the SSA program has been used by communities to help prevent contamination of groundwater from federally funded projects and has increased public awareness of the vulnerability of groundwater resources.

[17] FEMA, FEMA Flood Map Service Center (https://msc.fema.gov/portal/search?AddressQuery=gainesville%20municipal%20airport), accessed June 2025

[18] U.S. EPA, How's My Waterway (https://mywaterway.epa.gov/community/gainesville%20municipal%20airport/overview), accessed June 2025

[19] United States Geological Survey, What is Groundwater? (https://www.usgs.gov/faqs/what-groundwater#:~:text=Groundwater%20is%20water%20that%20exists,does%20not%20form%20underground%20rivers.), accessed June 2025

According to the U.S. EPA's *Sole Source Aquifers for Drinking Water* website, no sole source aquifers are located with airport boundaries. The closest sole source aquifer to GLE is the Arbuckle-Simpson Aquifer Recharge Zone, located 56 miles north of the airport in Oklahoma.[20]

The North Texas Groundwater Conservation District (the District) manages groundwater resources within Collin, Cooke, and Denton counties. The District's primary goal is to develop and adopt rules and regulations for aquifers, wells, and other groundwater resources located in its jurisdiction.[21] No U.S. Geological Survey (USGS) monitoring wells or U.S. EPA monitoring wells are located at the airport.[22]

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 Rivers Inventory (NRI) is a list of over 3,400 rivers or river segments that appear to meet the minimum *National 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 *National Wild and Scenic Rivers Act*, which directs agencies to consider potential wild and scenic rivers in the comprehensive planning process.

The closest designated national wild and scenic river identified is a segment of the Rio Grande River, which is located 381 miles south of the airport.[23] The nearest Nationwide Rivers Inventory feature is a portion of the Washita River, which is located 44 miles north of GLE, in Oklahoma.[24]

[20] U.S. EPA, Sole Source Aquifers (https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b), accessed June 2025
[21] North Texas Groundwater Conservation District, 2022 Management Plan, adopted August 9, 2022
[22] NEPAssist, NEPAssist Mapper (https://nepassisttool.epa.gov/nepassist/nepamap.aspx), accessed July 2025
[23] National Wild and Scenic Rivers System (https://rivers.gov/), accessed June 2025
[24] National Park Service, Nationwide Rivers Inventory (https://www.nps.gov/subjects/rivers/nationwide-rivers-inventory.htm), accessed June 2025