CHAPTER 3: FORECAST OF AVIATION ACTIVITY

Introduction

The Forecast of Aviation Activity is an essential component for the development of the Dallas Executive Airport (RBD or Airport) Airport Layout Plan with Narrative Report (ALP with Narrative). The forecast follows guidance set forth in the Federal Aviation Administration (FAA) *Memorandum for Forecast Review and Approval Instructions (August 2024)*.

This 20-year outlook for aeronautical demand provides essential inputs to be used in the Airport's facility requirement analysis, development of alternatives, and strategy for a financially feasible capital improvement program (CIP). The forecast is intended to provide realistic projections for various RBD operational and based aircraft metrics using the latest available data, as well as local and national trends. However, the actual trajectory of growth experienced by the Airport may occur differently than anticipated in the forecast.

Forecast Overview

Timeframe

The 20-year timeframe of the forecast extends from 2025-2045, with a near-term forecast period of 2025-2030; a mid-term forecast period of 2030-2035; and a long-term forecast period of 2035-2045. The forecast includes a baseline forecast which is the preferred forecast to be used in comparison with the FAA Terminal Area Forecast (TAF) 2024, (published January 2025). This forecast also includes an alternative high-growth forecast which provides a "what-if" scenario to better prepare RBD for growth that exceeds the baseline forecast.

Aviation Activity Metrics

The 2025-2029 National Plan of Integrated Airport Systems (NPIAS) classifies Dallas Executive Airport as a "reliever" airport. As a reliever airport, RBD provides capacity relief for general aviation traffic at Dallas Love Field Airport (DAL) and Dallas Fort Worth International Airport (DFW). Given this role, this forecast focuses on annual aircraft operations and based aircraft projections that consider broader trends in the Dallas-Fort Worth area. Aircraft operations are defined as aircraft takeoffs or landings. A based aircraft is defined as an aircraft that is based at a given airport for the majority of the year.

Methodologies

The RBD ALP Forecast of Aviation Activity uses an unconstrained, bottom-up forecasting approach that leverages multiple methodologies including market share analysis, trend analysis, and regression analysis.

- Market Share Analysis – The market share analysis methodology identifies the historical ratio of an aviation metric (i.e., itinerant operations, local operations, based aircraft, etc.) at RBD compared to other larger relevant groupings of airports (i.e., state, region, etc.). It may maintain a historically consistent share or modify it if there is reason to do so. For this analysis, RBD was compared to airports within the State of Texas; airports within the FAA Southwest Region (ASW); and airports within the United States of America (U.S.) using projections from the FAA TAF.
- Trend Analysis – The trend analysis methodology reviews annual rates of growth from various sources such as the Airport's historical records or historical and forecast trends from the FAA Aerospace Forecast for Fiscal Years 2025-2045. It applies selected growth rates to RBD based on relevance to the Airport and consistency with previous activity levels.
- Regression Analysis – The regression analysis methodology, compares the relationship between a dependent variable, and one or more independent variables. For this forecast, the independent variables came from a variety of sources including but not limited to:
    - Socioeconomic data for Dallas County, the Dallas-Fort Worth area, the State of Texas, and the U.S.;
    - General aviation related statistics such as GA fuel consumption, active aircraft within the GA fleet, pilot certificates, and GA hours flown; and
    - Other indicator variables relevant to the economy or activity levels at RBD.

  The regression analysis used in this forecast tested over 150 models using a large number of variables against the selected metric and evaluated the significance of the statistics to select a model that best fits the data with a high confidence level.

Airport Setting

Dallas Executive Airport is located approximately 10 miles south of the Dallas Central Business District (CBD) in downtown Dallas. This proximity makes RBD an ideal site for corporate based tenants as well as other transient aircraft visiting the city.

Historical and forecasted socioeconomic data often provides a strong correlation with past and future aviation activity levels. When there are multiple active airports within a region, potential airport users may have varying preferences for which airport to use based on

numerous factors. For GA airports like RBD, some of these factors may include the presence of aviation facilities, proximity to other businesses, convenience, cost, and available amenities.

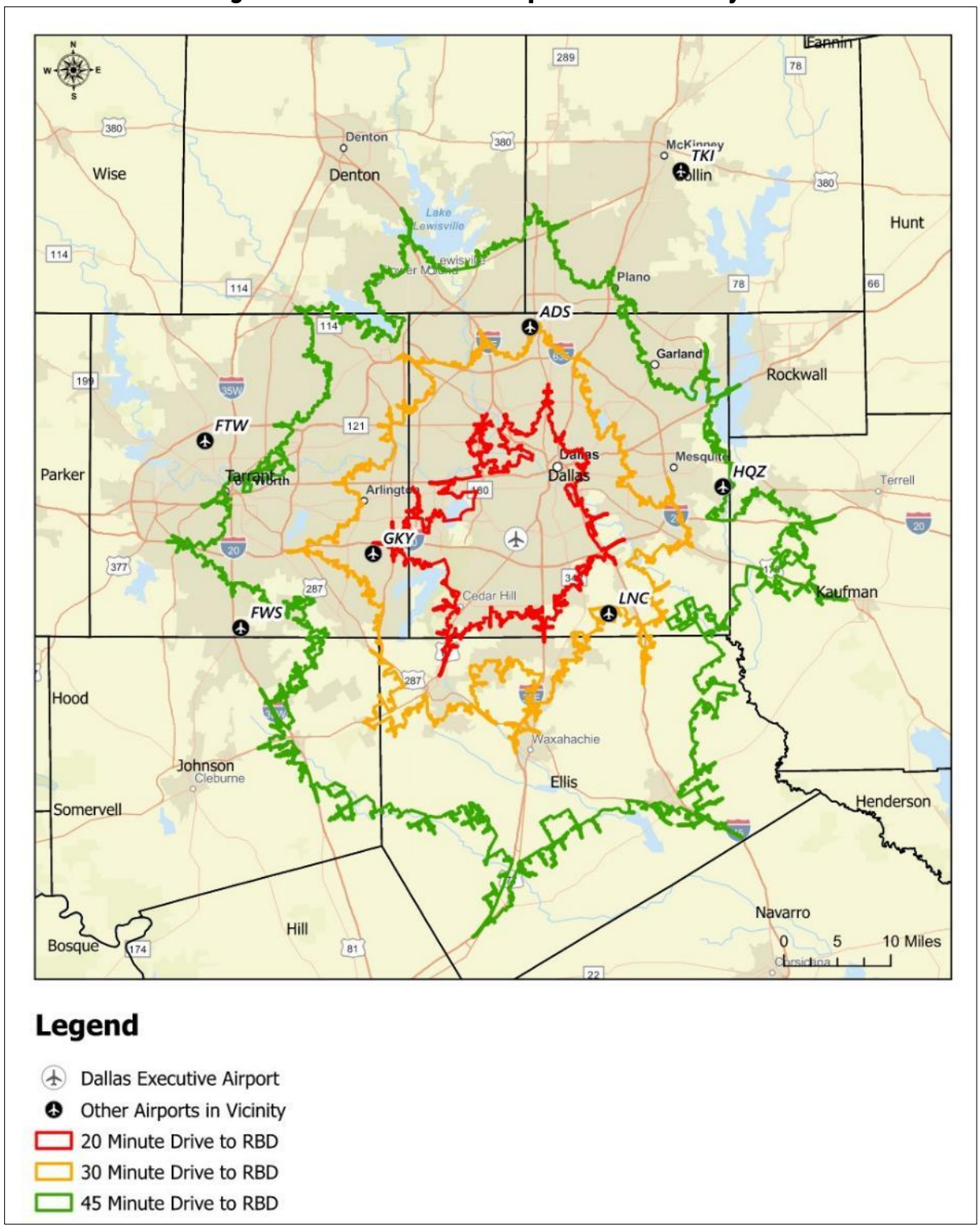
Airport Service Area

The RBD service area represents the geographic area from which Airport users are typically expected to originate from to utilize aviation facilities and services available at RBD. For based aircraft, tenants, or transient aircraft customers, proximity to the airport from a residence or business may play a role in selecting RBD over other comparable airports. Some of the other GA airports in the Dallas area with similar activity levels and distances from the CBD are shown below.

- Addison Airport (ADS) – Located approximately 15 miles north of downtown Dallas.
- Mesquite Metro Airport (HQZ) – Located approximately 18 miles east of downtown Dallas.
- Lancaster Regional Airport (LNC) – Located approximately 20 miles southeast of downtown Dallas.
- Arlington Municipal Airport (GKY) – Located approximately 24 miles southwest of downtown Dallas.
- McKinney National Airport (TKI) – Located approximately 33 miles north of downtown Dallas.
- Fort Worth Meachem International Airport (FTW) – Located approximately 37 miles west of downtown Dallas.
- Fort Worth Spinks Airport (FWS) – Located approximately 44 miles southwest of downtown Dallas.

To more accurately define RBD's service area, a drive-time analysis (DTA) was completed, as shown in **Figure 3-1**. It was assumed that most individuals with based aircraft at RBD would drive up to 45 minutes one way. Therefore, the DTA establishes three perimeter polygons around RBD showing the distance one could be from RBD if driving 20-minutes or less, 30-minutes or less, or 45-minutes or less, under normal traffic conditions on a weekday at 8:00 AM. As shown in the analysis, the majority of the service area for RBD resides within Dallas County. However, a portion of the 30-minute and 45-minute drive time polygons extend into Collin, Denton, Tarrant, Johnson, Ellis, Kaufman, and Rockwall counties.

Figure 3-1 - Dallas Executive Airport Drive Time Analysis



Source: Garver, 2025; Esri, 2025

Socioeconomic Data Review

Socioeconomic characteristics such as population, employment, and income show the vitality of an area/region and can provide insight into an airport's potential for growth. Typically, there is a correlation between these socioeconomic factors and demand for aviation goods and services at an airport. Therefore, population, personal income per capita (PIPC) and gross regional product (GRP) for the area; and gross domestic product (GDP) for the U.S., were analyzed as part of this forecasting analysis.

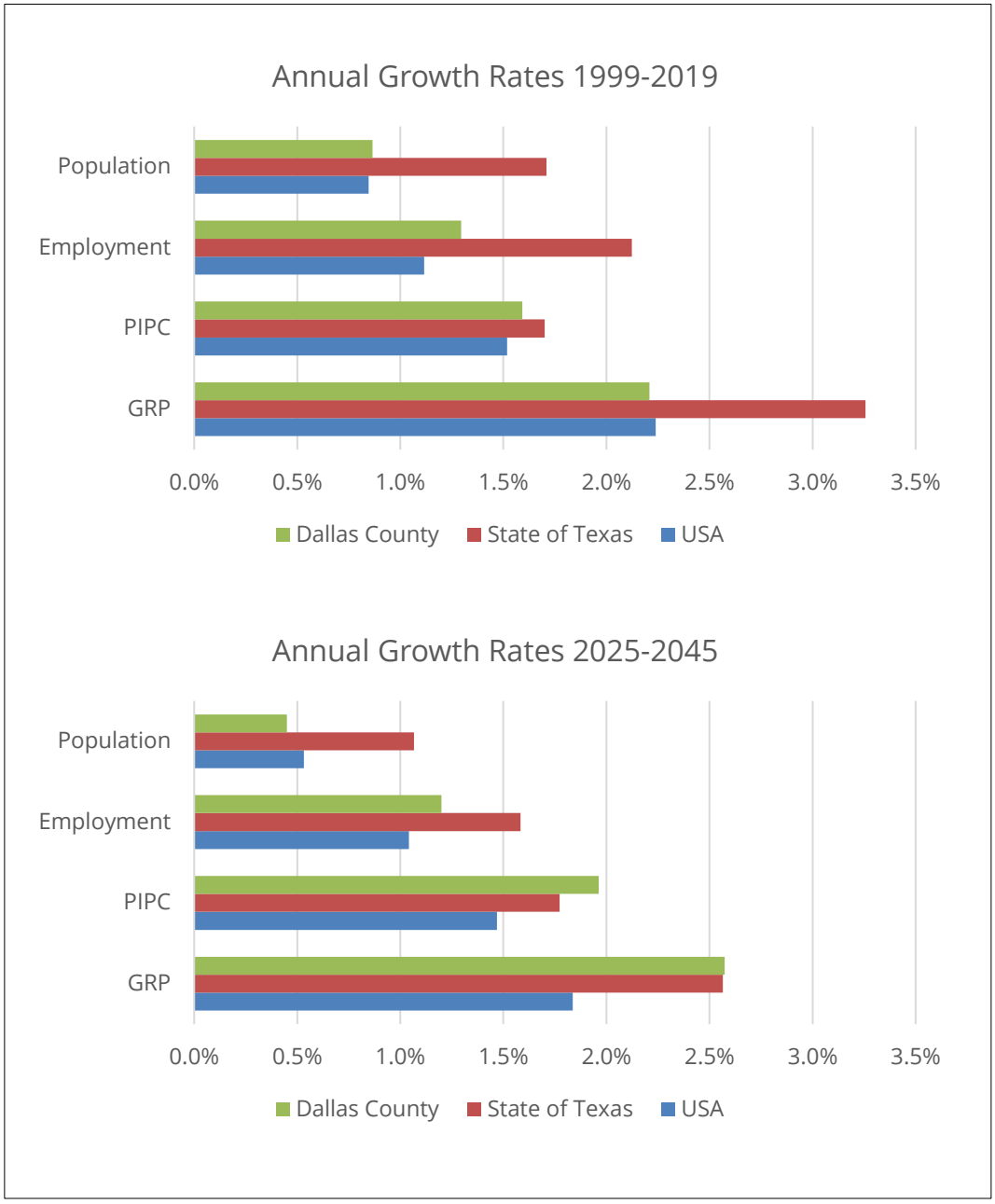
Table 3-1 and **Figure 3-2** show the annual growth rates of socioeconomic characteristics for Dallas County, the State of Texas, and the U.S. historically from 1999-2019 and over the planning horizon from 2025-2045. The data shows that Dallas County is anticipated to see gains in employment, PIPC, and GRP similar to the State of Texas and beyond the average increases anticipated for the U.S.

