Chapter 2: Inventory And Description of Existing Facilities

Facilities Inventory

As part of the development of an Airport Layout Plan (ALP) with Narrative Report (ALP with Narrative), a detailed inventory of an airport's existing facilities, airspace, and supporting infrastructure is established to serve as a foundation for the development of the airport's infrastructure development plan. The inventory also identifies existing challenges and other considerations relevant to planning for future development and describes the role the airport plays within the state and national aviation system.

To inform the development of the ALP with Narrative for Dallas Executive Airport (RBD or Airport) the following inventory-related tasks were completed:

- An on-site inspection of existing facilities was conducted on October 20 and 21, 2025. This inspection included a review of airside infrastructure, terminal/landside facilities, and undeveloped properties at RBD. Runway Safety Area Inventories (RSAI) were also completed for Runway 13-31 and Runway 17-35.
- Multiple interviews were completed with Airport staff, stakeholders, and tenants to better understand the condition of the Airport's existing infrastructure, how it is utilized, and current development interests that should be considered for integration into future development plans.
- The collection and review of current and historical documentation related to Airport infrastructure and operations including documentation provided by the Federal Aviation Administration (FAA), Texas Department of Transportation – Aviation Division (TxDOT – Aviation), and Airport staff.
- The collection of environmental information from publicly available sources that is related or relevant to the extent of the Airport's property.
- A review of historical environmental reports regarding RBD property.

Airport History

Dallas Executive Airport has always been owned and operated by the City of Dallas. In 1944, the City purchased 1,026 acres of land to establish and develop the initial facilities. The Airport was constructed in an effort to support general aviation (GA) traffic on the south side of Dallas, Texas. It was originally named Redbird Airport and later changed to Dallas Executive Airport on May 1, 2002. The initial airfield included two runways – Runway

13-31 and Runway 17-35 – both of which are still present today. Since that time, Runway 13-31 has been extended multiple times, and the current Airport terminal building and conference center were opened in 2005.

Today, Dallas Executive Airport serves a wide array of GA traffic including jets, turboprops, and piston aircraft and is home to multiple fixed base operators (FBOs), maintenance, repair and overhaul (MRO) service providers, flight schools and other aeronautical businesses. The Airport is also the national headquarters for the Commemorative Air Force (CAF) and regularly supports the operation of historic aircraft.

Airport Role

Dallas Executive Airport's role within the state and national aviation system is set forth in the FAA's National Plan of Integrated Airport Systems (NPIAS) and the Texas Airport System Plan (TASP). Each of these publications defines Dallas Executive Airport's role as follows:

- NPIAS Role Designation – Dallas Executive Airport is designated as a "National" airport in the 2025-2029 NPIAS published by the FAA. Dallas Executive Airport is also considered a "Reliever" airport to Dallas Love Field. According to the NPIAS, National airports are typically located in metropolitan areas and have high levels of aeronautical activity. Reliever airports are typically located in close proximity to primary commercial service airports and provide an alternative operating location for non-commercial service aircraft.
- TASP Role Designation – Dallas Executive Airport is designated as a "Reliever" Airport in the 2010 TASP published by TxDOT Aviation.

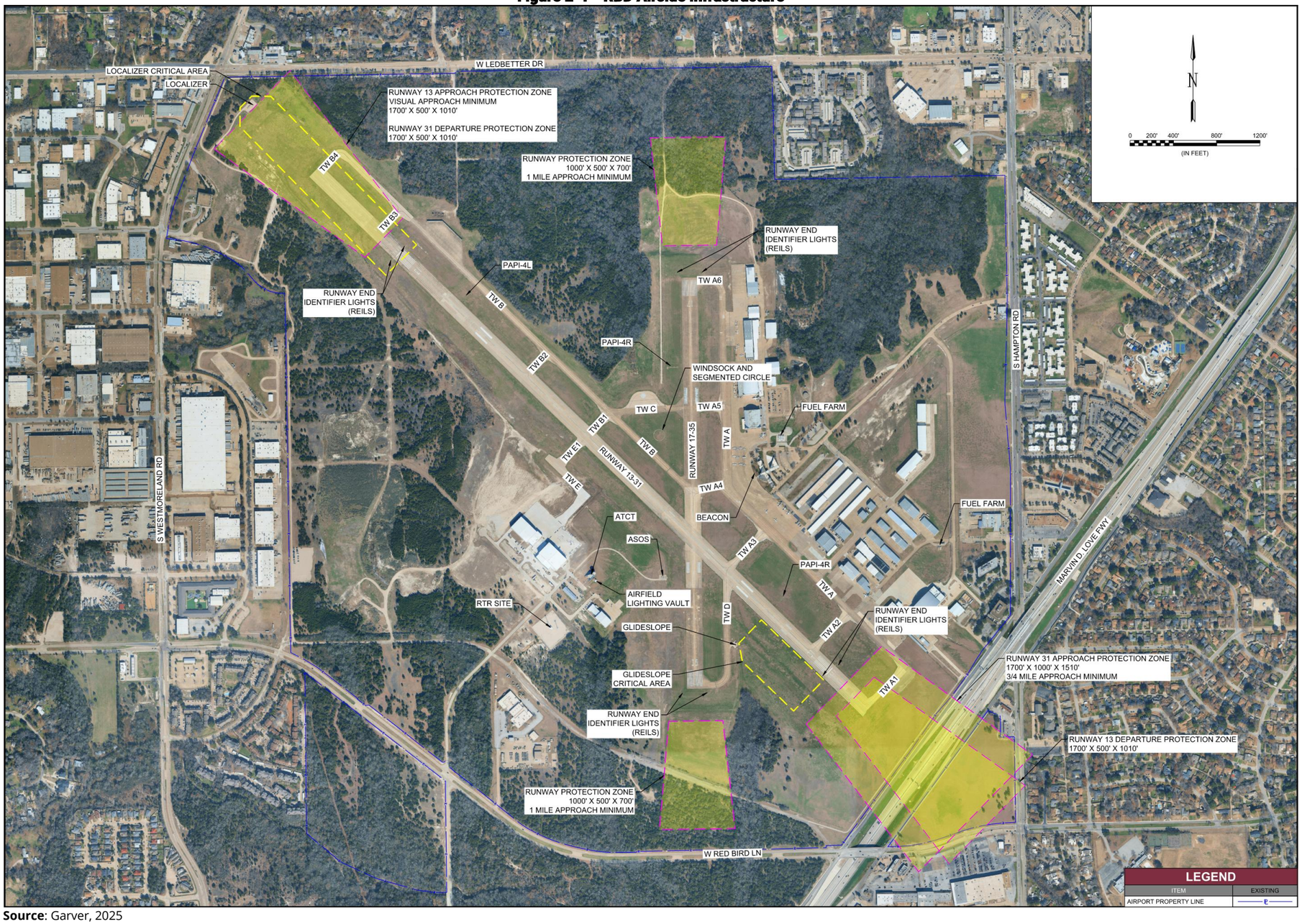
The FAA NPIAS is updated biannually, and state system plans are updated as needed.

Airside Facilities and Airspace Inventory

Some of the primary airside facilities at an airport include runways, taxiways, navigational aids (NAVAIDs), and weather observation systems. Additionally, there are various protected surfaces necessary for some of these facilities to be operated safely. Protected surfaces are generally defined as areas surrounding an airside facility that are restricted from certain types of development or that must be maintained in a specific condition.

Figure 2-1, *RBD Airside Infrastructure*, provides an overview of the existing airside facilities present at Dallas Executive Airport. Each of these airside infrastructure elements are further described in subsections of this Chapter.

Figure 2-1 - RBD Airside Infrastructure



Source: Garver, 2025

Runway Design Overview

The FAA identifies design standards for airports and their operating pavements based on FAA Advisory Circular (AC) 150/5300-13B (current edition), *Airport Design*. Pavement categorization is provided for runways through the Runway Design Code (RDC) classification system while taxiway pavements are classified separately through the Taxiway Design Group (TDG) classification system.

A runway's RDC is defined by two variables related to the designated critical design aircraft for the runway and the lowest approach visibility minimums for the runway. The critical design aircraft is the largest single aircraft or classification of aircraft the runway is expected to serve on a regular basis (500 operations per year or more).

The critical design aircraft variables used to establish a runway's RDC include:

- Aircraft Approach Category (AAC) – Based on landing approach speed of the aircraft.
- Airplane Design Group (ADG) – Based on aircraft wingspan and tail height.

The tables below further define the variables utilized to establish the RDC for a runway. **Table 2-1** defines the AAC categories. **Table 2-2** documents the ADG categories. **Table 2-3** describes the various visibility minimum categories.

Table 2-1 - Aircraft Approach Category (AAC)

AAC	V_{REF}/Approach Speed [1]
A	Approach speed less than 91 knots
B	Approach speed 91 knots or more but less than 121 knots
C	Approach speed 121 knots or more but less than 141 knots
D	Approach speed 141 knots or more but less than 166 knots
E	Approach speed 166 knots or more

Source: FAA Advisory Circular 150/5300-13 (current edition), *Airport Design*
[1] VREF = Landing Reference Speed or Threshold Crossing Speed

Table 2-2 - Airplane Design Group (ADG)

Group #	Tail Height (ft. [m])	Wingspan (ft. [m])
I	< 20′ (< 6.1 m)	< 49′ (< 14.9 m)
II	20′ to < 30′ (6.1 m to < 9.1 m)	49′ to < 79′ (14.9 m to < 24.1 m)
III	30′ to < 45′ (9.1 m to < 13.7 m)	79′ to < 118′ (24.1 m to < 36 m)
IV	45′ to < 60′ (13.7 m to < 18.3 m)	118′ to < 171′ (36 m to < 52.1 m)
V	60′ to < 66′ (18.3 m to < 20.1 m)	171′ to < 214′ (52.1 m to < 65.2 m)
VI	66′ to < 80′ (20.1 m to < 24.4 m)	214′ to < 262′ (65.2 m to < 79.9 m)

Source: FAA Advisory Circular 150/5300-13 (current edition), Airport Design

Table 2-3 - Visibility Minimums

RVR (ft. [m]) *	Instrument Flight Visibility Category (statute mile)
5000' (1,524 m)	Not lower than 1 mile (1.6 km)
4000' (1,219 m)	Lower than 1 mile (1.6 km) but not lower than ¾ mile (1.2km)
2400' (732 m)	Lower than ¾ (1.2 km) mile but not lower than ½ mile (0.8 km)
1600' (488 m)	Lower than ½ (0.8 km) mile but not lower than ¼ mile (0.4 km)
1200' (366 m)	Lower than ¼ mile (0.4 km)

Source: FAA Advisory Circular 150/5300-13 (current edition), Airport Design
* RVR values are not exact equivalents

Table 2-4 and **Table 2-5** provide an overview the types of aircraft that represent various AAC and ADG categories.

Table 2-4 - AAC Example Aircraft and Descriptions

AAC	Aircraft Name	Photo	General Description of Aircraft
A	Cessna 172 Skyhawk		AAC A typically consists of small piston aircraft with low approach speeds.
B	Beechcraft Super King Air B200		AAC B typically consists of high performance piston, turbo-prop, and some jet aircraft.
C	Bombardier Challenger 300		AAC C typically consists of jet aircraft with mid-range approach speeds.
D	Gulfstream IV		AAC D typically consists of larger jet aircraft with high approach speeds.
E	McDonnell Douglas F-15E		AAC E typically consists of military jet aircraft with very high approach speeds.

Source: Garver, 2025

Table 2-5 - ADG Example Aircraft and Descriptions

ADG	Aircraft Name	Photo	General Description of Aircraft
I	Beech Bonanza 35		ADG I typically consists of small piston, turboprop, and jet aircraft with capacity for less than 8 passengers.
II	Cessna Citation Latitude		ADG II typically consists of turboprop and jet aircraft with capacity for 8 to 18 passengers.
II	Boeing 737-800		ADG III typically consists of large business jets and narrowbody commercial passenger/cargo aircraft.
IV	Boeing 767-300		ADG IV typically consists of large narrowbody commercial passenger/cargo aircraft and some widebody aircraft.
V	Airbus A350-900		ADG V typically consists of large widebody commercial passenger/cargo aircraft.
VI	Airbus A380-800		ADG VI typically consists of very large widebody commercial passenger/cargo aircraft.

