1. Overview

This report provides an update to the GA forecasts prepared in the 2017 Master Plan for the Doña Ana County International Jetport, also referred to as the "Jetport" or "KDNA" (FAA/ICAO identifier). The update covers the current level of aviation activity, the types of aircraft comprising that activity, the various categories of users, and future projections for all of the former.

Aviation demand forecasts support the effective and timely development of an airport. With airport development often planned in three timeframes, aviation demand is projected for the same three timeframes:

- Short-term (thru 2027)
- Intermediate term (2028-2032)
- Long-term (2033-2042)

Forecasts should be realistic and based upon reliable data that is current and considers industry trends and projections. The forecasts help determine the timing and need for new or expanded facilities, particularly in the short-term. Various aviation demand indicators drive the need for specific facility requirements such as hangars and apron area. Greater pavement strengths or increased safety clearances may be required where larger aircraft operate. In this *GA Forecasts Update* for KDNA, the following are reviewed:

- Based Aircraft and Fleet Mix
- General Aviation, Air Taxi, and Military Operations
- Operations Fleet Mix and Critical Aircraft

Air cargo activity is addressed in a separate study report but referenced in this report.

GA forecasts presented in this report consider numerous sources of national, state and local aviation and socioeconomic information.

Upon completion, the aviation demand forecasts were submitted to the FAA. The FAA is responsible for reviewing and approving the forecasts, so the findings may be used to update the FAA's records including the Terminal Area Forecasts (TAF). This report provides the justification to the FAA for the approval with detailed data and rationale alongside realistic projections. In a letter dated February 23, 2023, the FAA approved the forecasts presented in this report. In Table 11 of Section 4.6, the forecasts are summarized and compared to the FAA's latest Terminal Area Forecasts (TAF).

2. Historical Aviation Activity and Trends

Past aviation activity, trends and industry projections offer insight on what to expect at KDNA in the future. Reviewing information available at the national, state and local levels provides the best available picture of aviation for forecasting purposes.

2.1 National Aviation Trends

National trends in the aviation industry influence demand at the local airport level. As a general aviation (GA) airport, industry GA trends are the primary focus for the KDNA forecasts. GA comprises all activity other than commercial and military.

The *FAA Aerospace Forecast*, published annually, is reviewed here with respect to national trends in active GA aircraft, GA hours flown, and pilot certifications. The FAA routinely monitors a range of aviation trends and influencing factors in support of their forecasting effort. FAA's most recent report is the *FAA Aerospace Forecast 2022-2042,* which uses aviation activity estimates from 2021 as the baseline for current activity. Airport user input from an annual General Aviation and Part 135 Activity Survey (aka GA survey) is also used. The latest available GA survey data is from 2020.

Figure A presents an illustration of the historical and projected active GA aircraft fleet. A slight decline occurred between 2012 and 2022, but a modest rebound is projected through 2042, revealing a generally flat growth line (0.1% average annual growth). While the total number of active aircraft will see little change, the fleet mix is expected to shift. Fixed wing piston aircraft, depicted in blue, have been declining and are projected to continue doing so. Offsetting this decline is the continued growth in the other active aircraft types. By 2042, the fixed wing piston aircraft are expected to be 16% less than 2022, while fixed wing turbine are expected to increase by 48% over the same period.

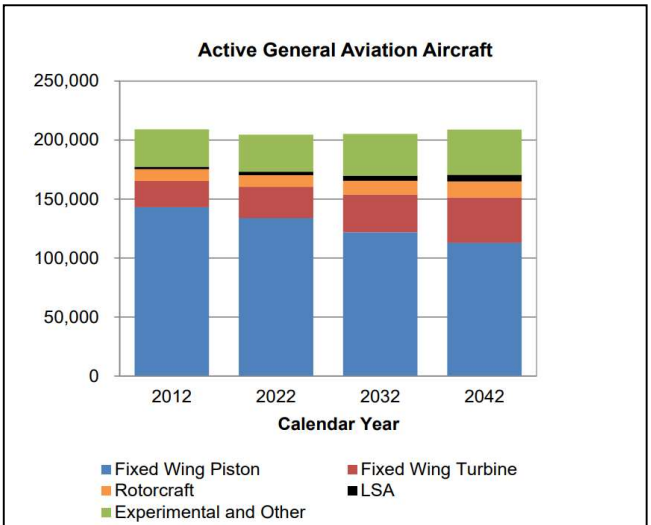


Figure A. National Active GA Fleet - Historical and Projected

Past aviation activity, trends and industry projections offer insight on what to expect at KDNA in the future.

In contrast to the flat growth in active GA aircraft, GA hours flown are projected to steadily grow through 2042. **Figure B** depicts the hours flown by each aircraft type in the fleet. Fixed wing piston aircraft usage is forecast to decline while the use of other aircraft is projected to increase—a promising outlook for GA activity. The overall growth rate for GA flight hours is anticipated to average 1.2% annually.

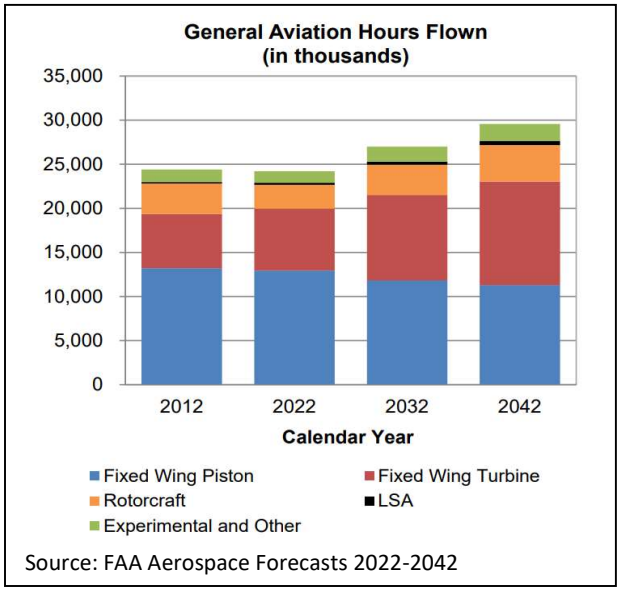


Figure B. National GA Hours Flown - Historical and Projected

To better understand the average use of aircraft nationwide, GA hours flown are divided by active aircraft in each category. **Table 1** summarizes the results showing that turbojet aircraft, for example, are flown an average of 246 hours annually—more than double the average hours flown by piston fixed wing aircraft. Turboprop use follows close behind turbojets while rotorcraft usage ranks the highest of all aircraft with an average of 265 hours flown annually. It's no surprise that jets and helicopters are flown more frequently than small piston aircraft since their acquisition and purpose is often more business related and less recreational. This is a common disparity between costly, higher performance aircraft (high end GA segment) and piston airplanes (low end GA segment). As expected, experimental and sport aircraft, which are generally limited to recreational use, are flown less than single-engine piston fixed wing.

Table 1. Nationwide Average GA Hours Flown per Aircraft

Aircraft Type	Average Hours Flown per Aircraft Annually
Piston SE Fixed Wing	94
Piston ME Fixed Wing	122
Turboprop Fixed Wing	243
Turbojet Fixed Wing	246
Rotorcraft	265
Total	129
Experimental	41
Sport Aircraft	79
Other	27
Total	43

Source: FAA Aerospace Forecast, 2022-2042

Fixed wing aircraft will continue to decline as older aircraft retire from the active fleet. Offsetting this decline will be an increase in more costly, higher performance aircraft, such as jets and rotorcraft, which also fly more often. This nationwide trend is an influencing factor in KDNA's aviation activity.

Figure C and **Figure D** illustrate a comparison of FAA's projected growth rates within the active aircraft fleet and GA hours flown, respectively, over the next two decades. These projected growth rates are updated annually with each publication of the *FAA Aerospace Forecast*. These charts clearly depict the negative growth forecast for piston activity and positive growth forecast for other aircraft.

The trend in nationwide pilot certifications is another aviation demand indicator of interest. According to *FAA Aerospace Forecast 2022-2042*, the number of pilots declined from 2010 to 2016 before reversing this trend. From 2016 to 2021, pilot numbers increased by 3%. FAA projects an increase of 0.9% from 2021 to 2022, and then a modest 0.3% annual growth rate over the next two decades. It's important to note that the pilot count excludes student pilots at this time.[1]

The General Aviation Manufacturers Association[2] (GAMA) is another important source of industry data and trends. GAMA reports on aircraft shipments and billings on a quarterly basis. The FAA Aerospace Forecast considers GAMA data in their projections. **Figure E** depicts, in recent history, the fluctuations in GA aircraft shipments and billings. As evident in the chart, global measures showed steady growth up until 2019 before suffering a decline in 2020 from the COVID pandemic. Fortunately, growth returned in 2021 as the industry began to recover but fell short of returning to 2019 levels.