Table 3-1 - Socioeconomic Characteristics - Dallas County, State of Texas, and USA

	1999-2019	2025-2045
Dallas County		
Population	0.9%	0.5%
Employment	1.3%	1.2%
PIPC	1.6%	2.0%
GRP	2.2%	2.6%
State of Texas		
Population	1.7%	1.1%
Employment	2.1%	1.6%
PIPC	1.7%	1.8%
GRP	3.3%	2.6%
United States of America		
Population	0.8%	0.5%
Employment	1.1%	1.0%
PIPC	1.5%	1.5%
GDP	2.2%	1.8%

Source: Woods & Poole, 2025; Garver, 2025

Figure 3-2 - Socioeconomics Comparison - Dallas County, State of Texas, and U.S.



Source: Woods & Poole, Inc, 2025; Garver, 2025

Dallas Regional Economic Development

The Dallas region is home to many successful businesses, some of which were on the 2024 Forbes Fortune 1000 list.

1. AT&T
2. Energy Transfer
3. HF Sinclair
4. CBRE Group
5. Southwest Airlines
6. Tenet Healthcare
7. Texas Instruments
8. Jacob Solutions
9. AECOM
10. Enlink Midstream
11. Frontier Communications
12. Primoris Services
13. Comerica
14. Atmos Energy
15. ATI
16. Brinker International
17. Copart
18. AMN Healthcare Services
19. Match Group
20. Trinity Industries
21. Matador Resources
22. Mckesson
23. Caterpillar
24. Kimberly-Clark
25. Pioneer Natural Resources
26. Builders FirstSource
27. Fluor
28. Vistra
29. Celanese
30. Commercial Metals
31. Darling Ingredients
32. D.R. Horton
33. Yum China Holdings
34. Upbound Group
35. Cinemark Holdings
36. Globe life
37. Encore Wire

The success of these and other businesses shows great promise for the local economy and may entice other businesses to locate in the region.

The Dallas regional economy is growing rapidly, led by corporate and financial services, as well as logistics and manufacturing. While some of the more prominent growth in the region is found north of Dallas, there is continued interest in large scale offices and other industrial services in many of the areas near RBD. The south Dallas area currently has some of the greatest potential, with substantial amounts of land available for development.

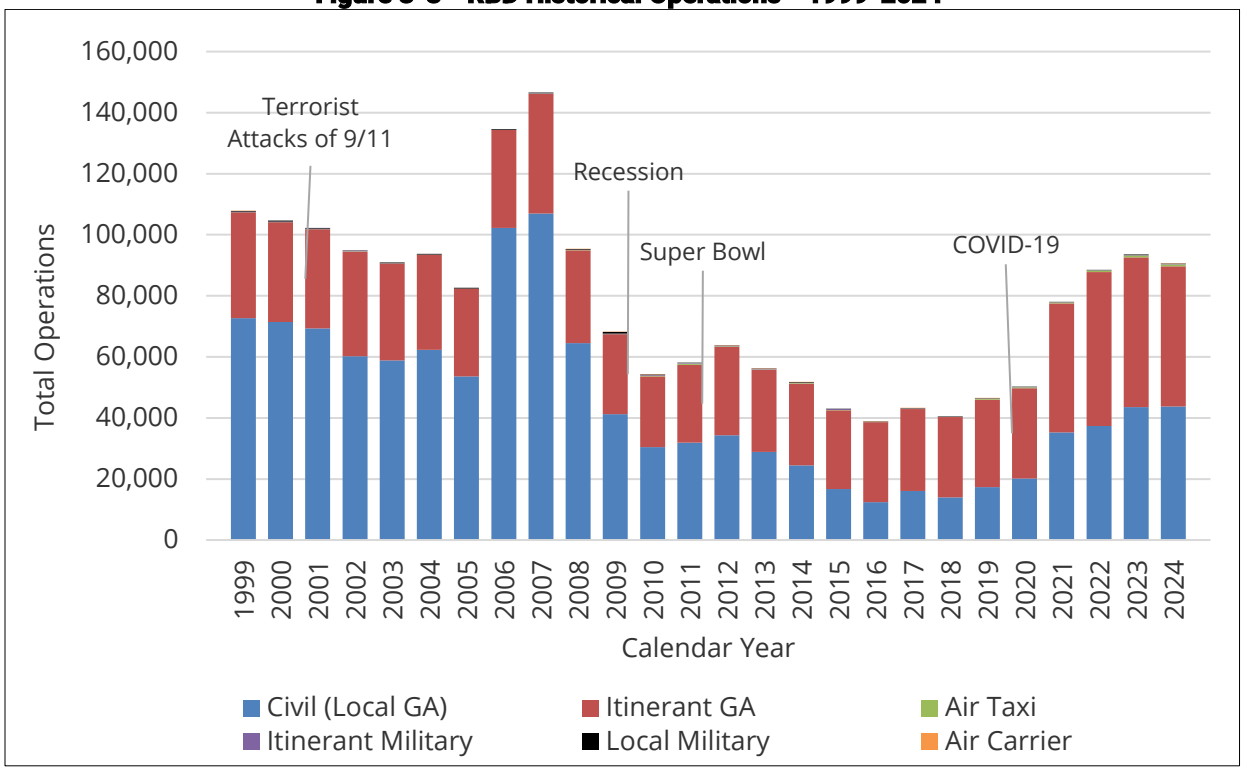
Historical Activity

Aircraft Operations

Figure 3-3 shows historical aircraft operations at RBD over the past 25 years. Based on the data, it is clear that Dallas Executive Airport has consistently maintained its role as an essential GA airport for the Dallas region. During that time, many notable events have occurred throughout the nation, and locally in Dallas, yet, RBD has maintained an average of 77,500 total operations from 1999-2024.

After the terrorist attacks of 9/11 in 2001, operations decreased slightly for two years. Then in 2006 and 2007, the Airport had its highest two years of activity with 134,627 and 146,570 operations, respectively. Following this period of growth, RBD decreased to 68,182 operations in 2009, likely due to the economic fallout of the Recession. Dallas hosted the Super Bowl in 2011; however, the increase in aircraft operations at RBD was minimal with an increase of only 5,000 operations compared to the previous year. As Dallas and the rest of the world coped with the impacts of the COVID-19 Coronavirus pandemic (public health emergency), the Airport experienced strong growth through the nation's period of recovery with 78,000 operations in 2020 and increasing to over 90,000 operations in 2024.

Figure 3-3 - RBD Historical Operations - 1999-2024



Source: FAA OPSNET, 2025; Garver, 2025

Based Aircraft

Historical based aircraft records from RBD, shown in **Table 3-2**, indicate that the Airport has increased its based aircraft over the past ten years in every category, more than doubling the 2016 totals for some aircraft types in 2025.

Dallas Executive Airport has maintained a large number of single-engine piston (SEP) based aircraft over the past 25 years, and while there are some projections for SEP aircraft to decrease or grow minimally over the next 20 years, the number of SEP aircraft at RBD will likely continue to increase based on the flight training and future hangar development anticipated at the airport. The most noteworthy historical increase in based aircraft outside of SEP was jets. From 2016 to 2025, the number of based jets increased by 30, or an average of three per year.

Table 3-2 - Historical Based Aircraft - RBD

Year	Single Engine	Multi-Engine	Jets	Helicopters	Total
2016	121	34	25	6	186
2017	117	33	21	6	177
2018	171	47	26	12	256
2019	181	48	29	12	270
2020	189	44	33	16	282
2021	213	42	39	19	313
2022	227	48	50	18	343
2023	232	49	55	23	359
2024	269	54	58	16	397
2025	262	49	55	12	378
Annual Growth Rates					
2016-2020	11.8%	6.7%	7.2%	27.8%	11.0%
2020-2025	6.8%	2.2%	10.8%	-5.6%	6.0%

Source: Dallas Executive Airport, 2025; Garver, 2025

Other Forecast Reviews

FAA Aerospace Forecast FY 2025-2045

The FAA Aerospace Forecast offers national projections on aviation trends. While the majority of the forecast uses the FAA fiscal year (FY) format which goes from October 1, through September 30, the general aviation projections use a calendar year (CY) format. Specific national GA forecasts include: the active GA fleet; GA hours flown; pilot certificates; and GA fuel consumption.

Active GA Fleet

The active GA fleet of the U.S. is forecasted to see declines in the number of fixed-wing piston aircraft over the next 20 years. However, this decrease will be offset by increases in fixed wing turboprops, jets, and rotorcraft, as well as other aircraft including light sport aircraft (LSA) and experimental aircraft (included in the "Other" category). In full, the active GA fleet will still increase by 0.4% annually from 2025-2035, and 0.5% from 2025-2045.

Table 3-3 shows the 20-year forecast of the active GA fleet from the FAA Aerospace Forecast for FY 2025-2045.

Table 3-3 – Active GA Fleet - FAA Aerospace Forecast FY 2025-2045

Year	Pistons	Turbo Props	Jets	Rotorcraft	Other	Total GA Fleet
2025	138,270	11,100	17,505	10,420	38,305	215,600
2030	136,540	11,425	20,235	11,440	39,765	219,405
2035	135,425	11,935	23,335	12,520	41,590	224,805
2040	134,750	12,660	26,565	13,620	43,455	231,050
2045	134,850	13,540	29,865	14,715	45,380	238,350
Annual Growth Rates						
2025-2035	-0.2%	0.7%	2.9%	1.9%	0.8%	0.4%
2025-2045	-0.1%	1.0%	2.7%	1.7%	0.9%	0.5%

Source: FAA Aerospace Forecast FY 2025-2045, Table 28; Garver, 2025

GA Hours Flown

The number of hours flown by GA aircraft types follows a somewhat similar trend to that of the active GA fleet. With an overall growth rate of 0.9% annually, the majority of the increase is expected to come from jets, turboprops, and rotorcraft, which will offset some of the declines anticipated in piston aircraft.

Table 3-4 shows the 20-year forecast of the hours flown by the GA fleet from the FAA Aerospace Forecast for FY 2025-2045.

Table 3-4 – GA Hours Flown (in Thousands) - FAA Aerospace Forecast FY 2025-2045

	Pistons	Turbo Props	Jets	Rotorcraft	Other	Total GA Hours
2025	15,079	2,994	5,085	3,036	2,033	28,227
2030	13,736	3,184	6,125	3,394	2,105	28,544
2035	13,488	3,347	7,186	3,771	2,251	30,044
2040	13,542	3,548	8,253	4,147	2,417	31,908
2045	13,771	3,782	9,320	4,528	2,590	33,991
Annual Growth Rates						
2025-2035	-1.1%	1.1%	3.5%	2.2%	1.0%	0.6%
2025-2045	-0.5%	1.2%	3.1%	2.0%	1.4%	0.9%

Source: FAA Aerospace Forecast FY 2025-2045, Table 29; Garver, 2025

Pilot Certificates

The FAA conducts a forecast of pilot certificates segmented by certificate type . The FAA has ceased its forecast on student pilots since 2018, due to student pilot certificates being affected by regulatory changes.