Source: Garver, 2025

Dallas Executive Airport has two runways: Runway 13-31 and Runway 17-35. Based on RBD's current Airport Layout Drawing (ALD) and instrument approach procedures, the RDC for each runway is depicted in **Table 2-6**.

Table 2-6 - Runway Design Codes

RDC Variables	Runway 13-31	Runway 17-35
Aircraft Approach Category (AAC)	D	B
Airplane Design Group (ADG)	II	II
Approach Visibility Minimums	4,000 ft.	5,000 ft.
RDC	D-IV-4000	B-II-5000

Source: 2019 RBD Airport Layout Drawing

Runway System Overview

As shown in **Figure 2-1**, the runway system at RBD consists of two runways (Runway 13-31 and Runway 17-35). Runway 13-31 is the primary runway and Runway 17-35 is the secondary runway. The primary runway at an airport is often the longest runway, with the highest weight bearing capacity, and the lowest approach minimums.

Table 2-7 provides an overview of the pavement dimensions, surface material, and condition of all runways at RBD.

Table 2-7 - Runway Pavement

Pavement Attribute	Runway 13-31	Runway 17-35
Length (feet)	7,136	3,800
Width (feet)	100	150
Surface Material	Concrete	Concrete
Grooved	Yes	No
Pavement Condition	Excellent	Good
Paved Shoulders	Yes	No
Paved Blast Pad	No	No

Source: FAA Aeronautical Information Services Website – Obtained 11/5/2025

Runway 13-31 is the longest runway at RBD with a total length of 7,136 feet. It has 25-foot paved shoulders on both sides as the runway was previously 150 feet in total width. Runway 17-35 is 3,800 feet long and 150 feet wide. Blast pads are not present on any of the runway ends. Blast pads are paved areas typically located at the end of a runway to prevent erosion related to jet blast from larger aircraft.

There are no "hot spots" at RBD as designated by the FAA. According to the FAA Hot Spot Standardized Symbology website, a hot spot is "a location on an airport movement area with a history of potential risk for a collision or runway incursion, and where heightened attention by pilots and drivers is necessary." While not designated as a "hot spot," the intersection of Taxiway A4, Taxiway B, and Runway 17-35 was identified by air traffic control tower personnel as an area that sometimes causes confusion for pilots.

Runway 13 – Approach End

Table 2-8 provides an overview of the weight bearing capacity of each runway at RBD based on landing gear configuration. This information indicates that the runways at RBD are capable of handling a wide array of aircraft including some narrowbody commercial passenger/cargo aircraft.

Table 2-8 - Runway Weight Bearing Capacity

Weight Bearing Capacity (lbs.) by Gear Configuration	Runway 13-31	Runway 17-35
Single Wheel (SW)	40,000 lbs.	35,000 lbs.
Double Wheel (DW)	90,000 lbs.	60,000 lbs.
Double Tandem (DT)	130,000 lbs.	110,000 lbs.

Source: FAA Aeronautical Information Services Website – Obtained 11/5/2025

Table 2-9 provides an overview of the declared distances for all runways at RBD. Declared distances are established to aid turbine-engine aircraft operators in assessing their performance related to takeoff and landing requirements.

Each declared distance category is defined as follows:

- Takeoff Run Available (TORA) – The runway length declared available and suitable for the ground run of an aircraft taking off.
- Takeoff Distance Available (TODA) – The TORA plus the length of any remaining runway or clearway beyond the far end of the TORA; the full length of the TODA may need to be reduced because of obstacles in the departure area.
- Accelerate-Stop Distance Available (ASDA) – The runway plus stopway length declared available and suitable for the acceleration and deceleration of an aircraft aborting a takeoff.
- Landing Distance Available (LDA) – The runway length declared available and suitable for landing an aircraft.

Declared distances are typically assumed to be the full length of a runway's usable pavement unless otherwise published. Declared distances less than the full length of Runway 13-31 are present to accommodate airspace and protected surface limitations. All declared distances for Runway 17-35 are the full length of the available runway.

Table 2-9 - Declared Distances

Declared Distance	Runway 13-31		Runway 17-35	
	13	31	17	35
Takeoff Run Available (TORA) (ft.)	6,766	6,051	3,800	3,800
Takeoff Distance Available (TODA) (ft.)	7,136	7,136	3,800	3,800
Accelerate-Stop Distance Available (ASDA) (ft.)	6,622	7,101	3,800	3,800
Landing Distance Available (LDA) (ft.)	5,537	6,601	3,800	3,800

Source: FAA Aeronautical Information Services Website – Obtained 11/5/2025

Table 2-10 provides an overview of the runway markings for each runway end. All markings are in good condition.

Table 2-10 - Runway Markings

Runway End	13	31	17	35
Runway Marking Pattern	Non-Precision	Precision	Non-Precision	Non- Precision

Source: FAA Aeronautical Information Services Website – Obtained 11/5/2025

Runway Protected Surfaces

Runway pavements have multiple protected surfaces that each have a unique purpose and function. Each of these surfaces and their primary purpose are discussed below:

- Runway Safety Area (RSA) – A defined area surrounding the runway consisting of a prepared surface suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway.
- Runway Object Free Area (ROFA) – A clear area limited to equipment necessary for air and ground navigation and providing wingtip protection in the event of an aircraft excursion from the runway.
- Runway Obstacle Free Zone (ROFZ) – A defined volume of airspace centered on the runway centerline that is clear of obstacles for the protection of aircraft landing or taking off from the runway, whose base elevation is that of the highest runway elevation at that particular location.

In addition to the ROFZ, there are other Obstacle Free Zone (OFZ) surfaces, which are dependent on the presence of an instrument approach, visibility minimums, and the approach lighting system (ALS) associated with a runway end. These other OFZ surfaces include:

- Inner Approach OFZ – Applies to runways with an ALS. The inner approach OFZ is the same width as the ROFZ and extends from the end of the ROFZ to 200 ft beyond the last light unit in the approach lighting system. It rises at a 50:1 slope beginning at the same elevation as the outer edge of the ROFZ.
- Inner-Transitional OFZ – Applies to runways with visibility minimums below ¾ statute mile. It extends from the sides of the ROFZ and the inner approach OFZ. The heights and slopes associated with the inner-transitional OFZ vary based on the type of aircraft the runway serves (e.g. small or large) and the runway's visibility minimums.
- Precision OFZ (POFZ) – Applies to runways with a precision instrument approach. It is a defined volume of airspace that begins at the end of the runway, extends 200 feet beyond the runway threshold, and extends 400 feet to each side of the extended runway centerline (800 feet in total width).

The primary purpose of each of these additional OFZ surfaces is to protect aircraft during their arrival or departure to a runway. **Table 2-11** and **Table 2-12** identify the protected surfaces applicable to each runway and runway end at RBD. Since Runway 13-31 is a D-II-4000 runway, its protected surfaces are generally larger than Runway 17-35 which is a B-II-5000 runway. A precision OFZ is only applicable to the landing threshold associated with Runway 31 due to the presence of an Instrument Landing System (ILS) approach on that runway end.

Table 2-11 - Runway Protected Surfaces

Protected Surfaces	Runway 13-31	Runway 17-35
Runway Safety Area (RSA)	500 ft. wide x 1,000 ft. beyond each runway end	150 ft. wide x 300 ft. beyond each runway end
Runway Object Free Area (ROFA)	800 ft. wide x 1,000 ft. beyond each runway end	500 ft. wide x 300 ft. beyond each runway end
Runway Obstacle Free Zone (ROFZ)	400 ft. wide x 200 ft. beyond each runway end	400 ft. wide x 200 ft. beyond each runway end

Source: 2019 RBD Airport Layout Drawing and Airfield Facilities Review

Table 2-12 - Obstacle Free Zone (OFZ) Surfaces - Per Runway End

OFZ Surface by Runway End	13	31	17	35
Inner Approach OFZ	No	No	No	No
Inner-Transitional OFZ	No	No	No	No
Precision OFZ	No	Yes	No	No

Source: 2019 RBD Airport Layout Drawing and Airfield Facilities Review

A full-length RSA/ROFA is not available on each end of Runway 13-31. Consequently, declared distances have been established for the ASDA and LDA to meet RSA/ROFA requirements. A full-length RSA/ROFA is available at each end of Runway 17-35.

Runway Protection Zones

The purpose of a Runway Protection Zone (RPZ) is to enhance the protection of people and property on the ground and to prevent developments that are incompatible with aircraft operations. The RPZ is a two-dimensional trapezoidal area that normally begins 200 feet beyond the paved runway end and extends along the runway centerline. There are two types of RPZs, approach and departure, and the approach RPZ is often the most stringent. In many instances, the approach and departure RPZs on a runway end overlap. However, when declared distances reduce the runway pavement available for operations, separate approach and departure RPZs are present. The dimensions of an RPZ are determined by the type/size of aircraft expected to operate at an airport and the type of instrument approach for each runway end (visual, precision, or non-precision). **Table 2-13** defines the approach RPZ dimensions for the four runway ends at RBD.

Table 2-13 - Runway Protection Zone Dimensions - Approach RPZ

Runway End	Approach Visibility Minimums	Length (ft.)	Inner Width (ft.)	Outer Width (ft.)
Runway 13	1 Mile	1,700	500	1,010
Runway 31	¾ Mile	1,700	1,000	1,510
Runway 17	1 Mile	1,000	500	700
Runway 35	1 Mile	1,000	500	700

Source: 2019 RBD Airport Layout Drawing and Airfield Facilities Review

Since displaced landing thresholds and a reduced TORA exist on each end of Runway 13-31, the approach and departure RPZs are not aligned with one another. **Table 2-14** identifies the dimension of the departure RPZs associated with Runway 13-31. There are no reduced declared distances on Runway 17-35, therefore, the departure RPZs overlap and exist as listed for the approach RPZ.

Table 2-14 - Runway Protection Zone Dimensions - Departure RPZ

Runway End	Length (ft.)	Inner Width (ft.)	Outer Width (ft.)
Runway 13	1,700	500	1,010
Runway 31	1,700	500	1,010

Source: 2019 RBD Airport Layout Drawing and Airfield Facilities Review

Runway Operational Patterns

Based on discussions with RBD Air Traffic Control Tower (ATCT) personnel, both runways are used interchangeably at the Airport. There is no runway designated specifically for arrivals or departures during most wind conditions. There are two general operating flows for aircraft traffic at RBD, and they are commonly referred to as a “south flow” and a “north flow.” Based on seasonal wind patterns near RBD, a south flow is used the majority of the year. While on a south flow, Runways 13 and 17 are used for arriving and departing aircraft. When in the north flow, Runways 31 and 35 are used for are used for arriving and departing aircraft.

Aircraft operations data for Dallas Executive Airport was analyzed using Automated Dependent Surveillance – Broadcast (ADS-B) data from 2024. **Figure 2-2** depicts the share of aircraft traffic using each runway end for arrivals and **Figure 2-3** depicts the share of aircraft traffic using each runway end for departures over the year. A prevailing wind analysis will be completed as part of the facility requirements effort.

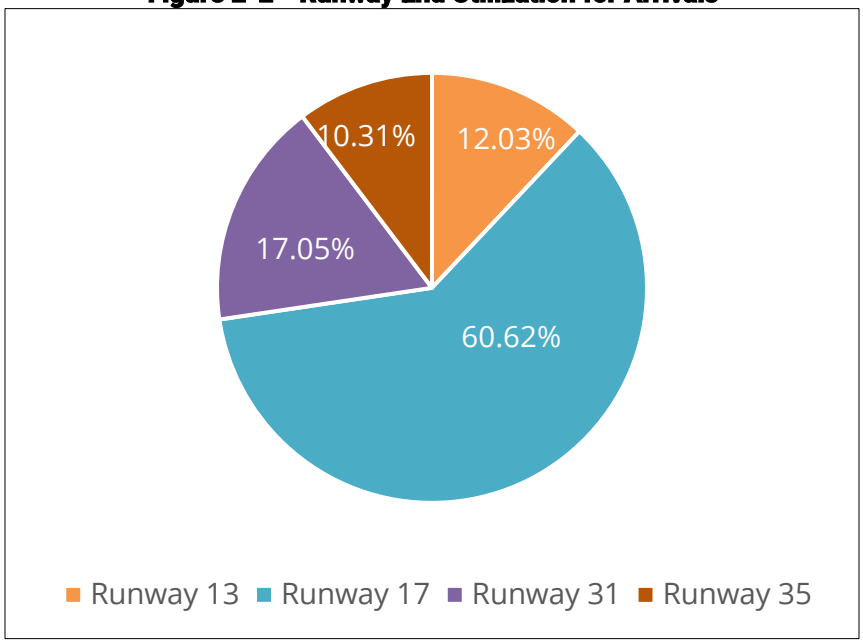
Many smaller aircraft use Runway 17-35 for arrivals and departures due to the runway’s close proximity to the majority of the hangars located at the airport. Larger aircraft typically use Runway 13-31 due to its length.