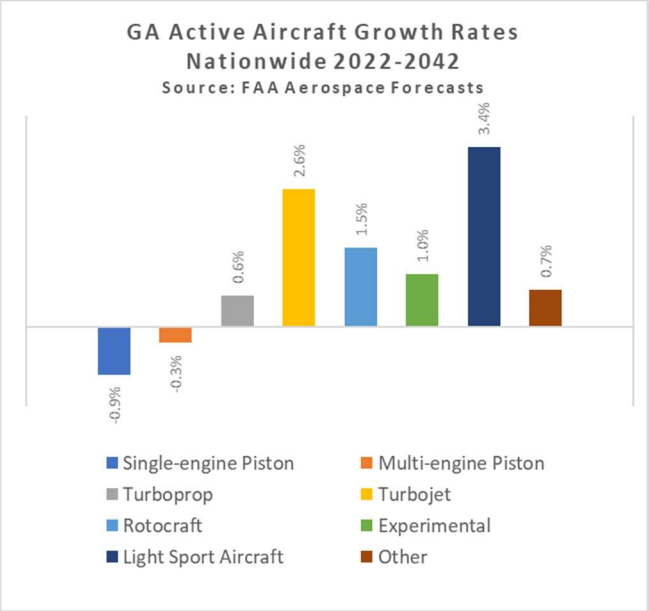


Figure C. GA Active Aircraft Annual Growth Rates

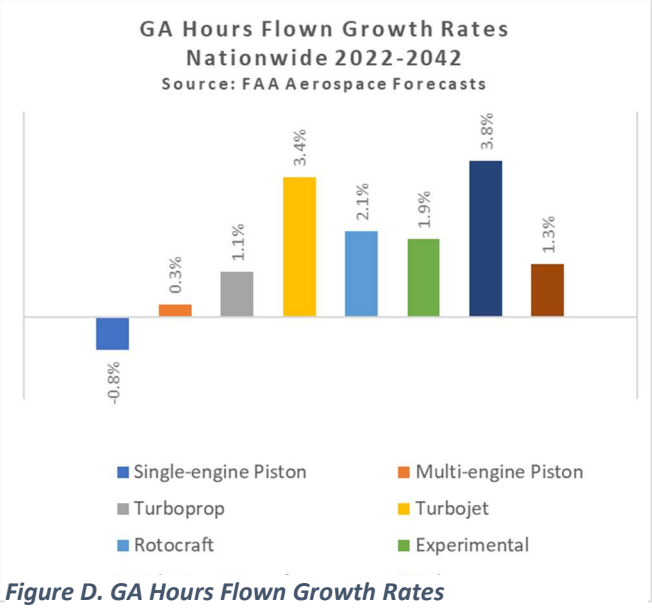


Figure D. GA Hours Flown Growth Rates

[1] The FAA explains that as of April 2016, there is no expiration date on new student pilot certificates, so this generates a cumulative increase in the student pilot numbers and breaks the link between student pilot and private pilot or higher-level certificates. Since there is no sufficient data yet to forecast the student certificates under the new rule, student pilot forecast is suspended.

[2] GAMA was founded in 1970 by 11 companies but has 125 member companies today.

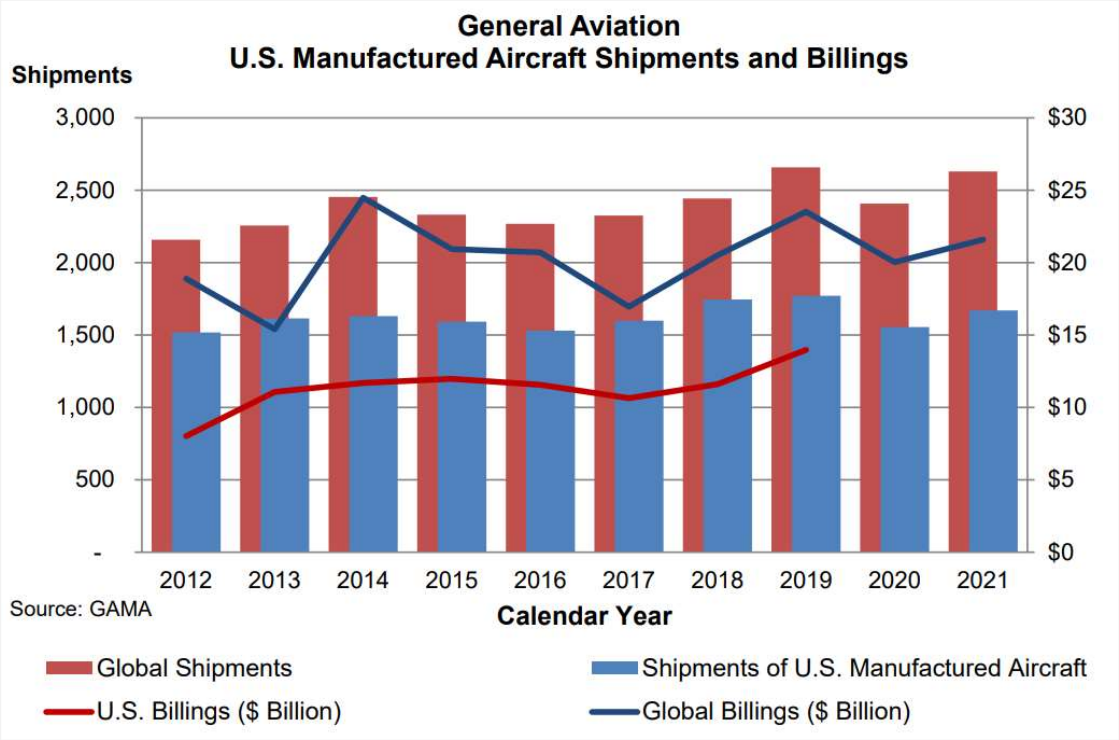


Figure E. Aircraft Shipments and Billings (Chart from FAA Aerospace Forecasts 2022-2042)

In a GAMA news release, preliminary 2022 data for the first three quarters of the year reveal growth in all segments of aircraft shipments and billings worldwide over the same period for 2021 (Table 2). GAMA points out that this is representative of a strong industry since this positive growth occurred while facing issues of supply chain and workforce shortages.

Table 2. Comparison of 2021 vs. 2022 Shipments and Billings for First Three Quarters

Aircraft Type	2021	2022	% Change
Piston Airplane	930	1,012	8.8%
Turboprops	357	383	7.3%
Business Jets	438	446	1.8%
Total Airplanes	1,725	1,841	6.7%
Total Airplane Billings	$13.5B	$14.1B	4.8%
Piston Helicopters	132	137	3.8%
Turbine Helicopters	410	439	7.1%
Total Helicopters	542	576	6.3%
Total Helicopter Billings	$2.4B	$2.6B	5.3%

Source: General Aviation Manufacturers Association (GAMA) Worldwide Data

GAMA reports that the fractional aircraft industry, which began 30 years ago, continues to grow and remains an important segment in GA allowing users easier access to aircraft. NetJets followed by Flexjet are the dominant operators in the fractional segment controlling an estimated 85% of the market (based on flight hours). In fact, NetJets reported in July that they "…made a multibillion-dollar, multiyear investment in 175+ new aircraft—nearly 80 of which are scheduled to be delivered in 2022." This will be a record number of new aircraft deliveries in one year for NetJets (in the U.S. and Europe).