The number of active GA pilot certificates excluding students and Airline Transport Pilots (ATP) is anticipated to increase at an annual rate of 0.6% in the next ten years, before slowing to rate of 0.4%, which is representative of the entire 20-year planning horizon. A further breakdown of pilot certificates shows that recreational pilot certificates are phasing out by 2035. Meanwhile, sport pilot certificates will increase at the greatest rate (2.6% annually) from 2025-2045, with rotorcraft pilot certificates coming in second at 1.3% annually during that time. The number of GA pilots is anticipated to remain strong, increasing by 25,000 over the 20-year planning horizon.

Table 3-5 shows the 20-year forecast of pilot certificates from the FAA Aerospace Forecast for FY 2025-2045.

Table 3-5 – Pilot Certificates - FAA Aerospace Forecast FY 2025-2045

Pilot Certificates	2025	2030	2035	2040	2045	Annual Growth Rates 2025-35	Annual Growth Rates 2025-45
Recreational	50	5	0	0	0	-100.0%	-100.0%
Sport Pilot	7,560	8,815	10,090	11,405	12,530	2.9%	2.6%
Private	174,950	178,550	176,700	175,550	176,100	0.1%	0.0%
Commercial	112,200	120,000	123,150	124,300	124,750	0.9%	0.5%
Airline Transport	183,900	192,000	199,400	206,300	213,400	0.8%	0.7%
Rotorcraft	13,600	14,500	15,650	16,650	17,650	1.4%	1.3%
Glider	21,800	23,100	23,750	24,050	24,150	0.9%	0.5%
Total Less Student Pilots	514,060	536,970	548,740	558,255	568,580	0.7%	0.5%
GA Pilots (Excluding Students & ATPs)	330,160	344,970	349,340	351,955	355,180	0.6%	0.4%

Source: FAA Aerospace Forecast FY 2025-2045, Table 30; Garver, 2025

GA Fuel Consumption

Trends in GA fuel consumption can be reviewed to understand trends in general aviation operations. AVGAS (also referred to as 100LL) is typically associated with smaller aircraft such as fixed wing-pistons, while jet fuel is used by turbine engine aircraft including jets, turboprops, and some helicopters. Based on these general uses, the reduction in AVGAS consumption nationwide over the forecast horizon (-0.4% annually) suggests a reduced level of activity by piston aircraft, and the increase of jet fuel by 2.2% annually suggests an increase in jets, turboprops, and helicopter activity.

Table 3-6 shows the 20-year forecast of GA fuel consumption from the FAA Aerospace Forecast for FY 2025-2045.

Table 3-6 – GA Fuel Consumption (Millions of Gallons) – FAA Aerospace Forecast FY 2025-2045

Year	AVGAS Consumed	Jet Fuel Consumed	Total GA Fuel Consumed
2025	242	1,904	2,147
2030	225	2,178	2,403
2035	221	2,443	2,665
2040	221	2,695	2,916
2045	225	2,933	3,157
Annual Growth Rates			
2025-2035	-0.9%	2.5%	2.2%
2025-2045	-0.4%	2.2%	1.9%

Source: FAA Aerospace Forecast FY 2025-2045, Table 31; Garver, 2025

Advanced Air Mobility

The FAA Aerospace Forecast defines Advanced Air Mobility (AAM) to include aircraft that are highly automated, utilize electrical power propulsion, and that have vertical take-off and landing capabilities. Multiple uses for AAM services have been identified including passenger and cargo transportation in the form of air taxis, as well as cargo and emergency transport services in and around urban areas.

Table 3-7 shows the National Airspace System (NAS) – Wide AAM Demand Forecast for the first six years after entry into service (EIS). The actual EIS nationwide could occur next year (2026), or sometime later. The forecast determines daily activity as an average over the course of a year, without defining any periods of peak activity.

Table 3-7 – NAS-Wide AAM Demand Forecast - FAA Aerospace Forecast

Year	Annual Trips	Daily Trips
Year 1 (EIS)	42,405	116
Year 2	323,038	885
Year 3	616,115	1,688
Year 4	1,029,883	2,822
Year 5	1,826,525	5,004
Year 6	2,820,956	7,729
Annual Growth Rates		
Year 1-2	661.8%	
Year 3-4	90.7%	
Year 4-5	67.2%	
Year 5-6	77.4%	

Source: FAA Aerospace Forecast FY 2025-2045

Without any confirmed dates for initiation of AAM in the U.S. or Dallas, this forecast cannot say with any certainty when AAM EIS will occur nationally or within the Dallas region. However, given the Dallas-Fort Worth region's population and economy, there is a high likelihood that AAM could be initiated within the first five years of this forecast. The FAA's forecast above shows notable growth on an annual basis. Since AAM and Urban Air Mobility (UAM) are centered around the convenience of moving goods and services within urban areas and in some instances out to remote rural areas, when EIS occurs, there will need to be multiple facilities (vertiports) within the area and region.

From a facilities planning perspective, AAM operations are anticipated at RBD within the planning horizon. Consequently, discussions with fixed-base operators (FBOs) and potential users should occur regularly to ensure there are facilities to accommodate these aircraft as demand increases.

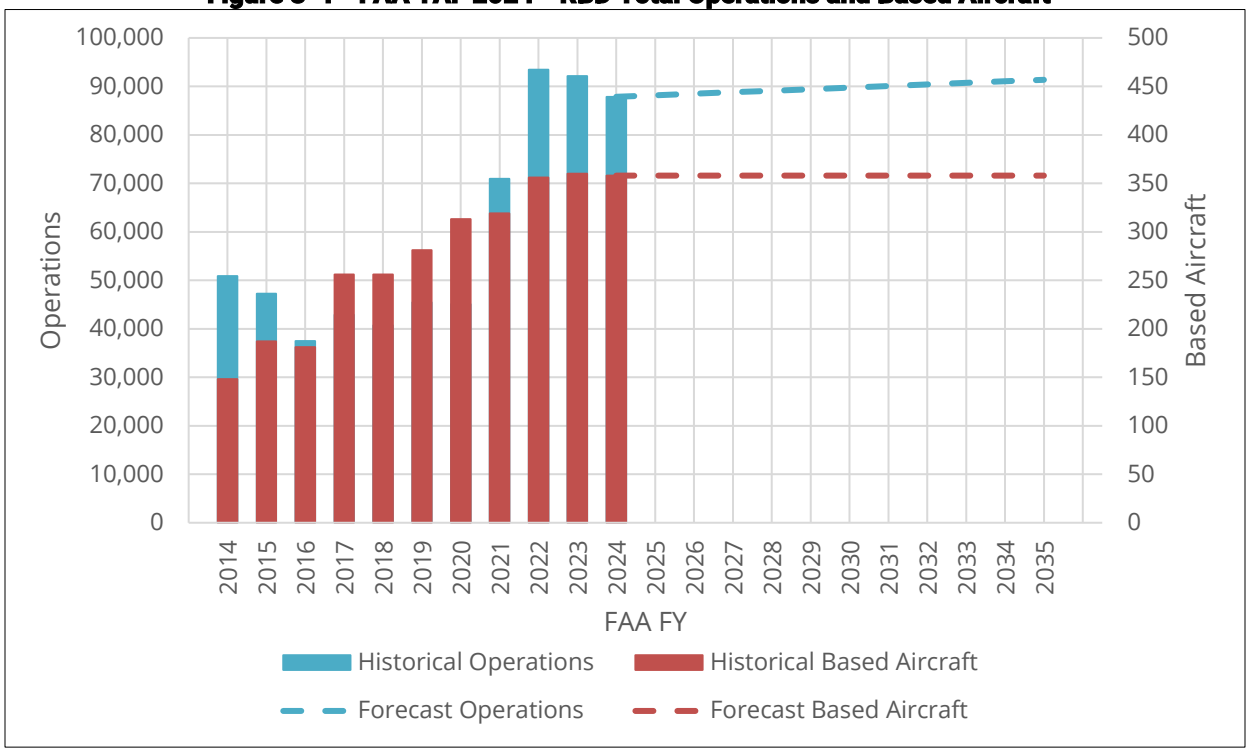
FAA TAF 2024

The FAA TAF 2024 provides forecasts for each NPIAS airport facility; total NPIAS airports within a state; total NPIAS airports within an FAA region; and total NPIAS airports within the U.S. Historical and forecast aviation activity metrics include breakdowns of enplanements, operations, and based aircraft using the FAA FY format. While RBD does not have any enplanements, it has historical and forecast operations data for total itinerant and local operations including the subcategories of each and based aircraft.

From 2025-2035, the TAF projects minimal increases in the Airport's total operations with an annual growth rate of 0.4%, versus the historical growth rate from 2014-2024 where they increased at an annual growth rate of 5.6%. Based aircraft also increased notably from 2014-2024 at an annual growth rate of 9.2% but was left constant over the 10-year forecast period from 2025-2035 with a 0.0% annual growth rate.

Ten years of RBD historical operations and based aircraft from 2014-2024 are compared with their TAF 2024 forecasts from 2025-2035 in **Figure 3-4**.

Figure 3-4 - FAA TAF 2024 - RBD Total Operations and Based Aircraft



Source: FAA TAF 2024; Garver, 2025

Forecast Analyses

The development of the Airport's total operations forecast utilizes a bottom-up approach, where multiple analyses are conducted to select a preferred baseline forecast for itinerant GA; local GA; air taxi and commuter; and air carrier operations.

Because the FAA's guidance for forecasts states that only the first 10 years are to be reviewed for consistency with the FAA TAF, the following tables summarize each of the analyses with a focus on years 2025-2035. However, the preferred baseline forecasts and the alternative high growth scenario forecasts that are selected will include the entire 20-year projections.

Itinerant GA Operations

Itinerant GA operations reflect all GA aircraft takeoffs and landings that occur outside of local operations. From 1999-2009, itinerant GA operations averaged 32.3% of total Airport operations, then from 2009-2024 they increased to an average of 53.7% annually.

Itinerant GA Operations - Market Share Analysis

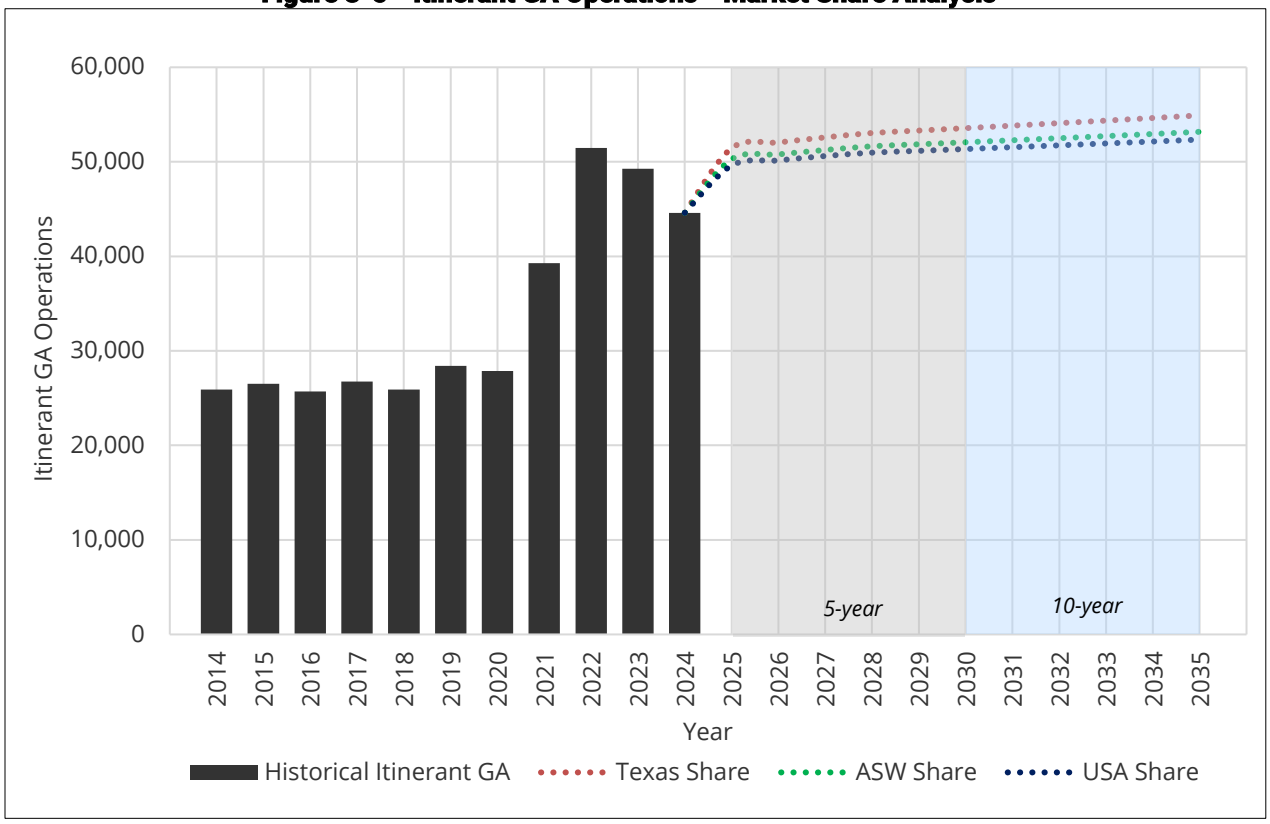
The market share analysis takes an approach where the forecast of RBD itinerant GA traffic is related to a larger group of airports. Using this method, the share of the Airport to the whole can remain constant or change over time. This analysis maintained RBD's recent historical share of activity with the State of Texas (2.0%); FAA Southwest Region (ASW) (1.2%); and the U.S. (0.2%) based on totals from the FAA TAF 2024. It then used the projections for Texas; the ASW region, and the U.S. from the TAF, while maintaining those shares over the 20-year forecast horizon.