ATCT personnel reported that when aircraft are arriving on Runway 13, the most common taxiways utilized for exiting the runway are Taxiways B1, A3, and A2. Taxiway A1 is rarely used by aircraft to exit Runway 13 after landing. When landing on Runway 31, the most common taxiways utilized for exiting the runway are Taxiways B1, B2, and B3. Aircraft rarely roll out long enough to use Taxiway B4 at the runway end.

When aircraft arrive on Runway 17, the most common taxiways utilized for exiting the runway are Taxiways A4 and D. Some aircraft will also turn off Runway 17-35 onto Runway

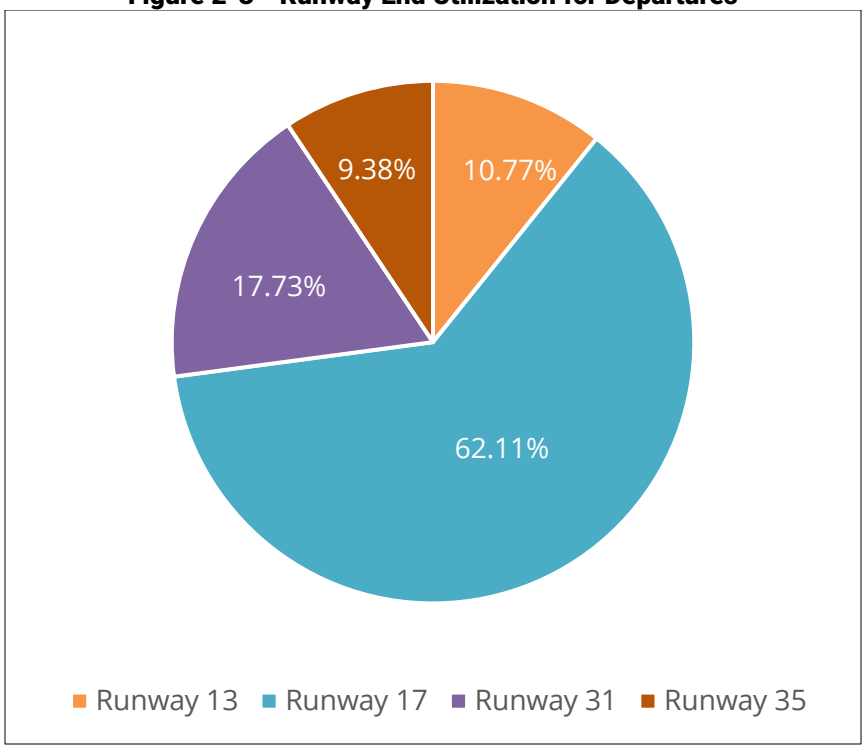
13-31 and utilize Taxiway A3 to access the hangar area. When aircraft arrive on Runway 35, the most common taxiways utilized for exiting the runway are Taxiways A4, A5, and A6.

Figure 2-2 - Runway End Utilization for Arrivals



Source: 1200.aero 2024 Flight Data for RBD

Figure 2-3 - Runway End Utilization for Departures



Source: 1200.aero 2024 Flight Data for RBD

Taxiway System

An airport's taxiway system plays a critical role in supporting the movement of aircraft from their parking locations at the Airport to/from the runway system. Both Runway 13-31 and Runway 17-35 have partial parallel taxiways that connect the ends of each runway.

Runway 13-31's northeastern parallel taxiway integrates portions of Taxiway B and Taxiway A. A partial parallel taxiway, identified as Taxiway E, is present on the southwest side of Runway 13-31. An extension project is currently underway for Taxiway E. This project will extend Taxiway E to intersect with Taxiway B2 on the northeast side of the runway.

Runway 17-35's parallel taxiway integrates portions of Taxiway A and Taxiway D. The separation distances for each runway centerline to its associated parallel taxiway centerlines are as shown in **Table 2-15**. Proper separation from runway to parallel taxiway centerlines is important for facilitating the safe and efficient flow of aircraft between the runway and parallel taxiway.

Table 2-15 - Runway to Parallel Taxiway Separation

Runway/Taxiway Pair	Centerline to Centerline Separation Distance (ft.)
Runway 13-31 Offset to Taxiway B	300
Runway 13-31 Offset to Taxiway A	530
Runway 13-31 Offset to Taxiway E	400
Runway 17-35 Offset to Taxiway A	300
Runway 17-35 Offset to Taxiway D	300

Source: 2019 RBD Airport Layout Drawing and Airfield Facilities Review

Based on discussions with ATCT, the capacity of the taxiway system is currently not an issue and minimal taxi delays occur. Engine run-up areas do not exist at the approach ends of Runway 17 and Runway 35. Adding these would accommodate engine run-ups for the significant amount of piston aircraft traffic at the Airport.

All of the taxiways are constructed of concrete. Similar to runways, taxiways have associated protected surfaces that are critical to the safe and efficient operation of aircraft. These surfaces include:

- Taxiway Safety Areas (TSA) – A defined surface on both sides of the taxiway prepared and suitable for reducing the risk of damage to aircraft deviating from the pavement and for supporting passage of aircraft rescue and firefighting (ARFF) equipment.

- Taxiway Object Free Areas (TOFA) – An area centered on the surface of a taxiway provided to enhance the safety of aircraft operations by remaining clear of objects, except for objects that need to be located ("fixed-by-function") in the TOFA for air navigation or aircraft ground maneuvering purposes.

Taxiway C – Looking East

Taxiways are also designated with a critical aircraft related to the taxiway's intended ADG as well as its Taxiway Design Group (TDG). A taxiway's ADG critical aircraft designation dictates the width of the TSA and TOFA for the taxiway. A taxiway's TDG is based on the landing gear dimensions of the taxiway's critical aircraft and dictates the taxiway's width and fillet (i.e., curvature where two taxiways intersect or curve) dimensions. **Table 2-16** identifies the general width of each taxiway at RBD in addition to the ADG, TDG, and total width of each taxiway's TSA and TOFA.

Table 2-16 - Taxiway Widths and Protected Surfaces

Taxiway Designation	Width (ft.)	Airplane Design Group	Taxiway Design Group	Taxiway Safety Area (ft.)	Taxiway Object Free Area (ft.)
A	60	II	3	79	124
A1	50	II	3	79	124
A2	50	II	3	79	124
A3	50	II	3	79	124
A4	60	II	3	79	124
A5	60	II	3	79	124
A6	60	II	3	79	124
B	60	II	3	79	124
B1	65	II	3	79	124
B2	60	II	3	79	124
B3	60	II	3	79	124
B4	60	II	3	79	124
C	60	II	3	79	124
D	60	II	3	79	124
E	60	III	3	118	171
E1	65	III	3	118	171

Source: 2019 RBD Airport Layout Drawing, Airfield Facilities Review, and FAA Airport Diagram

The width of all taxiways at RBD meet the taxiway width requirement for TDG 3 standards. However, many fillets associated with these taxiways were designed prior to current FAA fillet design standards. Consequently, the fillets for all taxiways other than Taxiway E and E1 do not meet current fillet design standards for TDG 3.

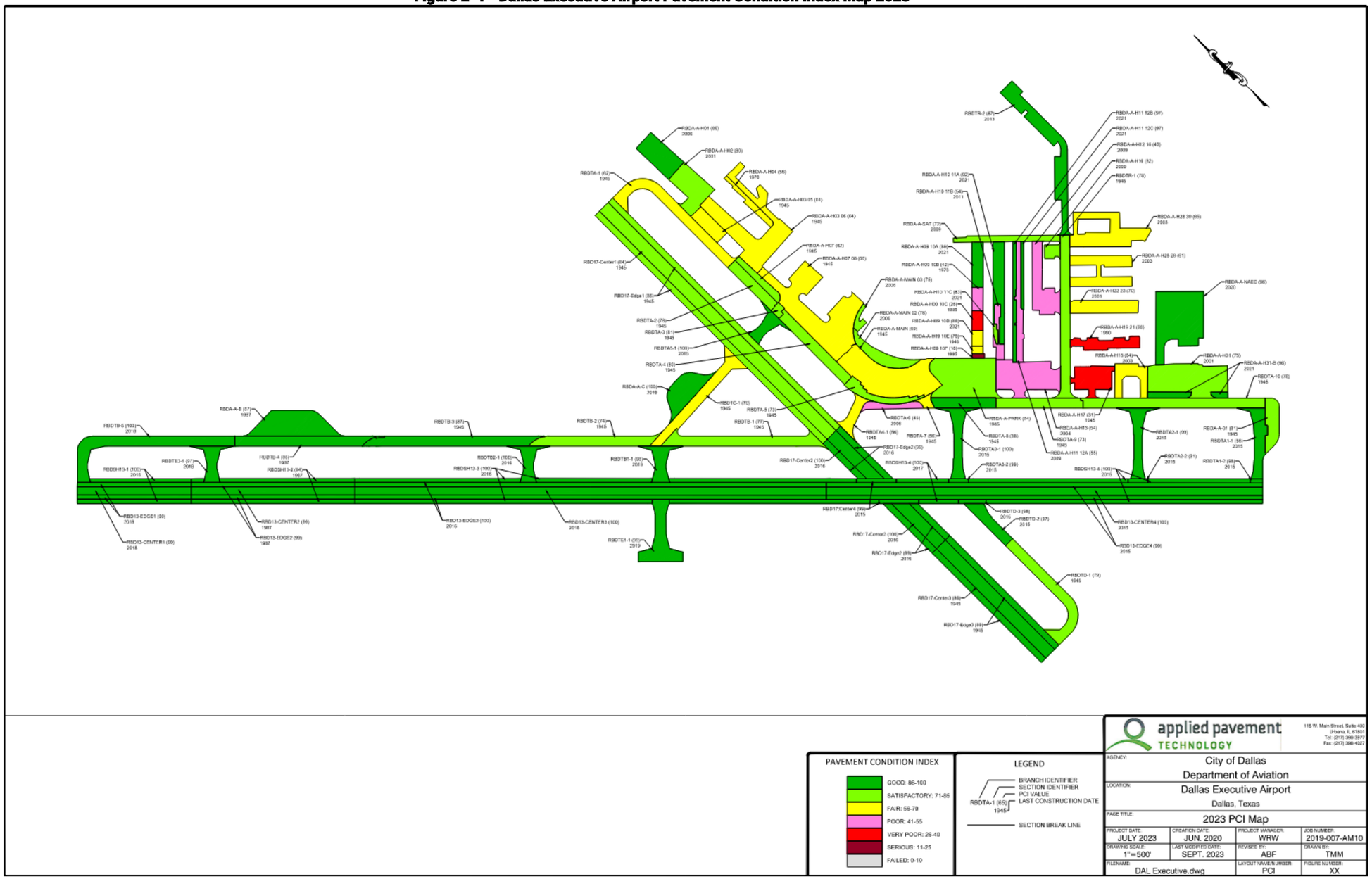
Airfield Pavement Condition

A pavement condition index (PCI) inspection was performed by Applied Pavement Technology for all airside pavements at RBD in 2023. According to the FAA's Advisory Circular 150/5320-6G, *Airport Pavement Design and Evaluation*, a pavement condition index is a numerical rating of the surface condition of pavement and indicates functional performance with implications of structural performance.

The PCI scale ranges from a value of 0 (representing a pavement in a completely failed condition) to a value of 100 (representing a pavement with no distress). In general terms, pavements in satisfactory to good condition that are not exhibiting significant amounts of load-related distress will benefit from preventive maintenance actions, such as joint and crack sealing and patching. Pavements with a PCI between 40 and 70 (i.e., fair to poor condition) are more likely candidates for major rehabilitation activities, such as Portland Cement Concrete (PCC) repairs, although preventive maintenance may still be beneficial. Often, when the PCI is less than 40, reconstruction is the most viable alternative due to substantial deterioration of the pavement structure. These guidelines are general PCI thresholds associated with the level of repair needed.