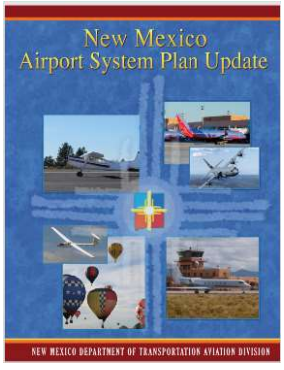
Additional insight on the direction of general aviation, namely business aviation, is found in Honeywell's annual *Global Business Aviation Outlook*. The most recent version, released in October 2022, paints a positive picture for business jets. A portion of Honeywell's outlook is derived from an annual business aviation survey conducted. The survey combined with their own analyses and industry expert discussions support their annual report findings. Highlights include:

- New business jet deliveries in 2023 are expected to be 17% higher than 2022
- Five-year purchase plans for new business jets are up 3% over the previous business aviation survey results
- In line with worldwide economic growth, new jet deliveries and expenditures are projected to grow 2% annually
- Approximately 2/3 of operators surveyed expect to fly more in 2023 than in 2022
- Large, long-range aircraft are expected to comprise 70% of all new business jet expenditures in the next five years
- A modest 2% of operators plan to dispose of an aircraft without replacement

A number of other recent issues have been unfolding in 2022, which will likely influence aviation activity trends reported in future industry publications—impacts may be limited to the U.S. while others are worldwide. Considering the history of aviation activity, it's more common than not to see fluctuations due to any number of factors. Influencing events and factors in recent history include:

- COVID-19
- Fuel prices
- Russia's invasion of Ukraine
- Inflation, interest rate hikes, supply and demand issues

2.2 State Aviation Trends



In 2017, the New Mexico Department of Transportation Aviation Division published their latest update to the New Mexico Airport System Plan (NMASP). The two former study updates were published in 2009 and 2003. The Airport System Plan documents the public use airports statewide that serve the air transportation system; aviation demand forecasts are one of many elements typically included.

According to the NMASP 2017, there are 61 public use aviation facilities statewide comprised of 55 airports, four heliports, one seaplane base, and one proposed airport. The NMASP established goals and performance measures for the system with subsequent analysis and recommendations for improvement. Some improvements are based, in part, by aviation activity. The NMASP is an important document to KDNA to understand activity and trends in the state.

The NMASP 2017 report uses 2013 as the baseline for activity statewide, which identifies 1,625 aircraft based in New Mexico and an estimated 546,472 total GA operations statewide. Growth in these two

measures of GA activity is projected in the NMASP; **1.1 % average annual growth in based aircraft and 0.69% overall growth in GA operations**. These forecast growth rates for New Mexico are considered in this study when assessing the anticipated future of KNDA based aircraft and GA operations. KDNA activity types are similar to what is seen statewide with business and personal travel, flight instruction, and recreational flying.

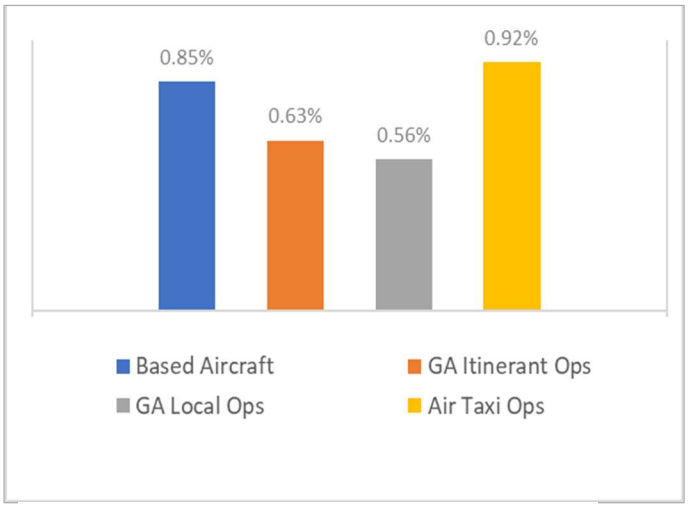


Figure F. Projected 20-Year New Mexico Growth Rates (FAA TAF)

Like the NMASP, the FAA TAF includes statewide aviation activity for New Mexico—both historical and projected. According to the TAF, growth is anticipated in based aircraft, GA local and itinerant operations, and in air taxi operations. However, FAA projects that growth will remain below 1.0% annually, on average (**Figure F**), for these measures. As shown, the strongest growth rate is forecast for air taxi operations (0.92%) followed by based aircraft. The forecast growth in GA operations is below based aircraft with GA itinerant expected to outpace GA local (training) operations.

2.3 Local Aviation Trends

Reviewing local aviation activity includes historical data and trends for KDNA as well as previously published forecasts and projected growth rates. Local activity comes from a number of sources such as online reports, airport management, user survey responses and interviews, and fuel sales. Based aircraft and operations are the two key aviation activity measures for KDNA. Some sources of data are fairly accurate while others include questionable figures before more reliable methods of data collection were in place. Establishing a reliable baseline of KDNA based aircraft and operations is important to the forecasting process.

The based aircraft count for an airport may be verified through an online database once the airport manager enters the aircraft tail numbers. An aircraft is "based" at an airport if it spends the majority of its time there. To ensure an aircraft is not counted twice, the FAA established the National Based Aircraft Inventory Program requiring sponsors enter tail numbers into a database. The database validates the aircraft as a based aircraft or flags it as a duplicate tail number entered for another airport. Further, aircraft are cross-referenced with the FAA Registry to ensure each is active (not de-registered) and to identify its place of registration (city, state). Airport managers can keep their based aircraft list current through the database.

Only "active" aircraft are included in the base aircraft count, which means that the aircraft flies at least one hour during the year. Consequently, any War Eagles Air Museum aircraft that are not flying at least

an hour annually are excluded, often because they are not airworthy. Other aircraft excluded may not have a current registration due to factors such as pending repair or overhaul.

KDNA is currently home to 129 aircraft, but this number has routinely fluctuated in the past. Further, this based aircraft count is likely constrained and could be higher since airport management, pilot survey respondents, and stakeholder interviewees have indicated that KDNA has a shortage of hangars, preventing some aircraft owners from storing their aircraft there. The 129 aircraft officially based at KDNA is comprised of 88 single-engine, 12 multi-engine, 21 jet, and eight rotorcraft. Additional aircraft may be located at KDNA on a part-time basis. While not officially counted by the FAA as a based aircraft, part-time aircraft are often considered in the airport's facility needs such as hangars or apron space; their activity is already counted in operations.

Also of interest is the review of aircraft registration types within Doña Ana County and El Paso County (TX). **Figure G** provides a summary of registration types and insight on the large number of aircraft registered in each county—247 in Doña Ana County and 308 in El Paso County. KDNA's 129 based aircraft represents an estimated 52% of the County's registered aircraft, which means the remaining aircraft are based at other area airports such as Las Cruces or private airports. Statewide, there are 3,003 total aircraft registered, which means Doña Ana County comprises an estimated eight percent of New Mexico's aircraft registrations.

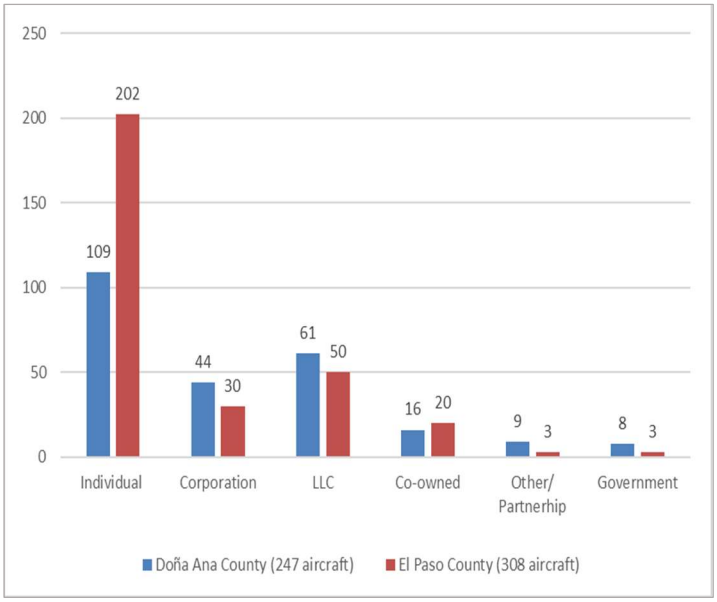


Figure G. County Aircraft Registration Types

Although the chart shows *individual* registrations represent the large majority, *corporate* and *LLC* registrants are a positive indicator of business aviation activity in the region. Aircraft can serve as an important business tool that help companies thrive, grow, and create jobs. Using their own aircraft, companies can be more efficient with their time than possible when using the commercial airlines.

2.3.1 FAA Terminal Area Forecast (TAF)

In the FAA Terminal Area Forecast (TAF), historical and projected aviation activity measures are included and updated on an annual basis[3]. Two key measures for KDNA include annual operations and based aircraft. **Figure H** charts the last two decades of FAA's historical records for KDNA. These records represent estimates since reliable data collection tools have not been available for FAA TAF records, which often results in significant fluctuations as seen in in the chart. As improved data collection processes are implemented and cross-referencing databases is possible, future FAA TAF data may be more accurate. Regardless, FAA TAF data is reviewed as part of any forecasting effort since the FAA requires a comparison of an airport planning study's forecasts to those published by the FAA in the TAF.