A review of the analysis showed that all three shares had some level of growth over the forecast horizon, but the State of Texas had the strongest growth during that time, yielding a 1.4% annual growth rate over the 20-year planning horizon, which was greater than the ASW and U.S. which both have an anticipated 0.9% annual growth rate.

The various forecast models developed for itinerant GA operations ranged from 51,400-53,600 in 2030, to 52,400-55,000 in 2035.

Figure 3-5 and **Table 3-8** compare the itinerant GA operations forecasts using the market share analysis as described above.

Figure 3-5 - Itinerant GA Operations - Market Share Analysis



Source: FAA TAF 2024; Garver, 2025

Table 3-8 - Itinerant GA Operations - Market Share Analysis

Year	Texas Share	ASW Share	USA Share
2014	25,890	25,890	25,890
2019	28,416	28,416	28,416
2024	44,598	44,598	44,598
2025	51,446	50,264	49,608
2030	53,563	52,067	51,351
2035	54,910	53,171	52,351
Annual Growth Rates			
2014-2019	1.9%	1.9%	1.9%
2019-2024	9.4%	9.4%	9.4%
2025-2030	0.8%	0.7%	0.7%
2030-2035	0.5%	0.4%	0.4%

Source: Garver, 2025; FAA OPSNET, 2025; W&P 2025
Note: Historical differences with the TAF and the trend lines are due to CY and FY formats.

Itinerant GA Operations - Trend Analysis

Multiple trends related to RBD operations as well as national trends in general aviation were analyzed for their relevance to RBD itinerant GA activity.

From a historical perspective, itinerant GA activity at RBD has been strong over the past ten years, including during the public health emergency. From 2014-2019 RBD increased at 1.4% annual rate, and from 2019-2024 it increased at a 9.9% annual rate.

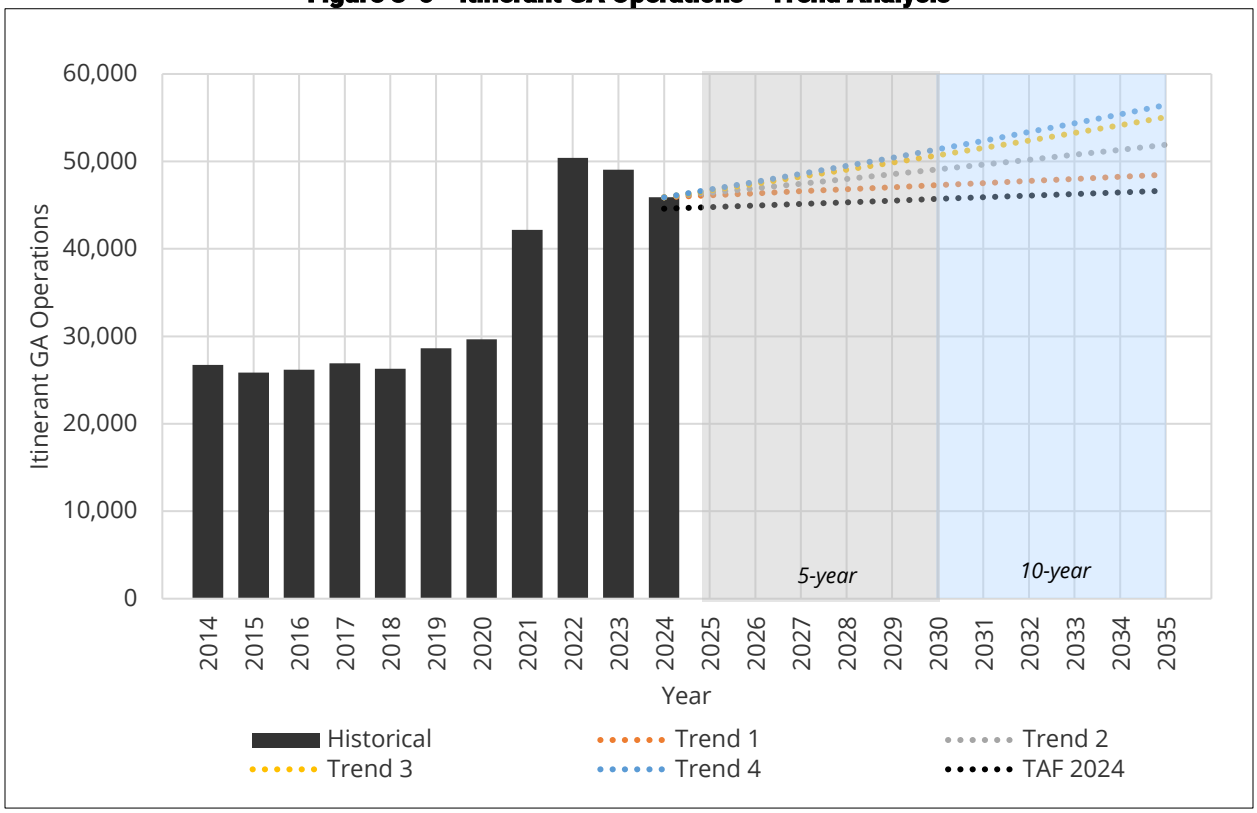
With the FAA TAF 2024 providing an annual growth rate of 0.4% for the next 20 years, the trends below were considered based on their relevance but also on their alignment to this rate.

- Trend 1 – Adopts the forecasted annual rate of growth for the active GA fleet (0.5%) from 2025-2045, based on the FAA Aerospace Forecast for FY 2025-2045.
- Trend 2 – Adopts the historical annual growth rate for itinerant GA operations (1.1%) at RBD from 1999-2024.
- Trend 3 – Adopts the historical annual growth rate for Instrument Flight Rules (IFR) itinerant operations (1.7%) at RBD from 2009-2019.
- Trend 4 – Adopts the forecasted annual rate of growth for GA fuel consumed (1.9%) from 2025-2045, based on the FAA Aerospace Forecast for FY 2025-2045. This includes total gallons of AVGAS and jet fuel.

Comparatively, the four trends were all greater than the TAF's five- and 10-year projections, with a range of 47,300-51,400 operations in 2030, and 48,500-56,500 in 2035.

Figure 3-6 and **Table 3-9** compares the trend analysis forecasts for itinerant GA operations as described above.

Figure 3-6 - Itinerant GA Operations - Trend Analysis



Source: FAA OPSNET 2025; FAA TAF 2024; Garver, 2025

Table 3-9 - Itinerant GA Operations - Trend Analysis

Year	Trend 1	Trend 2	Trend 3	Trend 4	TAF 2024
2014	26,718	26,718	26,718	26,718	25,890
2019	28,623	28,623	28,623	28,623	28,416
2024	45,894	45,894	45,894	45,894	44,598
2025	46,123	46,410	46,660	46,766	44,781
2030	47,288	49,081	50,687	51,381	45,708
2035	48,482	51,905	55,060	56,451	46,653
Annual Growth Rates					
2014-2019	1.4%	1.4%	1.4%	1.4%	1.4%
2019-2024	9.9%	9.9%	9.9%	9.9%	9.9%
2025-2030	0.5%	1.1%	1.7%	1.9%	0.4%
2030-2035	0.5%	1.1%	1.7%	1.9%	0.4%

Source: FAA OPSNET 2025; FAA TAF 2024; Garver, 2025
Note: Historical differences with the TAF and the trend lines are due to CY and FY formats.

Itinerant GA Operations – Regression Analysis

The regression analyses forecasts considered various socioeconomic characteristics of different RBD services areas; other variables related to national GA characteristics focusing on turboprop and jets aircraft; and other indicator variables reflecting notable events nationally and regionally.

The analyses performed tested numerous models and utilized alpha p-values for rejecting the null hypothesis at 0.05. Each of the models listed below differed from one another by the counties included, as well as the selected independent variables and indicator variables that produced the best fit.

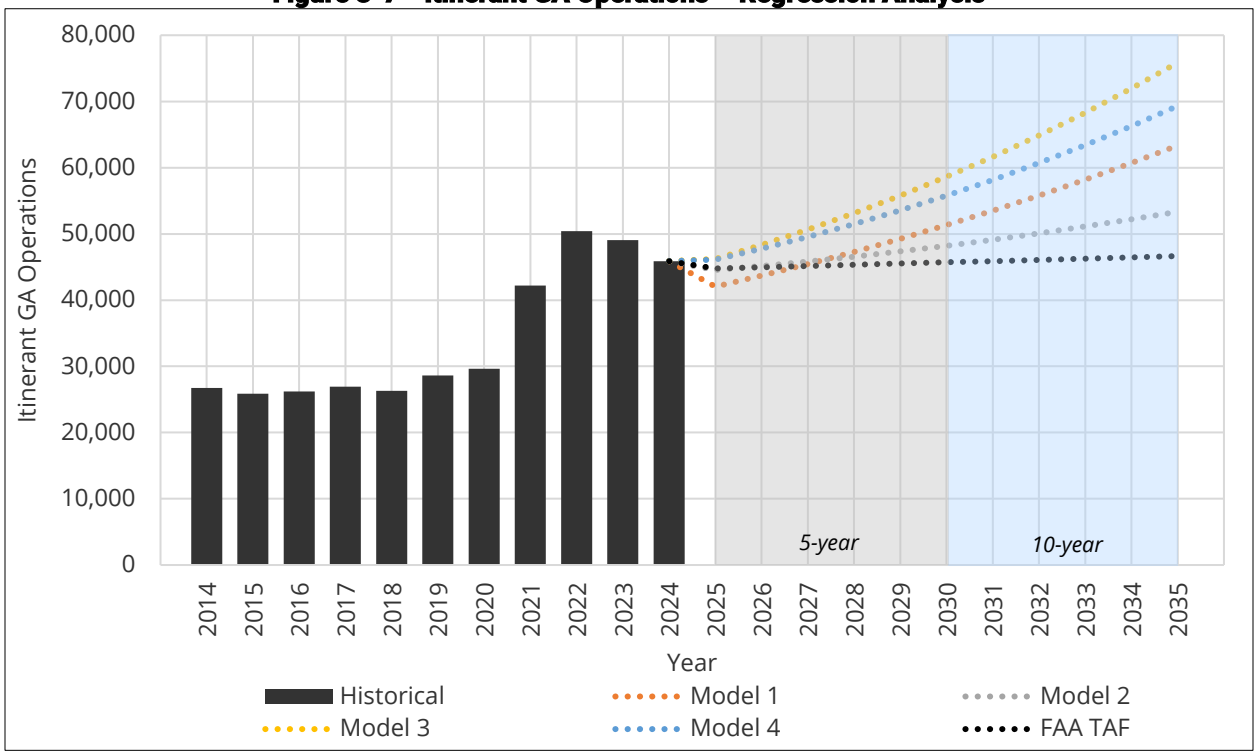
- Model 1 – Used an RBD service area made up of Dallas, Kaufman, and Ellis Counties. The model had an R Square value of 0.850 and used population, GRP, and an indicator variable for the public health emergency that began in 2020.
- Model 2 – Used an RBD service area made up of Dallas, Kaufman, Ellis, and Johnson Counties. The model had an R Square value of 0.741 and used population and employment.
- Model 3 – Used an RBD service area made up of Dallas and Ellis Counties. The model had an R Square value of 0.907 and used population, employment, PIPC, and an indicator variable for the public health emergency in 2020.
- Model 4 – Used an RBD service area made up of Dallas County only. The model had an R Square value of 0.909 and used population, employment, PIPC, and an indicator variable for the public health emergency in 2020.