Figure 2-4 was developed to visually represent the results of the pavement study. The runway and taxiway system at RBD are generally in good or satisfactory condition. Taxiway C and A4 are classified as fair and a portion of Taxiway A, adjacent to Taxiway A4, is identified as being in poor condition.

Figure 2-4 - Dallas Executive Airport Pavement Condition Index Map 2023



Source: Applied Pavement Technology, 2023

Airfield Lighting, Signage, and Electrical Infrastructure

Airfield lighting, signage, and electrical infrastructure play an important role in providing a visual to pilots regarding their location on the airport. **Table 2-17** provides an overview of the existing runway lighting infrastructure at RBD.

Table 2-17 - Runway Lighting

Runway	Runway Edge Lighting	Runway Centerline Lighting	Touchdown Zone Lighting	Approach Lighting System
Runway 13-31	MIRL	None	None	None
Runway 17-35	MIRL	None	None	None

Source: 2019 RBD Airport Layout Drawing and Airfield Facilities Review

The Medium Intensity Runway Lights (MIRLs) on Runway 13-31 are Light-Emitting Diode (LED) fixtures (FAA-type L-861) that were installed in 2017 as part of the last runway extension project. The runway edge lights are located within the paved shoulders for the runway. Displaced threshold lights and runway end lights are present on each end of the runway.

The MIRLs on Runway 17-35 are incandescent fixtures that include a combination of FAA-type L-861 and L-862 lights. Based on historical grant documentation, it is estimated that the original fixtures (L-861) were installed in 2004. However, some fixtures have been replaced since that time. The lights are installed in the grass on both sides of the runway. Runway end/threshold lights are present on each end of the runway.

All taxiways at RBD are equipped with medium intensity taxiway edge lighting (MITL) and lighted runway/taxiway signage is present throughout the airfield. The MITLs are FAA-type L-861T lights and are a combination of LED and incandescent fixtures. The original incandescent fixtures were installed in 2004, and the LED fixtures were installed between 2014 and 2018. The current airfield signage is FAA-type L-858 with a curved face produced by Lumacurve. The face panels for several signs are beginning to fade.

Airfield Lighting Vault

The existing Airfield Lighting Vault (ALV) is an approximately 17-foot by 20-foot building located near the ATCT on the south side of the airfield. The ALV houses the airfield lighting constant current regulators (CCRs) that power the airfield series circuits, the relay-based lighting control system, a heating, ventilation, and air conditioning (HVAC) system for the vault, and an automatic transfer switch (ATS) as part of the emergency power system for the vault. The ALV and four (4) CCRs (the CCRs for Runways 13-31 and 17-35 and the CCRs

for Taxiways A and B) were constructed and installed in 2004. The regulator for the Runway 13-31 Precision Approach Path Indicators (PAPI) was installed in 2017 and the regulator for Taxiway E on the southwest side of Runway 13-31 was installed in 2019. There are no spare regulators present in the vault. The control system is connected to a remote-control panel consisting of selector switches in the cab of the ATCT.

Airfield Lighting Vault and Generator

The ALV also has a propane-powered backup generator located on the west side of the building. The generator is powered by a propane tank that has a 500-gallon capacity. The generator is located under an awning and within a concrete curbed enclosure. The generator has been set up with the intention of being connected to a permanent natural gas connection, when available, ultimately removing the need for the propane tank. The generator is a 200kW Kohler Model 200REZXB that was manufactured in 2020.

Navigational Aids (NAVAIDs)

Navigational Aids (NAVAIDs) are ground-based systems that provide information to pilots for navigational purposes. In general, NAVAIDs can be segmented into two categories: visual and electronic. Visual NAVAIDs provide visual guidance to pilots to aid them in landing an aircraft, locating the airport, or locating a particular runway. Electronic NAVAIDs emit a signal that communicates with equipment in the cockpit of an aircraft that aids a pilot in navigating without using visual cues outside the aircraft. Electronic NAVAIDs are used for both enroute navigation and approaches to landing at an airport.

Visual NAVAIDS

The following visual NAVAIDS are present at RBD and are owned and maintained by the airport:

- Airport Beacon – The Airport beacon operates at night or during inclement weather to provide pilots with a visual signal identifying the location of RBD. It is located next to the terminal building and uses a fixture with an LED light that is approximately two years old.

- Precision Approach Path Indicators for Runway 13-31 – Precision approach path indicators (PAPIs) provide a visual indication to pilots regarding whether they are above, below, or on the intended glidepath for landing on a runway. Each end of Runway 13-31 is equipped with a four box PAPI system. Both PAPIs are calibrated for a 3-degree glidepath angle and were installed in 2017.
- Runway End Identifier Lights for Runway 13-31 – Runway end identifier lights (REILs) are sequenced flashing lights that provide a visual indication to pilots regarding the location of the landing threshold of a runway. REIL systems are located at the landing thresholds on each end of Runway 13-31 and were installed in 2017.

REIL for Runway 17

The following visual NAVAIDs at RBD are owned and maintained by the FAA:

- PAPI for Runway 17 – The PAPI is calibrated for a 3-degree glidepath angle.
- REILS for Runway 17-35 – Located at the landing threshold for each runway.

Electronic NAVAIDS

The primary electronic NAVAIDs at RBD are the glideslope and localizer systems associated with the Instrument Landing System (ILS) approach for Runway 31. The glideslope provides vertical guidance to instrumentation in the aircraft indicating whether the aircraft is above, below, or on the established glidepath to the runway. The localizer provides horizontal guidance to instrumentation in the aircraft, indicating whether the aircraft is in alignment with the extended runway centerline. Glideslopes are located near the approach end of the landing runway while localizers are located at the departure end.

Glideslope for Runway 31

The localizer for Runway 13 is a Mark 1F and the glideslope is a capture effect glideslope. The glideslopes and localizers have established critical areas that need to be protected from aircraft, vehicle parking, and any other objects that could potentially block the signals emitted by the equipment.

Airspace

All flight operations conducted at RBD are governed by FAA regulations established for the National Airspace System (NAS). The NAS is made up of airspace, navigation facilities, airports, regulations/procedures, and ATC facilities. The following sections describe the airspace system associated with Dallas Executive Airport.

National Airspace Structure

Airspace can be generally categorized as either controlled or uncontrolled. The area over and surrounding RBD is controlled airspace. Controlled airspace is defined as airspace with positive navigational control, meaning the pilot is communicating with the ATCT who is providing instructions to takeoff, land, or transition through the airspace. The different classes of controlled airspace are defined as follows:

- Class A Airspace – Generally includes all airspace between 18,000 feet Mean Sea Level (MSL) and 60,000 feet MSL. All operations in Class A airspace are conducted under Instrument Flight Rules (IFR) unless otherwise authorized.
- Class B Airspace – Generally consists of airspace from the surface to 10,000 feet MSL. The dimensions of this type of airspace are tailored to specific airport conditions based on the airport's environment. ATCT clearance is required to enter Class B airspace and all aircraft within it receive separation services. Class B airspace typically surrounds the nation's busiest airports.
- Class C Airspace – Generally consists of airspace from the surface to 4,000 feet above an airport's field elevation. The airspace usually consists of a surface area with a five nautical mile (NM) radius and an outer circle with a ten NM radius that extends from 1,200 feet to 4,000 feet above the airport's elevation. Two-way radio communication is required with the ATCT.
- Class D Airspace – Generally extends from the surface to 2,500 feet above an airport's elevation at airports with an operational ATCT. Each configuration is tailored to the specific airport but Class D airspace typically spans a five NM radius.
- Class E Airspace – Controlled airspace that is not defined as A, B, C, or D is Class E. Class E also typically surrounds many non-towered airports. Class E airspace extends up to, but not including, 18,000 feet MSL, and all airspace above 60,000 feet MSL is categorized as Class E.

RBD Airspace Structure

The airspace surrounding RBD is Class D when the ATCT is operational. The ATCT operates daily from 7:00 AM to 9:00 PM. During operational hours for the ATCT, all aircraft are required to obtain ATCT clearance prior to entering the Class D airspace. The Airport is also located underneath the Class B airspace associated with Dallas-Fort Worth International Airport (DFW). The airspace is depicted in **Figure 2-5**. The airspace surrounding RBD is complex, as multiple other airports including Dallas-Love Field (DAL) are located in close proximity to RBD.

The FAA requires aircraft operating in RBD's airspace to be equipped with an operable radar beacon transponder with automatic altitude reporting capability and operable Automatic Dependent Surveillance – Broadcast (ADS-B) Out at a minimum.

RBD Airspace Procedures

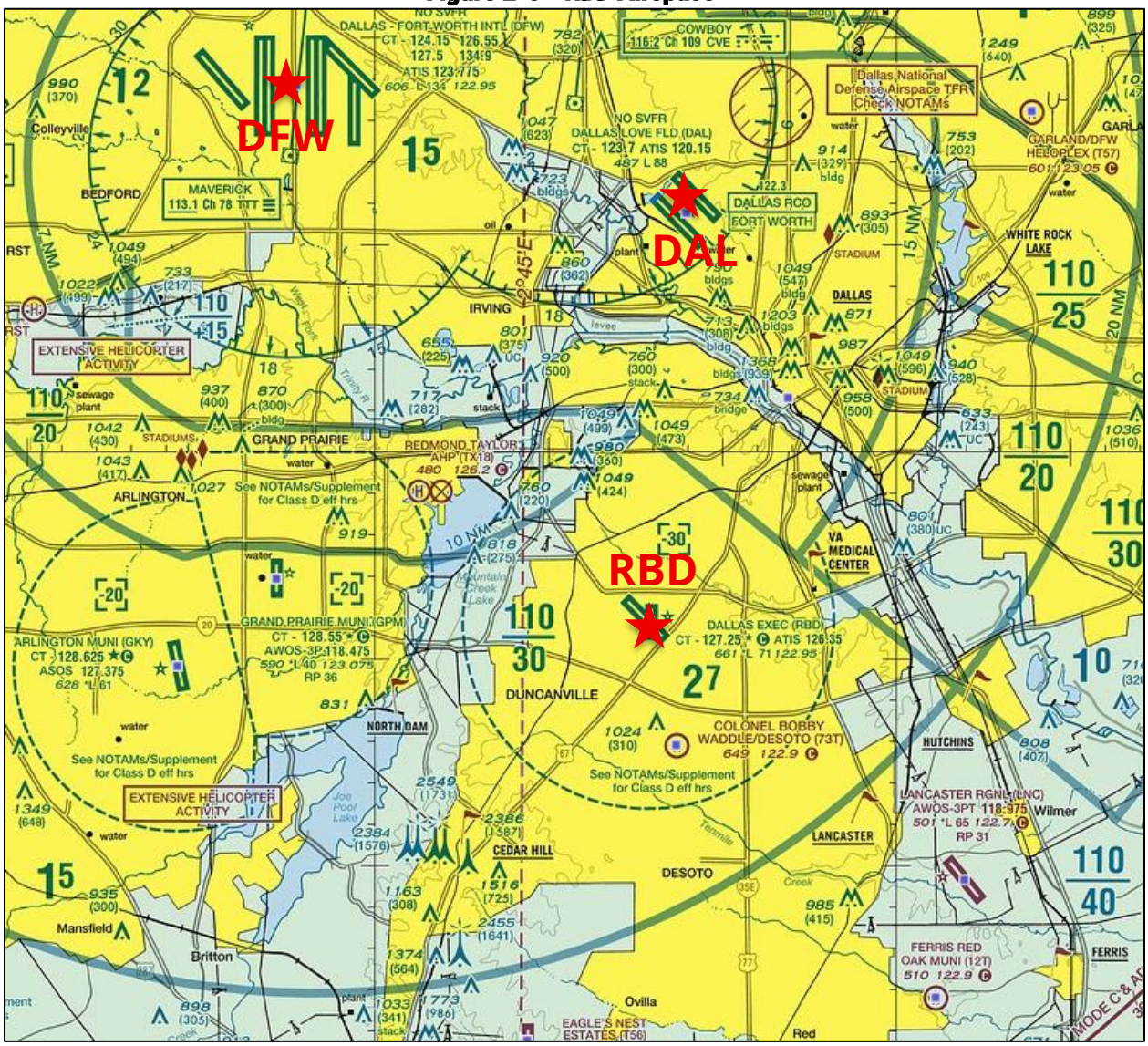
Aircraft approaching RBD during Instrument Flight Rule (IFR) conditions fly through the airspace to land on runways using predetermined routes called Instrument Approach Procedures (IAPs). **Table 2-18** summarizes the instrument approaches available at RBD and the minimum visibility and the DA (Decision Altitude)/DH (Decision Height) associated with each approach.