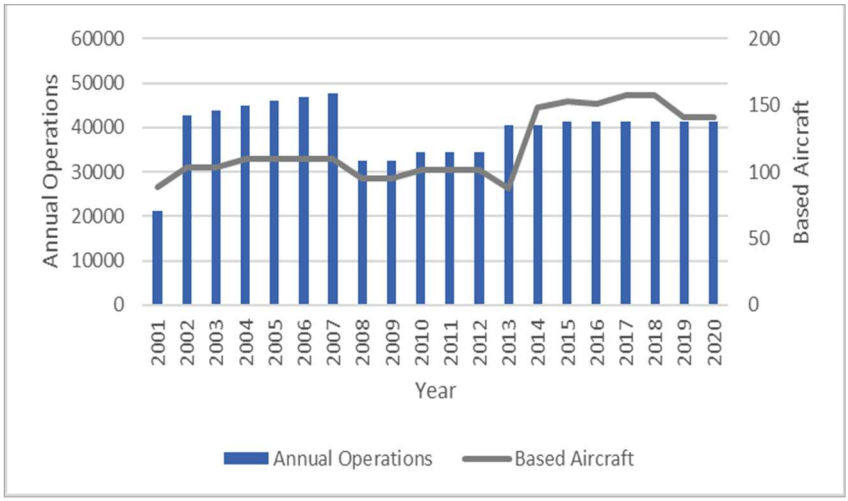


Figure H. Historical FAA TAF Records for KDNA

The FAA reviews the forecasts and variance from their TAF projections in order to approve or reject the study forecast. Often, the FAA TAF takes a more conservative approach to GA airport forecasting, so operations and based aircraft growth are minimal. FAA's growth projected for KDNA over the next 20 years deviates from that approach, with based aircraft and annual operations forecast to grow at an average annual rate of 1.68% and 2.07%, respectively.

Table 3 lists the TAF's historical based aircraft and annual operations shown in the above chart as well as the 20-year forecast for the same measures.

[3] According to the FAA, the 2021 TAF accounts for the downturn and recovery from the COVID-19 pandemic to varying degrees based on airport type.

Table 3. Historical and Forecast KDNA Based Aircraft and Operations (FAA TAF)

Year	Based Aircraft	Operations
2001	89	21,300
2002	103	42,810
2003	103	43,866
2004	110	44,905
2005	110	45,963
2006	110	46,853
2007	110	47,763
2008	95	32,400
2009	95	32,400
2010	102	34,600
2011	102	34,600
2012	102	34,600
2013	88	40,500
2014	88	40,500
2015	148	41,500
2016	153	41,500
2017	151	41,500
2018	158	41,500
2019	158	41,500
2020	141	41,500
2021*	144	42,388
2022**	147	43,301
Forecast 2027	167	48,218
Forecast 2032	182	53,790
Forecast 2042	212	67,355
Forecast AAGR	1.68%	2.07%

Source: FAA TAF. AAGR = Average Annual Growth Rate
**The latest FAA TAF publication identifies 2021 as the first year of projected based aircraft and operations with 2020 and prior representing historical figures*
*** KDNA's validated based aircraft at www.basedaircraft.com confirms 129 aircraft (not 147) are based at KDNA including 88 SE, 12 ME, 21 Jets and 8 helicopters.*

In comparison, TAF growth rates for El Paso International Airport (KELP) were reviewed alongside KDNA (**Figure I**) for GA-related and air taxi segments of the forecasts. As evident in the chart, KDNA growth is anticipated to be stronger than KELP with respect to based aircraft, GA itinerant operations and air taxi operations. More robust growth at KDNA is expected as GA operators appreciate the convenience of GA airports over commercial service facilities like KELP.

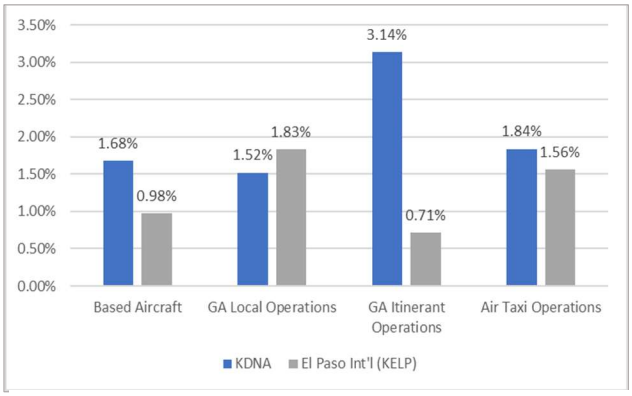


Figure I. Projected Annual Growth Rates (FAA TAF)

2.3.2 FlightAware Movement Reports and Virtower Reports

FlightAware[4] movement reports provide airport operations activity such as date, time and aircraft type. Airport management has reviewed this data for a more reliable operations count than the estimated counts from the past. Since FlightAware data relies on aircraft equipped with ADS-B Out and many GA aircraft lacked this equipment until early 2020, the FlightAware GA operation figures prior to 2020 may be far below actual GA operations. Consequently, FlightAware activity for 2019 - 2021 for KDNA represents a mix of changes occurring such as the jump in GA aircraft equipped with ADS-B Out, the COVID-19 shutdown, and the pent-up demand that followed COVID. **Figure J** compares the FlightAware operations recorded for 2019 to 2022.

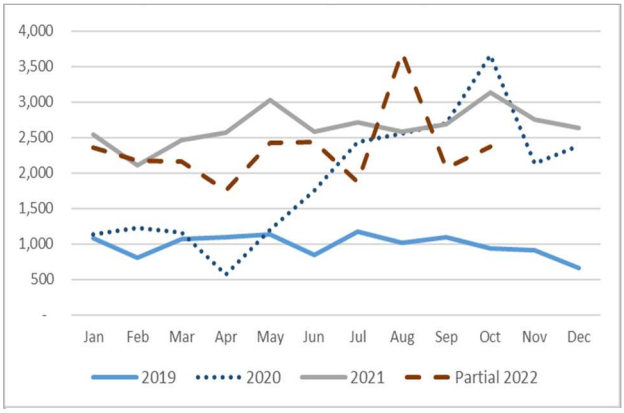


Figure J. FlightAware Operations Data 2019-2022

KDNA operations data reveals the most common origin and destination airports are within New Mexico, as expected. Texas, Arizona, Colorado, and California also ranked high for KDNA origination or destination traffic. Two of the frequent and more commonly known KDNA users include NetJets and FlexJet. Various air charter operators and medical transport companies use KDNA regularly, too.

A new and more customized aviation activity resource is the onsite Virtower[5] operations tracking system which KDNA has had since Spring 2022. The Virtower data available for this forecasting effort was limited to seven complete months but provides summary reports on details such as runway and helipad utilization for takeoffs and landings, operation types, aircraft types, and FAA's Airport Reference Code (ARC); the ARC is important for identifying applicable FAA airport design standards. Despite the limited seven-month timeframe for 2022, the detailed information was beneficial and offered data that could be compared to the FlightAware movement report for the majority of 2022. Pilot responses to a survey questionnaire also helped characterize airport activity and offered a sample of operations identified as business, personal or training; phone interviews and email correspondence offered insight as well. The longer Virtower is in place at KDNA providing detailed reports, the less airport management will need other resources, other than for comparison and verification.

With Virtower data available in Spring 2022, the seven months of operations data were used to extrapolate an annual estimate for 2022. Partial year 2022 FlightAware data was also compared to the Virtower data to help establish the estimated annual operations count of 25,195 for 2022. This reveals

[4] FlightAware operates a worldwide network of ADS-B and Mode S receivers that track ADS-B or Mode S equipped aircraft flying around the globe.