With the exception of Model 2, the R Square values of each model produced are a good fit with the data.

Comparatively, the four models were all much greater than the TAF's five- and 10-year projections, with a range of 48,200-58,600 operations in 2030, and 53,300-75,900 in 2035.

Figure 3-7 and **Table 3-10** compare the regression analysis forecasts for itinerant GA operations as described above.

Figure 3-7 - Itinerant GA Operations – Regression Analysis



Source: FAA OPSNET 2025; Garver, 2025.

Table 3-10 - Itinerant GA Operations – Regression Analysis

Year	Model 1	Model 2	Model 3	Model 4	TAF 2024
2014	26,718	26,718	26,718	26,718	25,890
2019	28,623	28,623	28,623	28,623	28,416
2024	45,894	45,894	45,894	45,894	44,598
2025	42,033	44,546	46,193	46,129	44,781
2030	51,330	48,213	58,615	55,778	45,708
2035	63,345	53,341	75,857	69,324	46,653
Annual Growth Rates					
2014-2019	1.4%	1.4%	1.4%	1.4%	1.4%
2019-2024	9.9%	9.9%	9.9%	9.9%	9.9%
2025-2030	4.1%	1.6%	4.9%	3.9%	0.4%
2030-2035	4.3%	2.0%	5.3%	4.4%	0.4%

Source: FAA OPSNET 2025; FAA TAF 2024; Garver, 2025
Note: Historical differences with the TAF and the trend lines are due to CY and FY formats.

Local GA Operations

The Airport's local GA (Civil) operations reflect all GA aircraft takeoffs and landings that occur at the Airport, but the aircraft does not leave the vicinity of RBD. Although the share of local GA operations decreased from 67.3% in 1999-2009, to an average of 45.4% from 2009-2024, the average number of total local GA operations was 40,000 from 2021 to 2024, which had not been achieved since 2009.

Local GA Operations - Market Share Analysis

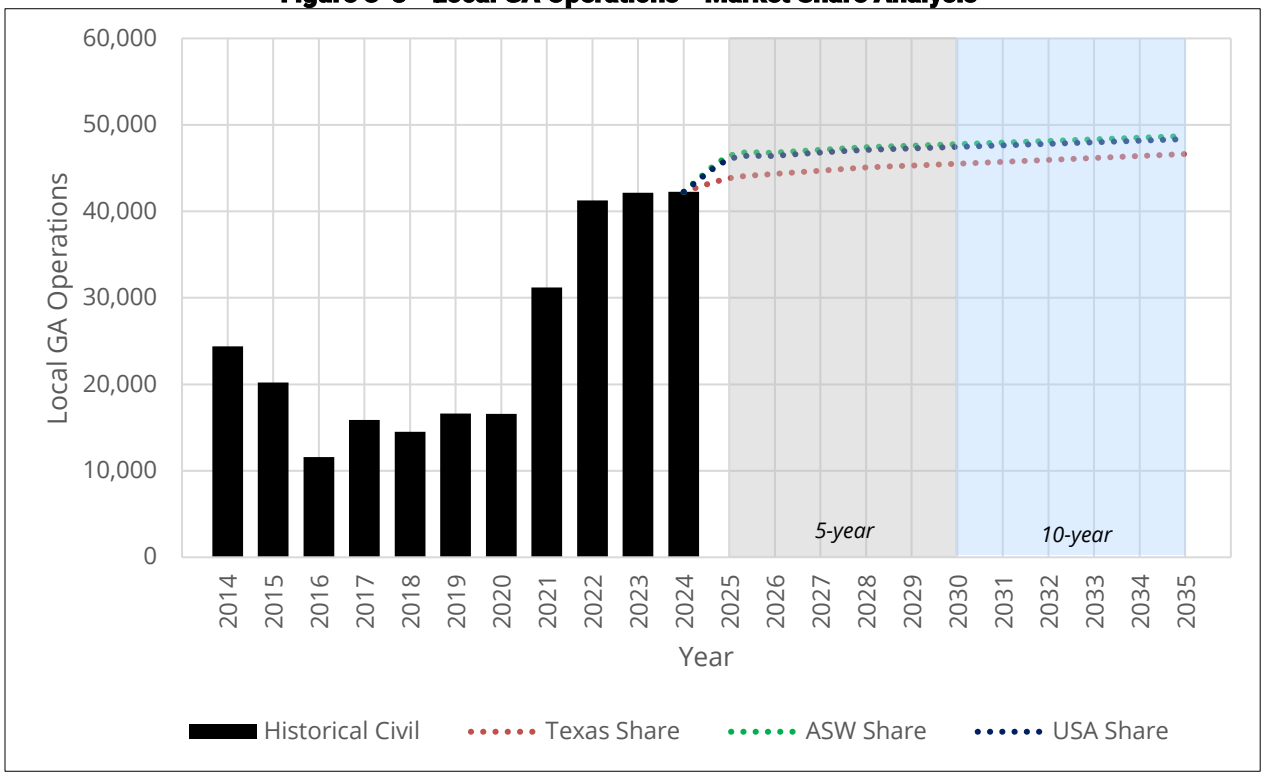
The market share analysis takes an approach where the forecast of local GA operations is related to a larger group of airports. Using this method the share of the Airport to the whole can remain constant or change over time. This analysis maintained RBD's recent historical share with the State of Texas (1.5%); FAA Southwest Region (ASW) (0.8%); and the U.S. (0.1%) based on local GA totals from the FAA TAF 2024. It then used the projections for Texas; the ASW region, and the U.S. from the TAF, while maintaining those shares over the 20-year forecast horizon.

A review of the analysis showed that all three shares had growth over the forecast horizon, but the State of Texas had the strongest growth during that time, yielding a 0.6% annual growth rate over the 20-year planning horizon, slightly greater than the ASW and U.S. 0.5% annual growth rates.

Comparatively, the three market shares had a range of 45,500-47,800 operations in 2030, and 46,700-48,800 in 2035.

Figure 3-8 and **Table 3-11** compare the local GA operations forecasts using a market share analysis as described above.

Figure 3-8 - Local GA Operations - Market Share Analysis



Source: FAA TAF 2024; Garver, 2025

Table 3-11 - Local GA Operations - Market Share Analysis

Year	Texas Share	ASW Share	USA Share
2014	24,396	24,396	24,396
2019	16,603	16,603	16,603
2024	42,247	42,247	42,247
2025	43,829	46,393	46,017
2030	45,506	47,775	47,452
2035	46,633	48,714	48,357
Annual Growth Rates			
2014-2019	-7.4%	-7.4%	-7.4%
2019-2024	20.5%	20.5%	20.5%
2025-2030	0.8%	0.6%	0.6%
2030-2035	0.5%	0.4%	0.4%

Source: FAA OPSNET 2025; FAA TAF 2024; Garver, 2025
Note: Historical differences with the TAF and the trend lines are due to CY and FY formats.

Local GA Operations - Trend Analysis

Multiple trends related to RBD operations as well as national trends in general aviation were analyzed for the relevance to RBD's local GA activity.

From a historical perspective, local GA activity at RBD has fluctuated over the past ten years, with an annual decrease -6.7% or -7,000 total operations from 2014-2019. It then increased by 20.3% or by 25,000 annual operations from 2019-2024.

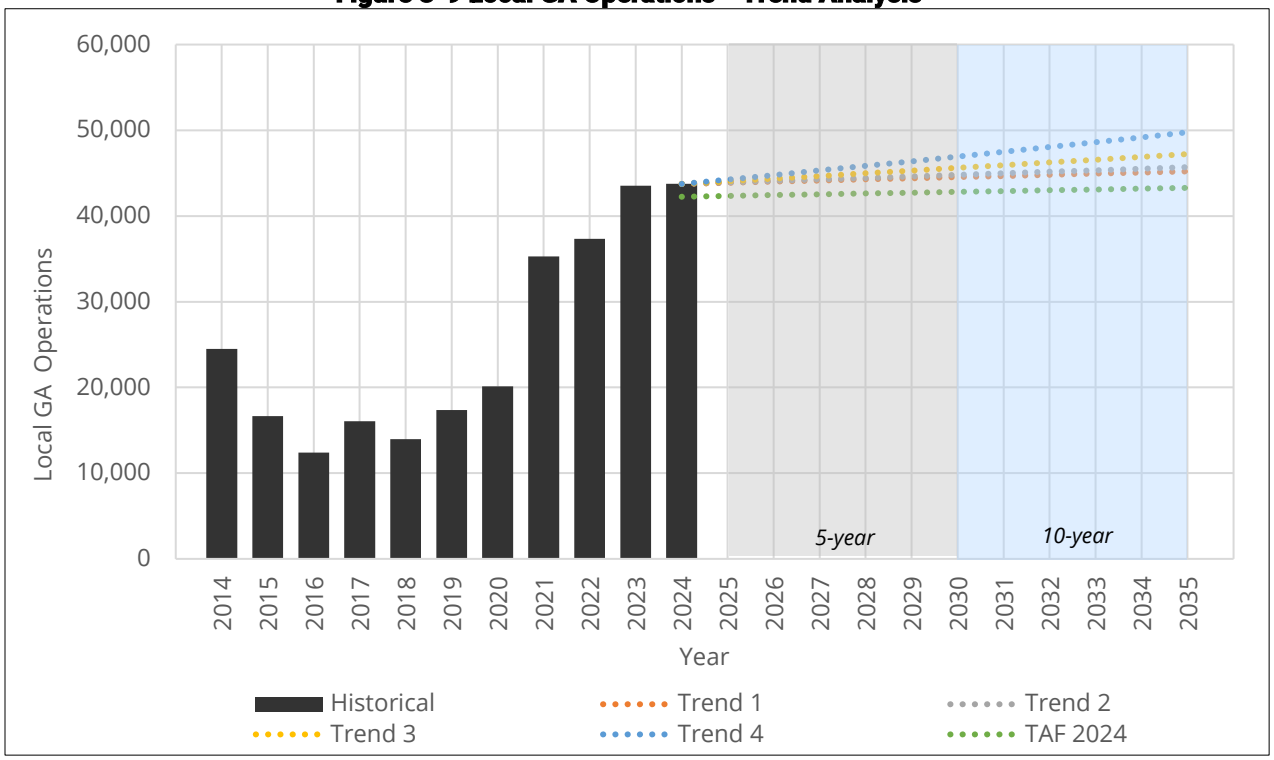
With the FAA TAF 2024 providing an annual growth rate of 0.2% for the next 20 years, the trends below were considered based on their relevance but also on their alignment to this rate.

- Trend 1 – Adopts the forecast annual rate of growth for the total active GA fleet (0.3%) from 2024-2025, based on the FAA Aerospace Forecast for FY 2025-2045.
- Trend 2 – Adopts the forecast annual rate of growth for the number of total GA pilots excluding students (0.4%) from 2025-2035, based on the FAA Aerospace Forecast for FY 2025-2045.
- Trend 3 – Adopts the historical annual rate of growth for the number of hours flown by piston fixed-wing aircraft (0.7%) from 2010-2024, based on the FAA Aerospace Forecast for FY 2025-2045.
- Trend 4 – Adopts the historical annual growth rate for total RBD operations (1.2%) from 2022-2024.

Comparatively, the four trends were greater than the TAF's five- and 10-year projections, with a range of 44,500-47,000 operations in 2030, and 45,200-49,800 in 2035.

Figure 3-9 and **Table 3-12** compares the trend analysis forecasts for local GA operations as described above.