Table 2-18 - Instrument Approaches

Instrument Approaches	Visibility Minimums (statute miles)	Decision Height/Altitude (ft.) (AGL)
Runway 13-31		
Runway 13		
RNAV (GPS) Y	1	383'
RNAV (RNP) Z	1	363'
Runway 31		
ILS	3/4	200'
LOC	1	420'
RNAV (GPS)	3/4	200'
Runway 17-35		
Runway 17		
RNAV (GPS)	1	442'
VOR	1	462'
Runway 35		
RNAV (GPS)	1	621'

Source: FAA Aeronautical Information Services, Obtained 11/7/2025

Figure 2-5 - RBD Airspace



Source: FAA Sectional Chart, 2025. Obtained 11/7/2025

Due to the complexity of the airspace surrounding DFW, multiple Standard Terminal Arrival (STAR) and Departure Procedures (DP) exist for RBD. Based on discussions with RBD ATCT personnel, the existing STAR, DP, and instrument approach procedures meet the needs of the Airport.

Communication and Weather Facilities

Ground-to-air communication equipment and weather facilities are critical to supporting the safe operation of aircraft in and around airports.

Automated Surface Observing System

RBD has an Automated Surface Observing System (ASOS) that is the primary source of wind direction, velocity, and altimeter data for weather observation purposes for the Airport. The ASOS is an automated sensor suite that reports weather conditions over a discrete radio frequency for pilots to receive real time weather information. The RBD ASOS information can be received by turning to the RBD Automated Terminal Information Service (ATIS) frequency of 126.35 MHz or by calling 214-330-5317. The FAA owns the ASOS, but it is maintained by the National Weather Service (NWS).

The Office of the Federal Coordinator for Meteorological Services and Supporting Research FCM-S4-2019, *Federal Standard for Siting Meteorological Sensors at Airports,* provides guidance for critical areas for ASOS facilities. Within 100 feet of the visibility sensor, no grass or vegetation should be higher than 10 inches. The wind sensor should be at least 15 feet higher than any obstruction within 500 feet and 10 feet higher than any obstruction between 500 and 1,000 feet.

Windsock and Segmented Circle

RBD has a single windsock located north of the runway/runway intersection. The windsock is surrounded by a segmented circle constructed of concrete. The windsock is internally illuminated with an LED lighting array.

Remote Transmit/Receive Communication Array

RTR (Remote Transmitter/Receiver) towers are communication towers that can be used for ground-to-air communication. There is a single RTR tower site located at RBD. Based on discussions with RBD ATCT personnel, the RTR site includes communication equipment for the RBD tower as well as secondary communications equipment for DFW.

Air Traffic Control Tower

The current ATCT is located off Boulder Drive on the west side of the airport. It is a contract tower facility that was originally opened in 2007. The facility houses air traffic control services for RBD but does not include a Terminal Radar Approach Control (TRACON) facility. There are currently no line-of-sight issues from the ATCT cab to any portions of the movement area. The facility has its own access control infrastructure, including perimeter fencing, and a vehicle gate.

Air Traffic Control Tower

Airport Perimeter Road

A partial perimeter road exists along the outer limits of Airport property at RBD. The perimeter road needs to be extended southward from the CAF apron to where the perimeter road begins adjacent to the Marvin D. Love Freeway.

Terminal/Landside Facilities

An airport's terminal/landside facilities include the aprons, fixed base operators (FBOs), aeronautical businesses, terminal building, hangars, roadways, and other facilities that are essential for the integration of airside facilities into the local community. The terminal/landside facilities at RBD accommodate a wide range of aircraft including small piston engine aircraft to large corporate jets. The current based aircraft fleet mix at RBD is shown in **Table 2-19**.

Table 2-19 – Based Aircraft

Aircraft Type	Number
Single Engine	262
Multi-Engine	49
Jet	55
Helicopter	12
Total	**378**

Source: RBD Based Aircraft Count, 1-1-2025

Dallas Executive Airport has established a building numbering system used to identify facilities at the airport. The building numbers associated with each facility are identified in **Figure 2-6** and **Figure 2-7**. **Table 2-20** provides a list of facilities located at RBD including the building number, size, and facility type.

Airport Terminal and FBO Facilities

RBD has a general aviation (GA) terminal building located east of Runway 17-35 in the center of the eastern GA development area. The terminal opened in 2005 and is approximately 13,000 square feet. The terminal includes a lobby, office space, and area for a restaurant. Adjacent to the terminal is a conference center that is used for various activities including public meetings and events.

Ambassador Jet Center

RBD also has two FBOs: Ambassador Jet Center and Jet Access. Ambassador Jet Center was established in 2001 and is located on the east side of the airfield. The FBO includes multiple hangars and a terminal facility located within

Building 5435. The terminal facility includes a lobby, conference room, flight support areas, and office space. The terminal facility is two stories and is approximately 7,000 square feet.

Jet Access was established in 2024 and is located on the west side of the airfield. The FBO includes multiple hangars and a terminal facility located within Building 5535. The terminal facility includes a lobby, conference room, flight support areas, and office space. The terminal is a single story and is approximately 8,000 square feet.

Jet Access

Figure 2-6 - Hangars and Buildings - Eastside

Source: Garver, 2025

Figure 2-7 - Hangars and Buildings - Westside

Source: Garver, 2025

Table 2-20 - Terminal/Landside Facilities Inventory

Building Number	Hangar Type	Area (sq. ft.)	Utilization
4975	Box Hangar	8,500	Private Hangar
4985	Box Hangar	19,500	Private Hangar
5010	Box Hangar	14,000	Private Hangar
5015	Box Hangar	12,600	Private Hangar – Ambassador
5025	Box Hangar	24,500	Private Hangar – Ambassador
5110	Box Hangar	19,600	Private Hangar
5120	Office Space	7,200	Office Space
5125	Box Hangar	41,500	Private Hangar/Flight Schools
5223	Storage Building	70	Storage
5225	Box Hangar	25,500	Private Hangar – Jet Access
5303	Terminal Building	13,000	GA Terminal and Restaurant
5419	T-Hangar	32,400	25 T-Hangar Bays (Ambassador)
5423	T-Hangar	29,400	1 Box Hangar and 10 T-Hangar Bays (Ambassador)
5427	T-Hangar	34,000	32 T-Hangar Bays (Ambassador)
5431	T-Hangar	20,900	16 T-Hangar Bays (Ambassador)
5433	Box Hangar	13,40	Private Hangar – Ambassador
5435	Box Hangar/FBO	20,400	Ambassador Hangar and FBO Terminal
5439	Box Hangar	4,100	Private Hangar – Ambassador
5443	Box Hangar	4,100	Private Hangar – Ambassador
5478	Box Hangar	20,000	Private Hangar – Jet Access
5484	Box Hangar	18,000	Private Hangar – Jet Access
5490	Box Hangar	12,000	Private Hangar
5523	Box Hangar	40,000	Private Hangar – Jets MRO
5535	Box Hangar/FBO	36,500	Jet Access Hangar and FBO Terminal
5540	Box Hangar	17,000	Public Safety Hangar
5550	ATCT/Lighting Vault	N/A	Air Traffic Control Tower and Lighting Vault
5555	Box Hangar	15,000	Private Hangar – Dallas College/Jet Access
5661	Box Hangar	21,000	CAF Hangar
5673	Box Hangar	6,000	Private Hangar
5675	Box Hangar	6,000	Private Hangar
5676	Box Hangar	9,200	Private Hangar – Jet Access
5677	Box Hangar	3,600	Private Hangar
5681	Box Hangar	13,500	Private Hangar – Jet Access
5685	Box Hangar	13,500	Private Hangar

Source: Garver, 2025

TABLE 2-20 (CONTINUED)

Building Number	Hangar Type	Area (sq. ft.)	Utilization
5689	Box Hangar	9,600	Private Hangar
5691	Box Hangar	10,000	Private Hangar
5693	Box Hangar	7,200	Private Hangar
5695	Box Hangar	10,200	Private Hangar
5697	Box Hangar	17,000	Private Hangar
5699	Box Hangar	16,000	Private Hangar
5701	Box Hangar	9,500	Private Hangar
5907	Airport Maintenance Facility	N/A	Airport Maintenance
CAF	Box Hangar	46,500	CAF Hangar

Source: Garver, 2025

Aircraft Storage/Hangar Facilities

Dallas Executive Airport has a wide range of hangar facilities from large box hangar complexes to T-hangars. In total, the Airport has 39 hangar buildings including four T-hangar facilities. Many of the box hangar facilities include multiple hangar bays. Additionally, some hangars have office space built into or immediately adjacent to the hangar. The total square footage of hangar space at RBD is approximately 681,300. There are currently no vacant hangars at the airport.

Hangars at the airport are occupied by a myriad of aeronautical businesses including FBOs, MROs, and other aeronautical service providers. The Airport is also home to the national headquarters for the Commemorative Air Force (CAF). Dallas College also occupies a hangar where they conduct training for individuals seeking to obtain their Airframe and Powerplant (A&P) maintenance license. The Airport is also home to two flight schools: Parrish Aviation Flight Academy and Coast Flight Training.

Commemorative Air Force

Aircraft Parking Apron

Dallas Executive Airport has approximately 1,500,000 square feet of apron space used for parking and maneuvering of aircraft. The majority of the apron space is constructed of concrete. The apron area has a total of 25 designated aircraft tie-down spaces, all of which are located on the east apron. Within the contiguous apron area on the east side of the Airport there are many areas shared by both vehicle and aircraft traffic.

East Apron

Terminal Parking and Roadway Access

The GA terminal facility located on the east side of the airport has a large parking lot around it that includes 75 parking spaces including six Americans with Disabilities Act (ADA)-accessible parking spaces. The parking lot is constructed of concrete and is in good condition. Vehicle parking for hangars on the eastern side of the Airport is limited and will need to be expanded as part of future development planning to reduce the need for vehicles to utilize the apron to access hangars within the area. Vehicle parking on the western side of the Airport is generally sufficient to accommodate existing demand. Additionally, vehicle access on the west side of the Airport is separated from airside access.

Roadway access to the eastern side of the Airport is via Challenger Drive and Mariner Drive which connect to South Hampton Road. Both access roads are constructed of concrete and are generally in good condition. Saturn Drive and Voyager Drive both connect from Challenge Drive into the eastern development area at the Airport. Controlled access points are present where both roadways intersect the perimeter fence. Saturn Drive and Voyager Drive are constructed of concrete and are generally in good condition.

Roadway access to the western development area is available via Boulder Drive which connects to West Red Bird Lane. Boulder Drive is constructed of concrete and is generally in good condition. A controlled access point is present where Boulder Drive intersects with West Red Bird Lane.

Security

Dallas Executive Airport has a chain-link fence with three strands of barbed wire surrounding the majority of the airfield. The type of fencing varies around the GA terminal building where some wrought iron fencing is present. Multiple controlled access vehicle gates exist along the fence line. The primary gates use a common access control system. The configuration of the perimeter fence in the western development area will likely need to be reconfigured as additional development occurs in the area to provide improved separation of airside and terminal/landside facilities and to support additional vehicle traffic.

Fuel Storage Facility

Dallas Executive Airport has two fuel farms present on Airport property. The largest fuel farm includes four above ground storage tanks and is located adjacent to the terminal building. The tanks are utilized by Ambassador Jet Center and Jet Access. This fuel farm is referred to as the northern fuel farm. The smaller fuel farm is located by CAF and is used by Jet Access. This fuel farm is referred to as the southern fuel farm. A summary of the fuel farm infrastructure used by both Ambassador Jet Center and Jet Access is provided in **Table 2-21**. The northern fuel farm is pictured here.