[5] According to their webpage, Virtower monitors key airport operational parameters including takeoffs, landings, touch and go's, pavement utilization and based aircraft operations. Tracking is completed in realtime and includes helicopters from designated helipads. Detailed and customized reports can be obtained.

that 2022 is approximately 21% lower than 2021 levels, which is partially attributed to the pent-up demand from COVID-19 through 2020 that caused an artificially large jump in 2021. Due to the significant drop in operations, 2022's estimated 25,195 annual operations figure is used as the baseline for KDNA operations. A breakdown of 2022 activity follows (**Table 4**):

Table 4. Baseline Operations Breakdown for KDNA

Activity Type	Baseline 2022	% Split	Description
Air Taxi	1,100	4.4%	Charter flights, "for hire" activity at KDNA
GA Local	13,652	54.2%	GA activity that remains in vicinity of KDNA (e.g., flight training, touch-and-go operations)
GA Itinerant	9,783	38.8%	All GA activity that arrives at KDNA from another airport or departs KDNA destined for another airport
Military	660	2.6%	Military landings and takeoffs at KDNA
TOTAL	25,195	100.0%	

Air Taxi

Air taxi operations are estimated at 1,100 for 2022 based on data available for the study. This activity typically refers to unscheduled passenger and cargo charters for KDNA including medical transport. Fractional owners, using NetJets and Flexjet, fly into KDNA and also are counted as air taxi operations; the majority of such activity is for business purposes according to pilot survey responses and operations data.

General Aviation (GA) Operations

GA operations at KDNA includes all activity other than air taxi and military. However, GA operations are split into local and itinerant activity. GA local represents those operations conducted in the vicinity of the airport, which are primarily training—practice area flights and touch-and-go activity. At KDNA, GA local operations are estimated at 13,652 for the year (2022). Red Arrow Flight Academy, based at KDNA, indicates that their student pilots conduct approximately 2,400 annual flights, or 18%, of the GA local operations. The remainder of GA local flights are conducted by based and transient aircraft owners as well as student pilots from other airports in the region. KDNA remains a less congested alternative to El Paso International for flight training and touch-and-go activity.

GA itinerant operations comprise all GA origin-and-destination traffic—flights between KDNA and another airport. Airports routinely accommodating flight training, like KDNA, often have a high number of GA local operations. Airports serving a lot of business aviation activity may have a high number of GA itinerant operations. The local/itinerant GA operations split for 2022 at KDNA is approximately 58% / 42%.

Military Operations

Total 2022 military operations at KDNA are estimated at 660. This activity segment is not included in KDNA's forecasting effort as the military does not share any anticipated changes.

2.3.3 Instrument Flight Rules (IFR) Operations

FAA records of aircraft flying by instrument flight rules (IFR) are helpful in identifying the typical percentage of total annual operations comprised of IFR activity. The IFR data also includes a breakdown by physical class – jet, turbine and piston aircraft. Results varied for 2020, 2021 and the first 10 months of 2022 (available estimated data). The following is a breakdown (**Table 5**):

Table 5. IFR Operations Data for KDNA

	2020	2021	Jan-Oct 2022
Estimated Total Operations	22,889	31,810	23,306
Percent IFR Activity	13% *(2,935 ops)*	14% *(4,497 ops)*	16% *(3,689 ops)*
IFR by Physical Class • Jet • Turbine • Piston	 53% 14% 33%	 52% 16% 32%	 51% 12% 37%

The "estimated total operations" figures vary by source but are used in comparison to IFR activity. This data shows that the percent of IFR operations has been gradually increasing the last three years and that jet traffic comprises more than half of the IFR operations.

2.3.4 Fuel Sales

Historical KDNA fuel sales data collected covers 2017 to 2021. **Figure K** compares the annual fuel sales for Avgas and Jet A. Steady growth occurred between 2017 and 2019 before dropping in 2020 and rebounding in 2021, surpassing 2019 fuel sales by nearly 32%. As shown, avgas sales have remained fairly flat while Jet A sales have grown.

Fuel service is provided by Francis Aviation at KDNA. According to their monthly records for the last five years, avgas sales have consistently remained below 10,000 gallons each month. Jet-A monthly sales have grown and often reach the 40,000-to-50,000-gallon range.

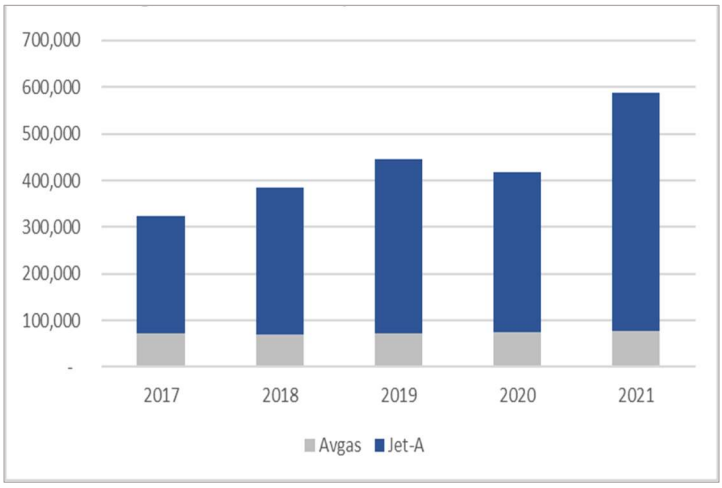


Figure K. Annual Comparison of KDNA Fuel Sales

2.3.5 User Survey and Interviews

KDNA is home to a large number of tenants and serves a broad range of transient operators. To give these tenants and operators an opportunity to provide input on their aviation activity at KDNA, an airport user survey was distributed. Most respondents estimated their annual landings and what flights represented business-related, personal, or training activity at KDNA. Based on the input, the respondents fly nearly 6,200 annual operations comprised of 30% business, 25% personal and 45% training since Red Arrow submitted their annual flight training numbers. Nine respondents indicated that their aviation activity could increase next year for business, personal or training flights, but most did not offer an approximate increase. Jet operator respondents suggested that their operations next year will be consistent with their current activity levels or possibly higher. Although this forecasting effort does not address facility needs, the survey did question airport users about any specific needs to assess whether inadequate facilities were impacting their aviation activity. The most common issue identified was the need for more hangars suggesting that some aircraft owners may store their aircraft at other area airports but desire space at KDNA.

In addition to the user survey, select businesses and pilots were contacted for interviews with most agreeing to a phone interview and/or responding to a set of interview questions via email. Interviewees generally had a positive impression of KDNA for business, personal and flight training use. To support current activity and enhance growth, additional hangars, a crosswind runway, a westerly instrument approach and better security were identified as important needs. One operator anticipates the replacement of their Gulfstream GVII-500 with a larger aircraft that will likely have a maximum ramp weight above 100,000 pounds. The same operator anticipates a second aircraft may be added within the next three years, which would replace their NetJets use. Another operator based at KDNA with five aircraft anticipates adding one more in the near future—a Eurocopter. While they have no plans for major expansion, they do anticipate their estimated 300 annual total operations among their aircraft to steadily increase in the future.

2.3.6 New Mexico Airport System Plan (NMASP)

In addition to projecting aviation demand statewide, as addressed in Section 4.2, the NMASP 2017 identifies individual airport forecasts. For KDNA, future based aircraft and GA operations are projected to grow at a more aggressive rate than the statewide projections. However, the NMASP explains that the growth rates applied for many of the individual airports, were derived from the latest available FAA TAF at the time. Consequently, those projections are five or six years older than the FAA TAF projections available for this study.

3. Socioeconomic Factors

An understanding of regional demographics and socioeconomics is beneficial in forecasting since aviation demand is often sensitive to changes in these factors. For example, a strong and growing economy can stimulate growth in aviation demand with increased aircraft ownership and use. Key growth indicators may include population, employment, earnings, and gross regional product, to name a few. Fuel prices can just as easily influence aviation activity, and from the national to local level.

For Doña Ana County and the El Paso MSA, **Figure L** comparatively illustrates the historical population and employment growth since 1971, and projected growth for the same over the next two decades, according to Woods & Poole Economics forecast. While Doña Ana County has averaged 0.48% annual growth in population from 2010 to 2020, population increased 0.9% in the last year (2020 to 2021) according to population estimates.

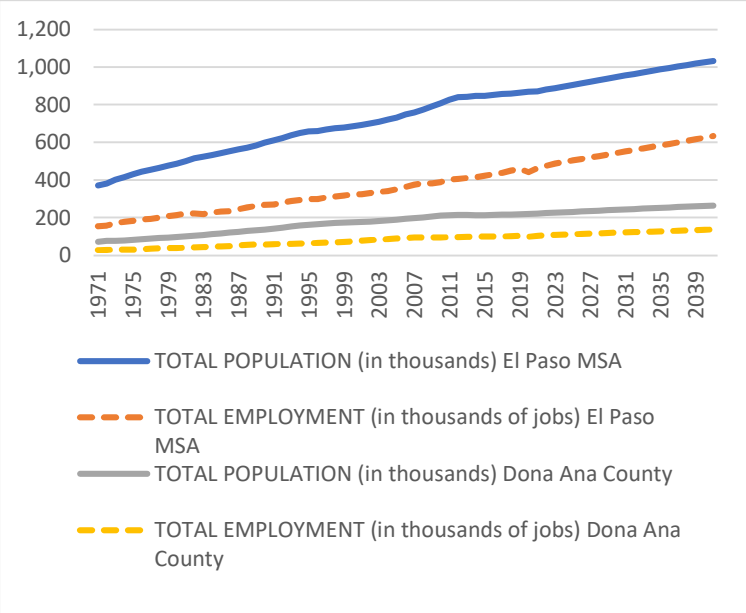


Figure L. Population and Employment (000)

The Santa Teresa area surrounding KDNA has seen growing exports, industrial space filling up with more than six million more square feet under construction and increasing activity at the port of entry.