Figure 3-9 Local GA Operations - Trend Analysis



Source: FAA OPSNET 2025; FAA TAF 2024; Garver, 2025

Table 3-12 Local GA Operations - Trend Analysis

Year	Trend 1	Trend 2	Trend 3	Trend 4	TAF 2024
2014	24,486	24,486	24,486	24,486	26,268
2019	17,354	17,354	17,354	17,354	16,603
2024	43,739	43,739	43,739	43,739	42,247
2025	43,870	43,914	44,045	44,256	42,340
2030	44,532	44,799	45,608	46,932	42,809
2035	45,204	45,702	47,227	49,770	43,283
Annual Growth Rates					
2014-2019	-6.7%	-6.7%	-6.7%	-6.7%	-6.7%
2019-2024	20.3%	20.3%	20.3%	20.3%	20.3%
2025-2030	0.3%	0.4%	0.7%	1.2%	0.2%
2030-2035	0.3%	0.4%	0.7%	1.2%	0.2%

Source: FAA OPSNET 2025; FAA TAF 2024; Garver, 2025
Note. Historical differences with the TAF and the trend lines are due to CY and FY formats.

Local GA Operations – Regression Analysis

The regression analyses compared the various socioeconomic characteristics of different RBD services areas; other variables related to national GA trends of piston and turboprop fixed wing aircraft; as well as other indicator variables reflecting notable events nationally and regionally.

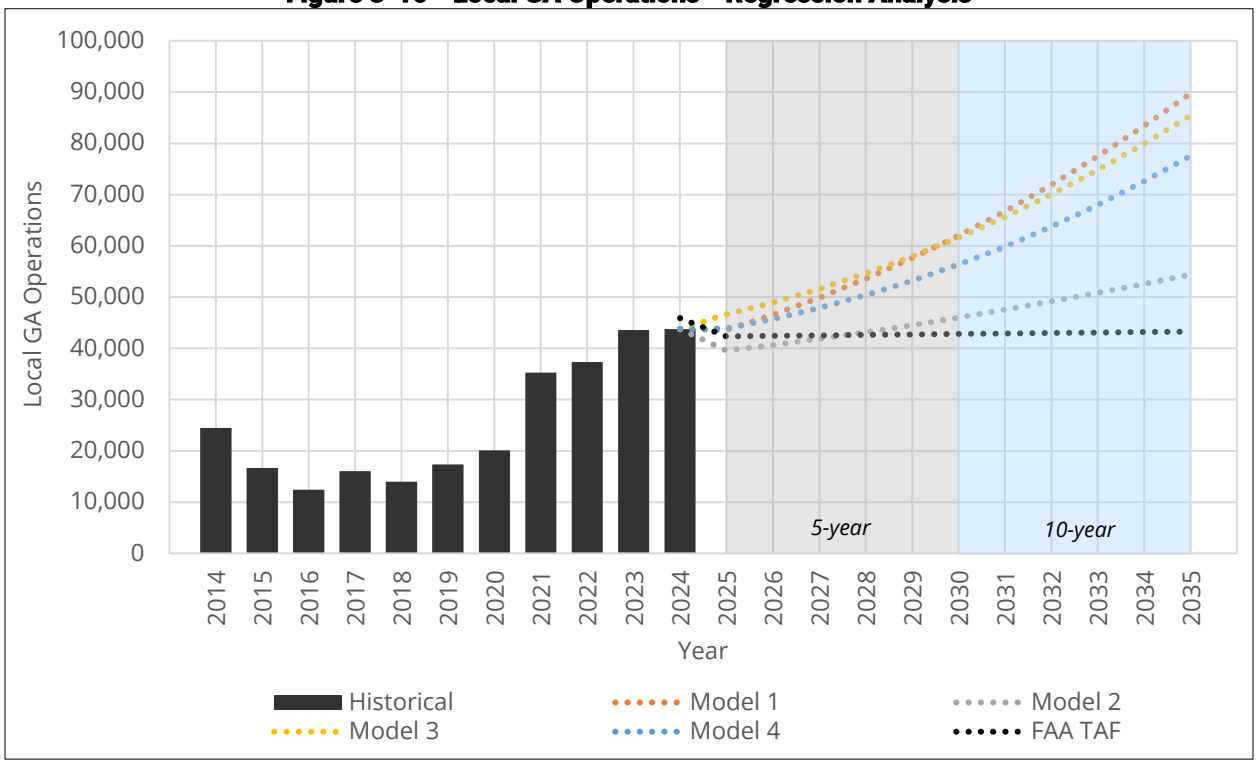
The analyses performed tested numerous models and utilized alpha p-values for rejecting the null hypothesis at 0.05. Each of the models listed below differed from one another by the counties included, as well as the selected independent variables and indicator variables that produced the best fit.

- Model 1 – Used an RBD service area made up of Dallas, Kaufman, and Ellis Counties. The model had an R Square value of 0.818 and used population, GRP, and total earnings. However, one of the model's coefficients failed to meet the alpha p-value.
- Model 2 – Used an RBD service area made up of Dallas, Kaufman, Ellis, and Johnson Counties. The model had an R Square value of 0.708 and used GRP, manufacturing income, and active fixed-wing piston activity nationwide from the FAA Aerospace Forecast. Additionally, two of the coefficients failed to meet the alpha p-value.
- Model 3 – Used an RBD service area made up of Dallas and Ellis Counties. The model had an R Square value of 0.803 and used population, GRP, and an indicator variable for the public health emergency in 2020. Additionally, one of the coefficients failed to meet the alpha p-value.
- Model 4 – Used an RBD service area made up of Dallas County only. The model had an R Square value of 0.808 and used population, employment, GRP, and manufacturing income. However, one coefficient failed to meet the alpha p-value.

While there were models with R squared values that indicated the model fit the data well, each of the four candidate models above had at least one or more coefficients that did not meet the alpha p-value.

Figure 3-10 and **Table 3-13** compare the regression analysis forecasts for local GA operations as described above.

Figure 3-10 - Local GA Operations - Regression Analysis



Source: FAA OPSNET 2025; Garver, 2025

Table 3-13 - Local GA Operations - Regression Analysis

Year	Model 1	Model 2	Model 3	Model 4	TAF 2024
2014	24,486	24,486	24,486	24,486	24,486
2019	17,354	17,354	17,354	17,354	17,354
2024	43,739	43,739	43,739	43,739	43,739
2025	43,582	39,582	46,660	43,896	42,340
2030	62,016	46,003	61,598	56,351	42,809
2035	89,711	54,402	85,422	77,552	43,283
Annual Growth Rates					
2014-2019	-6.7%	-6.7%	-6.7%	-6.7%	-6.7%
2019-2024	20.3%	20.3%	20.3%	20.3%	20.3%
2025-2030	7.3%	3.1%	5.7%	5.1%	0.2%
2030-2035	7.7%	3.4%	6.8%	6.6%	0.2%

Source: FAA OPSNET 2025; FAA TAF 2024; Garver, 2025
Note: Historical differences with the TAF and the trend lines are due to CY and FY formats.

Air Taxi and Commuter Operations

Since 2014, air taxi and commuter operations at RBD have represented an average of 0.5% of the annual share of total operations. Today, air taxi and commuter operations are still less than 1,000 annually, however, the total has quadrupled since 2014.

With the number of air taxi and commuter operations beginning to increase over the past few years, larger aircraft, including jets, are becoming more prominent as noted by Airport tenants, users, and fixed base operators (FBOs).

Air Taxi and Commuter Operations – Trend Analysis

Multiple trends related to RBD operations as well as national trends in general aviation were analyzed for their relevance to RBD air taxi and commuter activity.

From a historical perspective, air taxi and commuter activity at RBD has fluctuated over the past ten years, with an annual growth rate of 11.6% from 2014-2019, and then again in 2019-2024 as it increased 20.2% annually.

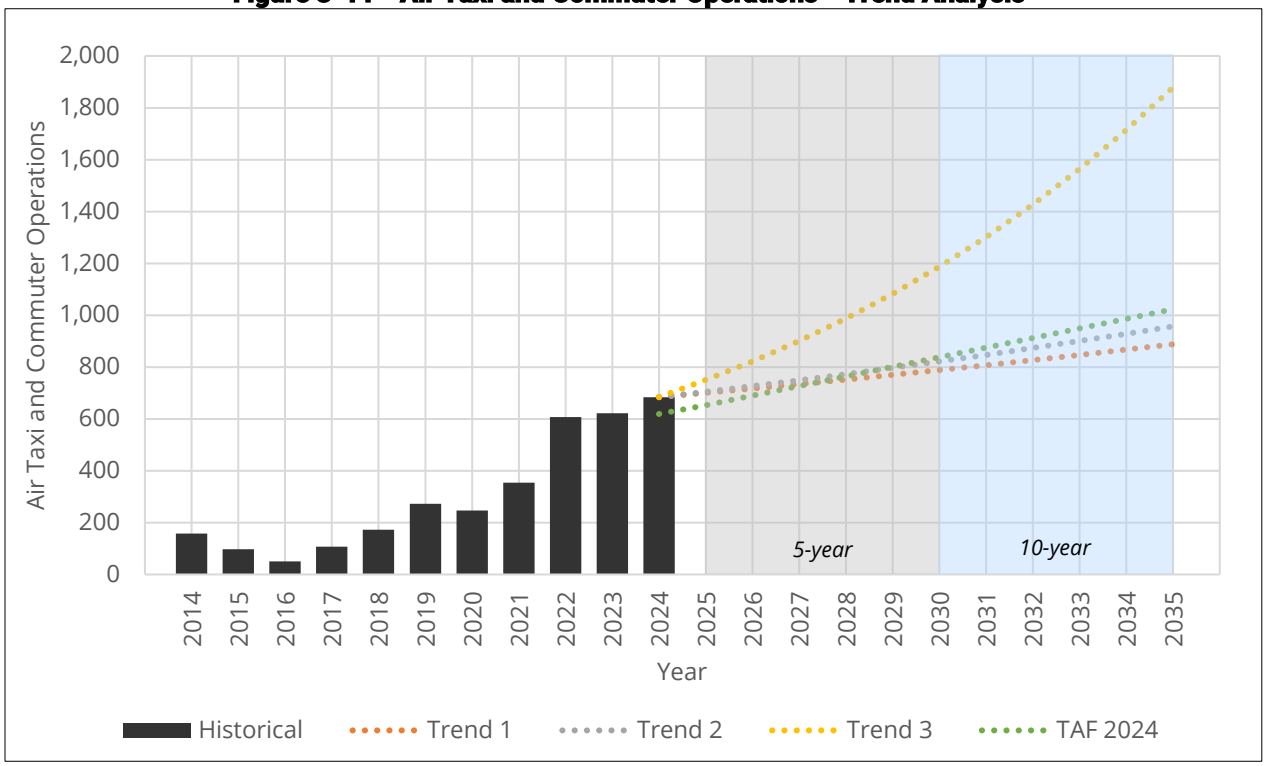
Considering the growth exhibited in the FAA TAF 2024 over the next 20 years is 3.9% annually, the trends below were considered based on their relevance but also on their alignment to this rate.

- Trend 1 – Adopts the forecast annual rate of growth for hours flown by the GA fleet of turbine fixed-wing aircraft, which includes turboprops and turbojets, at 2.4% annually from 2025-2045 based on the FAA Aerospace Forecast for FY 2025-2045.
- Trend 2 – Adopts the historical annual growth rate for RBD air taxi and commuter operations (3.1%) from 1999-2009.
- Trend 3 – Adopts the historical annual growth rate for RBD air taxi and commuter operations (9.6%) from 2019-2024.

Comparatively, two of the three trends were greater than the TAF's five- and 10-year projections, with a range of 800-1,200 operations in 2030, and 900-1,900 in 2035.

Figure 3-11 and **Table 3-14** compares the trend analysis forecasts for air taxi and commuter operations as described above.

Figure 3-11 - Air Taxi and Commuter Operations - Trend Analysis



Source: FAA OPSNET 2025; FAA TAF 2024; Garver, 2025

Table 3-14 - Air Taxi and Commuter Operations - Trend Analysis

Year	Trend 1	Trend 2	Trend 3	TAF 2024
2014	158	158	158	159
2019	273	273	273	238
2024	684	684	684	619
2025	700	705	750	653
2030	789	822	1,187	838
2035	888	957	1,879	1,023
Annual Growth Rates				
2014-2019	11.6%	11.6%	11.6%	11.6%
2019-2024	20.2%	20.2%	20.2%	20.2%
2025-2030	2.4%	3.1%	9.6%	5.1%
2030-2035	2.4%	3.1%	9.6%	4.1%

Source: FAA OPSNET 2025; FAA TAF 2024; Garver, 2025

Military Operations

Military operations are broken into itinerant and local categories similar to how GA operations are classified. Over the past 10 years, the Airport's military activity has averaged 148 itinerant military operations and 81 local military operations annually. Because military aircraft operations are independent of civilian aircraft operations, they are held constant from their base year totals over the duration of the forecast horizon.