Northern Fuel Farm

Table 2-21 - RBD Fuel Farms

FBO	Fuel Farm Assets
Ambassador Jet Center	Northern Fuel Farm 1. Jet A – 20,000 gallons 2. 100LL – 12,000 gallons
Jet Access	Northern Fuel Farm 1. Jet A – 20,000 gallons 2. 100LL – 12,000 gallons Southern Fuel Farm 1. Jet A – 16,000 gallons 2. 100LL – 16,000 gallons

Source: Tenant Interviews, October 2025

Both FBOs have multiple fuel trucks. Only full service fueling is available at both FBOs. As development on the west side of the Airport increases, a fuel farm on the west side of the airport will likely be needed to minimize fuel truck movements along the perimeter road. Both fuel farms are in good condition based on discussions with airport and FBO staff.

Existing Environmental Overview

This section provides an overview of the known environmental factors that should be considered as part of the ALP with Narrative process. Multiple environmental investigations and analysis reports have been completed at RBD over the past 10 years including the reports identified and described in **Table 2-22**. In addition to the reports identified in the table, multiple environmental reports have been issued related to the removal and closure of underground storage tank sites at RBD.

Table 2-22 - Previous Environmental Investigation and Analysis Reports

Report Title	Description	Report Date
Phase I – Site Investigation Report (Western Development Area)	This analysis included a Phase 1 Environmental Site Assessment (ESA) for approximately 170 acres on the western side of the airport reviewing historical soil filling activities conducted in the area. The report recommended the completion of a Phase II ESA for the area.	December 19, 2018
Phase II – Site Investigation Report (Western Development Area)	This analysis included soil borings for approximately 170 acres on the western side of the airport analyzing for soil contaminants as part of a Phase II ESA. The report identified that no further action was needed at this time.	March 19, 2019
Affected Property Assessment Report (Wings over Dallas Crash Event)	This report analyzed the environmental impacts of fluids released during the Wings Over Dallas Crash (2022). A subsequent report was completed on October 28, 2024, that summarized the actions taken by the City of Dallas to mitigate environmental impacts. Contaminated soil in the area was removed and the Texas Commission on Environmental Quality (TCEQ) issued a letter on December 17, 2024, stating no additional action is necessary.	August 14, 2023
Environmental Assessment (EA) on Runway Shift and Other Improvements	The Texas Department of Transportation – Aviation Division conducted an EA related to the extension and shift of Runway 13-31.	August 4, 2016

Source: Environmental reports provided by City of Dallas. Reviewed 11-14-25

Historical, Architectural, Archaeological, and Cultural Resources

The National Historic Preservation Act of 1966 requires that an initial review be made to determine if any properties in or eligible for inclusion in the National Register of Historic Places are within the area of a proposed action's potential environmental impact. The Archaeological and Historic Preservation Act of 1974 provides for the survey, recovery, and preservation of significant scientific, pre-historic, historical, archaeological, or paleontological data when such data may be destroyed or irreparably lost due to a federal, federally funded, or federally licensed project.

An online query through the National Registry of Historic Places and Texas Historical Commission website revealed that there are no historic site locations in the immediate vicinity of the Airport. The closest historical site that the query identified was the Monroe Shops located 4.5 miles northeast of the Airport. A historical marker is located close to the Airport for the Oak Cliff Presbyterian Church located at 6000 South Hampton Road. However, the church is not a designated historical site.

Fish, Wildlife, and Plants

The Endangered Species Act requires each federal agency to ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species nor result in the destruction or adverse modification of the habitat of such species. An online query was completed utilizing the Texas Parks and Wildlife Department's (TPWD) Rare, Threatened, and Endangered Species of Texas database for Dallas County. **Table 2-23** lists the threatened and endangered species identified through the online query using the database. Future coordination with the United States Fish and Wildlife Service (USFWS) and TPWD may be necessary prior to commencing any major construction project at RBD to confirm that no hazard to an endangered or threatened species is being created.

Table 2-23 - Dallas County Threatened and Endangered Species

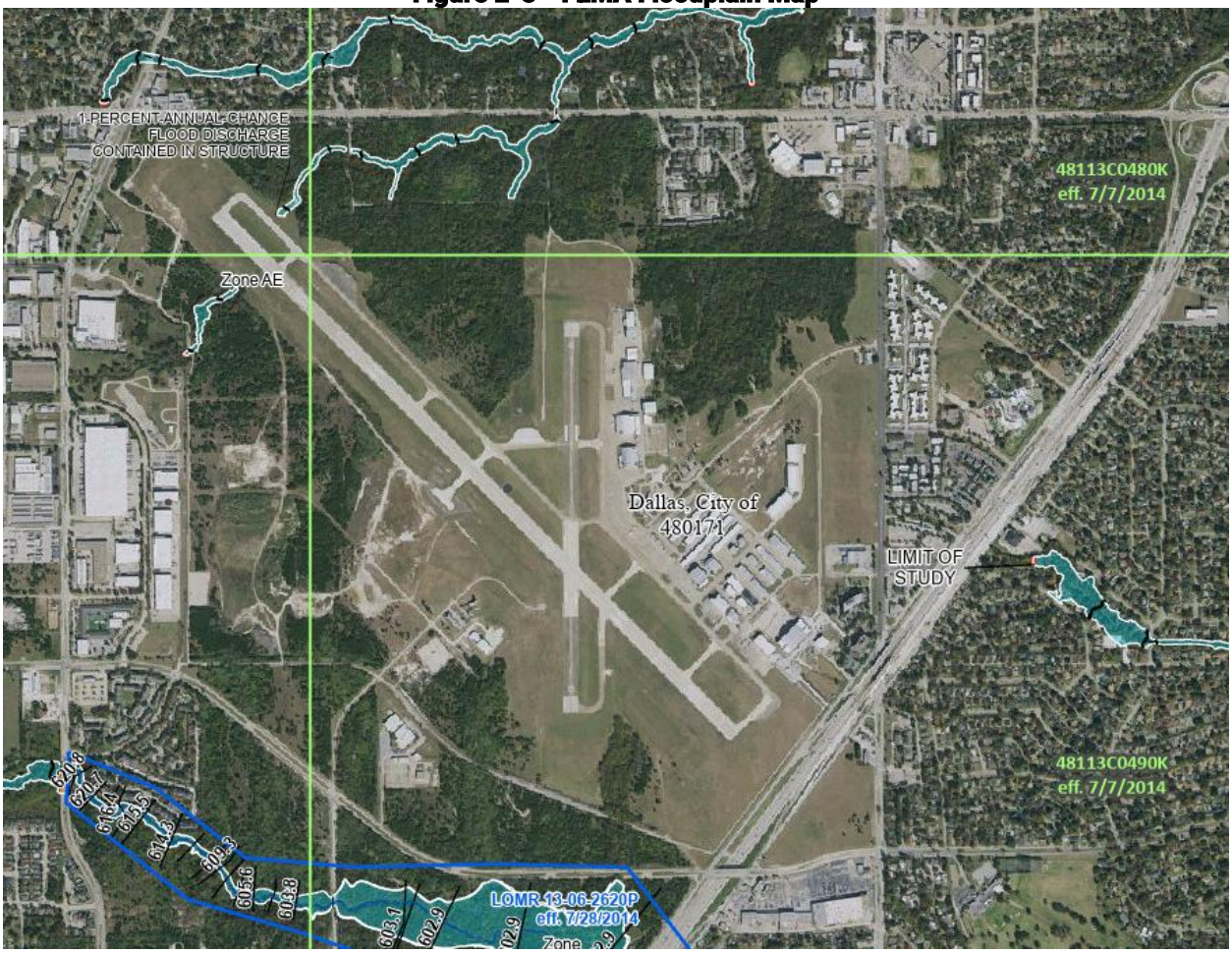
Common Name	Guenus/Species	Status
Black Rail	Laterallus jamaicensis	LT
Whooping Crane	Grus americana	LE
Piping Plover	Charadrius melodus	LT
Rufa Red Knot	Calidris canutus rufa	LT
Yellow-Billed Cuckoo	Coccyzus americanus	LT
Golden-Cheeked Warbler	Setophaga chrysoparia	LE
Texas Fawnsfoot	Truncilla macrodon	LT
White-Faced Ibis	Plegadis chihi	State Listed
Wood Stork	Mycteria americana	State Listed
Interior Least Tern	Sternula antillarum athalassos	State Listed
Alligator Snapping Turtle	Macrochelys temminckii	State Listed
Texas Horned Lizard	Phrynosoma cornutum	State Listed
Sandbank Pocketbook	Lampsilis satura	State Listed
Louisiana Pigtoe	Pleurobema riddellii	State Listed
Texas Heelsplitter	Potamilus amphichaenus	State Listed

Source: USFWS and TPWD. LE = Federally Listed Endangered; LT = Federally Listed Threatened

FEMA Floodplain Map

Flooding can hamper the safe operation of an airport and make it difficult to develop property on or around an airport. As part of this study, an online inquiry was completed through the FEMA Flood Map Service Center to identify areas on or around RBD affected by the existing floodplain. According to the results of the query, the Airport lies in an area of minimal flood hazard as shown as in **Figure 2-8.** Airport staff reported that there have not been any previous flooding issues at RBD within recent history. One significant drainage tributary is located along the northern portion of the Airport that is designated as being within the 100-year floodplain.

Figure 2-8 - FEMA Floodplain Map

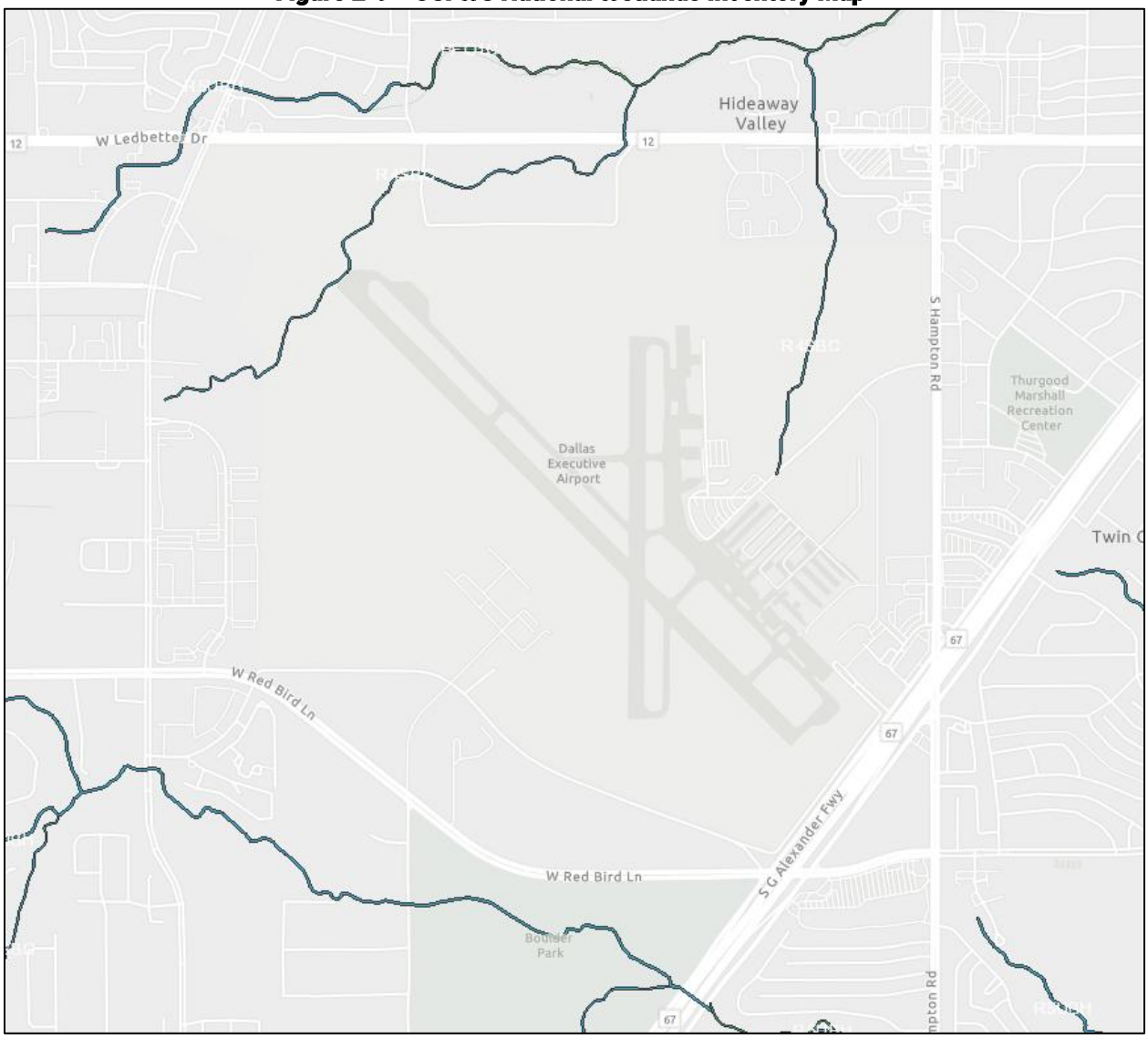


Source: FEMA Flood Map Service Center, 2025

Wetlands

Similar to floodplains, wetlands can present a challenge for future developments on airport property. As part of this ALP with Narrative Report, an online inquiry was completed using the U.S. Fish & Wildlife Service National Wetlands Inventory online database. The result is shown in **Figure 2-9.** Two riverines exist on the north side of the Airport's property. One riverine is in the same general area as the 100-year floodplain. The second riverine is on the east side of Airport property and is generally shown in the same location as a significant drainage tributary.