In **Figure M**, projected growth is depicted for two more economic indicators—Gross Regional Product (GRP) and Total Earnings—for Doña Ana County and the El Paso MSA. Like population and employment in the previous chart, steady growth is forecast over the next two decades for GRP and Total Earnings.

Figure M. Gross Regional Product and Total Earnings (in millions)

Growth projections in these measures are important to KDNA as they further strengthen the potential for growing aviation demand. Investments in infrastructure announced this year underscore the state and county's confidence in economic growth in the region with funds going to support projects such as KDNA expanded facilities, roadway improvements to the Santa Teresa port of entry from an area industrial park, and increased water system capacity in anticipation of area growth, to name a few. Beyond the area socioeconomic growth on the U.S. side, the Mexico side has also experienced significant growth with continued strong growth projected into the future.

Borderplex activity and growth is considered a major influence on KDNA. The border crossing near Santa Teresa is less congested than El Paso making it a more attractive option for ground transport from the US to Mexico. The Air Cargo Study addresses this in greater detail, but it's important to point out for the general aviation forecasts since overall economic growth spurs private and business aviation use separate from the increased cargo activity. While the forecasts presented in this study require realistic projections that generally align with aviation industry trends and FAA's outlook over the planning period, strong economic growth in the region makes the argument for possible accelerated aviation demand.

4. Forecasts

Forecasts presented here use a base year of 2022 and project short-, intermediate and long-term demand over a 20-year planning window to 2042. Forecast models are also discussed.

Based aircraft are projected to increase from **129 to 154**, an average annual growth rate of **0.85%**, through the planning period. Total operations are forecast to grow at an average of **2.07%** annually from an estimated **25,195** to **37,956** by 2042.

The current critical aircraft, which determines the FAA design standards applicable for KDNA facilities, is the Gulfstream 280. The future critical aircraft for GA is the **Gulfstream GVII-G500**, which already operates

at KDNA but is anticipated to reach the FAA-defined threshold of 500 operations in the long-term to qualify the Gulfstream GVII as the critical aircraft. Despite this critical aircraft upgrade being forecast in the long-term, the region's ongoing economic development and growth could prompt accelerated growth in business aviation activity that frequently translates to increased jet traffic such as the Gulfstream activity. Consequently, the County should consider the strong possibility of this accelerated demand earlier than later in the planning period.

4.1 Based Aircraft Forecast

Based Aircraft forecasts begin with a baseline of 129 aircraft as verified through the airport manager's latest update in NBAIP database, addressed earlier.

Forecast models used to project based aircraft growth for KDNA during the 20-year planning period include:

- US Growth Rate GA Aircraft
- FAA TAF – KDNA Growth Rate
- FAA TAF – State Growth Rate
- NMASP 2017 Growth Rate
- Previous 2017 Master Plan
- County Population Growth Rate
- Linear Trend

An aircraft may split its time between two airports, but only one airport will be permitted to officially claim it as a "based" aircraft—the location where the aircraft spends the most time.

Table 6 summarizes the results derived from the forecast models, which ranges from an additional three aircraft to an additional 84 over the 20-year planning period. Average annual growth rates range from 0.10% to 2.54%. A brief description of each forecasting model follows.

Table 6. Based Aircraft Forecasts for KDNA

Forecast Model	Current Based Aircraft	Additional aircraft over 20 years	Total Based Aircraft by 2042	Average Annual Growth Rate
U.S. Growth Rate GA Aircraft	129	+3	132	0.10%
FAA TAF - KDNA Growth Rate		+54	183	1.68%
FAA TAF - State Growth Rate		+25	154	0.85%
NMASP 2017 Growth Rate		+33	162	1.10%
Previous Master Plan 2017		+51	180	1.60%
County Population Growth Rate		+27	156	0.90%
Linear Trend		+89	218	2.54%

U.S. Growth Rate

Derived from the FAA Aerospace Forecast addressed earlier, the national GA aircraft fleet is projected to grow an average of 0.1% annually representing the anticipated decline in piston aircraft offset by growth in the remainder of the fleet. Applying this growth rate to KDNA results in minimal growth, or three additional aircraft over the 20-year planning period for a total of 132.

FAA Terminal Area Forecast (TAF) – KDNA Growth Rate

The FAA TAF projects 1.68% annual growth for KDNA in its latest projections. This is a robust FAA growth rate forecast compared to the nationwide flat growth in the active GA fleet, but it potentially takes into consideration the recent and anticipated positive economic growth in the region. By 2042, aircraft would increase by more than 40% for a total of 183. This model represents a mid- to high-range forecast model.

FAA Terminal Area Forecast (TAF) - New Mexico Growth Rate

The latest FAA TAF projects New Mexico statewide growth in based aircraft to average 0.85% annually. Applying this growth rate to KDNA results in 25 more based aircraft for a total of 153 based aircraft by 2042. **This is recommended as the preferred forecast.** This forecast aligns well with recent business aviation trends in the GA industry and the economic growth in the region with consideration for cyclical fluctuations, but contrasts with FAA's nationwide forecast of flat growth (0.1%) in the active GA aircraft fleet.

New Mexico Airport System Plan (NMASP) 2017 Growth Rate

The NMASP 2017 projected based aircraft would grow at an average of 1.1% annually. This growth rate falls in the middle range among the forecast models, below the 2017 Master Plan and FAA TAF projections for KDNA, but above projected population growth and FAA's flat growth projection for the active GA fleet. This forecast growth rate translates to 33 additional aircraft at KDNA by 2042, or total of 162.

Master Plan 2017

The 2017 Master Plan for KDNA projected based aircraft growth of 1.6% annually over the 20-year planning period. This master plan forecast was derived from the projected population growth rate at the time, which anticipated more aggressive growth than population projections today. Applying the 1.6% growth rate to KDNA's current count of 129 results in a total of 180 aircraft by 2042, an addition or 51 aircraft over the next two decades.

County Population Growth Rate

Although aviation demand at KDNA has not historically aligned well with area County population changes in the past, population growth is considered in forecasting demand. Often, an airport may be sensitive to a combination of demographics and economic factors. Still, population growth suggests potential for increased demand at KDNA, particularly since business and employment are anticipated to grow as well. This model uses the Doña Ana County population growth rate, 0.9% annually, which results in 27 additional aircraft for a total of 156 aircraft within the 20-year planning period.

Linear Trend

The linear trend model for KDAN represents the most aggressive growth model at an average annual growth rate of 2.54%, resulting in an increase of 89 based aircraft for a total of 218. However, this growth does not align well with aviation industry trends and projections nor socioeconomic-related projections.

Preferred Forecast

As stated above, the preferred forecast is an average annual growth rate of 0.85% derived from the FAA TAF projected growth for statewide New Mexico based aircraft. The result is growth from **129 to 154** based aircraft at KDNA by 2042. While the majority of KDNA's aircraft fleet is comprised of piston aircraft, which are declining in the U.S. as an overall percentage of active aircraft, growth is anticipated in other aircraft types such as jets and helicopters.

4.2 Operations Forecast

The KDNA operations forecast uses a baseline of 25,195 operations, which is derived from the Virtower operations report for seven months of 2022 with an extrapolation to produce an estimate for the full calendar year. The initial use of 2021 operations produced a baseline of 31,810. However, a substantial decrease in operations of approximately 20% in 2022 supported the need to update the base year to the lower figure for more reliable and realistic forecasts.

In some cases, GA and air taxi operations forecasts are prepared separately. For KDNA, air taxi operations are anticipated to grow at a similar strong growth rate as GA operations.

The preferred forecast is the KDNA Growth Rate projected in the FAA TAF, which is 2.07%. This aggressive growth rate considers the significant fluctuations in KDNA ops including the drop in 2022 operations below KNDA's average activity in recent history. Positive economic indicators and aviation industry projections further supports recovery and growth in KDNA operations. A brief description of the forecast models listed in **Table 7** follows.