Therefore, the annual growth rate for all military operations is 0.0%. Itinerant military operations will have an annual total of 235, and local military operations will have an annual total of 20 from 2025-2045.

Air Carrier Operations

Air carrier operations are the least common type of operation at RBD, where they have occurred minimally since 1999, never totaling more than 20 annually. As a result, the projections in this forecast are expected to remain at two annually.

Based Aircraft

The FAA defines based aircraft as an aircraft that is operational and airworthy and typically based at an airport for the majority of the year. The FAA TAF 2024 shows a 0.0% annual growth rate, keeping the number of based aircraft constant at RBD from 2025-2045. However, Dallas Executive Airport has provided facilities for large increases in the number of based aircraft over the past 25 years, specifically seeing notable growth from 2016-2025.

Further discussions with airport tenants and stakeholders indicate that RBD's centralized location along with competitive costs for hangar space may be some of the factors driving increased levels of interest from aircraft owners in the Dallas community.

Table 3-15 shows a based aircraft benchmark analysis, comparing some of the other notable airports in the Dallas region with large numbers of based aircraft.

Table 3-15 – Based Aircraft Benchmark Analysis - Dallas GA Airports

Year	RBD	ADS	FTW	FWS	TKI	GKY	HQZ	LNC
2016	186	550	382	261	286	255	173	135
2017	177	621	354	241	274	142	167	119
2018	256	621	444	241	274	191	187	119
2019	270	613	444	161	211	206	180	86
2020	282	609	316	169	202	231	184	78
2021	313	560	316	232	227	247	187	78
2022	343	550	312	236	219	247	183	78
2023	359	553	313	240	220	249	183	81
2024	397	589	299	279	203	200	186	68
2025	378	592	300	283	205	203	186	71
2016-2025	+192	+42	-82	+22	-81	-52	+13	-64
Annual Growth Rates								
2016-2020	11.0%	2.6%	-4.6%	-10.3%	-8.3%	-2.4%	1.6%	-12.8%
2020-2025	6.0%	-0.6%	-1.0%	10.9%	0.3%	-2.6%	0.2%	-1.9%

Source: FAA TAF 2024; RBD Airport Records, 2025; Garver, 2025

Notes: 1) – RBD based aircraft counts provided by Dallas Executive Airport records. All other based aircraft counts in this table show totals within the FAA TAF 2024. 2) RBD records are shown in calendar year format, all other airports in this table are shown in FAA FY format. 3) Airport Abbreviations: ADS – Addison Airport; FTW – Fort Worth Meachem International Airport; FWS – Fort Worth Spinks Airport; TKI – McKinney National Airport; GKY – Arlington Municipal Airport; HQZ – Mesquite Metro Airport; LNC – Lancaster Regional Airport.

Based Aircraft – Market Share Analysis

The market share analysis takes an approach where the based aircraft forecast is related to a larger group of airports. Using this method the share of the Airport to the whole can remain constant or change over time. This analysis maintained RBD's recent historical share with the State of Texas (2.8%); FAA Southwest Region (ASW) (1.6%); and the U.S. (0.2%) based on totals from the FAA TAF 2024. It then used the FAA TAF projections for Texas; the ASW region, and the U.S., while maintaining those shares over the 20-year forecast horizon.

A review of the analysis showed that while all three shares had growth over the forecast horizon, the State of Texas once again had the strongest growth during that timeframe, yielding a 1.1% annual growth rate over the 20-year planning horizon, slightly greater than the ASW at 1.0% and U.S. at 0.8%, respectively.

Table 3-16 compares the based aircraft forecasts using a market share analysis as described above.

Table 3-16 - Based Aircraft - Market Share Analysis

Year	Texas Share	ASW Share	U.S. Share
2014	148	148	148
2019	270	270	270
2024	397	397	397
2025	378	378	378
2030	400	397	395
2035	421	416	411
Annual Growth Rates			
2014-2019	12.8%	12.8%	12.8%
2019-2024	8.0%	8.0%	8.0%
2025-2030	1.2%	1.0%	0.9%
2030-2035	1.0%	0.9%	0.8%

Source: FAA TAF 2024; Garver, 2025

Based Aircraft – Aerospace Forecast

Based aircraft projections for RBD were also projected using a bottom-up approach where the distribution of based aircraft by type was increased using national trends associated with the FAA Aerospace Forecast FY 2025-2045 for the active GA fleet, summarized in **Table 3-3**.

As of 2025, the Airport's distribution of based aircraft by type was:

- Single Engines – 262 single engine fixed-wing aircraft representing approximately 69.3% of the RBD based aircraft fleet.
- Multi-Engines – 49 multi-engine fixed-wing aircraft representing approximately 13.0% of the RBD based aircraft fleet.
- Jets – 55 jets representing approximately 14.6% of the RBD based aircraft fleet.
- Helicopters – 12 helicopters representing approximately 3.2% of the RBD based aircraft fleet.

Because single engine and multi-engine fixed wing aircraft were not distinguished as pistons or turboprops, it was assumed that the single engine aircraft would follow the trend for single engine pistons, and the multi-engine aircraft would follow the trend for turboprops. Jets would follow the trend for turbojets, and helicopters would follow the trend for all rotorcrafts.

Table 3-17 shows the forecast of based aircraft using the FAA Aerospace Forecast for FY 2025-2045, using trends for the active GA fleet.

Table 3-17 - Based Aircraft – Active GA Fleet Increases

Year	Single Engine	Multi-Engine	Jet	Helicopter	Total	TAF 2024
2019	181	48	29	12	270	281
2024	269	54	58	16	397	358
2025	262	49	55	12	378	358
2030	261	51	63	13	388	358
2035	259	54	72	14	400	358
Annual Growth Rate						
2019-2024	8.2%	2.4%	14.9%	5.9%	8.0%	5.0%
2025-2030	-0.1%	1.0%	2.7%	1.7%	0.5%	0.0%
2030-2035	-0.1%	1.0%	2.7%	1.7%	0.6%	0.0%
2025-2035	-0.1%	1.0%	2.7%	1.7%	0.6%	0.0%

Source: Dallas Executive Airport, 2025; Garver, 2025

Forecast Summary

After comparing and reviewing all of the forecasts for operations by type and based aircraft, two combined forecasts were selected. The baseline forecast is identified as the preferred forecast which will be submitted to the FAA for review and approval. Because this forecast is for a general aviation airport in Texas, the Texas Department of Transportation (TxDOT) Aviation Division has authority to review and approve this forecast in lieu of the FAA.

The second forecast presented is an alternative high growth scenario forecast. This forecast was developed to support aggressive planning for future growth and development at RBD and will be used extensively in the facility requirements analysis.

Table 3-18 shows a summary of the baseline and high growth scenario forecasts for based aircraft at Dallas Executive Airport.

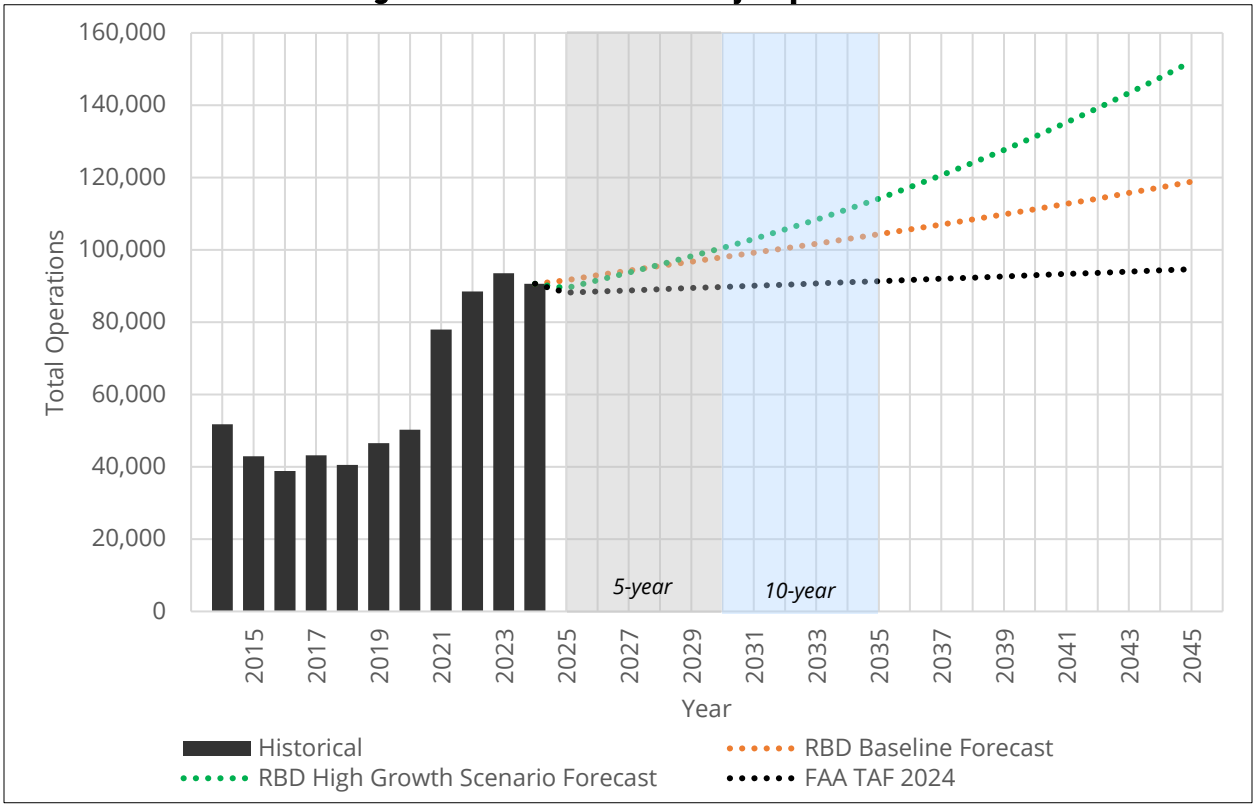
Table 3-18 - Forecast Summaries - Based Aircraft

Year	Baseline Forecast	High Growth Scenario Forecast	FAA TAF 2024
2025	378	378	358
2030	388	400	358
2035	400	421	358
2040	412	444	358
2045	427	468	358
Annual Growth Rates			
2025-2030	0.5%	1.2%	0.0%
2030-2035	0.6%	1.0%	0.0%
2035-2045	0.7%	1.1%	0.0%
2025-2045	0.6%	1.1%	0.0%

Source: Garver, 2025, FAA TAF 2024

Figure 3-12 and **Table 3-19** shows a summary of the baseline and high growth scenario forecasts for total operations at Dallas Executive Airport.

Figure 3-12 - Forecast Summary - Operations



Source: Garver, 2025, FAA TAF 2024

Table 3-19 - Forecast Summaries - Operations

Year	Baseline Forecast	High Growth Scenario Forecast	FAA TAF 2024
2025	91,556	89,432	88,172
2030	97,965	100,548	89,753
2035	104,298	114,194	91,357
2040	111,237	131,347	92,987
2045	118,841	152,088	94,642
Annual Growth Rates			
2025-2030	1.4%	2.4%	0.4%
2030-2035	1.3%	2.6%	0.4%
2035-2045	1.3%	2.9%	0.4%
2025-2045	1.3%	2.7%	0.4%

Source: Garver, 2025, FAA TAF 2024

Baseline Forecast

The baseline forecast selected the following models for operations and based aircraft projections over the 20-year planning horizon.

- Operations Models
  - Itinerant Operations
    - Air Carrier – Trend Analysis: Historical RBD 1999-2009 (4.1%)
    - Air Taxi and Commuter – Trend Analysis: Historical RBD 1999-2009 (3.1%)
    - Itinerant GA – Trend Analysis: FAA Aerospace Forecast Total GA Aircraft Fuel Consumption 2025-2045 (1.9%)
    - Itinerant Military – FAA TAF: Held constant (0.0%)
  - Local Operations
    - Civil (Local GA) – Market Share Analysis: Texas (0.6%)
    - Local Military – FAA TAF: Held constant (0.0%)
- Based Aircraft Model – FAA Aerospace 2025-2045 Active Fleet Forecast (0.6%)

High Growth Scenario Forecast

The high growth scenario forecast selected the following models for operations and based aircraft projections over the 20-year planning horizon.