Figure 2-9 - USFWS National Wetlands Inventory Map

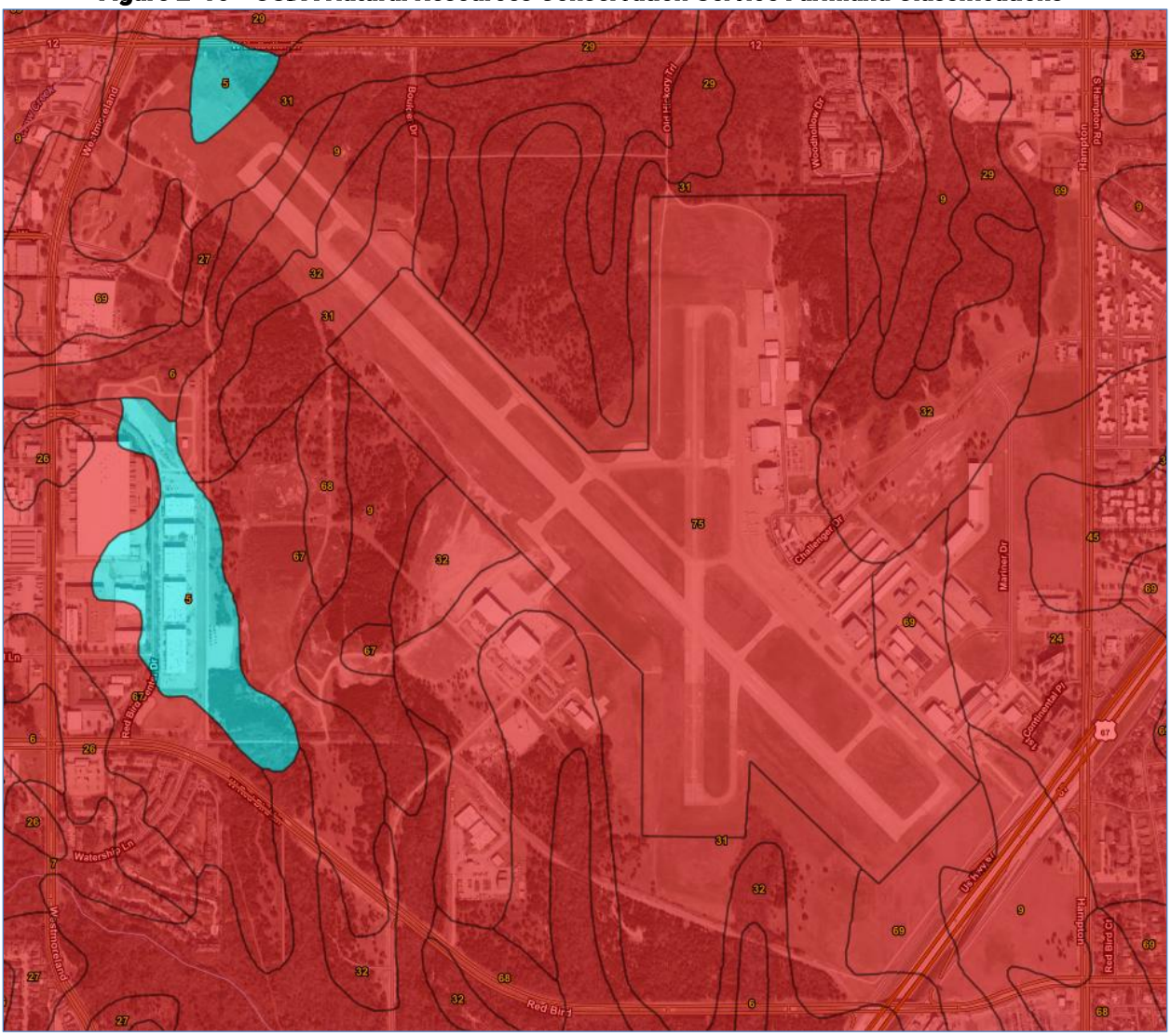


Source: USFWS National Wetlands Inventory, 2025

Farmlands

The Farmland Protection Policy Act (FPPA) regulates federal actions with the potential to convert farmland into non-agricultural uses. The FPPA is intended to minimize the impact that federal programs have on the unnecessary and irreversible conversion of farmland to non-agricultural uses. According to the USDA Web Soil Survey System in **Figure 2-10**, almost the entirety of the Airport property as well as its surroundings are considered “not prime farmland” colored in red. A small area of “farmland of statewide importance” exists on the west side of the airport (shown in light blue).

Figure 2-10 - USDA Natural Resources Conservation Service Farmland Classifications



Source: USDA Web Soil Survey System, 2025

Hazardous Materials, Solid Waste, and Pollution

Hazardous materials, solid waste, and other pollutants can present a challenge to future airport development. There are currently no identified municipal solid waste (MSW) sites located on or adjacent to RBD property according to the TCEQ MSW Facility Viewer. Additionally, there are no industrial or hazardous waste sites located on or adjacent to RBD property according to the TCEQ Industrial and Hazardous Waste (IHW) Facility Viewer.

Noise

Noise created by arriving and departing aircraft has the potential to create environmental impacts on communities living in close proximity to an airport. Dallas Executive Airport has a noise monitoring system installed around the Airport to aid in monitoring aircraft noise impacts. Additionally, in 2021, HMMH completed a noise contour map for RBD. The 2020 estimated noise contours are shown in **Figure 2-11**. As shown in the exhibit, the 75-, 70-, and 65-Day Night Average Sound Level (DNL) contours are fully contained on Airport property. The 60 DNL at the approach end of Runway 35 extends into an undeveloped area off of Airport property.

Land Use and Controls

The City of Dallas has established land-use zoning requirements throughout the city. The majority of the Airport's property is currently zoned "IR – Industrial Research" with the surrounding area primarily zoned as residential. **Figure 2-12** shows the current zoning map for the City of Dallas for the area surrounding RBD. The City has established a height hazard zoning (HHZ) ordinance related to RBD.

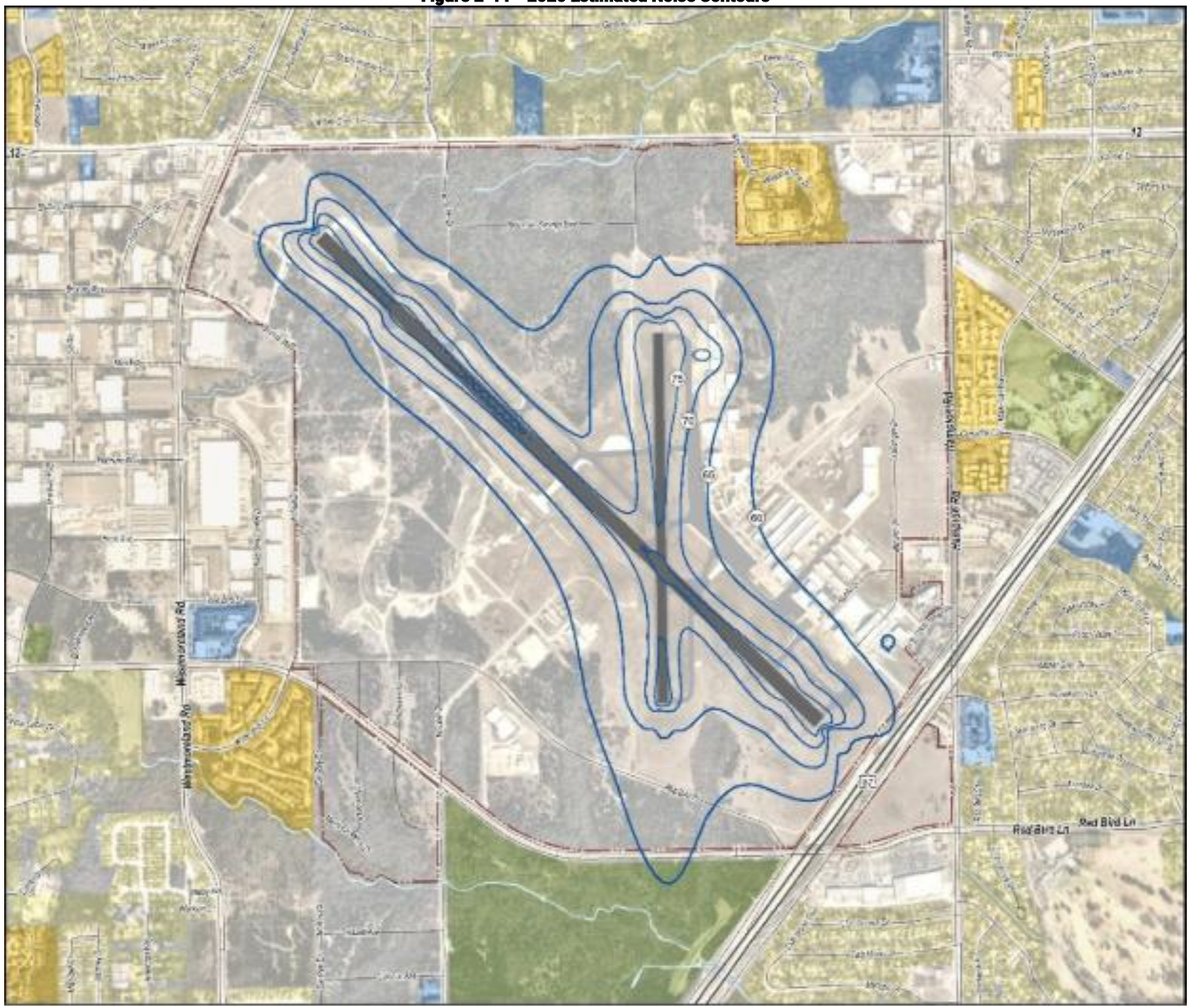
Utilities

As part of the scope of this ALP with Narrative Report, research was conducted to document underground utility lines located within Airport property. **Figure 2-13** depicts the utilities that were identified as part of this process. Underground utility lines were identified on Airport property based on documentation provided by the City of Dallas. No underground utility investigation was completed as part of this project. Underground utility information is missing for some portions of RBD property.