Table 7. Operations Forecast Models for KDNA

Forecast Model	Current Operations	Total Operations by 2042	Average Annual Growth Rate
U.S. Growth Rate GA Hours Flown	25,195	31,983	1.20%
FAA TAF - KDNA Growth Rate		37,956	2.07%
FAA TAF - State Growth Rate		28,567	0.63%
NMASP 2017 Growth Rate		28,910	0.69%
Previous Master Plan 2017		45,505	3.00%
Employment Growth Rate*		35,366	1.71%

*Doña Ana County (1.57%) and El Paso MSA (1.74%) combined

U.S. Growth Rate GA Hours Flown

The U.S. growth rate for GA flight hours flown is from the FAA Aerospace Forecast 2022-2042 publication discussed previously. National GA hours flown are projected to grow an average of 1.2% annually. Applying this growth rate to KDNA results in annual operations of nearly 32,000 by the end of the 20-year planning period.

FAA TAF - KDNA Growth Rate

The FAA TAF projects 2.07% annual growth for KDNA in its latest projections. This aggressive FAA growth rate forecast is higher than that FAA's projected growth in GA hours flown in the previous model. Like the TAF's based aircraft growth projections, this growth rate potentially takes into consideration the recent and anticipated ongoing positive economic growth in the region. By 2042, this model forecasts a total of nearly 38,000 operations, which is the preferred forecast for KDNA.

FAA Terminal Area Forecast (TAF) - New Mexico Growth Rate

In this model, the FAA TAF's projected growth rate in operations statewide is applied. This growth rate averages 0.63% annually resulting in a total of nearly 28,600 operations by 2042. This forecast falls short of recognizing the positive GA industry trends and the economic growth in the region.

New Mexico Airport System Plan (NMASP) 2017 Growth Rate

The NMASP 2017 projected statewide operations would grow at an average of 0.69% annually, which is near, but slightly below the projected growth rate for statewide based aircraft. Like the previous model, this growth rate is misaligned with key indicators for KDNA. At 0.69% annually, operations at KDNA would reach 28,910 by 2042.

Master Plan 2017

The 2017 Master Plan for KDNA projected strong growth in aviation activity at an average annual rate of 3.0% over the 20-year planning period. While strong growth in operations is anticipated at KDNA, this growth rate is considered too aggressive in relation to recent national aviation and socioeconomic trends and fluctuations. At 3.0%, KDNA annual operations would reach just over 45,500 operations.

Employment Growth Rate

The employment growth rate of 1.71% is derived from Woods & Poole Economics projected growth for combined Doña Ana County and the El Paso metropolitan statistical area (MSA). Like population, aviation demand at KDNA has not historically aligned well with area employment changes in the past, aviation activity remains sensitive to employment and other indicators. At 1.71% average annual growth, this translates to KDNA operations reaching nearly 35,400 by 2042. This model forecasts activity which falls below the anticipated recovery in operations for KDNA, but its growth rate is closest to the more robust growth rate selected as the preferred forecast above—the FAA TAF growth rate for KDNA.

Preferred Operations Forecast

Using the preferred forecast for KDNA, **Table 8** identifies the breakdown by operations type including air taxi, GA local, GA itinerant, and military.

Table 8. Preferred Operations Forecast by Activity Type for KDNA

Activity Type	Baseline 2022	2027	2032	2042
Air Taxi	1,100	1,220	1,350	1,660
GA Local	13,652	14,803	16,100	19,106
GA Itinerant	9,783	11,230	12,814	16,530
Military	660	660	660	660
TOTAL	25,195	27,913	30,924	37,956

Note: The GA operations split for 2022 is approximately 58% / 42%. By 2042, this split is expected to shift to 54% /46% with itinerant traffic outpacing growth in flight training activity.

Air Taxi

Air taxi operations represent approximately 4.4% of KDNA's total annual activity in 2022, which is an estimated 1,100 operations. Like GA activity, air taxi operations are projected to steadily grow over the planning period. By 2042, air taxi operations are projected to reach 1,660 operations, 51% above current levels. Also notable is business aviation activity may shift between air taxi operations and GA itinerant operations. For example, a company flying into KDNA could use a fractional jet ownership company (e.g., NetJets) for their business travel, but that same company could instead purchase their own jet for use at KDNA. From the standpoint of operations, their flights with a fractional jet company are counted as air taxi operations while their company-owned jet flights are counted as GA itinerant operations. In fact, one operator at KDNA stated that their company is considering doing just that—they may purchase a jet to replace their current use of a fractional jet ownership company. While their total annual operations may not change, this action will result in the reallocation of operations—their air taxi operations will become GA itinerant operations.

General Aviation (GA) Operations

GA operations at KDNA are projected to grow throughout the 20-year planning period. However, the local/itinerant percentage split among operations is anticipated to shift. GA local operations are expected to increase as flight training grows, but GA itinerant operations growth is projected to outpace GA local. Consequently, the percentage split in 2022, which is 58% local/42% itinerant is projected to be 54% local/ 46% itinerant by 2042.

Military Operations

KDNA military operations are comprised of both helicopters and fixed wing activity. While activity has historically fluctuated, current 2022 operations are estimated at 660. This forecasting effort assumes no changes to military operations, so current operation levels are carried throughout the planning period.

4.3 Critical Aircraft

Identification of the critical aircraft, or design aircraft, is essential to determine the FAA design standards applicable in airport development. The critical aircraft is defined by the FAA as the most demanding aircraft that regularly uses the airport. Regular use, also referred to as substantial use, is defined as 500 or more annual itinerant operations (250 takeoffs/250 landings). Often, the critical aircraft is one among several aircraft with similar characteristics which, in combination, comprise the required 500 annual operations. Consequently, the critical aircraft represents a family of aircraft. The critical aircraft or family of aircraft drives the Airport Reference Code (ARC), which dictates FAA design standards for runway, taxiways, and dimensions required for aircraft clearance in operational areas.

The ARC is an alphanumeric code comprised of two components; a letter represents the Aircraft Approach Category (AAC), and a Roman numeral represents the Airplane Design Group (ADG). **Table 9** lists these components most applicable to GA aircraft operations at KDNA. The AAC is 1.3 times the stall speed of the aircraft in its landing configuration at max landing weight. The ADG is typically defined by wingspan but may be determined by tail height if it's the more demanding group. The current ARC for KDNA is C-II, as defined by the combined activity of Approach Category C or greater, and Airplane Design Group II or greater; such activity exceeds the FAA threshold of 500 itinerant operations annually. Examples of C-II aircraft include the Gulfstream 280, Citation X+, Learjet 75, and Challenger 300, 600/601/604. Operations by Approach Category D-III aircraft are included in the critical aircraft count for C-II as they are more demanding aircraft (faster, larger). Over the last five years, IFR records indicate that operations by C-II aircraft (or greater) have fluctuated above and below 500 operations, partly attributed to COVID 19. Despite the fluctuations, IFR records in 2022 (base year) support the current C-II designation[6] at KDNA.

The GA critical aircraft today is the Gulfstream 280, which is a C-II aircraft. Examples of other C-II aircraft include the Challenger 300, 600/601/604 Citation X+, and the Learjet 75. The long-term GA critical aircraft is identified as the larger Gulfstream VII-G500 (D-III). The Air Cargo Study, recently completed, identifies the long-term critical air cargo aircraft as the Boeing 757 (C-IV). This means the long-term ARC for KDNA will be D-IV derived from the D-III and C-IV designation.

[6] IFR records indicate that Aircraft Approach Category (AAC) "C" or greater comprised 600+ operations, and Airplane Design Group (ADG) "II" or greater comprised 2400+ operations.

Table 9. Airport Reference Code (ARC) Components

Aircraft Approach Category	Approach Speed	Representative Aircraft
A	Less than 91 knots	Cessna 150, 172, Beech Bonanza
B	91 to 120 knots	King Air, Piper Navajo, Gulfstream I
C	121 to 140 knots	Gulfstream 280, Learjet, , Boeing 737
D	141 to 165 knots	Boeing 747, Gulfstream GVII-G500
Airplane Design Group	**Wingspan**	**Representative Aircraft**
I	Less than 49 feet	Cessna 150, 172, 206
II	40 to 78 feet	King Air, Dassault Falcon 900
III	79 to 117 feet	Boeing 737, DC-3, Gulfstream G500
Airplane Design Group may be determined by tail height, if more demanding than wingspan:		
Airplane Design Group	**Tail Height**	
I	Less than 20 feet	
II	20 to 29 feet	
III	30 to 44 feet	

Source: FAA AC 150/5300-13B, Airport Design.
Note: Aircraft Approach Category E (166 knots or more) and Airplane Design Groups IV, V, and VI (118 feet or more) are not shown.