- Operations Models
  - Itinerant Operations
    - Air Carrier – Trend Analysis: Historical RBD 1999-2009 (4.1%)
    - Air Taxi and Commuter – Trend Analysis: Historical RBD 2019-2024 (9.6%)
    - Itinerant GA – Regression Analysis: Service Area 1 Model (4.2%)
    - Itinerant Military – FAA TAF: Held constant (0.0%)
  - Local Operations
    - Civil (Local GA) – Market Share Analysis: ASW (0.5%)
    - Local Military – FAA TAF: Held constant (0.0%)
- Based Aircraft Model – Market Share Analysis: Texas (1.1%)

Derivative Forecasts

The derivative forecasts provide added details to other specific distributions of the operations forecasts. Using the total operations forecasts, projections were calculated for aircraft operating under instrument flight rules (IFR) and visual flight rules (VFR). Additionally, the number of annual instrument approaches was calculated. Planning for the number of aircraft flying under IFR or VFR may drive the pursuit of navigational aids (NAVAIDs) and other air traffic control facilities. Similarly, the number of transient aircraft annually can be calculated to determine whether transient apron space is adequate to accommodate existing and future peak demand.

Table 3-20 shows the derivative forecast of operations using the baseline forecast.

Table 3-20 - Derivative Forecasts - Operations

Year	Annual Itinerant Operations	Annual Instrument Approaches	Itinerant IFR Operations	Itinerant VFR Operations	Annual Transient Operations
2014	51,766	2,870	5,740	21,334	17,238
2019	46,503	2,766	5,532	23,513	15,485
2024	90,573	4,693	9,386	37,428	30,161
2025	47,707	4,373	8,746	38,961	30,488
2030	52,439	4,807	9,613	42,825	32,622
2035	57,645	5,284	10,568	47,077	34,731
Annual Growth Rates					
2014-2019	-2.12%	-0.74%	-0.74%	1.96%	-2.12%
2019-2024	14.26%	11.15%	11.15%	9.74%	14.26%
2025-2030	1.91%	1.91%	1.91%	1.91%	1.36%
2030-2035	1.91%	1.91%	1.91%	1.91%	1.26%

Source: Garver, 2025, FAA TAF 2024

Peaking Forecasts

Projections of peak activity levels at an airport play an important role in facility requirements. Even though an airport may experience an absolute peak day and peak hour, these occurrences are often random and infrequent. Therefore, facilities are not commonly planned to accommodate such extreme totals. Instead, it is often a best practice to plan for an average day of the peak month (ADPM). **Table 3-21** shows the distribution of Dallas Executive Airport's total operations for each calendar year from 2014-2024. The table highlights the month with the greatest share of a year in orange and transitions to the lowest share in blue.

Table 3-21- Distribution of Operations by Month 2014-2024

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Jan.	7.8%	10.2%	8.5%	7.1%	8.2%	6.8%	6.3%	7.0%	9.1%	7.3%	6.6%
Feb.	6.7%	9.8%	8.3%	7.9%	6.6%	5.7%	7.5%	4.6%	6.8%	7.2%	8.0%
Mar.	7.4%	6.4%	6.5%	9.1%	9.4%	8.1%	5.1%	7.8%	8.5%	9.2%	8.1%
Apr.	8.6%	9.7%	7.7%	7.3%	9.1%	8.3%	4.3%	6.4%	7.3%	9.1%	6.6%
May	7.5%	9.0%	7.5%	10.0%	10.4%	8.8%	6.8%	8.1%	8.5%	10.4%	6.7%
Jun.	8.4%	8.7%	8.7%	8.1%	8.9%	9.1%	7.2%	8.9%	10.3%	7.7%	9.4%
Jul.	8.9%	8.4%	8.6%	7.7%	6.3%	9.3%	8.3%	8.9%	9.6%	8.7%	9.5%
Aug.	9.2%	7.7%	7.4%	8.1%	7.3%	9.3%	12.0%	8.1%	9.0%	9.8%	10.1%
Sep.	9.3%	8.3%	9.4%	9.1%	7.1%	8.9%	8.5%	9.0%	9.2%	8.4%	9.2%
Oct.	10.9%	8.0%	11.4%	9.4%	9.3%	9.5%	10.8%	10.0%	8.6%	6.9%	9.7%
Nov.	8.6%	6.3%	8.4%	9.2%	9.1%	7.5%	12.4%	10.9%	6.2%	7.3%	8.5%
Dec.	6.8%	7.3%	7.6%	6.9%	8.3%	8.6%	10.8%	10.2%	6.9%	7.9%	7.7%

Source: FAA OPSNET, 2025; Garver, 2025

Utilizing the base year's 10.1% share of operations to represent the peak month of each forecast year, the ADPM is calculated using the average number of operations based on the number of days in August. Finally, to determine the average number of operations per hour on an ADPM, the ADPM operations are averaged by the hours that the RBD Airport Traffic Control Tower is attended (07:00 to 21:00 daily).

Table 3-22 shows the baseline and high growth scenario forecast of total annual operations, peak month, ADPM, and average hour of the ADPM operations from 2025-2045.

Table 3-22 - Peak Operations Forecasts

Year	Total Annual Operations	Peak Month Operations	Average Day Peak Month Operations	Average Hour - ADPM Operations
Baseline Forecast				
2025	91,556	9,288	300	21
2030	97,965	9,938	321	23
2035	104,298	10,580	341	24
2040	111,237	11,284	364	26
2045	118,841	12,056	389	28
High Growth Scenario Forecast				
2025	89,432	9,072	293	21
2030	100,548	10,200	329	24
2035	114,194	11,584	374	27
2040	131,347	13,324	430	31
2045	152,088	15,428	498	36

Source: FAA OPSNET, 2025; Garver, 2025

Baseline Forecast - FAA TAF Comparison

Per FAA guidance, one of the factors needed for gaining FAA approval is whether the variance of the baseline forecast with the FAA TAF is met. In this forecast, the baseline forecast is compared with the FAA TAF 2024. Under this requirement, the forecast should differ from the current TAF baseline scenario by less than 10% in year 5, and 15% at year 10.

Table 3-23 shows that the baseline forecast meets the less than 10% variance in five years, as well as the less than 15% variance in ten years. The base year or last year of historical data is 2024, and the 20-year forecast horizon includes the years 2025-2045.

Table 3-23 - FAA TAF - Baseline Forecast Comparison

Description	Year	Baseline Forecast	FAA TAF 2024	Percent Higher/Lower
Operations				
Base Year	2024	91,556	88,172	3.8%
Base Year +5 Years	2030	97,965	89,753	9.1%
Base Year +10 Years	2035	104,298	91,357	14.2%
Based Aircraft				
Base Year	2024	397	358	10.9%
Base Year +5 Years	2030	388	358	8.4%
Base Year +10 Years	2035	400	358	11.6%

Source: FAA TAF 2024; Garver, 2025

Critical Aircraft

Dallas Executive Airport regularly has a diverse fleet of aircraft that utilizes its facilities over the course of a year. In base year 2024, RBD had at least 489 different aircraft models documented by 1200.aero recorded operations.

The Airport's full data set listed a total of 74,864 total operations that were recorded using 1200.aero during 2024. Of those operations, 28,670 were identified as touch-and-go's. Comparatively, the FAA's OPSNET database for operations, listed a total of 90,573 operations for RBD in 2024. Because of the variance between the two sources, the 1200.aero dataset was scaled up by adding the difference as A-I Small SEP aircraft, as it was assumed that these aircraft were omitted during the recording process. Additionally, the 28,670 touch-and-go's were scaled up to 34,686 reflecting the ratio of operations under this classification. Because touch-and-go's are not permitted to be used in the determination of a critical aircraft they were not included in the analysis.

FAA Advisory Circular 150/5000-17, *Critical Aircraft and Regular Use Determination*, defines a critical aircraft as the most demanding aircraft type, or grouping of aircraft with similar characteristics, which make regular use of the airport. Regular use is defined as 500 annual operations, made up of itinerant and local operations but excluding touch-and-go's. When an airport has a diverse fleet like RBD, the Aircraft Approach Category (AAC) and Airplane Design Group (ADG) of each aircraft are totaled to select the critical aircraft category.

Table 3-24 shows a summary of the operations by aircraft and grouped by AAC and ADG.

Table 3-24 - Critical Aircraft - Operations by Aircraft

Aircraft Group	2024	2035	2045
A-I	45,627	50,062	57,043
A-II	478	666	759
A-III	6	8	10
B-I	966	1,346	1,533
B-II	2,534	3,530	4,023
B-III	29	40	46
C-I	312	435	495
C-II	640	892	1,016
C-III	14	20	22
C-V	1	1	2
D-I	9	13	14
D-II	41	57	65
D-III	8	11	13
Touch and Go's (not counted for Critical Aircraft)	*34,686*	*39,942*	*45,512*
Other / Helicopter	5,222	7,275	8,290
Total	90,573	104,298	118,841
AAC			
A	46,111	50,736	57,811
B	3,529	4,916	5,602
C	967	1,347	1,535
D	58	81	92
Other / Helicopter	5,222	7,275	8,290
ADG			
I	46,914	51,855	59,086
II	3,693	5,145	5,862
III	57	79	90
IV			
V	1	1	2
Other / Helicopter	5,222	7,275	8,290

Source: Garver 2025; 1200 Aero, 2025

Critical Aircraft – Runway 13-31

Runway 13-31 is 7,136 feet long by 100 feet wide, and is considered the Airport's primary runway, allowing it to accommodate the entire fleet that operates out of RBD. Because the most demanding aircraft with 500 or more annual operations is a C-II, the Gulfstream III (GLF3) which operates at RBD, has been designated to represent the existing critical aircraft of Runway 13-31. The GLF3 also has a Taxiway Design Group (TDG) of TDG-2A. For uniformity, the entire airfield will be planned to meet TDG-2A standards in the existing condition.

Nationally, there is a growing trend in jet activity anticipated over the 20-year planning horizon. The FAA Aerospace Forecast for FY 2025-2045 shows the following GA projections related to jets:

- Jets in the active GA fleet are forecast to increase at a rate of 2.7% annually.
- GA hours flown by jets are forecast to increase at a rate of 3.1% annually.
- GA jet fuel consumed is forecast to increase at a rate of 2.2% annually.

For these reasons, and input from multiple Airport interviews during the inventory stage of this project, it is reasonable to believe that C-III jet activity will achieve 500 annual operations over the planning horizon. Therefore, the future critical aircraft for Runway 13-31 is the Gulfstream G600 (G-7) (GA6C) jet, which is a C-III, with a TDG-2B. For uniformity, the entire airfield will be planned for TDG-2B standards.

Critical Aircraft – Runway 17-35

Runway 17-35 is 3,800 feet long by 150 feet wide and is considered the Airport's secondary runway. Because of its shorter length, some of the larger aircraft within RBD's fleet may not be able to operate on it regularly. Based on these details, the most demanding type of aircraft with 500 or more annual operations is a B-II, the Beech King Air 200 (BE20), which operates regularly at RBD, has been designated to represent the existing critical aircraft for Runway 17-35. Due o the limited ability to extend the runway, it is anticipated that B-II will remain the critical aircraft during the forecast horizon.

Critical Aircraft Summary

The future critical aircraft for a runway cannot be changed until a total of 500 AAC and ADG operations confirming its designation are recorded on a respective runway. This includes any project that would require funding to develop facilities needed for accommodating a larger critical aircraft. However, by proactively planning for larger more demanding aircraft,

Dallas Executive Airport will position itself to secure and preserve the space needed for larger aircraft facilities and protected when it is achieved.

Table 3-25 shows a summary of the existing and future critical aircraft for each runway at RBD.

Table 3-25 - Critical Aircraft Summary

Runway	Aircraft Name / Model	AAC	ADG	TDG
Runway 13-31				
Existing Critical Aircraft	Gulfstream III (GLF3)	C	II	2A
Future Critical Aircraft	Gulfstream G600 (G-7) (GA6C)	C	III	2B
Runway	Aircraft Name / Model	AAC	ADG	TDG
Runway 17-35				
Existing Critical Aircraft	Beech King Air 200 (BE20)	B	II	2A
Future Critical Aircraft	Beech King Air 200 (BE20)	B	II	2A

Source: Garver 2025; 1200 Aero, 2025

Note: The TDG differs between Runway 13-31 and Runway 17-35. For uniformity, all taxiways will follow the design standards of the most stringent critical aircraft TDG, which will be Runway 13-31.