Historical Development

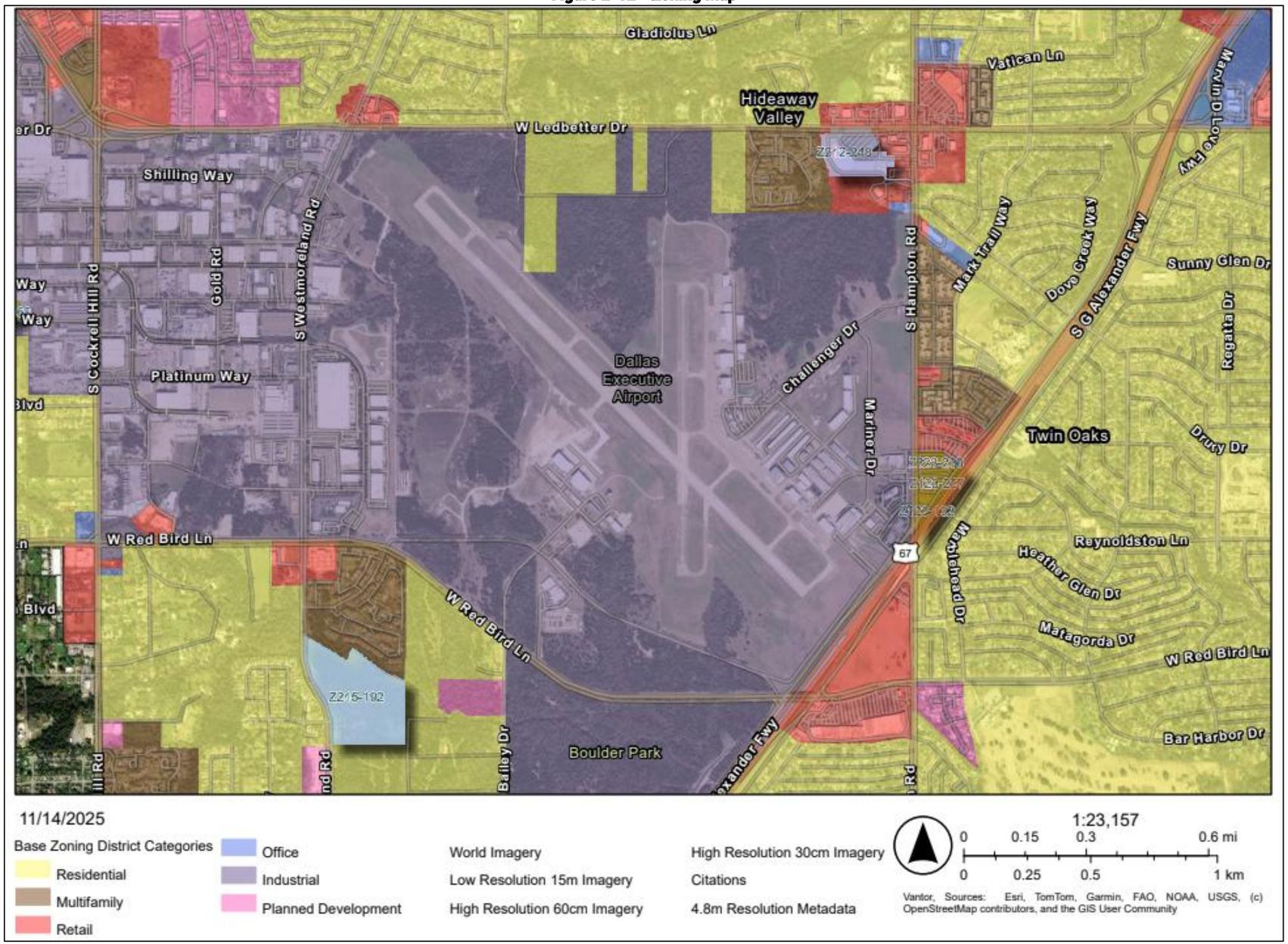
Table 2-24 provides an overview of historical development projects completed at the Airport since 1974 that involved state or federal funding through TxDOT Aviation or the FAA. Projects funded by sources outside the TxDOT state block grant program or the FAA Airport Improvement Program (AIP) are not shown.

Figure 2-11 - 2020 Estimated Noise Contours



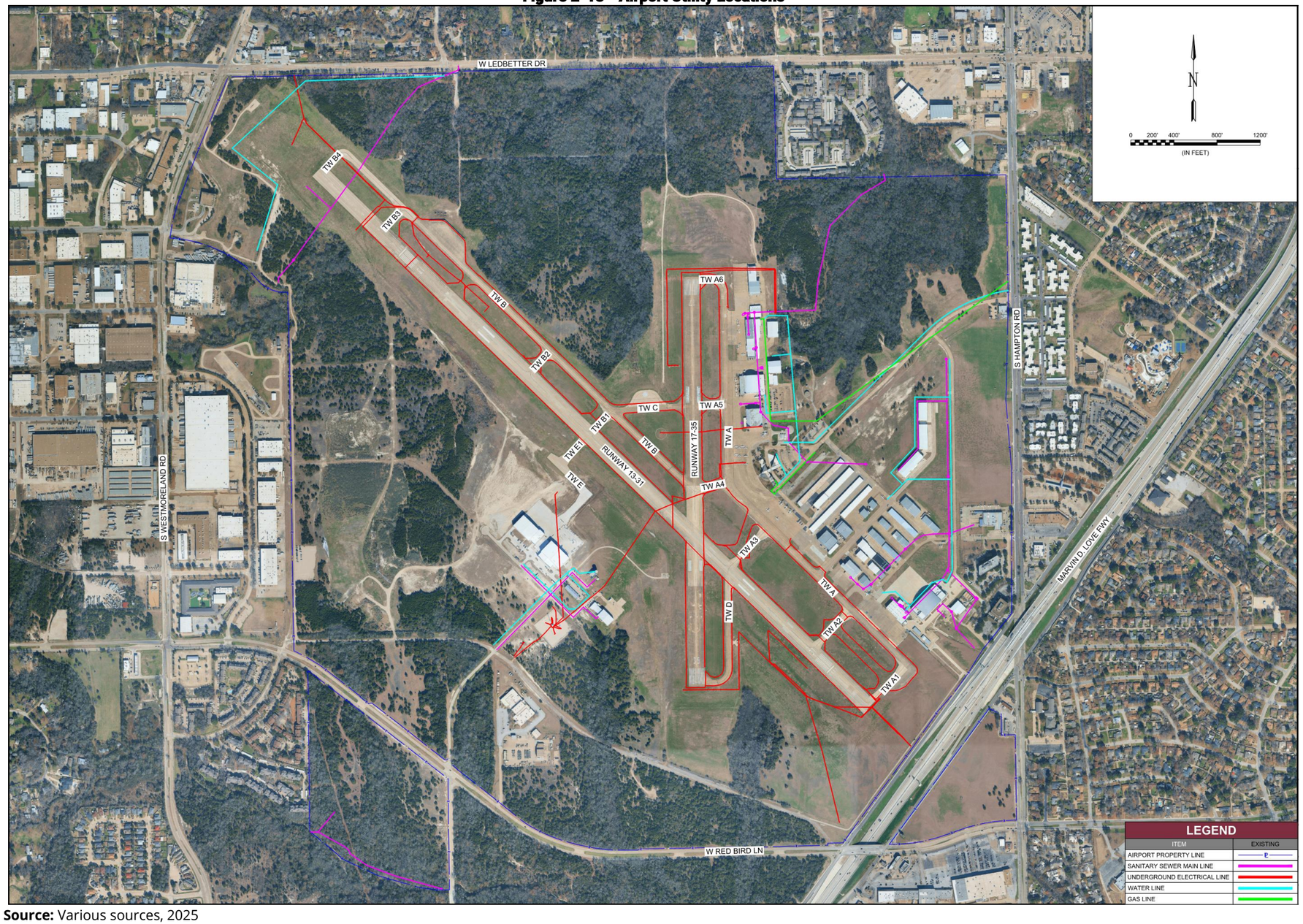
Source: HMMH, 2021

Figure 2-12 - Zoning Map



Source: City of Dallas, 2025

Figure 2-13 - Airport Utility Locations



Source: Various sources, 2025

Table 2-24 - Historical Grant Funded Projects

Description	Year	State Total ($)	Federal Total ($)	Local Total ($)	Total ($)
Construct and light TW S (approx. 1200' x 60').	**1982**	$0	$450,000	$50,000	$500,000
Construct and light TW S (1200' x 60').	**1983**	$0	$775,000	$86,111	$861,111
Relocate localizer; extend RW 13-31 (1000') including parallel TW and lighting extension.	**1987**	$0	$3,192,749	$354,750	$3,547,499
Update airport master plan.	**2000**	$0	$124,245	$13,805	$138,050
Engineering/design for RW.	**2003**	$0	$146,350	$16,261	$162,611
Construction services to reprofile intersection of RW 13-31 and RW 17-35; replace medium intensity runway lights and taxiway lights RW 13-31 and RW 17-35; upgrade signage and construct an electrical vault	**2004**	$0	$1,257,307	$139,701	$1,397,008
Design and construction of a terminal building and auto parking lot	**2004**	$400,000	$0	$0	$400,000
Design and construction of an air traffic control tower	**2004**	$0	$1,100,000	$0	$1,100,000
reimbursement for and design and construction for apron	**2004**	$378,977	$0	$42,107	$421,084
Prepare airport strategic business plan NPE 2006	**2009**	$0	$50,000	$50,000	$100,000
Design to Install fencing east/west perimeter (13, 050 lf) clearing, 3 gates; Install fencing north perimeter (7250 lf), 2 gates; Install fencing south perimeter (5700 lf) w/ clearing, 2 gates; Clear brush along north perimeter (20 ac); Construct asphalt airfield service road (6450 x 12) w/ culverts & ditches; Extend TXWY Romeo; Construct light duty perimeter road (13,200 x 12) w/ culverts & ditch	**2011**	$0	$280,296	$31,140	$311,436
Engineering: Evaluation & Design for Pavement Rehabilitation; Conduct airfield pavement evaluation (including dynamic deflection testing)	**2011**	$0	$1,053,608	$117,068	$1,170,676
Update Airport Master Plan	**2011**	$93,062	$86,938	$20,000	$200,000
Install fencing north perimeter (7250 lf), 2 gates; Construct new hangar access TW (1300 x 50); Install fencing south perimeter (5700 lf) w/ clearing, 2 gates; Install fencing east/west perimeter (13, 050 lf) clearing, 3 gates; Clear brush along north perimeter (20 ac); Construct asphalt airfield service road (6450 x 12) w/ culverts & ditches; Construct light duty perimeter road (13,200 x 12) w/ culverts & ditch	**2012**	$0	$1,804,385	$558,943	$2,363,328
Environmental Assessment RW 13-31 Extension	**2014**	$0	$46,620	$5,180	$51,800
FAA required wildlife hazard assessment and management plan	**2014**	$0	$83,102	$9,234	$92,336
Obstruction Survey for RW 13 RW Extension	**2014**	$0	$49,451	$5,495	$54,946
Reconstruct RW 13-31 shoulders (100% Sponsor); Construction Engineering Services (admin, RPR, testing, closeout, etc.); Runway shoulder compression join sealant (100% Sponsor); LED Electrical Improvement (100% Sponsor); Recon. 2,650' RW 13-31@ 100' width [from north of RW 17-35 intersection to RW 31 end]; recon. RW 17-35 at intersect w/13-31; recon. TXY A1 & A5; realign TXY A3; recon. portions TXY A & D; demo TXY A2; install new electrical components for replacement MIRL;	**2014**	$0	$6,652,731	$1,567,251	$8,219,982
Engineering & Design RW 13-31 Shift (Phase III); MOA w/FAA for Equipment Relocation	**2015**	$0	$453,043	$50,338	$503,381
LED electrical improvement (100% Sponsor); Recon. RW 13-31 @ 100' width [2,850' nw of RW 17-35]; rehab concrete (joint & crack seal) 1,000' at RW 13 end; regrade runway safety area; improve drainage along runway; recon. TXY B-2; demo TXY B-1& B-3; demo pvmt. west of RW 13 - near end; Reconstruct RW 13-31 shoulders (100% Sponsor); Construction Contingency; Construction Engineering Services (admin, RPR, testing, closeout, etc.); Runway shoulder compression joint sealant (100%)	**2015**	$0	$4,147,887	$1,563,665	$5,711,552
RAMP: Sponsor to perform airport general maintenance.	**2015**	$33,687	$0	$33,687	$67,374
RAMP: Sponsor to perform airport general maintenance.	**2016-21**	$248,654	$0	$248,654	$497,308
Extend TXWY B [985 x 50]; Extend RW 13-31 [685 x 100]; Contingency -; Install drainage box culverts for RW 13-31 shift; Mobilization, RPR, Testing, Closeout, etc.; Construct runway shoulders (685' x 50) (100% sponsor); Runway shoulder compression joint sealant (100% sponsor); LED electrical improvement (100% Sponsor); Relocate RW 13 Localizer, Glideslope, ASOS, RW 31 Threshold, Extend MIRL RW 13	**2017**	$0	$7,141,377	$1,118,786	$8,260,163

Source: TxDOT Aviation Grant Histories, 2025