As future operations grow at KDNA, operations by jet aircraft will increase. This translates to increased operations by jets larger and faster than the current critical aircraft. Gulfstream aircraft that fall into the D-III classification are already operating at KDNA to include the Gulfstream GVII-G500. There are two G500 aircraft based at KDNA today. Combined, these aircraft surpassed 300 operations in 2021. According to Virtower data and IFR records, operations fell below 300 in 2022, but this is expected to be a temporary decline. At the projected growth rate for jet operations, D-III is expected to reach 500 operations in the long-term, which will upgrade KDNA to D-III. FAA projects GA hours flown by jet aircraft will increase at an average annual growth rate of 3.4%. This growth coupled with the projected increase in jet aircraft based at KDNA over the planning period supports a promising outlook for business aviation activity in the region.

4.4 Peaking Characteristics

Considering the fuel sales by month as well as operations reports, the peak month for KDNA has varied in recent years. It is typical for many airports to see activity fluctuate throughout the year, the month, and the day. For busy airports, it is often important to calculate peak demand to ensure facility capacity is adequate and necessary improvements are completed in a timely manner.

For KDNA, the peak demand forecasts are determined by starting with total annual operations and identifying the "peak month" as that which comprises the highest level in fuel sales or operations from reliable reports. The busiest month for KDNA frequently changes and typically represents no more than 11.8%, which is used to calculate KDNA peak activity starting with design day. "Design day" is calculated by dividing the peak month operations by the number of days in the month, or 30.5 used for KDNA. Then, "design hour" is determined, which represents the busiest hour. For KDNA, the busiest hour for GA activity

is estimated at 15% of the day, or currently 15 operations, and growing to 22 operations in the 20-year planning period. **Table 10** is a summary of the peak demand.

Table 10. Operations Peaking Characteristics at KDNA

	BASE YEAR 2022	SHORT- TERM 2027	INTERMEDIATE TERM 2032	LONG-TERM 2042
Annual Operations	25,195	27,913	30,924	37,956
Peak Month (11.8% of Annual)	2,973	3,294	3,649	4,479
Design Day	97	108	120	147
Design Hour (15% of Design Day)	15	16	18	22
Note: This activity excludes projected air cargo aircraft operations being addressed in the Air Cargo Study, currently under way.				

4.5 IFR Activity

In 2021, IFR operations represented approximately 14% of annual activity at KDNA, up from an estimated 13% the previous year. In 2022, IFR data is showing an upward trend with operations anticipated to represent more than 14% of total operations for the year. This trend is projected to continue at KDNA with total IFR operations anticipated to reach 18% of annual operations by 2042. Despite KDNA's clear weather the large majority of the year, there are many operations conducted using a flight plan. These include the air taxi operators and many of the GA operators, especially the jet operators. With the forecast growth in air taxi operations as well as the increased jet operations as an overall percent of GA activity, the steady increase in IFR as a proportion of total activity is expected.

4.6 Summary of Forecasts and Comparison to FAA Terminal Area Forecast (TAF)

Table 11 presents a summary of the KDNA forecasts and compares them to the latest published projections in the FAA TAF. As indicated, the FAA's baseline activity is substantially higher than the current activity established for this study.

Table 11. Comparison of FAA TAF and KDNA Study Forecasts

KDNA Based Aircraft Forecast				
AIRCRAFT TYPE	Base Year	Short Term Forecast 2027	Intermediate Term Forecast 2032	Long Term Forecast 2042
Single Engine Piston	87	88	88	89
Twin Engine Piston	7	7	7	7
Turboprop	6	7	8	9
Jet	21	24	28	36
Helicopter	8	9	9	11
Other	0	1	1	2
Total Based Aircraft Forecast	129	136	141	154
FAA TAF Based Aircraft forecast*	141	167	182	212
% Difference Between Forecast and TAF	-9%	-19%	-22%	-27.8%
KDNA Operations Forecast				
Air Taxi	1,100	1,220	1,350	1,660
GA Local	13,652	14,803	16,100	19,106
GA Itinerant	9,783	11,230	12,814	16,530
Military	660	660	660	660
Total Aircraft Operations Forecast	25,195	27,913	30,924	37,956
Current TAF Aircraft Operations*	41,500	48,218	53,790	67,355
% Difference Between Forecast and TAF	-39%	-42%	-43%	-44%

*Note: Current turboprop aircraft at KDNA include one single- and five multi-engine. Baseline figures used for the Master Plan are different than TAF records resulting in larger percentage variations. *Base year for the FAA TAF is 2020 while the base year for the current study forecasts is 2022.*

The *Air Cargo Study Update* conducted concurrently with the *GA Forecasts Update* addressed air cargo operations to accommodate the preferred forecast for air cargo tonnage. While air cargo operations are excluded from the table above, a brief summary of that activity obtained from the Air Cargo Study Update[7] is presented here.

- Baseline air cargo demand is estimated at 8,000 to 10,000 annual tons (by 2025), which translates to estimated annual operations as follows:
  - 529 to 661 operations using a Boeing 737-700, or
  - 296 to 370 operations using a Boeing 757-200
- By 2042, with an average annual growth rate of 2.5 percent, air cargo demand is estimated to reach 12,130 to 15,160 annual tons, which means estimated annual operations of:
  - 802 to 1,103 operations using a Boeing 737-700, or
  - 448 to 560 operations using a Boeing 757-200

Considering the projected air cargo operations by 2042, operations would be approximately three percent higher than total airport operations projected in this report.

5. High Growth Potential and Emerging Advanced Air Mobility

Aviation demand forecasting in this report relies on known market sectors with current and historical data that can be evaluated. This evaluation is conducted alongside an assessment of typical socioeconomic factors and the long-established aviation industry's analyses and published projections. What is often excluded in these forecasts is emerging aviation trends, which have yet to represent real activity but stand for possibilities. The importance of these emerging trends is that they unlock exciting opportunities for aviation—its "look" and direction. Changes in aviation activity have always prompted changes in facility needs, but major changes on the horizon can require new types of infrastructure from airport facilities to airspace.

For KDNA, much of their current and anticipated aviation demand is already tied into airport development plans, but aviation trends on the horizon are without specific guidance for early airport planning and development purposes. Further, their impact on KDNA's aviation activity is uncertain, but coupled with the area's economic growth, there is potential for accelerated growth. Such growth could mean that operations projected in 20 years could be realized sooner than later. Accelerated growth in combination with emerging trends could further influence the County's decision making. Consequently, one of the most industry-changing trends is briefly discussed here—Advanced Air Mobility.

The FAA states that *Advanced Air Mobility* (AAM) is an umbrella term for aircraft that are likely highly automated and electric, or electric Vertical Takeoff and Landing (eVTOL) aircraft. These aircraft will serve

[7] See Air Cargo Study Update Technical Report, Section 5.3.2. Annual Operations Forecast for additional details on projected air cargo tonnage and air cargo aircraft operations.

as air taxis. It is anticipated that the facility needs at airports for AAM activity will be accommodated initially by existing helicopter facilities such as helipads. FAA plans to publish guidance on vertiports in the future as the AAM concept progresses. The National Aeronautics and Space Administration (NASA) has been conducting a national campaign for AAM stating that the goal is to promote public confidence and accelerate the realization of emerging aviation markets for passenger and cargo transportation in urban, suburban, rural, and regional environments. NASA sees AAM as transformative and innovative for aviation. The FAA has referred to AAM as the new aviation era. For KDNA, these future AAM operations will be counted as air taxi operations, which are already projected to increase. However, future growth in air taxi operations inclusive of eVTOL aircraft, as they enter the transportation system in large numbers, could be substantial. The timing of this activity and level of growth remains uncertain. Much is to be accomplished to ready the transportation system for AAM, but the many aspects of this effort are already under way. The FAA and the aviation industry envision a safe and efficient aviation transportation system for AAM that will operate and transport passengers or cargo at lower altitudes within urban and suburban areas. AAM is also anticipated to serve markets beyond urban areas with cargo delivery, public services and commercial inter-city/longer range transportation, to name a few. Considering the possibilities of AAM, the aviation industry and the communities served may experience some extraordinary changes in the coming years.